



COMMUNITY  
DEVELOPMENT (925) 673-7340  
ENGINEERING (925) 363-7433

6000 HERITAGE TRAIL • CLAYTON, CALIFORNIA 94517-1250  
TELEPHONE (925) 673-7300 FAX (925) 672-4917

*City Council*  
HANK STRATFORD, *MAYOR*  
DAVID T. SHUEY, *VICE MAYOR*  
JIM DIAZ  
HOWARD GELLER  
JULIE K. PIERCE

Bruce H. Wolfe, Executive Officer  
California Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

November 13, 2014

Ms. Pamela Creedon, Executive Officer  
California Regional Water Quality Control Board  
Central Valley Region  
11020 Sun Center Drive, #200  
Rancho Cordova, CA 95670-6114

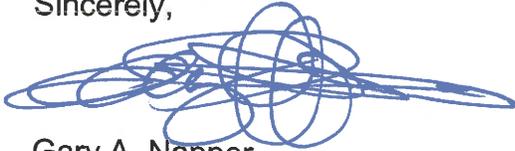
Dear Mr. Wolfe and Ms. Creedon:

Enclosed is the 2013-14 Annual Report for the City of Clayton, which is required by and in accordance with Provision C.16 in National Pollutant Discharge Elimination System (NPDES) Permit Number CAS612008 issued by the San Francisco Bay Regional Water Quality Control Board and/or by Provision C.13 in NPDES Permit Number CA0083313 issued by the Central Valley Regional Water Quality Control Board. We are also submitting herewith the City of Clayton Long Range Trash Management Plan.

The Clean Water Program had communicated by email and cover transmittal of the Annual Reports to Selina Louie and Dale Bowyer on September 15, 2014, that the Clayton Report would be filed by November 17, 2014. This was followed up by an email from the City of Clayton via Laura Hoffmeister on September 20, 2014 to Tom Mumley, Selina Louie, and Dale Bowyer at the request of Selina Louie; the email further noted the reason for the delay, that due to unforeseen staff shortages and conflicting priority projects with the sole person responsible for undertaking and preparing this report, it would be filed by November 17, 2014. The only response received was an email from Dale Bowyer on September 22, 2014 asking about the status of the Long Range Trash Plan submittal. A reply email was sent on September 22, 2014 to Dale Bowyer from Laura Hoffmeister stating the Long Range Trash Plan (LRTP) would be filed concurrent with the Annual Report by November 17, 2014, as the items in the LRTP would need to be inputted into Section C10 of the Annual Report. We did not receive any notification of any concern to this extension until an email was received from on October 8, 2014 from Tom Mumley. A follow up phone call on October 9, 2010 with Tom Mumley, followed by an email and mailed letter by me dated October 10, 2014 to Tom Mumley, confirmed that we would be meeting a November 17, 2014 time frame for both the filing of the FY 13-14 Annual Report, and the Long Range Trash Plan. I thank you for your patience during this time.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,

A handwritten signature in blue ink, appearing to be "Gary A. Napper", written over a circular stamp or seal.

Gary A. Napper  
City Manager

Attachments: communications with SF Regional Water Board staff  
Enclosures: City of Clayton FY 13-14 Annual Report and Long Range Trash Plan



# CITY OF CLAYTON

Founded 1857... Incorporated 1964

COMMUNITY  
DEVELOPMENT (925) 673-7340  
ENGINEERING (925) 363-7433

6000 HERITAGE TRAIL • CLAYTON, CALIFORNIA 94517-1250  
TELEPHONE (925) 673-7300 FAX (925) 672-4917

*City Council*  
HANK STRATFORD, *MAYOR*  
DAVID T. SHURY, *VICE MAYOR*  
JIM DIAZ  
HOWARD GELLER  
JULIE K. PIERCE

10 October 2014

**VIA EMAIL AND U.S. REGULAR MAIL**

Thomas E. Mumley, Ph. D  
Assistant Executive Director  
Regional Water Quality Control Board, San Francisco Bay  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

**Re: Response to Recurring Non-Compliance Reports by City of Clayton**

Dear Mr. Mumley:

Thank you for emailing me on 08 October 2014 (6:19 pm) regarding notification of the City of Clayton's inability to comply with its Municipal Stormwater Permit reporting requirements. Specifically, your communication indicated that not only has our City not filed its 2013-2014 Annual Report missing the September reporting deadline this year, this omission is the third time in the last four years that Clayton has not filed its annual report on time. Further, your email informed me Clayton is the only municipality that has not submitted a Long Term Trash Load Reduction Plan, which was due on 01 February 2014.

As noted during our telephone conversation on October 9<sup>th</sup>, I am particularly chagrined on notification of these reporting non-compliances and fully acknowledge this chronic pattern in recent years could cause the impression the City of Clayton is ignoring other obligations under its Municipal Stormwater Permit. However, a review of the City's past annual reports would indeed reveal our City is consistently in full compliance with its field and stormwater program implementations, and our 2013-2014 Annual Report will document the same achievement. With that notation, we regret missing the required deadlines and any inconvenience or additional workloads to Water Board staff necessitated by our oversights.

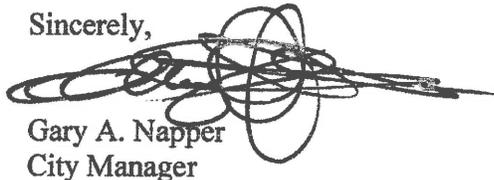
As indicated in the 15 September 2014 cover letter to the San Francisco Bay Regional Water Quality Control Board by Mr. Tom Dalziel, Program Manager of the Contra Costa Clean Water Program, in association with annual report filings of other dischargers, the City of Clayton expects to file its 2013-2014 Annual Report on or before 17 November 2014. In addition (as receipt thereof was acknowledged), Ms. Laura Hoffmeister, Assistant to the Clayton City Manager, sent an email to you and various Water Board staff containing this same information about our expectant late filing. It is understood this announcement does not obviate the City from the required deadlines. In that respect, internal conversation has occurred within our organization to ensure the City of Clayton will file its 2013-14 Annual Report and its overdue Long Term Trash Load Reduction Plan on or before 17 November 2014. Your indulgence in this deferred schedule is appreciated. Further, actions have been initiated to ensure the City's reporting obligations are not missed in the future.

Letter to Mr. Thomas Mumley  
10 October 2014

Despite its limited resources and limited staffing (e.g. Clayton Maintenance has only 5 permanent employees and City Hall operations are staffed by a mere 7.5 positions, including the City Manager), our City shoulders well its obligations and responsibilities under the Municipal Stormwater Permit and good progress is achieved each reporting year to document its performance of stormwater duties and mandates. For example, for two years our City has installed and monitored 25 insert devices (“diapers”) on key or high-volume stormwater inlets to capture debris and trash for successful diversion from eventual Bay Area waters. We are diligent in our stewardship notwithstanding a FY 2014-15 Stormwater Budget that calls for total expenditures of \$195,031 compared with only \$126,077 in stormwater revenues; the annual deficit to meet obligations requires our City to draw down on its Stormwater reserves this year by \$68,954, thereby dropping its reserve balance to \$73,269. While certain you routinely hear local governments’ lamentations about dwindling resources amidst climbing obligations, as a 30+ year city manager in California I do attest to the stark reality on this end of the Municipal Stormwater Permit.

While proud of regularly meeting our stormwater field and program implementations, the City is not proud of its recent neglects in missing deadlines for filing of annual reports or failure to file a Long Term Trash Load Reduction Plan. We shall do better in this regard.

Sincerely,



Gary A. Napper  
City Manager

cc: Honorable Mayor and City Council Members  
Laura Hoffmeister, Assistant to the City Manager

## Laura Hoffmeister

---

**From:** Mumley, Thomas@Waterboards <Thomas.Mumley@waterboards.ca.gov>  
**Sent:** Wednesday, October 08, 2014 6:19 PM  
**To:** gnapper@ci.clayton.ca.us  
**Cc:** Bowyer, Dale@Waterboards; Ma, Sue@Waterboards; lhoffmeister@ci.clayton.ca.us  
**Subject:** Recurring Non-Compliance by Clayton

Mr. Napper – we are troubled by the City of Clayton’s inability to comply with its Municipal Stormwater Permit reporting requirements. Clayton is the only municipality that has not submitted its annual report this year, and this is the third time in the last four years that Clayton did not submit its annual report on time. Last year, you submitted your report five months after the due date! In addition, Clayton is the only municipality that has not submitted a Long Term Trash Load Reduction Plan, which was due on February 1, 2014. We understand that Clayton may have staff shortages and competing priorities, but other municipalities with similar or greater challenges have complied with permit requirements. The lack of a corrective and preventive action plan with your notification that the annual report would be late is also a violation of permit requirements.

Consequently, due to Clayton’s outstanding and recurring violations, and in fairness to other municipalities, we are compelled to pursue a formal enforcement action. The severity of the enforcement will be based on the number of days that the annual report and Long Term Trash Load Reduction Plan are late, and what assurance you can provide that Clayton will comply with permit requirements in the future.

This has been a very difficult communication to deliver because I am very aware and sympathetic of municipal staffing and financial challenges.

I expect you will be troubled by this email, and anticipate meeting with you to discuss this matter.

Thomas Mumley  
Assistant Executive Officer  
[thomas.mumley@waterboards.ca.gov](mailto:thomas.mumley@waterboards.ca.gov)  
510 622-2395

## Laura Hoffmeister

---

**Subject:** FW: FY 2013-14 Annual Report Submittal

**Importance:** High

**From:** Tom Dalziel [<mailto:tdalz@pw.cccounty.us>]  
**Sent:** Tuesday, September 16, 2014 8:31 AM  
**To:** [lhoffmeister@ci.clayton.ca.us](mailto:lhoffmeister@ci.clayton.ca.us)  
**Cc:** Fan Ventura  
**Subject:** FW: FY 2013-14 Annual Report Submittal  
**Importance:** High

Laura,  
See Selina's email below. As a matter of process, our letter on your behalf should be sufficient notification.  
Tom

---

**From:** Louie, Selina@Waterboards [<mailto:Selina.Louie@waterboards.ca.gov>]  
**Sent:** Monday, September 15, 2014 3:33 PM  
**To:** Fan Ventura  
**Cc:** Tom Dalziel  
**Subject:** RE: FY 2013-14 Annual Report Submittal

Fan,  
Clayton needs to contact us directly. Please have the City send an email to Tom Mumley with a cc to Dale Bowyer and myself.

Regards,  
Selina

---

**From:** Fan Ventura [<mailto:fvent@pw.cccounty.us>]  
**Sent:** Monday, September 15, 2014 2:00 PM  
**To:** Louie, Selina@Waterboards  
**Cc:** Tom Dalziel  
**Subject:** FY 2013-14 Annual Report Submittal

Hello Selina,

This is to let you know that the Contra Costa Clean Water Program has uploaded its FY 2013-14 Annual Report to the Region 2 FTP site. Annual Reports from all CCCWP permittees, except Antioch and Clayton, have also been uploaded. A status of Antioch's and Clayton's reports are noted at the end of the attached Certification Letter.

If you have any questions or comments, please let Tom Dalziel know ([tdalz@pw.cccounty.us](mailto:tdalz@pw.cccounty.us) or (925) 313-2392).

Thanks,

**Fan Ventura**

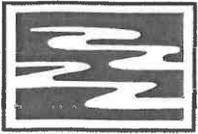
Contra Costa Clean Water Program

255 Glacier Dr.

Martinez, CA 94553-4825

[fvent@pw.cccounty.us](mailto:fvent@pw.cccounty.us)

(925) 313-2360



CONTRA COSTA  
CLEAN WATER  
PROGRAM

Thomas E. Dalziel  
Program Manager

September 15, 2014

Bruce H. Wolfe, Executive Officer  
California Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

Ms. Pamela Creedon, Executive Officer  
California Regional Water Quality Control Board  
Central Valley Region  
11020 Sun Center Drive, #200  
Rancho Cordova, CA 95670-6114

Dear Mr. Wolfe and Ms. Creedon:

Enclosed is the Contra Costa Clean Water Program's (CCCWP's) *Fiscal Year 2013-2014 Annual Report, Volume I: Group Activities*. This report documents activities conducted collectively by Contra Costa Permittees in accordance with National Pollutant Discharge Elimination System (NPDES) Permit No. CAS612008 (Orders R2-2009-0074 and R2-2011-0083) issued by the San Francisco Bay Regional Water Quality Control Board (Water Board), and NPDES Permit No. CA0083313 (Order R5-2010-0102) issued by the Central Valley Water Board. This submittal includes by reference the following reports submitted separately by the Bay Area Stormwater Management Agencies Association (BASMAA) on behalf of Contra Costa Permittees:

- *"Annual Reporting for FY 2013-2014, Regional Supplement for Training and Outreach"*
- *"Preventing Urban Pesticide Pollution in Stormwater", CASQA Pesticides Subcommittee Annual Report 2013-2014*

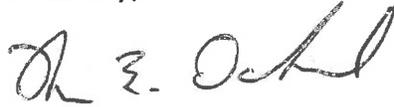
With the approval and direction from each duly authorized representative of each Permittee, I have been authorized to submit and certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

255 Glacier Drive, Martinez, CA 94553-4825 • Tel: (925) 313-2360 Fax: (925) 313-2301 • Website: [www.cccleanwater.org](http://www.cccleanwater.org)

Program Participants: Antioch, Brentwood, Clayton, Concord, Danville, El Cerrito, Hercules, Lafayette, Martinez, Moraga, Oakley, Orinda, Pinole, Pittsburg, Pleasant Hill, Richmond, San Pablo, San Ramon, Walnut Creek, Contra Costa County and Contra Costa County Flood Control & Water Conservation District

Also provided with this submittal are the *Fiscal Year 2013-2014 Individual Municipal Annual Reports* compiled and referred to as "Volume II". The FY 2013-2014 Municipal Annual Report for the City of Antioch and the City of Clayton are not included with this submittal. Additional time is necessary for completion of these two reports, which will be submitted separately no later than September 30 and November 17, 2014, respectively.

Sincerely,

A handwritten signature in black ink, appearing to read "Th E. Dalziel". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Thomas E. Dalziel  
Program Manager  
Contra Costa Clean Water Program

TD:fv  
G:\NPDES\13-14 Annual Report\Volume 1 Sections - Program\01-Annual Rpt Certification Letter 13-14.doc  
Enclosures

**Laura Hoffmeister**

---

**Subject:** FW: FY 2013-14 Annual Report Submittal

**Importance:** High

**From:** Louie, Selina@Waterboards [<mailto:Selina.Louie@waterboards.ca.gov>]

**Sent:** Monday, September 15, 2014 3:33 PM

**To:** Fan Ventura

**Cc:** Tom Dalziel

**Subject:** RE: FY 2013-14 Annual Report Submittal

Fan,

Clayton needs to contact us directly. Please have the City send an email to Tom Mumley with a cc to Dale Bowyer and myself.

Regards,

Selina

---

**From:** Fan Ventura [<mailto:fvent@pw.cccounty.us>]

**Sent:** Monday, September 15, 2014 2:00 PM

**To:** Louie, Selina@Waterboards

**Cc:** Tom Dalziel

**Subject:** FY 2013-14 Annual Report Submittal

Hello Selina,

This is to let you know that the Contra Costa Clean Water Program has uploaded its FY 2013-14 Annual Report to the Region 2 FTP site. Annual Reports from all CCCWP permittees, except Antioch and Clayton, have also been uploaded. A status of Antioch's and Clayton's reports are noted at the end of the attached Certification Letter.

If you have any questions or comments, please let Tom Dalziel know ([tdalz@pw.cccounty.us](mailto:tdalz@pw.cccounty.us) or (925) 313-2392).

Thanks,

**Fan Ventura**

Contra Costa Clean Water Program

255 Glacier Dr.

Martinez, CA 94553-4825

[fvent@pw.cccounty.us](mailto:fvent@pw.cccounty.us)

(925) 313-2360

## Laura Hoffmeister

---

**From:** Laura Hoffmeister <lhoffmeister@ci.clayton.ca.us>  
**Sent:** Saturday, September 20, 2014 7:46 PM  
**To:** Louie, Selina@Waterboards (Selina.Louie@waterboards.ca.gov)  
**Cc:** Tom Dalziel (tdalz@pw.cccounty.us)  
**Subject:** FW: FY 2014-15 Annual Report Submittal

Selina:

I tried to send this Tom as you requested, but the email I had bounced back, so I might not have correct one, can you please forward this to him

Thanks

Laura Hoffmeister

---

**From:** Laura Hoffmeister [mailto:lhoffmeister@ci.clayton.ca.us]  
**Sent:** Saturday, September 20, 2014 7:43 PM  
**To:** 'Louie, Selina@Waterboards'; 'tom.mumley@waterboards.ca.gov'  
**Cc:** 'Bowyer, Dale@Waterboards'; Tom Dalziel (tdalz@pw.cccounty.us)  
**Subject:** FY 2014-15 Annual Report Submittal

Dear Mr. Mumley:

The Contra Costa Clean Water Program transmitted the AR for FY 14/15 and in the cover transmittal certification letter stated that the City of Clayton report would not be ready until November 18.

Staff shortages and other unexpected critical timeline projects has resulted in a later start than anticipated for inputting and formatting all the FY14/15 AR information. I also will be out leave for personal and family matters at least the next few weeks.

I will be checking emails periodically. If need to reach me contact me via my cell listed below.

Laura Hoffmeister  
Assistant to the City Manager  
City of Clayton  
6000 Heritage Trail  
Clayton, CA 94517

Email: [LHoffmeister@ci.clayton.ca.us](mailto:LHoffmeister@ci.clayton.ca.us)  
Ph. desk/vm: (925) 673-7308  
Ph. cell/vm/txt: (925) 250-8532  
Fax: (925) 672-4917

## Laura Hoffmeister

---

**From:** Laura Hoffmeister <lhoffmeister@ci.clayton.ca.us>  
**Sent:** Saturday, September 20, 2014 7:43 PM  
**To:** 'Louie, Selina@Waterboards'; 'tom.mumley@waterboards.ca.gov'  
**Cc:** 'Bowyer, Dale@Waterboards'; Tom Dalziel (tdalz@pw.cccounty.us)  
**Subject:** FY 2014-15 Annual Report Submittal

Dear Mr. Mumley:

The Contra Costa Clean Water Program transmitted the AR for FY 14/15 and in the cover transmittal certification letter stated that the City of Clayton report would not be ready until November 18.

Staff shortages and other unexpected critical timeline projects has resulted in a later start than anticipated for inputting and formatting all the FY14/15 AR information. I also will be out leave for personal and family matters at least the next few weeks.

I will be checking emails periodically. If need to reach me contact me via my cell listed below.

Laura Hoffmeister  
Assistant to the City Manager  
City of Clayton  
6000 Heritage Trail  
Clayton, CA 94517

Email: [LHoffmeister@ci.clayton.ca.us](mailto:LHoffmeister@ci.clayton.ca.us)  
Ph. desk/vm: (925) 673-7308  
Ph. cell/vm/txt: (925) 250-8532  
Fax: (925) 672-4917

## Laura Hoffmeister

---

**From:** Bowyer, Dale@Waterboards <Dale.Bowyer@waterboards.ca.gov>  
**Sent:** Monday, September 22, 2014 1:44 PM  
**To:** lhoffmeister@ci.clayton.ca.us; Louie, Selina@Waterboards;  
tom.mumley@waterboards.ca.gov  
**Cc:** Tom Dalziel  
**Subject:** RE: FY 2014-15 Annual Report Submittal

Ms. Hoffmeister,  
What is the status of Clayton's overdue Trash Reduction Long Term Plan?

---

**From:** Laura Hoffmeister [<mailto:lhoffmeister@ci.clayton.ca.us>]  
**Sent:** Saturday, September 20, 2014 7:43 PM  
**To:** Louie, Selina@Waterboards; [tom.mumley@waterboards.ca.gov](mailto:tom.mumley@waterboards.ca.gov)  
**Cc:** Bowyer, Dale@Waterboards; Tom Dalziel  
**Subject:** FY 2014-15 Annual Report Submittal

Dear Mr. Mumley:

The Contra Costa Clean Water Program transmitted the AR for FY 14/15 and in the cover transmittal certification letter stated that the City of Clayton report would not be ready until November 18.

Staff shortages and other unexpected critical timeline projects has resulted in a later start than anticipated for inputting and formatting all the FY14/15 AR information. I also will be out leave for personal and family matters at least the next few weeks.

I will be checking emails periodically. If need to reach me contact me via my cell listed below.

Laura Hoffmeister  
Assistant to the City Manager  
City of Clayton  
6000 Heritage Trail  
Clayton, CA 94517

Email: [LHoffmeister@ci.clayton.ca.us](mailto:LHoffmeister@ci.clayton.ca.us)  
Ph. desk/vm: (925) 673-7308  
Ph. cell/vm/txt: (925) 250-8532  
Fax: (925) 672-4917

## Laura Hoffmeister

---

**From:** Laura Hoffmeister <lhoffmeister@ci.clayton.ca.us>  
**Sent:** Friday, October 03, 2014 4:04 PM  
**To:** 'TMumley@waterboards.ca.gov'  
**Subject:** FW: FY 2014-15 Annual Report Submittal

Tom, Apparently your staff had an incorrect email address included as a cc on their Sept 20<sup>th</sup> email to me, so when I hit reply all yours bounced back, just got your correct email so I am resending to you.

Laura Hoffmeister

---

**From:** Laura Hoffmeister [<mailto:lhoffmeister@ci.clayton.ca.us>]  
**Sent:** Thursday, October 02, 2014 5:32 PM  
**To:** 'Bowyer, Dale@Waterboards'; 'Louie, Selina@Waterboards'; 'tom.mumley@waterboards.ca.gov'  
**Cc:** 'Tom Dalziel'  
**Subject:** RE: FY 2014-15 Annual Report Submittal

Dale: sorry for the delay in response but I have not been out of the office and still am out most of this week and next it is still in process and being refined I will be meeting with consultant mid Oct which is as soon as I can on my end as I am only in the office two part days this week, and off on leave this next week, as to submittal it would be at same time of AR, of Nov 18<sup>th</sup> since some of the info for the comes from the trash plan.

Laura Hoffmeister  
Assistant to the City Manager  
City of Clayton  
6000 Heritage Trail  
Clayton, CA 94517

Email: [LHoffmeister@ci.clayton.ca.us](mailto:LHoffmeister@ci.clayton.ca.us)  
Ph. desk/vm: (925) 673-7308  
Ph. cell/vm/txt: (925) 250-8532  
Fax: (925) 672-4917

---

**From:** Bowyer, Dale@Waterboards [<mailto:Dale.Bowyer@waterboards.ca.gov>]  
**Sent:** Monday, September 22, 2014 1:44 PM  
**To:** [lhoffmeister@ci.clayton.ca.us](mailto:lhoffmeister@ci.clayton.ca.us); Louie, Selina@Waterboards; [tom.mumley@waterboards.ca.gov](mailto:tom.mumley@waterboards.ca.gov)  
**Cc:** Tom Dalziel  
**Subject:** RE: FY 2014-15 Annual Report Submittal

Ms. Hoffmeister,  
What is the status of Clayton's overdue Trash Reduction Long Term Plan?

---

**From:** Laura Hoffmeister [<mailto:lhoffmeister@ci.clayton.ca.us>]  
**Sent:** Saturday, September 20, 2014 7:43 PM  
**To:** Louie, Selina@Waterboards; [tom.mumley@waterboards.ca.gov](mailto:tom.mumley@waterboards.ca.gov)  
**Cc:** Bowyer, Dale@Waterboards; Tom Dalziel  
**Subject:** FY 2014-15 Annual Report Submittal

Dear Mr. Mumley:

The Contra Costa Clean Water Program transmitted the AR for FY 14/15 and in the cover transmittal certification letter stated that the City of Clayton report would not be ready until November 18.

Staff shortages and other unexpected critical timeline projects has resulted in a later start than anticipated for inputting and formatting all the FY14/15 AR information. I also will be out leave for personal and family matters at least the next few weeks.

I will be checking emails periodically. If need to reach me contact me via my cell listed below.

Laura Hoffmeister  
Assistant to the City Manager  
City of Clayton  
6000 Heritage Trail  
Clayton, CA 94517

Email: [LHoffmeister@ci.clayton.ca.us](mailto:LHoffmeister@ci.clayton.ca.us)  
Ph. desk/vm: (925) 673-7308  
Ph. cell/vm/txt: (925) 250-8532  
Fax: (925) 672-4917

**ATTACHMENT B**

**Table of Contents**

<b>Section</b>	<b>Page</b>
Section 1 – Permittee Information.....	1-1
Section 2 – Provision C.2 Municipal Operations... ..	2-1
Section 3 – Provision C.3 New Development and Redevelopment.....	3-1
Section 4 – Provision C.4 Industrial and Commercial Site Controls.....	4-1
Section 5 – Provision C.5 Illicit Discharge Detection and Elimination.....	5-1
Section 6 – Provision C.6 Construction Site Controls.....	6-1
Section 7 – Provision C.7 Public Information and Outreach.....	7-1
Section 8 – Provision C.8 Water Quality Monitoring.....	8-1
Section 9 – Provision C.9 Pesticides Toxicity Controls.....	9-1
Section 10 – Provision C.10 Trash Load Reduction.....	10-1
Section 11 – Provision C.11 Mercury Controls.....	11-1
Section 12 – Provision C.12 PCBs Controls.....	12-1
Section 13 – Provision C.13 Copper Controls.....	13-1
Section 14 – Provision C.14 PBDE, Legacy Pesticides and Selenium Controls.....	14-1
Section 15 – Provision C.15 Exempted and Conditionally Exempted Discharges.....	15-1

Section 1 – Permittee Information

Background Information					
<b>Permittee Name:</b>	City of Clayton				
<b>Population:</b>	10,996				
<b>NPDES Permit No.:</b>	CAS612008 (San Francisco Bay RWQCB Permit)				
<b>Order Number:</b>	R2-2009-0074 (San Francisco Bay RWQCB Permit)				
<b>Reporting Time Period (month/year):</b>	July 2013 through June 2014				
<b>Name of the Responsible Authority:</b>	Gary Napper			<b>Title:</b>	City Manager
<b>Mailing Address:</b>	6000 Heritage Trail				
<b>City:</b>	Clayton	<b>Zip Code:</b>	94517	<b>County:</b>	Contra Costa
<b>Telephone Number:</b>	925-673-7300		<b>Fax Number:</b>	925-672-4917	
<b>E-mail Address:</b>					
<b>Name of the Designated Stormwater Management Program Contact (if different from above):</b>	Laura Hoffmeister			<b>Title:</b>	Assistant to the City Manager
<b>Department:</b>	Administration				
<b>Mailing Address:</b>	6000 Heritage Trail				
<b>City:</b>	Clayton	<b>Zip Code:</b>	94517	<b>County:</b>	Contra Costa
<b>Telephone Number:</b>	925-673-7308		<b>Fax Number:</b>	925-672-4917	
<b>E-mail Address:</b>	LHoffmesiter@ci.clayton.ca.us				

Section 2 - Provision C.2 Reporting Municipal Operations

**Program Highlights and Evaluation**

Highlight/summarize activities for reporting year:

Summary:

The City of Clayton monitored and received updates from the Contra Costa Clean Water Program's (CCCWP's) Municipal Operations Committee/Work Group, and the BASMAA Municipal Operations Committee. Refer to the C.2 Municipal Operations section of the CCCWP's FY 13-14 Annual Report for a description of activities implemented at the countywide and/or regional level and on our behalf.

The City does not have a full service maintenance department. The City has only 5 full time maintenance staff which are responsible for 2 million square feet of landscaping and irrigation; 500 acres of open space; 50 acres of parks and irrigation; 2 children playgrounds/equipment; 3 ball fields; 2 soccer fields; 25 miles of trails; 84 miles of street markings; 50 miles of underground drainage; 20 miles of major roadway sidewalks; 10 miles of creeks; 650 catch basins (inlets); 15 miles of "v" ditches; 2000 street signs; 500 street lights; 110,000 sq. ft. of public buildings; and 75,000 square feet of public parking lots. Services for street pavement and/or sidewalk repair, sewer and signal lights are contracted out. Water supply and fire protection services are provided by other public agencies. The City uses a maintenance staff supervisor as the field contact person (Mark Janney 925-763-7327) and the Assistant to the City Manager (Laura Hoffmeister, 925-673-7308) as the primary program manager for the entire permit, including Municipal Maintenance.

Street Cleaning/Sweeping

Monthly sweeping was done during FY 13/14 on all city streets, which is about 82 curblane miles. (annually this equates to 1764 curb lane miles swept) A total of 100 tons (or 370 cubic yards) of material were collected by the City sweeping contractor.

In addition three city street areas, about 15 curblane miles, which are part of a truck route to a nearby gravel quarry in the County are swept at a minimum of a weekly basis by the Quarry (CeMex formerly Lodestar RMC Quarry), and often during the summer busy season are swept two to three times a week to prevent quarry dust and sediment from reaching storm drains. This would average about 1950 curb lane miles per year. There are no quantitative statistics of the Quarry sweeper as part of the route is in the County (unincorporated) and it is under contract by a private business (rock quarry) that is located outside the City's jurisdiction. The quantitative data is for the City monthly sweeper and is extrapolated for the Quarry based on the average amount of material picked up per mile by the City sweeper of in FY 13/14 of .21 cubic yards per mile. This would equate to about 110 tons or 409 cubic yard collected of additional materials collected.

The company uses a broom assist vacuum sweeper which has been effective for our mostly residential community with its leaf fall from its street trees and dust and sediments from the gutter. The quarry uses a broom/brush sweeper as the material targeted by them is gravel and larger sediment particles along the quarry truck accesses.

Drainage Inlet Cleaning

Every City storm drain (catch basin) and culverts were inspected and cleaned (approximately 650) and approximately 5 cubic yards of sediment was removed. The remainder was leaves and a bit of litter/trash consisting of a few plastic bottles, some paper, and cans. Additionally, less sediment was removed due to a decreased amount of rainfall again this year.

Creek cleaning of the 10 miles of creeks were walked and inspected and cleaned by the City Maintenance staff consisted of about 60 cubic yards of landscape materials, mostly woody brush, branches, and some tree limbs. There was some scattered wood debris from kids making bicycle ramps and jumps, some paper, a few plastic bottles and cans.

V-ditch cleaning:

The City maintenance staff walked and inspected and cleaned 15 miles of v-ditches in the open space areas including those near to residential development areas. A total of 12 cubic yards of dirt and weeds were removed from the V-ditches, and only a very small amount of litter consisting of a single piece of paper, single can, single bottle, etc.

New Zealand Mud Snail Policy:

In September 19, 2012 there was a new administrative written Standard Operation Procedures (SOP) for addressing maintenance issues related to the potential threat of New Zealand Mud Snail. The information was transmitted to the Maintenance Supervisor who then provided the information to the maintenance staff. The information was reviewed on September 27, 2012 with the staff and acknowledged in writing of receiving the policy. The City maintenance staff does not allow its volunteers that it directly oversees (i.e.: work alternative program) go into the creek. Seasonal staff as they arrive are provided the information before being allowed to work in the creek areas. In June 2014 an update was received from the Clean Water Program indicating the observance of the New Zealand Mud Snail in a portion of Mt Diablo Creek in Clayton (near the Branch Library). City Maintenance staff and the City Council were provided this information. No work was conducted in the creek in the area identified to be impacted by the New Zealand Mud Snail since September 2013. Prior to the FY 13/14 rainy season (Sept- Nov 2014) Maintenance will again review protocols and Standard Operating Procedures (SOP). In addition any outside contractor that the City hires that might be working in and around the segment of affected creek will be provided the information regarding the New Zealand Mud Snail and the SOP. This information will be reported on in the FY 14/15 Annual Report.

(See Attachment C 2)

**C.2.a. ► Street and Road Repair and Maintenance**

Place a **Y** in the boxes next to activities where applicable BMPs were implemented. If not applicable, type **NA** in the box and provide an explanation in the comments section below. Place an **N** in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.

<b>Y</b>	Control of debris and waste materials during road and parking lot installation, repaving or repair maintenance activities from polluting stormwater
<b>Y</b>	Control of concrete slurry and wastewater, asphalt, pavement cutting, and other street and road maintenance materials and wastewater from discharging to storm drains from work sites.
<b>Y</b>	Sweeping and/or vacuuming and other dry methods to remove debris, concrete, or sediment residues from work sites upon completion of work.

Comments: **In addition to BMP controls for specific road and maintenance projects above all public streets are swept once a month via a contract with a street sweeping company. A private sweeping company also sweeps at least one time a week, certain city roads related to rock quarry truck route, the quarry (CeMex Quarry – formerly Lodestar Quarry). This rock quarry is not located within the City Limits it is located in the unincorporated area; however portions of their truck route are within the City of Clayton. The City maintenance staff does not conduct road pavement repair projects. These projects are contracted out and the contractor specification documents include reference to needing to have and comply with appropriate BMP's including those listed above. Due to funding limitations the City of Clayton is only able to contract out street repair or resurfacing projects every two to three years. The City Engineer is responsible for inspection of the contractors work to ensure appropriate BMPs are being implemented.**

See Attachment C2a

**C.2.b. ► Sidewalk/Plaza Maintenance and Pavement Washing**

Place a **Y** in the boxes next to activities where applicable BMPs were implemented. If not applicable, type **NA** in the box and provide an explanation in the comments section below. Place an **N** in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.

<b>Y</b>	Control of wash water from pavement washing, mobile cleaning, pressure wash operations at parking lots, garages, trash areas, gas station fueling areas, and sidewalk and plaza cleaning activities from polluting stormwater
<b>Y</b>	Implementation of the BASMAA Mobile Surface Cleaner Program BMPs

Comments: **The City only has a few small public surface parking lots, we do not pressure wash these. The City does not have any gas station fueling areas. We have two public plaza areas that are periodically pressure washed and all wash water is plain water only and is directed to landscape areas per the BASMAA Mobile Surface Cleaner Program BMPs.**

**C.2.c. ► Bridge and Structure Maintenance and Graffiti Removal**

Place a **Y** in the boxes next to activities where applicable BMPs were implemented. If not applicable, type **NA** in the box and provide an explanation in the comments section below. Place an **N** in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.

N/A	Control of discharges from bridge and structural maintenance activities directly over water or into storm drains
Y	Control of discharges from graffiti removal activities
Y	Proper disposal for wastes generated from bridge and structure maintenance and graffiti removal activities
N/A	Implementation of the BASMAA Mobile Surface Cleaner Program BMPs for graffiti removal
Y	Employee training on proper capture and disposal methods for wastes generated from bridge and structural maintenance and graffiti removal activities.
N/A	Contract specifications requiring proper capture and disposal methods for wastes generated from bridge and structural maintenance and graffiti removal activities.

Comments: **All graffiti removal is done with direct applied solvent with rags and wiped with cloths. Graffiti is very minimal and rarely occurs and not a problem in the City of Clayton. In some rare occurrence the City will paint over the graffiti. The City does not use mobile surface cleaning for outdoor areas. The City does not have any bridges, except for small pedestrian foot bridges along the public trail which crosses Mt Diablo Creek in a few places. The City maintenance staff does not undertake any bridge or structural maintenance activities; if a need arises it would be contracted out. We did not contract out for any bridge or structural maintenance activities during the reporting period.**

**C.2.d. ► Stormwater Pump Stations**

Does your municipality own stormwater pump stations:  Yes  No

If your answer is **No** then skip to **C.2.e.**

Complete the following table for dry weather DO monitoring and inspection data for pump stations<sup>1</sup> (add more rows for additional pump stations). If a pump station is exempt from DO monitoring, explain why it is exempt.

Pump Station Name and Location	First inspection Dry Weather DO Data		Second inspection Dry Weather DO Data	
	Date	mg/L	Date	mg/L

<sup>1</sup> DO monitoring is exempted where all discharge from a pump station remains in a stormwater collection system or infiltrates into a dry creek immediately downstream.

Summarize corrective actions as needed for DO monitoring at or below 3 mg/L. Attach inspection records of additional DO monitoring for corrective actions:

Summary:

Attachments:

Complete the following table for wet weather inspection data for pump stations (add more rows for additional pump stations):

Pump Station Name and Location	Date (2x/year required)	Presence of Trash (Cubic Yards)	Presence of Odor (Yes or No)	Presence of Color (Yes or No)	Presence of Turbidity (Yes or No)	Presence of Floating Hydrocarbons (Yes or No)

C.2.e. ► Rural Public Works Construction and Maintenance					
Does your municipality own/maintain rural <sup>2</sup> roads:		<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
If your answer is <b>No</b> then skip to <b>C.2.f.</b>					
Place a <b>Y</b> in the boxes next to activities where applicable BMPs were implemented. If not applicable, type <b>NA</b> in the box and provide an explanation in the comments section below. Place an <b>N</b> in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.					
<input type="checkbox"/>	Control of road-related erosion and sediment transport from road design, construction, maintenance, and repairs in rural areas				
<input type="checkbox"/>	Identification and prioritization of rural road maintenance based on soil erosion potential, slope steepness, and stream habitat resources				
<input type="checkbox"/>	No impact to creek functions including migratory fish passage during construction of roads and culverts				
<input type="checkbox"/>	Inspection of rural roads for structural integrity and prevention of impact on water quality				
<input type="checkbox"/>	Maintenance of rural roads adjacent to streams and riparian habitat to reduce erosion, replace damaging shotgun culverts and excessive erosion				
<input type="checkbox"/>	Re-grading of unpaved rural roads to slope outward where consistent with road engineering safety standards, and installation of water bars as appropriate				
<input type="checkbox"/>	Inclusion of measures to reduce erosion, provide fish passage, and maintain natural stream geomorphology when replacing culverts or design of new culverts or bridge crossings				
Comments including listing increased maintenance in priority areas:					

<sup>2</sup> Rural means any watershed or portion thereof that is developed with large lot home-sites, such as one acre or larger, or with primarily agricultural, grazing or open space uses.

C.2.f. ► Corporation Yard BMP Implementation			
Place an <b>X</b> in the boxes below that apply to your corporations yard(s):			
<input type="checkbox"/>	We do not have a corporation yard		
<input type="checkbox"/>	Our corporation yard is a filed NOI facility and regulated by the California State Industrial Stormwater NPDES General Permit		
<input checked="" type="checkbox"/>	We have a <b>Stormwater Pollution Prevention Plan (SWPPP)</b> for the Corporation Yard(s)		
Place an <b>X</b> in the boxes below next to implemented SWPPP BMPs to indicate that these BMPs were implemented in applicable instances. If not applicable, type <b>NA</b> in the box. If one or more of the BMPs were not adequately implemented during the reporting fiscal year then indicate so and explain in the comments section below:			
<input checked="" type="checkbox"/>	Control of pollutant discharges to storm drains such as wash waters from cleaning vehicles and equipment		
<input checked="" type="checkbox"/>	Routine inspection prior to the rainy seasons of corporation yard(s) to ensure non-stormwater discharges have not entered the storm drain system		
<input checked="" type="checkbox"/>	Containment of all vehicle and equipment wash areas through plumbing to sanitary or another collection method		
<input checked="" type="checkbox"/>	Use of dry cleanup methods when cleaning debris and spills from corporation yard(s) or collection of all wash water and disposing of wash water to sanitary or other location where it does not impact surface or groundwater when wet cleanup methods are used		
<input checked="" type="checkbox"/>	Cover and/or berm outdoor storage areas containing waste pollutants		
<p>Comments: <b>The Corp yard SWPPP was updated in August 2013, and is included as an attachment with this FY 13/14 Annual Report. The City had previously conducted its inspections Annual prior to the rainy season of October 15<sup>th</sup>. However based upon comments received January 8, 2013, from the Water Boards review of the FY 11-12 Annual Report it is was requested that we conduct prior to September 30<sup>th</sup>. Because the notice from the SF Water Board staff was received in January 2013, it was too late to adjust for FY 12/13. The timing has been done annually and reported in each Annual Report Cycle. With this FY 13-14 Annual Report we have implemented adjusted inspection timing so that it is done at the end of September. We have included the last three prior FY inspections on our reporting table for ease of looking at the history and determining any trends that would need attention. We have not identified any trends or issues.</b></p> <p><b>See Attachment C 2 f.</b></p>			
If you have a corporation yard(s) that is not an NOI facility, complete the following table for inspection results for your corporation yard(s) or attach a summary including the following information:			
Corporation Yard Name	Inspection Date (1x/year required)	Inspection Findings/Results	Follow-up Actions
Clayton Maintenance Yard	Sept. 20, 2013 (FY 13-14)	Need new tarps to cover stockpiles of gravel and bark. Some misc. debris and old street poles, paint cans to be removed and hauled off.	Tarps purchased and on-site, misc. debris removed and hauled off – completed 9/27/13.

Clayton Maintenance Yard	October 5, 2012 (FY 12-13)	All BMPs working fine. Tarps are starting to degrade, need to order additional replacement tarps to cover equipment and bins.	Ordered replacement tarps - completed 10/27/12
Clayton Maintenance Yard	October 7, 2011 (FY 11-12)	All BMP's working fine. Covers, straw waddles and sandbags for stockpiles are beginning to degrade need replacing. Unused and obsolete equipment and stockpile to be removed.	Removed 120 cy of unused dirt stockpile; covered remaining stockpiles with new covers and straw waddles & new sandbags. Removed misc and obsolete equipment - completed 10/28/11
Clayton Maintenance Yard	February 23, 2011 (FY 10-11)	All BMPs working fine – minor house keeping items being attended to – recovering of stockpile materials, removal of unused vehicle. Vehicle is not leaking fluids and area around vehicle is checked regularly so no issues.	Unused vehicle will be taken to auction house . Continue to inspect vehicle to ensure no leaks until removed- removal expected by 10/30/11. Stockpile covers were replaced on 3/4/11; Unused vehicles were removed

Section 3 - Provision C.3 Reporting New Development and Redevelopment

**C.3.b.v.(2)(a) ► Green Streets Status Report**

(All projects to be completed by December 1, 2014)

On an annual basis (if applicable), report on the status of any pilot green street projects within your jurisdiction. For each completed project, report the capital costs, operation and maintenance costs, legal and procedural arrangements in place to address operation and maintenance and its associated costs, and the sustainable landscape measures incorporated in the project including, if relevant, the score from the Bay-Friendly Landscape Scorecard.

Summary:

**There are no green streets projects built or planned within our jurisdiction. The City is built out city with newer infrastructure there does not appear to be any foreseeable future opportunity for retrofitting existing improvements. The C.3 New Development and Redevelopment section of the CCCWP's FY 13-14 Annual Report includes a description of activities conducted at the countywide or regional level.**

**C.3.b.v.(1) ► Regulated Projects Reporting**

Fill in attached table C.3.b.v.(1) or attach your own table including the same information.

**There were no regulated projects approved in the FY 13/14 reporting period. The City of Clayton did deem one project (Silver Oak Estates) complete for permit entitlement processing in May 2013. This will be our first regulated project. This project is in the process of undergoing the CEQA compliance Environmental Review and will require public hearings for tentative map, design review. The expected start of the public hearing process for the CEQA would be after January 2015 by the City Planning Commission, followed at a later time by the City Council. Thereafter Design Review process will be undertaken and subdivision mapping. At this time it is unknown if the Design and subdivision map entitlement applications will be done concurrently or subsequent to the CEQA process. This is an in fill residential project of apx. 14 acres consisting of 53 attached single family (townhomes) and 7 detached single family homes, near Mt. Diablo Creek. The total density is 4 units per acre. The project draft Stormwater Control Plan complies with City Ordinance 444 and C3 Guidebook 6<sup>th</sup> Ed.**

See Table C.3.b.v.(1)

**C.3.e.v. ► Alternative or In-Lieu Compliance with Provision C.3.c.**

(For FY 11-12 Annual Report and each Annual Report thereafter) Is your agency choosing to require 100% LID treatment onsite for all Regulated Projects and not allow alternative compliance under Provision C.3.e.?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
Comments (optional):  <p>The City of Clayton stormwater ordinance was updated on April 2, 2013 by Ordinance 444 (previous Ordinance 379 was repealed in its entirety and replaced by the new Ordinance 444). The update was to address some clean up items since adoption of the MRP, and is consistent with the sample updated Ordinance that the program developed. As with the prior Ordinance the current Ordinance 444 requires every application for a development project to be accompanied by a stormwater control plan that meets the criteria in the most recent version of the CCCWP Stormwater C.3 Guidebook as well as the current NPDES permit and any subsequent amendments, reissuance or successor thereafter. The Guidebook is ongoingly updated to incorporate the requirements of Provision C.3.e. See the New Development and Redevelopment section of the CCCWP's FY 2013-2014 Annual Report for details.</p> <p>See Attachment C3e for Ordinance 444</p>				

**C.3.e.vi ► Special Projects Reporting**

1. Has your agency received, but not yet granted final discretionary approval of, a development permit application for a project that has been identified as a potential Special Project based on criteria listed in MRP Provision C.3.e.ii(2) for any of the three categories of Special Projects (Categories A, B or C)?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
2. Has your agency granted final discretionary approval of a project identified as a Special Project in the March 15, 2014 report? If yes, include the project in both the C.3.b.v.(1) Table, and the C.3.e.vi. Table.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
If you answered "Yes" to either question, 1) Complete Table C.3.e.vi . below. 2) Attach narrative discussion of 100% LID Feasibility or Infeasibility for each project.				

**C.3.h.iv. ► Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting**

(1) Fill in attached table C.3.h.iv.(1)

There City does not have any regulated projects (those approved prior to December 1, 2011) however the City has early projects that have included LID approaches although were not required to implement the LID requirement. These projects are being included on the listing for purposes of providing the information to appropriate vector control agency only, and to demonstrate that the City of Clayton has had projects implement measures prior to when required under the permit thus demonstrating our efforts to comply with the objectives of the Clean Water Program and the Water Board as it relates to reducing impervious pavement runoff impacts into waterways, and assists in trash capture. Even though not required these early projects have O&M plans and are all inspected annually by the City.

See attached table C.3.h.iv

The City has 5 private and two public non-regulated projects that have LID with O&M Programs that include self –inspection by owners/operators—However the City has always done its own annual inspection and continues to do so even for all these non-regulated projects. The inspection reports include identification of any repairs or maintenance required and appropriate notification to responsible party, as well as follow up inspection to ensure compliance. They are monitored and tracked by the City but are included in this report as information only since they are not regulated projects as they pre-date the specific reporting requirement. Even though these are non-regulated and thus not reportable projects the City is including this information only to more fully document our efforts to address stormwater runoff and full trash capture.

Non reportable (non-regulated) private projects:

The City has five private projects approved prior to December 1, 2011 as “early projects” they include LID The early projects are:

- CVS Pharmacy (formally Longs Drugs) 16,000 sq. ft. ;
- Flora Square Retail/Office 7,000 sq. ft. ;
- Mitchell Creek Place residential 9-lot small lot infill ;
- Pine Hollow Estates single family residential subdivision 8-lot.
- Diablo Pointe/Diablo Estates subdivision 24 lot single family residential; however this project was recently completed and accepted by the City in February 2014. The project included the construction of approximately 48 bio- filtration planters which are maintained by each homeowner, and two vortex vault units that are part of the Benefit Assessment District which the city hires inspector to review all annually and perform maintenance on the vortex units as needed based upon the annual inspections. In some cases repairs and maintenance to the vortex units are completed by City personnel prior to the preparation of an annual Certificate of Compliance being issued for the treatment measures. This project has a Benefit Assessment District that the City uses the funds to monitor compliance with the O&M.
- Oak Creek Canyon a 5 lot single family detached large lot subdivision was originally approved in 2003 (with application deemed complete in July 2002) and was thought to have an expired subdivision map. However it was recently determined that the tentative map is still valid pursuant to State legislation which extended the time of certain locally approved subdivision maps. The project however has

not recorded a final map nor obtained approvals for the layout and design of the homes. It is therefore likely that this project will need to comply with the current C3 LID and submit appropriate O&M plans/documents as part of its remaining discretionary approvals; and may need to do this prior to filing a final map. Because this is new information the City Attorney and City Engineer have not had an opportunity to determine specifically what requirements will apply. Staff has met with the developer and outlined the issues and reference to the C3 6<sup>th</sup> Ed. The developer may not be able to provide on lot bio planters due to soil and slope conditions, and therefore may pursue modifying the previously planned siltation and detention basin to comply with C3 for all project runoff. To date staff has not received any updated materials or communication from the developer.

- Creekside Terrace is an early private project consisting of a 7,000 sq. ft. mixed use retail/residential project that was approved in October 2011. It is not yet under construction. It's design includes LID measures. The project still has valid entitlement actions.

Non-reportable (non-regulated) public project:

- Clayton Community Park Parking Lot Expansion, received approval in March 2011, and began construction in June 2011, and completed construction in December 28, 2011. This project included LID and has an O&M Program.
- Oakhurst Fountain Landscaping Improvements, was constructed and completed in late 2012 however its size of area was below the C3 thresholds however included LID with porous pavers, and bio-filtration planters, it has an O&M program.

There have not been any significant problems identified to date as part of the O&M Program and inspections. Minor issues identified to date have been some overgrown landscape vegetation, some sediment filling of LID's and some plant die off. In all cases either the private maintenance corrected the issue as part of regular maintenance or if identified by City annual inspection, correction letter/notice of violations sent to responsible party with deadline to correct. City then conducted a follow up inspection and found the corrections were completed and no further action or follow up was needed. (See Attachment C3 h)

The City confirmed through its annual inspection process that all the sites had been properly maintained and were working as designed. No violations were issued.

See Attachment C.3.h

**(2)** On an annual basis, provide a discussion of the inspection findings for the year and any common problems encountered with various types of treatment systems and/or HM controls. This discussion should include a general comparison to the inspection findings from the previous year.

Summary:

**Note that projects approved prior to December 1, 2011 were not required to fully implement the LID requirement in Provision C.3.c.i. The City of Clayton did not have nor approve any regulated project during the FY 13/14 reporting period.**

**There are no Regulated Projects within the City of Clayton and there are not any stormwater treatments or HM controls have that have been built yet for Regulated Projects within the City of Clayton. For any future regulated projects the City will conduct annual O&M Program verification compliance inspection. The City conducts its own verification inspections or directly contracts for such independent verification inspections and inspects all LID projects (including those projects approved prior to December 1, 2011) on an annual basis.**

**(3)** On an annual basis, provide a discussion of the effectiveness of the O&M Program and any proposed changes to improve the O&M Program (e.g., changes in prioritization plan or frequency of O&M inspections, other changes to improve effectiveness program).

Summary:

**To date the O&M Program seems to be working well. No major issues have been identified to date. No changes to our inspection program are planned. Because we have so few LID projects, all are currently being inspected annually by private contractors hired by the City, and the City is performing verification inspections. In addition the Homeowners Assn., or site management contractors, or individual property owners are responsible for ongoing inspections and maintenance throughout the year. The City receives their report as well as conducts its own annual verification inspection. During the City annual inspection if deficiencies are identified the responsible party is contacted by mail and a correction notice with deadline to complete issued. The City conducts follow up inspection to verify corrections and compliance. To date projects that have had deficiencies have responded to the letter and corrected the deficiencies at the time of the City follow up inspection. The City Engineer office has one Inspector attend the "Low Impact Development Planning, Design, and Construction" workshop provided by the CC Clean Water Program on June 12, 2014. Neither the City Engineer nor Stormwater Program Manager attended, as both had attended multiple previous workshops in prior years on the topic and both have attended training on QSD/QSP training, with the City Engineer having been certified as QSP/QSD, and has been renewed through 2015. [Note: In FY 14-15, the contract engineer office eliminated the only field inspector due to budget cuts from low activity. The City Engineer has been performing both plan review and field inspections during this time].**

<b>(4)</b> During the reporting year, did your agency:					
• Inspect all newly installed stormwater treatment systems and HM controls within 45 days of installation?	X	Yes		No	Not applicable. No new facilities were installed.
• Inspect at least 20 percent of the total number of installed stormwater treatment systems or HM controls? <sup>3</sup>	X	Yes		No	Not applicable. No treatment measures
• Inspect at least 20 percent of the total number of installed vault-based systems?	X	Yes		No	Not applicable. No vault systems.
If you answered "No" to any of the questions above, please explain:					

**C.3.i. ► Required Site Design Measures for Small Projects and Detached Single Family Home Projects**

On an annual basis, discuss the implementation of the requirements of Provision C.3.i, including ordinance revisions, permit conditions, development of standard specifications and/or guidance materials, and staff training.

Summary:

**The Contra Costa Clean Water Program adopted a December 1, 2012 addendum to the *Stormwater C.3 Guidebook, 6<sup>th</sup> Edition*. The addendum, "Preparing a Stormwater Control Plan for a Small Land Development Project," includes step-by-step instructions, a project data form, and standard specifications for runoff reduction measures. The City of Clayton's stormwater ordinance (Ordinance 444) adopted April 2013, requires that applications for development approvals for projects subject to the permit's new development requirements include a Stormwater Control Plan meeting the criteria in the most recent version of the *Stormwater C.3 Guidebook*.**

<sup>3</sup> If there is only 1 treatment measure in the jurisdiction, the agency must inspect it every year.

**C.3.b.v.(1) ► Regulated Projects Reporting Table (part 1) – Projects Approved During the Fiscal Year Reporting Period**

Project Name Project No.	Project Location <sup>10</sup> , Street Address	Name of Developer	Project Phase No. <sup>11</sup>	Project Type & Description <sup>12</sup>	Project Watershed <sup>13</sup>	Total Site Area (Acres)	Total Area of Land Disturbed (Acres)	Total New Impervious Surface Area (ft <sup>2</sup> ) <sup>14</sup>	Total Replaced Impervious Surface Area (ft <sup>2</sup> ) <sup>15</sup>	Total Pre- Project Impervious Surface Area <sup>16</sup> (ft <sup>2</sup> )	Total Post- Project Impervious Surface Area <sup>17</sup> (ft <sup>2</sup> )
<b>Private Projects</b>											
None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Public Projects</b>											
None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Comments: During the reporting period of FY 13/14 the City of Clayton did not have any regulated projects approved.											

<sup>10</sup> Include cross streets

<sup>11</sup> If a project is being constructed in phases, indicate the phase number and use a separate row entry for each phase. If not, enter "NA".

<sup>12</sup> Project Type is the type of development (i.e., new and/or redevelopment). Example descriptions of development are: 5-story office building, residential with 160 single-family homes with five 4-story buildings to contain 200 condominiums, 100 unit 2-story shopping mall, mixed use retail and residential development (apartments), industrial warehouse.

<sup>13</sup> State the watershed(s) in which the Regulated Project is located. Downstream watershed(s) may be included, but this is optional.

<sup>14</sup> All impervious surfaces added to any area of the site that was previously existing pervious surface.

<sup>15</sup> All impervious surfaces added to any area of the site that was previously existing impervious surface.

<sup>16</sup> For redevelopment projects, state the pre-project impervious surface area.

<sup>17</sup> For redevelopment projects, state the post-project impervious surface area.

**C.3.b.v.(1) ► Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period (private projects)**

Project Name Project No.	Application Deemed Complete Date <sup>18</sup>	Application Final Approval Date <sup>19</sup>	Source Control Measures <sup>20</sup>	Site Design Measures <sup>21</sup>	Treatment Systems Approved <sup>22</sup>	Type of Operation & Maintenance Responsibility Mechanism <sup>23</sup>	Hydraulic Sizing Criteria <sup>24</sup>	Alternative Compliance Measures <sup>25/26</sup>	Alternative Certification <sup>27</sup>	HM Controls <sup>28/29</sup>
<b>Private Projects</b>										
None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Comments: During the reporting period of FY 13/14 the City of Clayton did not have any regulated private projects approved.										

<sup>18</sup> For private projects, state project application deemed complete date. If the project did not go through discretionary review, report the building permit issuance date.

<sup>19</sup> For private projects, state project application final discretionary approval date. If the project did not go through discretionary review, report the building permit issuance date.

<sup>20</sup> List source control measures approved for the project. Examples include: properly designed trash storage areas; storm drain stenciling or signage; efficient landscape irrigation systems; etc.

<sup>21</sup> List site design measures approved for the project. Examples include: minimize impervious surfaces; conserve natural areas, including existing trees or other vegetation, and soils; construct sidewalks, walkways, and/or patios with permeable surfaces, etc.

<sup>22</sup> List all approved stormwater treatment system(s) to be installed onsite or at a joint stormwater treatment facility (e.g., flow through planter, bioretention facility, infiltration basin, etc.).

<sup>23</sup> List the legal mechanism(s) (e.g., O&M agreement with private landowner; O&M agreement with homeowners' association; O&M by public entity, etc...) that have been or will be used to assign responsibility for the maintenance of the post-construction stormwater treatment systems.

<sup>24</sup> See Provision C.3.d.i. "Numeric Sizing Criteria for Stormwater Treatment Systems" for list of hydraulic sizing design criteria. Enter the corresponding provision number of the appropriate criterion (i.e., 1.a., 1.b., 2.a., 2.b., 2.c., or 3).

<sup>25</sup> For Alternative Compliance at an offsite location in accordance with Provision C.3.e.i.(1), on a separate page, give a discussion of the alternative compliance site including the information specified in Provision C.3.b.v.(1)(m)(i) for the offsite project.

<sup>26</sup> For Alternative Compliance by paying in-lieu fees in accordance with Provision C.3.e.i.(2), on a separate page, provide the information specified in Provision C.3.b.v.(1)(m)(ii) for the Regional Project.

<sup>27</sup> Note whether a third party was used to certify the project design complies with Provision C.3.d.

<sup>28</sup> If HM control is not required, state why not.

<sup>29</sup> If HM control is required, state control method used (e.g., method to design and size device(s) or method(s) used to meet the HM Standard, and description of device(s) or method(s) used, such as detention basin(s), bioretention unit(s), regional detention basin, or in-stream control).

**C.3.b.v.(1) ► Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period (public projects)**

Project Name Project No.	Approval Date <sup>30</sup>	Date Construction Scheduled to Begin	Source Control Measures <sup>31</sup>	Site Design Measures <sup>32</sup>	Treatment Systems Approved <sup>33</sup>	Operation & Maintenance Responsibility Mechanism <sup>34</sup>	Hydraulic Sizing Criteria <sup>35</sup>	Alternative Compliance Measures <sup>36/37</sup>	Alternative Certification <sup>38</sup>	HM Controls <sup>39/40</sup>
<b>Public Projects</b>										
None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Comments:  
 During the reporting period of FY 13/14 the City of Clayton did not have any regulated public projects approved.

<sup>30</sup> For public projects, enter the plans and specifications approval date.

<sup>31</sup> List source control measures approved for the project. Examples include: properly designed trash storage areas; storm drain stenciling or signage; efficient landscape irrigation systems; etc.

<sup>32</sup> List site design measures approved for the project. Examples include: minimize impervious surfaces; conserve natural areas, including existing trees or other vegetation, and soils; construct sidewalks, walkways, and/or patios with permeable surfaces, etc.

<sup>33</sup> List all approved stormwater treatment system(s) to be installed onsite or at a joint stormwater treatment facility (e.g., flow through planter, bioretention facility, infiltration basin, etc.).

<sup>34</sup> List the legal mechanism(s) (e.g., maintenance plan for O&M by public entity, etc...) that have been or will be used to assign responsibility for the maintenance of the post-construction stormwater treatment systems.

<sup>35</sup> See Provision C.3.d.i. "Numeric Sizing Criteria for Stormwater Treatment Systems" for list of hydraulic sizing design criteria. Enter the corresponding provision number of the appropriate criterion (i.e., 1.a., 1.b., 2.a., 2.b., 2.c., or 3).

<sup>36</sup> For Alternative Compliance at an offsite location in accordance with Provision C.3.e.i.(1), on a separate page, give a discussion of the alternative compliance site including the information specified in Provision C.3.b.v.(1)(m)(i) for the offsite project.

<sup>37</sup> For Alternative Compliance by paying in-lieu fees in accordance with Provision C.3.e.i.(2), on a separate page, provide the information specified in Provision C.3.b.v.(1)(m)(ii) for the Regional Project.

<sup>38</sup> Note whether a third party was used to certify the project design complies with Provision C.3.d.

<sup>39</sup> If HM control is not required, state why not.

<sup>40</sup> If HM control is required, state control method used (e.g., method to design and size device(s) or method(s) used to meet the HM Standard, and description of device(s) or method(s) used, such as detention basin(s), bioretention unit(s), regional detention basin, or in-stream control).

**C.3.h.iv. ► Table of Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting**

Fill in table below or attach your own table including the same information.

The City of Clayton does not have any regulated projects (those approved prior to December 1, 2011) however the City has early projects that have included LID approaches although were not required to implement the LID requirement.

These projects are non-regulated and non-reportable but are being included on the listing for purposes of providing the information to appropriate vector control agency only, and to demonstrate that the City of Clayton has had projects implement measures prior to when required under the permit thus demonstrating our efforts to comply with the objectives of the Clean Water Program and the Water Board as it relates to reducing impervious pavement runoff impacts into waterways, and full trash capture. Even though not required these early projects have O&M plans and are all inspected annually by the City.

Name of Facility/Site Inspected	Address of Facility/Site Inspected	Newly Installed? (YES/NO) <sup>41</sup>	Party Responsible <sup>42</sup> For Maintenance	Date of Inspection	Type of Inspection <sup>43</sup>	Type of Treatment/HM Control(s) Inspected <sup>44</sup>	Inspection Findings or Results <sup>45</sup>	Enforcement Action Taken <sup>46</sup>	Comments/Follow-up
CVS Pharmacy (private)	Center Street (16,000 sq ft single story commercial building; City conducts annual inspection; private maintenance)	No Installed apx. 2006	CVS and Endashian LLC (lessor; and property owner)	9/29/2013 10/1/2013	Annual; Follow Up	Filtration Planters/Bio-Retention Planters / Flo-Through Planters  On-Site	Minor leaf build up, no litter all vegetation healthy and properly trimmed	Inspector notified owner	Follow up inspection of 10/1/13 determined compliance (leaf build up removed)
Flora Square (private)	Center/Oak Street (7,000 sq foot 2 story retail/office building; city conducts annual inspection; private maintenance)	No Installed apx. 2009	Dave Thomas NUCP Clayton LLC (property owner)	9/15/2013	Annual	Filtration Planters/Bio-Retention Planters  On- Site	Satisfactory, clear of debris, no litter all vegetation healthy and properly trimmed; in compliance with plans	None	None
Mitchell Creek Place (private)	High Street 9-lot single family subdivision; city conducts annual inspection; HOA private maintenance)	No Installed apx. 2009	HOA	9/19/2013 10/1/2013	Annual Follow Up	Filtration Planters/Bio-Retention Planters On-Site	Need to remove some silt/dirt build up; all vegetation healthy and properly trimmed; in compliance with plans	Inspector notified HOA	Follow up inspection of 10/1/13 determined compliance (silts/dirt removed)

<sup>41</sup> Indicate "YES" if the facility was installed within the reporting period, or "NO" if installed during a previous fiscal year.

<sup>42</sup> State the responsible operator for installed stormwater treatment systems and HM controls.

<sup>43</sup> State the type of inspection (e.g., 45-day, routine or scheduled, follow-up, etc.).

<sup>44</sup> State the type(s) of treatment systems inspected (e.g., bioretention facility, flow-through planter, infiltration basin, etc...) and the type(s) of HM controls inspected, and indicate whether the treatment system is an onsite, joint, or offsite system.

<sup>45</sup> State the inspection findings or results (e.g., proper installation, improper installation, proper O&M, immediate maintenance needed, etc.).

<sup>46</sup> State the enforcement action(s) taken, if any.

**C.3.h.iv. ► Table of Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting**

Fill in table below or attach your own table including the same information.

The City of Clayton does not have any regulated projects (those approved prior to December 1, 2011) however the City has early projects that have included LID approaches although were not required to implement the LID requirement.

These projects are non-regulated and non-reportable but are being included on the listing for purposes of providing the information to appropriate vector control agency only, and to demonstrate that the City of Clayton has had projects implement measures prior to when required under the permit thus demonstrating our efforts to comply with the objectives of the Clean Water Program and the Water Board as it relates to reducing impervious pavement runoff impacts into waterways, and full trash capture. Even though not required these early projects have O&M plans and are all inspected annually by the City.

Name of Facility/Site Inspected	Address of Facility/Site Inspected	Newly Installed? (YES/NO) <sup>41</sup>	Party Responsible <sup>42</sup> For Maintenance	Date of Inspection	Type of Inspection <sup>43</sup>	Type of Treatment/HM Control(s) Inspected <sup>44</sup>	Inspection Findings or Results <sup>45</sup>	Enforcement Action Taken <sup>46</sup>	Comments/Follow-up
Pine Hollow Estates (private)	Pardi Place 8 lot single family subdivision; city conducts annual inspection; private HOA and homeowner does maintenance	No Installed apx. 2008	HOA	9/19/2013 10/1/2013	Annual Follow Up	Filtration Planters/Bio-Retention Planters  On-Site	Lot 1 had voids in perimeter stones or bio –filtration planter that need to be filled; Lot 2 planter mix has moss build up and need to be removed otherwise Satisfactory, clear of debris, no litter all vegetation healthy and properly trimmed; in compliance with plans	Inspector notified HOA	Follow up inspection of 10/1/13 determined compliance ( voids filled in and moss build up removed)
Diablo Pointe (Estates) (private)	Regency/Rialto 24 lot single family residential	Yes VortSentry Installed apx. 2006 Lot LIDs installed apx. 2010 to January 2014 Project accepted in Feb. 2014	City of Clayton for VortSentry – via BAD; private homeowners for the residential lot LIDs	8/2013  1/10/2014	Annual  Tract acceptance	Bio Retention Planters Vort Sentry Vort Sentry pre Treatment  On-Site	All items installed in accordance with approved plans and properly functioning no maintenance issues identified. All on site LIDs of the residential lots completed to date were found to be in compliance	None	Has a Benefit Assessment District (BAD) that city oversees and City conducts maintenance and inspections on VortSentry; only conducts inspections for the on lot LID which are individual homeowner maintained.
Community Park Public parking lot – City responsible for maintenance and inspections (public)	Regency Dr/Marsh Creek Road	No Installed in 2/2011	City of Clayton	12/2012	Annual	Filtration Planters/Bio-Retention Planters  On-Site	Minor leaf build up in one planter otherwise other areas clear of debris, no litter all vegetation healthy and properly trimmed; in compliance with plans	Inspector notified City Maintenance	Follow up inspection of 10/1/13 determined compliance (leaf build up removed)

**C.3.h.iv. ► Table of Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting**

Fill in table below or attach your own table including the same information.

The City of Clayton does not have any regulated projects (those approved prior to December 1, 2011) however the City has early projects that have included LID approaches although were not required to implement the LID requirement.

These projects are non-regulated and non-reportable but are being included on the listing for purposes of providing the information to appropriate vector control agency only, and to demonstrate that the City of Clayton has had projects implement measures prior to when required under the permit thus demonstrating our efforts to comply with the objectives of the Clean Water Program and the Water Board as it relates to reducing impervious pavement runoff impacts into waterways, and full trash capture. Even though not required these early projects have O&M plans and are all inspected annually by the City.

Name of Facility/Site Inspected	Address of Facility/Site Inspected	Newly Installed? (YES/NO) <sup>41</sup>	Party Responsible <sup>42</sup> For Maintenance	Date of Inspection	Type of Inspection <sup>43</sup>	Type of Treatment/HM Control(s) Inspected <sup>44</sup>	Inspection Findings or Results <sup>45</sup>	Enforcement Action Taken <sup>46</sup>	Comments/Follow-up
Oakhurst Fountain Landscaping (public)	Oakhurst Drive at Clayton Road	Yes	City of Clayton	9/19/13	Annual	Filtration Planters/Bio-Retention Planters  On-Site	No issues. Plants healthy no litter.	None	None

Comments:

See Attachment C3 h for verification of inspection compliance

C.3.e.vi.Special Projects Reporting Table												
Reporting Period – January 1 – June 30, 2013												
Project Name & No.	Permittee	Address	Application Submittal Date <sup>47</sup>	Status <sup>48</sup>	Description <sup>49</sup>	Site Total Acreage	Density DU/Acre	Density FAR	Special Project Category <sup>50</sup>	LID Treatment Reduction Credit Available <sup>51</sup>	List of LID Stormwater Treatment Systems <sup>52</sup>	List of Non-LID Stormwater Treatment Systems <sup>53</sup>
None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

<sup>47</sup> Date that a planning application for the Special Project was submitted.

<sup>48</sup> Indicate whether final discretionary approval is still pending or has been granted, and provide the date or version of the project plans upon which reporting is based.

<sup>49</sup> Type of project (commercial, mixed-use, residential), number of floors, number of units, type of parking, and other relevant information.

<sup>50</sup> For each applicable Special Project Category, list the specific criteria applied to determine applicability. For each non-applicable Special Project Category, indicate n/a.

<sup>51</sup> For each applicable Special Project Category, state the maximum total LID Treatment Reduction Credit available. For Category C Special Projects also list the individual Location, Density, and Minimized Surface Parking Credits available.

<sup>52</sup> List all LID stormwater treatment systems proposed. For each type, indicate the percentage of the total amount of runoff identified in Provision C.3.d. for the Special Project's drainage area (assume % of total runoff = % of total equivalent impervious area).

<sup>53</sup> List all non-LID stormwater treatment systems proposed. For each type of non-LID treatment system, indicate: (1) the percentage of the total amount of runoff identified in Provision C.3.d. for the Special Project's drainage area, and (2) whether the treatment system either meets minimum design criteria published by a government agency or received certification issued by a government agency, and reference the applicable criteria or certification. (Contra Costa's criteria were adopted March 20, 2013.)

Section 4 – Provision C.4 Industrial and Commercial Site Controls

**Program Highlights**

Provide background information, highlights, trends, etc.

The City of Clayton does not have any industrial sites. The City of Clayton has very few commercial sites, they are limited to one 8 acre master planned neighborhood shopping center, and a two block area of smaller commercial business consisting of mostly offices, two small convenience stores, and a few restaurants. The City does not have any auto service facilities. The City of Clayton contracts with the Central Contra Costa Sanitary District – Central Sans- (POTW) for its commercial inspections. We have developed an inspection plan and review and update annually as needed with Central Sans staff supervising inspector. City staff met with its inspector supervisor and ensured the business listing data base was current and updated the planned inspection list for the Fiscal year, facilities lists, and inspection frequencies and priorities; 2) the contracted POTW inspectors conducting inspections and provides regular updates to city staff 3) the POTW inspectors received appropriate training. The City regularly monitors the meetings CCCWP's Municipal Operations Committee and the in the BASMAA Municipal Operations Committee.

Refer to the C.4. Industrial and Commercial Site Controls section of the Program's FY 13-14 Annual Report for a description of activities of the countywide program and/or the BASMAA Municipal Operations Committee.

**C.4.b.i. ► Business Inspection Plan**

Do you have a Business Inspection Plan?

Yes  No

If No, explain:

**C.4.b.iii.(1) ► Potential Facilities List**

List below or attach your list of industrial and commercial facilities in your Inspection Plan to inspect that could reasonably be considered to cause or contribute to pollution of stormwater runoff.

See Attachment C4b(1)

**C.4.b.iii.(2) ► Facilities Scheduled for Inspection**

List below or attach your list of facilities scheduled for inspection during the current fiscal year.

**See Attachment C4b(2)**

**C.4.c.iii.(1) ► Facility Inspections**

Fill out the following table or attach a summary of the following information. Indicate your violation reporting methodology below.

<input checked="" type="checkbox"/>	Permittee reports multiple discrete violations on a site as one violation.
<input type="checkbox"/>	Permittee reports the total number of discrete violations on each site.

	Number	Percent
Number of businesses inspected	10	
Total number of inspections conducted	14	
Number of violations (excluding verbal warnings)	0	
Sites inspected in violation	N/A	N/A
Violations resolved within 10 working days or otherwise deemed resolved in a longer but still timely manner	N/A	N/A

Comments:

**Central Sans, our POTW inspector, reports that for initial inspections they provide an average of 4 informational materials per business; for re-inspections they provide an average of 2 informational materials to the business.**

**In summary, no businesses were issued Warning Notices (WN) or Notice of Violations (NOV).**

**See Attachments C 4c for details of the inspections.**

**C.4.c.iii.(2) ▶ Frequency and Types/Categories of Violations Observed**

Fill out the following table or attach a summary of the following information.

Type/Category of Violations Observed	Number of Violations
Actual discharge (e.g. active non-stormwater discharge or clear evidence of a recent discharge)	0
Potential discharge and other	0
Comments: The City of Clayton contracts with our POTW- Central Contra Costa Sanitation District for inspection services. Refer to the "Enforcement Actions" listed under C.4.c.iii.2 Typically a "Level 1" enforcement actions (Warning Notice) is not considered "violations", however it is followed up with either specific follow up inspection, or at a subsequent regular inspection to ensure corrective action is taken.  During the reporting period of FY 13/14 no warning notices or notices of violations were issued.	

**C.4.c.iii.(2) ▶ Frequency and Type of Enforcement Conducted**

Fill out the following table or attach a summary of the following information.

	Enforcement Action (as listed in ERP) <sup>48</sup>	Number of Enforcement Actions Taken	% of Enforcement Actions Taken <sup>49</sup>
Level 1	Warning Notice	0	N/A
Level 2	Notice of Violation	0	N/A
Level 3	Formal Enforcement Action (Administrative Penalties, Cost Recovery)	0	N/A
Level 4	Legal Action/Referral to State and Federal Agencies	0	N/A
<b>Total</b>		0	N/A

<sup>48</sup> Agencies to list specific enforcement actions as defined in their ERPs.

<sup>49</sup> Percentage calculated as number of each type of enforcement action divided by the total number of enforcement actions.

**C.4.c.iii.(3) ▶ Types of Violations Noted by Business Category**

Fill out the following table or attach a summary of the following information.

Business Category <sup>50</sup>	Number of Actual Discharge Violations	Number of Potential/Other Discharge Violations
No violations reported or observed during FY 13/14	0	0
See Attachment C4c for information on business inspection		

**C.4.c.iii.(4) ▶ Non-Filers**

List below or attach a list of the facilities required to have coverage under the Industrial General Permit but have not filed for coverage:

There are no industrial facilities in the City of Clayton, therefore there were no industries identified as non-filers during scheduled inspections during this fiscal year. Central Sans conducts inspections for Clayton under an interagency service agreement. Central Sans reviews the operations of the businesses inspected to determine if they may be subject to the General Industrial Permit standards and if so, determines if the business filed a Notice of Intent (NOI) with the SWRCB. If a non-filer is identified, Central Sans informs the business of the requirement to file a NOI. If the business does not file a NOI, Central Sans notifies City of Clayton of this status so that appropriate referral to the RWQCB is made. Central Sans did not notify the City of Clayton of any non-filers during the reporting period.

**C.4.d.iii ▶ Staff Training Summary**

Training Name	Training Dates	Topics Covered	No. of Inspectors in Attendance	Percent of Inspectors in Attendance
Commercial/Industrial Stormwater Inspection Training Workshop – Brentwood Community Center	May 8, 2014	<ul style="list-style-type: none"> <li>• What Constitutes a Stormwater Violation?</li> <li>• Overview of Site Visit and Mock Inspection</li> <li>• Guided Tour and Mock Inspection of Streets of Brentwood</li> <li>• Building a Strong Enforcement Case</li> <li>• Mapping the Storm Sewer Systems: An Important Component to Your Municipality's Illicit Discharge Detection and Elimination System</li> </ul>	6	67

<sup>50</sup> List your Program's standard business categories.

CCCSD Sampling Training	April, 30 2014	<ul style="list-style-type: none"> <li>• Proper sampling methods</li> <li>• Sample preservation and holding times</li> </ul>	8	89
CCCSD Customer Service Training	June 6, 2014	<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Non-verbal queues</li> </ul>	1	11
CWEA – NRTC	Sept. 9-12, 2013	<ul style="list-style-type: none"> <li>• Stormwater education and outreach</li> <li>• Trash management</li> </ul>	1	11
CWEA Annual Conference	April 29, 2014	<ul style="list-style-type: none"> <li>• Inspector Training</li> <li>• Stormwater BMPs</li> <li>• Outreach</li> </ul>	1	11
CalEPA Basic Inspector Academy	March 3-14, 2014	<ul style="list-style-type: none"> <li>• Investigation</li> <li>• Evidence</li> <li>• Witness testimony</li> <li>• Case Development</li> <li>• Interagency Coordination</li> </ul>	1	11
Regulatory Investigative Techniques	Jan. 24-27, 2014	<ul style="list-style-type: none"> <li>• Interview skills</li> <li>• Gathering and preserving evidence</li> </ul>	1	11
Environmental Enforcement Training	June 6, 2014	<ul style="list-style-type: none"> <li>• Report writing</li> <li>• Evidence</li> <li>• Developing a case</li> </ul>	2	22

Section 5 – Provision C.5 Illicit Discharge Detection and Elimination

**Program Highlights**

Provide background information, highlights, trends, etc.

The City of Clayton monitored and received updates from the countywide program's Municipal Operations Committee/Work Group; and the BASMAA Municipal Operations Committee. Refer to the C.5 Illicit Discharge Detection and Elimination section of the CCCWP's FY 13-14 Annual Report for a description of activities conducted at the countywide or regional level.

During the year the City reviewed and updated its emergency and environmental contact list. There are no known or observed illicit discharges or illicit connections in the City of Clayton. City Maintenance staff annually checks and cleans as needed all DI's throughout the City, and at that time observes to see if any signs of illicit discharges or connections. During the FY 13/14 period Maintenance staff did not observe any illicit discharges or connections. The POTW's also observe for such illicit discharges or connections during their annual business inspections, no illicit discharges or connections were observed by Central Sans staff during the FY 13/14 reporting period. The City contracts with the City of Concord for maintenance of its Sanitary Sewer system. Construction permits go through a review by the City of Concord prior to issuance to ensure that any sewer connections are done to appropriate sewer lines and to current codes and are inspected properly.

Because the City does not receive or observe or have issues related to illicit discharges or connections there are not any trends in the detection and abatement of illicit discharges to report. If there is an item identified it is a rare and infrequent occurrence.

If the City was to receive a complaint/observation of illicit discharge or connection: Our process is that calls are received by city front line staff, police admin staff, or may be field observed by police patrol or maintenance staff in the field, and are directed to either the Asst. to the City Manager or the City Engineering Inspector for initial review, field verification and action; or referred to City Maintenance staff to verify and if needed to take appropriate action to ensure any discharge in public ways does not enter into storm drain. The Asst. to the City Manager is responsible to coordinate with POTW, city part time code enforcement staff person/city engineer/city attorney for any other appropriate follow action. Such actions include contacting the business owner/operator and contact the property owner to determine how the discharge came about; provide them with appropriate educational information; and depending on circumstances may issue any appropriate written warning notice/ citation and/or conduct an investigation and file report with the District Attorney and the Regional Water Control Board for any other follow up action. If it is from an illicit connection we would require them to remove the connection.

See Attachment C.5 updated contact list

**C.5.c.iii ► Complaint and Spill Response Phone Number and Spill Contact List**

List below or attach your complaint and spill response phone number and spill contact list.

Contact	Description	Phone Number
No complaints received	N/A	N/A

**C.5.d.iii ► Evaluation of Mobile Business Program**

Describe implementation of minimum standards and BMPs for mobile businesses and your enforcement strategy. This may include participation in the BASMAA Mobile Surface Cleaners regional program or local activities.

Description:  
**The City participates in the Program outreach related to mobile surface cleaners and that by BASMAA. There are not any mobile surface cleaners located in the City of Clayton. The City has not and does not utilize or hire any mobile surface cleaners, if we were to do so we would utilize a certified Mobile Surface Cleaner.**

If the City was to receive a complaint/observation of illicit discharge: Our process is that calls are received by city front line staff, police admin staff, or may be field observed by police patrol or maintenance staff in the field, and are directed to either the Asst. to the City Manager or the City Engineering Inspector for initial review, field verification and action; or referred to City Maintenance staff to verify and if needed to take appropriate action to ensure any discharge in public ways does not enter into storm drain. The Asst. to the City Manager is responsible to coordinate with POTW, city part time code enforcement staff person/city engineer/city attorney for any other appropriate follow action. Such actions include contacting the business owner/operator and contact the property owner to determine how the discharge came about; provide them with appropriate educational information; and depending on circumstances may issue any appropriate written warning notice/ citation and/or conduct an investigation and file report with the District Attorney and the Regional Water Control Board for any other follow up action. If it is from an illicit connection we would require them to remove the connection.

Refer to the C.5 Illicit Discharge Detection and Elimination section of the CCCWP's FY 13-14 Annual Report for a description of efforts by the CCCWP's Municipal Operations Committee and the BASMAA Municipal Operations Committee to address mobile businesses.

**C.5.e.iii ► Evaluation of Collection System Screening Program**

Provide a summary or attach a summary of your collection screening program, a summary of problems found during collection system screening and any changes to the screening program this FY.

Description:  
**City Maintenance staff conducts annual conducts visual inspections and cleans as necessary all drainage inlets and all creeks, outfalls, and v-ditches and box culverts (650 DI's; 5 miles of creeks; 15 miles of v-ditches; and 2 box culverts). All DI's and outfalls are regularly inspected, monitored and cleaned as part of overall field maintenance activity during the rainy season and cleared as may be necessary. Of the 650 DI's,**

25 have full trash capture devices installed on them. No issues were observed or reported this year.  
 Of all the DI's there were 26 "No Dumping Drains to Creek" thermoplastic markings were replaced in FY 13/14 that were remaining from FY 12/13 as city ran out of markings, plus during FY 13/14 an additional 74 additional markings were replaced. There are apx. 20 newly identified DI's during the FY 13/14 inspections that need markings replaced which will be done in FY 14/15. Currently there is apx. 97% of the DI's marked, well above the minimum MRP requirement of 80%.  
 City Maintenance staff did clean the creeks, v-ditches, and DI's during FY 13-14 however, the 2 box culverts were inspected and determined that they did not need to be cleaned this FY.

**C.5.f.iii.(1), (2), (3) ▶ Spill and Discharge Complaint Tracking**

Spill and Discharge Complaint Tracking (fill out the following table or include an attachment of the following information)		
	Number	Percentage
Discharges reported (C.5.f.iii.(1))	0	
Discharges reaching storm drains and/or receiving waters (C.5.f.iii.(2))	0	N/A
Discharges resolved in a timely manner (C.5.f.iii.(3))	0	N/A
Comments: The City of Clayton did not receive or observe any spills or illicit discharges during the reporting period. Our process is that calls are received by city front line staff, police admin staff, or may be field observed by police patrol or maintenance staff in the field, and are directed to either the Asst. to the City Manager or City Engineering Inspector for initial review, field verification and action; or referred to City Maintenance staff to verify and if needed to take appropriate action to ensure any discharge in public ways does not enter into storm drain. The Asst. to the City Manager is responsible to coordinate with POTW, city part time code enforcement staff person/city engineer/city attorney for any other appropriate follow action. Such actions include contacting the business owner/operator and contact the property owner to determine how the discharge came about; provide them with appropriate educational information; and depending on circumstances may issue any appropriate written warning notice/ citation and/or conduct an investigation and file report with the District Attorney and the Regional Water Control Board for any other follow up action.		

**C.5.f.iii.(4) ▶ Summary of major types of discharges and complaints**

Provide a narrative or attach a table and/or graph.  
**None. There were not any discharges observed or complaints received during FY 2013-14.**

Section 6 – Provision C.6 Construction Site Controls

<b>C.6.e.iii.1.a, b, c ▶ Site/Inspection Totals</b>		
<b>Number of High Priority Sites (sites disturbing &lt; 1 acre of soil requiring storm water runoff quality inspection) (C.6.e.iii.1.a)</b>	<b>Number of sites disturbing ≥ 1 acre of soil (C.6.e.iii.1.b)</b>	<b>Total number of storm water runoff quality inspections conducted (include only High Priority Site and sites disturbing 1 acre or more) (C.6.e.iii.1.c)</b>
#	#	#
0	0	0
<p>Comments:                      The City of Clayton issued 29 small project stormwater permits for small projects. These sites generally consist of construction of minor items such as backyard residential swimming pools/spas, demolition of pools and backfill, residential building additions and remodels, and remove/replace of sidewalks due to tripping hazards. For these 29 small projects, the City conducted 98 additional stormwater quality inspections that were not included within the above categories during FY 2013-14. The city conducted these inspections as part of its practice to ensure small projects are properly implementing site construction best management practices. The City of Clayton collects inspection fees to cover its costs and a small refundable deposit. This approach implemented several years ago greatly enhances our program to ensure these small projects are using appropriate BMP's. Because the City of Clayton is mostly built out, most of the construction activity is related to smaller residential type projects and some smaller tenant improvements to existing commercial buildings.</p>		

<b>C.6.e.iii.1.d ▶ Construction Activities Storm Water Violations</b>		
<b>BMP Category</b>	<b>Number of Violations<sup>51</sup> excluding Verbal Warnings</b>	<b>% of Total Violations<sup>52</sup></b>
Erosion Control	0	N/A
Run-on and Run-off Control	0	N/A
Sediment Control	0	N/A
Active Treatment Systems	0	N/A
Good Site Management	0	N/A
Non Stormwater Management	0	N/A
<b>Total<sup>53</sup></b>	<b>0</b>	<b>N/A</b>

<sup>51</sup> Count one violation in a category for each site and inspection regardless of how many violations/problems occurred in the BMP category. For example, if during one inspection at a site, there are 2 erosion control violations, only 1 violation would be counted for this table.

<sup>52</sup> Percentage calculated as number of violations in each category divided by total number of violations in all six categories.

<sup>53</sup> The total number of violations may count more than one violation per inspection, since some inspections may result in violations in more than one category. For example, during one inspection of a site, there may have been both an erosion control violation and a sediment control violation. For this reason, the total number of violations in this table may not match the total number of enforcement actions reported in Table C6.e.iii.1.e.

**C.6.e.iii.1.e ► Construction Related Storm Water Enforcement Actions**

	Enforcement Action (as listed in ERP) <sup>54</sup>	Number Enforcement Actions Issued	% Enforcement Actions Issued <sup>55</sup>
Level 1 <sup>56</sup>	Verbal Warning	0	N/A
Level 2	Written Letter of Correction	0	N/A
Level 3	Written Notice of Violation – Formal Enforcement Action Stop Work Order for active construction issues	0	N/A
Level 4	Legal Action/Referral to State and Federal Agencies	0	N/A
<b>Total</b>		<b>0</b>	<b>N/A</b>

**C.6.e.iii.1.f, g ► Illicit Discharges**

	Number
Number of illicit discharges, actual and those inferred through evidence at high priority sites and sites that disturb 1 acre or more of land (C.6.e.iii.1.f)	0
Number of sites with discharges, actual and those inferred through evidence at high priority sites and sites that disturb 1 acre or more of land (C.6.e.iii.1.g)	0

<sup>54</sup> Agencies should list the specific enforcement actions as defined in their ERPs.

<sup>55</sup> Percentage calculated as number of each type of enforcement action divided by the total number of enforcement actions.

<sup>56</sup> For example, Enforcement Level 1 may be Verbal Warning.

C.6.e.iii.1.h, i ► Violation Correction Times		
	Number	Percent
Violations (excluding verbal warnings) fully corrected within 10 business days after violations are discovered or otherwise considered corrected in a timely period (C.6.e.iii.1.h)	0	N/A <sup>57</sup>
Violations (excluding verbal warnings) not fully corrected within 30 days after violations are discovered (C.6.e.iii.1.i)	0	N/A <sup>58</sup>
Total number of violations (excluding verbal warnings) for the reporting year <sup>59</sup>	0	N/A
Comments:		

C.6.e.iii.(2) ► Evaluation of Inspection Data
Describe your evaluation of the tracking data and data summaries and provide information on the evaluation results (e.g., data trends, typical BMP performance issues, comparisons to previous years, etc.).
<p>Description:</p> <p>In 09/10 there were not any active construction projects that were subject to the thresholds of the NPDES MRP permit. During 10/11 there was only one project (Diablo Pointe) which was only doing remedial grading to a reactivated subdivision project of 24 lots. During 11/12 the 24 lot project was reactivated and moved quickly through the construction process. The project had all site improvement work completed some years back; the only hard construction was limited to the pad lots and some open space slope repair.</p> <p>During FY 12/13 this development was in the house construction phase. Currently, the Diablo Pointe Subdivision is now built out, and all house construction is complete. The City of Clayton is very small and mostly built out; most projects occur only every few years and thus we are not able to obtain meaningful trend analysis. Over the 24 inspections that occurred to this project site (through 12/13 when construction was complete); there were not any consistent or significant issues identified and the contractors kept all BMP's in good condition, there were not any violations observed. The developer was a major builder (Toll Brothers) and they appeared to understand the importance of good establishment and maintenance of their site BMP's. In general it appears most major developers have contractors who are better versed in the provisions of the MRP, the Clean Water Programs C3 Guidebook etc. During FY 13/14 there were not any projects under construction nor planned or projects that have received entitlements. If the current development project of Silver Oaks Estates receives entitlements in 2015, it is not expected to commence construction until 2016/15 at the earliest. Therefore as noted there is not sufficient development or consistent development projects in the City of Clayton to be able to establish any meaningful evaluation of inspections, issues, concerns and data tracking/trend analysis. Of the projects in the past no consistent issues have been identified that need to be addressed or would generate any changes to construction site controls and inspection processes.</p>

<sup>57</sup> Calculated as number of violations fully corrected in a timely period after the violations are discovered divided by the total number of violations for the reporting year.

<sup>58</sup> Calculated as number of violations not fully corrected within 30 days after the violations are discovered divided by the total number of violations for the reporting year.

<sup>59</sup> The total number of violations reported in the table of Violation Correction Times equals the number of initial enforcement actions. I.e., This assumes one violation is issued for several problems during an inspection at a site. The total number of violations in the table of Violation Correction Times may not equal the total number of enforcement actions because one violation issued at a site may have a second enforcement action for the same violation at the next inspection if it is not corrected.

**C.6.e.iii.(2) ► Evaluation of Inspection Program Effectiveness**

Describe what appear to be your program's strengths and weaknesses, and identify needed improvements, including education and outreach.

Description:

**There have not been any weaknesses identified. There has only been one active construction site over the last three years or too little activity to make evaluation.**

**Our strength is in our training and information materials and outreach/information processes we have developed. The City has had its City Engineer, Planning Director and Stormwater Manager trained on the new MRP through the program training. The City Engineer, City Inspector, and City Stormwater Program Manager (Asst to the City Manager) completed the QSD/QSP training. The city engineer also took and passed the exam. They also received, along with the new Planning Director and the Asst. Planner additional training from the CCCWP in June 2013 related to implementing MRP provision C3 requirements. The City continues to actively implement the MRP requirements as part of its planning and development process review and refers any potential developer of a project subject to the MRP to the Programs website. The City outreached and provided information to developers/architects and engineers in the private sector of training opportunities related to the MRP. The City provides informational materials on good housekeeping construction practices on all construction related permits, including small projects. The City has very infrequent large construction projects, most construction is smaller projects of home remodeling's/additions/swimming pools and commercial tenant improvements. The city requires and conducts inspections of all these projects to ensure compliance with appropriate BMP's. The City's stormwater manager actively participated in the CCCWP's Development Committee and monitored the activity of the BASMAA Development Committee. The City Inspector has replaced the prior year inspection forms with the example forms available through the Clean Water Program. The City Inspector also participated in local training workshops/seminars on storm water inspection procedures.**

**In April 2013 the City Council Adopted Ordinance 444 which updated our Stormwater Discharge Ordinance to align better with the MRP. The Ordinance framework was provided by the Clean Water Program new Development Committee Workgroup which the City Stormwater Manager (Asst to the City Mgr.) actively participated on.**

**As noted above there is not sufficient development or consistent development projects in the City of Clayton to be able to establish any meaningful evaluation of inspections, issues, concerns and data tracking/trend analysis. Of the projects in the past no consistent issues have been identified that need to be addressed or would generate any changes to construction site controls and inspection processes.**

**See Attachment C 6 e 2**

**Refer to the C.6 Construction Site Control section of countywide CCCWP's program's FY 13-14 Annual Report for a description of activities at the countywide or regional level.**

**C.6.f ▶ Staff Training Summary**

Training Name	Training Dates	Topics Covered	No. of Inspectors in Attendance	Percent of Inspectors in Attendance
Construction Site Stormwater Controls Workshop – Walnut Creek Civic Arts Education Center	April 10, 2014	<ul style="list-style-type: none"> <li>• C.6 Requirements Overview</li> <li>• Recognizing C.6 BMPs – Inspector's Eye</li> <li>• Relating C.6 to the Construction General Permit</li> <li>• Inspections, Documentation, and Reporting</li> <li>• Enforcement – Using the ERP</li> <li>• Using Inspection Tools Exercise and Discussion</li> </ul>	<b>0</b>	<b>N/A</b>
<p><b>The City currently does not have a dedicated filed engineer from the contract engineer's office as the only field inspector was eliminated due to budget cuts from low activity. The City Engineer has been performing both plan review and field inspections during this time. Neither the City Engineer nor the Stormwater Program Manager attended the "Construction Site Stormwater Controls Workshop" provided by the CC Clean Water Program on April 10, 2014 as both had attended multiple previous workshops in prior years on the topic and both have attended training on QSD/QSP training, with the City Engineer having been certified as QSP/QSD and renewed through 2015. At such time that additional contract engineer office staff inspector is added they will be provided appropriate training.</b></p>				

Section 7 – Provision C.7. Public Information and Outreach

**C.7.b.ii.1 ▶ Advertising Campaign**

Summarize advertising efforts. Include details such as messages, creative developed, and outreach media used. The detailed advertising report may be included as an attachment. If advertising is being done by participation in a countywide or regional program, refer to the separate countywide or regional Annual Report.

Summary:

**The City of Clayton monitored and received updates during FY 2013-14 from the countywide program's CCCWP's Public Information and Participation Committee and BASMAA's Public Information and Participation Committee Guidance. Refer to Section 7 in the CCCWP's FY 13-14 Annual Report for a complete review of advertising efforts conducted by the CCCWP on behalf of all Permittees.**

**C.7.b.iii.1 ▶ Pre-Campaign Survey**

*(For the Annual Report following the pre-campaign survey)* Summarize survey information such as sample size, type of survey (telephone survey, interviews etc.). Attach a survey report that includes the following information. If survey was done regionally, refer to a regional submittal that contains the following information:

Place an **X** in the appropriate box below:

<input type="checkbox"/>	Survey report attached
<input checked="" type="checkbox"/>	<b>Refer to Section C.7 in the CCCWP's FY 13-14 Annual Report for complete details on the pre-campaign survey conducted for the CCCWP's Pesticide Campaign</b>

**C.7.b.iii.2 ▶ Post-Campaign Survey**

*(For the Annual Report following the post-campaign survey)* Discuss the campaigns and the measureable changes in awareness and behavior achieved. Provide an update of outreach strategies based on the survey results. If survey was done regionally, refer to a regional submittal that contains the following information:

Place an **X** in the appropriate box below:

<input type="checkbox"/>	Survey report attached
<input checked="" type="checkbox"/>	<b>Refer to Section C.7 in the CCCWP's FY 13-14 Annual Report for complete details on the post-campaign survey conducted for the CCCWP's Pesticide Campaign</b>

**C.7.c ▶ Media Relations**

Summarize the media relations effort. Include the following details for each media pitch in the space below, AND/OR refer to a regional report that includes these details:

- Topic and content of pitch
- Medium (TV, radio, print, online)
- Date of publication/broadcast

Summary: **The City of Clayton is required to participate in a minimum of 6 media efforts.**

**The following separate report developed by BASMAA summarizes media relations efforts conducted during FY 13-14:**

- **BASMAA Media Relations Final Report FY 13-14**

**This report and any other media relations efforts conducted countywide is included within the C.7 Public Information and Outreach section of the Countywide Program's FY 13-14 Annual Report.**

**In addition to the above there were additional local efforts:**

**Within the City of Clayton there are two local newspapers "Clayton Pioneer" and the "Concord Transcript", throughout the year there are various articles related to a variety of green topics, including recycling and trash reduction. In addition our local trash/recycling hauler maintains a website with information related to the proper way to discard trash/recycling, the City's web site has a link to their website and the website is also included on outreach materials. Our hauler also provides an annual customer guide that is mailed to all residents and businesses within the City, and provides bi-monthly billing messages that often have information related to trash reduction and recycling. The City also distributes at its library and City hall flyers on sharps/drugs and bulky object pick up/recycling that the hauler provides for in most cases at no cost, including e-waste. During 13-14 the hauler also mailed out a flier with information and provided direct mail letter to all commercial business. All commercial businesses were re- inspected and found to still be subscribing and have trash and recycling services. The City's local paper "Clayton Pioneer" also coordinated and advertised a "Clayton Cleans Up" day for residents to participate in. This year apx. 3250 people attended, our largest turn out yet. At this event there were various materials related to the proper disposal of trash and recycling provided.**

**Clayton Customer Guide 2014 (mailed Jan – Feb 2014) sent to over 4,700 residents and 100 businesses (all Clayton households and businesses)**

**Treecycling 2013 (mailed November 2013) sent to over 4,700 residents and 100 businesses (all clayton households and businesses) – Also posted at three public posting informational kiosks in the City**

**Sharps – Pharmaceutical disposal included in the customer guide is sent to over 4,700 residents (all clayton households); and 50 flyers provided at Library and City Hall; 50 flyers provided at Clayton Cleans Up. Also posted at three public posting informational kiosks in the City- The city has collection bins at its police department for these. In FY 12/13 there was 401 lbs of sharps dropped off (an increase of 114% over FY 12/13); and there was 760 lbs. of pharmaceuticals dropped off (an increase of 44% over FY 12/13).**

**Free Bulky items/e-waste pick up – 50 flyers provided pick up at Library and City Hall; 50 flyers provided for Clayton Cleans Up April 2014 Also posted at three public posting informational kiosks in the City. In FY 13/14 there were apx. 81 appliances and 95 mattress; and 93 e-waste items collected curbside for free from our hauler Allied/Republic. This is fewer than last year however many appliance companies back haul old appliances and there were several e-waste drop off events at the local nearby schools.**

**C.7.d ► Stormwater Point of Contact**

Summary of any changes made during FY 13-14:

There are no changes to the City website or city point of contact for the stormwater program.

Refer to countywide Program's [CCCWP's] C.7 Public Information and Outreach section of Program's FY 13-14 Annual Report for efforts conducted by the countywide program to publicize stormwater points of contact (e.g. CCCWP website, hotline, outreach materials, etc.). Also refer to the BASMAA MRP Regional Supplement: Training and Outreach for FY 13-14, for efforts conducted by the countywide program to publicize stormwater points of contact (e.g. program website, hotline, outreach materials, etc.).

Additionally, our local trash/recycling hauler continues to maintain a website with information related to the proper way to discard trash/recycling, the City's web site has a link to their website and the website is also included on outreach materials.

The City updated its contact sheet with updates from adjacent jurisdiction contacts.

See Attachment C7d

**C.7.e ► Public Outreach Events**

Describe general approach to event selection. Provide a list of outreach materials and giveaways distributed.

Use the following table for reporting and evaluating public outreach events

Event Details	Description (messages, audience)	Evaluation of Effectiveness
<p>Provide event name, date, and location. Indicate if event is local, countywide or regional.</p> <p><b>The City of Clayton is required to participate in a minimum of 3 public outreach events every year, the City exceeded this minimum as it participated in a total of 6 events in FY 13-14. Two events were coordinated by the program: Bring Back the Natives, Our Water Our World. In addition the City helped facilitate four other local outreach events: Oktoberfest, Clayton Cleans Up; Creekside Arts Festival; the Art and Wine Festival.</b></p> <p>See Attachment C7e</p>	<p>Identify type of event (e.g., school fair, farmers market etc.), type of audience (school children, gardeners, homeowners etc.) and outreach messages (e.g., Enviro scape presentation, pesticides, stormwater awareness)</p>	<p>Provide general staff feedback on the event (e.g., success at reaching a broad spectrum of the community, well attended, good opportunity to talk to gardeners etc.). Provide other details such as:</p> <ul style="list-style-type: none"> <li>• Estimated overall attendance at the event.</li> <li>• Number of people that visited the booth, comparison with previous years</li> <li>• Number of brochures and giveaways distributed</li> <li>• Results of any spot surveys conducted</li> </ul>

Event Details	Description (messages, audience)	Evaluation of Effectiveness
<b>Bringing Back the Natives Garden Tour, Countywide</b> May 2014	Tour to encourage landscaping using native plants, minimizing pesticide and fertilizer use, water conservation, mulching and composting, etc... for countywide residents. See the Fiscal Year 2013/14 Group Program Annual Report, Section C.7, for further details regarding the description of this event.	See the Fiscal Year 2013/14 Group Program Annual Report, Section C.7, for further details regarding the effectiveness of this event.
<b>Support Our Water Our World, Countywide</b> Various dates	See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the description of this event.	See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the effectiveness of this event.
<b>Oktoberfest, Local</b> (October 5 & 6, 2013 – Downtown Clayton)	This is a two day weekend of vendor booths and music. The City staff helps facilitate the placement of two booths one from the Household Hazardous Waste/Central Sanitary District/Mr. Funnelhead and the other Contra Costa Water District. Both these booths provide their own staffing with information and education on watershed awareness, proper disposal/recycling of materials, general stormwater awareness, EnviroScape landscaping using native plants, minimizing pesticide and fertilizer use, water conservation, mulching and composting, etc Attendees were encouraged to take the materials. Mr. Funnelhead also attends, a dressed up mascot that interacts with the children, the message is only rain down the drain, general stormwater awareness and less toxic gardening practices.	Estimated attendance over the two day weekend is 10,000 it included parents and children. Due to budget cuts city staff can no longer attend this event, and is done solely by the other agencies and their staff there is not any information on the amount of materials distributed. The number of attendees has varied over the years as it is dependent on weather (better weather has better turn out)
<b>Creekside Arts Festival, Local</b> (March 21, 22 & 23, 2014 - Library)	A weekend event featuring local area artist who have made or done art that is reflective or the natural /local environment and also includes those that do unique art in reuse. Artists and the Environment. The location is a community room next to a	Estimated attendance was 400 over the two days. Due to budget cuts city staff can no longer participate and it is put on by volunteers. There is not any information on the amount of materials distributed. There is interactive art project for children using the environment, such

	<p>creekside trail/local library branch. Tables for local organizations that promote our nature areas are provided and there is information regarding good environment stewardship. Also promoted are books promoting nature and the environment especially local materials.</p> <p>This year included Wildlife biologist presentation on the rebirth from the Mt Diablo fire; eco art interactive projects/demonstrations.</p>	<p>as rock painting, collecting leafs for colleges from the nearby creekside trail etc. The number of attendees has varied over the years as it is dependent on weather (better weather has better turn out) as well as competing local youth sports activities.</p>
<p>Clayton Cleans Up , Local        (April 26, 2014- City Hall Courtyard)</p>	<p>This is a three hour Saturday morning Community Clean Up event along city trails, creeks, and sidewalk/landscape areas. Tables with information and education was provided &amp; residents encouraged to take the materials. Mr. Funnelhead also attends, a dressed up mascot that interacts with the children, the message is only rain down the drain, general stormwater awareness and less toxic gardening practices.</p>	<p>Estimated attendance was 325 ( the most ever for this annual event) it included parents and children. Due to budget cuts city staff can no longer attend this event, and is done solely by volunteers there is not any information on the amount of materials distributed. The number of attendees has varied over the years as it is dependent on weather (better weather has better turn out) as well as competing local youth sports activities.</p>
<p>Art and Wine Festival, Local        (May 3 &amp; 4, 2014- Downtown Clayton)</p>	<p>This is a two day weekend of vendor booths and music. The City staff helps facilitate the placement of two booths one from the Household Hazardous Waste/Central Sanitary District/Mr. Funnelhead and the other Contra Costa Water District. Both these booths provide their own staffing with information and education on watershed awareness, proper disposal/recycling of materials, general stormwater awareness, Enviroscapes landscaping using native plants, minimizing pesticide and fertilizer use, water conservation, mulching and composting, etc Attendees were encouraged to take the materials. Mr. Funnelhead also attends, a dressed up mascot that interacts with the children, the message is only rain down the drain,</p>	<p>Estimated attendance over the two day weekend is 10,000 it included parents and children. Due to budget cuts city staff can no longer attend this event, and is done solely by the other agencies and their staff there is not any information on the amount of materials distributed. The number of attendees has varied over the years as it is dependent on weather (better weather has better turn out)</p>

	general stormwater awareness and less toxic gardening practices.	
--	--	--

**C.7.f. ► Watershed Stewardship Collaborative Efforts**

Summarize watershed stewardship collaborative efforts and/or refer to a regional report that provides details. Describe the level of effort and support given (e.g., funding only, active participation etc.). State efforts undertaken and the results of these efforts. If this activity is done regionally refer to a regional report.

Evaluate effectiveness by describing the following:

- Efforts undertaken
- Major accomplishments

Summary:

**See the Fiscal Year 2013/14 Group Program Annual Report, Section C.7, for a detailed report on BASMAA and the Program's Events and Activities Efforts on our behalf.**

**The City is required to participate in or contribute to a minimum of 1 effort. During FY 13/14 the City participated/supported in apx. 7 efforts.**

**The City of Clayton actively participates and supports the Program and its 1) participation in the Contra Costa Watershed Forum, 2) the Green Business Program; 3) membership and partnering with the Bay Friendly Landscape Coalition; 4) CCCleanwater.org Community Calendar 5) MyGreengarden.org; 6) membership and support for the California Product Stewardship Council.; and 7) The City also sent letters of support for various legislative efforts on proposed state legislation on regulating plastic bags.**

**See Attachment C 7 f**

<b>C.7.g. ► Citizen Involvement Events</b>		
List the types of events conducted (e.g., creek clean up, storm drain inlet marking, native gardening etc.). Use the following table for reporting and evaluating citizen involvement events.		
<b>Event Details</b>	<b>Description</b>	<b>Evaluation of effectiveness</b>
Provide event name, date, and location. Indicate if event is local, countywide or regional  <b>The City of Clayton is required to participate in a minimum of 1 citizen involvement event. This year the City participated in 5 events, 3 through the Program: Watershed Stewardship Grant Program; Program website CCCleanwater.org Community Calendar and website Mygreengarden.org. The 2 City activities: City maintains its own City Event Calendar on its own website (cityofclayton.org), and the City helped facilitate the local annual Clayton Cleans Up. See Attachment C7g</b>	Describe activity (e.g., creek clean-up, storm drain marking etc.)	Provide general staff feedback on the event. Provide other evaluation details such as: <ul style="list-style-type: none"> <li>• Number of participants. Any change in participation from previous years.</li> <li>• Distance of creek or water body cleaned</li> <li>• Quantity of trash/recyclables collected (weight or volume).</li> <li>• Number of inlets marked.</li> <li>• Data trends</li> </ul>
Program website CCCleanwater.org Community Calendar	See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the description of this event.	See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the effectiveness of this event.
website Mygreengarden.org	See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the description of this event.	See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the effectiveness of this event.
Community Watershed Stewardship Grant Program	See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the description of this event.	See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the effectiveness of this event.
Clayton Cleans Up , Local (April 26, 2014- City Hall Courtyard)	This is a three hour Saturday morning Community Clean Up event along city trails, creeksides, and sidewalk/landscape areas. There were tables with information and education was provided where residents were encouraged to take the materials. Mr. Funnelhead also attends, a dressed up mascot	Estimated attendance was 325 it included parents and children. Due to budget cuts city staff can no longer attend this event, and is done solely by volunteers there is not any information on the amount of materials distributed. The number of attendees has varied over the years as it is dependent on

	that interacts with the children, the message is only rain down the drain, general stormwater awareness and less toxic gardening practices.	weather (better weather has better turn out) as well as competing local youth sports activities. It is estimated that 300 gallons of trash (mostly on land) was collected at this one day activity.
City event calendar <a href="http://www.cityofclayton.org">www. cityofclayton.org</a>	City maintains its own City event calendar which included the listing of various community events such as the Clayton Leans Up, Creekside Arts Festival; Oktoberfest and Art and Wine. The City website also has links to our haulers web site and the Clean Water Program web site.	We do not have the capability to track and find out the number of visits to the various web sites.

**C.7.h. ► School-Age Children Outreach**

Summarize school-age children outreach programs implemented. A detailed report may be included as an attachment. Use the following table for reporting school-age children outreach efforts.

Program Details	Focus & Short Description	Number of Students/Teachers reached	Evaluation of Effectiveness
Provide the following information: Name Grade or level (elementary/ middle/ high) <b>The City of Clayton is to participate or supported a minimum of 1 effort.</b>  <b>In FY 13-14 the City supported 5 such efforts: 2 via the CCCWP: Be Classy not Trashy Youth Anti-littering outreach campaign; and Mr. Funnelhead school, city/county events and tv ads.</b>  <b>In addition the City facilitated 3 other efforts: Mr. Funnelhead</b>	Brief description, messages, methods of outreach used	Provide number or participants	Provide agency staff feedback. Report any other evaluation methods used (quiz, teacher feedback etc.). Attach evaluation summary if applicable.

<p>appearance at Oktoberfest, Clayton Cleans Up; Art and Wine Festival.          See Attachment C7h</p>			
<p>Be Classy not Trashy Outreach, Countywide</p>	<p>See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the description of this event.</p>	<p>See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the number of students reached from this on of this program.</p>	<p>See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the effectiveness of this outreach program.</p>
<p>Mr. Funnelhead, Countywide</p>	<p>See the FY 2012-13 Group Program Annual Report, Section C.7, for further details regarding the description of this event.</p>	<p>See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the number of students/teachers reached from this on of this program.</p>	<p>See the FY 2013-14 Group Program Annual Report, Section C.7, for further details regarding the effectiveness of this outreach program.</p>
<p>Mr. Funnelhead – Local (Oktoberfest 5 &amp; 6, 2013 Downtown Clayton)</p>	<p>This is a two day weekend of vendor booths and music. The City staff helps facilitate the placement of two booths one from the Household Hazardous Waste/Central Sanitary District/Mr. Funnelhead and the other Contra Costa Water District. Both these booths provide their own staffing with information and education on watershed awareness, proper disposal/recycling of materials, general stormwater awareness, Enviroscap landscaping using native</p>	<p>Estimated attendance over the two day weekend is 10,000 if included parents and children. It is likely that some of the adults are local teachers live in area. Due to budget cuts city staff can no longer attend this event, and is done</p>	

	<p>plants, minimizing pesticide and fertilizer use, water conservation, mulching and composting, etc          Attendees were encouraged to take the materials. Mr. Funnelhead also attends, a dressed up mascot that interacts with the children, the message is only rain down the drain, general stormwater awareness and less toxic gardening practices</p>	<p>solely by the other agencies and their staff. The number of attendees has varied over the years as it is dependent on weather (better weather has better turn out)</p>	
<p>Clayton Cleans Up/Mr. Funnelhead, Local (April 26, 2014- City Hall Courtyard)</p>	<p>This is a three hour Saturday morning Community Clean Up event along city trails, creeksides, and sidewalk/landscape areas. There were tables with information and education was provided where residents were encouraged to take the materials. Mr. Funnelhead also attends, a dressed up mascot that interacts with the children, the message is only rain down the drain, general stormwater awareness and less toxic gardening practices.</p>	<p>Estimated attendance was 325 it included parents and children. It is likely that some of the adults are local teachers live in area. Due to budget cuts city staff can no longer attend this event; it is done solely by volunteers there is not any data on the amount of children vs. adults. The number of attendees has varied over the years as it is dependent on weather (better weather has better turn out) as well as competing local youth sports activities.</p>	

<p>Art and Wine/Mr. Funnelhead, Local        (May 3 &amp; 4, 2014- Downtown Clayton)</p>	<p>This is a two day weekend of vendor booths and music. The City staff helps facilitate the placement of two booths one from the Household Hazardous Waste/Central Sanitary District/Mr. Funnelhead and the other Contra Costa Water District. Both these booths provide their own staffing with information and education on watershed awareness, proper disposal/recycling of materials, general stormwater awareness, Enviroscape landscaping using native plants, minimizing pesticide and fertilizer use, water conservation, mulching and composting, etc. Attendees were encouraged to take the materials. Mr. Funnelhead also attends, a dressed up mascot that interacts with the children, the message is only rain down the drain, general stormwater awareness and less toxic gardening practices.</p>	<p>Estimated attendance over the two day weekend is 10,000 if included parents and children. It is likely that some of the adults are local teachers live in area. Due to budget cuts city staff can no longer attend this event, and is done solely by the other agencies and their staff. The number of attendees has varied over the years as it is dependent on weather (better weather has better turn out)</p>	
--	---	--	--

Section 8 - Provision C.8 Water Quality Monitoring

**C.8 ► Water Quality Monitoring**

State below if information is reported in a separate regional report. Municipalities can also describe below any Water Quality Monitoring activities in which they participate directly, e.g. participation in RMP workgroups, fieldwork within their jurisdictions, etc.

Summary:

**During FY 13-14, we contributed through the CCCWP to the BASMAA Regional Monitoring Coalition (RMC). In addition, we contributed financially to the Regional Monitoring Program for Water Quality in the San Francisco Estuary (RMP) and were represented at RMP committees and work groups. Monitoring efforts and results are documented in a separate report submitted March 15 of each year, as required in Provision C.8. For additional information on monitoring activities conducted by the CCCWP, BASMAA RMC and the RMP, see the C.8 Water Quality Monitoring section of the Program's FY 13-14 Annual Report and the Integrated Monitoring Report.**

Section 9 – Provision C.9 Pesticides Toxicity Controls

**C.9.b ▶ Implement IPM Policy or Ordinance**

Report implementation of IPM BMPs by showing trends in quantities and types of pesticides used, and suggest reasons for increases in use of pesticides that threaten water quality, specifically organophosphates, pyrethroids, carbaryl, and fipronil. A separate report can be attached as evidence of your implementation. **See Attachment C 9 b Neither City Maintenance Staff nor its contractors used any organophosphates, pyrethroids, carbaryl and fipronil in a manner that threatens water quality (i.e., are used outdoors and may come in contact with stormwater.) Footnote #61 provides the list of active ingredients that need to be reported under the pyrethroids class of pesticides.**

**Trends in Quantities and Types of Pesticides Used<sup>60</sup>**

Pesticide Category and Specific Pesticide Used	Amount <sup>61</sup>				
	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
<b>Organophosphates</b>	0	0	0	0	0
Product or Pesticide Type A					
Product or Pesticide Type B					
<b>Pyrethroids</b>	0	0	0	0	0
Product or Pesticide Type X					
Product or Pesticide Type Y					
<b>Carbaryl</b>	0	0	0	0	0
<b>Fipronil</b>	0	0	0	0	0

**C.9.c ▶ Train Municipal Employees**

Enter the number of employees that applied or used pesticides (including herbicides) within the scope of their duties this reporting year. <b>(Note: Full time perm. employees only reported; in addition there were 5 season employees trained)</b>	<b>3</b>
Enter the number of these employees who received training on your IPM policy and IPM standard operating procedures within the last 3 years. <b>(Note: Full time perm. employees only reported; in addition there were 5 season employees trained)</b>	<b>3</b>
Enter the percentage of municipal employees who apply pesticides who have received training in the IPM policy and IPM standard operating procedures within the last three years.	<b>100%</b>

<sup>60</sup> Includes all municipal structural and landscape pesticide usage by employees and contractors.

<sup>61</sup> Weight or volume of the product or preferably its active ingredient, using same units for the product each year. The active ingredients in any pesticide are listed on the label. The list of active ingredients that need to be reported in the pyrethroids class includes: allethrin, bifenthrin, beta-cyfluthrin, bioallethrin, cyfluthrin, cypermethrin, cyphenothrin, deltamethrin, esfenvalerate, etofenprox, fenpropathrin, gamma-cyhalothrin, imiprothrin, lambda-cyhalothrin, metofluthrin, permethrin, phenothrin, prallethrin, resmethrin, sumithrin (d-phenothrin), tau-fluvalinate, tefluthrin, tetramethrin, tralomethrin, cis-permethrin, and zeta-cypermethrin.

C.9.d ▶ Require Contractors to Implement IPM			
Did your municipality contract with any pesticide service provider in the reporting year?		<input type="checkbox"/>	Yes
		<input checked="" type="checkbox"/>	No
If yes, attach one of the following:			
<input type="checkbox"/>	Contract specifications that require adherence to your IPM policy and standard operating procedures, OR		
<input checked="" type="checkbox"/>	Copy(ies) of the contractors' IPM certification(s) or equivalent, OR		
<input type="checkbox"/>	Equivalent documentation.		
If <b>Not attached</b> , explain:			
<p>The City historically has always used a very minimal amount of pesticides and herbicides. The City does not use any pesticides or herbicides in a manner that threatens water quality, or in any quantities that would be sufficient to have trend analysis. Pesticide use is mostly limited to building interiors for ants and is mostly done with ant bait stations. Overall the amount used has been constant. Any increase in use is due to increase in the ants based upon weather and climate conditions and seasonal fluctuations. The City limits its use to herbicides to round up and pre-emergent for spot spraying in landscape areas. It uses slow release fertilizer on turf areas only in park areas. These applications are also done when it is not raining or threat of rain. The City ensures through its maintenance operations that it's limited outside contractors for building pest management also use IPM practices. Buildings are mostly managed mostly with minimal building exterior foundation spray if needed and bait type materials for ants by its outside contractor Western Exterminator that is Eco Wise IPM certified. Western Exterminators use of organophosphates, pyrethroids, carbaryl and fipronil are not used or applied in a manner that threatens water quality (i.e., are used outdoors and may come in contact with stormwater.) Any work is done inside of building areas or it outdoors only during non-rain periods. Outdoor work is limited to around building foundations which have landscaping adjacent to the buildings so there is not any potential runoff. Only three small restroom buildings (each about 300 sq. ft. in size) does not have landscaping and treatments are applied only during non-rain periods so that there is not any potential runoff thus no threat to coming into contact with stormwater.</p> <p>Open space weeds in about 125 acres are also managed for non-native invasive (star thistle and artichoke heart) by outside contractor that during FY 11-12 attend and was certified as Bay Friendly IPM and renewed in 2014. The area targeted for this weed management is a limited area and applications are conducted during non-rain periods.</p> <p>The City Maintenance Supervisor during FY 11-12 attended and was certified as Bay Friendly IPM. City Maintenance Staff only uses spot spraying of round-up and pre-emergent in landscape areas during the spring and fall during non-rain periods. During FY 13-14 due to budget cuts and limited staff resources, and the drought the maintenance staff applied limited pre-emergent, only spot and spraying of roundup during the non-rainy times. No fertilizer or pesticide spraying occurs in the planted landscape areas. The only fertilizer application is limited to active play lawn (ie: park sports field areas) and three small grass landscape features. The City maintenance employees do not use or apply pesticides outside.</p> <p>See Attachment C9</p>			

**C.9.e ▶ Track and Participate in Relevant Regulatory Processes**

Summarize participation efforts, information submitted, and how regulatory actions were affected **OR** reference a regional report that summarizes regional participation efforts, information submitted, and how regulatory actions were affected.

Summary:

**During FY 13-14, we participated in regulatory processes related to pesticides through contributions to the CCCWP, BASMAA and CASQA. For additional information, see the Regional Report submitted by BASMAA on behalf of all MRP Permittees.**

**C.9.f ▶ Interface with County Agricultural Commissioners**

Did your municipal staff observe any improper pesticide usage or evidence of improper usage (e.g., pesticides in storm drain systems, along street curbs, or in receiving waters) during this fiscal year?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
--	--------------------------	-----	-------------------------------------	----

If yes, provide a summary of improper pesticide usage reported to the County Agricultural Commissioner and follow-up actions taken to correct any violations. A separate report can be attached as your summary.

**C.9.h.ii ▶ Public Outreach: Point of Purchase**

Provide a summary of public outreach at point of purchase, and any measurable awareness and behavior changes resulting from outreach (here or in a separate report); **OR** reference a report of a regional effort for public outreach in which your agency participates.

Summary:

**See the C.9 Pesticides Toxicity Control section of the CCCWP's FY 13-14 Annual Report for information on point of purchase public outreach conducted countywide and regionally.**

**The City of Clayton supported the additional programs: Bay-Friendly Landscape Maintenance and Gardening Coalition; and Our Water our World. In addition the City outreached to its community and the local Garden Club to participate in the Bring Back the Natives Tour to encourage residents to learn about native plants, water efficient irrigation and IPM practices presented as part of the tour. Two Clayton residential home sites were on the tour. In addition our local Garden Club held a local Spring Home Tour that included homes that had some of the same components. The City Council approved a new contract in FY 12/13 with our open space weed abatement management company who was previously Bay Friendly Certified.**

**C.9.h.vi ► Public Outreach: Pest Control Operators**

Provide a summary of public outreach to pest control operators and landscapers and reduced pesticide use (here or in a separate report); **OR** reference a report of a regional effort for outreach to pest control operators and landscapers in which your agency participates.

Summary:  
**See the C.9 Pesticides Toxicity Control section of CCCWP's FY 13-14 Annual Report for a summary of our participation in and contributions towards countywide and regional public outreach to pest control operators and landscapers to reduce pesticide use.**

Section 10 - Provision C.10 Trash Load Reduction

**C.10.a.iii ▶ Minimum Full Trash Capture**

Provide the following:

- 1) Descriptions of actions/tasks completed towards achieving the Minimum Full Trash Capture requirement in provision C.10.a.iii. Include the:
  - Total number and types of full capture devices (publicly and privately-owned) installed to-date;
  - Total land area (acres) and land areas within each trash generation category (i.e., very high, high, moderate and low) treated by full capture devices (or other types of devices for non-population based Permittees), in comparison to the MRP-required full capture requirements in Attachment J to the MRP; and,
  - Percentage of jurisdictional land areas with very high, high, moderate and low trash generation rates treated by full capture devices.
- 2) A narrative summary of maintenance activities implemented for each device, group of devices, or device type, including descriptions of typical maintenance frequencies and issues associated with maintaining these devices.

**Descriptions of Actions/Tasks (Conducted or Planned):**

The City has met the minimum treatment area required (6 acres) by treating 195 acres with small full-capture devices. The City installed twenty-five (25) connector pipe screens on November 12, 2012. The devices are located within TMAs #1, 3 and 4. To-date, four (4) low-impact development projects (i.e., LID facilities) installed via provision C.3 have been constructed within TMAs #1 and #4. The LID facilities were found to be effective in removing trash. All trash capture devices are publicly owned and maintained. The table below describes the land area within each trash generating category that is treated with full capture devices, and the percentages of areas within each generation rate treated by full capture devices. City does not plan on installing additional connector pipe screens.

See Attachment C 10a

Total Number of Devices Installed	Connector Pipe Screens or Filters	Netting Devices	HDS Units	Gross Solid Removal Devices	LID Facilities	Other	TOTAL
	25	0	0	0	4	0	29

Full Capture Treatment Area	Low	Moderate	High	Very High	TOTAL	Minimum Treatment Area Required (Attachment J)
Acres (All TMAs)	147	48	0	0	195	6
% (All TMAs)	6%	100%	0%	0%	7.9%	

**Descriptions of Maintenance Activities:** Initial inspection and maintenance of full-capture devices occurred on July 20, 2013. All devices were inspected and cleaned July 26, 2013. Most had very little trash; the main materials collected were leaves and silts. At most one catch basin inlet was observed to be apx. 5 % full, mostly with leaves and silts. All catch basin inlets are inspected prior to rainy season (September/October) and cleaned as needed. All devices were observed to be functioning properly. LID facilities are inspected and maintained by the property owners. City staff though its hired contractor conducts an annual inspection of all LID facilities.

**C.10.b.iii ► Trash Hot Spot Assessment**

Provide the volume of material removed during each MRP-required Trash Hot Spot cleanup during each fiscal year, and the dominant types of trash (e.g., glass, plastics, paper) removed and their sources in FY 2013-14 to the extent possible.

See Attachment C10b

Trash Hot Spot	FY 13-14 Cleanup Date	Volume of Trash Removed (cubic yards)				Dominant Type(s) of Trash in FY 2013-14	Trash Sources in FY 2013-14 (where possible)
		FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14		
Clayton Station (behind Safeway – Mt Diablo Creek segment)		7/17/2011 5 gallons (.03 cubic yd)	6/5/2012 33 gallons (.20 cubic yd)	6/28/2013 25 gallons (.15 cubic yd)	6/27/2014 7.5 gallons (.04 cubic yd)	Misc. Litter (See Attachment 10 b)	Unknown- possible general windblown from nearby road; pedestrians along trail.

**C.10.c ► Long-Term Trash Load Reduction Plan**

Provide descriptions of significant revisions made to your Long-term Trash Load Reduction Plan submitted to the Water Board in February 2014. Describe significant changes made to primary or secondary trash management areas (TMA), trash generation maps, control measures, or time schedules identified in your plan.

Description of Significant Revision	Associated TMA
No revisions to the Long-term Trash Load Reduction Plan	None

**C.10.d ► PART A - Trash Control Measure Implementation and Assessment (Jurisdictional-wide Actions)**

Provide a description of each jurisdictional-wide trash control measure implemented to-date. Identify the dominant trash source(s) and dominant type(s) of trash addressed by each control measure. For each jurisdictional-wide measure, identify the trash assessment method(s) used to demonstrate on-going reductions, summarize the results of the assessment(s), and estimate the associated reduction of trash within your jurisdictional area.

Control Measure	Summary Description of Control Measure & Dominant Trash Sources and Types	Assessment Method(s)	Summary of Assessment Results To-date	Estimated % Trash Reduced
<p>Public Education and Outreach Programs Targeted at Trash Reduction and Implemented post-MRP Adoption</p>	<p>Through the CCCWP, the Permittees conducted a "Litter Travels, But It Can Stop with You" multi-year campaign that started in FY 2009-10 and ran through FY 2011-12. The multi-media campaign was designed to educate citizens about the impacts of trash and litter in the County's waterways and how they can help address this problem</p> <p>The campaign included TV spots, billboards, posters at BART stations, placards on transit buses, print ads, and updates to the CCCWP website. Other outreach included more than 10,000 letters to County residents, contact with youth sport leagues, outreach to 17 school districts in the County, and distribution of flyers to students in 5 of those districts. Pre- and post-campaign surveys were conducted.</p> <p>In addition, as per MRP requirement Provision C.3.a.i (7) and C.3.c.i (1) (f), municipalities stencil all new storm drains with the "No Dumping – Drains to Bay" decals and maintain stencils on all storm drains. The City of Clayton uses thermoplastic "No Dumping Drains to Creek" inlet markings for all drainage inlets throughout the City.</p> <p>Both Litter Travels and storm drain stenciling are aimed at reducing all trash types and sources.</p>	<p>Surveys results conducted from the multi-year "Litter Travels" advertising campaign.</p>	<p>Surveys were conducted to measure the effectiveness of the "Litter Travels" campaign that ran from 2009 to 2012. As stated in the May 2010 Topline Report, there was an 18% increase between 2009 and 2010 in the "very willing" response to the questions of "How willing are you to participate in a community event to help clean up trash?"</p> <p>As shown in the June 2011 Topline Report, there was a 21% increase from 2009 to 2011 in the "very high" response to the question of "How high would you rate your own concern about litter polluting water?"</p> <p>As shown in the June 2011 Topline Report, there was a 21% increase from 2009 to 2011 in the "very high" response to the question of "How high would you rate your own concern about litter polluting water?"</p> <p>While both the "Litter Travels" campaign and storm drain stenciling cannot be assigned specific trash reduction percentages, a 2% reduction has been assigned based on best professional judgment.</p>	<p>2 %</p>

**C.10.d ► PART B - Trash Control Measure Implementation and Assessment (TMA Specific Actions)**

Complete the following trash control measure implementation and assessment summary for each primary trash management area (TMA) identified in your Long-term Plan. Include the following information:

- Identify the total jurisdictional area and the % of that area that generates very high (VH), high (H), moderate (M), or low (L) levels of trash;
- Identify the dominant trash source(s) and dominant type(s) of trash addressed or to-be addressed in the TMA;
- Include the area currently treated by full capture devices, the quantity and type of devices installed to-date, and the % of jurisdictional area that generates very high (VH), high (H), moderate (M), and low (L) levels of trash after accounting for reductions via full capture devices;
- Summarize control measures other than full capture devices implemented to-date, distinguishing between implementation that began pre- and post-MRP effective date. If not implemented in the entire TMA, describe generation category targeted and % of TMA addressed;
- Provide the % of the jurisdictional area that generates very VH, H, M or L levels of trash after accounting for all control measures implemented to-date;
- Describe the methods used to evaluate the effectiveness of control measures other than full capture devices, and any assessment results to-date. If the method was not implemented in the entire TMA, describe generation category targeted and % of TMA addressed; and
- Provide an estimate of the % of trash reduced in the TMA and jurisdiction-wide.

C.10.d ► PART B - Trash Control Measure Implementation and Assessment (TMA Specific Actions)								
TMA ID	TMA Area (Acres)	Dominant Sources	Dominant Types	% TMA in Each Trash Generation Category				
				VH	H	M	L	
1 (Downtown)	44	Vehicles and pedestrians are the main trash sources.	All trash types	Baseline Generation (Pre-MRP)	0%	0%	30%	70%
Trash Full Capture Devices		Summary Descriptions of Full Trash Capture Devices (Quantity and Type)		After taking into account Full Capture Devices	0%	0%	0%	100%
Total Area (Acres)	20	Fifteen (15) connector pipe screens and two (2) LID facilities have be installed within TMA #1.						
% of TMA	46%							
% of VH/H/M	100%							
Summary Descriptions of Control Measures Implemented Since MRP Adoption, Other than Full Capture Devices				After taking into account all New or Enhanced (post-MRP) Control Measures	0%	0%	0%	100%
<ul style="list-style-type: none"> <li>• <b>Street Sweeping</b>- All streets within TMA #1 are swept once/month, all arterials (i.e., Clayton Road) are swept once/week and all HOA landscape maintained private streets within TMA #1 are swept once/week.</li> <li>• <b>Storm Drain Inlet Cleaning</b>: The City's Maintenance Department inspects and cleans, as needed all storm drain inlets within TMA #1 on an annual basis. Additional inspections are conducted, as needed.</li> <li>• <b>On-land Trash Cleanups</b>: Within TMA #1, the City's Maintenance Department conducts seasonal on-land cleanups twice/year along Clayton Road and once/week in parks, as needed. In addition, the City-supports the Annual Spring "Clayton Cleans Up" on-land cleanup event each April. The event lasts approximately three hours and draws volunteers consisting of residents, community groups and local businesses. Volunteers remove litter from streets parks and trails near creeks. City Maintenance Temp/Seasonal/volunteers also conduct seasonal on-land cleanups once/week in parks &amp; downtown streets as needed.</li> <li>• <b>Creek Cleanups</b>: On an annual basis, maintenance staff walks along all creeks within TMA #1 to remove trash as needed.</li> </ul>								
Assessment Methods for Control Measures Other than Full Capture Devices								
<p>Assessment methods include the following:</p> <ul style="list-style-type: none"> <li>• Track ability of street sweeper to reach the curb at designated speed. Visually assess trash condition before and after sweeping.</li> <li>• Track inspection and maintenance frequency of storm drain inlets. Document problematic storm drain inlets which require more frequent inspection and maintenance.</li> <li>• Track on-land cleanup location, cleanup frequency, and volume of trash removed during on-land cleanups. Track total number of volunteers participating in Annual Spring "Clayton Cleans Up". Visually assess overall trash condition of cleanup sites before and after event. When possible estimate amount of material collected and type.</li> <li>• Track creek cleanup location, cleanup frequency, and volume of trash or material/type removed during creek cleanups conducted by the City's Maintenance Department. Document overall trash condition of creek cleanup site.</li> </ul>				After taking into account all New or Enhanced (post-MRP) Control Measures	0%	0%	0%	100%
Summary of Assessment Results To-date								
Street sweeping is on-going and is effective in removing trash from streets. The removal of trash with street sweeping and on land clean-up has been highly effective in preventing trash from reaching creeks.								
Estimated % Trash Reduction in TMA due to New or Enhanced Post-MRP actions				100%				
Estimated % Trash Reduction Jurisdiction-wide due to New or Enhanced Post-MRP actions				27%				

C.10.d ► PART B - Trash Control Measure Implementation and Assessment (TMA Specific Actions)									
TMA ID	TMA Area (Acres)	Dominant Sources	Dominant Types	% TMA in Each Trash Generation Category					
				VH	H	M	L		
2 (Clayton Station)	15	Vehicles, pedestrians are the main trash sources.	All trash types.	Baseline Generation (Pre-MRP)	0%	0%	0%	100%	
Trash Full Capture Devices		Summary Descriptions of Full Trash Capture Devices (Quantity and Type)		After taking into account Full Capture Devices	0%	0%	0%	100%	
Total Area (Acres)	0	Full-capture devices have not been installed within TMA #2.							
% of TMA	0%								
% of VH/H/M	--								
Summary Descriptions of Control Measures Implemented Since MRP Adoption, Other than Full Capture Devices				After taking into account all New or Enhanced (post-MRP) Control Measures	0%	0%	0%	100%	
<ul style="list-style-type: none"> <li>• <b>Street Sweeping:</b> Kirker Pass Road and Clayton Road adjacent to Clayton Station Shopping Center is swept once/week.</li> <li>• The center also sweeps weekly the parking lot. <b>Storm Drain Inlet Cleaning:</b> The City's Maintenance Department inspects and cleans, as needed all storm drain inlets within TMA #2 on an annual basis. Additional inspections are conducted, as needed.</li> <li>• <b>Creek Cleanups:</b> Within TMA #2, the City's Maint. Department removes trash along Mt. Diablo Creek behind the Clayton Station Shopping Center on annual basis. To supplement the City's creek cleanup efforts the Clayton Station Shopping Center, landscape maintenance crews hired by shopping center property management removes trash on a monthly basis. The City of Clayton Police Department also responds to complaints of homelessness and trespassing behind the shopping center and periodically checks for homelessness. City adopted Ord. 455 prohibiting camping – allows police to issue citations.</li> </ul>									
Assessment Methods for Control Measures Other than Full Capture Devices									
Assessment methods include the following: <ul style="list-style-type: none"> <li>• Track ability of street sweeper to reach the curb at designated speed. Visually assess trash condition before and after street sweeping.</li> <li>• Track inspection and maintenance frequency of storm drain inlets. Document problematic storm drain inlets which require more frequent inspection and maintenance.</li> <li>• Track creek cleanup location, cleanup frequency, and volume of trash or materials/type removed during creek cleanups conducted by the City's Maintenance Department. Periodic visual assessment of cleanups conducted by the Clayton Station Shopping Center landscape maintenance crews. Document overall trash condition of creek cleanup site.</li> </ul>									
Summary of Assessment Results To-date				Street sweeping is on-going and is effective in removing trash from streets. Routine street, parking lot sweeping, and creek cleanups have been highly effective in reducing impacts to water quality.	Estimated % Trash Reduction <u>in TMA</u> due to New or Enhanced Post-MRP actions				NA
					Estimated % Trash Reduction <u>Jurisdiction-wide</u> due to New or Enhanced Post-MRP actions				NA

C.10.d ► PART B - Trash Control Measure Implementation and Assessment (TMA Specific Actions)								
TMA ID	TMA Area (Acres)	Dominant Sources	Dominant Types	% TMA in Each Trash Generation Category				
				VH	H	M	L	
3 (Middle School – Community Park)	36	Vehicles, pedestrians are the main trash sources.	All trash types.	Baseline Generation (Pre-MRP)	0%	0%	95%	5%
Trash Full Capture Devices		Summary Descriptions of Full Trash Capture Devices (Quantify and Type)		After taking into account Full Capture Devices	0%	0%	0%	100%
Total Area (Acres)	36	Full-capture devices installed within TMA #3 include six (6) connector pipe screens						
% of TMA	100%							
% of VH/H/M	100%							
Summary Descriptions of Control Measures Implemented Since MRP Adoption, Other than Full Capture Devices				After taking into account all New or Enhanced (post-MRP) Control Measures	0%	0%	0%	100%
<ul style="list-style-type: none"> <li><b>Street Sweeping:</b> Clayton Road/Marsh Creek Road adjacent to Diablo View Middle School and Clayton Community Park is swept once/month. Sweeping is on-going and is effective in removing trash from streets.</li> <li><b>Storm Drain Inlet Cleaning:</b> The City's Maintenance Department inspects and cleans, as needed all storm drain inlets within TMA #3 on an annual basis. Additional inspections are conducted, as needed.</li> <li><b>On-land Trash Cleanups:</b> Within TMA #3, the City's Maintenance Department conducts seasonal on-land cleanups twice/year along Clayton Road and once/week in parks, as needed. In addition, city temp/season/volunteers conduct seasonal on-land cleanups once/week in parks, as needed.</li> </ul>								
Assessment Methods for Control Measures Other than Full Capture Devices								
Assessment methods include the following: <ul style="list-style-type: none"> <li>Track ability of street sweeper to reach the curb at designated speed. Visually assess trash condition before and after street sweeping.</li> <li>Track inspection and maintenance frequency of storm drain inlets. Document problematic storm drain inlets which require more frequent inspection and maintenance.</li> <li>Track on-land cleanup location, cleanup frequency, and volume of trash or materials/type removed during on-land cleanups. Track total number of volunteers participating in Annual Spring "Clayton Cleans Up". Visually assess overall trash condition of cleanup sites before and after event. When possible estimate amount of material collected and type.</li> <li>Track creek cleanup location, cleanup frequency, and volume of trash or material/type removed during creek cleanups conducted by the City's Maintenance Department. Document overall trash condition of creek cleanup site.</li> </ul>				After taking into account all New or Enhanced (post-MRP) Control Measures	0%	0%	0%	100%
Summary of Assessment Results To-date								
Street sweeping is on-going and is effective in removing trash from streets. The removal of trash along streets and within parks has been highly effective in preventing trash from reaching the stormwater conveyance system.				After taking into account all New or Enhanced (post-MRP) Control Measures	0%	0%	0%	100%
Estimated % Trash Reduction in TMA due to New or Enhanced Post-MRP actions								
Estimated % Trash Reduction Jurisdiction-wide due to New or Enhanced Post-MRP actions				72%				

C.10.d ► PART B - Trash Control Measure Implementation and Assessment (TMA Specific Actions)									
TMA ID	TMA Area (Acres)	Dominant Sources	Dominant Types		% TMA in Each Trash Generation Category				
					VH	H	M	L	
4 (City Remainder)	2,356	Vehicles, pedestrians are the main trash sources.	All trash types	Baseline Generation (Pre-MRP)	0%	0%	0%	100%	
Trash Full Capture Devices		Summary Descriptions of Full Trash Capture Devices (Quantity and Type)			After taking into account Full Capture Devices	0%	0%	0%	100%
Total Area (Acres)	138	Full-capture devices installed within TMA #4 include four (4) connector pipe screens and two (2) LID facilities.							
% of TMA	6%								
% of VH/H/M	0%								
Summary Descriptions of Control Measures Implemented Since MRP Adoption, Other than Full Capture Devices					After taking into account all New or Enhanced (post-MRP) Control Measures	0%	0%	0%	100%
<ul style="list-style-type: none"> <li><b>Street Sweeping:</b> All streets (84 curb miles) within the city of Clayton are swept once/month, all arterials (10 curb miles) are swept once/week and all HOA landscape maintained private streets (10 curb miles) are swept once/week.</li> <li><b>Storm Drain Inlet Cleaning:</b> The City's Maintenance Department inspects and cleans, as needed all storm drain inlets within TMA #4 on an annual basis. Additional inspections are conducted, as needed.</li> <li><b>On-land Trash Cleanups:</b> Within TMA #4, the City's Maintenance Department conducts seasonal on-land cleanups twice/year along Clayton Road and once/week in parks, as needed. In addition, the City-supports the Annual Spring "Clayton Cleans Up" on-land cleanup event each April. The event lasts approximately three hours and draws volunteers consisting of residents, community groups and local businesses. Volunteers remove litter from streets and trails near creeks. City temp/seasonal/volunteers also conduct seasonal on-land cleanups once/week in parks, as needed.</li> <li><b>Creek Cleanups:</b> On an annual basis, maintenance staff walks along all creeks within TMA#4 to remove trash as needed. This effort is highly effective in preventing trash from reaching creeks.</li> </ul>									
Assessment Methods for Control Measures Other than Full Capture Devices									
Assessment methods include the following: <ul style="list-style-type: none"> <li>Track ability of street sweeper to reach the curb at designated speed. Visually assess trash condition before and after sweeping.</li> <li>Track inspection and maintenance frequency of storm drain inlets. Document problematic storm drain inlets which require more frequent inspection and maintenance.</li> <li>Track on-land cleanup location, cleanup frequency, and volume of trash removed during on-land cleanups. Track total number of volunteers participating in Annual Spring "Clayton Cleans Up". Visually assess overall trash condition of cleanup sites before and after event.</li> <li>Track creek cleanup location, cleanup frequency, and volume of trash removed or materials/type during creek cleanups conducted by the City's Maintenance Department. Document overall trash condition of creek cleanup site.</li> </ul>									
Summary of Assessment Results To-date									
Street sweeping is on-going and is effective in removing trash from streets. The removal of trash along streets and within parks has been highly effective in preventing trash from reaching the stormwater conveyance system. In addition, the removal of trash along creeks has been highly effective in preventing trash from reaching creeks.									
Estimated % Trash Reduction in TMA due to New or Enhanced Post-MRP actions					NA				
Estimated % Trash Reduction Jurisdiction-wide due to New or Enhanced Post-MRP actions					NA				

**C.10.d ► PART C – Estimated Overall Trash Load Reduction**

For Population-based Permittees, provide an estimate of the overall trash reduction percentage achieved to-date within the jurisdictional area of your municipality that generates problematic trash levels (i.e., Very High, High or Moderate trash generation). Base the estimate on the information presented in C.10.d – Parts A and B and creek/shoreline cleanups not reported in C.10.b.iii. Provide a statement regarding the confidence in the estimate and challenges and/or successes in measuring progress towards the 40% trash reduction target described in provision C.10.

Discussion of Trash Reduction Estimate: **The City of Clayton estimates that it has achieved an overall trash load reduction of “no adverse impacts” (i.e.100 %). This load reduction was solely achieved through the installation of full-capture devices. The City has greatly exceeded the minimum treatment area required (6 acres) by treating 195 acres with small full-capture devices. The City has installed twenty-five (25) connector pipe screens. To date, seven (7) low-impact development projects (i.e., LID facilities) installed early (pre Dec. 2011) but meet provision C.3 have been constructed within the City. Since the City is adequately reducing trash through the installation of trash full-capture devices, it will not be taking additional % trash reductions from jurisdictional-wide actions at this time.**

Trash is rarely visible on City streets, along creeks and within parks and suburban open land uses, and open space areas. Creek clean up events remove what little trash exists in the area (e.g., 7.5 gallons in 2014 from their designated trash hot spot). When full-capture devices are cleaned, the vast majority of material removed in leaves and organic debris. To address potential trash in areas not served by trash full-capture device, the City has implemented street sweeping, storm drain inlet cleaning, on-land trash cleanups and creek cleanups.

The City supported state legislation to ban plastic bags. This legislation (which passed and was signed into law by the Governor) would apply to the City’s five retail stores (Safeway, Walgreens, CVS, and two small independent convenience markets)

Homeless encampment issues are fairly infrequent however to help ensure this continues to be minimal & infrequent the City adopted Ord. 455 on May 6, 2014, which prohibits camping within the city limits and allows the police to issue citations or arrest if necessary for violations.

The certainty of the trash load reductions through the installation of trash full-capture devices is high.

See Attachment C10 d.

Estimated % Trash Reduction due to Jurisdictional-wide Actions	0%
Estimated % Trash Reduction due to Trash Full Capture Devices (All TMAs)	100%
Estimated % Trash Reduction due to Other Control Measures (All TMAs)	0%
<b>SubTotal for Above Actions</b>	<b>100%</b>
Estimated % Trash Reduction due to Creek/Shoreline Cleanups (All TMAs)	0%
<b>Total Estimated % Trash Reduction in FY 13-14</b>	<b>To a “No Adverse Impact” Level (i.e., 100%)</b>

Section 11 - Provision C.11 Mercury Controls

**C.11.a.i ► Mercury Recycling Efforts**

List below or attach lists of efforts to promote, facilitate, and/or participate in collection and recycling of mercury containing devices and equipment at the consumer level (e.g., thermometers, thermostats, switches, bulbs).

Refer to FY 13-14 Countywide Program's [CCCWP] Annual Report for a list of mercury collection and recycling efforts conducted countywide and regionally.

The City of Clayton local efforts related to mercury recycling during FY 13-14 included the following:

- 1) **Promotion:** Our Solid Waste/Recycling Hauler (Allied Waste – AWIN, now known as Republic Services) started In October 2011 the curbside collection of CFL's and e-waste for free. This promotion was included on the Republic Services billing messages to customers, billing insets, and their Annual Customer Guide (mailed to all customers) and Republic Services web site. The City of Clayton web site has a link to our haulers web site. In addition there is information on the County web site related to proper disposal or recycling opportunities. Our hauler also provides periodic information in our local newspaper [Clayton Pioneer] which is distributed to all Clayton residences and businesses.
  - 2) **HHW Program:** The City of Clayton is served by a semi regional facility operated by and located at Central Contra Costa Sanitation – Central Sans. They produce promotional information and have a Web Site. They provide the opportunity for small businesses and residents to drop-off mercury-containing devices of CFL's, fluorescent tubes, mercury thermometers, mercury switches.
  - 3) **Curbside Collection:** Our Hauler (Republic Services) started curbside collection In October 2011 of CFL's and e-waste for free at individual residences and businesses [fluorescent tubes and thermometers are not collected curbside].
  - 4) **Commercial business take back:** Bill's Ace Hardware is located about 3 miles away in Concord. This location takes back fluorescent tubes at no cost to residents – this location is closer than the HHW Central Sans.
  - 5) **City Maintenance Activity:** The City maintains four buildings [City Hall, County Library Branch, Maintenance Yard Building, and a small rental hall (Endeavor Hall)], and some of the city streetlamps, all park lighting, and landscape lighting. All CFL's, Fluorescent tubes, Metal Halides lamps, as well as leftover paints are taken to the Central Sans HHW facility. The City recently converted some of its streetlights on its arterial streets with LED lamps through grant funds. The LED's have a longer life and contain less mercury than metal halides streetlights.
1. **Collection of Mercury-containing devices and equipment:** The City of Clayton has no role in the collection of mercury-containing devices and equipment at the consumer level.
    - a. Collection of Mercury-containing devices and equipment by your municipality or contractors at individual residences. The City of Clayton does not have nor does its hauler provide pick up for mercury containing devices other than CFL's. Collection is done with residents putting bulbs into zip lock bags and placing out with their other materials on their scheduled collection day. (According to our hauler in 2013/14 apx. 483 CFL's were collected curbside; along with 93 e-waste devices; and 1758 household batteries)

See Attachment C 11

**C.11.a.ii ▶ Mercury Collection**

Provide an estimate of the mass of mercury collected through these efforts, or provide a reference to a report containing this estimate.

**Please refer to the FY 13-14 CCCWP Annual Report for an estimate of the mass of mercury collected through collection and recycling efforts in the Countywide Program area.**

**C.11.b ▶ Monitor Methylmercury**

**C.11.c ▶ Pilot Projects to Investigate and Abate Mercury Sources in Drainages**

**C.11.d ▶ Pilot Projects to Evaluate and Enhance Municipal Sediment Removal and Management Practices**

**C.11.e ▶ Conduct Pilot Projects to Evaluate On-Site Stormwater Treatment via Retrofit**

**C.11.f ▶ Diversion of Dry Weather and First Flush Flows to POTWs**

**C.11.g ▶ Monitor Stormwater Mercury Pollutant Loads and Loads Reduced**

**C.11.h ▶ Fate and Transport Study of Mercury In Urban Runoff**

**C.11.i ▶ Development of a Risk Reduction Program Implemented Throughout the Region**

**C.11.j ▶ Develop Allocation Sharing Scheme with Caltrans**

State below if information is reported in a separate regional report. Municipalities that participate directly in regional activities to can provide descriptions below.

Summary

**A summary of CCCWP and regional accomplishments for these sub-provisions are included within the C.11 Mercury Controls section of Program's FY 13-14 Annual Report, Integrated Monitoring Report.**

Section 12 - Provision C.12 PCBs Controls

**C.12.a.ii,iii ▶ Ongoing Training**

(For FY 10-11 Annual Report and Each Annual Report Thereafter) List below or attach description of ongoing training development and inspections for PCB identification, including documentation and referral to appropriate regulatory agencies (e.g. county health departments, Department of Toxic Substances Control, California Department of Public Health, and the Water Board) as necessary.

Description:

**There are no industrial facilities or uses in the City of Clayton. See the FY 13-14 CCCWP Annual Report for a description of training provided countywide and/or regionally.**

**C.12.b ▶ Conduct Pilot Projects to Evaluate Managing PCB-Containing Materials and Wastes during Building Demolition and Renovation Activities**

**C.12.c ▶ Pilot Projects to Investigate and Abate On-land Locations with Elevated PCB Concentrations**

**C.12.d ▶ Conduct Pilot Projects to Evaluate and Enhance Municipal Sediment Removal and Management Practices**

**C.12.e ▶ Conduct Pilot Projects to Evaluate On-Site Stormwater Treatment via Retrofit**

**C.12.f ▶ Diversion of Dry Weather and First Flush Flows to POTWs**

**C.12.g ▶ Monitor Stormwater PCB Pollutant Loads and Loads Reduced**

**C.12.h ▶ Fate and Transport Study of PCBs In Urban Runoff**

**C.12.i ▶ Development of a Risk Reduction Program Implemented Throughout the Region**

State below if information is reported in a separate regional report. Municipalities that participate directly in regional activities to can provide descriptions below.

Summary

**A summary of CCCWP and regional accomplishments for these sub-provisions are included within the C.12 PCB Controls section of Program's FY 13-14 Annual Report, Integrated Monitoring Report.**

Section 13 - Provision C.13 Copper Controls

**C.13.a.iii.(2) ▶ Training, Permitting and Enforcement Activities**

(FY 11-12 Annual Report and each Annual Report thereafter) Provide summaries of activities implemented to manage waste generated from cleaning and treating of copper architectural features, including copper roofs, during construction and post-construction including. :

- Development of BMPs on how to manage the water during and post construction
- Requiring the use of appropriate BMPs when issuing building permits
- Educating installers and operators on appropriate BMPs
- Enforcement actions taken again noncompliance

**There are no facilities within the City of Clayton that have been identified as potential users or sources of copper that would require copper reduction BMPs. There are not any copper roofs or other copper features existing in the City of Clayton. New development projects would require discretionary review by the Planning Commission and at that time if copper features were proposed staff would either work to have the material changed to non-copper; or if approved with copper ensure that all runoff from the copper features went into LID's. The City's inspectors are the POTW inspectors – Central Contra Costa Sanitation which have received training on this topic. Please refer to BASMAA POC inspector training materials, which are available on the Program's website.**

Any materials developed through the CCCWP are made available as appropriate at the City offices.

**C.13.d.iii ▶ Industrial Sources Copper Reduction Results**

Based upon inspection activities conducted under Provision C.4, highlight copper reduction results achieved among the facilities identified as potential users or sources of copper, facilities inspected, and BMPs addressed.

Summary

**There are no facilities within the City of Clayton that have been identified as potential users or sources of copper that would require copper reduction BMPs, as there are not any auto repair uses within the City. The City's inspectors are the POTW inspectors – Central Contra Costa Sanitation which have received training on this topic. Please refer to BASMAA POC inspector training materials, which are available on the Program's website.**

**Section 14 - Provision C.14 PBDE, Legacy Pesticides and Selenium Controls**

Note: There are no reporting requirements in the FY 13-14 Annual Report for Section C.14.

Section 15 - Provision C.15 Exempted and Conditionally Exempted Discharges

**C.15.b.iii.(1), C.15.b.iii.(2) ► Planned and Unplanned Discharges of Potable Water**

Is your agency a water purveyor?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
If <b>No</b> , skip to C.15.b.vi.(2):				
If <b>Yes</b> , Complete the attached reporting tables or attach your own table with the same information. Provide any clarifying comments below.				
Comments:				

**C.15.b.vi.(2) ► Irrigation Water, Landscape Irrigation, and Lawn or Garden Watering**

Provide implementation summaries of the required BMPs to promote measures that minimize runoff and pollutant loading from excess irrigation. Generally the categories are:

- Promote conservation programs
- Promote outreach for less toxic pest control and landscape management
- Promote use of drought tolerant and native vegetation
- Promote outreach messages to encourage appropriate watering/irrigation practices
- Implement Illicit Discharge Enforcement Response Plan for ongoing, large volume landscape irrigation runoff.

Summary:

**In September 2010, the City of Clayton adopted new water conservation requirements as was mandated per state law. This ordinance requires new developments to submit efficient irrigation water use calculations and detailed landscape plan prior to either issuance of permits or final inspection of the development project. The Planning staff, City Engineer, stormwater manager have all received a copy and been trained on the new requirements. The requirements apply to private and public projects. Since the requirements are a part of the city codes they are included on our on line documents. The Planning staff provides the information to as part of the early review consultation process of any applicable development application. The city engineer includes as part of any public contract bid process, and city maintenance staff utilize as part of any major landscape renovation project.**

**In February 2014, the City adopted Ordinance 452 which updated the Building Codes to the 2013 Cal Green version which includes water conservation components related to plumbing.**

**In addition the Contra Costa Water District (CCWD) provided direct mail information/bill insert messages to customers as well as print ads regarding water conservation promotion.**

Materials prepared by the Program on less toxic pest control measures are available at the library kiosk display and were provided at the Clayton Cleans Up event and the Creekside Arts Festival. The Contra Costa Water District also staffed information booth and provided outreach materials on water conservation, proper plant selection, less toxic pest control and landscape management and drought tolerant and native vegetation. The local garden club also provided information on drought tolerant and native vegetation at one of the farmers market and at their annual spring plant sale. There are also local landscape designers that support these approaches and include this aspect in their print media of our local newspaper on a regular basis. The local garden club (Clayton Valley Garden Club) hosts an annual local spring Garden Tour where homes feature water conserving planting and irrigation, in addition the City of Clayton supports the Bringing Back the Natives annual Garden Tour with usually two local homes in Clayton on the tour again promotes water conserving planting and irrigation, and less toxic pest control methods.

Additionally, the City of Clayton through the CCCWP promotes several programs and measures to minimize pollutant loading from excess irrigation including, but not limited to:

- 6th Edition Stormwater C.3 Guidebook adopted by ordinance promotes to land development professionals landscaping designed to: 1) minimize irrigation and runoff; 2) promote infiltration of runoff where appropriate; and, 3) minimize use of fertilizers and pesticides using pest-resistant plants that are suited to site conditions (e.g., soil and climate).
- Green Business Program promotes to businesses a variety of measures such as using drought tolerant plantings, mulching, carefully monitoring irrigation schedules and needs, and implementing Integrated Pest Management.
- Our Water Our World (OWOW) Program promotes to consumers and the point of purchase less toxic alternatives to combating lawn and garden pests.
- Bay Friendly Landscaping and Gardening Training and Certification Program promotes to landscapers a variety of measures designed to reduce waste and prevent stormwater pollution.

One of our Maintenance Supervisors has been Bay Friendly certified and our outside contractor for weed abatement is also Bay Friendly Certified.

See Attachment C15b

Refer to the C.3 New Development and Redevelopment, C.7. Public Information and Outreach and C.9. Pesticide Toxicity Control sections of CCCWP's FY 13-14 Annual Report for additional information on BMPs promoted countywide.



**C.15.b.iii.(2) ► Unplanned Discharges of the Potable Water System<sup>63</sup>**

Site/ Location	Discharge Type	Receiving Waterbody(ies)	Date of Discharge	Discharge Duration (military time)	Estimated Volume (gallons)	Estimated Flow Rate (gallons/day)	Chlorine Residual (mg/L) <sup>64</sup>	pH (standard units) <sup>52</sup>	Discharge Turbidity (Visual) <sup>52</sup>	Implemented BMPs & Corrective Actions	Time of discharge discovery	Regulatory Agency Notification Time <sup>65</sup>	Inspector arrival time	Responding crew arrival time

<sup>63</sup> This table contains all of the unplanned discharges that occurred in this FY.

<sup>64</sup> Monitoring data is only required for 10% of the unplanned discharges. If you monitored more than 10% of your unplanned discharges, report all of the data collected.

<sup>65</sup> Notification to Water Board staff is required for unplanned discharges where the chlorine residual is >0.05 mg/L and total volume is ≥ 50,000 gallons. Notification to State Office of Emergency Services is required after becoming aware of aquatic impacts as a result of unplanned discharge or when the discharge might endanger or compromise public health and safety.

## City Maintenance Staff Activity

### **Material Removed in annual fall inspection**

**Creeks:** 60 yards removed – mostly wood, brush, trash; including paper, plastic, bottles, and cans.

**Catch Basin:** 5 yards removed – mostly dirt with trash including paper, plastic, bottles, and cans

**V Ditches:** 12 yards removed – mostly dirt small amount of trash

**Drain to the Bay Signs:** 20 signs reported with some damage 100 replaced

Training 3 Full time in pesticide application with IPM training at PAPA seminars Train 5 seasonal in pesticide application 2/19/14 and 6/14/14

Trash from City Parks 1,652 cubic yards Recycling 1,070 cubic yards

**Inspection of Corp Yard** Inspected 9-20-13 bought new tarps and cover stock pile supplies i.e. top soil, gravel, bark. Check and clean catch basin, removed debris from yard i.e. old light poles, paint, signs general hose cleaning.

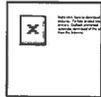
**From:** mailer@groupsite.com on behalf of Beth Baldwin via Contra Costa Clean Water Program (Groupsite) <mailer@groupsite.com>  
**Sent:** Thursday, June 05, 2014 11:25 AM  
**To:** Laura Hoffmeister  
**Subject:** Management Committee - New Sightings of the Invasive New Zealand Mud Snail

Management Committee  
Contra Costa Clean Water Program  
New Email Blast

 [Update your notification preferences](#)

**Think this email is off topic?**

 [Tell the Manager](#)



*Beth Baldwin wants you to know about the following*  
([View Beth Baldwin's profile](#))



[CWF 7-9-2014\\_Agenda.pdf](#)

Dear Management Committee Members:

The highly invasive New Zealand Mud Snail was discovered this past month in Mount Diablo Creek. As a result of this new sighting and other factors, the Contra Costa Watershed Forum will be holding a workshop on the mud snail and other invasive species followed by a site visit to a nearby creek to look for mud snails and review and practice decontamination procedures.

A similar email about this workshop will also be sent to the Monitoring Committee and Municipal Operations Committee.

Please contact Program staff members Beth Baldwin (925-313-2164) or Lucile Paquette (925-313-2373) if you have any questions.

Sincerely,

Beth A. Baldwin

Watershed Management Planning Specialist

Contra Costa Clean Water Program

255 Glacier Drive

Martinez, CA 94553

Tel: (925) 313-2164

E-mail: [bbald@pw.eccounty.us](mailto:bbald@pw.eccounty.us)

## Laura Hoffmeister

---

**From:** Mark Janney <mjanney@ci.clayton.ca.us>  
**Sent:** Wednesday, November 12, 2014 2:50 PM  
**To:** lhoffmeister@ci.clayton.ca.us  
**Subject:** RE: New Zealand Mud Snail

Laura

This information on the New Zealand Mud Snail has been relayed to the Maintenance Staff (full time and seasonal) and will be part of the ongoing education and training for working in the creeks. All contractors that work in the creeks for the City will be made aware of this information also before work starts. Mark

---

**From:** Laura Hoffmeister [<mailto:lhoffmeister@ci.clayton.ca.us>]  
**Sent:** Friday, June 27, 2014 12:58 PM  
**To:** [mjanney@ci.clayton.ca.us](mailto:mjanney@ci.clayton.ca.us); [jjohnston@ci.clayton.ca.us](mailto:jjohnston@ci.clayton.ca.us)  
**Subject:** FW: New Zealand Mud Snail  
**Importance:** High

Mark and John

Please be advised the New Zealand mud snail has arrived in Clayton in the Mt Diablo creek I think between the second and third bridge – the coordinates it has been logged into the USGS data base mapping is below (I think we are now the 4<sup>th</sup> location in County to have : Antioch (West Antioch Creek below Contra Loma) , Pleasant Hill (Grayson Creek), Walnut Creek (Sarnap area), and now Clayton – Mt Diablo Creek

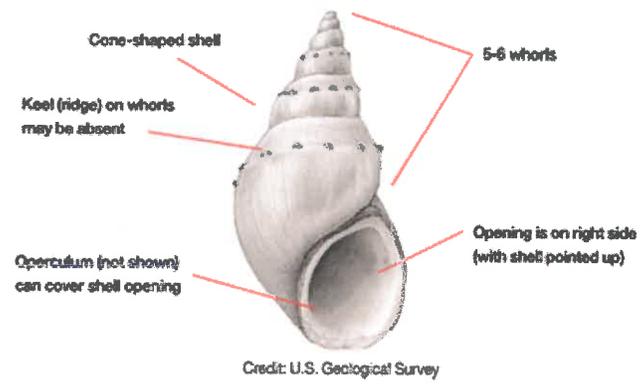
**Mt. Diablo Creek, north of Clayton Library adjacent to public trail ( 37°56'44.26"N, 121°56'19.48"W )**

**Specimen ID:** 630844  
**Specimen Type:** New Zealand mudsnail  
**Description:** Mt. Diablo Creek, north of Clayton Library adjacent to public trail  
**State/Province:** CA  
**County:** Contra Costa  
**Year:** 2014  
[View Additional Data for this specimen](#)

We must ensure any activity in creeks we follow all decontamination procedures for clothing and equipment (including shovels, hand tools) etc.

The review of what the snails are need to be gone over again now, and done quarterly thereafter, and when ever a new employee arrives they need to be trained on what they look like and how to decontaminate etc – looks like the last time was in 2012

– just because it is in this one area the state believes it could be elsewhere it just happened that this was the location they took a water sample at. We are now on the monitoring radar screen for this



Laura

Here's a link for the USGS's mudsnail map:

<http://nas.er.usgs.gov/taxgroup/mollusks/newzealandmudsnaildistribution.aspx>.

## Laura Hoffmeister

---

**From:** Mark Janney <mjanney@ci.clayton.ca.us>  
**Sent:** Wednesday, February 05, 2014 8:35 AM  
**To:** lhoffmeister@ci.clayton.ca.us  
**Subject:** New Zealand Mud Snails

Laura

It is the policy of the City of Clayton Maintenance Department to let only paid seasonal or full time workers into the creek during the Cities annual inspection and cleaning. All paid seasonal and full time workers that work in the creeks have been made aware of the New Zealand Mud Snails. They have been informed on the proper way of cleaning equipment and clothing that comes in contact with the creeks. The Maintenance Department does not use WAP (work alternative personal) to enter creek areas during our annual creek maintenance or any other official volunteer personnel.

NEW ZEALAND MUD SNAIL

CLAYTON MAINTENANCE MEETING

DATE 9-10-13

Meeting of the Clayton Maintenance Staff in Methods/Procedures for the prevention of the New Zealand Mud Snail survival and proper cleaning of Equipment/Clothing when in Creeks.

Attendees

Print Name

Sign

Robert J. Quintana

GARY DANKOWSKI

Michael Brown

James Morales

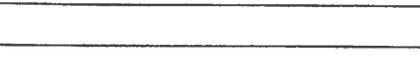
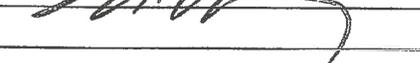
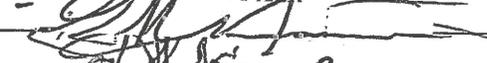
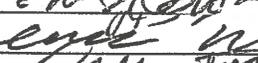
River Grace

Zach Meeker

Ed Bryce

Sandro Anias

Mark Junney





# Memo

**To:** Mark Janney and John Johnston – Maintenance Supervisors

**From:** Laura Hoffmeister, Asst. to the City Manager

**Meeting Date:** September 19, 2012

**Re:** Transmittal of new required City Maintenance Written Standard Operation Procedures (SOP) for addressing potential threat of New Zealand Mud Snail

---

The City of Clayton is a part of the Contra Costa Clean Water Program NPDES permit regulations issued as the Municipal Regional Permit (MRP). One of the permit regulations state that we are to address impacts or potential threats to impacts to water quality including that in and around the creeks.

A regional monitoring program conducts periodic assessments to evaluate for any potential threats that water board has identified. One of the threats is from the non-native New Zealand Mud Snail. Recent monitoring studies have found that it is appearing in several creek areas in Contra Costa County. Even though it has not been identified to date in creeks in our city we are still required to immediately undertake the SOP. Because the studies did not include all creeks or creek segments in the region as the New Zealand Mud Snail is highly transportable, reproduces extremely fast and wipes out creek habitat swiftly all cities are to implement the SOP. Additional background info is attached.

I have attached the SOP that are now to be implemented. All maintenance staff are to be made aware of the information. Obtain in writing (their signature/date) that they have reviewed and received the information. The SOP and documentation shall be kept on site at the Corp. Yard where it is easily accessible as can be quickly located by any of the staff, as it is a part of the permit requirement and thus is subject to random audits conducted by the Water Board staff or their consultants.

Volunteer groups that might go into the creek must adhere to these SOP. For the volunteers it is probably best just to prohibit them from going into the creek.

For outside contractors that you or City Engineer may use they also must adhere to the SOP, and these SOP are to be a part of their contract/agreement.

cc: Rick Angrisani  
Gary Napper

# Standard Operating Procedures for Field and Personal Equipment and Clothing Decontamination Procedures for Creek Work

## **Special Cautions and Considerations; Health and Safety**

!

### **CAUTIONS**

When using chemical cleaners, always read the product label and adhere to all printed cautions and safety measures. Wear rubber gloves and eye protection when using chemical cleaners.

Treating field gear with chemical methods may result in unintended contamination of the environment. In particular, extreme caution must be taken to avoid contamination of waterways and wetlands. DO NOT rinse your treated gear in a water body.

Treating rubber gear or boots with Formula 409® and other disinfectants with quaternary ammonium compounds (QACs) may result in surface cracking of the rubber and loss of water repellency.

Chemical methods are not always effective in killing mudsnails. Always scrub your gear and consider using physical methods before resorting to chemical methods.

The best prevention is to simply stay out of the creeks as much as possible. When maintenance is required, limit the number of people who are actually getting into the water.

Work shall be spaced or scheduled in a manner that is spaced out and not going from one creek to another without decontaminating gear. If in same creek and going to a different section (more than ¼ mile away), gear and equipment shall be decontaminated prior to going into the next segment.

Decontamination of all gear, boots, waders and equipment that goes into or comes in contact with the water.

One of the 3 following methods shall be used for decontamination: Do not hose off into yard. Must use a sink that is connected to sanitary sewer or use the covered service bay with water that goes into holding tank.

Scrubbed with a stiff brush, AND followed by either:

- Chemical or Physical treatment. Chemical treatment can include Quat 128 (the active ingredient in Formula 409).
- Drying for a minimum of one week.
- Freezing gear overnight.

Further information and details regarding decontamination procedures are attached.

## Methods/Procedures

To prevent the survival of mudsnails or other invasives on field clothing and equipment, it is necessary to first clean all field gear and then to treat it, using either the physical or chemical methods listed below. The following steps are recommended:

- If possible, keep different sets of field gear for use in different bodies of water.
- **Clean** all gear before leaving a site, scrubbing with a stiff-bristled scrub brush and rinsing with water, preferably high-pressure. This is often the simplest and most effective measure for prevention.
- **Inspect** gear before it is packed for transport. Visible traces of sand, mud, gravel, and plant fragments are signs that gear has not been properly cleaned and mudsnails may have been retained.
- **Select** a treatment method in addition to scrubbing and rinsing if mudsnails are present or suspected to be present. Two general categories of treatment are available - physical methods and chemical methods:
  - **Freezing, hot water, or drying treatments** are recommended over chemical treatments because they are usually less expensive, more environmentally sound, and possibly less destructive to gear. However, most physical methods require longer treatment times and often cannot be performed in the field.
  - **Chemical treatments** require a 10-minute soak in a special solution (see "CHEMICAL," page 5). After chemical treatment, gear must be rinsed thoroughly with tap water away from all bodies of water, and all soak solutions and rinse water must be properly disposed of.

## PHYSICAL TREATMENT

These methods for cleaning gear are effective as well as environmentally sound. Use *one* of the following methods:

- **Freeze** your gear for a minimum of 4 hours to kill all mudsnails. Freezer temperatures should be at 26°F (-3°C) or below.
- **Soak** gear in a bath of hot water (at least 120°F, 46°C) for 10 minutes.  
NOTE: This method is not advised for Gortex.
- **Dry** your gear before reuse. A drying time of at least 48 hours under low humidity is recommended to remove all pockets of dampness. Gear must be completely dry for a minimum of 24 hours. Check to ensure that boots are totally dry.

## CHEMICAL TREATMENT

Common disinfecting cleaners containing quaternary ammonium compounds (QACs, e.g., alkyl dimethyl benzylammonium chloride [ADBAC]; diacyl dimethyl ammonium chloride [DDAC]) are effective for decontaminating gear.

Disinfectants listed below will kill other aquatic invasive species but may not result in 100% mortality.

Gear should be soaked in *one* of the following solutions for 5 minutes and then rinsed thoroughly with tap water, away from the water body:

- Commercial disinfectant solutions containing quaternary ammonium compounds (e.g., Formula 409® Cleaner Degreaser Disinfectant, alkyl dimethyl benzylammonium chloride [ADBAC]; diacyl dimethyl ammonium chloride [DDAC]). Formula 409®. Cleaner Degreaser Disinfectant has been proven effective for killing mudsnails at 50% dilution.
- The compounds Quat 128® and Sparquat 256® are commercial disinfectants with an active ingredient (QAC) similar to that of Formula 409® Cleaner Degreaser Disinfectant, which has proven effective for killing mudsnails and other aquatic invasive species (see the table on the foldout page of the brochure for dilution rates).
- Many household bath and kitchen disinfectants contain quaternary ammonium compounds (check the label for active ingredients containing alkyl dimethyl benzylammonium chloride [ADBAC]; diacyl dimethyl ammonium chloride [DDAC]).

These and other chemical treatments are constantly being evaluated and are updated online at: [seagrant.oregonstate.edu/themes/invasives/](http://seagrant.oregonstate.edu/themes/invasives/)

Store and dispose of solution and used rinse water properly.

### **Quality Assurance/Quality Control**

If chemical treatments are used, ensure that rinsing is performed thoroughly, to prevent contamination of water courses.

## IF YOU FIND MUDSNAILS

If you suspect you have found mudsnails, collect 5 to 10 individuals and place them in a plastic bag into which you have sprinkled water. Check against the simple traits above and on the Web page below to confirm identification.

<http://www.esg.montana.edu/aim/mollusca/nzms>

Please save the samples and contact the Oregon Invasive Species Council (1-866-INVADER) and one of these specialists:

Sam Chan  
Oregon State University  
Oregon Sea Grant Extension  
[samuel.chan@oregonstate.edu](mailto:samuel.chan@oregonstate.edu)

Robyn Draheim  
Center for Lakes and Reservoirs  
Portland State University  
[draheim@pdx.edu](mailto:draheim@pdx.edu)

Paul Heimowitz  
U.S. Fish and Wildlife Service  
[Paul\\_Heimowitz@fws.gov](mailto:Paul_Heimowitz@fws.gov)

Sherri L. Johnson  
PNW Research Station  
USDA Forest Service  
[johnsons@fsl.orst.edu](mailto:johnsons@fsl.orst.edu)

To order copies, call 1-800-375-9360,  
or write [sea.grant.communications@oregonstate.edu](mailto:sea.grant.communications@oregonstate.edu)  
You can download a pdf of this brochure at  
<http://seagrants.oregonstate.edu/sgpubs/onlinepubs.html>



PORTLAND STATE  
UNIVERSITY

## NEW ZEALAND MUDSNAILS



### HOW TO PREVENT THE SPREAD OF NEW ZEALAND MUDSNAILS THROUGH FIELD GEAR



*This brochure is intended for researchers, monitoring crews, watershed survey groups, and anyone else who travels frequently between aquatic or riparian locations. It is intended to be used as a guide to currently accepted methods for treating field gear to prevent the spread of New Zealand mudsnails.*

June 2006

Design by Stefania M. Padalino.

Cover photos: top three photos by D. L. Gustafson; bottom two photos by Jane and Michael Liu.

ORESU-C-06-006



Devils Lake, Oregon, is heavily infested with New Zealand mudsnails. Prevent the spread of New Zealand mudsnails by cleaning gear and boats and not moving water from infested waters into new bodies of water. (Photo by Jane and Michael Liu.)

## INTRODUCTION

The New Zealand mudsnail (*Potamopyrgus antipodarum*) is an introduced aquatic species that has invaded estuaries, lakes, rivers, and streams in Washington, Oregon, California, and many other states in the western U.S. It was first noted in North America in the late 1980s in the Snake River and has since spread throughout the West.

The small size (< 5 mm), cryptic coloration, and ability to survive out of water for weeks make the New Zealand mudsnail an ideal hitchhiker.



Snails can be inadvertently transported in bootlaces (center—note different color). (Photo by Jane and Michael Liu.)

Range expansion of the mudsnail has been unwittingly hastened by anglers, hunters, and field personnel—in other words, people who frequently move between streams and lakes in watersheds, hauling wet waders, nets, and other gear with them. Once the mudsnail is established in a new habitat, it is impossible to eradicate it without damaging other components of the ecosystem. Thus, inspecting, removing, and treating gear before moving to a new water body is the most effective means of preventing the spread of mudsnails.

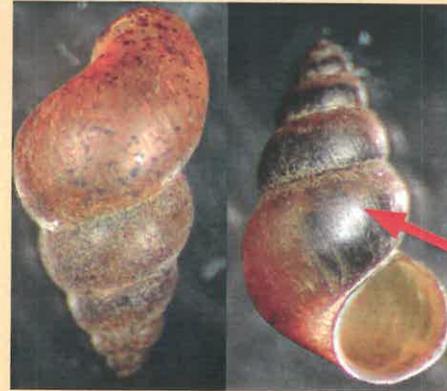


The New Zealand mudsnail is often less than 5 mm long. (Photo by Jane and Michael Liu.)

## IDENTIFYING THE NEW ZEALAND MUDSNAIL



**Size:** A mature snail is usually less than 5 mm (.2 in) long. (Photo by Jane and Michael Liu.)



**Shape:** Shell is elongated and dextral (its whorls or spirals lean toward the right). Snail typically has between 5 to 6 whorls on its shell.

(Photo by D. L. Gustafson, <http://www.esg.montana.edu/aim/mollusca/nzms>.)

1 whorl

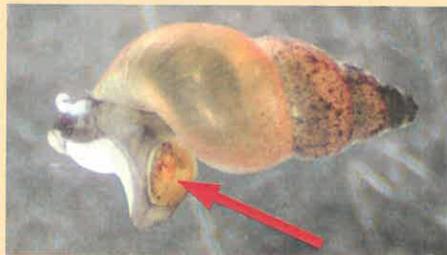


**Color:** Most snails have a light- to dark-brown shell that may appear to be black when wet. (Photo by Jane and Michael Liu.)



**Embryos:** Upon dissection, mature snails will have brooded embryos.

(Photo by D. L. Gustafson, <http://www.esg.montana.edu/aim/mollusca/nzms>.)



**Operculum:** The mudsnail operculum (a rounded plate that seals the mouth of the shell when the animal's body is inside) can be seen on live snails but is not easily visible on dead or preserved snails. (Photo by D. L. Gustafson, <http://www.esg.montana.edu/aim/mollusca/nzms>.)

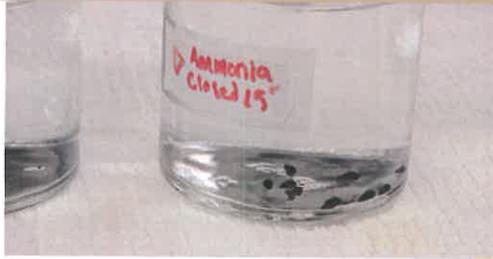
[www.esg.montana.edu/aim/mollusca/nzms](http://www.esg.montana.edu/aim/mollusca/nzms)

## MIXING INSTRUCTIONS

■ **Copper sulfate:** Dissolve 3.785 grams of copper sulfate pentahydrate crystals (99.1% purity) for each gallon of solution you want to make. This will achieve a concentration of 252 mg/L of copper ion in the cleaning solution.

■ **Benzethonium chloride:** Dissolve 7.57 grams of benzethonium chloride (97% purity) for each gallon of cleaning solution you want to make. This will achieve a concentration of 1,947 mg/L in the cleaning solution.

■ **Formula 409® Disinfectant:** Dilute the commercially available solution 1:1 with clean water to achieve the needed concentration for the cleaning solution (i.e., 1 gallon of Formula 409 Disinfectant to one gallon of water). (Note that formulations are subject to change. Check label to make sure that benzethonium chloride is listed as an ingredient.)



*New Zealand mudsnail in test chamber with chemical test solution. (Photo by Robert Hosea.)*

## CAUTION

Treating field gear with chemical methods may result in unintended contamination of the environment. In particular, extreme caution must be taken to avoid contamination of waterways and wetlands. DO NOT rinse your treated gear in a water body.

Treating rubber gear or boots with benzethonium chloride or Formula 409® may result in surface cracking of the rubber and loss of water repellency. Chemical methods are not always effective in killing mudsnails. Always scrub your gear and consider using physical methods before resorting to chemical methods. For more information on the testing of chemical treatment methodology, see R. C. Hosea, and B. Finlayson, 2005, *Controlling the Spread of New Zealand Mud Snails on Wading Gear*, Administrative Report 2005-02, Rancho Cordova, California: Resources Agency, California Department of Fish and Game.



*Fishing docks and boats are potential conduits for spreading the New Zealand mudsnail. (Photo by Jane and Michael Liu.)*

## THE MUDSNAIL PROBLEM

The New Zealand mudsnail is a threat to our waters. By competing with native invertebrates for food and habitat, it may have a detrimental impact on fish populations, vegetation, and other native biota.

Mudsnails can tolerate a wide range of habitats, including brackish water, and are found living in high densities (often over 400,000 snails/sq meter) on many different substrates (rock, gravel, sand, and mud).



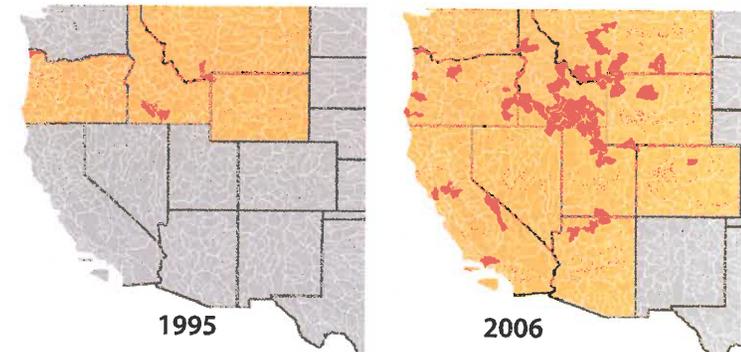
*Mudsnails on the seam of a stream boot. Unintentional transport from one stream location to another by hitchhiking on waders or wading boots is one of the primary vectors for spreading New Zealand mudsnails. (Photo by Jane and Michael Liu.)*

The biology, ecology, and distribution rate of the mudsnail suggest that many habitats are suitable for further expansion.

Mudsnail populations in the West are self-reproducing brooders; they clone themselves and retain the embryos inside their shell until they are large enough to release. Also known as parthenogenesis, this reproductive technique means that a single mudsnail can rapidly colonize a new location.

Mudsnails are easily transported to new habitats by field crews because the snails readily attach to or are wedged into the many cracks, crevices, and crannies presented by waders, boot soles, nets, buckets, and so on. New Zealand mudsnails can live for weeks in damp, cool conditions; can easily survive on field gear for long periods of time; and can be transferred to a new environment when that gear is reused.

*Spread of the New Zealand mudsnail from 1995 to 2006 in the western U.S. New Zealand mudsnails have recently been found in parts of the Great Lakes region. (Map modified from D. L. Gustafson, <http://www.esg.montana.edu/aim/mollusca/nzms>.)*



*Mudsnails that have been passed through the intestinal tract of a fish. Almost half of the mudsnails survived this trip. (Photo by M. Vinson, <http://www.esg.montana.edu/aim/mollusca/nzms>.)*



## PREVENTION

To prevent the survival of mudsnails on field clothing and equipment, you will need first to clean your field gear and then to treat it, using either the physical or chemical methods listed below. We recommend the following steps:

- 1** If possible, keep several changes of field gear for use in different bodies of water.
- 2** Clean all gear before leaving a site (a stiff-bristled scrub brush or high-pressure water is the best tool for this task).
- 3** Inspect gear before it is packed for transport. Visible traces of sand, mud, gravel, and plant fragments are signs that gear has not been properly scrubbed and mudsnails may have been retained.
- 4** Select a treatment method in addition to physical cleaning.
  - **Physical treatments** are recommended over chemical treatments because they are usually less expensive, more environmentally sound, and possibly less destructive to gear. However, most physical methods require longer treatment times and often cannot be performed in the field.
  - **Chemical treatments** require a 5-minute soak in a special solution. After chemical treatment, gear must be rinsed thoroughly with tap water away from all bodies of water, and all soak solutions and rinse water must be properly disposed of.

**Remember: physical and chemical treatments are not a substitute for physically scrubbing and cleaning your gear.**

## PHYSICAL

Physical methods for cleaning gear are effective as well as environmentally sound. Use *one* of the following methods:

- Freeze your gear for a minimum of 4 hours to kill all mudsnails. Freezer temperatures should be at 26°F (-3°C) or below.
- Soak gear in a bath of hot water (at least 120°F, 46°C) for 5 minutes. This method is not advised for Gortex.
- Dry your gear before reuse. A drying time of at least 48 hours under low humidity is recommended to remove all pockets of dampness. Gear must be completely dry for a minimum of 24 hours. Check to ensure that boots are totally dry.

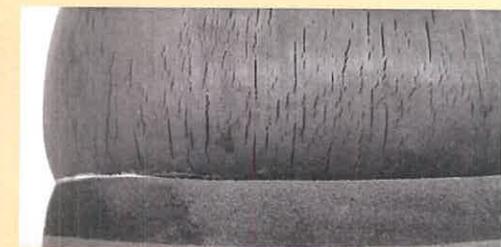
## CHEMICAL

Chemical solutions, at the concentrations below, also kill mudsnails but may not always result in 100% mortality.

Gear should be soaked in *one* of the following solutions for 5 minutes and then rinsed thoroughly with tap water, away from the water body. Store and dispose of solution and used rinse water properly.

- Benzethonium chloride (1, 940 mg/L)
- Commercial Solutions Formula 409® Cleaner Degreaser Disinfectant (50% dilution)
- Copper sulfate (252 mg/L copper ion)

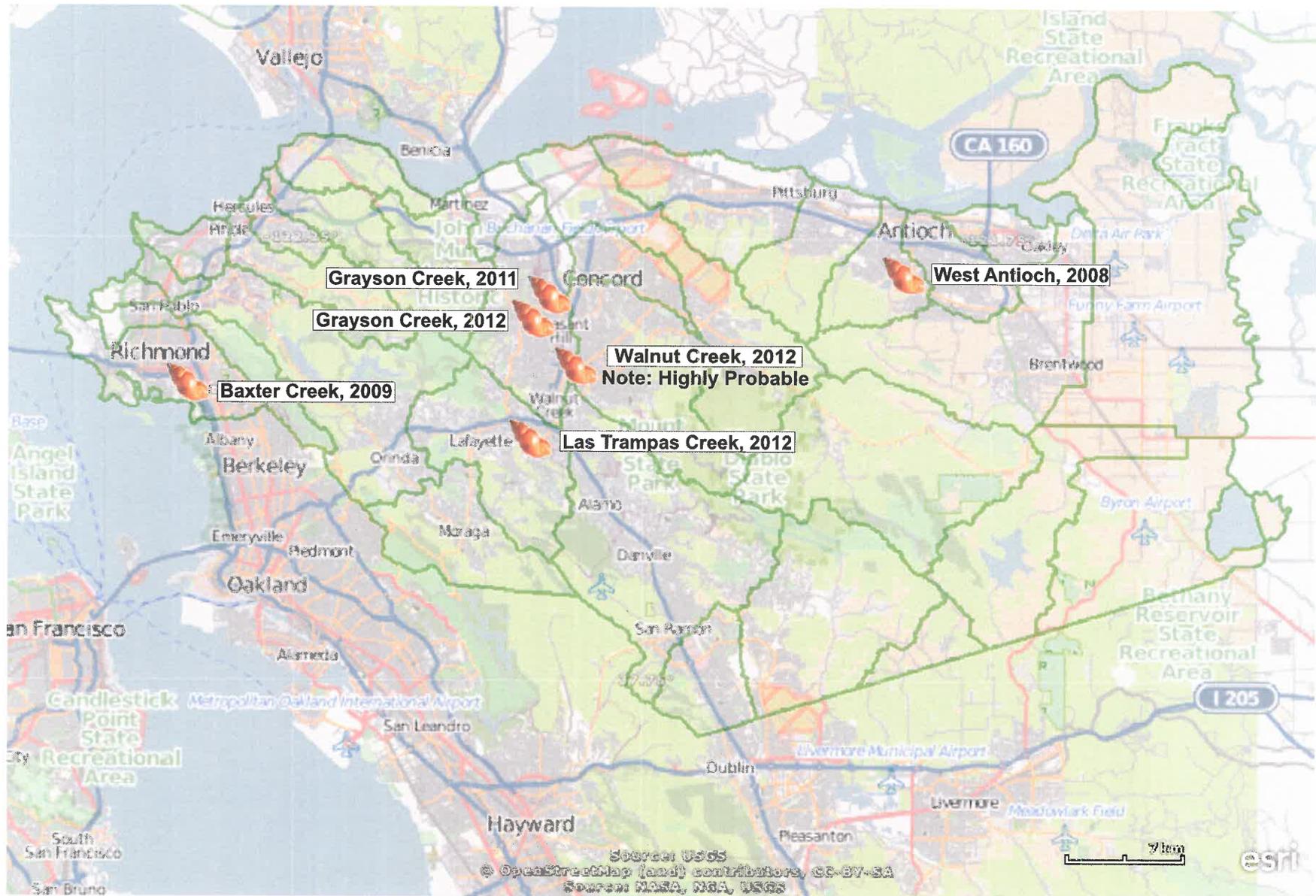
These and other chemical treatments are constantly being evaluated.



*The toe of this rubber wader boot has cracked after being exposed to repeated applications of benzethonium chloride. (Photo by Robert Hosea.)*

*A worker filters the cleaning solution after removing wading gear. (Photo by Robert Hosea.)*

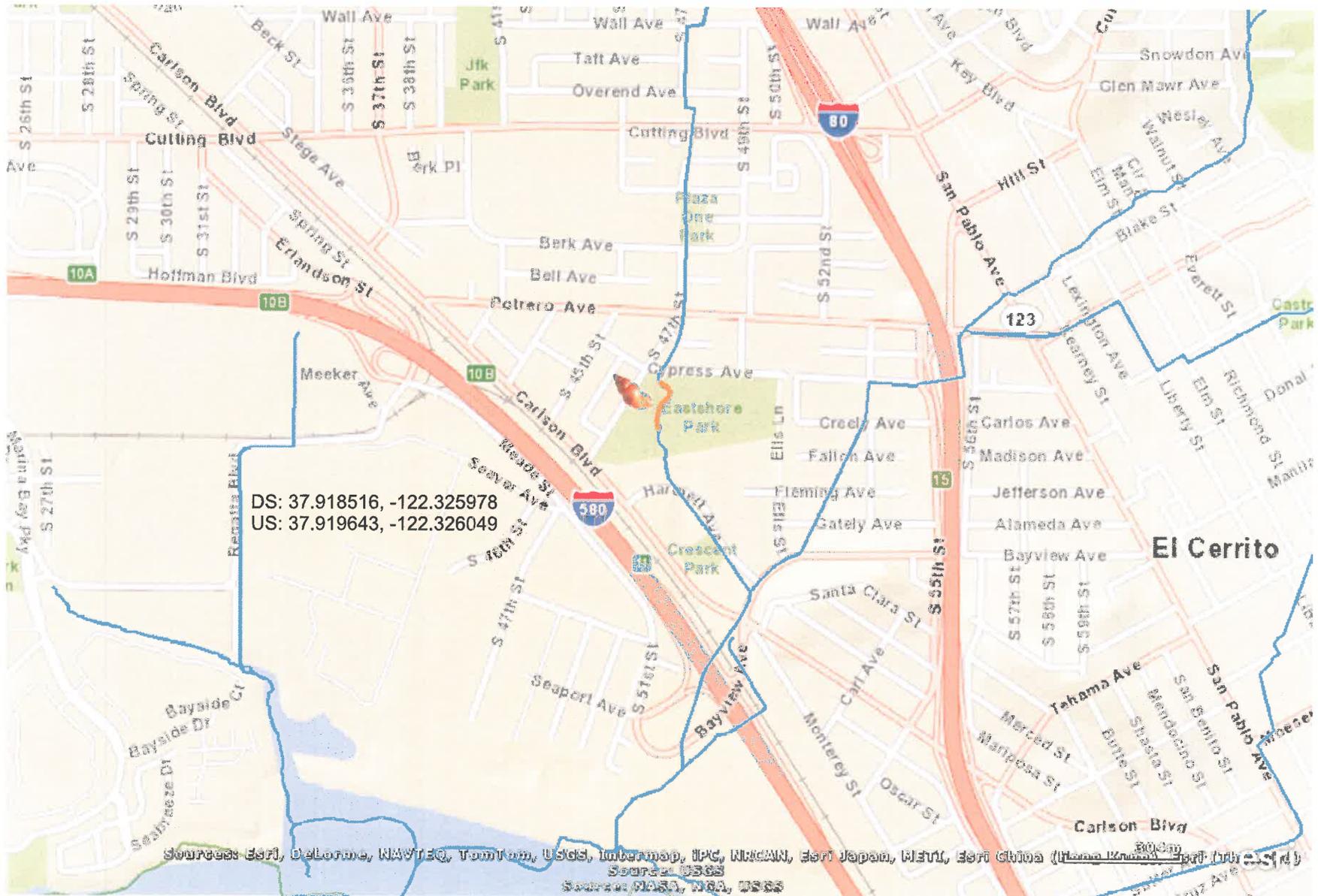
# Occurrences of New Zealand Mud Snail in Contra Costa County



 New Zealand Mud Snail Detection  
 Watershed Boundary

Note: Year given with a station was the that one in which the snails were first detected.

# Baxter Creek (BAX030), 2009



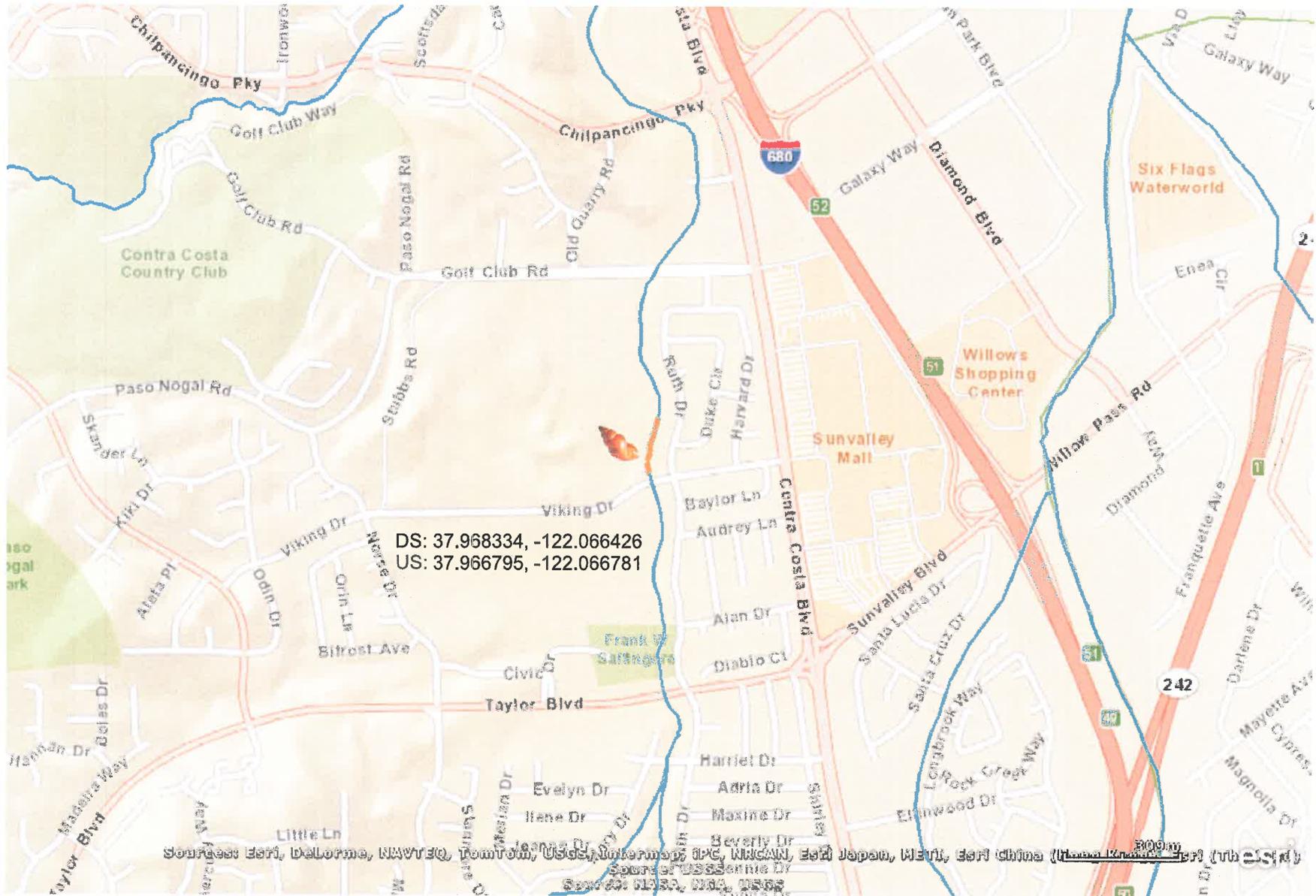
DS: Downstream Latitude, Longitude of Stream Reach where Mud Snails were detected.

US: Upstream Latitude, Longitude of Stream Reach where Mud Snails were detected.

— Creek (Blue-Line data)

— Mud Snail Detection

# Grayson Creek (WAL050), 2011



DS: Downstream Latitude, Longitude of Stream Reach where Mud Snails were detected.

US: Upstream Latitude, Longitude of Stream Reach where Mud Snails were detected.

— Creek (Blue-Line data)

— Mud Snail Detection









Standard General Specification Information for  
Road Repair and Construction Contracts

STORMWATER POLLUTION PREVENTION

Stormwater Protection for Construction Contracts

Stormwater Pollution Prevention for Sawcut Slurry

Fresh Concrete and Mortar Application

Painting and Application of Solvents and Adhesives

Pollution Prevention – It's Part of the Plan

RECYCLING OF CONSTRUCTION & DEMOLITION MATERIALS

C&D Waste Recovery and Disposal

Republic Services on site C&D services

C&D Waste Recovery Management Plan

## **STORMWATER PROTECTION and STORM WATER POLLUTION CONTROL MEASURES for**

### **CITY OF CLAYTON**

#### **CONSTRUCTION CONTRACTS**

The attached following is being included in construction contracts awarded by City of Clayton. Its purpose is to provide detailed instructions to contractors to insure that construction practices do not cause pollutant discharges to the storm drain system. Businesses and institutions are encouraged to use this or similar language in their contracts as well. The language is based upon best management practices (BMPs) presented in the *California Storm Water Best Management Practice Handbook—Construction Activity* and the Regional Water Quality Control Board's (RWQCB's) *Erosion and Sediment Control Field Manual*.

The language was produced originally in 1994 by the City of Palo Alto where it was a companion to a new ordinance specifically prohibiting construction related discharges to storm drains and adding administrative penalty authority (fines). The language was revised in 2001 for circulation to member agencies of the Bay Area Storm Water Management Agencies Association.

The goal of these requirements is to prevent the pollution of storm water runoff from construction projects by keeping pollutants out of storm drains, reducing the exposure and discharge of materials and wastes to storm water, and by reducing erosion and sedimentation. Storm drains discharge runoff directly to creeks and the Bay without treatment. The City of Clayton is required under its stormwater discharge NPDES permit from the Regional Water Quality Control Board (RWQCB) to reduce pollutants in stormwater runoff from construction sites to the maximum extent practicable.

#### **A. General Requirements**

The following requirements shall be met on all projects for the City of Clayton. All contractors and subcontractors working on City of Clayton projects are required at a minimum to comply with the pollution control measures attached. Depending on the work scope the City Engineer may require additional BMP measures.

##### **1) Employee and Subcontractor Training and Awareness**

- a. The CONTRACTOR shall train all employees/subcontractors on the storm water pollution prevention requirements contained in these Specifications.
- b. The CONTRACTOR shall inform subcontractors of the storm water pollution prevention contract requirements and include appropriate subcontract provisions to ensure that these requirements are met.

c. The CONTRACTOR shall label new storm drain inlets, constructed as part of the project, with the “No Dumping Drains to Creek” message (to obtain a stencil or marker, contact the City of Clayton Maintenance staff).

## **2) Nonhazardous Material / Waste Management**

### **a. Designated Area**

The CONTRACTOR shall propose designated areas of the project site, for approval by the ENGINEER, suitable for material delivery, storage, and waste collection that are near construction entrances and away from storm drain inlets, gutters, drainage courses, and creeks.

### **b. Granular Material**

i) The CONTRACTOR shall store granular material at least ten feet away from storm drain inlet and curb returns.

ii) The CONTRACTOR shall not allow granular material to enter the storm drains or creeks.

iii) When rain is forecast within 24 hours or during wet weather, the ENGINEER may require the CONTRACTOR to cover granular material with a tarpaulin and to surround the material with sand bags.

### **c. Dust Control**

i) The CONTRACTOR shall use water to control dust on a daily basis or as directed by the ENGINEER.

### **d. Street Sweeping**

i) At the end of each working day or as directed by the ENGINEER, the CONTRACTOR shall clean and sweep roadways and on-site paved areas to remove all materials attributed to or involved in the work. The CONTRACTOR shall not use water to flush down streets in place of street sweeping.

### **e. Recycling**

i) The CONTRACTOR shall recycle aggregate base material, asphalt concrete, and Portland cement concrete.

ii) In addition, to the maximum extent practicable, the CONTRACTOR shall reuse or recycle any useful construction materials generated during the project.

## **f. Disposal**

- i) At the end of each working day, the CONTRACTOR shall collect all scrap, debris, and waste material, and dispose of such materials properly.
- ii) The CONTRACTOR shall inspect dumpsters for leaks and contact trash hauling contractors to replace or repair dumpsters that leak.
- iii) The CONTRACTOR shall not discharge water on-site from cleaning dumpsters.
- iv) The CONTRACTOR shall arrange for regular waste collection before dumpsters overflow.

## **3) Hazardous Material / Waste Management**

### **a. Storage**

- i) The CONTRACTOR shall label and store all hazardous materials, such as pesticides, paints, thinners, solvents, and fuels; and all hazardous wastes, such as waste oil, antifreeze and mercury containing devices such as thermostats and fluorescent light bulbs in accordance all applicable local, State and Federal regulations.
- ii) The CONTRACTOR shall store all hazardous materials and all hazardous wastes in accordance with secondary containment regulations, and it is recommended that these materials and wastes be covered, as needed, to avoid potential management of collected rainwater as a hazardous waste.
- iii) The CONTRACTOR shall keep an accurate, up-to-date inventory, including Material Safety Data Sheets (MSDSs), of hazardous materials and hazardous wastes stored on-site, to assist emergency response personnel in the event of a hazardous materials incident.

### **b. Usage**

- i) When rain is forecast within 24 hours or during wet weather, the ENGINEER may prevent the CONTRACTOR from applying chemicals in outside areas.
- ii) The CONTRACTOR shall not over-apply pesticides or fertilizers and shall follow material manufacturers' instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals. Over-application of a pesticide constitutes a "label violation" subject to an enforcement action by your local County Agricultural Commissioner.

### **c. Disposal**

- i) The CONTRACTOR shall arrange for regular hazardous waste collection to comply with time limits on storage of hazardous wastes.
- ii) The CONTRACTOR shall dispose of hazardous waste only at authorized and permitted Treatment, Storage, and Disposal Facilities, and use only licensed hazardous waste haulers to remove the waste off-

site, unless quantities to be transported are below applicable threshold limits for transportation specified in State and Federal regulations.

iii) If the CONTRACTOR qualifies as a "Conditionally Exempt Small Quantity Generator" as defined under State and Federal regulations then the CONTRACTOR may be able to dispose of this waste through a local sponsored small quantity generator program. Contact your local hazardous waste management agency for information on these programs.

#### **4) Spill Prevention and Control**

a. The CONTRACTOR shall keep a stockpile of spill cleanup materials, such as rags or absorbents, readily accessible on-site, and ensure that all employees know where these materials are and how to use them.

b. The CONTRACTOR shall immediately contain and prevent leaks and spills from entering storm drains, and properly clean up and dispose of the waste and cleanup materials. If the waste is hazardous, the CONTRACTOR shall handle the waste as described in section A.3.c above.

c. The CONTRACTOR shall not wash any spilled material into streets, gutters, storm drains, or creeks and shall not bury spilled hazardous materials.

d. The CONTRACTOR shall report any hazardous materials spill to the local fire department.

#### **B. Activity-Specific Requirements**

The following requirements shall be met on all projects for the City of Clayton that include the listed activities.

##### **1) Dewatering Operations**

###### **a. Sediment Control**

i) The CONTRACTOR shall route water through a control measure, such as a sediment trap, sediment basin, or Baker tank, to remove settleable solids prior to discharge to the storm drain system.

ii) Approval of the control measure shall be obtained in advance from the ENGINEER.

iii) Filtration of the water following the control measure may be required on a case-by-case basis.

iv) If the ENGINEER determines that the dewatering operation would not generate an appreciable amount of settleable solids, the control measure requirement in i) above may be waived.

v) The CONTRACTOR shall reuse water for other needs, such as dust control or irrigation, to the maximum extent practicable.

###### **b. Contaminated Groundwater**

i) If the project is within an area of known groundwater contamination, then water from dewatering operations shall be tested prior to discharge. If the water quality meets Regional Water Quality Control

Board (RWQCB) standards, then it may be discharged to the storm drain. If the water quality meets local sanitary sewer pretreatment regulations, then it may be discharged to the sanitary sewer with prior approval from the local wastewater management authority. Otherwise, the water shall be treated or hauled off-site for proper disposal.

ii) If the project is not within an area of known groundwater contamination, then monitoring shall only be required if directed by the ENGINEER. The CONTRACTOR shall follow section B.1.b.i above, if contamination is found.

iii) If the project is found to be within an area of groundwater contamination not identified in the project specifications, a change order shall be negotiated to cover additional work performed by the CONTRACTOR.

## **2) Paving Operations**

### **a. Project Site Management**

i) When rain is forecast within 24 hours or during wet weather, the ENGINEER may prevent the CONTRACTOR from paving.

ii) The ENGINEER may direct the CONTRACTOR to protect drainage courses by using control measures, such as earth dike, and sand bag, to divert runoff or trap and filter sediment.

iii) The CONTRACTOR shall place drip pans or absorbent material under paving equipment when not in use.

iv) The CONTRACTOR shall cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.

v) If the paving operation includes an on-site mixing plant, the CONTRACTOR shall comply with General Industrial Activities Storm Water Permit requirements.

### **b. Paving Waste Management**

i) The CONTRACTOR shall not sweep or wash down excess sand (placed as part of a sand seal or to absorb excess oil) into gutters, storm drains, or creeks. Instead, the CONTRACTOR shall either collect the sand and return it to the stockpile, or dispose of it in a trash container.

ii) The CONTRACTOR shall not use water to wash down asphalt or concrete pavement.

iii) Marking paint shall be removed from paving using dry methods such as a wire brush and vacuum. If water is used, all wastewater shall be collected and disposed of to a dirt area or to the sanitary sewer.

## **3) Saw Cutting**

a. During saw cutting, the CONTRACTOR shall cover or barricade storm drain inlets using control measures, such as filter fabric, straw bales, sand bags, and fine gravel dams, to keep slurry out of the

storm drain system. When protecting a storm drain inlet, the CONTRACTOR shall ensure that the entire opening is covered.

b. The CONTRACTOR shall shovel, absorb, or vacuum saw cut slurry and pick up the waste prior to moving to the next location or at the end of each working day, whichever is sooner.

c. If saw cut slurry enters storm drain inlets, the CONTRACTOR shall remove the slurry from the storm drain system immediately.

#### **4) Contaminated Soil Management**

a. On all projects involving grading or excavation, the CONTRACTOR shall look for contaminated soil as evidenced by site history, discoloration, odor, differences in soil properties, abandoned underground tanks or pipes, or buried debris. If the project is not within an area of known soil contamination and no evidence of soil contamination is found, then testing of the soil shall only be required if directed by the ENGINEER. The CONTRACTOR shall follow section B.4.b below, if contamination is found.

b. If the project is within an area of known soil contamination or evidence of soil contamination is found, then soil from grading or excavation operations shall be tested. The soil shall be managed as required by the local hazardous waste management agency.

c. If the project is found to be within an area of soil contamination not identified in the project specifications, a change order shall be negotiated to cover additional work performed by the CONTRACTOR.

#### **5) Concrete, Grout, and Mortar Waste Management**

a. The CONTRACTOR shall store concrete, grout, and mortar away from drainage areas and ensure that these materials do not enter the storm drain system.

##### **b. Concrete Truck/Equipment Wash Out**

i) The CONTRACTOR shall not wash out concrete trucks or equipment into streets, gutters, storm drains, or creeks.

ii) The CONTRACTOR shall perform washout of concrete trucks or equipment off-site or in a designated area on-site where the water will flow onto dirt or into a temporary pit in a dirt area. The CONTRACTOR shall let the water percolate into the soil and dispose of the hardened concrete in a trash container. If a suitable dirt area is not available, then the CONTRACTOR shall collect the wash water and remove it off-site.

##### **c. Exposed Aggregate Concrete Wash Water**

i) The CONTRACTOR shall avoid creating runoff by draining water from washing of exposed aggregate concrete to a dirt area to percolate and evaporate. If a suitable dirt area is not available, then the

CONTRACTOR shall filter the wash water or allow solids to settle out and pump the water to a sanitary sewer (first check with your local wastewater authority).

ii) The CONTRACTOR shall collect and return sweepings from exposed aggregate concrete to a stockpile or dispose of the waste in a trash container.

## **6) Painting**

### **a. Painting Cleanup**

#### **i) Designated Area**

(a) The CONTRACTOR shall conduct cleaning of painting equipment and tools in a designated area that will not allow run-on of storm water or runoff of spills.

(b) The CONTRACTOR shall not allow wash water from cleaning of painting equipment and tools to drain into streets, gutters, storm drains, or creeks.

#### **ii) Water-based Paint**

(a) The CONTRACTOR shall remove as much excess paint as possible from brushes, rollers, and equipment before starting cleanup.

(b) To the maximum extent practicable, the CONTRACTOR shall dispose of wash water from aqueous cleaning of equipment and tools to the sanitary sewer.

(c) Otherwise, the CONTRACTOR shall direct wash water onto dirt area and spade in.

#### **iii) Oil-based Paint**

(a) The CONTRACTOR shall remove as much excess paint as possible from brushes, rollers, and equipment before starting cleanup.

(b) To the maximum extent practicable, the CONTRACTOR shall filter paint thinner and solvents for reuse.

(c) The CONTRACTOR shall dispose of waste thinner and solvent, and sludge from cleaning of equipment and tools as hazardous waste, as described in section A.3.c above.

### **b. Painting Materials and Waste Management**

i) The CONTRACTOR shall store paint, solvents, chemicals, and waste materials in compliance with all applicable local, State and Federal regulations. The CONTRACTOR shall store these materials in a designated area that will not allow run-on of storm water or runoff of spills.

ii) The CONTRACTOR shall dispose of excess thinners, solvents, oil and water-based paint as hazardous waste.

iii) The CONTRACTOR shall dispose of dry, empty paint cans/buckets, old brushes, rollers, rags, and drop cloths in the trash.

#### **7) Earthwork**

a. The CONTRACTOR shall maximize the control of erosion and sediment by using the BMPs for erosion and sedimentation in the RWQCB's *Erosion and Sediment Control Field Manual*.

#### **8) Vehicle / Equipment Cleaning**

a. The CONTRACTOR shall not perform vehicle or equipment cleaning onsite or in the street using soaps, solvents, degreasers, steam cleaning equipment, or equivalent methods.

b. The CONTRACTOR shall perform vehicle or equipment cleaning offsite, or onsite with water only, in a designated, bermed area that will not allow rinse water to run off-site or into streets, gutters, storm drains, or

creeks.

#### **9) Vehicle / Equipment Maintenance and Fueling**

a. The CONTRACTOR shall perform maintenance and fueling of vehicles or equipment in a designated, bermed area or over a drip pan that will not allow run-on of storm water or runoff of spills.

b. The CONTRACTOR shall use secondary containment, such as a drip pan, to catch leaks or spills any time that vehicle or equipment fluids are dispensed, changed, or poured.

c. The CONTRACTOR shall keep a stockpile of spill cleanup materials, such as rags or absorbents, readily accessible on-site.

d. The CONTRACTOR shall clean up leaks and spills of vehicle or equipment fluids immediately and dispose of the waste and cleanup materials as hazardous waste, as described in section A.3.c above.

e. The CONTRACTOR shall not wash any spilled material into streets, gutters, storm drains, or creeks and shall not bury spilled hazardous materials.

f. The CONTRACTOR shall report any spill of vehicle fluids to City of Clayton.

g. The CONTRACTOR shall inspect vehicles and equipment arriving on-site for leaking fluids and shall promptly repair leaking vehicles and equipment. Drip pans shall be used to catch leaks until repairs are made.

h. The CONTRACTOR shall recycle waste oil and antifreeze.

i. The CONTRACTOR shall comply with local, State and Federal requirements for aboveground storage tanks.

## **RECYCLING OF CONSTRUCTION AND DEMOLITION MATERIALS**

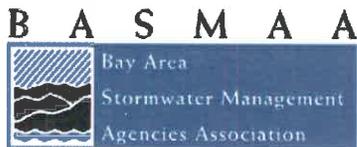
The City of Clayton expects its contractors, as part of its bid, to consider the economic benefits of recycling construction and demolition materials. As such, the Contractor shall include, as part of its contract cost, the recycling of construction and demolition materials. At least 50% of job-site waste shall be diverted from landfills.

The names of local recyclers can be obtained from Certified Facility List attached. The City of Clayton has a franchise agreement that requires Republic Services to provide on-site collection and off haul or C&D or debris boxes, otherwise the contractor may direct haul himself to a certified facility. No other hauling services other than Republic Services shall be used.

Prior to the release of retention per the "Payments Withheld" section of these Special Provisions, the Contractor shall complete and submit the "Construction and Demolition Debris Recycling Waste Management Plan" contained in the appendices. The Contractor must disclose in Section II of the form how the 50% waste diversion was achieved. Adequate evidence must include official weight tags, receipts, or similar documentation from the facility receiving the waste for recycling.

This brochure is one of a series of pamphlets describing storm drain protection measures for specific types of construction industry activities. Other pamphlets include:

- **General Construction and Site Supervision**
- **Landscaping, Gardening and Pool Maintenance**
- **Fresh Concrete and Mortar Application**
- **Roadwork and Paving**
- **Earth Moving Activities**
- **Heavy Equipment Operation**
- **Painting and Application of Solvents and Adhesives**
- **Dewatering Activities**
- **Home Repair and Remodeling**



*BASMAA gratefully acknowledges the City of Palo Alto and Alameda Countywide Clean Water Program for the original concept and text of this brochure.*

For more information from countywide storm drain protection programs, and additional brochures, contact the storm-water program in your area (listed below) or by calling 1-888-BAYWISE.

### **Local Stormwater Quality Management Programs**

Alameda Countywide Clean Water Program  
951 Turner Court, Hayward, CA 94545  
510-670-5543

Contra Costa Clean Water Program  
255 Glacier Drive, Martinez, CA 94553-4897  
925-313-2360

Fairfield-Suisun Urban Runoff Management Program  
1010 Chadbourne Road, Fairfield, CA 94585  
707-429-8930

Marin County Stormwater Pollution Prevention Program  
P. O. Box 4186  
San Rafael, CA 94913  
415-499-6528

San Mateo Countywide Stormwater Pollution Prevention Program  
555 County Center  
Redwood City, CA 94063  
650-599-1406

Santa Clara Valley Urban Runoff Pollution Prevention Program  
699 Town & Country Village  
Sunnyvale, CA 94086  
800-794-2482

Vallejo Sanitation and Flood Control District  
450 Ryder Street, Vallejo, CA 94590  
707-644-8949

Bay Area Stormwater Management Agencies Association (BASMAA)  
1515 Clay Street, Suite 1400  
Oakland CA 94612  
510-622-2326 or 1-888-BAYWISE

### **State Agencies**

California Regional Water Quality Control Board  
San Francisco Bay Region (510) 622-2300

Department of Toxic Substances (for questions about hazardous waste, call the Public and Business Liaison Hotline, Regional Duty Officers at (800) 728-6942 or (800) 72TOXIC)

# *Storm Water Pollution Prevention for Sawcut Slurry*



*Best Management Practices for the  
Construction Industry*

## Why is Sawcut Slurry a Problem?

The slurry created when pavement is cut can enter storm drains and flow directly to local waterways. This slurry can be toxic to wildlife in a local creek, the creek, bay or ocean. It can also clog drains and cause flooding.

**CAUTION:** *If sawcut slurry from your job enters a storm drain, you have broken the law!*

Allowing slurry or other pollutants to enter a storm drain, or directly to a waterway, is a violation of local, state, and federal regulations. Violators are subject to fines and cleanup costs.

*By following this three-step procedure when saw cutting you can protect the storm drain system, help environment, and avoid fines.*

## Minimize and Contain Slurry

Before you begin saw cutting, block the path to the nearest storm drain by placing sand bags (or equivalent) in the gutter or around the storm drain inlet. If you can lift the grate over the drain, place filter fabric underneath.

Even if the nearest drain is several blocks away, place a barrier in the gutter as near your site as practical to contain the slurry.

Use as little water as possible, to reduce the amount of slurry you must collect.

Barricade area where slurry is drying to prevent tracking by cars and foot traffic.

## Collect Slurry

Clean up slurry with a wet vac as you work. Where wet slurry cannot be vacuumed, allow it to dry and then sweep up with a stiff broom at the end of the day.

## Dispose of Slurry

Empty wet slurry into a well-contained area (where it will not run off into a gutter, street, or creek) and allow it to dry. A small amount of slurry may be mixed with dirt and left on the construction site. Where this is not possible, sweep up the dry slurry and dispose in the trash.

## Small Business Hazardous Waste Disposal Program

Businesses that generate less than 27 gallons or 220 pounds of hazardous waste per month (known as Conditionally Exempt Small Quantity Generators) can often take advantage of a county-wide small business hazardous waste disposal program. Call your local stormwater program (see numbers listed below,) county health department, or local fire department for more information

## Local Stormwater Quality Management Programs

Alameda Countywide Clean Water Program  
951 Turner Court, Hayward, CA 94545  
510-670-5543

Contra Costa Clean Water Program  
255 Glacier Drive, Martinez, CA 94553-4897  
925-313-2360

Fairfield-Suisun Urban Runoff Management Program  
1010 Chadbourne Road, Fairfield, CA 94585  
707-429-8930

Marin County Stormwater Pollution Prevention Program  
P. O. Box 4186  
San Rafael, CA 94913  
415-499-6528

San Mateo Countywide Stormwater Pollution Prevention Program  
555 County Center  
Redwood City, CA 94063  
650-599-1406

Santa Clara Valley Urban Runoff Pollution Prevention Program  
699 Town & Country Village  
Sunnyvale, CA 94086  
800-794-2482

Vallejo Sanitation and Flood Control District  
450 Ryder Street, Vallejo, CA 94590  
707-644-8949

Bay Area Stormwater Management Agencies Association (BASMAA)  
1515 Clay Street, Suite 1400  
Oakland CA 94612  
510-622-2326 or 1-888-BAYWISE

## State Agencies

California Regional Water Quality Control Board  
San Francisco Bay Region (510) 622-2300

Department of Toxic Substances (for questions about hazardous waste, call the Public and Business Liaison Hotline, Regional Duty Officers at (800) 728-6942 or (800) 72TOXIC



## TO LEARN MORE CALL 1-888-BAYWISE

*BASMAA gratefully acknowledges the Santa Clara Valley Urban Runoff Pollution Prevention Program for the original concept and text of this brochure.*

July 2002

June 2001

# Fresh Concrete and Mortar Application

*Best Management Practices for the Construction Industry*



## Who should use this brochure?

- Masons and bricklayers
- Sidewalk construction crews
- Patio construction workers
- Construction inspectors
- General contractors
- Home builders
- Developers
- Concrete delivery/pumping workers

# Preventing Pollution: It's Up to Us

In the San Francisco Bay Area, storm drains transport water directly to local creeks and the Bay without treatment. Stormwater pollution is a serious problem for wildlife dependent on our waterways and for the people who live near polluted streams or baylands. Some common sources of this pollution include spilled oil, fuel, and fluids from vehicles and heavy equipment; construction debris; sediment created by erosion; landscaping runoff containing pesticides or weed killers; and materials such as used motor oil, antifreeze, and paint products that people pour or spill into a street or storm drain.



## Storm Drain Pollution from Fresh Concrete and Mortar Applications

Fresh concrete and cement-related mortars that wash into lakes, streams, or estuaries are toxic to fish and the aquatic environment. Disposing of these materials to the storm drains or creeks can block storm drains, causes serious problems, and is prohibited by law.

### Doing the Job Right

#### *General Business Practices*

- Wash out concrete mixers only in designated wash-out areas in your yard, away from storm drains and waterways, where the water will flow into a temporary waste pit in a dirt area. Let water percolate through soil and dispose of settled, hardened concrete as garbage. Whenever possible, recycle washout by pumping back into mixers for reuse.
- Wash out chutes onto dirt areas at site that do not flow to streets or drains.
- Always store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Protect dry materials from wind.
- Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and runoff.
- Do not use diesel fuel as a lubricant on concrete forms, tools, or trailers.



### *During Construction*

- Don't mix up more fresh concrete or cement than you will use in a two-hour period.
- Set up and operate small mixers on tarps or heavy plastic drop cloths.
- When cleaning up after driveway or sidewalk construction, wash fines onto dirt areas, not down the driveway or into the street or storm drain.
- Protect applications of fresh concrete and mortar from rainfall and runoff until the material has dried.
- Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure runoff does not reach gutters or storm drains.
- When breaking up pavement, be sure to pick up all the pieces and dispose of properly. Recycle large chunks of broken concrete at a landfill.
- Never bury waste material. Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.
- Never dispose of washout into the street, storm drains, drainage ditches, or streams.

## Small Business Hazardous Waste Disposal Program

Businesses that generate less than 27 gallons or 220 pounds of hazardous waste per month (known as Conditionally Exempt Small Quantity Generators) can often take advantage of a county-wide small business hazardous waste disposal program. Call your local stormwater program (see numbers listed below,) county health department, or local fire department for more information

## Local Stormwater Quality Management Programs

Alameda Countywide Clean Water Program  
951 Turner Court, Hayward, CA 94545  
510-670-5543

Contra Costa Clean Water Program  
255 Glacier Drive, Martinez, CA 94553-4897  
925-313-2360

Fairfield-Suisun Urban Runoff Management Program  
1010 Chadbourne Road, Fairfield, CA 94585  
707-429-8930

Marin County Stormwater Pollution Prevention Program  
P. O. Box 4186  
San Rafael, CA 94913  
415-499-6528

San Mateo Countywide Stormwater Pollution Prevention Program  
555 County Center  
Redwood City, CA 94063  
650-599-1406

Santa Clara Valley Urban Runoff Pollution Prevention Program  
699 Town & Country Village  
Sunnyvale, CA 94086  
800-794-2482

Vallejo Sanitation and Flood Control District  
450 Ryder Street, Vallejo, CA 94590  
707-644-8949

Bay Area Stormwater Management Agencies Association (BASMAA)  
1515 Clay Street, Suite 1400  
Oakland CA 94612  
510-622-2326 or 1-888-BAYWISE

## State Agencies

California Regional Water Quality Control Board  
San Francisco Bay Region (510) 622-2300

Department of Toxic Substances (for questions about hazardous waste, call the Public and Business Liaison Hotline, Regional Duty Officers at (800) 728-6942 or (800) 72TOXIC



## TO LEARN MORE CALL 1-888-BAYWISE

*BASMAA gratefully acknowledges the Santa Clara Valley Urban Runoff Pollution Prevention Program for the original concept and text of this brochure.*

# Painting and Application of Solvents and Adhesives

*Best Management Practices for the Construction Industry*



## Who should use this brochure?

- Painters
- Homeowners
- Paperhangers
- Plasterers
- Graphic artists
- Dry wall crews
- Floor covering installers
- General contractors
- Home builders
- Developers

# Preventing Pollution: It's Up to Us

In the San Francisco Bay Area, storm drains transport water directly to local creeks and the Bay without treatment. Stormwater pollution is a serious problem for wildlife dependent on our waterways and for the people who live near polluted streams or baylands. Some common sources of this pollution include spilled oil, fuel, and fluids from vehicles and heavy equipment; construction debris; sediment created by erosion; landscaping runoff containing pesticides or weed killers; and materials such as used motor oil, antifreeze, and paint products that people pour or spill into a street or storm drain.



## Storm Drain Pollution from Paints, Solvents, and Adhesives

All paints, solvents, and adhesives contain chemicals that are harmful to wildlife in local creeks, San Francisco Bay, and the Pacific Ocean. Toxic chemicals may come from liquid or solid products or from cleaning residues or rags. Paint material and wastes, adhesives and cleaning fluids should be recycled when possible, or disposed of properly to prevent these materials from flowing into storm drains and watercourses.

### Doing the Job Right Handling Paint Products

- Keep all liquid paint products and wastes away from the gutter, street, and storm drains.** Liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes and must be disposed of at a hazardous waste collection facility (contact 1-888-BAYWISE for more information).
- When thoroughly dry, empty paint cans, used brushes, rags, and drop cloths may be disposed of as garbage in a sanitary landfill. Empty, dry paint cans also may be recycled as metal.

### Recycle/Reuse Leftover Paints Whenever Possible.

- Recycle or donate excess **water-based (latex) paint**, or return to supplier.
- Reuse leftover **oil-based paint**. Dispose of non-recyclable thinners, sludge and unwanted paint, as hazardous waste.
- Unopened cans of paint may be able to be returned to the paint vendor. Check with the vendor regarding its "buy-back" policy.
- To locate local paint recycling facilities call 1-800-CLEANUP or go to [www.cleanup.org](http://www.cleanup.org)

### Painting Cleanup

- Never clean brushes or rinse paint containers into a street, gutter, storm drain, French drain, or stream.**
- For **water-based paints**, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- For **oil-based paints**, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids and residue as hazardous waste.

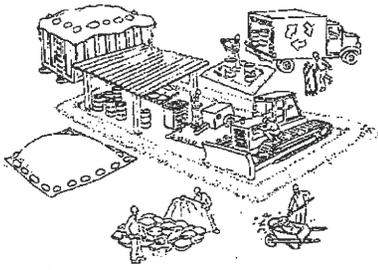
### Paint Removal and Building Cleaning

- Paint chips and dust from non-hazardous dry stripping and sand blasting** may be swept up or collected in plastic drop cloths and disposed of as trash.
- Chemical paint stripping residue** and chips and dust from **marine paints or paints containing lead, mercury or tributyl tin** must be disposed of as hazardous wastes. Lead based paint removal requires a state-certified contractor.
- Wash water from painted buildings constructed before 1978 can contain high amounts of lead, even without paint chips. Before you begin pressure washing or stripping pre-1978 building exteriors, test paint for lead by taking paint scrapings to a local laboratory. See Yellow Pages for a state-certified laboratory.
- When stripping or cleaning **building exteriors** with high-pressure water, block storm drains. Direct wash water onto a dirt area and spade into soil. Or, check with the local wastewater treatment authority to find out if you can collect (mop or vacuum) building cleaning water and dispose to the sanitary sewer. Sampling of the water may be required to assist the wastewater treatment authority in making its decision.

# Pollution Prevention — It's Part of the Plan

## Make sure your crews and subs do the job right!

Runoff from streets and other paved areas is a major source of pollution in San Francisco Bay. Construction activities can directly affect the health of the Bay unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and local creeks. Following these guidelines will ensure your compliance with local ordinance requirements.



### Materials storage & spill cleanup

#### Non-hazardous materials management

- ✓ Sand, dirt, and similar materials must be stored at least 10 feet from catch basins, and covered with a tarp during wet weather or when rain is forecast.
- ✓ Use (but don't overuse) reclaimed water for dust control as needed.
- ✓ Sweep streets and other paved areas daily. Do not wash down streets or work areas with water!
- ✓ Recycle all asphalt, concrete, and aggregate base material from demolition activities.
- ✓ Check dumpsters regularly for leaks and to make sure they don't overflow. Repair or replace leaking dumpsters promptly.

#### Hazardous materials management

- ✓ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, state, and federal regulations.
- ✓ Store hazardous materials and wastes in secondary containment and cover them during wet weather.
- ✓ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ✓ Be sure to arrange for appropriate disposal of all hazardous wastes.

#### Spill prevention and control

- ✓ Keep a stockpile of spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times.
- ✓ When spills or leaks occur, contain them immediately and be particularly careful to prevent leaks and spills from reaching the gutter, street, or storm drain. Never wash spilled material into a gutter, street, storm drain, or creek!
- ✓ Report any hazardous materials spills immediately! Dial 911 or your local emergency response number.

### Vehicle and equipment maintenance & cleaning

- ✓ Inspect vehicles and equipment for leaks frequently. Use drip pans to catch leaks until repairs are made; repair leaks promptly.
- ✓ Fuel and maintain vehicles on site only in a bermed area or over a drip pan that is big enough to prevent runoff.
- ✓ If you must clean vehicles or equipment on site, clean with water only in a bermed area that will not allow rinsewater to run into gutters, streets, storm drains, or creeks.
- ✓ Do not clean vehicles or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc.



### Dewatering operations

- ✓ Reuse water for dust control, irrigation, or another on-site purpose to the greatest extent possible.
- ✓ Be sure to call your city's storm drain inspector before discharging water to a street, gutter, or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ✓ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the city inspector to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.



### Saw cutting

- ✓ Always completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or sand/gravel bags to keep slurry out of the storm drain system.
- ✓ Shovel, absorb, or vacuum saw-cut slurry and pick up all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner).
- ✓ If saw cut slurry enters a catch basin, clean it up immediately.

### Concrete, grout, and mortar storage & waste disposal

- ✓ Be sure to store concrete, grout, and mortar under cover and away from drainage areas. These materials must never reach a storm drain.
- ✓ Wash out concrete equipment/trucks off-site or designate an on-site area for washing where water will flow onto dirt or into a temporary pit in a dirt area. Let the water seep into the soil and dispose of hardened concrete with trash.

- ✓ Divert water from washing exposed aggregate concrete to a dirt area where it will not run into a gutter, street, or storm drain.

- ✓ If a suitable dirt area is not available, collect the wash water and remove it for appropriate disposal off site.



### Earthwork & contaminated soils

- ✓ Keep excavated soil on the site where it is least likely to collect in the street. Transfer to dump trucks should take place on the site, not in the street.
- ✓ Use fiber rolls, silt fences, or other control measures to minimize the flow of silt off the site.



- ✓ Avoid scheduling earth moving activities during the rainy season if possible. If grading activities during wet weather are allowed in your permit, be sure to implement all control measures necessary to prevent erosion.

- ✓ Mature vegetation is the best form of erosion control. Minimize disturbance to existing vegetation whenever possible.
- ✓ If you disturb a slope during construction, prevent erosion by securing the soil with erosion control fabric, or seed with fast-growing grasses as soon as possible. Place fiber rolls down-slope until soil is secure.

- ✓ If you suspect contamination (from site history, discoloration, odor, texture, abandoned underground tanks or pipes, or buried debris), call the Regional Water Quality Control Board or local hazardous waste management agency for help in determining what testing should be done, and manage disposal of contaminated soil according to their instructions.

### Paving/asphalt work



- ✓ Do not pave during wet weather or when rain is forecast.
- ✓ Always cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- ✓ Place drip pans or absorbent material under paving equipment when not in use.
- ✓ Protect gutters, ditches, and drainage courses with sand/gravel bags, or earthen berms.
- ✓ Do not sweep or wash down excess sand from sand sealing into gutters, storm drains, or creeks. Collect sand and return it to the stockpile, or dispose of it as trash.

- ✓ Do not use water to wash down fresh asphalt concrete pavement.

### Painting



- ✓ Never rinse paint brushes or materials in a gutter or street!
- ✓ Paint out excess water-based paint before rinsing brushes, rollers, or containers in a sink. If you can't use a sink, direct wash water to a dirt area and spade it in.
- ✓ Paint out excess oil-based paint before cleaning brushes in thinner.
- ✓ Filter paint thinners and solvents for reuse whenever possible. Dispose of oil-based paint sludge and unusable thinner as hazardous waste.

# City of Clayton C&D Waste Recovery and Disposal

## Certified Facility List

(\*Provisional authorization indicates on-site inspection of facility still required before final certification)

### Disposal Facilities

#### **Bio Fuel Systems**

30 Greenville Road, Livermore.....**925-455-5908**  
*Clean wood, green waste, tree stumps, and shingles (no tar paper).*

#### **County Quarry Products (Provisional)**

5501 Imhoff Rd, Martinez ..... **925-682-0707**  
*Concrete, asphalt, and dirt.*

#### **GreenWaste Recovery Facility**

625 Charles Street, San José .....**408-283-4800**  
*C&D materials accepted from GT Waste, Green waste Recovery*

#### **Newby Island Landfill**

1601 Dixon Landing Road, San José ..**408-262-1401**  
*Mixed C&D materials and separated metal, wood, concrete, asphalt, gypsum, cardboard, roofing, carpet, green waste, and block foam.*

#### **Zanker Materials Processing Facility**

675 Los Esteros Road, San José.....**408-263-2384**  
*Mixed C&D materials and separated metal, wood, concrete, asphalt, gypsum, cardboard, roofing, and soil.*

#### **Contra Costa Transfer/Recovery Facility**

951 Waterbird Way, Martinez ..... **925-458-9800**  
*Mixed C&D materials and separated metal, wood, concrete, asphalt, gypsum, cardboard, roofing, and soil.*

#### **Acme Fill Corporation (Provisional)**

950 waterbird way, Martinez ..... **925-228-7099**  
*Separated metal, wood, soil, and mixed C&D Loads*

#### **Contra Costa Recycling Center & Transfer**

1300 Loveridge Rd, Pittsburg ..... **925-473-0180**  
*Mixed C&D materials and separated metal, wood, concrete, asphalt, gypsum, cardboard, roofing, and soil.*

#### **Davis Street Station for Material Recycling**

2615 Davis St, San Leandro ..... **510-563-4257**  
*Mixed C&D materials and separated metal, wood, concrete, asphalt, gypsum, cardboard, roofing, and soil.*

#### **Vasco Rd Landfill & Recycling Center**

4001 N. Vasco Rd, Livermore ..... **925-447-0491**  
*Mixed C&D materials and separated metal, wood, concrete, asphalt, gypsum, cardboard, roofing, and soil.*

#### **Hay Road Compost Facility/Landfill**

6426 Hay Road, Vacaville ..... **707-678-4718**  
*Clean wood, green waste, tree stumps*

#### **Organic Solutions (Provisional)**

1460 Goodyear rd, Benicia .... **707-751-0467**  
*Green waste, wood waste*

#### **Potrero Hills Compost Facility (Provisional)**

Potrero Hills Lane, Suisun City .... **707- 429-9600**  
*C&D materials accepted from GT Waste, Green waste Recovery*

#### **Pleasanton Transfer/Recovery Facility**

3110 Busch rd, Pleasanton.....**925-846-2042**  
*Mixed C&D materials and separated metal, wood, concrete, asphalt, gypsum, cardboard, roofing, and soil.*

#### **Sonoma Transfer/Recovery Facility**

4376 Stage Gulch Road, Sonoma ....**707-565-7940**  
*Mixed C&D materials and separated metal, wood, concrete, asphalt, gypsum, cardboard, roofing, and soil.*

#### **Woodmill Recycling Company (Provisional)**

5595 Byron Hot Springs Rd  
Byron, CA 94514  
*Green waste, wood waste, Concrete, asphalt, and dirt.*

#### **Diablo Valley Rock (Provisional)**

925 Waterbird Way,  
Martinez, Ca 94553 ..... 925-228-1118

#### **M&M Services, Inc.**

590 Caletti Ave.  
Windsor, CA 94592 .... 877-698-8473  
*Green waste, wood waste, Concrete, asphalt, and dirt.*

### Job Site Collection

City of Clayton has franchise  
agreement that requires on site  
use of Republic Services for C&D  
Waste Recovery and Disposal



# One-Stop Construction & Demolition Recycle Ordinance Compliance Made Easy

951 Waterbird Way  
Martinez, CA 94553  
(925) 313-8900

## Open to the Public

**Hours:** 7 a.m. to 5 p.m. Daily

Except Easter, Thanksgiving, Christmas Day and New Year's Day

### Directions:

From Benicia, take I-680 South over Benicia Bridge, take Marina Vista exit, go right, then right on Waterbird Way;

From Walnut Creek, take I-680 North, take Marina Vista exit, go right, then right on Waterbird Way;

From Antioch, take Highway 4 West, then I-680 North, take Marina Vista exit, go right, then right on Waterbird Way.

## We Provide Proof of Recycling

Many communities have enacted local construction and demolition (C&D) recycle ordinances and require proof that your material has been recycled. **Contra Costa Transfer & Recovery** can provide you with the documentation you need to comply. Here's all you need to do:

**Step #1** Make sure your load has a minimum of 50% recycle material mixed with trash or a 100% clean (no trash) single source load. See information below.

**Step #2** Tell the scale house operator you need "Construction and Demolition Recycle Ordinance" on your weight ticket.

**Step #3** Your weight ticket will be your receipt to comply with local C&D recycle ordinances.

It's that easy!!

## Mixed Construction & Demolition Loads

Up to half (50%) of the load can be trash. However, at least 50% of the load **MUST** contain a combination of the following recycle materials:

- Cardboard – no wax-coated materials
- Carpet padding
- Lumber – dimensional lumber, lumber cutoffs, plywood, particleboard, wood scraps, pallets, fencing siding, cabinets
- Shake roofing
- Metals (ferrous and nonferrous) – metal doors, office furniture, fixtures, and framing, appliances, heaters, refrigerators, freezers, washers, dryers, air conditioners and any other scrap metal flashing. All Freon must be removed. There will be an extra charge for Freon removal.
- Sheetrock, drywall, plasterboard, wallboard
- Yard waste – branches and trees, lawn clippings, brush, prunings
- Painted wood

**UNACCEPTABLE MATERIAL** includes liquids, heavy steel plates, concrete, asphalt, rock, concrete tile roofing, creosote treated wood (railroad ties, telephone poles, pressure treated wood), hazardous waste including computer monitors and televisions.

## Source Separated Construction and Demolition Loads

You can bring a clean load of only metal, wood, lumber or green waste. The load must contain 100% of only one of these materials and contain **NO** garbage.

## We Help You Recycle Construction and Demolition Debris

Allied Waste Services has the expertise and services that make it easier for builders and contractors to comply with laws that regulate the recycling and diversion of construction and demolition (C&D) debris from landfills.

### Complying with Regulations

Allied Waste Service's staff will help you deal with the different rules and regulations in the communities where you do business and make recycling construction and demolition debris easier for you.

We can help your company cut through the red tape and paperwork and make sure you receive your proper documentation and what you deliver to us meets all local regulations. Call (925) 603-1383 with any questions.

### Single-Source, Separated Debris: Lower Rates

Customers can save by delivering single-source loads. These loads must contain only one kind of recyclable material. No garbage of any kind is allowed.

To create single-source loads and qualify for lower rates, customers must separate debris and construction material and place each type of material in individual debris boxes, i.e., a debris box for wood, another for metal, another for concrete and so on.

The following are accepted for single-source loads:

- Asphalt
- Concrete
- Dirt
- Green waste
- Metals (ferrous and nonferrous)
- Lumber
- Paper and cardboard
- Wood

Please note: Contaminated debris boxes will be treated as garbage and charged at standard garbage rates. Call (925) 603-1383 for details and information

about the debris you are planning to recycle with Allied Waste Services.

### Commingled Loads

To comply with local construction and demolition debris ordinances, customers must fill 50 percent or more of their debris boxes with recyclable materials. Recyclables can be any or a combination of the following:

- Cardboard
- Carpet padding
- Green waste
- Lumber and wood, including painted wood
- Metals
- Shake roofing
- Sheetrock, drywall, plasterboard, wallboard
- Small pieces and quantities of asphalt paving, concrete and rocks

Unacceptable materials in mixed loads include liquids, heavy steel plates, concrete tile roofing, creosote treated wood (railroad ties, utility poles, pressure-treated wood), hazardous wastes, including computer monitors and televisions.

### Debris Box Service

To order a debris box and for more information about recycling construction and demolition debris, call us at (925) 603-1383.



PRESORTED  
FIRST-CLASS  
U.S. POSTAGE PAID  
PLEASANT HILL, CA  
PERMIT NO. 122

  
ALLIED WASTE SERVICES  
441 N. Buchanan Circle  
Pacheco, CA 94553  
<http://awsvcc.com>

Printed on Recycled Paper

## RECYCLE CONSTRUCTION & DEMOLITION DEBRIS



 AKA  
Republic  
Services

(925) 603-1383



# Recycling Options



## Asphalt Paving (and Roofing)

Black or brown, tar-like material mixed with aggregate used as a paving material. Also composite shingles or other roofing material made with asphalt. (Prefer 2 ft. x 2 ft. x 1 ft. pieces.) No bricks.



## Cardboard

Corrugated cardboard boxes. No wax-coated materials.



## Carpet Padding

Used carpet padding and remnants of padding from newly installed carpeting.



## Concrete

Material made from sand, aggregate gravel, cement mix and water, including pieces of building foundations, concrete paving, and concrete blocks. (Prefer 2 ft. x 2 ft. x 1 ft. pieces; small amount of rebar OK.)



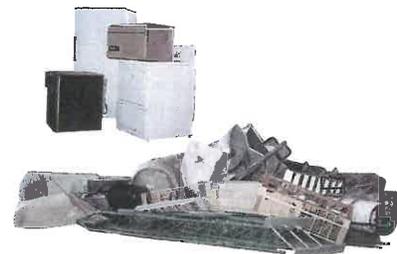
## Drywall (Gypsum Board)

Interior wall covering made of a sheet of gypsum sandwiched between paper layers. Gypsum board may be called sheetrock, drywall, plasterboard, gyproc or wallboard. Must be clean. No wire meshing, paper or cardboard.



## Lumber

Processed wood for building, manufacturing, landscaping, packaging and from demolition including lumber cutoffs, plywood and particleboard, wood scraps, pallets, fencing, shake roofing, siding. No creosote or lead-based paint. Nails OK.



## Metals

All ferrous and non-ferrous metals. Office furniture and fixtures, metal doors and framing, appliances, including heaters, freezers, refrigerators and air conditioners (additional fee required).



## Rocks

Stones and rocks of any size and shape including pebbles. No bricks. No sandstone.



## Soil and Fines

Soil, dirt, and other matter. Examples: sand, clay, soil and other fines. No rocks, sod or concrete.

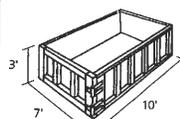


## Yard Waste

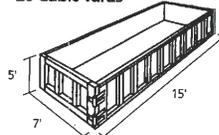
Lawn clippings, shrubbery, plants and prunings only. No stumps or large branches and no contaminants including plastic bags, food, rocks, dirt or pet waste.

### DEBRIS BOX SIZES

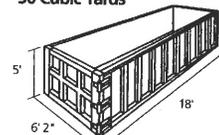
10 Cubic Yards



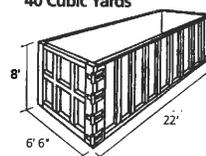
20 Cubic Yards



30 Cubic Yards



40 Cubic Yards



### Guidelines

Comingle construction and recycle debris in 20-, 30- or 40-cubic-yard boxes.

Heavy-weight materials should be placed in 10-cu-

bic-yard boxes. Heavy-weight materials include:

- Asphalt
- Concrete
- Rock
- Dirt
- Sod



6000 Heritage Trail  
Clayton, CA 94517  
925-673-7340

# CLAYTON CONSTRUCTION AND DEMOLITION DEBRIS RECYCLING WASTE MANAGEMENT PLAN (WMP)

*For City Use Only*  
Project No. \_\_\_\_\_

Approved  
 Waived  
 Not Approved

Staff Initials: \_\_\_\_\_

Receipt # \_\_\_\_\_

Date: \_\_\_\_\_

**Clayton C&D Recycling Ordinance requires at least 50% diversion of job-site waste materials from the landfill. (Ord. No. 389: Jan. 6, 2006)**

Please answer the following:

1.

Property Owner Name/Ph.#	
Job-site Address:	
Name of Project Manager:	
Address:	
Phone Number:	
Cellular Phone Number:	
Fax Number:	

- Identify the type of materials to be recycled, salvaged or disposed from the job-site in **Section I** of the waste assessment table on the back of this page.
- Identify how materials will be handled, who will haul materials or what facility materials will be going to in **Section I** of the waste assessment table on the back of this page.
- Section II** is to be filled out with supporting documentation upon completion of project.
- Briefly state how materials will be sorted for recycling and/or salvage on the job site.

---

---

---

---

---

---

---

---

---

---

- Will this project require the use of sub-contractors?  Yes  No  
If yes, briefly state how you plan to inform and ensure participation by the sub-contractors of your job-site recycling and waste management responsibility.

---

---

---

---

---

---

---

---

**SECTION I. BEFORE START OF PROJECT:** Identify the materials that you estimate will be recycled, salvaged or landfilled. Identify the handling procedure, hauler and/or destination of each material type.

**SECTION II. UPON COMPLETION OF PROJECT:** Indicate the material **types and quantities** recycled, salvaged or disposed from this job-site. Official weight tags must be submitted with this completed report identifying 1) job site address, 2) weight of load(s), 3) material type(s) and 4) if materials were recycled, salvaged or disposed. Submit completed form with receipts/tags to City of Clayton Community Development Department.

Material Type	Section I Identify materials (✓) (Est. amount by weight – optional)			Handling procedure, hauler or final destination of materials	Section II Quantity of each material (by weight) (To be filled out at completion of project)			City use only Acceptable weight tag (staff initials)
	Recycle	Salvage	Landfill		Recycled	Salvaged	Landfilled	
Asphalt & Concrete								
Brick, Tile								
Building materials-doors, windows, fixtures, cabinets								
Cardboard								
Dirt/Clean Fill								
Drywall								
Carpet padding/ Foam								
Plate/window Glass								
Scrap Metals (steel, aluminum, brass, copper, etc.)								
Unpainted Wood & Pallets								
Yard Trimmings (brush, trees, stumps, etc.)								
Other:								
Garbage								

If no materials are targeted for recycling or salvage, please state why: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 Contractor's Signature / Date

\_\_\_\_\_  
 Property Owner's Signature/Date

City Use Only: Recycling meets 50% minimum – (Amount \_\_\_\_\_ %) Yes  No  Staff Initials: \_\_\_\_\_ Date: \_\_\_\_\_

Refund: Yes  No  Refund Amount: \_\_\_\_\_

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_

Authorized By: \_\_\_\_\_ Date: \_\_\_\_\_

Account # \_\_\_\_\_

Vendor # \_\_\_\_\_

\_\_\_\_\_  
 City Manager Approval



6000 Heritage Trail  
Clayton, CA 94517  
925-673-7340

### **How to complete a Waste Management Plan**

Download the Waste Management Plan (WMP) you need to submit prior to receiving your permit. Below are the general guidelines for the WMP process:

To receive your building permit:

- Complete Page 1 and Section I of the **WMP**
- Contract and Property Owner's signatures are required
- Submit the **WMP** to the permit desk or directly to the WMP Compliance Official
- Once the submitted **WMP** is approved, your permit will be issued
- A copy of your approved **WMP** will be returned to you with your building permit

While on the Job:

- Keep records of all material reused, recycled or landfilled from the site
- Official weight tags will need to be submitted with the final WMP prior to a final inspection
- Official weight tags must contain the following information:
  1. Job site address
  2. Weight of load
  3. Material types
  4. If the materials were recycled, salvaged or disposed

**Prior** to scheduling your **Final Inspection**:

- Complete Section II of the **WMP**
- Submit the final **WMP** and all applicable documentation to the **City of Clayton Planning Dept. at least 3 business days before you want your final inspection** for approval.

Once your final **WMP** is approved, a final inspection can be scheduled with the Building Division of Contra Costa County, who conducts building inspections for the City of Clayton.

In order to get a building permit on qualifying projects, you will need to complete the attached Waste Management Plan (WMP), submit it along with your deposit fee to the City of Clayton Community Development Department when you submit your construction plans for city planning /zoning review.

- Contact Laura Hoffmeister, Asst. to the City Manager, via email at [LHoffmeister@ci.clayton.ca.us](mailto:LHoffmeister@ci.clayton.ca.us); or by calling (925) 673-7308 if you need any assistance or have questions.

### **How can I estimate the amount of C&D debris material on my project?**

Attached are conversion tables and generation rates that can be used for making your calculations.

### **How do I get the debris to a salvage or recycling facility?**

If you will be hauling your C&D debris to a salvage or recycling facility, **call ahead** to check hours of operation, disposal fees and **confirm that the facility can receive and recycle your materials** Allied Waste (Pleasant Hill Bayshore Disposal-PHBD) is the only authorized hauler for the City of Clayton. You may use a third party hauler if they have a current City business license. Your regular household refuse and recycling is required to be serviced by Allied. Please call Allied to set up your regular weekly curbside recycling and garbage collection service at 925-685-4711; for Allied's temporary C&D service, and rate information call 671-5806.

### **What if I am using sub-contractors?**

Inform your sub-contractors about your recycling requirements. **You are responsible for any materials they take away from the job-site.** They must take materials to a recognized recycling facility and provide you with recycling receipts. That's your recycling credit driving away in their truck!

### **Do I need to separate the debris by material type or can I mix it together?**

The manner in which you collect and sort the C&D debris will determine what facility you can use for recycling. **Separated loads** of clean materials can be taken to one of the many area facilities listed in the Builder's Guide or Contra Costa Reuse and Recycling Guide. **Mixed loads** can be taken to facilities listed in the Builder's Guide or Contra Costa reuse and Recycling Guide that state they can receive mixed materials for recycling. **You must insist that the facility provide you with a recycling receipt and you should call ahead to confirm this.** A weight tag that simply says "C&D debris" is not adequate. A C&D Recycling Debris Box for mixed loads can be set up with Allied Waste Services by calling 925-671-5806. They can also provide you with their current rates for their services.

### **What do I need to do to demonstrate compliance with city recycling requirements?**

You will need to submit all recycling and disposal receipts to the building department before receiving your final permits. The recycling receipts should clearly state the city building permit number or job-site address, the date, the weight or volume, material type and confirmation that the materials were actually recycled. A sample form of what information is needed is attached. Please note that at most all facilities you must inform them prior to, or at the time you bring in your materials, of the need for the appropriate receipts. Most facilities can not provide the appropriate documentation after you have deposited the load or after the fact.

### **What is the cost to do construction and demolition debris recycling?**

The cost for vary depending on where the materials are taken and how they are hauled (separated material, co-mingled materials). All locations will charge a fee for taking the materials. In addition there are fees associated with hauling and on site debris boxes that would contain the materials to be hauled from the site.

### **Can I use a hauler other than Allied Waste Services?**

Yes you can use a third party hauler (not a debris box from another refuse service or landfill company such as Delta Diablo, Concord Disposal, Altamont, BFI, etc. These are franchised haulers that have very specific territory assigned to them.) A third party or independent hauler can be used however they must have a valid City of Clayton Business license. (Contact our City Business License Officer at 673-7310 to verify or obtain license application). You are responsible to ensure that they have valid City of Clayton Business License.

### **What if they do not get the City of Clayton Business License?**

Lack of a business license may result in a hold on building inspections, payment of additional fines and penalties.

### **Where can I obtain information about third party haulers and places that take C & D materials?**

Resources such as the Contra Costa Builders Guide to Reuse and Recycling and the Contra Costa Recycling Guidebook are available at City Hall or on line at [www.cccrecycle.org/debris](http://www.cccrecycle.org/debris). City Hall also has information from Allied Waste on their C&D services or at their website [www.awsgcc.com](http://www.awsgcc.com).



6000 Heritage Trail- Clayton, CA - 94517 925-673-7340

Permit applicants for construction, renovation/remodel, additions, or demolition, of 500 square feet or more of area are required to divert 50% of the waste generated.

(City Ordinance No. 389, effective January 6, 2006)

The following materials should be considered for recycling and reuse.

- Appliances
- Asphalt
- Brick
- Building materials - doors, windows, and fixtures
- Cardboard
- Carpet
- Carpet padding and foam
- Ceiling tile
- Concrete
- Drywall
- Landscape debris (brush, trees, branches, stumps, leaves, and grass)
- Lumber and wood - unpainted and unfinished
- Masonry tile
- Metal - ferrous and nonferrous
- Plastics - PET (#1) and HDPE (#2)



6000 Heritage Trail- Clayton, CA - 94517 925-673-7340

## STANDARDIZED GENERATION RATES

These generation rates should be used by applicants preparing Waste Management Plans for construction, renovation, and demolition projects to estimate the quantity of construction and demolition debris that will be generated.

<b>Construction Projects:</b> Type of Project	C&D Debris Pounds per sq.ft.
Single family home.....	4.6
Multifamily.....	4.0
Commercial.....	3.9

<b>Demolition Projects:</b> Type of Project	C&D Debris Pounds per sq.ft.
Single family home (without basement).....	50
Single family home (with concrete basement).....	111
Multifamily.....	127
Commercial.....	155

<b>Renovation Projects - residential</b> Type of Project	C&D Debris Pounds per sq.ft.
Kitchen (minor).....	0.75
Kitchen (major).....	4.5
Baths (minor).....	0.25
Baths (major).....	1.00
Room additions.....	0.75



6000 Heritage Trail- Clayton, CA - 94517 925-673-7340

## Construction & Demolition Debris Recycling & Reuse Program STANDARDIZED CONVERSION FACTORS

These factors should be used by Applicants preparing Final Reports to convert the quantity of recycled or reused materials from volume to weight. The amount of a material recorded in cubic yards should be multiplied by the appropriate factor (pounds per cubic yard), and then divided by 2,000, to determine the number of tons of the material recycled or reused.

Example: To convert a quantity of cubic yards of cardboard to tons

(5 cubic yards of cardboard) x (300 pounds per cubic yard) = 1,500 pounds

(1,500 pounds) ÷ (2,000 pounds per ton) = 0.75 tons

Material	Pounds per Cubic Yard
Asphalt.....	1,400
Brick.....	1,400
Building Materials.....	300
Cardboard.....	120
Carpet.....	600
Carpet Padding & Foam.....	6.25
Ceiling Tile.....	175
Concrete.....	1,800
Drywall.....	500
Landscape Debris.....	300
Lumber & Wood.....	300
Metals - ferrous.....	906
Metals - nonferrous.....	175
Plastics.....	35



**Weights of Building Materials – Pounds Per Square Foot [PSF]**

**CEILING**

Acoustical fiber board <sup>(1)</sup>	1
Suspended steel channel system <sup>(1)</sup>	2
Suspended wood channel system	2.5
2x8 ceiling joists @ 16" o.c., R-49 insulation, 1/2" gypsum board	7
1" Plaster	8
1/2" gypsum board <sup>(1)</sup>	2.2
5/8" gypsum board <sup>(1)</sup>	2.75

**ROOF**

Fiberglass shingles	3
Asphalt shingles <sup>(1)</sup>	2
Wood shingles <sup>(1)</sup>	3
Spanish clay tile <sup>(1)</sup>	19
Concrete roof tile	12
Composition Roofing:	
Three-ply ready roofing <sup>(1)</sup>	1
Four-ply felt and gravel <sup>(1)</sup>	5.5
Five-ply felt and gravel <sup>(1)</sup>	6
20 gage metal deck <sup>(1)</sup>	2.5
18 gage metal deck <sup>(1)</sup>	3
0.05" thick polyvinyl chloride polymer membrane <sup>(4)</sup>	0.35
1" fiberglass batt insulation	0.04
1" loose fiberglass insulation	0.04
1" loose cellulose insulation	0.14
1" rigid insulation <sup>(1)</sup>	1.5
Blowing wool insulation R-38 (16" deep)	0.62
3/16" slate <sup>(1)</sup>	7
1/4" slate <sup>(1)</sup>	10
Single-ply (no ballast) <sup>(1)</sup>	0.7
Single-ply (ballasted)	11
Dry gravel <sup>(1)</sup>	8.7
2x8 rafters @ 16" o.c., fiberglass shingles, 15# felt, 3/8" sheathing	8
Skylight: metal frame w/ 3/8" wire glass <sup>(1)</sup>	8

**FLOOR**

1" reinforced regular weight concrete	12.5
1" plain lightweight concrete <sup>(1)</sup>	8
7/16" cementitious backerboard	3
Ceramic or quarry tile (3/4") on 1/2" mortar bed <sup>(1)</sup>	16
Ceramic or quarry tile (3/4") on 1" mortar bed <sup>(1)</sup>	23
1" mortar bed	12
1" slate <sup>(1)</sup>	15
3/8" marble tile	6
3/8" ceramic floor tile <sup>(1)</sup>	4.7

**FLOOR (cont.)**

Hardwood flooring, 7/7-in <sup>(1)</sup>	4
1/4" linoleum or asphalt tile <sup>(1)</sup>	1
BCI/AJS joists @ 16" o.c., 3/4" sheathing, 1/2" gypsum board	10
3/4" Gyp-Crete <sup>®</sup> topping	6.5
Carpet & Pad	2.0
Waterproofing Membranes	
Bituminous, smooth surface <sup>(1)</sup>	1.5
Liquid applied <sup>(1)</sup>	1

**SHEATHING**

11/32" or 3/8" Plywood – OSB <sup>(3)</sup>	1.0 - 1.2
15/32" or 1/2" Plywood - OSB <sup>(3)</sup>	1.4 - 1.7
19/32" or 5/8" Plywood - OSB <sup>(3)</sup>	1.8 - 2.1
23/32" or 3/4" Plywood - OSB <sup>(3)</sup>	2.2 - 2.5
7/8" Plywood - OSB <sup>(3)</sup>	2.6 - 2.9
1 1/8" Plywood - OSB <sup>(3)</sup>	3.3 - 3.6
1/2" cementitious backerboard	3
1-1/2" softwood T & G decking	4.6

**FRAMING**

2x4 @ 16" o.c.	1.1
2x6 @ 16" o.c.	1.7
2x8 @ 16" o.c.	2.2
2x10 @ 16" o.c.	2.9
2x12 @ 16" o.c.	3.5
BCI <sup>®</sup> 4500s, 5000 or 5000s @ 12" o.c.	2.0 – 2.9
BCI <sup>®</sup> 4500s, 5000 or 5000s @ 16" o.c.	1.5 – 2.2
BCI <sup>®</sup> 4500s, 5000 or 5000s @ 19.2" o.c.	1.3 – 2.8
BCI <sup>®</sup> 4500s, 5000 or 5000s @ 24" o.c.	1.0 – 1.5
BCI <sup>®</sup> 6000 or 6000s @ 12" o.c.	2.2 – 3.4
BCI <sup>®</sup> 6000 or 6000s @ 16" o.c.	1.7 – 2.6
BCI <sup>®</sup> 6000 or 6000s @ 19.2" o.c.	1.4 - 2.1
BCI <sup>®</sup> 6000 or 6000s @ 24" o.c.	1.1 - 1.7
BCI <sup>®</sup> 60, 60s, 6500 or 6500s @ 12" o.c.	2.3 – 3.8
BCI <sup>®</sup> 60, 60s, 6500 or 6500s @ 16" o.c.	1.7 – 2.9
BCI <sup>®</sup> 60, 60s, 6000 or 6500s @ 19.2" o.c.	1.4 – 2.4
BCI <sup>®</sup> 60, 60s, 6500 or 6500s @ 24" o.c.	1.2 – 1.9
BCI <sup>®</sup> 90 or 90s @ 12" o.c.	3.9 – 4.9
BCI <sup>®</sup> 90 or 90s @ 16" o.c.	2.9 – 3.7
BCI <sup>®</sup> 90 or 90s @ 19.2" o.c.	2.4 – 3.1
BCI <sup>®</sup> 90 or 90s @ 24" o.c.	1.9 – 2.5
AJS <sup>®</sup> 140 or 20 @ 12" o.c.	2.2 – 3.3
AJS <sup>®</sup> 140 or 20 @ 16" o.c.	1.7 – 2.5
AJS <sup>®</sup> 140 or 20 @ 19.2" o.c.	1.4 – 2.1
AJS <sup>®</sup> 140 or 20 @ 24" o.c.	1.1 – 1.7
AJS <sup>®</sup> 25 @ 12" o.c.	3.1 – 3.9
AJS <sup>®</sup> 25 @ 16" o.c.	2.3 – 2.9
AJS <sup>®</sup> 25 @ 19.2" o.c.	1.9 – 2.4
AJS <sup>®</sup> 25 @ 24" o.c.	1.6 – 2.0



WALL

5/16" x 7-1/2" fiber cement lap siding	3
4" clay brick <sup>(1)</sup>	39
1/4" ceramic wall tile <sup>(1)</sup>	3.1
1 3/4" Cultured Stone <sup>®</sup>	12
2x4 studs @ 16" o.c., 5/8" gypsum, insulation, 3/8" siding <sup>(1)</sup>	11
2x6 studs @ 16" o.c., 5/8" gypsum, insulation, 3/8" siding <sup>(1)</sup>	12
Wood or steel studs, 1/2" gypsum board each side <sup>(1)</sup>	8
Exterior stud walls w/ brick veneer <sup>(1)</sup>	48
Windows: glass, frame and sash <sup>(1)</sup>	8
Stucco	10
Log Wall: 10" diameter	26
Glass Block	
4" thick - standard (hollow)	20
3" thick - standard (hollow)	16
4" thick - thick face	30
3" thick - solid glass block	40

MISCELLANEOUS

1" of sand	8
1" of water	5.2
Hay: baled (dry) <sup>(2)</sup>	15
	PCF <sup>(2)</sup>
Straw: baled (dry) <sup>(2)</sup>	8 PCF <sup>(2)</sup>
Saturated soil (garden/landscaped roof)	135 PCF
Grand Piano	1000 LB

**Include at least 1.5 psf in all dead load summations to account for incidentals such as plumbing, ducts, light fixtures, etc.**

- (1) *Minimum Design Loads for Buildings and Other Structures, ASCE 7-05.*
- (2) *National Farm Building Code (Canada) 1995. Value in pounds per cubic foot (PCF), multiply by maximum height to obtain PSF.*
- (3) *Approximate Engineering Dead Load Weight of Wood Structural Panels, APA EWS TT-019, 1998.*
- (4) *Duro-Last General Specifications, Duro-Last Roofing, Inc. 2005*



6000 Heritage Trail- Clayton, CA - 94517 925-673-7340

## Recycling Receipt For Material(s) Received

(to be completed by material receiver)

### Company or Individual Receiving Material(s):

Facility Name:					
Contact or Individual Name:					
Address:					
City, State, Zip:					
Phone/Fax/Mobile/Page:					
Circle Facility/Individual Type(s):	Recycler	Salvager	Landfill Operator	End User	Other
*Facility Attendant Signature:					

\* Signature required to validate receipt.

### Job-Site Information:

Permit #:	
Job-Site Address:	

### Construction/Demolition Company or Individual Providing Material(s) to Receiver:

Company Name:		
Contact or Individual Name:		
Address:		
City, State, Zip:		
Phone/Fax/Mobile/Page:		

### Identification of Materials Left with Receiver (use separate receipt for materials landfilled):

Material Type	Quantity by Weight, in pounds or tons**	Circle how receiving facility or individual will use materials received for each Material Type	Date Received or Picked Up
<i>Sample: Concrete</i>	<i>12 tons</i>	(Recycle) Salvage    Trash	
		Recycle Salvage    Trash	
		Recycle Salvage    Trash	
		Recycle Salvage    Trash	
		Recycle Salvage    Trash	
		Recycle Salvage    Trash	
		Recycle Salvage    Trash	
		Recycle Salvage    Trash	

Use published conversion factors between volume and weight, if necessary, from City of Clayton  
 Contact Laura Hoffmeister for assistance, 6000 Heritage Trail, Clayton, CA 94517, 925-673-7308,  
 LHoffmeister@ci.clayton.ca.us

***Thank you for recycling.***

**ORDINANCE NO. 389**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CLAYTON  
ADDING CHAPTER 15.80 TO TITLE 15 OF THE CLAYTON MUNICIPAL  
CODE TO REGULATE PROJECT CONSTRUCTION AND DEMOLITION  
DEBRIS RECYCLING**

**THE CITY COUNCIL OF THE CITY OF CLAYTON DOES HEREBY FIND AS  
FOLLOWS:**

**WHEREAS**, the State of California passed Assembly Bill (AB) 939 in 1989 mandating cities and counties to recycle 50% of their solid waste stream; and

**WHEREAS**, the City of Clayton is committed to protecting public health, safety, welfare and the environment and in furtherance thereof, promotes the reduction of solid waste; and

**WHEREAS**, the City of Clayton enacted its Source Reduction and Recycling Element in 1993 to implement recycling programs in an effort to improve its recycling efforts; and

**WHEREAS**, an estimated 10-20% of solid waste material generated within the City of Clayton is comprised of construction and demolition debris that can and should be recycled; and

**WHEREAS**, the City established incentive pricing in 2001 to encourage recycling of construction related materials; and

**WHEREAS**, the State of California passed Senate Bill (SB) 1374 in 2002 imposing state mandated Construction and Demolition model ordinances be developed for local government use by 2004 or establishment of local ordinances and programs be enacted by local governments and included in a local agency's annual waste report to the California Integrated Waste Management Board; and

**WHEREAS**, the City of Clayton received conditional approval by the California Integrated Waste Management Board in 2002 for Alternative Diversion Requirement (ADR) for the years 2000-2003 (AB 1600-ADR), which included a condition to establish a local Construction and Demolition ordinance; and

**WHEREAS**, recycling of project construction and demolition debris furthers Clayton's commitment to reducing waste and state-mandated compliance with AB 939 and SB 1374, and the City's State approved AB 1600-ADR requirements.

**NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF CLAYTON  
DOES ORDAIN AS FOLLOWS:**

**Section 1. Chapter 15.80 of the Municipal Code is added to read in its entirety as follows:**

Chapter 15.80

PROJECT CONSTRUCTION AND DEMOLITION DEBRIS RECYCLING

Sections:

- 15.80.010 Definitions
- 15.80.020 Threshold for covered projects
- 15.80.030 Submission and contents of waste management plan
- 15.80.040 Review of waste management plan
- 15.80.050 Modified diversion rate
- 15.80.060 Submission of completed waste management plan
- 15.80.070 Appeal
- 15.80.080 Enforcement

15.80.010 Definitions.

For the purposes of this ordinance, the following definitions shall apply:

- A. "Applicant" means any individual, firm, limited liability company, association, partnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatsoever who applies to the city for the applicable permits to undertake construction, demolition, or renovation projects within the city.
- B. "Construction" means the building of any facility, structure, or paved area or any portion thereof including tenant improvements to an existing facility, structure, or paved area.
- C. "Construction and demolition debris" ("C&D debris") means used or discarded materials removed from a project site during construction, demolition, or renovation activities.
- D. "Conversion rate" means the rate set forth in the standardized conversion rate table approved by the state, as amended or revised, for estimating the volume or weight of materials identified in a waste management plan.
- E. "Covered project" shall have the meaning set forth in Section 15.80.020.A.
- F. "Deconstruction" means the process of dismantling a building, structure, or paved area in order to salvage components for reuse or recycling.
- G. "Demolition" means the decimating, razing, ruining, tearing down, or wrecking of any facility, structure, pavement or building, whether in whole or in part, whether interior or exterior.
- H. "Divert" means to use material for any purpose other than disposal in a landfill or transfer facility.
- I. "Diversion requirement" means the redirection from the waste stream of construction and demolition debris generated by a project via salvage, reuse, and/or recycling.
- J. "Modified diversion rate" means a diversion rate less than a standard diversion requirement.
- K. "Non-covered project" shall have the meaning set forth in Section 15.80.020.B.
- L. "Official" shall have the meaning set forth in Section 15.80.010.W.
- M. "Project" means any activity, which requires an application for a building, grading, or demolition permit, or any similar permit from the city.

N. "Recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.

O. "Renovation" means any change, addition, or modification (including tenant improvements) in an existing structure or building.

P. "Reuse" means further or repeated use of materials in their original form.

Q. "Salvage" means the controlled removal of construction or demolition debris from a project site for diversion requirement purposes.

R. "Site" means any location which requires a waste management plan under this chapter.

S. "Standard diversion requirement" means at least fifty (50) percent of the waste stream of construction and demolition debris generated by a project is diverted from the landfill via salvage, reuse, and/or recycling.

T. "Tenant improvements" means a "project" involving structural or other modifications of an existing building, structure, or project site resulting in the generation of C&D debris.

U. "Vendor" means a hauler of commercial recycling material licensed to conduct business in the city.

V. "Waste management plan" ("WMP") means a completed WMP form submitted by the applicant for any covered project for the purpose of compliance with this chapter.

W. "WMP compliance official" ("official") means the city community development director or his or her designee.

15.80.020      Threshold for covered projects.

A. Covered projects. All construction, demolition and renovation projects within the city, which involve the construction, demolition, or renovation of 500 square feet or more and which require a building, grading, or demolition permit shall be considered covered projects and shall comply with this chapter. For the purposes of determining whether a project meets the foregoing thresholds, all phases of a project and all related projects taking place on single or adjoining parcels, as determined by the official, shall be deemed a single project.

B. Non-covered projects. Construction, demolition and renovation projects within the city that have not met the threshold for covered projects shall be considered non-covered projects. Applicants for non-covered projects shall be encouraged and endeavor to divert as much project-related C&D debris as possible.

C. Projects Sponsored by the City or its Redevelopment Agency. All construction, demolition and renovation projects sponsored by the city or its redevelopment agency shall be considered covered projects for the purposes of this chapter. The project sponsor or its contractor shall submit a WMP to the official prior to beginning any activities and shall be subject to all applicable provisions of this chapter.

D. Building, grading and demolition permits. No building, grading or demolition permit shall be issued for a covered project unless and until the official has approved a WMP for the project.

15.80.030      Submission and contents of waste management plan.

An applicant for any covered project shall complete and submit a WMP on a form approved by the city as part of the application submittal requirements for a building, grading, or demolition permit. A complete WMP shall include all of the following:

A. Identification of the types of C&D debris expected to be generated from the project and the types of C&D debris to be made available for salvage, reuse, and/or recycling, and diverted from the landfill;

B. Acknowledgement that the standard diversion requirement requires at least fifty (50) percent of the C&D debris materials to be diverted from the landfill and made available for salvage, reuse, and/or recycling;

C. Acknowledgement that the applicant is responsible for the actions of his or her contractors, sub-contractors or other agents with regard to the diversion requirement;

D. Signature of the property owner (or authorized agent); and

E. A cash deposit (or other financial security instrument acceptable to the city) to ensure the performance of the diversion requirements of this chapter, and to cover staff review and processing charges. The amount of the cash deposit (based upon the square footage of the construction, demolition, or renovation), plus a minimum deposit, shall be established by City Council resolution, and as may be amended from time to time.

15.80.040      Review of waste management plan.

A. Approval. Notwithstanding any other provision of this code, no building, grading, or demolition permits shall be issued for any covered project, nor shall any construction, demolition, or renovation take place on any covered project, unless and until the official has approved the WMP. Approval shall not be necessary, however, when the city determines an emergency demolition is required to protect public health or safety. The official shall approve the WMP if the official determines that the WMP complies with the requirements of Section 15.80.030.

B. Non-approval. If the official determines the submitted WMP does not comply with the requirements of Section 15.80.030, the official shall notify the applicant the WMP is not approved and provide a written statement of the reason(s) the WMP is out of compliance. The official shall withhold or order the withholding of issuance of all associated city development permits, including building, grading, and demolition permits for the covered project until compliance has been met.

15.80.050      Modified diversion rate.

A. Application. If an applicant experiences unique circumstances that the applicant believes make it infeasible to comply with the standard fifty (50) percent diversion requirement, the applicant may request approval of a modified diversion rate at the time the applicant submits the WMP in accordance with Section 15.80.030. Economic or increased financial costs to the applicant generally will not be a sufficient basis for approval of a modified diversion rate unless such costs are proportionately extraordinary. The applicant shall indicate on the WMP the maximum amount of diversion the applicant believes can be achieved for each material and the specific unique circumstance(s) the applicant believes makes compliance with the standard diversion requirement infeasible.

B. Granting of modified diversion rate. If the official determines that the applicant is unable to meet the standard diversion requirement due to unique circumstances, the official may

approve and issue a modified diversion rate and shall indicate this rate on the WMP submitted by the applicant.

C. Denial of modified diversion rate. If the official determines that unique circumstances are not present and the applicant is able to comply with the standard diversion requirement, the official shall so inform the applicant in writing. The applicant shall have thirty (30) calendar days to resubmit a WMP in full compliance with Section 15.80.030.

15.80.060 Submission of completed waste management plan.

A. Documentation. Prior to the final building inspection or the filing of a notice of completion for a public works project for any covered project, the applicant shall submit documentation that it has met the diversion requirement for the project to the official. This documentation shall include the following:

1. A copy of the approved WMP for the project with notations of the actual material volume or weight generated by the completed project;
2. Receipts from disposal and recycling facilities and/or vendors that received each material showing the type and quantity (weight or volume) of material, and whether the material was disposed in a landfill or recycled; and
3. Any additional information the applicant believes is relevant to determining compliance with this chapter.

B. Weighing of materials. The applicant shall make reasonable efforts to ensure that all C&D debris recycled or disposed in a landfill are measured and recorded using the most accurate method of measurement available. To the extent practical, all C&D debris shall be weighed by measurement on scales. Such scales shall be in compliance with all regulatory requirements for accuracy and maintenance. A volumetric measurement shall be used on C&D debris for which weighing is not practical due to small size or due to other considerations as determined by the official or the state. For conversion of volumetric measurements to weight, the applicant shall use the conversion rates approved by the state for this purpose.

C. Determination of compliance. The official shall review the submitted information and determine whether the applicant has complied with the diversion requirement. The official shall authorize the final building inspection or the filing of the notice of completion for a public works project upon making a determination of compliance, as listed below:

1. Full compliance. If the official determines the applicant has fully complied with the diversion requirement applicable to the project, the full performance security, less staff review and processing charges, shall be returned to the applicant within thirty (30) days after full compliance is determined.

2. Partial compliance. If the official determines the applicant has not fully complied with the diversion requirement applicable to the project, the official shall determine on a case-by-case basis whether the applicant has made a good faith effort to comply with the approved WMP. In making this determination, the official shall consider the availability of markets for the C&D debris disposed in a landfill, the size of the project and the documented efforts of the applicant to divert the C&D debris. If the official determines the applicant has made a good faith effort to comply with the approved WMP, such determination shall be provided in writing, and the portion of the deposit equivalent to the portion of C&D debris actually diverted compared to the portion that should have been diverted according to the approved WMP will be returned to the applicant, less staff review and processing charges. The

partial deposit shall be returned to the applicant within thirty (30) days after partial compliance is determined.

3. Noncompliance. If the official determines the applicant has not complied with the approved WMP, the official shall notify the applicant in writing. The full amount of the performance security shall be forfeited to the city as a penalty and to cover staff review and processing charges.

15.80.070 Appeal.

Appeal of a determination made under this chapter may be made to the city council following the procedures set forth in Section 5.04.100 of this code, with payment of an appeal fee as established by City Council resolution. Any appeals shall be limited to: 1) the granting or denial of modified diversion rate; or 2) whether the applicant has complied with an approved WMP.

15.80.080 Enforcement.

Violation of any provision of this chapter may be enforced through remedies listed in this code, including but not limited to Chapters 1.14, 1.18 and 1.20.

**Section 2. Action to challenge**

Any action or proceeding to attack, review, set aside, void or annul this Ordinance must be commenced and the service made on the City no later than 90 days after its effective date.

**Section 3. Conflicting Ordinances Repealed.**

Any ordinances or parts thereof, or regulations in conflict with the provisions of this Ordinance are hereby repealed. The provisions of this Ordinance shall control with regard to any provisions of the Municipal Code that may be inconsistent with the provisions of this Ordinance.

**Section 4. Severability.**

If any section, subsection, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council has declared that it would have passed this Ordinance and each section, subsection, sentence, clause, or phrase thereof, irrespective of the fact that any one or more section, subsection, sentence, clause, or phrase thereof was declared unconstitutional, invalid or ineffective.

**Section 5. Effective date and publication.**

This Ordinance shall become effective thirty (30) days from and after its passage. Within fifteen (15) days after the passage of the Ordinance, the City Clerk shall cause it to be posted in three (3) public places heretofore designated by Resolution of the City Council for the posting of ordinances and public notices.

The foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Clayton held on October 18, 2005.

Passed, adopted and ordered posted at a regular meeting of the City Council of the City of Clayton on December 6, 2005 by the following vote:

AYES: Councilmember Laurence, Manning, Pierce, Vice Mayor Walcutt and Mayor Shuey.

NOES: None.

ABSENT: None.

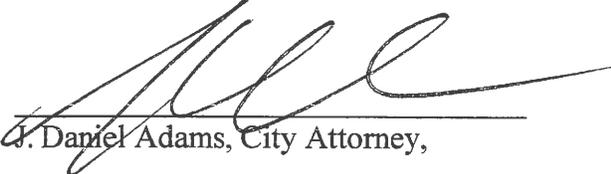
THE CITY COUNCIL OF CLAYTON, CA

  
David T. Shuey, Mayor

ATTEST:

  
Rhonda K. Basore, City Clerk

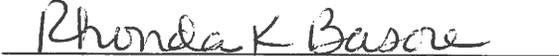
APPROVED AS TO FORM:

  
J. Daniel Adams, City Attorney,

APPROVED AS TO ADMINISTRATION:

  
Gary A. Napper, City Manager

I hereby certify that the foregoing Ordinance was duly introduced at a regular meeting of the City Council of the City of Clayton held October 18, 2005, and was duly adopted, passed and ordered posted at a regular meeting of the City Council held on December 6, 2005.

  
Rhonda K. Basore, City Clerk

2006



**MATT GREENE** sorts cardboard at the Brentwood transfer station Friday. Cities are passing ordinances requiring builders to recycle.

KRISTOPHER SKINNER/TIMES

# Ordinances force builders to recycle

By Sarah Jane Tribble  
TIMES STAFF WRITER

With state pressure mounting, an increasing number of Contra Costa communities are creating laws to force builders to recycle the wood, concrete and other materials from projects.

The new demands are getting results in fast-growing Antioch, and officials expect more cities countywide to join the effort this year.

Moraga, Concord and Martinez are all expected to pass or propose ordinances within the next few months. El Cerrito and Pittsburg staff members are also considering creating a construction and demolition ordinance, according to county officials.

"Contra Costa as a county has recognized the C&D (construction and demolition) issue and is taking steps," said Eric Bissinger, integrated waste management specialist for the California Integrated Waste Management

Board. "They have to convince the councils, and some people might look at the ordinance as a business hindrance."

The state board is pushing the ordinances as a way for communities to comply with a state law that requires local governments to divert half their waste from landfills or face fines of up to \$10,000 a day.

A 2004 board study found that 22 percent of the garbage that went into landfills the previous year was construction debris that could be recycled. As a result, ordinances have been a "reoccurring topic" for the board, Bissinger said.

Walnut Creek passed the first ordinance and Lafayette, Orinda, Brentwood, Antioch, Clayton and the unincorporated part of the county followed in the past five years.

Contra Costa's unincorporated area has a diversion rate of 45 percent, according to the county's

state-submitted report from 2003, the most recent data available.

Ordinances enable cities and counties to track how much developers recycle and whether the community is improving its recycling rates, said Laura Wright, senior administrative analyst in Pittsburg's public works department.

Pittsburg's diversion rate is more than 50 percent, she said.

Down the road a few miles in Antioch, Environmental Resource Coordinator Julie Haas-Wajdowicz said the city reduced by more than half its construction and demolition waste hauled to the landfill between 2003 and after the city's ordinance passed in 2004.

Antioch builders were hauling more than 6,000 tons of construction and demolition material a year to the landfill in 2003, an amount that dropped to 2,000 tons in 2004, she said. Not all of the difference was a result of recycling because the city began shipping the material to a trans-

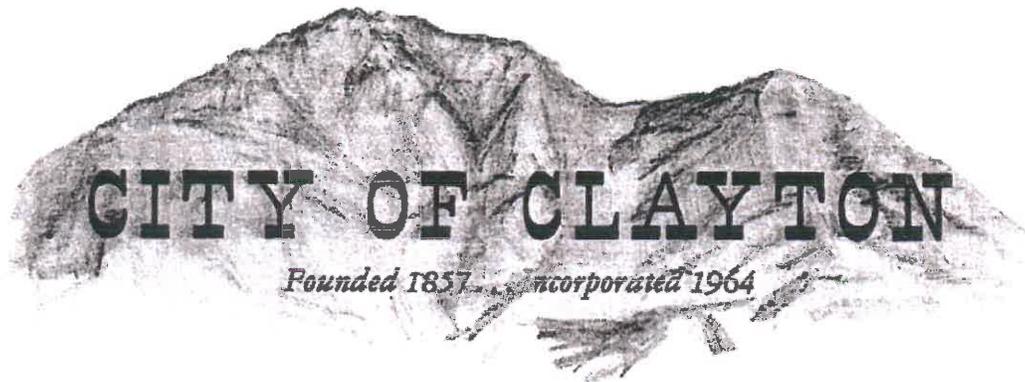
fer station, but at least half of that difference went on to be recycled, she said.

Antioch and Brentwood require developers to recycle half their waste for any project that costs more than \$75,000.

In Brentwood, where construction and demolition materials are a large part of the waste stream, city officials are spending \$5 million this year to expand a garbage transfer station.

Brentwood Solid Waste Manager Jon Carlson said the expanded station will enable the city to recycle more efficiently as well as keep up with the city's building boom and increasing population, which is expected to nearly double and hit 70,000 in the coming years.

*Sarah Jane Tribble covers East County growth and development. She can be reached at 925-779-7134 or [stribble@cctimes.com](mailto:stribble@cctimes.com).*



# **STORM WATER POLLUTION PREVENTION PLAN**

for the

**CITY OF CLAYTON  
MUNICIPAL OPERATIONS AND FACILITIES**

**PREPARED BY:  
CITY OF CLAYTON  
ENGINEERING DEPT.  
5375 CLAYTON ROAD  
CONCORD, CA 94521  
(925) 363-7433 / 825-5294 FAX**

**August 12, 2013**

## TABLE OF CONTENTS

INTRODUCTION.....	1
PURPOSE.....	1
LOCATION .....	2
CITY OF CLAYTON FIXED FACILITIES .....	3
A) CORPORATION YARD.....	3
B) CLAYTON COMMUNITY PARK .....	4
C) THE GROVE.....	5
CITY OF CLAYTON FIELD PROGRAMS .....	6
INSPECTION PROGRAM.....	6
BEST MANAGEMENT PRACTICES .....	4
SPILL RESPONSE AND RECORD KEEPING .....	6

### ATTACHMENTS:

- 1) FIXED FACILITY INVENTORY
- 2) FIELD PROGRAM ACTIVITIES INVENTORY
- 3) BMP FACT SHEETS

**CITY OF CLAYTON  
STORM WATER POLLUTION PREVENTION PLAN  
FOR THE  
CITY OF CLAYTON  
MUNICIPAL OPERATIONS AND FACILITIES**

**INTRODUCTION**

As a member of the Contra Costa Clean Water Program, the City of Clayton is a co-permittee under a joint National Pollutant Discharge Elimination System (NPDES) permit issued by the San Francisco Bay Regional Water Quality Control Board (RWQCD). Each co-permittee is responsible for stormwater pollution prevention in its jurisdiction and must meet the Performance Standards listed in the Stormwater Management Plan, which serves as the basis for the NPDES permit application. One of these Performance Standards requires each co-permittee to prepare a Stormwater Pollution Prevention Plan (SWPPP) for its operations and maintenance facilities because of the potential to contribute to stormwater pollution.

The Clayton Corporation Yard, located at 5901 Heritage Trail, serves as the maintenance facility for the City of Clayton. The nature of the work performed at the Clayton Corporation Yard utilizes and generates potential pollutants that would be detrimental to water quality if allowed to enter the storm water system. In addition, City personnel perform various maintenance operations (landscape, open space and streets) that could pollute storm runoff that enters the City's storm drain systems and creeks

**PURPOSE**

The purpose of this SWPPP is to provide guidance for the City's ongoing efforts to prevent contaminants that may be generated at the Clayton Corporation Yard and by other operations from entering the storm drain system and reaching our creeks and bay. This will be accomplished by identifying potential stormwater pollutants and describing best management practices (BMPs) that are being used and will continue to be used to prevent contaminants from polluting our creeks. This plan will be kept at the Corporation Yard for reference and training purposes.

## LOCATION

The City of Clayton is located in Central Contra Costa County abutting the east side of the City of Concord. The City has a population of approximately 11,000 and covers approximately 4.3 square miles. The City includes 45 miles of roadways, 20 acres of improved parks, 27 miles of open space and creek side trails, and 515 acres of open space.

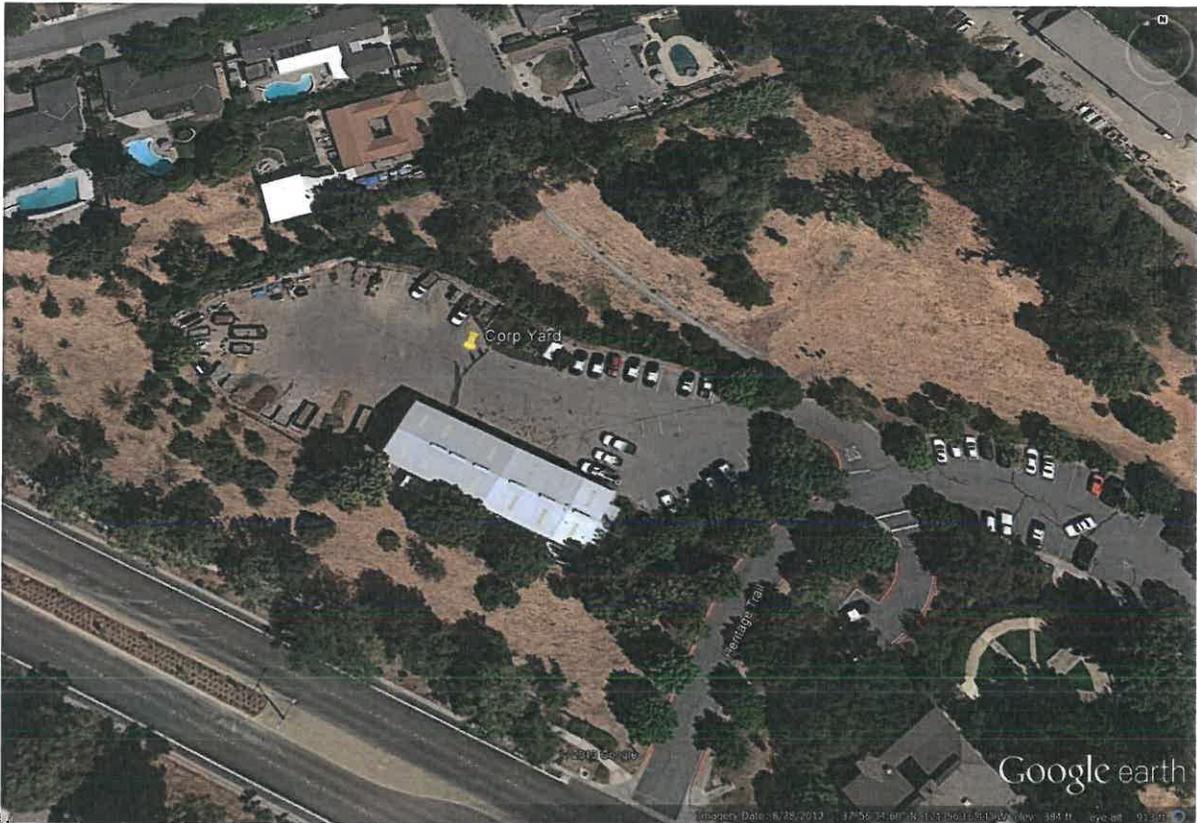


Vicinity Map

## CITY OF CLAYTON FIXED FACILITIES

### **A) CORPORATION YARD**

The Clayton Corporation Yard is located at 5901 Heritage Trail and occupies an area of 1.03 acres. It is bounded on the north by vacant land, on the south by Clayton Road, on the west by a single-family residential subdivision and on the east by the Clayton Civic Center, a three-story building housing City Hall and the Police Department. Mt. Diablo Creek, flowing in a westerly direction, is located approximately 300 feet north of the yard. The site lies in the Mt. Diablo Creek Watershed at an approximate latitude/longitude of 37.943036° N / 121.938186° W.



**CLAYTON CORPORATION YARD**

The Corporation Yard site consists of a parking lot for vehicle, material and large equipment storage as well as a 5,628 square foot building used as an office, workshop, and storage facility for hazardous chemicals, small equipment, tools and supplies, etc. the site is surrounded by a six-foot high fence and the gates are locked at all times, requiring a code for entry.

Attached to the office/workshop building is a covered wash rack area used for vehicle and equipment washing that has been designed to prevent runoff from escaping onto the parking

lot. The wash rack area drains directly to an oil/water separator which then recycles and stores the water for future wash use. There are no other drainage inlets inside the workshop building.

All parking lot runoff is directed from a corner of the parking lot into a drainage inlet that leads to a vegetated natural drainage swale which drains to a low point which acts as a desilting basin prior to flows reaching Mt. Diablo Creek.

The Corporation Yard is multi-use facility. Current uses include the following:

- Offices and related facilities
- Warehouse of various operating and office supplies
- Paint supplies, equipment fuels and assorted maintenance fluids
- Street maintenance equipment
- Vehicles and equipment parking/storage
- Landscaping supplies and debris piles

The site is primarily used as an office and for storage of vehicles, equipment, supplies and materials. There are also material bins and a temporary storage area on pavement adjacent to the parking lot. The temporary storage area is used for collected materials such as landscape clippings, litter and catch basin debris until they can be sorted and transferred to the appropriate dumpsters.

There are no underground storage tanks and no vehicle maintenance or fueling is performed here. The only chemical products stored onsite are a small amount of paint, pesticides and herbicides, fertilizers and an assortment of equipment maintenance fluids (including gasoline).

## **B) CLAYTON COMMUNITY PARK**

The Clayton Community Park is a 20 acre facility located on the north side of Marsh Creek Road at Regency Drive. The park is fully improved with four ball/play fields, picnic areas, parking facilities and two restroom/snack shack buildings. The parking areas were recently expanded to provide an additional 100 parking spaces. As part of this construction, bioretention facilities were constructed to treat the runoff from the new parking area prior to its entering the City's storm drain system.



**CLAYTON COMMUNITY PARK**

**C) THE GROVE**

The Grove is a 1 acre fully improved park in the Town Center at the intersection of Center Street and Marsh Creek Road. The park contains picnic facilities, water toy features, grassy play area and a gazebo which is used as a stage for entertainment.



**THE GROVE**

Each of the fixed facilities have been evaluated for potential pollutants and recommended Best Management Practices (BMPs) have been followed to minimize any chance of pollutants reaching the City's storm drain system or creeks.

The results of the evaluation and the recommended BMPs are shown in Attachment 1. BMP facts sheets are provided in Attachment 3.

### **CITY OF CLAYTON FIELD PROGRAMS**

The Maintenance Department performs graffiti abatement, landscape planting and maintenance, storm drain maintenance, sign maintenance and replacement, street striping and pothole repairs. The City contracts out for street sweeping and asphalt/concrete repair.

Each of the field programs have been evaluated for potential pollutants and recommended Best Management Practices (BMPs) have been followed to minimize any chance of pollutants reaching the City's storm drain system or creeks.

The results of the evaluation and the recommended BMPs are shown in Attachment 2. BMP facts sheets are provided in Attachment 3.

### **INSPECTION PROGRAM**

#### **Inspection - Routine**

Routine inspections are performed, particularly prior to and during the first rain event of the season, and every major storm event thereafter, to ensure there are no illegal discharges to the drainage inlet.

#### **Inspection - Annual**

The Corporation Yard will be pre-inspected at the beginning of August to determine whether the BMPs in this plan are being implemented and are effective, and whether changes to the SWPPP are needed. Prior to the final Annual Inspection on September 1<sup>st</sup>, any improvements, repairs, or changes shall be implemented. The results of the final Annual Inspection, including findings and any corrections/changes made, are kept on file in the yard.

### **SPILL RESPONSE AND RECORD KEEPING**

City of Clayton employees follow a contingency plan for spill prevention and response. This plan details prevention procedures involving the proper handling of material and waste response procedures for the clean-up and disposal of spills. All spill containment kits and safety

equipment that should be used in the event of a spill are readily accessible in areas where they may be needed (both onsite and on each of the Maintenance Department's trucks).

Care is taken to avoid spillage, but any spills that do occur are immediately contained and are cleaned up using the appropriate methods, for example:

- Using the aforementioned spill containment kit;
- Applying kitty litter (or substitute absorbent material) to absorb fluids, then sweeping and disposing of kitty litter in the trash bin;
- Using rags and disposing of properly; and
- Sweeping dry spills and disposing in the trash bin.

If there is any possibility of a spill reaching the drainage inlet, the inlet will be temporarily covered as soon as possible.

If the spill is large or hazardous and cannot be contained by onsite personnel, "911" or Police Dispatch at 925-229-1212 will be called.

All responses to spill incidents will be documented and tracked.

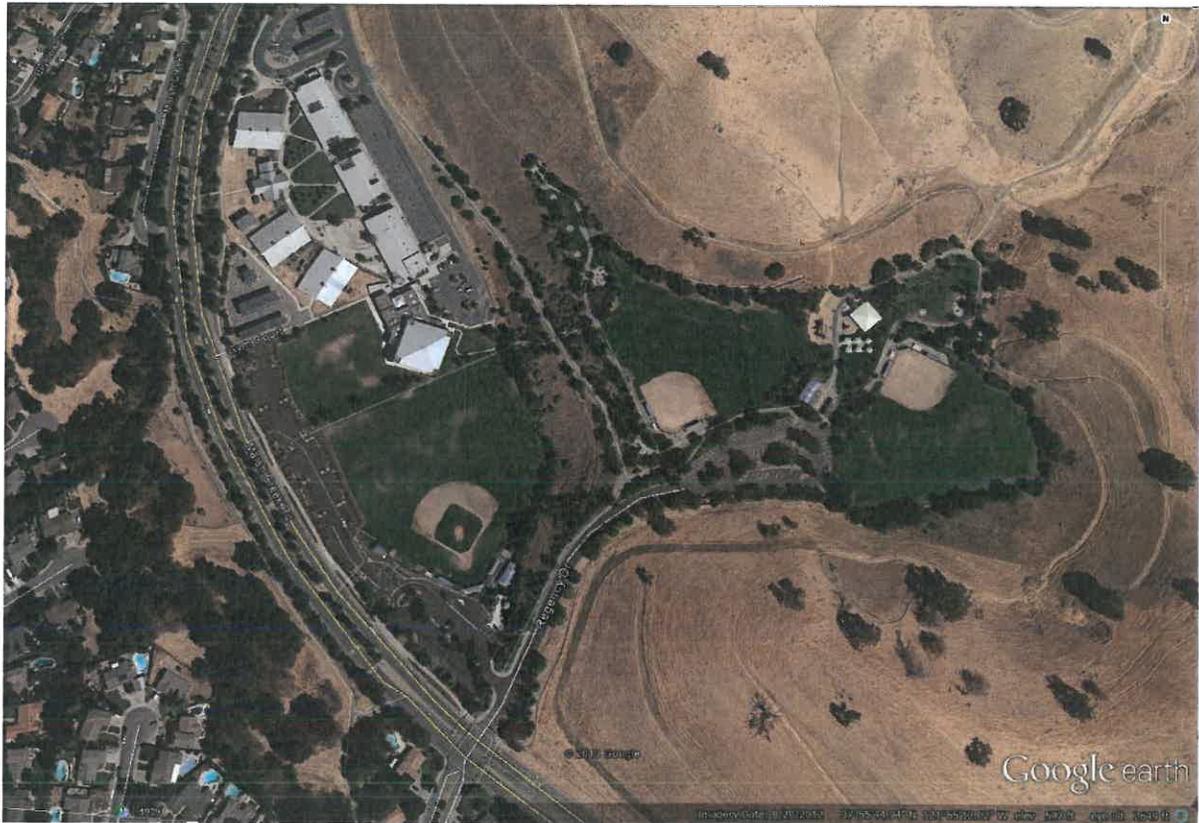
# **ATTACHMENTS**

**ATTACHMENT 1**  
**FIXED FACILITY INVENTORY**

# STORM WATER POLLUTION PREVENTION PLAN

## FIXED FACILITY INVENTORY

<b>Name/Size:</b>	<b>Clayton Community Park/20 acres</b>
<b>Sub-category:</b>	Parks
<b>Address:</b>	Marsh Creek Road @ Regency Drive
<b>Watershed/water bodies:</b>	Drains to City storm drain
<b>GIS:</b>	37° 55' 40.61" N/121° 55' 15.30" W



<b>Facility Activities and Pollutants</b>	
<b>Activities:</b>	Parking area maintenance; landscape maintenance
<b>Potential Pollutants:</b>	Sediment, Nutrients, Trash, Metals, Bacteria, Oil & Grease, Organics, Pesticides, Oxygen Demanding Substances
<b>Pollutants of Concern (303d):</b>	None
<b>Past Spills/leaks:</b>	None
<b>Significant Materials &amp; chemicals:</b>	Herbicides, pesticides, fertilizers
<b>Potential Non-stormwater discharges</b>	Sediment, Nutrients, Trash, Metals, Bacteria, Oil & Grease, Organics, Pesticides, Oxygen Demanding Substances
<b>Constructed Treatment Facilities</b>	Bioretention Facilities along expanded parking area
<b>Selected BMPs</b>	SC-10, SC-11, SC-41, SC-43, SC-60, SC-71, SC-73, TC-32

# STORM WATER POLLUTION PREVENTION PLAN

## FIXED FACILITY INVENTORY (cont'd.)

<b>Name/Size:</b>	<b>The Grove/1.05 acres</b>
<b>Sub-category:</b>	Parks
<b>Address:</b>	Center Street @ Marsh Creek Road
<b>Watershed/water bodies:</b>	Drains to City storm drain
<b>GIS:</b>	37° 56' 27.10" N/121° 56' 02.44" W



Facility Activities and Pollutants	
<b>Activities:</b>	Landscape maintenance
<b>Potential Pollutants:</b>	Sediment, Nutrients, Trash, Bacteria, Pesticides, Oxygen Demanding Substances
<b>Pollutants of Concern (303d):</b>	None
<b>Past Spills/leaks:</b>	None
<b>Significant Materials &amp; chemicals:</b>	Herbicides, pesticides, fertilizers
<b>Potential Non-stormwater discharges</b>	Sediment, Nutrients, Trash, Metals, Bacteria, Oil & Grease, Organics, Pesticides, Oxygen Demanding Substances
<b>Constructed Treatment Facilities</b>	None
<b>Selected BMPs</b>	SC-10, SC-11, SC-41, SC-43, SC-60, SC-71, SC-73

# STORM WATER POLLUTION PREVENTION PLAN

## FIXED FACILITY INVENTORY (cont'd.)

<b>Name/Size:</b>	<b>City Corporation Yard/1.03 acres</b>
<b>Sub-category:</b>	Corporation Yard
<b>Address:</b>	5901 Heritage Trail
<b>Watershed/water bodies:</b>	Drains to Mt. Diablo Creek
<b>GIS:</b>	37° 56' 34.93" N/121° 56' 17.47" W



<b>Facility Activities and Pollutants</b>	
<b>Activities:</b>	Parking/storage area maintenance, Waster Handling and disposal, Vehicle and equipment maintenance and repair, Outdoor loading and unloading of materials, Outdoor storage of raw materials
<b>Potential Pollutants:</b>	Sediment, Nutrients, Trash, Bacteria, Pesticides, Oxygen Demanding Substances
<b>Pollutants of Concern (303d):</b>	None
<b>Past Spills/leaks:</b>	None
<b>Significant Materials &amp; chemicals:</b>	Herbicides, pesticides. fertilizers
<b>Potential Non-stormwater discharges</b>	Sediment, Nutrients, Trash, Metals, Bacteria, Oil & Grease, Organics, Pesticides, Oxygen Demanding Substances
<b>Constructed Treatment Facilities</b>	Oil/water separator, desilting basin
<b>Selected BMPs</b>	SC-10, SC-11, SC-21, SC-22, SC-30, SC-31, SC-32, SC-33, SC-34, SC-41, SC-43, SC-60, SC-71, SC-73, MP-51, MP-52

**ATTACHMENT 2**  
**FIELD PROGRAM ACTIVITIES INVENTORY**

## STORM WATER POLLUTION PREVENTION PLAN

### FIELD PROGRAM ACTIVITIES INVENTORY

<b>Activity Name:</b>	<b>Roads, Streets and Highway Operation &amp; Maintenance</b>
Activity 1:	<i>Sweeping and cleaning</i>
Potential Pollutants:	Sediment, Trash, Metals, Oil & Grease, Oxygen Demanding Substances
Activity 2:	<i>Street Repair, Maintenance, and Striping/Painting</i>
Potential Pollutants:	Sediment, Trash, Metals, Oil & Grease, Organics
<b>Selected BMPs</b>	<b>SC-70</b>
<b>Activity Name:</b>	<b>Plaza, Sidewalk, and Parking Lot Maintenance and Cleaning</b>
Activity 1:	<i>Surface cleaning</i>
Potential Pollutants:	Sediment, Nutrients, Bacteria, Oil & Grease, Oxygen Demanding Substances
Activity 2:	<i>Graffiti cleaning</i>
Potential Pollutants:	Sediment, Nutrients, Metals, Organics
Activity 3:	<i>Sidewalk repair</i>
Potential Pollutants:	Sediment, Trash
Activity 4:	Controlling litter
Potential Pollutants:	Sediment, Trash, Bacteria, Oil & Grease, Oxygen Demanding Substances
<b>Selected BMPs</b>	<b>SC-71</b>
<b>Activity Name:</b>	<b>Fountains, Pools, Lakes, and Lagoon Maintenance</b>
Activity 1:	<i>Fountain draining</i>
Potential Pollutants:	Nutrients, Organics
<b>Selected BMPs</b>	<b>SC-72</b>
<b>Activity Name:</b>	<b>Landscape Maintenance</b>
Activity 1:	<i>Mowing/Trimming/Planting</i>
Potential Pollutants:	Sediment, Nutrients, Trash, Bacteria, Pesticides, Oxygen Demanding Substances
Activity 2:	<i>Fertilizer &amp; Pesticide Management</i>
Potential Pollutants:	Sediment, Nutrients, Pesticides
Activity 3:	<i>Managing Landscape Wastes</i>
Potential Pollutants:	Trash, Pesticides, Oxygen Demanding Substances
Activity 4:	<i>Erosion Control</i>
Potential Pollutants:	Sediment, Nutrients
<b>Selected BMPs</b>	<b>SC-73</b>

## STORM WATER POLLUTION PREVENTION PLAN

### FIELD PROGRAM ACTIVITIES INVENTORY (cont'd)

<b>Activity Name:</b>	<b>Drainage System Operation and Maintenance</b>
Activity 1:	<i>Inspection and Cleaning of Stormwater Conveyance Structures</i>
Potential Pollutants:	Sediment, Nutrients, Trash, Bacteria, Organics, Oxygen Demanding Substances
Activity 2:	<i>Controlling Illicit Connections and Discharges</i>
Potential Pollutants:	Sediment, Nutrients, Trash, Metals, Bacteria, Oil & Grease, Organics, Pesticides, Oxygen Demanding Substances
Activity 3:	<i>Controlling Illegal Dumping</i>
Potential Pollutants:	Sediment, Nutrients, Trash, Metals, Bacteria, Oil & Grease, Organics, Pesticides, Oxygen Demanding Substances
Activity 4:	<i>Maintenance of Inlet and Outlet Structures</i>
Potential Pollutants:	Sediment, Trash, Metals, Oil & Grease, Oxygen Demanding Substances
<b>Selected BMPs</b>	<b>SC-74</b>
<b>Activity Name:</b>	<b>Waste Handling and Disposal</b>
Activity 1:	<i>Solid Waste Collection</i>
Potential Pollutants:	Nutrients, Trash, Metals, Bacteria, Oil & Grease, Organics, Oxygen Demanding Substances
Activity 2:	<i>Waste Reduction and Recycling</i>
Potential Pollutants:	Trash, Metals, Oxygen Demanding Substances
Activity 3:	<i>Controlling Litter</i>
Potential Pollutants:	Trash, Metals, Bacteria, Organics, Oxygen Demanding Substances
Activity 4:	<i>Controlling Illegal Dumping</i>
Potential Pollutants:	Sediment, Trash, Bacteria, Oil & Grease, Pesticides, Oxygen Demanding Substances
<b>Selected BMPs</b>	<b>SC-75</b>

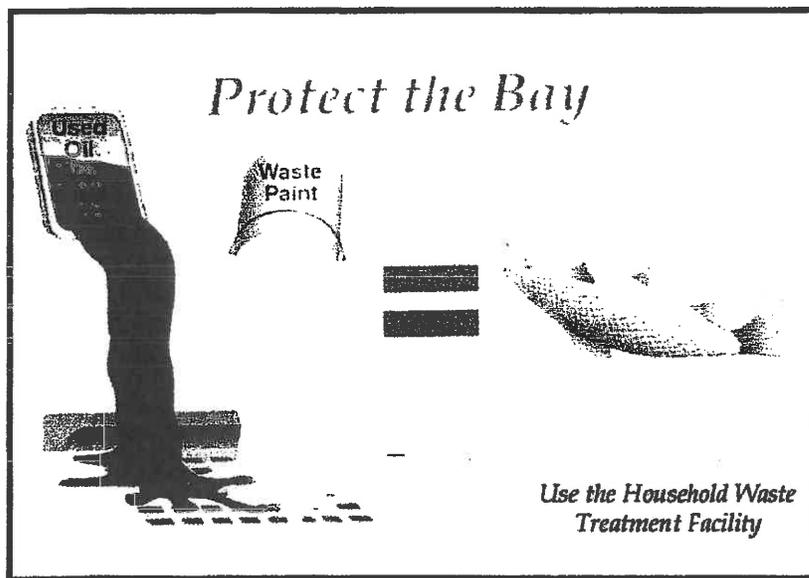
# **ATTACHMENT 3**

## **BMP FACT SHEETS**

**(Source Control: 10, 11, 21, 22, 30, 31, 32, 33, 34, 41, 43, 60, 70, 71, 72, 73, 74, 75)**

**(Treatment Control: 32)**

**(Manufactured [Proprietary]: 51, 52)**



Graphic by: Margie Winter

## Description

Non-stormwater discharges are those flows that do not consist entirely of stormwater. For municipalities non-stormwater discharges present themselves in two situations. One is from fixed facilities owned and/or operated by the municipality. The other situation is non-stormwater discharges that are discovered during the normal operation of a field program. Some non-stormwater discharges do not include pollutants and may be discharged to the storm drain. These include uncontaminated groundwater and natural springs. There are also some non-stormwater discharges that typically do not contain pollutants and may be discharged to the storm drain with conditions. These include car washing, and surface cleaning. However, there are certain non-stormwater discharges that pose environmental concern. These discharges may originate from illegal dumping or from internal floor drains, appliances, industrial processes, sinks, and toilets that are connected to the nearby storm drainage system. These discharges (which may include: process waste waters, cooling waters, wash waters, and sanitary wastewater) can carry substances (such as paint, oil, fuel and other automotive fluids, chemicals and other pollutants) into storm drains. The ultimate goal is to effectively eliminate non-stormwater discharges to the stormwater drainage system through implementation of measures to detect, correct, and enforce against illicit connections and illegal discharges.

## Approach

The municipality must address non-stormwater discharges from its fixed facilities by assessing the types of non-stormwater discharges and implementing BMPs for the discharges determined to pose environmental concern. For field programs the field staff must be

## Objectives

- Contain
- Educate
- Reduce/Minimize

## Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓



trained to now what to look for regarding non-stormwater discharges and the procedures to follow in investigating the detected discharges.

## ***Suggested Protocols***

### **Fixed Facility**

#### *General*

- Post “No Dumping” signs with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.
- Stencil storm drains, where applicable, to prevent illegal disposal of pollutants. Storm drain inlets should have messages such as “Dump No Waste Drains to Stream” stenciled next to them to warn against ignorant or intentional dumping of pollutants into the storm drainage system.
- Landscaping and beautification efforts of hot spots might also discourage future dumping, as well as provide open space and increase property values.
- Lighting or barriers may also be needed to discourage future dumping.

#### *Illicit Connections*

- Locate discharges from the fixed facility drainage system to the municipal storm drain system through review of “as-built” piping schematics.
- Use techniques such as smoke testing, dye testing and television camera inspection (as noted below) to verify physical connections.
- Isolate problem areas and plug illicit discharge points.

#### *Visual Inspection and Inventory*

- Inventory and inspect each discharge point during dry weather.
- Keep in mind that drainage from a storm event can continue for several days following the end of a storm and groundwater may infiltrate the underground stormwater collection system. Also, non-stormwater discharges are often intermittent and may require periodic inspections.

#### *Review Infield Piping*

- Review the “as-built” piping schematic as a way to determine if there are any connections to the stormwater collection system.
- Inspect the path of floor drains in older buildings.

#### *Smoke Testing*

- Smoke testing of wastewater and stormwater collection systems is used to detect connections between the two systems.

- During dry weather the stormwater collection system is filled with smoke and then traced to sources. The appearance of smoke at the base of a toilet indicates that there may be a connection between the sanitary and the stormwater system.

### *Dye Testing*

- A dye test can be performed by simply releasing a dye into either your sanitary or process wastewater system and examining the discharge points from the stormwater collection system for discoloration.

### *TV Inspection of Storm Sewer*

- TV Cameras can be employed to visually identify illicit connections to the fixed facility storm drain system.

### *Illegal Dumping*

- Regularly inspect and clean up hot spots and other storm drainage areas where illegal dumping and disposal occurs.
- Clean up spills on paved surfaces with as little water as possible. Use a rag for small spills, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be sent to a certified laundry (rags) or disposed of as hazardous waste.
- Never hose down or bury dry material spills. Sweep up the material and dispose of properly.
- Use adsorbent materials on small spills rather than hosing down the spill. Remove the adsorbent materials promptly and dispose of properly.
- For larger spills, a private spill cleanup company or Hazmat team may be necessary.
- See fact sheet SC-11 Spill Prevention, Control, and Clean Up.

### **Field Program**

#### *General*

- Develop clear protocols and lines of communication for effectively prohibiting non-stormwater discharges, especially ones that involve more than one jurisdiction and those that are not classified as hazardous, which are often not responded to as effectively as they need to be.
- Stencil storm drains, where applicable, to prevent illegal disposal of pollutants. Storm drain inlets should have messages such as "Dump No Waste Drains to Stream" stenciled next to them to warn against ignorant or intentional dumping of pollutants into the storm drainage system.
- See SC-74 Stormwater Drainage System Maintenance for additional information.

*Field Inspection*

- Regularly inspect and clean up hot spots and other storm drainage areas where illegal dumping and disposal occurs.
- During routine field program maintenance field staff should look for evidence of illegal discharges or illicit connection:
  - Is there evidence of spills such as paints, discoloring, etc.
  - Are there any odors associated with the drainage system
  - Record locations of apparent illegal discharges/illicit connections and notify appropriate investigating agency.
- If trained, conduct field investigation of non-stormwater discharges to determine whether they pose a threat to water quality.

*Recommended Complaint Investigation Equipment*

- Field Screening Analysis
  - pH paper or meter
  - Commercial stormwater pollutant screening kit that can detect for reactive phosphorus, nitrate nitrogen, ammonium nitrogen, specific conductance, and turbidity
  - Sample jars
  - Sample collection pole
  - A tool to remove access hole covers
- Laboratory Analysis
  - Sample cooler
  - Ice
  - Sample jars and labels
  - Chain of custody forms.
- Documentation
  - Camera
  - Notebook
  - Pens
  - Notice of Violation forms

- Educational materials

## *Reporting*

- A database is useful for defining and tracking the magnitude and location of the problem.
- Report prohibited non-stormwater discharges observed during the course of normal daily activities so they can be investigated, contained and cleaned up or eliminated.
- Document that non-stormwater discharges have been eliminated by recording tests performed, methods used, dates of testing, and any onsite drainage points observed.
- Maintain documentation of illicit connection and illegal dumping incidents, including significant conditionally exempt discharges that are not properly managed.

## *Enforcement*

- Educate the responsible party if identified on the impacts of their actions, explain the stormwater requirements, and provide information regarding Best Management Practices (BMP), as appropriate. Initiate follow-up and/or enforcement procedures.
- If an illegal discharge is traced to a commercial, residential or industrial source, conduct the following activities or coordinate the following activities with the appropriate agency:
  - Contact the responsible party to discuss methods of eliminating the non-stormwater discharge, including disposal options, recycling, and possible discharge to the sanitary sewer (if within POTW limits).
  - Provide information regarding BMPs to the responsible party, where appropriate.
  - Begin enforcement procedures, if appropriate.
  - Continue inspection and follow-up activities until the illicit discharge activity has ceased.
- If an illegal discharge is traced to a commercial or industrial activity, coordinate information on the discharge with the jurisdiction's commercial and industrial facility inspection program.

## *Training*

- Train technical staff to identify and document illegal dumping incidents.
- Well-trained employees can reduce human errors that lead to accidental releases or spills. The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur. Employees should be familiar with the Spill Prevention Control and Countermeasure Plan.
- Train employees to identify non-stormwater discharges and report them to the appropriate departments.
- Train staff who have the authority to conduct surveillance and inspections, and write citations for those caught illegally dumping.

- Train municipal staff responsible for surveillance and inspection in the following:
  - OSHA-required Health and Safety Training (29 CFR 1910.120) plus annual refresher training (as needed).
  - OSHA Confined Space Entry training (Cal-OSHA Confined Space, Title 8 and federal OSHA 29 CFR 1910.146).
  - Procedural training (field screening, sampling, smoke/dye testing, TV inspection).
- Educate the identified responsible party on the impacts of his or her actions.

***Spill Response and Prevention***

- See SC-11 Spill Prevention Control and Clean Up

***Other Considerations***

- The elimination of illegal dumping is dependent on the availability, convenience, and cost of alternative means of disposal. The cost of fees for dumping at a proper waste disposal facility are often more than the fine for an illegal dumping offense, thereby discouraging people from complying with the law. The absence of routine or affordable pickup service for trash and recyclables in some communities also encourages illegal dumping. A lack of understanding regarding applicable laws or the inadequacy of existing laws may also contribute to the problem.
- Municipal codes should include sections prohibiting the discharge of soil, debris, refuse, hazardous wastes, and other pollutants into the storm drain system.
- Many facilities do not have accurate, up-to-date schematic drawings.
- Can be difficult to locate illicit connections especially if there is groundwater infiltration.

**Requirements*****Costs***

- Eliminating illicit connections can be expensive especially if structural modifications are required such re-plumbing cross connections under an existing slab.
- Minor cost to train field crews regarding the identification of non-stormwater discharges. The primary cost is for a fully integrated program to identify and eliminate illicit connections and illegal dumping. However, by combining with other municipal programs (i.e. pretreatment program) cost may be lowered.
- Municipal cost for containment and disposal may be borne by the discharger.

***Maintenance***

Not applicable

## Supplemental Information

### *Further Detail of the BMP*

*What constitutes a “non-stormwater” discharge?*

- Non-stormwater discharges are discharges not made up entirely of stormwater and include water used directly in the manufacturing process (process wastewater), air conditioning condensate and coolant, non-contact cooling water, cooling equipment condensate, outdoor secondary containment water, vehicle and equipment wash water, landscape irrigation, sink and drinking fountain wastewater, sanitary wastes, or other wastewaters.

### *Permit Requirements*

- Current municipal NPDES permits require municipalities to effectively prohibit non-stormwater discharges unless authorized by a separate NPDES permit or allowed in accordance with the current NPDES permit conditions. Typically the current permits allow certain non-stormwater discharges in the storm drain system as long as the discharges are not significant sources of pollutants. In this context the following non-stormwater discharges are typically allowed:
  - Diverted stream flows;
  - Rising found waters;
  - Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20));
  - Uncontaminated pumped ground water;
  - Foundation drains;
  - Springs;
  - Water from crawl space pumps;
  - Footing drains;
  - Air conditioning condensation;
  - Flows from riparian habitats and wetlands;
  - Water line and hydrant flushing ;
  - Landscape irrigation;
  - Planned and unplanned discharges from potable water sources;
  - Irrigation water;
  - Individual residential car washing; and
  - Lawn watering.

Municipal facilities subject to industrial general permit requirements must include a certification that the stormwater collection system has been tested or evaluated for the presence of non-stormwater discharges. The state's General Industrial Stormwater Permit requires that non-stormwater discharges be eliminated prior to implementation of the facility's SWPPP.

### *Illegal Dumping*

- Establish a system for tracking incidents. The system should be designed to identify the following:
  - Illegal dumping hot spots
  - Types and quantities (in some cases) of wastes
  - Patterns in time of occurrence (time of day/night, month, or year)
  - Mode of dumping (abandoned containers, "midnight dumping" from moving vehicles, direct dumping of materials, accidents/spills)
  - Responsible parties

### *Outreach*

One of the keys to success of reducing or eliminating illegal dumping is increasing the number of people on the street who are aware of the problem and who have the tools to at least identify the incident, if not correct it. There are a number of ways of accomplishing this:

- Train municipal staff from all departments (public works, utilities, street cleaning, parks and recreation, industrial waste inspection, hazardous waste inspection, sewer maintenance) to recognize and report the incidents.
- Deputize municipal staff who may come into contact with illegal dumping with the authority to write illegal dumping tickets for offenders caught in the act (see below).
- Educate the public. As many as 3 out of 4 people do not understand that in most communities the storm drain does not go to the wastewater treatment plant. Unfortunately, with the heavy emphasis in recent years on public education about solid waste management, including recycling and household hazardous waste, the sewer system (both storm and sanitary) has been the likely recipient of cross-media transfers of waste.
- Provide the public with a mechanism for reporting incidents such as a hot line and/or door hanger (see below).
- Help areas where incidents occur more frequently set up environmental watch programs (like crime watch programs).
- Train volunteers to notice and report the presence and suspected source of an observed pollutant to the appropriate public agency.

*What constitutes a “non-stormwater” discharge?*

- Non-stormwater discharges are discharges not made up entirely of stormwater and include water used directly in the manufacturing process (process wastewater), air conditioning condensate and coolant, non-contact cooling water, cooling equipment condensate, outdoor secondary containment water, vehicle and equipment wash water, landscape irrigation, sink and drinking fountain wastewater, sanitary wastes, or other wastewaters.

*Permit Requirements*

- Current municipal NPDES permits require municipalities to effectively prohibit non-stormwater discharges unless authorized by a separate NPDES permit or allowed in accordance with the current NPDES permit conditions. Typically the current permits allow certain non-stormwater discharges in the storm drain system as long as the discharges are not significant sources of pollutants. In this context the following non-stormwater discharges are typically allowed:
  - Diverted stream flows;
  - Rising found<sup>ation</sup> waters;
  - Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20));
  - Uncontaminated pumped ground water;
  - Foundation drains;
  - Springs;
  - Water from crawl space pumps;
  - Footing drains;
  - Air conditioning condensation;
  - Flows from riparian habitats and wetlands;
  - Water line and hydrant flushing ;
  - Landscape irrigation;
  - Planned and unplanned discharges from potable water sources;
  - Irrigation water;
  - Individual residential car washing; and
  - Lawn watering.

Municipal facilities subject to industrial general permit requirements must include a certification that the stormwater collection system has been tested or evaluated for the presence of non-stormwater discharges. The state's General Industrial Stormwater Permit requires that non-stormwater discharges be eliminated prior to implementation of the facility's SWPPP.

### *Storm Drain Stenciling*

- Stencil storm drain inlets with a message to prohibit illegal dumpings, especially in areas with waste handling facilities.
- Encourage public reporting of improper waste disposal by a HOTLINE number stenciled onto the storm drain inlet.
- See Supplemental Information section of this fact sheet for further detail on stenciling program approach.

### *Oil Recycling*

- Contract collection and hauling of used oil to a private licensed used oil hauler/recycler.
- Comply with all applicable state and federal regulations regarding storage, handling, and transport of petroleum products.
- Create procedures for collection such as; collection locations and schedule, acceptable containers, and maximum amounts accepted.
- The California Integrated Waste Management Board has a Recycling Hotline, (800) 553-2962, that provides information and recycling locations for used oil.

### *Household Hazardous Waste*

- Provide household hazardous waste (HHW) collection facilities. Several types of collection approaches are available including permanent, periodic, or mobile centers, curbside collection, or a combination of these systems.

### *Training*

- Train municipal employees and contractors in proper and consistent methods for waste disposal.
- Train municipal employees to recognize and report illegal dumping.
- Train employees and subcontractors in proper hazardous waste management.

### *Spill Response and Prevention*

- Refer to SC-11, Spill Prevention, Control & Cleanup
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

## *Other Considerations*

- Federal Regulations (RCRA, SARA, CERCLA) and state regulations exist regarding the disposal of hazardous waste.
- Municipalities are required to have a used oil recycling and a HHW element within their integrated waste management plan.
- Significant liability issues are involved with the collection, handling, and disposal of HHW.

## *Examples*

The City of Palo Alto has developed a public participation program for reporting dumping violations. When a concerned citizen or public employee encounters evidence of illegal dumping, a door hanger (similar in format to hotel "Do Not Disturb" signs) is placed on the front doors in the neighborhood. The door hanger notes that a violation has occurred in the neighborhood, informs the reader why illegal dumping is a problem, and notes that illegal dumping carries a significant financial penalty. Information is also provided on what citizens can do as well as contact numbers for more information or to report a violation.

The Port of Long Beach has a state of the art database incorporating storm drain infrastructure, potential pollutant sources, facility management practices, and a pollutant tracking system.

The State Department of Fish and Game has a hotline for reporting violations called CalTIP (1-800-952-5400). The phone number may be used to report any violation of a Fish and Game code (illegal dumping, poaching, etc.).

The California Department of Toxic Substances Control's Waste Alert Hotline, 1-800-69TOXIC, can be used to report hazardous waste violations.

## **References and Resources**

<http://www.stormwatercenter.net/>

California's Nonpoint Source Program Plan <http://www.co.clark.wa.us/pubworks/bmpman.pdf>

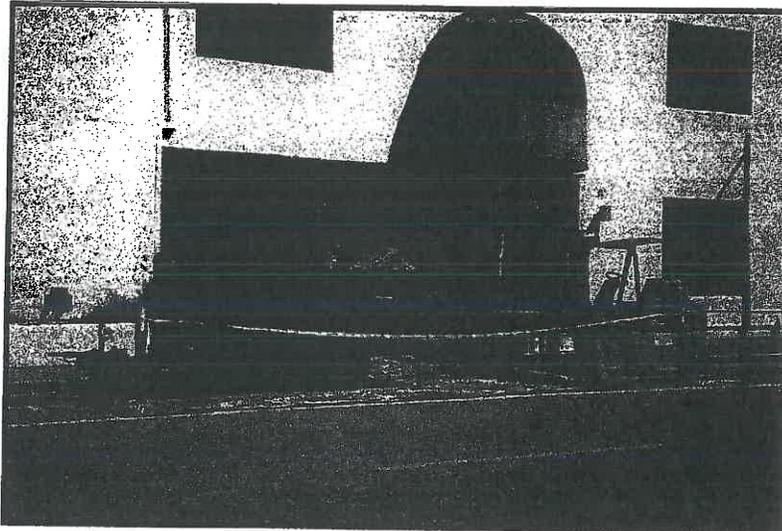
King County Stormwater Pollution Control Manual - <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Orange County Stormwater Program,  
[http://www.ocwatersheds.com/stormwater/swp\\_introduction.asp](http://www.ocwatersheds.com/stormwater/swp_introduction.asp)

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program  
(<http://www.projectcleanwater.org>)

Santa Clara Valley Urban Runoff Pollution Prevention Program  
[http://www.scvurppp-w2k.com/pdf%20documents/PS\\_ICID.PDF](http://www.scvurppp-w2k.com/pdf%20documents/PS_ICID.PDF)

# Spill Prevention, Control & Cleanup SC-11



## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Description

Spills and leaks, if not properly controlled, can adversely impact the storm drain system and receiving waters. Due to the type of work or the materials involved, many activities that occur either at a municipal facility or as a part of municipal field programs have the potential for accidental spills and leaks. Proper spill response planning and preparation can enable municipal employees to effectively respond to problems when they occur and minimize the discharge of pollutants to the environment.

## Approach

- An effective spill response and control plan should include:
  - Spill/leak prevention measures;
  - Spill response procedures;
  - Spill cleanup procedures;
  - Reporting; and
  - Training
- A well thought out and implemented plan can prevent pollutants from entering the storm drainage system and can be used as a tool for training personnel to prevent and control future spills as well.

## Pollution Prevention

- Develop and implement a Spill Prevention Control and Response Plan. The plan should include:

## Targeted Constituents

Sediment	
Nutrients	<input checked="" type="checkbox"/>
Trash	
Metals	<input checked="" type="checkbox"/>
Bacteria	
Oil and Grease	<input checked="" type="checkbox"/>
Organics	<input checked="" type="checkbox"/>
Oxygen Demanding	<input checked="" type="checkbox"/>



# **SC-11 Spill Prevention, Control & Cleanup**

- A description of the facility, the address, activities and materials involved
- Identification of key spill response personnel
- Identification of the potential spill areas or operations prone to spills/leaks
- Identification of which areas should be or are bermed to contain spills/leaks
- Facility map identifying the key locations of areas, activities, materials, structural BMPs, etc.
- Material handling procedures
- Spill response procedures including:
  - Assessment of the site and potential impacts
  - Containment of the material
  - Notification of the proper personnel and evacuation procedures
  - Clean up of the site
  - Disposal of the waste material and
  - Proper record keeping
- Product substitution – use less toxic materials (i.e. use water based paints instead of oil based paints)
- Recycle, reclaim, or reuse materials whenever possible. This will reduce the amount of materials that are brought into the facility or into the field.

## ***Suggested Protocols***

### ***Spill/Leak Prevention Measures***

- If possible, move material handling indoors, under cover, or away from storm drains or sensitive water bodies.
- Properly label all containers so that the contents are easily identifiable.
- Berm storage areas so that if a spill or leak occurs, the material is contained.
- Cover outside storage areas either with a permanent structure or with a seasonal one such as a tarp so that rain can not come into contact with the materials.
- Check containers (and any containment sumps) often for leaks and spills. Replace containers that are leaking, corroded, or otherwise deteriorating with containers in good condition. Collect all spilled liquids and properly dispose of them.

# **Spill Prevention, Control & Cleanup SC-11**

- Store, contain and transfer liquid materials in such a manner that if the container is ruptured or the contents spilled, they will not discharge, flow or be washed into the storm drainage system, surface waters, or groundwater.
- Place drip pans or absorbent materials beneath all mounted taps and at all potential drip and spill locations during the filling and unloading of containers. Any collected liquids or soiled absorbent materials should be reused/recycled or properly disposed of.
- For field programs, only transport the minimum amount of material needed for the daily activities and transfer materials between containers at a municipal yard where leaks and spill are easier to control.
- If paved, sweep and clean storage areas monthly, do not use water to hose down the area unless all of the water will be collected and disposed of properly.
- Install a spill control device (such as a tee section) in any catch basins that collect runoff from any storage areas if the materials stored are oil, gas, or other materials that separate from and float on water. This will allow for easier cleanup if a spill occurs.
- If necessary, protect catch basins while conducting field activities so that if a spill occurs, the material will be contained.

## ***Training***

- Educate employees about spill prevention, spill response and cleanup on a routine basis.
- Well-trained employees can reduce human errors that lead to accidental releases or spills:
  - The employees should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.
  - Employees should be familiar with the Spill Prevention Control and Countermeasure Plan if one is available.
- Training of staff from all municipal departments should focus on recognizing and reporting potential or current spills/leaks and who they should contact.
- Employees responsible for aboveground storage tanks and liquid transfers for large bulk containers should be thoroughly familiar with the Spill Prevention Control and Countermeasure Plan and the plan should be readily available.

## ***Spill Response and Prevention***

- Identify key spill response personnel and train employees on who they are.
- Store and maintain appropriate spill cleanup materials in a clearly marked location near storage areas; and train employees to ensure familiarity with the site's spill control plan and/or proper spill cleanup procedures.
- Locate spill cleanup materials, such as absorbents, where they will be readily accessible (e.g. near storage and maintenance areas, on field trucks).

# **SC-11 Spill Prevention, Control & Cleanup**

---

- Follow the Spill Prevention Control and Countermeasure Plan if one is available.
- If a spill occurs, notify the key spill response personnel immediately. If the material is unknown or hazardous, the local fire department may also need to be contacted.
- If safe to do so, attempt to contain the material and block the nearby storm drains so that the area impacted is minimized. If the material is unknown or hazardous wait for properly trained personnel to contain the materials.
- Perform an assessment of the area where the spill occurred and the downstream area that it could impact. Relay this information to the key spill response and clean up personnel.

## *Spill Cleanup Procedures*

- **Small non-hazardous spills**
  - Use a rag, damp cloth or absorbent materials for general clean up of liquids
  - Use brooms or shovels for the general clean up of dry materials
  - If water is used, it must be collected and properly disposed of. The wash water can not be allowed to enter the storm drain.
  - Dispose of any waste materials properly
  - Clean or dispose of any equipment used to clean up the spill properly
- **Large non-hazardous spills**
  - Use absorbent materials for general clean up of liquids
  - Use brooms, shovels or street sweepers for the general clean up of dry materials
  - If water is used, it must be collected and properly disposed of. The wash water can not be allowed to enter the storm drain.
  - Dispose of any waste materials properly
  - Clean or dispose of any equipment used to clean up the spill properly
- For hazardous or very large spills, a private cleanup company or Hazmat team may need to be contacted to assess the situation and conduct the cleanup and disposal of the materials.
- Chemical cleanups of material can be achieved with the use of absorbents, gels, and foams. Remove the adsorbent materials promptly and dispose of according to regulations.
- If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be sent to a certified laundry (rags) or disposed of as hazardous waste.

## *Reporting*

- Report any spills immediately to the identified key municipal spill response personnel.

# **Spill Prevention, Control & Cleanup SC-11**

---

- Report spills in accordance with applicable reporting laws. Spills that pose an immediate threat to human health or the environment must be reported immediately to the Office of Emergency Service (OES)
- Spills that pose an immediate threat to human health or the environment may also need to be reported within 24 hours to the Regional Water Quality Control Board.
- Federal regulations require that any oil spill into a water body or onto an adjoining shoreline be reported to the National Response Center (NRC) at 800-424-8802 (24 hour)
- After the spill has been contained and cleaned up, a detailed report about the incident should be generated and kept on file (see the section on Reporting below). The incident may also be used in briefing staff about proper procedures

## ***Other Considerations***

- A Spill Prevention Control and Countermeasure Plan (SPCC) is required for facilities that are subject to the oil pollution regulations specified in Part 112 of Title 40 of the Code of Federal Regulations or if they have a storage capacity of 10,000 gallons or more of petroleum. (Health and Safety Code 6.67)
- State regulations also exist for storage of hazardous materials (Health & Safety Code Chapter 6.95), including the preparation of area and business plans for emergency response to the releases or threatened releases.
- Consider requiring smaller secondary containment areas (less than 200 sq. ft.) to be connected to the sanitary sewer, if permitted to do so, prohibiting any hard connections to the storm drain.

## **Requirements**

### ***Costs***

- Will vary depending on the size of the facility and the necessary controls.
- Prevention of leaks and spills is inexpensive. Treatment and/or disposal of wastes, contaminated soil and water is very expensive

### ***Maintenance***

- This BMP has no major administrative or staffing requirements. However, extra time is needed to properly handle and dispose of spills, which results in increased labor costs

## **Supplemental Information**

### ***Further Detail of the BMP***

#### ***Reporting***

Record keeping and internal reporting represent good operating practices because they can increase the efficiency of the response and containment of a spill. A good record keeping system helps the municipality minimize incident recurrence, correctly respond with appropriate containment and cleanup activities, and comply with legal requirements.

# **SC-11 Spill Prevention, Control & Cleanup**

A record keeping and reporting system should be set up for documenting spills, leaks, and other discharges, including discharges of hazardous substances in reportable quantities. Incident records describe the quality and quantity of non-stormwater discharges to the storm drain.

These records should contain the following information:

- Date and time of the incident
- Weather conditions
- Duration of the spill/leak/discharge
- Cause of the spill/leak/discharge
- Response procedures implemented
- Persons notified
- Environmental problems associated with the spill/leak/discharge

Separate record keeping systems should be established to document housekeeping and preventive maintenance inspections, and training activities. All housekeeping and preventive maintenance inspections should be documented. Inspection documentation should contain the following information:

- The date and time the inspection was performed
- Name of the inspector
- Items inspected
- Problems noted
- Corrective action required
- Date corrective action was taken

Other means to document and record inspection results are field notes, timed and dated photographs, videotapes, and drawings and maps.

## ***Examples***

The City of Palo Alto includes spill prevention and control as a major element of its highly effective program for municipal vehicle maintenance shops.

## **References and Resources**

King County Stormwater Pollution Control Manual - <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Orange County Stormwater Program

[http://www.ocwatersheds.com/stormwater/swp\\_introduction.asp](http://www.ocwatersheds.com/stormwater/swp_introduction.asp)

# **Spill Prevention, Control & Cleanup SC-11**

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program  
(URMP)

<http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf>

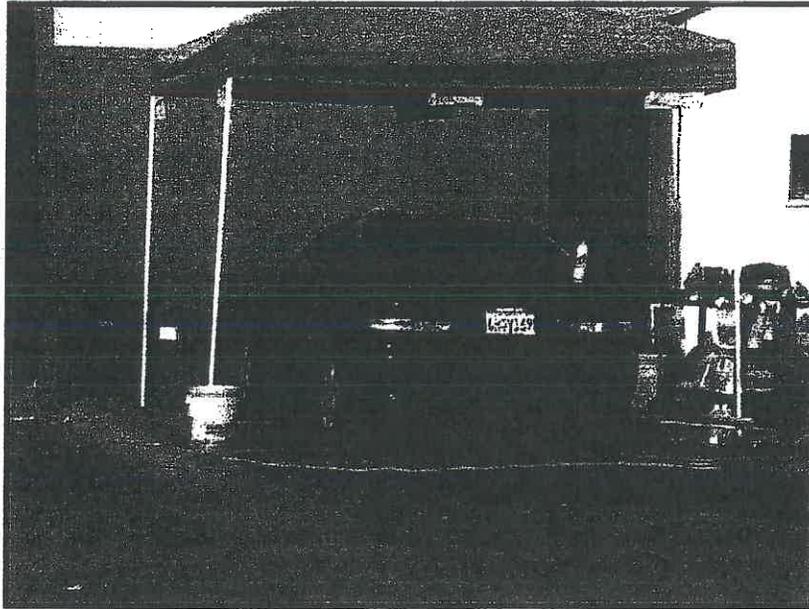


Photo Credit: Geoff Brosseau

## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓
Oxygen Demanding	

## Description

Wash water from vehicle and equipment cleaning activities performed outdoors or in areas where wash water flows onto the ground can contribute toxic hydrocarbons and other organic compounds, oils and greases, nutrients, phosphates, heavy metals, and suspended solids to stormwater runoff. Use of the procedures outlined below can prevent or reduce the discharge of pollutants to stormwater during vehicle and equipment cleaning.

## Approach

Reduce potential for pollutant discharge through source control pollution prevention and BMP implementation. Successful implementation depends on effective training of employees on applicable BMPs and general pollution prevention strategies and objectives

## Pollution Prevention

- If possible, use properly maintained off-site commercial washing and steam cleaning businesses whenever possible. These businesses are better equipped to handle and properly dispose of the wash waters.
- Good housekeeping practices can minimize the risk of contamination from wash water discharges.



# SC-21 Vehicle and Equipment Cleaning

---

## *Suggested Protocols*

### *General*

- Use biodegradable, phosphate-free detergents for washing vehicles as appropriate.
- Mark the area clearly as a wash area.
- Post signs stating that only washing is allowed in wash area and that discharges to the storm drain are prohibited.
- Provide a trash container in wash area.
- Map on-site storm drain locations to avoid discharges to the storm drain system.
- Emphasize the connection between the storm drain system and runoff and help reinforce that car washing activities can have an affect on local water quality. This can be accomplished through storm drain stenciling programs.

### *Vehicle and Equipment Cleaning*

- Design wash areas to properly collect and dispose of wash water when engine cleaning is conducted and when chemical additives, solvents, or degreasers are used. This may include installation of sumps or drain lines to collect wash water or construction of a berm around the designated area and grading of the area to collect wash water as well as prevent stormwater run-on.
- Consider washing vehicles and equipment inside the building if washing/cleaning must occur on-site. This will help to control the targeted constituents by directing them to the sanitary sewer.
- If washing must occur on-site and outdoor:
  - Use designated paved wash areas. Designated wash areas must be well marked with signs indicating where and how washing must be done. This area must be covered or bermed to collect the wash water and graded to direct the wash water to a treatment or disposal facility.
  - Oil changes and other engine maintenance cannot be conducted in the designated washing area. Perform these activities in a place designated for such activities.
  - Cover the wash area when not in use to prevent contact with rain water.
- Use hoses with nozzles that automatically turn off when left unattended.
- Perform pressure cleaning and steam cleaning off-site to avoid generating runoff with high pollutant concentrations. If done on-site, no pressure cleaning and steam cleaning should be done in areas designated as wellhead protection areas for public water supply.

### *Disposal*

- Consider filtering and recycling wash water.

# Vehicle and Equipment Cleaning **SC-21**

---

- Discharge equipment wash water to the sanitary sewer, a holding tank, or a process treatment system, regardless of the washing method used.
- Discharge vehicle wash water to (1) the sanitary sewer, a holding tank, or process treatment system or (2) an enclosed recycling system.
- Discharge wash water to sanitary sewer only after contacting the local sewer authority to find out if pretreatment is required.

## ***Training***

- Train employees on proper cleaning and wash water disposal procedures and conduct “refresher” courses on a regular basis.
- Train staff on proper maintenance measures for the wash area.
- Train employees and contractors on proper spill containment and cleanup. The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.

## ***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control and Cleanup.
- Keep your Spill Prevention Control and Counter Measure (SPCC) Plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Clean up spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

## ***Other Considerations (Limitations and Regulations)***

- Some municipalities may require pretreatment and monitoring of wash water discharges to the sanitary sewer.
- Steam cleaning can generate significant pollutant concentrations requiring that careful consideration be given to the environmental impacts and compliance issues related to steam cleaning.
- Most car washing best management practices are inexpensive, and rely more on good housekeeping practices (where vehicles are washed, planning for the collection of wash water) than on expensive technology. However, the construction of a specialized area for vehicle washing can be expensive for municipal facilities. Also, for facilities that cannot recycle their wash water the cost of pre-treating wash water through either structural practices or planning for collection and hauling of contaminated water to sewage treatment plants can represent a cost limitation.

## **Requirements**

### ***Costs***

- Capital costs vary depending on measures implemented

# SC-21 Vehicle and Equipment Cleaning

---

- Low cost (\$500-1,000) for berm construction,
  - Medium cost (\$5,000-20,000) for plumbing modifications (including re-routing discharge to sanitary sewer and installing simple sump).
  - High cost (\$30,000-150,000) for on-site treatment and recycling.
- O&M costs increase with increasing capital investment.

## ***Maintenance***

- Berm repair and patching.
- Sweep washing areas frequently to remove solid debris.
- Inspect and maintain sumps, oil/water separators, and on-site treatment/recycling units.

## **Supplemental Information**

### ***Design Considerations***

#### ***Designated Cleaning Areas***

- Washing operations outside should be conducted in a designated wash area having the following characteristics:
  - Paved with Portland cement concrete;
  - Covered and bermed to prevent contact with stormwater and contain wash water,
  - Sloped for wash water collection,
  - Equipped with an oil/water separator, if necessary.

## ***Examples***

The City of Palo Alto has an effective program for commercial vehicle service facilities. Many of the program's elements, including specific BMP guidance and lists of equipment suppliers, are applicable to industrial vehicle service facilities.

The U.S. Postal Service in West Sacramento has a new vehicle wash system that collects, filters, and recycles the wash water.

## **References and Resources**

<http://www.stormwatercenter.net/>

King County - <ftp://dnr.metrokc.gov/wlr/dss/spcm/Chapter%203.PDF>

Orange County Stormwater Program

[http://www.ocwatersheds.com/StormWater/swp\\_introduction.asp](http://www.ocwatersheds.com/StormWater/swp_introduction.asp)

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program (URMP)

<http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf>



Photo Credit: Geoff Brosseau

## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Description

Vehicle or equipment maintenance and repair is potentially a significant source of stormwater pollution, due to the use of materials and wastes created that are harmful to humans and the environment. Engine repair and service (e.g. parts cleaning), replacement of fluids (e.g. oil change), and outdoor equipment storage and parking (dripping engines) can impact water quality if stormwater runoff from areas with these activities occurring on them becomes polluted by a variety of contaminants. Implementation of the following activities will prevent or reduce the discharge of pollutants to stormwater from vehicle and equipment maintenance and repair activities.

## Approach

### Pollution Prevention

- Keep accurate maintenance logs to evaluate materials use.
- Switch to non-toxic chemicals for maintenance when possible.
- Choose cleaning agents that can be recycled.
- Minimize use of solvents. Clean parts without using solvents whenever possible.
- Keep an accurate, up-to-date inventory of materials.
- Recycle used motor oil, diesel oil, and other vehicle fluids and parts whenever possible.

### Suggested Protocols

## Targeted Constituents

Sediment	
Nutrients	
Trash	
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓
Oxygen Demanding	



*General*

- Move maintenance and repair activities indoors whenever feasible.
- Store idle equipment containing fluids under cover.
- Use a vehicle maintenance area designed to prevent stormwater pollution - minimize contact of stormwater with outside operations through berming and appropriate drainage routing.
- Avoid hosing down your work areas. If work areas are washed, collect and direct wash water to sanitary sewer.
- Paint signs on storm drain inlets to indicate that they are not to receive liquid or solid wastes.
- Post signs at sinks to remind employees, not to pour hazardous wastes down drains.
- Clean yard storm drain inlets(s) regularly.
- Do not pour materials down drains or hose down work areas; use dry sweeping.
- Cover the work area so as to limit exposure to the rain
- Place curbs around the immediate boundaries of the process equipment.
- Build a shed or temporary roof over areas where you park cars awaiting repair or salvage, especially if you handle wrecked vehicles. Build a roof over vehicles you keep for parts.

*Material and Waste Handling*

- Store materials and wastes under cover whenever possible.
- Designate a special area to drain and replace motor oil, coolant, and other fluids. This area should not have any connections to the storm drain or the sanitary sewer and should allow for easy clean up of drips and spills.
- Drain all fluids from wrecked vehicles immediately. Ensure that the drain pan or drip pan is large enough to contain drained fluids (e.g. larger pans are needed to contain antifreeze, which may gush from some vehicles).
- Do not pour liquid waste to floor drains, sinks, outdoor storm drain inlets, or other storm drains or sewer connections.
- Do not dispose of used or leftover cleaning solutions, solvents, and automotive fluids and oil in the sanitary sewer.
- Dispose of all waste materials according to applicable laws and regulations.
- Collect leaking or dripping fluids in drip pans or containers. Fluids are easier to recycle if kept separate.

- Promptly transfer used fluids to the proper waste or recycling drums and store in an appropriately designed area that can contain spills. Don't leave drip pans or other open containers lying around.
- Do not dispose of oil filters in trash cans or dumpsters, which may leak oil and contaminate stormwater. Place the oil filter in a funnel over a waste oil recycling drum to drain excess oil before disposal. Most municipalities prohibit or discourage disposal of these items in solid waste facilities. Oil filters can also be recycled. Ask your oil supplier or recycler about recycling oil filters.
- Store cracked and/or dead batteries in a non-leaking covered secondary container and dispose of properly at recycling or household hazardous waste facilities..

## *Maintenance and Repair Activities*

- Provide a designated area for vehicle maintenance.
- Keep equipment clean, don't allow excessive build-up of oil and grease.
- If temporary work is being conducted outside: Use a tarp, ground cloth, or drip pans beneath the vehicle or equipment to capture all spills and drips., The collected drips and spills must be disposed, reused, or recycled properly.
- If possible, perform all vehicle fluid removal or changing inside or under cover to prevent the runoff of stormwater and the runoff of spills:
  - Keep a drip pan under the vehicle while you unclip hoses, unscrew filters, or remove other parts. Use a drip pan under any vehicle that might leak while you work on it to keep splatters or drips off the shop floor.
  - Promptly transfer used fluids to the proper waste or recycling drums. Don't leave drip pans or other open containers lying around.
  - Keep drip pans or containers under vehicles or equipment that might drip during repairs.
  - Do not change motor oil or perform equipment maintenance in non-appropriate areas.
- If equipment (e.g., radiators, axles) is to be stored outdoors, oil and other fluids should be drained first. This is also applicable to vehicles being stored and not used on a regular basis.
- Monitor parked vehicles closely for leaks and place pans under any leaks to collect the fluids for proper disposal or recycling.

## *Parts Cleaning*

- Clean vehicle parts without using liquid cleaners wherever possible to reduce waste.
- Do all liquid cleaning at a centralized station so the solvents and residues stay in one area.

- Discharge wastewater generated from steam cleaning and pressure washing to an appropriate treatment control that is connected to a blind sump. Non-caustic detergents should be used instead of caustic cleaning agents, detergent-based or water-based cleaning systems in place of organic solvent degreasers, and non-chlorinated solvent in place of chlorinated organic solvents for parts cleaning. Refer to SC-21 for more information on steam cleaning.
- Locate drip pans, drain boards, and drying racks to direct drips back into a solvent sink or fluid holding tank for reuse.

### *Inspection*

- Regularly inspect vehicles and equipment for leaks, and repair immediately.
- Make sure incoming vehicles are checked for leaking oil and fluids. Apply controls accordingly.

### *Training*

- Train employees and contractors in the proper handling and disposal of engine fluids and waste materials.
- Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures (You can use reusable cloth rags to clean up small drips and spills instead of disposables; these can be washed by a permitted industrial laundry. Do not clean them at home or at a coin-operated laundry business). The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.
- Use a training log or similar method to document training.

### *Spill Response and Prevention*

- Refer to SC-11 Spill Prevention, Control & Cleanup for more information.
- Keep your Spill Prevention Control and Countermeasure (SPCC) Plan up-to-date, and implement accordingly.
- Place adequate stockpiles of spill cleanup materials where they are readily accessible.
- Clean leaks, drips, and other spills with as little water as possible. Use rags for small spills, a damp mop for general cleanup, and dry absorbent material for larger spills. Use the following three-step method for cleaning floors:
  - Clean spills with rags or other absorbent materials
  - Sweep floor using dry absorbent material
  - Mop the floor. Mop water may be discharged to the sanitary sewer via a toilet or sink.
- Remove absorbent materials used for cleaning small spills promptly and properly.
- Do not saturate rags or absorbent material to eliminate need for disposal of spilled material as hazardous waste.

## ***Other Considerations***

- Space and time limitations may preclude all work being conducted indoors.
- It may not be possible to contain and clean up spills from vehicles/equipment brought onsite after working hours.
- Drain pans (usually 1 ft. x 1 ft.) are generally too small to contain antifreeze, so drip pans (3 ft. x 3 ft.) may have to be purchased or fabricated.
- Identification of engine leaks may require some use of solvents, which may require disposal as hazardous waste.
- Installation of structural treatment practices for pretreatment controls of wastewater discharges can be expensive.
- Prices for recycled materials and fluids may be higher than those of non-recycled materials.
- Some facilities can be limited by a lack of providers of recycled materials, and by the absence of businesses to provide services such as hazardous waste removal, structural treatment practice maintenance or solvent equipment and solvent recycling.

## **Requirements**

### ***Costs***

- Should be low, but will vary depending on the size of the facility.

### ***Maintenance***

- Sweep the maintenance area weekly, if it is paved, to collect loose particles, and wipe up spills with rags and other absorbent material immediately, do not hose down the area to a storm drain.

## **Supplemental Information**

### ***Further Detail of the BMP***

#### ***Recycling***

Separating wastes allows for easier recycling and may reduce treatment costs. Keep hazardous and non-hazardous wastes separate, do not mix used oil and solvents, and keep chlorinated solvents (e.g., 1,1,1-trichloroethane) separate from non-chlorinated solvents (e.g., kerosene and mineral spirits).

Many products made of recycled (i.e., refined or purified) materials are available. Engine oil, transmission fluid, antifreeze, and hydraulic fluid are available in recycled form. Buying recycled products supports the market for recycled materials.

- Recycling is always preferable to disposal of unwanted materials.
- Separate wastes for easier recycling. Keep hazardous and non-hazardous wastes separate, do not mix used oil and solvents, and keep chlorinated solvents separate from non-chlorinated solvents.
- Label and track the recycling of waste material (e.g. used oil, spent solvents, batteries).

- Purchase recycled products to support the market for recycled materials.

*Safer Alternatives*

If possible, eliminate or reduce the amount of hazardous materials and waste by substituting non-hazardous or less hazardous material:

- Use non-caustic detergents instead of caustic cleaning for parts cleaning.
- Use detergent-based or water-based cleaning systems in place of organic solvent degreasers. Wash water may require treatment before it can be discharged to the sewer.
- Replace chlorinated organic solvents with non-chlorinated solvents. Non-chlorinated solvents like kerosene or mineral spirits are less toxic and less expensive to dispose of properly. Check list of active ingredients to see whether it contains chlorinated solvents.
- Choose cleaning agents that can be recycled.
- Refer to SC-61 Safer Alternative Products fact sheet for more information.

**References and Resources**

DTSC Doc. No. 619a Switching to Water Based Cleaners

DTSC Doc. No. 621 <http://www.stormwatercenter.net/>

King County - <ftp://dnr.metrokc.gov/wlr/dss/spcm/Chapter%203.PDF>

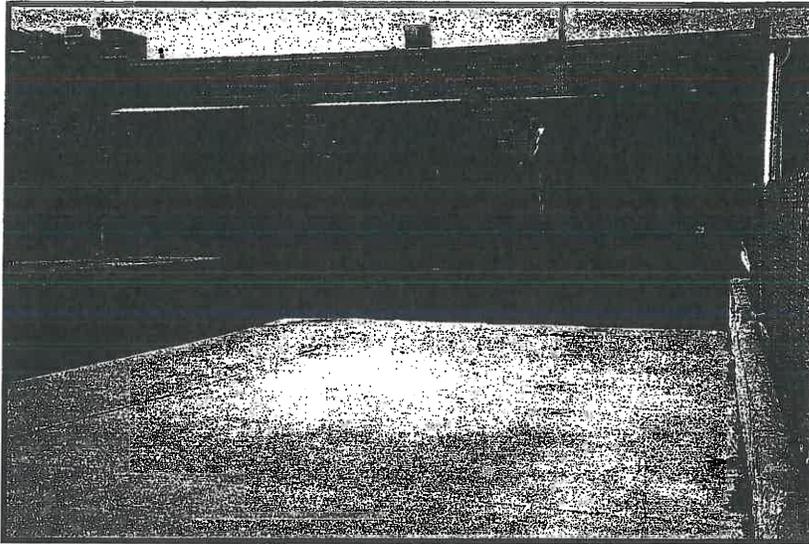
Model Urban Runoff Program: A How-To-Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Orange County Stormwater Program

[http://www.ocwatersheds.com/StormWater/swp\\_introduction.asp](http://www.ocwatersheds.com/StormWater/swp_introduction.asp)

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program (URMP) -

<http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf>



---

## Objectives

---

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Description

The loading/unloading of materials usually takes place outside on docks or terminals; therefore, materials spilled, leaked, or lost during loading/unloading may collect in the soil or on other surfaces and have the potential to be carried away by stormwater runoff or when the area is cleaned. Additionally, rainfall may wash pollutants from machinery used to unload or move materials. Loading and unloading of material may include package products, barrels, and bulk products. Implementation of the following protocols will prevent or reduce the discharge of pollutants to stormwater from outdoor loading/unloading of materials.

## Approach

### *Pollution Prevention*

- Keep accurate maintenance logs to evaluate materials removed and improvements made.
- Park tank trucks or delivery vehicles in designated areas so that spills or leaks can be contained.
- Limit exposure of materials with the potential to contaminate stormwater.
- Prevent stormwater runoff.
- Regularly check equipment for leaks.

---

## Targeted Constituents

---

Sediment	✓
Nutrients	✓
Trash	
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓



***Suggested Protocols******Loading and Unloading – General Guidelines***

- Develop an operations plan that describes procedures for loading and/or unloading.
- Do not conduct loading and unloading during wet weather, whenever possible.
- Cover designated loading/unloading areas to reduce exposure of materials to rain.
- A seal or door skirt between delivery vehicles and building can reduce or prevent exposure to rain.
- Design loading/unloading area to prevent stormwater runoff which would include grading or berming the area, and positioning roof downspouts so they direct stormwater away from the loading/unloading areas.
- If feasible, load and unload all materials and equipment in covered areas such as building overhangs at loading docks.
- Load/unload only at designated loading areas.
- Use drip pans underneath hose and pipe connections and other leak-prone spots during liquid transfer operations, and when making and breaking connections. Several drip pans should be stored in a covered location near the liquid transfer area so that they are always available, yet protected from precipitation when not in use. Drip pans can be made specifically for railroad tracks. Drip pans must be cleaned periodically, and drip collected materials must be disposed of properly.
- Pave loading areas with concrete instead of asphalt.
- Avoid placing storm drains in the area.
- Grade and/or berm the loading/ unloading area to a drain that is connected to a dead-end sump.

***Inspection***

- Check loading and unloading equipment regularly for leaks, including valves, pumps, flanges and connections.
- Look for dust or fumes during loading or unloading operations.

***Training***

- Train employees (e.g. fork lift operators) and contractors on proper spill containment and cleanup.
- Employees trained in spill containment and cleanup should be present during the loading/unloading.
- Train employees in proper handling techniques during liquid transfers to avoid spills.

- Make sure forklift operators are properly trained on loading and unloading procedures.

## ***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup
- Keep your spill prevention Control and countermeasure (SPCC) Plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

## ***Other Considerations***

- Space, material characteristics and/or time limitations may preclude all transfers from being performed indoors or under cover.

## **Requirements**

### ***Costs***

- Should be low except when covering a large loading/unloading area.

### ***Maintenance***

- Conduct regular inspections and make repairs as necessary. The frequency of repairs will depend on the age of the facility.
- Check loading and unloading equipment regularly for leaks.
- Regular broom dry-sweeping of area.
- Conduct major clean-out of loading and unloading area and sump prior to October 1 of each year.

## **Supplemental Information**

### ***Further Detail of the BMP***

#### ***Special Circumstances for Indoor Loading/Unloading of Materials***

As appropriate loading or unloading of liquids should occur indoors so that any spills that are not completely retained can be discharged to the sanitary sewer, treatment plant, or treated in a manner consistent with local sewer authorities and permit requirements.

- For loading and unloading tank trucks to above and below ground storage tanks, the following procedures should be used:
  - The area where the transfer takes place should be paved. If the liquid is reactive with the asphalt, Portland cement should be used to pave the area.
  - Transfer area should be designed to prevent runoff of stormwater from adjacent areas. Sloping the pad and using a curb, like a speed bump, around the uphill side of the transfer area should reduce run-on.

- Transfer area should be designed to prevent runoff of spilled liquids from the area. Sloping the area to a drain should prevent runoff. The drain should be connected to a dead-end sump or to the sanitary sewer (if allowed). A positive control valve should be installed on the drain.
- For transfer from rail cars to storage tanks that must occur outside, use the following procedures:
  - Drip pans should be placed at locations where spillage may occur, such as hose connections, hose reels, and filler nozzles, Use drip pans when making and breaking connections.
  - Drip pan systems should be installed between the rails to collect spillage from tank cars.

**References and Resources**

<http://www.stormwatercenter.net/>

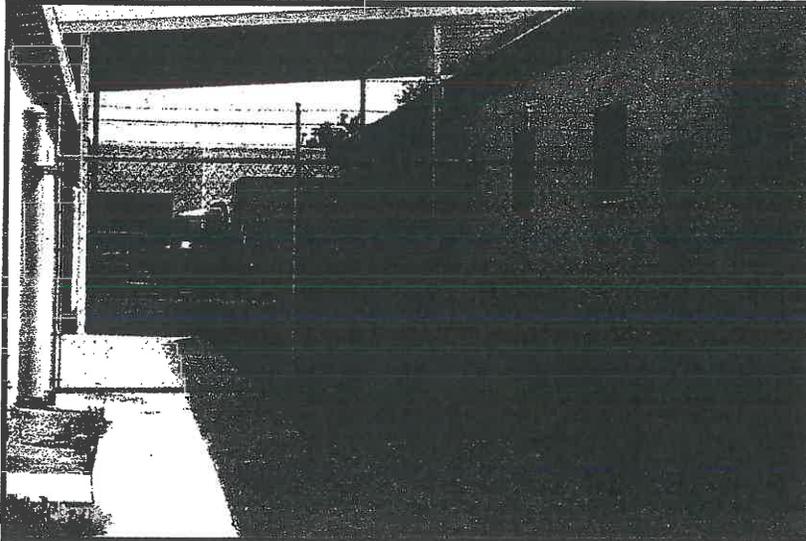
King County - <ftp://dnr.metrokc.gov/wlr/dss/spcm/Chapter%203.PDF>

Orange County Stormwater Program

[http://www.ocwatersheds.com/StormWater/swp\\_introduction.asp](http://www.ocwatersheds.com/StormWater/swp_introduction.asp)

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program (URMP) -

<http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf>



---

## Objectives

---

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Description

Accidental releases of materials from above ground liquid storage tanks, drums, and dumpsters present the potential for contaminating stormwaters with many different pollutants. Tanks may store many potential stormwater runoff pollutants, such as gasoline, aviation gas, diesel fuel, ammonia, solvents, syrups, etc. Materials spilled, leaked, or lost from storage tanks may accumulate in soils or on other surfaces and be carried away by rainfall runoff. These source controls apply to containers located outside of a building used to temporarily store liquid materials and include installing safeguards against accidental releases, installing secondary containment, conducting regular inspections, and training employees in standard operating procedures and spill cleanup techniques.

## Approach

### *Pollution Prevention*

- Educate employees about pollution prevention measures and goals
- Keep an accurate, up-to-date inventory of the materials delivered and stored on-site. Re-evaluate inventory needs and consider purchasing alternative products. Properly dispose of outdated products.
- Try to keep chemicals in their original containers, and keep them well labeled.

---

## Targeted Constituents

---

Sediment	
Nutrients	✓
Trash	
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓



***Suggested Protocols******General***

- Develop an operations plan that describes procedures for loading and/or unloading. Refer to SC-30 Outdoor Loading/Unloading for more detailed BMP information pertaining to loading and unloading of liquids.
- Protect materials from rainfall, runoff, and wind dispersal:
  - Cover the storage area with a roof.
  - Minimize stormwater runoff by enclosing the area or building a berm around it.
  - Use a “doghouse” structure for storage of liquid containers.
  - Use covered dumpsters for waste product containers.
- Employ safeguards against accidental releases:
  - Provide overflow protection devices to warn operator or automatic shut down transfer pumps.
  - Provide protection guards (bollards) around tanks and piping to prevent vehicle or forklift damage, and
  - Provide clear tagging or labeling, and restricting access to valves to reduce human error.
- Berm or surround tank or container with secondary containment system using dikes, liners, vaults, or double walled tanks.
- Contact the appropriate regulatory agency regarding environmental compliance for facilities with “spill ponds” designed to intercept, treat, and/or divert spills.
- Have registered and specifically trained professional engineers can identify and correct potential problems such as loose fittings, poor welding, and improper or poorly fitted gaskets for newly installed tank systems.

***Storage Areas***

- Provide storage tank piping located below product level with a shut-off valve at the tank; ideally this valve should be an automatic shear valve with the shut-off located inside the tank.
- Provide barriers such as posts or guard rails, where tanks are exposed, to prevent collision damage with vehicles.
- Provide secure storage to prevent vandalism.
- Place tight-fitting lids on all containers.
- Enclose or cover the containers where they are stored.

- Raise the containers off the ground by use of pallet or similar method, with provisions for spill control and secondary containment.
- Contain the material in such a manner that if the container leaks or spills, the contents will not discharge, flow, or be washed into the storm drainage system, surface waters or groundwater.
- Place drip pans or absorbent materials beneath all mounted container taps, and at all potential drip and spill locations during filling and unloading of containers. Drip pans must be cleaned periodically, and all collected liquids and soiled absorbent materials must be reused/recycled or properly disposed.
- Ensure that any underground or aboveground storage tanks shall be designed and managed in accordance with applicable regulations, be identified as a potential pollution source, have secondary containment, such as a berm or dike with an impervious surface.
- Rainfall collected in secondary containment system must not contain pollutants for discharge to storm drain system.

## *Container Management*

- Keep containers in good condition without corrosion or leaky seams.
- Place containers in a lean-to structure or otherwise covered to keep rainfall from reaching the drums.
- Replace containers if they are deteriorating to the point where leakage is occurring. Keep all containers undercover to prevent the entry of stormwater. Employees should be made aware of the importance of keeping the containers free from leaks.
- Keep waste container drums in an area such as a service bay. Drums stored outside must be stored in a lean-to type structure, shed or walk-in container.

## *Storage of Hazardous Materials*

- Storage of reactive, ignitable, or flammable liquids must comply with the fire and hazardous waste codes.
- Place containers in a designated area that is paved, free of cracks and gaps, and impervious in order to contain leaks and spills. The area should also be covered.
- Surround stored hazardous materials and waste with a curb or dike to provide the volume to contain 10 percent of the volume of all of the containers or 110 percent of the volume of the largest container, whichever is greater. The area inside the curb should slope to a drain and a dead-end sump should be installed in the drain.

## *Inspection*

- Provide regular inspections:
  - Inspect storage areas regularly for leaks or spills.

- Conduct routine inspections and check for external corrosion of material containers. Also check for structural failure, spills and overfills due to operator error, failure of piping system.
- Check for leaks or spills during pumping of liquids or gases from truck or rail car to a storage facility or vice versa.
- Visually inspect new tank or container installations for loose fittings, poor welding, and improper or poorly fitted gaskets.
- Inspect tank foundations, connections, coatings, and tank walls and piping system. Look for corrosion, leaks, cracks, scratches, and other physical damage that may weaken the tank or container system.
- Replace containers that are leaking, corroded, or otherwise deteriorating with ones in good condition. If the liquid chemicals are corrosive, containers made of compatible materials must be used instead of metal drums.
- Label new or secondary containers with the product name and hazards.

### ***Training***

- Train employees (e.g. fork lift operators) and contractors in proper spill containment and cleanup. The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.
- Train employees in proper storage measures.
- Use a training log or similar method to document training.

### ***Spill Response and Prevention***

- Keep your Spill Prevention Control and Countermeasure (SPCC) Plan up-to-date, and implement accordingly.
- Have an emergency plan, equipment and trained personnel ready at all times to deal immediately with major spills.
- Collect all spilled liquids and properly dispose of them.
- Employees trained in emergency spill cleanup procedures should be present when dangerous waste, liquid chemicals, or other wastes are delivered.
- Operator errors can be prevented by using engineering safe guards and thus reducing accidental releases of pollutant.
- Store and maintain appropriate spill cleanup materials in a location known to all near the tank storage area.
- See Aboveground Tank Leak and Spill Control section of the Spill Prevention, Control & Cleanup fact sheet (SC-11) for additional information.

## ***Other Considerations***

- Storage sheds often must meet building and fire code requirements.
- The local fire district must be consulted for limitations on clearance of roof covers over containers used to store flammable materials.
- All specific standards set by federal and state laws concerning the storage of oil and hazardous materials must be met.
- Storage of reactive, ignitable, or flammable liquids should comply with the Uniform Fire Code and the National Electric Code.
- Storage of oil and hazardous materials must meet specific federal and state standards including:
  - Spill Prevention Control and Countermeasure Plan (SPCC) Plan
  - Secondary containment
  - Integrity and leak detection monitoring
  - Emergency preparedness plans

## **Requirements**

### ***Costs***

- Will vary depending on the size of the facility and the necessary controls, such as berms or safeguards against accidental controls.

### ***Maintenance***

- Conduct weekly inspection.
- Sweep and clean the storage area regularly if it is paved, do not hose down the area to a storm drain.

## **Supplemental Information**

- The most common causes of unintentional releases are:
  - Installation problems,
  - Failure of piping systems (pipes, pumps, flanges, couplings, hoses, and valves),
  - External corrosion and structural failure,
  - Spills and overfills due to operator error, and
  - Leaks during pumping of liquids or gases from truck or rail car to a storage tank or vice versa

***Further Detail of the BMP******Dikes***

One of the best protective measures against contamination of stormwater is diking. Containment dikes are berms or retaining walls that are designed to hold spills. Diking is an effective pollution prevention measure for above ground storage tanks and railcar or tank truck loading and unloading areas. The dike surrounds the area of concern and holds the spill, keeping spill materials separated from the stormwater side of the dike area. Diking can be used in any industrial or municipal facility, but it is most commonly used for controlling large spills or releases from liquid storage areas and liquid transfer areas.

- For single-wall tanks, containment dikes should be large enough to hold the contents of the storage tank for the facility plus rain water.
- For trucks, diked areas should be capable of holding an amount equal to the volume of the tank truck compartment. Diked construction material should be strong enough to safely hold spilled materials.
- Dike materials can consist of earth, concrete, synthetic materials, metal, or other impervious materials.
- Strong acids or bases may react with metal containers, concrete, and some plastics.
- Where strong acids or bases are stored, alternative dike materials should be considered. More active organic chemicals may need certain special liners for dikes.
- Dikes may also be designed with impermeable materials to increase containment capabilities.
- Dikes should be inspected during or after significant storms or spills to check for washouts or overflows.
- Regular checks of containment dikes to insure the dikes are capable of holding spills should be conducted.
- Inability of a structure to retain stormwater, dike erosion, soggy areas, or changes in vegetation indicate problems with dike structures. Damaged areas should be patched and stabilized immediately.
- Accumulated stormwater in the containment area should be analyzed for pollutants before it is released to surface waters. If pollutants are found or if stormwater quality is not determined, then methods other than discharging to surface waters should be employed (e.g., discharge to sanitary sewer if allowed).
- Earthen dikes may require special maintenance of vegetation such as mulching and irrigation.

## *Curbing*

Curbing is a barrier that surrounds an area of concern. Curbing is similar to containment diking in the way that it prevents spills and leaks from being released into the environment. The curbing is usually small scaled and does not contain large spills like diking. Curbing is common at many facilities in small areas where handling and transfer liquid materials occur. Curbing can redirect stormwater away from the storage area. It is useful in areas where liquid materials are transferred from one container to another. Asphalt is a common material used for curbing; however, curbing materials include earth, concrete, synthetic materials, metal, or other impenetrable materials.

- Spilled materials should be removed immediately from curbed areas to allow space for future spills.
- Curbs should have manually-controlled pump systems rather than common drainage systems for collection of spilled materials.
- The curbed area should be inspected regularly to clear clogging debris.
- Maintenance should also be conducted frequently to prevent overflow of any spilled materials as curbed areas are designed only for smaller spills.
- Curbing has the following advantages:
  - Excellent runoff control,
  - Inexpensive,
  - Ease of installment,
  - Provides option to recycle materials spilled in curb areas, and
  - Common industry practice.

## ***Examples***

The “doghouse” design has been used to store small liquid containers. The roof and flooring design prevent contact with direct rain or runoff. The doghouse has two solid structural walls and two canvas covered walls. The flooring is wire mesh about secondary containment. The unit has been used successfully at Lockheed Missile and Space Company in Sunnyvale.

## **References and Resources**

British Columbia Lake Stewardship Society. Best Management Practices to Protect Water Quality from Non-Point Source Pollution. March 2000  
<http://www.nalms.org/bclss/storage.html>

King County Stormwater Pollution Control Manual –  
<http://dnr.metrokc.gov/wlr/dss/spcm.htm>

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program  
(URMP) -

<http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf>

## Description

Outside process equipment operations and maintenance can contaminate stormwater runoff. Activities, such as grinding, painting, coating, sanding, degreasing or parts cleaning, landfills and waste piles, solid waste treatment and disposal, are examples of process operations that can lead to contamination of stormwater runoff. Source controls for outdoor process equipment operations and maintenance include reducing the amount of waste created, enclosing or covering all or some of the equipment, installing secondary containment, and training employees.

## Approach

### Pollution Prevention

- Perform the activity during dry periods.
- Use non-toxic chemicals for maintenance and minimize or eliminate the use of solvents.

### Suggested Protocols

- Consider enclosing the activity in a building and connecting the floor drains to the sanitary sewer.
- Cover the work area with a permanent roof.
- Minimize contact of stormwater with outside process equipment operations through berming and drainage routing (runon prevention). If allowed, connect process equipment area to public sewer.
- Dry clean the work area regularly.

### Training

- Train employees to perform the activity during dry periods only and to use less or non-toxic materials.
- Train employee and contractors in proper techniques for spill containment and cleanup. The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.

## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Targeted Constituents

Sediment	✓
Nutrients	
Trash	✓
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓
Oxygen Demanding	



# SC-32 Outdoor Equipment Maintenance

---

## ***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup
- Keep your spill prevention control and countermeasure (SPCC) plan up-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

## ***Other Considerations***

- Space limitations may preclude enclosing some equipment.
- Storage sheds often must meet building and fire code requirements.

## **Requirements**

### ***Costs***

- Costs vary depending on the complexity of the operation and the amount of control necessary for stormwater pollution control.
- Providing cover may be expensive.

### ***Maintenance***

- Conduct routine preventive maintenance, including checking process equipment for leaks.
- Clean the storm drain system regularly.

## **Supplemental Information**

### ***Further Detail of the BMP***

#### ***Hydraulic/Treatment Modifications***

In some cases it may be necessary to capture and treat polluted stormwater. If the municipality does not have its own process wastewater treatment system, consider discharging to the public sewer system. Use of the public sewer might be allowed under the following conditions:

- If the activity area is very small (less than a few hundred square feet), the local sewer authority may be willing to allow the area to remain uncovered with the drain connected to the public sewer.
- It may be possible under unusual circumstances to connect a much larger area to the public sewer, as long as the rate of stormwater discharges does not exceed the capacity of the wastewater treatment plant. The stormwater could be stored during the storm and then transferred to the public sewer when the normal flow is low, such as at night.

## **References and Resources**

California's Nonpoint Source Program Plan <http://www.swrcb.ca.gov/nps/index.html>

# **Outdoor Equipment Maintenance      SC-32**

---

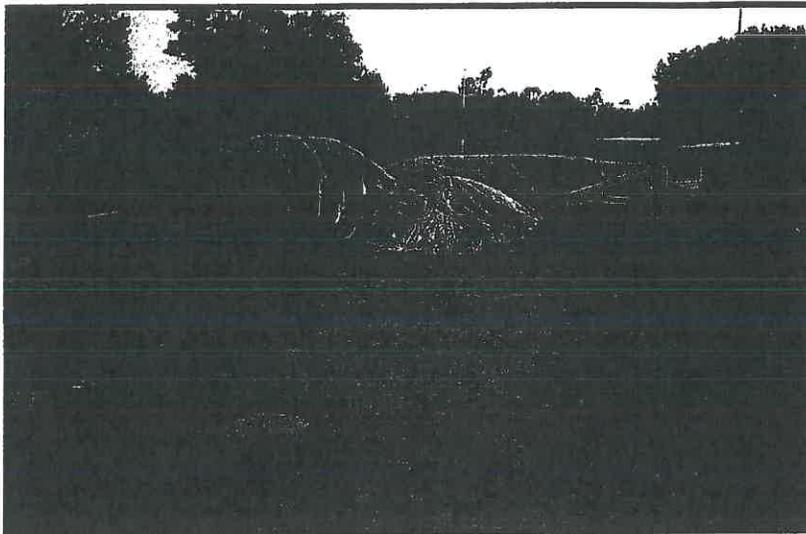
Clark County Stormwater Pollution Control Manual  
<http://www.co.clark.wa.us/pubworks/bmpman.pdf>

King County Stormwater Pollution Control Manual <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Santa Clara Valley Urban Runoff Pollution Prevention Program <http://www.scvurppp.org>

The Stormwater Managers Resource Center <http://www.stormwatercenter.net/>

# Outdoor Storage of Raw Materials SC-33



---

## Objectives

---

- Cover
- Contain
- Educate
- Reduce/Minimize

## Description

Raw materials, by-products, finished products, containers, and material storage areas exposed to rain and/or runoff can pollute stormwater. Stormwater can become contaminated when materials wash off or dissolve into water or are added to runoff by spills and leaks. Improper storage of these materials can result in accidental spills and the release of materials. To prevent or reduce the discharge of pollutants to stormwater from material delivery and storage, pollution prevention and source control measures, such as minimizing the storage of hazardous materials on-site, enclosing or covering materials, storing materials in a designated area, installing secondary containment, conducting regular inspections, preventing stormwater runoff and runoff, and training employees and subcontractors must be implemented.

## Approach

### *Pollution Prevention*

- Employee education is paramount for successful BMP implementation.
- Minimize inventory of raw materials.
- Keep an accurate, up-to-date inventory of the materials delivered and stored on-site.
- Try to keep chemicals in their original containers, and keep them well labeled.

---

## Targeted Constituents

---

Sediment	✓
Nutrients	✓
Trash	✓
Metals	
Bacteria	
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓



# **SC-33 Outdoor Storage of Raw Materials**

---

## ***Suggested Protocols***

### *General*

- Store all materials inside. If this is not feasible, then all outside storage areas should be covered with a roof, and bermed, or enclosed to prevent stormwater contact. At the very minimum, a temporary waterproof covering made of polyethylene, polypropylene or hypalon should be used over all materials stored outside.
- Cover and contain the stockpiles of raw materials to prevent stormwater from running into the covered piles. The covers must be in place at all times when work with the stockpiles is not occurring. (applicable to small stockpiles only).
- If the stockpiles are so large that they cannot feasibly be covered and contained, implement erosion control practices at the perimeter of your site and at any catch basins to prevent erosion of the stockpiled material off site,
- Keep liquids in a designated area on a paved impervious surface within a secondary containment.
- Keep outdoor storage containers in good condition.
- Keep storage areas clean and dry.
- Design paved areas to be sloped in a manner that minimizes the pooling of water on the site, particularly with materials that may leach pollutants into stormwater and/or groundwater, such as compost, logs, and wood chips. A minimum slope of 1.5 percent is recommended.
- Secure drums stored in an area where unauthorized persons may gain access to prevent accidental spillage, pilferage, or any unauthorized use.
- Cover wood products treated with chromated copper arsenate, ammonical copper zinc arsenate, creosote, or pentachlorophenol with tarps or store indoors.

### *Raw Material Containment*

- Do not store chemicals, drums, or bagged materials directly on the ground. Place these items in secondary containers if applicable.
- Prevent the run-on of uncontaminated stormwater from adjacent areas as well as runoff of stormwater from the stockpile areas, by placing a curb along the perimeter of the area. The area inside the curb should slope to a drain. Liquids should be drained to the sanitary sewer if allowed. The drain must have a positive control such as a lock, valve, or plug to prevent release of contaminated liquids.
- Tanks should be bermed or surrounded by a secondary containment system.
- Release accumulated stormwater in petroleum storage areas prior to the next storm. At a minimum, water should pass through an oil/water separator and, if allowed, discharged to a sanitary sewer.

# Outdoor Storage of Raw Materials SC-33

---

## *Inspection*

- Conduct regular inspections of storage areas so that leaks and spills are detected as soon as possible.
- Conduct routine inspections and check for external corrosion of material containers. Also check for structural failure, spills and overfills due to operator error, failure of piping system.
- Check for leaks or spills during pumping of liquids or gases from truck or rail car to a storage facility or vice versa.
- Visually inspect new tank or container installations for loose fittings, poor welding, and improper or poorly fitted gaskets.
- Inspect tank foundations, connections, coatings, and tank walls and piping system. Look for corrosion, leaks, cracks, scratches, and other physical damage that may weaken the tank or container system.

## *Training*

- Employees should be well trained in proper material storage.
- Train employees and contractors in proper techniques for spill containment and cleanup.

## *Spill Response and Prevention*

- Refer to SC-11, Spill Prevention, Control & Cleanup.
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.
- Have employees trained in spill containment and cleanup present during loading/unloading of dangerous waste, liquid chemicals and other potentially hazardous materials.

## *Other Considerations*

- Storage sheds often must meet building and fire code requirements. Storage of reactive, ignitable, or flammable liquids must comply with the Uniform Fire Code and the National Electric Code.
- Space limitations may preclude storing some materials indoors.
- Some municipalities require that secondary containment areas (regardless of size) be connected to the sanitary sewer, prohibiting any hard connections to the storm drain. Storage sheds often must meet building and fire code requirements.
- The local fire district must be consulted for limitations on clearance of roof covers over containers used to store flammable materials.

# **SC-33 Outdoor Storage of Raw Materials**

---

## **Requirements**

### **Costs**

- Costs will vary depending on the size of the facility and the necessary controls. They should be low except where large areas may have to be covered.

### **Maintenance**

- Accurate and up-to-date inventories should be kept of all stored materials.
- Berms and curbs may require periodic repair and patching.
- Parking lots or other surfaces near bulk materials storage areas should be swept periodically to remove debris blown or washed from storage area.
- Sweep paved storage areas regularly for collection and disposal of loose solid materials, do not hose down the area to a storm drain or conveyance ditch.
- Keep outdoor storage areas in good condition (e.g. repair roofs, floors, etc. to limit releases to runoff).

## **Supplemental Information**

### **Further Detail of the BMP**

#### *Raw Material Containment*

Paved areas should be sloped in a manner that minimize the pooling of water on the site, particularly with materials that may leach pollutants into stormwater and/or groundwater, such as compost, logs, and wood chips. A minimum slope of 1.5 percent is recommended.

- Curbing should be placed along the perimeter of the area to prevent the runoff of uncontaminated stormwater from adjacent areas as well as runoff of stormwater from the stockpile areas.
- The storm drainage system should be designed to minimize the use of catch basins in the interior of the area as they tend to rapidly fill with manufacturing material.
- The area should be sloped to drain stormwater to the perimeter where it can be collected or to internal drainage alleyways where material is not stockpiled.
- If the raw material, by-product, or product is a liquid, more information for outside storage of liquids can be found under SC-31, Outdoor Container Storage.

### **Examples**

The “doghouse” design has been used to store small liquid containers. The roof and flooring design prevent contact with direct rain or runoff. The doghouse has two solid structural walls and two canvas covered walls. The flooring is wire mesh about secondary containment. The unit has been used successively at Lockheed Missile and Space Company in Sunnyvale.

## **References and Resources**

King County Stormwater Pollution Control Manual - <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

# **Outdoor Storage of Raw Materials SC-33**

---

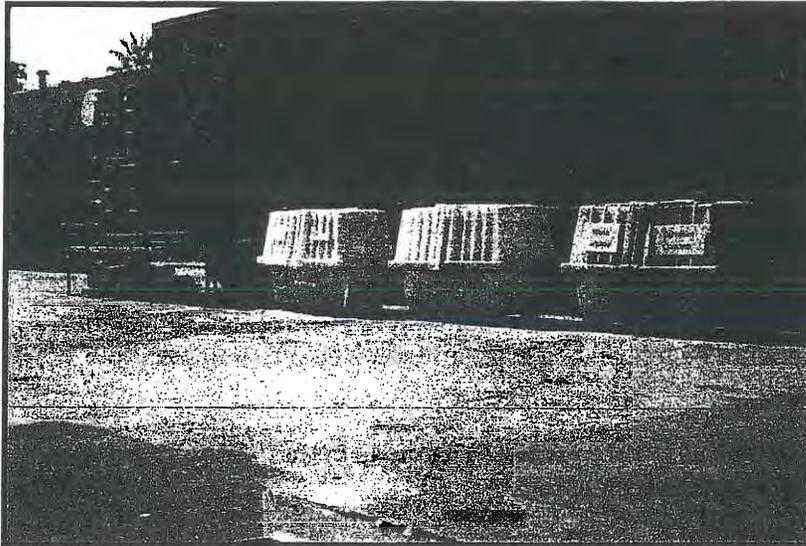
Model Urban Runoff Program: A How-To-Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Orange County Stormwater Program

[http://www.ocwatersheds.com/StormWater/swp\\_introduction.asp](http://www.ocwatersheds.com/StormWater/swp_introduction.asp)

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program (URMP)

<http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf>



## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Description

Improper storage and handling of solid wastes can allow toxic compounds, oils and greases, heavy metals, nutrients, suspended solids, and other pollutants to enter stormwater runoff. The discharge of pollutants to stormwater from waste handling and disposal can be prevented and reduced by tracking waste generation, storage, and disposal; reducing waste generation and disposal through source reduction, re-use, and recycling; and preventing runoff and runoff.

## Approach

### *Pollution Prevention*

- Reduction in the amount of waste generated can be accomplished using the following source controls such as:
  - Production planning and sequencing
  - Process or equipment modification
  - Raw material substitution or elimination
  - Loss prevention and housekeeping
  - Waste segregation and separation
  - Close loop recycling
- Establish a material tracking system to increase awareness about material usage. This may reduce spills and minimize contamination, thus reducing the amount of waste produced.
- Recycle materials whenever possible.

## Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓



***Suggested Protocols******General***

- Cover storage containers with leak proof lids or some other means. If waste is not in containers, cover all waste piles (plastic tarps are acceptable coverage) and prevent stormwater runoff and runoff with a berm. The waste containers or piles must be covered except when in use.
- Use drip pans or absorbent materials whenever grease containers are emptied by vacuum trucks or other means. Grease cannot be left on the ground. Collected grease must be properly disposed of as garbage.
- Check storage containers weekly for leaks and to ensure that lids are on tightly. Replace any that are leaking, corroded, or otherwise deteriorating.
- Sweep and clean the storage area regularly. If it is paved, do not hose down the area to a storm drain.
- Dispose of rinse and wash water from cleaning waste containers into a sanitary sewer if allowed by the local sewer authority. Do not discharge wash water to the street or storm drain.
- Transfer waste from damaged containers into safe containers.
- Take special care when loading or unloading wastes to minimize losses. Loading systems can be used to minimize spills and fugitive emission losses such as dust or mist. Vacuum transfer systems can minimize waste loss.

***Controlling Litter***

- Post "No Littering" signs and enforce anti-litter laws.
- Provide a sufficient number of litter receptacles for the facility.
- Clean out and cover litter receptacles frequently to prevent spillage.

***Waste Collection***

- Keep waste collection areas clean.
- Inspect solid waste containers for structural damage or leaks regularly. Repair or replace damaged containers as necessary.
- Secure solid waste containers; containers must be closed tightly when not in use.
- Place waste containers under cover if possible.
- Do not fill waste containers with washout water or any other liquid.
- Ensure that only appropriate solid wastes are added to the solid waste container. Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc. may not be

disposed of in solid waste containers (see chemical/ hazardous waste collection section below).

- Do not mix wastes; this can cause chemical reactions, make recycling impossible, and complicate disposal.

### *Good Housekeeping*

- Use all of the product before disposing of the container.
- Keep the waste management area clean at all times by sweeping and cleaning up spills immediately.
- Use dry methods when possible (e.g. sweeping, use of absorbents) when cleaning around restaurant/food handling dumpster areas. If water must be used after sweeping/using absorbents, collect water and discharge through grease interceptor to the sewer.
- Stencil storm drains on the facility's property with prohibitive message regarding waste disposal.

### *Chemical/Hazardous Wastes*

- Select designated hazardous waste collection areas on-site.
- Store hazardous materials and wastes in covered containers protected from vandalism, and in compliance with fire and hazardous waste codes.
- Place hazardous waste containers in secondary containment.
- Make sure that hazardous waste is collected, removed, and disposed of only at authorized disposal areas.

### *Runon/Runoff Prevention*

- Prevent stormwater runon from entering the waste management area by enclosing the area or building a berm around the area.
- Prevent the waste materials from directly contacting rain.
- Cover waste piles with temporary covering material such as reinforced tarpaulin, polyethylene, polyurethane, polypropylene or hypalon.
- Cover the area with a permanent roof if feasible.
- Cover dumpsters to prevent rain from washing waste out of holes or cracks in the bottom of the dumpster.
- Move the activity indoor after ensuring all safety concerns such as fire hazard and ventilation are addressed.

### *Inspection*

- Inspect and replace faulty pumps or hoses regularly to minimize the potential of releases and spills.
- Check waste management areas for leaking containers or spills.
- Repair leaking equipment including valves, lines, seals, or pumps promptly.

***Training***

- Train staff pollution prevention measures and proper disposal methods.
- Train employees and contractors proper spill containment and cleanup. The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.
- Train employees and subcontractors in proper hazardous waste management.

***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup.
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.
- Vehicles transporting waste should have spill prevention equipment that can prevent spills during transport. The spill prevention equipment includes:
  - Vehicles equipped with baffles for liquid waste
  - Trucks with sealed gates and spill guards for solid waste

***Other Considerations***

- Hazardous waste cannot be re-used or recycled; it must be disposed of by a licensed hazardous waste hauler.

**Requirements*****Costs***

- Capital and operation and maintenance costs will vary substantially depending on the size of the facility and the types of waste handled. Costs should be low if there is an inventory program in place.

***Maintenance***

- None except for maintaining equipment for material tracking program.

## Supplemental Information

### *Further Detail of the BMP*

#### *Land Treatment System*

- Minimize the runoff of polluted stormwater from land application of municipal waste on-site by:
  - Choosing a site where slopes are under 6%, the soil is permeable, there is a low water table, it is located away from wetlands or marshes, there is a closed drainage system.
  - Avoiding application of waste to the site when it is raining or when the ground is saturated with water.
  - Growing vegetation on land disposal areas to stabilize soils and reduce the volume of surface water runoff from the site.
  - Maintaining adequate barriers between the land application site and the receiving waters. Planted strips are particularly good.
  - Using erosion control techniques such as mulching and matting, filter fences, straw bales, diversion terracing, and sediment basins.
  - Performing routine maintenance to ensure the erosion control or site stabilization measures are working.

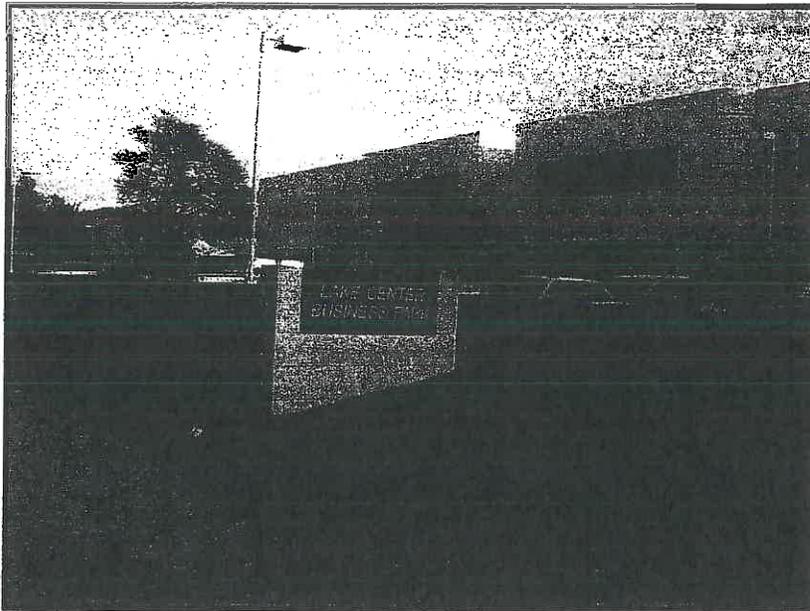
## References and Resources

King County Stormwater Pollution Control Manual - <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Orange County Stormwater Program

[http://www.ocwatersheds.com/StormWater/swp\\_introduction.asp](http://www.ocwatersheds.com/StormWater/swp_introduction.asp)

Pollution from Surface Cleaning Folder. 1996. Bay Area Stormwater Management Agencies Associations (BASMAA). On-line: <http://www.basmaa.org>



## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓

## Description

Stormwater runoff from building and grounds maintenance activities can be contaminated with toxic hydrocarbons in solvents, fertilizers and pesticides, suspended solids, heavy metals, and abnormal pH. Utilizing the following protocols will prevent or reduce the discharge of pollutants to stormwater from building and grounds maintenance activities by washing and cleaning up with as little water as possible, following good landscape management practices, preventing and cleaning up spills immediately, keeping debris from entering the storm drains, and maintaining the stormwater collection system.

## Approach

### Pollution Prevention

- Switch to non-toxic chemicals for maintenance when possible.
- Choose cleaning agents that can be recycled.
- Encourage proper lawn management and landscaping, including use of native vegetation.
- Encourage use of Integrated Pest Management techniques for pest control.
- Encourage proper onsite recycling of yard trimmings.
- Recycle residual paints, solvents, lumber, and other material as much as possible.



# SC-41 Building & Grounds Maintenance

---

## ***Suggested Protocols***

### *Pressure Washing of Buildings, Rooftops, and Other Large Objects*

- In situations where soaps or detergents are used and the surrounding area is paved, pressure washers must use a waste water collection device that enables collection of wash water and associated solids. A sump pump, wet vacuum or similarly effective device must be used to collect the runoff and loose materials. The collected runoff and solids must be disposed of properly.
- If soaps or detergents are not used, and the surrounding area is paved, wash water runoff does not have to be collected but must be screened. Pressure washers must use filter fabric or some other type of screen on the ground and/or in the catch basin to trap the particles in wash water runoff.
- If you are pressure washing on a grassed area (with or without soap), runoff must be dispersed as sheet flow as much as possible, rather than as a concentrated stream. The wash runoff must remain on the grass and not drain to pavement. Ensure that this practice does not kill grass.

### *Landscaping Activities*

- Do not apply any chemicals (insecticide, herbicide, or fertilizer) directly to surface waters, unless the application is approved and permitted by the state.
- Dispose of grass clippings, leaves, sticks, or other collected vegetation as garbage, or by composting. Do not dispose of collected vegetation into waterways or storm drainage systems.
- Use mulch or other erosion control measures on exposed soils.
- Check irrigation schedules so pesticides will not be washed away and to minimize non-stormwater discharge.

### *Building Repair, Remodeling, and Construction*

- Do not dump any toxic substance or liquid waste on the pavement, the ground, or toward a storm drain.
- Use ground or drop cloths underneath outdoor painting, scraping, and sandblasting work, and properly dispose of collected material daily.
- Use a ground cloth or oversized tub for activities such as paint mixing and tool cleaning.
- Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers that can be dumped into a sanitary sewer drain. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.

- Use a storm drain cover, filter fabric, or similarly effective runoff control mechanism if dust, grit, wash water, or other pollutants may escape the work area and enter a catch basin. The containment device(s) must be in place at the beginning of the work day, and accumulated dirty runoff and solids must be collected and disposed of before removing the containment device(s) at the end of the work day.
- If you need to de-water an excavation site, you may need to filter the water before discharging to a catch basin or off-site. In which case you should direct the water through hay bales and filter fabric or use other sediment filters or traps.
- Store toxic material under cover with secondary containment during precipitation events and when not in use. A cover would include tarps or other temporary cover material.

### *Mowing, Trimming, and Planting*

- Dispose of leaves, sticks, or other collected vegetation as garbage, by composting or at a permitted landfill. Do not dispose of collected vegetation into waterways or storm drainage systems.
- Use mulch or other erosion control measures when soils are exposed.
- Place temporarily stockpiled material away from watercourses and drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system.
- Consider an alternative approach when bailing out muddy water; do not put it in the storm drain, pour over landscaped areas.
- Use hand or mechanical weeding where practical.

### *Fertilizer and Pesticide Management*

- Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers and pesticides and training of applicators and pest control advisors.
- Follow manufacturers' recommendations and label directions. Pesticides must never be applied if precipitation is occurring or predicted. Do not apply insecticides within 100 feet of surface waters such as lakes, ponds, wetlands, and streams.
- Use less toxic pesticides that will do the job, whenever possible. Avoid use of copper-based pesticides if possible.
- Do not use pesticides if rain is expected.
- Do not mix or prepare pesticides for application near storm drains.
- Use the minimum amount needed for the job.
- Calibrate fertilizer distributors to avoid excessive application.
- Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.

# **SC-41 Building & Grounds Maintenance**

---

- Apply pesticides only when wind speeds are low.
- Work fertilizers into the soil rather than dumping or broadcasting them onto the surface.
- Irrigate slowly to prevent runoff and then only as much as is needed.
- Clean pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.
- Dispose of empty pesticide containers according to the instructions on the container label.
- Use up the pesticides. Rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- Implement storage requirements for pesticide products with guidance from the local fire department and County Agricultural Commissioner. Provide secondary containment for pesticides.

## ***Inspection***

- Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring. Minimize excess watering, and repair leaks in the irrigation system as soon as they are observed.

## ***Training***

- Educate and train employees on use of pesticides and in pesticide application techniques to prevent pollution.
- Train employees and contractors in proper techniques for spill containment and cleanup.
- Be sure the frequency of training takes into account the complexity of the operations and the nature of the staff.

## ***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

## ***Other Considerations***

- Alternative pest/weed controls may not be available, suitable, or effective in many cases.

## Requirements

### Costs

- Overall costs should be low in comparison to other BMPs.

### Maintenance

- Sweep paved areas regularly to collect loose particles, and wipe up spills with rags and other absorbent material immediately, do not hose down the area to a storm drain.

## Supplemental Information

### *Further Detail of the BMP*

#### *Fire Sprinkler Line Flushing*

Building fire sprinkler line flushing may be a source of non-stormwater runoff pollution. The water entering the system is usually potable water though in some areas it may be non-potable reclaimed wastewater. There are subsequent factors that may drastically reduce the quality of the water in such systems. Black iron pipe is usually used since it is cheaper than potable piping but it is subject to rusting and results in lower quality water. Initially the black iron pipe has an oil coating to protect it from rusting between manufacture and installation; this will contaminate the water from the first flush but not from subsequent flushes. Nitrates, polyphosphates and other corrosion inhibitors, as well as fire suppressants and antifreeze may be added to the sprinkler water system. Water generally remains in the sprinkler system a long time, typically a year, between flushes and may accumulate iron, manganese, lead, copper, nickel and zinc. The water generally becomes anoxic and contains living and dead bacteria and breakdown products from chlorination. This may result in a significant BOD problem and the water often smells. Consequently dispose fire sprinkler line flush water into the sanitary sewer. Do not allow discharge to storm drain or infiltration due to potential high levels of pollutants in fire sprinkler line water.

## References and Resources

California's Nonpoint Source Program Plan <http://www.swrcb.ca.gov/nps/index.html>

King County - <ftp://dnr.metrokc.gov/wlr/dss/spcm/Chapter%203.PDF>

Orange County Stormwater Program

[http://www.ocwatersheds.com/StormWater/swp\\_introduction.asp](http://www.ocwatersheds.com/StormWater/swp_introduction.asp)

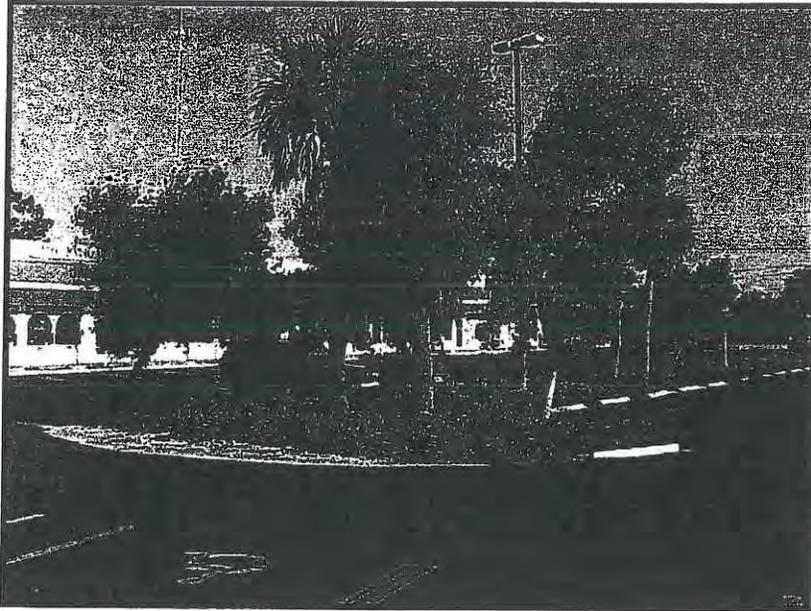
Mobile Cleaners Pilot Program: Final Report. 1997. Bay Area Stormwater Management Agencies Association (BASSMA) <http://www.basmaa.org/>

Pollution from Surface Cleaning Folder. 1996. Bay Area Stormwater Management Agencies Association (BASMAA) <http://www.basmaa.org/>

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program (URMP) -

<http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf>

# Parking/Storage Area Maintenance SC-43



## Description

Parking lots and storage areas can contribute a number of substances, such as trash, suspended solids, hydrocarbons, oil and grease, and heavy metals that can enter receiving waters through stormwater runoff or non-stormwater discharges. The following protocols are intended to prevent or reduce the discharge of pollutants from parking/storage areas and include using good housekeeping practices, following appropriate cleaning BMPs, and training employees.

## Approach

### Pollution Prevention

- Encourage alternative designs and maintenance strategies for impervious parking lots. (See New Development and Redevelopment BMP Handbook).
- Keep accurate maintenance logs to evaluate BMP implementation.

### Suggested Protocols

#### General

- Keep the parking and storage areas clean and orderly. Remove debris in a timely fashion.
- Allow sheet runoff to flow into biofilters (vegetated strip and swale) and/or infiltration devices.
- Utilize sand filters or oleophilic collectors for oily waste in low concentrations.

## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓



# **SC-43 Parking/Storage Area Maintenance**

---

- Arrange rooftop drains to prevent drainage directly onto paved surfaces.
- Design lot to include semi-permeable hardscape.

## *Controlling Litter*

- Post “No Littering” signs and enforce anti-litter laws.
- Provide an adequate number of litter receptacles.
- Clean out and cover litter receptacles frequently to prevent spillage.
- Provide trash receptacles in parking lots to discourage litter.
- Routinely sweep, shovel and dispose of litter in the trash.

## *Surface cleaning*

- Use dry cleaning methods (e.g. sweeping or vacuuming) to prevent the discharge of pollutants into the stormwater conveyance system.
- Establish frequency of public parking lot sweeping based on usage and field observations of waste accumulation.
- Sweep all parking lots at least once before the onset of the wet season.
- If water is used follow the procedures below:
  - Block the storm drain or contain runoff.
  - Wash water should be collected and pumped to the sanitary sewer or discharged to a pervious surface, do not allow wash water to enter storm drains.
  - Dispose of parking lot sweeping debris and dirt at a landfill.
- When cleaning heavy oily deposits:
  - Use absorbent materials on oily spots prior to sweeping or washing.
  - Dispose of used absorbents appropriately.

## *Surface Repair*

- Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
- Apply concrete, asphalt, and seal coat during dry weather to prevent contamination from contacting stormwater runoff.
- Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc., where applicable. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from these covered manholes and drains for proper disposal.

# **Parking/Storage Area Maintenance SC-43**

---

- Use only as much water as necessary for dust control, to avoid runoff.
- Catch drips from paving equipment that is not in use with pans or absorbent material placed under the machines. Dispose of collected material and absorbents properly.

## ***Inspection***

- Have designated personnel conduct inspections of the parking facilities and stormwater conveyance systems associated with them on a regular basis.
- Inspect cleaning equipment/sweepers for leaks on a regular basis.

## ***Training***

- Provide regular training to field employees and/or contractors regarding cleaning of paved areas and proper operation of equipment.
- Train employees and contractors in proper techniques for spill containment and cleanup.

## ***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup.
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

## ***Other Considerations***

- Limitations related to sweeping activities at large parking facilities may include high equipment costs, the need for sweeper operator training, and the inability of current sweeper technology to remove oil and grease.

## **Requirements**

### ***Costs***

Cleaning/sweeping costs can be quite large, construction and maintenance of stormwater structural controls can be quite expensive as well.

### ***Maintenance***

- Sweep parking lot to minimize cleaning with water.
- Clean out oil/water/sand separators regularly, especially after heavy storms.
- Clean parking facilities on a regular basis to prevent accumulated wastes and pollutants from being discharged into conveyance systems during rainy conditions.

# **SC-43 Parking/Storage Area Maintenance**

## **Supplemental Information**

### ***Further Detail of the BMP***

#### ***Surface Repair***

Apply concrete, asphalt, and seal coat during dry weather to prevent contamination from contacting stormwater runoff. Where applicable, cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from these covered manholes and drains for proper disposal. Use only as much water as necessary for dust control, to avoid runoff.

## **References and Resources**

<http://www.stormwatercenter.net/>

California's Nonpoint Source Program Plan <http://www.swrcb.ca.gov/nps/index.html>

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

#### **Orange County Stormwater Program**

[http://www.ocwatersheds.com/StormWater/swp\\_introduction.asp](http://www.ocwatersheds.com/StormWater/swp_introduction.asp)

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Pollution from Surface Cleaning Folder. 1996. Bay Area Stormwater Management Agencies Association (BASMAA) <http://www.basma.org>

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program (URMP)

<http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf>

## Description

Promote efficient and safe housekeeping practices (storage, use, and cleanup) when handling potentially harmful materials such as fertilizers, pesticides, cleaning solutions, paint products, automotive products, and swimming pool chemicals. Related information is provided in BMP fact sheets SC-11 Spill Prevention, Control & Cleanup and SC-34 Waste Handling & Disposal.

## Approach

### Pollution Prevention

- Purchase only the amount of material that will be needed for foreseeable use. In most cases this will result in cost savings in both purchasing and disposal. See SC-61 Safer Alternative Products for additional information.
- Be aware of new products that may do the same job with less environmental risk and for less or the equivalent cost. Total cost must be used here; this includes purchase price, transportation costs, storage costs, use related costs, clean up costs and disposal costs.

### Suggested Protocols

#### General

- Keep work sites clean and orderly. Remove debris in a timely fashion. Sweep the area.
- Dispose of wash water, sweepings, and sediments, properly.
- Recycle or dispose of fluids properly.
- Establish a daily checklist of office, yard and plant areas to confirm cleanliness and adherence to proper storage and security. Specific employees should be assigned specific inspection responsibilities and given the authority to remedy any problems found.
- Post waste disposal charts in appropriate locations detailing for each waste its hazardous nature (poison, corrosive, flammable), prohibitions on its disposal (dumpster, drain, sewer) and the recommended disposal method (recycle, sewer, burn, storage, landfill).
- Summarize the chosen BMPs applicable to your operation and post them in appropriate conspicuous places.

## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓



- Require a signed checklist from every user of any hazardous material detailing amount taken, amount used, amount returned and disposal of spent material.
- Do a before audit of your site to establish baseline conditions and regular subsequent audits to note any changes and whether conditions are improving or deteriorating.
- Keep records of water, air and solid waste quantities and quality tests and their disposition.
- Maintain a mass balance of incoming, outgoing and on hand materials so you know when there are unknown losses that need to be tracked down and accounted for.
- Use and reward employee suggestions related to BMPs, hazards, pollution reduction, work place safety, cost reduction, alternative materials and procedures, recycling and disposal.
- Have, and review regularly, a contingency plan for spills, leaks, weather extremes etc. Make sure all employees know about it and what their role is so that it comes into force automatically.

### ***Training***

- Train all employees, management, office, yard, manufacturing, field and clerical in BMPs and pollution prevention and make them accountable.
- Train municipal employees who handle potentially harmful materials in good housekeeping practices.
- Train personnel who use pesticides in the proper use of the pesticides. The California Department of Pesticide Regulation license pesticide dealers, certify pesticide applicators and conduct onsite inspections.
- Train employees and contractors in proper techniques for spill containment and cleanup. The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.

### ***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup.
- Keep your Spill Prevention Control and Countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

### ***Other Considerations***

- There are no major limitations to this best management practice.
- There are no regulatory requirements to this BMP. Existing regulations already require municipalities to properly store, use, and dispose of hazardous materials

## Requirements

### Costs

- Minimal cost associated with this BMP. Implementation of good housekeeping practices may result in cost savings as these procedures may reduce the need for more costly BMPs.

### Maintenance

- Ongoing maintenance required to keep a clean site. Level of effort is a function of site size and type of activities.

## Supplemental Information

### Further Detail of the BMP

- The California Integrated Waste Management Board's Recycling Hotline, 1-800-553-2962, provides information on household hazardous waste collection programs and facilities.

### Examples

There are a number of communities with effective programs. The most pro-active include Santa Clara County and the City of Palo Alto, the City and County of San Francisco, and the Municipality of Metropolitan Seattle (Metro).

## References and Resources

British Columbia Lake Stewardship Society. Best Management Practices to Protect Water Quality from Non-Point Source Pollution. March 2000.

<http://www.nalms.org/bclss/bmphome.html#bmp>

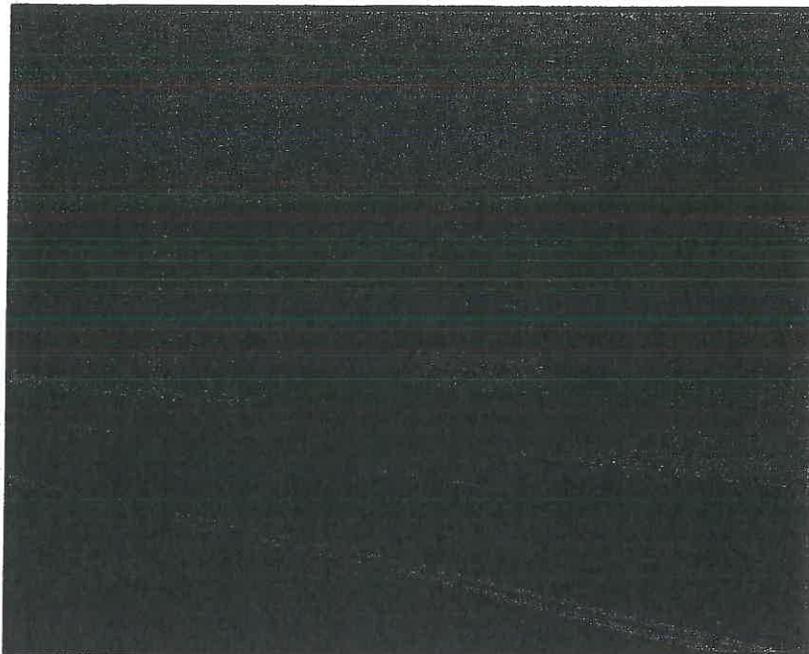
King County Stormwater Pollution Control Manual - <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities, Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July, 1998, Revised by California Coastal Commission, February 2002.

Orange County Stormwater Program

[http://www.ocwatersheds.com/stormwater/swp\\_introduction.asp](http://www.ocwatersheds.com/stormwater/swp_introduction.asp)

San Mateo STOPPP - (<http://stoppp.tripod.com/bmp.html>)



## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Targeted Constituents

Sediment	✓
Nutrients	
Trash	✓
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓

### Description

Streets, roads, and highways are significant sources of pollutants in stormwater discharges, and operation and maintenance (O&M) practices, if not conducted properly, can contribute to the problem. Stormwater pollution from roadway and bridge maintenance should be addressed on a site-specific basis. Use of the procedures outlined below, that address street sweeping and repair, bridge and structure maintenance, and unpaved roads will reduce pollutants in stormwater.

### Approach

#### *Pollution Prevention*

- Use the least toxic materials available (e.g. water based paints, gels or sprays for graffiti removal)
- Recycle paint and other materials whenever possible.
- Enlist the help of citizens to keep yard waste, used oil, and other wastes out of the gutter.

#### *Suggested Protocols*

##### *Street Sweeping and Cleaning*

- Maintain a consistent sweeping schedule. Provide minimum monthly sweeping of curbed streets.
- Perform street cleaning during dry weather if possible.



- Avoid wet cleaning or flushing of street, and utilize dry methods where possible.
- Consider increasing sweeping frequency based on factors such as traffic volume, land use, field observations of sediment and trash accumulation, proximity to water courses, etc. For example:
  - Increase the sweeping frequency for streets with high pollutant loadings, especially in high traffic and industrial areas.
  - Increase the sweeping frequency just before the wet season to remove sediments accumulated during the summer.
  - Increase the sweeping frequency for streets in special problem areas such as special events, high litter or erosion zones.
- Maintain cleaning equipment in good working condition and purchase replacement equipment as needed. Old sweepers should be replaced with new technologically advanced sweepers (preferably regenerative air sweepers) that maximize pollutant removal.
- Operate sweepers at manufacturer requested optimal speed levels to increase effectiveness.
- To increase sweeping effectiveness consider the following:
  - Institute a parking policy to restrict parking in problematic areas during periods of street sweeping.
  - Post permanent street sweeping signs in problematic areas; use temporary signs if installation of permanent signs is not possible.
  - Develop and distribute flyers notifying residents of street sweeping schedules.
- Regularly inspect vehicles and equipment for leaks, and repair immediately.
- If available use vacuum or regenerative air sweepers in the high sediment and trash areas (typically industrial/commercial).
- Keep accurate logs of the number of curb-miles swept and the amount of waste collected.
- Dispose of street sweeping debris and dirt at a landfill.
- Do not store swept material along the side of the street or near a storm drain inlet.
- Keep debris storage to a minimum during the wet season or make sure debris piles are contained (e.g. by berming the area) or covered (e.g. with tarps or permanent covers).

### *Street Repair and Maintenance*

#### *Pavement marking*

- Schedule pavement marking activities for dry weather.

- Develop paint handling procedures for proper use, storage, and disposal of paints.
- Transfer and load paint and hot thermoplastic away from storm drain inlets.
- Provide drop cloths and drip pans in paint mixing areas.
- Properly maintain application equipment.
- Street sweep thermoplastic grindings. Yellow thermoplastic grindings may require special handling as they may contain lead.
- Paints containing lead or tributyltin are considered a hazardous waste and must be disposed of properly.
- Use water based paints whenever possible. If using water based paints, clean the application equipment in a sink that is connected to the sanitary sewer.
- Properly store leftover paints if they are to be kept for the next job, or dispose of properly.

### *Concrete installation and repair*

- Schedule asphalt and concrete activities for dry weather.
- Take measures to protect any nearby storm drain inlets and adjacent watercourses, prior to breaking up asphalt or concrete (e.g. place sand bags around inlets or work areas).
- Limit the amount of fresh concrete or cement mortar mixed, mix only what is needed for the job.
- Store concrete materials under cover, away from drainage areas. Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and runoff.
- Return leftover materials to the transit mixer. Dispose of small amounts of hardened excess concrete, grout, and mortar in the trash.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose in the trash.
- When making saw cuts in pavement, use as little water as possible and perform during dry weather. Cover each storm drain inlet completely with filter fabric or plastic during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets. After the liquid drains or evaporates, shovel or vacuum the slurry residue from the pavement or gutter and remove from site. Alternatively, a small onsite vacuum may be used to pick up the slurry as this will prohibit slurry from reaching storm drain inlets.
- Wash concrete trucks off site or in designated areas on site designed to preclude discharge of wash water to drainage system.

*Patching, resurfacing, and surface sealing*

- Schedule patching, resurfacing and surface sealing for dry weather.
- Stockpile materials away from streets, gutter areas, storm drain inlets or watercourses. During wet weather, cover stockpiles with plastic tarps or berm around them if necessary to prevent transport of materials in runoff.
- Pre-heat, transfer or load hot bituminous material away from drainage systems or watercourses.
- Where applicable, cover and seal nearby storm drain inlets (with waterproof material or mesh) and maintenance holes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from covered maintenance holes and storm drain inlets when the job is complete.
- Prevent excess material from exposed aggregate concrete or similar treatments from entering streets or storm drain inlets. Designate an area for clean up and proper disposal of excess materials.
- Use only as much water as necessary for dust control, to avoid runoff.
- Sweep, never hose down streets to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquid in storm drains.
- Catch drips from paving equipment that is not in use with pans or absorbent material placed under the machines. Dispose of collected material and absorbents properly.

*Equipment cleaning maintenance and storage*

- Inspect equipment daily and repair any leaks. Place drip pans or absorbent materials under heavy equipment when not in use.
- Perform major equipment repairs at the corporation yard, when practical.
- If refueling or repairing vehicles and equipment must be done onsite, use a location away from storm drain inlets and watercourses.
- Clean equipment including sprayers, sprayer paint supply lines, patch and paving equipment, and mud jacking equipment at the end of each day. Clean in a sink or other area (e.g. vehicle wash area) that is connected to the sanitary sewer.

*Bridge and Structure Maintenance**Paint and Paint Removal*

- Transport paint and materials to and from job sites in containers with secure lids and tied down to the transport vehicle.
- Do not transfer or load paint near storm drain inlets or watercourses.

- Test and inspect spray equipment prior to starting to paint. Tighten all hoses and connections and do not overfill paint container.
- Plug nearby storm drain inlets prior to starting painting where there is significant risk of a spill reaching storm drains. Remove plugs when job is completed.
- If sand blasting is used to remove paint, cover nearby storm drain inlets prior to starting work.
- Perform work on a maintenance traveler or platform, or use suspended netting or tarps to capture paint, rust, paint removing agents, or other materials, to prevent discharge of materials to surface waters if the bridge crosses a watercourse. If sanding, use a sander with a vacuum filter bag.
- Capture all clean-up water, and dispose of properly.
- Recycle paint when possible (e.g. paint may be used for graffiti removal activities). Dispose of unused paint at an appropriate household hazardous waste facility.

### *Graffiti Removal*

- Schedule graffiti removal activities for dry weather.
- Protect nearby storm drain inlets prior to removing graffiti from walls, signs, sidewalks, or other structures needing graffiti abatement. Clean up afterwards by sweeping or vacuuming thoroughly, and/or by using absorbent and properly disposing of the absorbent.
- When graffiti is removed by painting over, implement the procedures under Painting and Paint Removal above.
- Direct runoff from sand blasting and high pressure washing (with no cleaning agents) into a landscaped or dirt area. If such an area is not available, filter runoff through an appropriate filtering device (e.g. filter fabric) to keep sand, particles, and debris out of storm drains.
- If a graffiti abatement method generates wash water containing a cleaning compound (such as high pressure washing with a cleaning compound), plug nearby storm drains and vacuum/pump wash water to the sanitary sewer.
- Consider using a waterless and non-toxic chemical cleaning method for graffiti removal (e.g. gels or spray compounds).

### *Repair Work*

- Prevent concrete, steel, wood, metal parts, tools, or other work materials from entering storm drains or watercourses.
- Thoroughly clean up the job site when the repair work is completed.
- When cleaning guardrails or fences follow the appropriate surface cleaning methods (depending on the type of surface) outlined in SC-71 Plaza & Sidewalk Cleaning fact sheet.

- If painting is conducted, follow the painting and paint removal procedures above.
- If graffiti removal is conducted, follow the graffiti removal procedures above.
- If construction takes place, see the Construction Activity BMP Handbook.
- Recycle materials whenever possible.

#### *Unpaved Roads and Trails*

- Stabilize exposed soil areas to prevent soil from eroding during rain events. This is particularly important on steep slopes.
- For roadside areas with exposed soils, the most cost-effective choice is to vegetate the area, preferably with a mulch or binder that will hold the soils in place while the vegetation is establishing. Native vegetation should be used if possible.
- If vegetation cannot be established immediately, apply temporary erosion control mats/blankets; a comma straw, or gravel as appropriate.
- If sediment is already eroded and mobilized in roadside areas, temporary controls should be installed. These may include: sediment control fences, fabric-covered triangular dikes, gravel-filled burlap bags, biobags, or hay bales staked in place.

#### *Non-Stormwater Discharges*

Field crews should be aware of non-stormwater discharges as part of their ongoing street maintenance efforts.

- Refer to SC-10 Non-Stormwater Discharges
- Identify location, time and estimated quantity of discharges.
- Notify appropriate personnel.

#### *Training*

- Train employees regarding proper street sweeping operation and street repair and maintenance.
- Instruct employees and subcontractors to ensure that measures to reduce the stormwater impacts of roadway/bridge maintenance are being followed.
- Require engineering staff and/or consulting A/E firms to address stormwater quality in new bridge designs or existing bridge retrofits.
- Use a training log or similar method to document training.
- Train employees on proper spill containment and clean up, and in identifying non-stormwater discharges.

## ***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup.
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

## ***Other Considerations***

- Densely populated areas or heavily used streets may require parking regulations to clear streets for cleaning.
- No currently available conventional sweeper is effective at removing oil and grease. Mechanical sweepers are not effective at removing finer sediments.
- Limitations may arise in the location of new bridges. The availability and cost of land and other economic and political factors may dictate where the placement of a new bridge will occur. Better design of the bridge to control runoff is required if it is being placed near sensitive waters.

## **Requirements**

### ***Costs***

- The maintenance of local roads and bridges is already a consideration of most community public works or transportation departments. Therefore, the cost of pollutant reducing management practices will involve the training and equipment required to implement these new practices.
- The largest expenditures for street sweeping programs are in staffing and equipment. The capital cost for a conventional street sweeper is between \$60,000 and \$120,000. Newer technologies might have prices approaching \$180,000. The average useful life of a conventional sweeper is about four years, and programs must budget for equipment replacement. Sweeping frequencies will determine equipment life, so programs that sweep more often should expect to have a higher cost of replacement.
- A street sweeping program may require the following.
  - Sweeper operators, maintenance, supervisory, and administrative personnel are required.
  - Traffic control officers may be required to enforce parking restrictions.
  - Skillful design of cleaning routes is required for program to be productive.
  - Arrangements must be made for disposal of collected wastes.

- If investing in newer technologies, training for operators must be included in operation and maintenance budgets. Costs for public education are small, and mostly deal with the need to obey parking restrictions and litter control. Parking tickets are an effective reminder to obey parking rules, as well as being a source of revenue.

***Maintenance***

- Not applicable

**Supplemental Information*****Further Detail of the BMP******Street sweeping***

There are advantages and disadvantages to the two common types of sweepers. The best choice depends on your specific conditions. Many communities find it useful to have a compliment of both types in their fleet.

**Mechanical Broom Sweepers** - More effective at picking up large debris and cleaning wet streets. Less costly to purchase and operate. Create more airborne dust.

**Vacuum Sweepers** - More effective at removing fine particles and associated heavy metals. Ineffective at cleaning wet streets. Noisier than mechanical broom sweepers which may restrict areas or times of operation. May require an advance vehicle to remove large debris.

**Street Flushers** - Not affected by biggest interference to cleaning, parked cars. May remove finer sediments, moving them toward the gutter and stormwater inlets. For this reason, flushing fell out of favor and is now used primarily after sweeping. Flushing may be effective for combined sewer systems. Presently street flushing is not allowed under most NPDES permits.

***Cross-Media Transfer of Pollutants***

The California Air Resources Board (ARB) has established state ambient air quality standards including a standard for respirable particulate matter (less than or equal to 10 microns in diameter, symbolized as PM<sub>10</sub>). In the effort to sweep up finer sediments to remove attached heavy metals, municipalities should be aware that fine dust, that cannot be captured by the sweeping equipment and becomes airborne, could lead to issues of worker and public safety.

***Bridges***

Bridges that carry vehicular traffic generate some of the more direct discharges of runoff to surface waters. Bridge scupper drains cause a direct discharge of stormwater into receiving waters and have been shown to carry relatively high concentrations of pollutants. Bridge maintenance also generates wastes that may be either directly deposited to the water below or carried to the receiving water by stormwater. The following steps will help reduce the stormwater impacts of bridge maintenance:

- Site new bridges so that significant adverse impacts to wetlands, sensitive areas, critical habitat, and riparian vegetation are minimized.

- Design new bridges to avoid the use of scupper drains and route runoff to land for treatment control. Existing scupper drains should be cleaned on a regular basis to avoid sediment/debris accumulation.
- Reduce the discharge of pollutants to surface waters during maintenance by using suspended traps, vacuums, or booms in the water to capture paint, rust, and paint removing agents. Many of these wastes may be hazardous. Properly dispose of this waste by referring to CA21 (Hazardous Waste Management) in the Construction Handbook.
- Train employees and subcontractors to reduce the discharge of wastes during bridge maintenance.

### *De-icing*

- Do not over-apply deicing salt and sand, and routinely calibrate spreaders.
- Near reservoirs, restrict the application of deicing salt and redirect any runoff away from reservoirs.
- Consider using alternative deicing agents (less toxic, biodegradable, etc.).

### **References and Resources**

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Orange County Stormwater Program

[http://www.ocwatersheds.com/stormwater/swp\\_introduction.asp](http://www.ocwatersheds.com/stormwater/swp_introduction.asp)

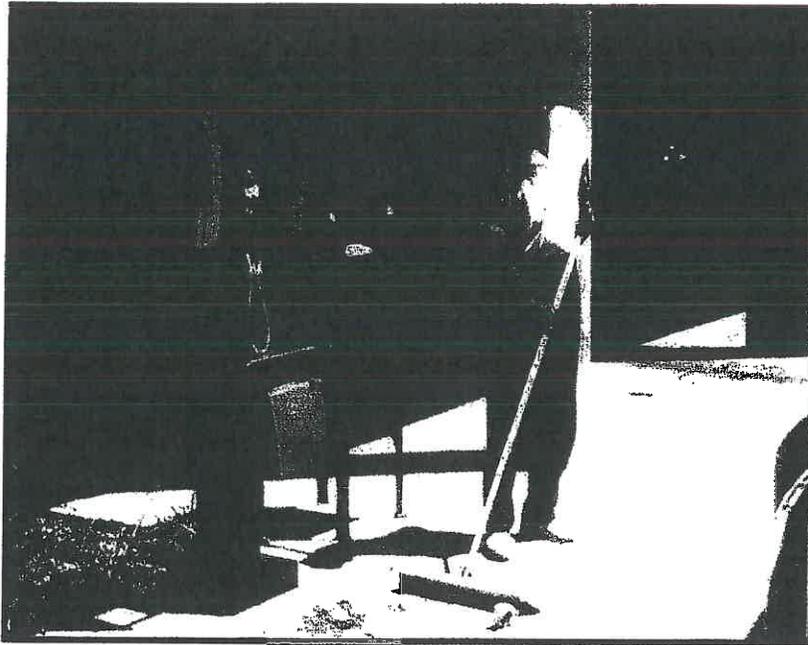
Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.

Santa Clara Valley Urban Runoff Pollution Prevention Program. 2001. Fresh Concrete and Mortar Application Best Management Practices for the Construction Industry. June.

Santa Clara Valley Urban Runoff Pollution Prevention Program. 2001. Roadwork and Paving Best Management Practices for the Construction Industry. June.

United States Environmental Protection Agency (USEPA). 2002. Pollution Prevention/Good Housekeeping for Municipal Operations Roadway and Bridge Maintenance. On-line [http://www.epa.gov/npdes/menuoffbmps/poll\\_13.htm](http://www.epa.gov/npdes/menuoffbmps/poll_13.htm)



## Description

Pollutants on sidewalks and other pedestrian traffic areas and plazas are typically due to littering and vehicle use. This fact sheet describes good housekeeping practices that can be incorporated into the municipality's existing cleaning and maintenance program.

## Approach

### *Pollution Prevention*

- Use dry cleaning methods whenever practical for surface cleaning activities.
- Use the least toxic materials available (e.g. water based paints, gels or sprays for graffiti removal).

### *Suggested Protocols*

#### *Surface Cleaning*

- Regularly broom (dry) sweep sidewalk, plaza and parking lot areas to minimize cleaning with water.
- Dry cleanup first (sweep, collect, and dispose of debris and trash) when cleaning sidewalks or plazas, then wash with or without soap.
- Block the storm drain or contain runoff when cleaning with water. Discharge wash water to landscaping or collect water and pump to a tank or discharge to sanitary sewer if allowed. (Permission may be required from local sanitation district.)

## Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓



- Block the storm drain or contain runoff when washing parking areas, driveways or drive-throughs. Use absorbents to pick up oil; then dry sweep. Clean with or without soap. Collect water and pump to a tank or discharge to sanitary sewer if allowed. Street Repair and Maintenance.

#### *Graffiti Removal*

- Avoid graffiti abatement activities during rain events.
- Implement the procedures under Painting and Paint Removal in SC-70 Roads, Streets, and Highway Operation and Maintenance fact sheet when graffiti is removed by painting over.
- Direct runoff from sand blasting and high pressure washing (with no cleaning agents) into a dirt or landscaped area after treating with an appropriate filtering device.
- Plug nearby storm drain inlets and vacuum/pump wash water to the sanitary sewer if authorized to do so if a graffiti abatement method generates wash water containing a cleaning compound (such as high pressure washing with a cleaning compound). Ensure that a non-hazardous cleaning compound is used or dispose as hazardous waste, as appropriate.

#### *Surface Removal and Repair*

- Schedule surface removal activities for dry weather if possible.
- Avoid creating excess dust when breaking asphalt or concrete.
- Take measures to protect nearby storm drain inlets prior to breaking up asphalt or concrete (e.g. place hay bales or sand bags around inlets). Clean afterwards by sweeping up as much material as possible.
- Designate an area for clean up and proper disposal of excess materials.
- Remove and recycle as much of the broken pavement as possible to avoid contact with rainfall and stormwater runoff.
- When making saw cuts in pavement, use as little water as possible. Cover each storm drain inlet completely with filter fabric during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets. After the liquid drains or evaporates, shovel or vacuum the slurry residue from the pavement or gutter and remove from site.
- Always dry sweep first to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquid in storm drains. Once dry sweeping is complete, the area may be hosed down if needed. Wash water should be directed to landscaping or collected and pumped to the sanitary sewer if allowed.

#### *Concrete Installation and Repair*

- Schedule asphalt and concrete activities for dry weather.

- Take measures to protect any nearby storm drain inlets and adjacent watercourses, prior to breaking up asphalt or concrete (e.g. place san bags around inlets or work areas).
- Limit the amount of fresh concrete or cement mortar mixed, mix only what is needed for the job.
- Store concrete materials under cover, away from drainage areas. Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and runoff.
- Return leftover materials to the transit mixer. Dispose of small amounts of hardened excess concrete, grout, and mortar in the trash.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose in the trash.
- Protect applications of fresh concrete from rainfall and runoff until the material has dried.
- Do not allow excess concrete to be dumped onsite, except in designated areas.
- Wash concrete trucks off site or in designated areas on site designed to preclude discharge of wash water to drainage system.

## *Controlling Litter*

- Post “No Littering” signs and enforce anti-litter laws.
- Provide litter receptacles in busy, high pedestrian traffic areas of the community, at recreational facilities, and at community events.
- Cover litter receptacles and clean out frequently to prevent leaking/spillage or overflow.
- Clean parking lots on a regular basis with a street sweeper.

## *Training*

- Provide regular training to field employees and/or contractors regarding surface cleaning and proper operation of equipment.
- Train employee and contractors in proper techniques for spill containment and cleanup.
- Use a training log or similar method to document training.

## *Spill Response and Prevention*

- Refer to SC-11, Spill Prevention, Control & Cleanup.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

***Other Considerations***

- Limitations related to sweeping activities at large parking facilities may include current sweeper technology to remove oil and grease.
- Surface cleaning activities that require discharges to the local sewerage agency will require coordination with the agency.
- Arrangements for disposal of the swept material collected must be made, as well as accurate tracking of the areas swept and the frequency of sweeping.

**Requirements*****Costs***

- The largest expenditures for sweeping and cleaning of sidewalks, plazas, and parking lots are in staffing and equipment. Sweeping of these areas should be incorporated into street sweeping programs to reduce costs.

***Maintenance***

Not applicable

**Supplemental Information*****Further Detail of the BMP***

Community education, such as informing residents about their options for recycling and waste disposal, as well as the consequences of littering, can instill a sense of citizen responsibility and potentially reduce the amount of maintenance required by the municipality.

Additional BMPs that should be considered for parking lot areas include:

- Allow sheet runoff to flow into biofilters (vegetated strip and swale) and infiltration devices.
- Utilize sand filters or oleophilic collectors for oily waste in low concentrations.
- Arrange rooftop drains to prevent drainage directly onto paved surfaces.
- Design lot to include semi-permeable hardscape.
- Structural BMPs such as storm drain inlet filters can be very effective in reducing the amount of pollutants discharged from parking facilities during periods of rain.

**References and Resources**

Bay Area Stormwater Management Agencies Association (BASMAA). 1996. Pollution From Surface Cleaning Folder <http://www.basmaa.org>

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Orange County Stormwater Program

[http://www.ocwatersheds.com/stormwater/swp\\_introduction.asp](http://www.ocwatersheds.com/stormwater/swp_introduction.asp)

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.

Santa Clara Valley Urban Runoff Pollution Prevention Program. Maintenance Best Management Practices for the Construction Industry. Brochures: Landscaping, Gardening, and Pool; Roadwork and Paving; and Fresh Concrete and Mortar Application. June 2001.

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Plan. 2001. Municipal Activities Model Program Guidance. November.

## Description

The primary pollutant of concern in municipal swimming pool water is chlorine or chloramine used as a disinfectant. This water, if discharged to the storm drain system, can be toxic to aquatic life. In lakes, lagoons, and fountains, the pollutants of concern are chemical algaecides that are added to control algae mainly for aesthetic reasons (visual and odor). Following the procedures noted in this fact sheet will reduce the pollutants in this discharge.

## Approach

### Pollution Prevention

- Prevent algae problems with regular cleaning, consistent adequate chlorine levels, and well-maintained water filtration and circulation systems.
- Manage pH and water hardness to minimize corrosion of copper pipes.

### Suggested Protocols

#### Pools and Fountains

- Do not use copper-based algaecides. Control algae with chlorine or other alternatives, such as sodium bromide.
- Do not discharge water to a street or storm drain when draining pools or fountains; discharge to the sanitary sewer if permitted to do so. If water is dechlorinated with a neutralizing chemical or by allowing chlorine to dissipate for a few days (do not use the facility during this time), the water may be recycled/reused by draining it gradually onto a landscaped area. Water must be tested prior to discharge to ensure that chlorine is not present.
- Prevent backflow if draining a pool to the sanitary sewer by maintaining an "air gap" between the discharge line and the sewer line (do not seal the connection between the hose and sewer line). Be sure to call the local wastewater treatment plant for further guidance on flow rate restrictions, backflow prevention, and handling special cleaning waste (such as acid wash). Discharge flows should be kept to the low levels typically possible through a garden hose. Higher flow rates may be prohibited by local ordinance.
- Provide drip pans or buckets beneath drain pipe connections to catch leaks. This will be especially pertinent if pool or spa water that has not been dechlorinated is pumped through piping to a discharge location.

## Objectives

- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	
Bacteria	✓
Oil and Grease	
Organics	✓
Oxygen Demanding	✓



# SC-72      Fountains & Pools Maintenance

---

- Never clean a filter in the street or near a storm drain.
- Rinse cartridge filters onto a dirt area, and spade filter residue into soil.
- Backwash diatomaceous earth filters onto dirt. Dispose of spent diatomaceous earth in the garbage. Spent diatomaceous earth cannot be discharged to surface waters, storm drainage systems, septic systems, or on the ground.
- If there is not a suitable dirt area discharge filter backwash or rinsewater to the sanitary sewer if permitted to do so by the local sewerage agency.

## *Lakes and Lagoons*

- Reduce fertilizer use in areas around the water body. High nitrogen fertilizers can produce excess growth requiring more frequent mowing or trimming, and may contribute to excessive algae growth.
- To control bacteria, discourage the public from feeding birds and fish (i.e. place signs that prohibit feeding of waterfowl).
- Consider introducing fish species that consume algae. Contact the California Department of Fish and Game for more information on this issue.
- Mechanically remove pond scum (blue-green algae) using a 60 micron net.
- Educate the public on algae and that no controls are necessary for certain types of algae that are beneficial to the water body.
- Control erosion by doing the following:
  - Maintain vegetative cover on banks to prevent soil erosion. Apply mulch or leave clippings to serve as additional cover for soil stabilization and to reduce the velocity of stormwater runoff.
  - Areas should be designed (sloped) to prevent runoff and erosion and to promote better irrigation practices.
  - Provide energy dissipaters (e.g. riprap) along banks to minimize potential for erosion.
  - Confine excavated materials to surfaces away from lakes. Material must be covered if rain is expected.
- Conduct inspections to detect illegal dumping of clippings/cuttings in or near a lake. Materials found should be picked up and properly disposed of.
- Avoid landscape wastes in and around lakes should be avoided by either using bagging equipment or by manually picking up the material. Collect trash and debris from within water bodies where feasible
- Provide and maintain trash receptacles near recreational water bodies to hold refuse generated by the public.

- Increase trash collection during peak visitation months (generally June, July and August).

### ***Training***

- Train maintenance personnel to test chlorine levels and to apply neutralizing chemicals.
- Train personnel regarding proper maintenance of pools, ponds and lakes.

### ***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

### ***Other Considerations***

- Managers of pools located in sensitive areas or adjacent to shorelines should check with the appropriate authorities to determine if code requirements apply.
- Cleanup activities at lakes and lagoons may create a slight disturbance for local aquatic species. If the lake is recognized as a wetland, many activities, including maintenance, may be subject to regulation and permitting.

### **Requirements**

#### ***Costs***

- The maintenance of pools and lakes is already a consideration of most municipal public works departments. Therefore the cost associated with this BMP is minimal and only reflects an increase in employee training and public outreach.

#### ***Maintenance***

Not applicable

### **Supplemental Information**

#### ***Further Detail of the BMP***

When dredging is conducted, adhere to the following:

- Dredge with shovels when laying/maintaining pipes.
- To determine amount to dredge, determine rate of volume loss due to sediments.
- For large lakes, dredge every 10 years.
- When dredging small lakes, drain lake.
- When dredging large lakes, use vacuum equipment.
- After dredging test sediment piles for proper disposal. Dredged sediment can be used as fill, or may have to be land filled.

# SC-72      Fountains & Pools Maintenance

---

## References and Resources

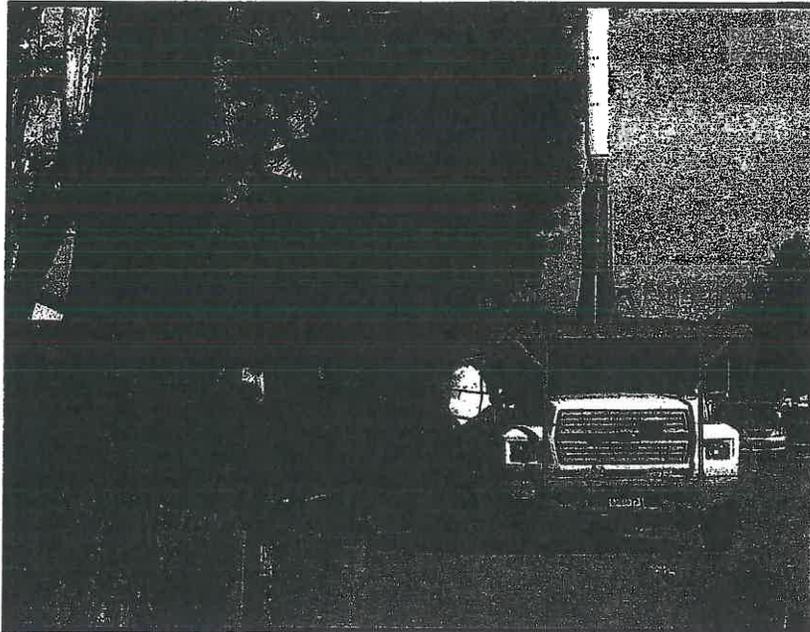
King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. 1995. King County Surface Water Management. July. On-line:  
<http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Los Angeles County Stormwater Quality. Public Agency Activities Model Program. On-line:  
[http://ladpw.org/wmd/npdes/public\\_TC.cfm](http://ladpw.org/wmd/npdes/public_TC.cfm)

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Orange County Stormwater Program  
[http://www.ocwatersheds.com/StormWater/swp\\_introduction.asp](http://www.ocwatersheds.com/StormWater/swp_introduction.asp)

Santa Clara Valley Urban Runoff Pollution Prevention Program. Maintenance Best Management Practices for the Construction Industry. Brochures: Landscaping, Gardening, and Pool; Roadwork and Paving; and Fresh Concrete and Mortar Application. June 2001.



## Description

Landscape maintenance activities include vegetation removal; herbicide and insecticide application; fertilizer application; watering; and other gardening and lawn care practices. Vegetation control typically involves a combination of chemical (herbicide) application and mechanical methods. All of these maintenance practices have the potential to contribute pollutants to the storm drain system. The major objectives of this BMP are to minimize the discharge of pesticides, herbicides and fertilizers to the storm drain system and receiving waters; prevent the disposal of landscape waste into the storm drain system by collecting and properly disposing of clippings and cuttings, and educating employees and the public.

## Approach

### Pollution Prevention

- Implement an integrated pest management (IPM) program. IPM is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools.
- Choose low water using flowers, trees, shrubs, and groundcover.
- Consider alternative landscaping techniques such as naturescaping and xeriscaping.
- Conduct appropriate maintenance (i.e. properly timed fertilizing, weeding, pest control, and pruning) to help preserve the landscapes water efficiency.

## Objectives

- Contain
- Educate
- Reduce/Minimize
- Product Substitution

## Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	
Bacteria	
Oil and Grease	
Organics	
Oxygen Demanding	✓



- Consider grass cycling (grass cycling is the natural recycling of grass by leaving the clippings on the lawn when mowing. Grass clippings decompose quickly and release valuable nutrients back into the lawn).

### ***Suggested Protocols***

#### ***Mowing, Trimming, and Weeding***

- Whenever possible use mechanical methods of vegetation removal (e.g. mowing with tractor-type or push mowers, hand cutting with gas or electric powered weed trimmers) rather than applying herbicides. Use hand weeding where practical.
- Avoid loosening the soil when conducting mechanical or manual weed control, this could lead to erosion. Use mulch or other erosion control measures when soils are exposed.
- Performing mowing at optimal times. Mowing should not be performed if significant rain events are predicted.
- Mulching mowers may be recommended for certain flat areas. Other techniques may be employed to minimize mowing such as selective vegetative planting using low maintenance grasses and shrubs.
- Collect lawn and garden clippings, pruning waste, tree trimmings, and weeds. Chip if necessary, and compost or dispose of at a landfill (see waste management section of this fact sheet).
- Place temporarily stockpiled material away from watercourses, and berm or cover stockpiles to prevent material releases to storm drains.

### ***Planting***

- Determine existing native vegetation features (location, species, size, function, importance) and consider the feasibility of protecting them. Consider elements such as their effect on drainage and erosion, hardiness, maintenance requirements, and possible conflicts between preserving vegetation and the resulting maintenance needs.
- Retain and/or plant selected native vegetation whose features are determined to be beneficial, where feasible. Native vegetation usually requires less maintenance (e.g., irrigation, fertilizer) than planting new vegetation.
- Consider using low water use groundcovers when planting or replanting.

### ***Waste Management***

- Compost leaves, sticks, or other collected vegetation or dispose of at a permitted landfill. Do not dispose of collected vegetation into waterways or storm drainage systems.
- Place temporarily stockpiled material away from watercourses and storm drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system.
- Reduce the use of high nitrogen fertilizers that produce excess growth requiring more frequent mowing or trimming.

- Avoid landscape wastes in and around storm drain inlets by either using bagging equipment or by manually picking up the material.

## ***Irrigation***

- Where practical, use automatic timers to minimize runoff.
- Use popup sprinkler heads in areas with a lot of activity or where there is a chance the pipes may be broken. Consider the use of mechanisms that reduce water flow to sprinkler heads if broken.
- Ensure that there is no runoff from the landscaped area(s) if re-claimed water is used for irrigation.
- If bailing of muddy water is required (e.g. when repairing a water line leak), do not put it in the storm drain; pour over landscaped areas.
- Irrigate slowly or pulse irrigate to prevent runoff and then only irrigate as much as is needed.
- Apply water at rates that do not exceed the infiltration rate of the soil.

## ***Fertilizer and Pesticide Management***

- Utilize a comprehensive management system that incorporates integrated pest management (IPM) techniques. There are many methods and types of IPM, including the following:
  - Mulching can be used to prevent weeds where turf is absent, fencing installed to keep rodents out, and netting used to keep birds and insects away from leaves and fruit.
  - Visible insects can be removed by hand (with gloves or tweezers) and placed in soapy water or vegetable oil. Alternatively, insects can be sprayed off the plant with water or in some cases vacuumed off of larger plants.
  - Store-bought traps, such as species-specific, pheromone-based traps or colored sticky cards, can be used.
  - Slugs can be trapped in small cups filled with beer that are set in the ground so the slugs can get in easily.
  - In cases where microscopic parasites, such as bacteria and fungi, are causing damage to plants, the affected plant material can be removed and disposed of (pruning equipment should be disinfected with bleach to prevent spreading the disease organism).
  - Small mammals and birds can be excluded using fences, netting, tree trunk guards.
  - Beneficial organisms, such as bats, birds, green lacewings, ladybugs, praying mantis, ground beetles, parasitic nematodes, trichogramma wasps, seed head weevils, and spiders that prey on detrimental pest species can be promoted.
- Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers and pesticides and training of applicators and pest control advisors.

- Use pesticides only if there is an actual pest problem (not on a regular preventative schedule).
- Do not use pesticides if rain is expected. Apply pesticides only when wind speeds are low (less than 5 mph).
- Do not mix or prepare pesticides for application near storm drains.
- Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the pest.
- Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.
- Fertilizers should be worked into the soil rather than dumped or broadcast onto the surface.
- Calibrate fertilizer and pesticide application equipment to avoid excessive application.
- Periodically test soils for determining proper fertilizer use.
- Sweep pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.
- Purchase only the amount of pesticide that you can reasonably use in a given time period (month or year depending on the product).
- Triple rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- Dispose of empty pesticide containers according to the instructions on the container label.

### *Inspection*

- Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring. Minimize excess watering, and repair leaks in the irrigation system as soon as they are observed.
- Inspect pesticide/fertilizer equipment and transportation vehicles daily.

### *Training*

- Educate and train employees on use of pesticides and in pesticide application techniques to prevent pollution. Pesticide application must be under the supervision of a California qualified pesticide applicator.
- Train/encourage municipal maintenance crews to use IPM techniques for managing public green areas.
- Annually train employees within departments responsible for pesticide application on the appropriate portions of the agency's IPM Policy, SOPs, and BMPs, and the latest IPM techniques.

- Employees who are not authorized and trained to apply pesticides should be periodically (at least annually) informed that they cannot use over-the-counter pesticides in or around the workplace.
- Use a training log or similar method to document training.

### ***Spill Response and Prevention***

- Refer to SC-11, Spill Prevention, Control & Cleanup
- Have spill cleanup materials readily available and in a known location
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

### ***Other Considerations***

- The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling and specify training, annual refresher, and testing requirements. The regulations generally cover: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures; and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs. All public agency employees who apply pesticides and herbicides in "agricultural use" areas such as parks, golf courses, rights-of-way and recreation areas should be properly certified in accordance with state regulations. Contracts for landscape maintenance should include similar requirements.
- All employees who handle pesticides should be familiar with the most recent material safety data sheet (MSDS) files.
- Municipalities do not have the authority to regulate the use of pesticides by school districts, however the California Healthy Schools Act of 2000 (AB 2260) has imposed requirements on California school districts regarding pesticide use in schools. Posting of notification prior to the application of pesticides is now required, and IPM is stated as the preferred approach to pest management in schools.

### **Requirements**

#### ***Costs***

Additional training of municipal employees will be required to address IPM techniques and BMPs. IPM methods will likely increase labor cost for pest control which may be offset by lower chemical costs.

#### ***Maintenance***

Not applicable

**Supplemental Information*****Further Detail of the BMP******Waste Management***

Composting is one of the better disposal alternatives if locally available. Most municipalities either have or are planning yard waste composting facilities as a means of reducing the amount of waste going to the landfill. Lawn clippings from municipal maintenance programs as well as private sources would probably be compatible with most composting facilities

***Contractors and Other Pesticide Users***

Municipal agencies should develop and implement a process to ensure that any contractor employed to conduct pest control and pesticide application on municipal property engages in pest control methods consistent with the IPM Policy adopted by the agency. Specifically, municipalities should require contractors to follow the agency's IPM policy, SOPs, and BMPs; provide evidence to the agency of having received training on current IPM techniques when feasible; provide documentation of pesticide use on agency property to the agency in a timely manner.

**References and Resources**

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. 1995. King County Surface Water Management. July. On-line:

<http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Los Angeles County Stormwater Quality Model Programs. Public Agency Activities

[http://ladpw.org/wmd/npdes/model\\_links.cfm](http://ladpw.org/wmd/npdes/model_links.cfm)

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Orange County Stormwater Program

[http://www.ocwatersheds.com/StormWater/swp\\_introduction.asp](http://www.ocwatersheds.com/StormWater/swp_introduction.asp)

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.

United States Environmental Protection Agency (USEPA). 2002. Pollution Prevention/Good Housekeeping for Municipal Operations Landscaping and Lawn Care. Office of Water. Office of Wastewater Management. On-line: [http://www.epa.gov/npdes/menuofbmps/poll\\_8.htm](http://www.epa.gov/npdes/menuofbmps/poll_8.htm)

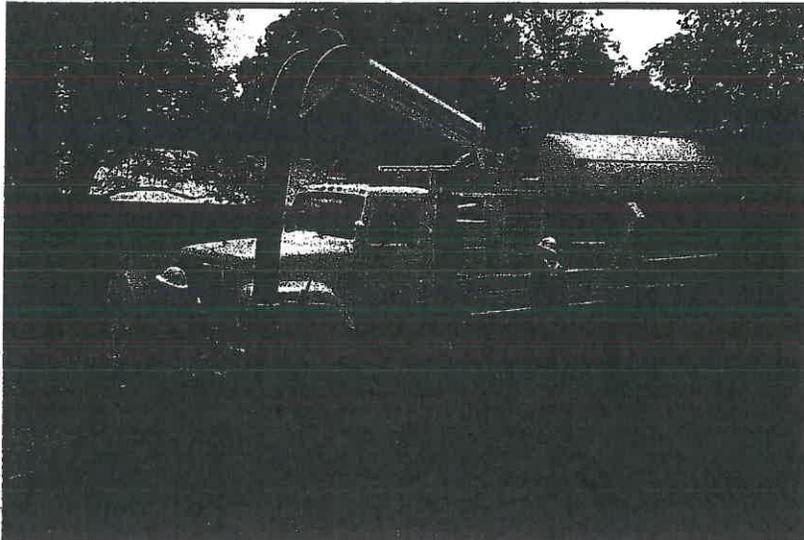


Photo Credit: Geoff Brosseau

## Description

As a consequence of its function, the stormwater conveyance system collects and transports urban runoff that may contain certain pollutants. Maintaining catch basins, stormwater inlets, and other stormwater conveyance structures on a regular basis will remove pollutants, prevent clogging of the downstream conveyance system, restore catch basins' sediment trapping capacity, and ensure the system functions properly hydraulically to avoid flooding.

## Approach

### *Suggested Protocols*

#### *Catch Basins/Inlet Structures*

- Municipal staff should regularly inspect facilities to ensure the following:
  - Immediate repair of any deterioration threatening structural integrity.
  - Cleaning before the sump is 40% full. Catch basins should be cleaned as frequently as needed to meet this standard.
  - Stenciling of catch basins and inlets (see SC-75 Waste Handling and Disposal).
- Clean catch basins, storm drain inlets, and other conveyance structures in high pollutant load areas just before the wet season to remove sediments and debris accumulated during the summer.

## Objectives

- Contain
- Educate
- Reduce/Minimize

## Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓



- Conduct inspections more frequently during the wet season for problem areas where sediment or trash accumulates more often. Clean and repair as needed.
- Keep accurate logs of the number of catch basins cleaned.
- Record the amount of waste collected.
- Store wastes collected from cleaning activities of the drainage system in appropriate containers or temporary storage sites in a manner that prevents discharge to the storm drain.
- Dewater the wastes with outflow into the sanitary sewer if permitted. Water should be treated with an appropriate filtering device prior to discharge to the sanitary sewer. If discharge to the sanitary sewer is not allowed, water should be pumped or vacuumed to a tank and properly disposed of. Do not dewater near a storm drain or stream.
- Except for small communities with relatively few catch basins that may be cleaned manually, most municipalities will require mechanical cleaners such as eductors, vacuums, or bucket loaders.

#### *Storm Drain Conveyance System*

- Locate reaches of storm drain with deposit problems and develop a flushing schedule that keeps the pipe clear of excessive buildup.
- Collect flushed effluent and pump to the sanitary sewer for treatment.

#### *Pump Stations*

- Clean all storm drain pump stations prior to the wet season to remove silt and trash.
- Do not allow discharge from cleaning a storm drain pump station or other facility to reach the storm drain system.
- Conduct quarterly routine maintenance at each pump station.
- Inspect, clean, and repair as necessary all outlet structures prior to the wet season.
- Sample collected sediments to determine if landfill disposal is possible, or illegal discharges in the watershed are occurring.

#### *Open Channel*

- Consider modification of storm channel characteristics to improve channel hydraulics, to increase pollutant removals, and to enhance channel/creek aesthetic and habitat value.
- Conduct channel modification/improvement in accordance with existing laws. Any person, government agency, or public utility proposing an activity that will change the natural (emphasis added) state of any river, stream, or lake in California, must enter into a stream or Lake Alteration Agreement with the Department of Fish and Game. The developer-applicant should also contact local governments (city, county, special districts), other state agencies

(SWRCB, RWQCB, Department of Forestry, Department of Water Resources), and Federal Corps of Engineers and USFWS

## *Illicit Connections and Discharges*

- During routine maintenance of conveyance system and drainage structures field staff should look for evidence of illegal discharges or illicit connections:
  - Is there evidence of spills such as paints, discoloring, etc.
  - Are there any odors associated with the drainage system
  - Record locations of apparent illegal discharges/illicit connections
  - Track flows back to potential dischargers and conduct aboveground inspections. This can be done through visual inspection of up gradient manholes or alternate techniques including zinc chloride smoke testing, fluorometric dye testing, physical inspection testing, or television camera inspection.
  - Once the origin of flow is established, require illicit discharger to eliminate the discharge.
- Stencil storm drains, where applicable, to prevent illegal disposal of pollutants. Storm drain inlets should have messages such as “Dump No Waste Drains to Stream” stenciled next to them to warn against ignorant or intentional dumping of pollutants into the storm drainage system.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

## *Illegal Dumping*

- Regularly inspect and clean up hot spots and other storm drainage areas where illegal dumping and disposal occurs.
- Establish a system for tracking incidents. The system should be designed to identify the following:
  - Illegal dumping hot spots
  - Types and quantities (in some cases) of wastes
  - Patterns in time of occurrence (time of day/night, month, or year)
  - Mode of dumping (abandoned containers, “midnight dumping” from moving vehicles, direct dumping of materials, accidents/spills)
  - Responsible parties
- Post “No Dumping” signs in problem areas with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

- The State Department of Fish and Game has a hotline for reporting violations called Cal TIP (1-800-952-5400). The phone number may be used to report any violation of a Fish and Game code (illegal dumping, poaching, etc.).
- The California Department of Toxic Substances Control's Waste Alert Hotline, 1-800-69TOXIC, can be used to report hazardous waste violations.

***Training***

- Train crews in proper maintenance activities, including record keeping and disposal.
- Only properly trained individuals are allowed to handle hazardous materials/wastes.
- Train municipal employees from all departments (public works, utilities, street cleaning, parks and recreation, industrial waste inspection, hazardous waste inspection, sewer maintenance) to recognize and report illegal dumping.
- Train municipal employees and educate businesses, contractors, and the general public in proper and consistent methods for disposal.
- Train municipal staff regarding non-stormwater discharges (See SC-10 Non-Stormwater Discharges).

***Spill Response and Prevention***

- Refer to SC-11, Prevention, Control & Cleanup
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

***Other Considerations***

- Cleanup activities may create a slight disturbance for local aquatic species. Access to items and material on private property may be limited. Trade-offs may exist between channel hydraulics and water quality/riparian habitat. If storm channels or basins are recognized as wetlands, many activities, including maintenance, may be subject to regulation and permitting.
- Storm drain flushing is most effective in small diameter pipes (36-inch diameter pipe or less, depending on water supply and sediment collection capacity). Other considerations associated with storm drain flushing may include the availability of a water source, finding a downstream area to collect sediments, liquid/sediment disposal, and disposal of flushed effluent to sanitary sewer may be prohibited in some areas.
- Regulations may include adoption of substantial penalties for illegal dumping and disposal.
- Municipal codes should include sections prohibiting the discharge of soil, debris, refuse, hazardous wastes, and other pollutants into the storm drain system.
- Private property access rights may be needed to track illegal discharges up gradient.

- Requirements of municipal ordinance authority for suspected source verification testing for illicit connections necessary for guaranteed rights of entry.

## Requirements

### Costs

- An aggressive catch basin cleaning program could require a significant capital and O&M budget. A careful study of cleaning effectiveness should be undertaken before increased cleaning is implemented. Catch basin cleaning costs are less expensive if vacuum street sweepers are available; cleaning catch basins manually can cost approximately twice as much as cleaning the basins with a vacuum attached to a sweeper.
- Methods used for illicit connection detection (smoke testing, dye testing, visual inspection, and flow monitoring) can be costly and time-consuming. Site-specific factors, such as the level of impervious area, the density and ages of buildings, and type of land use will determine the level of investigation necessary. Encouraging reporting of illicit discharges by employees can offset costs by saving expense on inspectors and directing resources more efficiently. Some programs have used funds available from “environmental fees” or special assessment districts to fund their illicit connection elimination programs.

### Maintenance

- Two-person teams may be required to clean catch basins with vector trucks.
- Identifying illicit discharges requires teams of at least two people (volunteers can be used), plus administrative personnel, depending on the complexity of the storm sewer system.
- Arrangements must be made for proper disposal of collected wastes.
- Requires technical staff to detect and investigate illegal dumping violations, and to coordinate public education.

## Supplemental Information

### Further Detail of the BMP

#### *Storm Drain flushing*

Sanitary sewer flushing is a common maintenance activity used to improve pipe hydraulics and to remove pollutants in sanitary sewer systems. The same principles that make sanitary sewer flushing effective can be used to flush storm drains. Flushing may be designed to hydraulically convey accumulated material to strategic locations, such as to an open channel, to another point where flushing will be initiated, or over to the sanitary sewer and on to the treatment facilities, thus preventing re-suspension and overflow of a portion of the solids during storm events. Flushing prevents “plug flow” discharges of concentrated pollutant loadings and sediments. The deposits can hinder the designed conveyance capacity of the storm drain system and potentially cause backwater conditions in severe cases of clogging.

Storm drain flushing usually takes place along segments of pipe with grades that are too flat to maintain adequate velocity to keep particles in suspension. An upstream manhole is selected to place an inflatable device that temporarily plugs the pipe. Further upstream, water is pumped into the line to create a flushing wave. When the upstream reach of pipe is sufficiently full to

cause a flushing wave, the inflated device is rapidly deflated with the assistance of a vacuum pump, releasing the backed up water and resulting in the cleaning of the storm drain segment.

To further reduce the impacts of stormwater pollution, a second inflatable device, placed well downstream, may be used to re-collect the water after the force of the flushing wave has dissipated. A pump may then be used to transfer the water and accumulated material to the sanitary sewer for treatment. In some cases, an interceptor structure may be more practical or required to re-collect the flushed waters.

It has been found that cleansing efficiency of periodic flush waves is dependent upon flush volume, flush discharge rate, sewer slope, sewer length, sewer flow rate, sewer diameter, and population density. As a rule of thumb, the length of line to be flushed should not exceed 700 feet. At this maximum recommended length, the percent removal efficiency ranges between 65-75 percent for organics and 55-65 percent for dry weather grit/inorganic material. The percent removal efficiency drops rapidly beyond that. Water is commonly supplied by a water truck, but fire hydrants can also supply water. To make the best use of water, it is recommended that reclaimed water be used or that fire hydrant line flushing coincide with storm drain flushing.

### *Flow Management*

Flow management has been one of the principal motivations for designing urban stream corridors in the past. Such needs may or may not be compatible with the stormwater quality goals in the stream corridor.

Downstream flood peaks can be suppressed by reducing through flow velocity. This can be accomplished by reducing gradient with grade control structures or increasing roughness with boulders, dense vegetation, or complex banks forms. Reducing velocity correspondingly increases flood height, so all such measures have a natural association with floodplain open space. Flood elevations laterally adjacent to the stream can be lowered by increasing through flow velocity.

However, increasing velocity increases flooding downstream and inherently conflicts with channel stability and human safety. Where topography permits, another way to lower flood elevation is to lower the level of the floodway with drop structures into a large but subtly excavated bowl where flood flows were allowed to spread out.

### *Stream Corridor Planning*

Urban streams receive and convey stormwater flows from developed or developing watersheds. Planning of stream corridors thus interacts with urban stormwater management programs. If local programs are intended to control or protect downstream environments by managing flows delivered to the channels, then it is logical that such programs should be supplemented by management of the materials, forms, and uses of the downstream riparian corridor. Any proposal for stream alteration or management should be investigated for its potential flow and stability effects on upstream, downstream, and laterally adjacent areas. The timing and rate of flow from various tributaries can combine in complex ways to alter flood hazards. Each section of channel is unique, influenced by its own distribution of roughness elements, management activities, and stream responses.

Flexibility to adapt to stream features and behaviors as they evolve must be included in stream reclamation planning. The amenity and ecology of streams may be enhanced through the landscape design options of 1) corridor reservation, 2) bank treatment, 3) geomorphic restoration, and 4) grade control.

Corridor reservation - Reserving stream corridors and valleys to accommodate natural stream meandering, aggradation, degradation, and over bank flows allows streams to find their own form and generate less ongoing erosion. In California, open stream corridors in recent urban developments have produced recreational open space, irrigation of streamside plantings, and the aesthetic amenity of flowing water.

Bank treatment - The use of armoring, vegetative cover, and flow deflection may be used to influence a channel's form, stability, and biotic habitat. To prevent bank erosion, armoring can be done with rigid construction materials, such as concrete, masonry, wood planks and logs, riprap, and gabions. Concrete linings have been criticized because of their lack of provision of biotic habitat. In contrast, riprap and gabions make relatively porous and flexible linings. Boulders, placed in the bed reduce velocity and erosive power.

Riparian vegetation can stabilize the banks of streams that are at or near a condition of equilibrium. Binding networks of roots increase bank shear strength. During flood flows, resilient vegetation is forced into erosion-inhibiting mats. The roughness of vegetation leads to lower velocity, further reducing erosive effects. Structural flow deflection can protect banks from erosion or alter fish habitat. By concentrating flow, a deflector causes a pool to be scoured in the bed.

Geomorphic restoration - Restoration refers to alteration of disturbed streams so their form and behavior emulate those of undisturbed streams. Natural meanders are retained, with grading to gentle slopes on the inside of curves to allow point bars and riffle-pool sequences to develop. Trees are retained to provide scenic quality, biotic productivity, and roots for bank stabilization, supplemented by plantings where necessary.

A restorative approach can be successful where the stream is already approaching equilibrium. However, if upstream urbanization continues new flow regimes will be generated that could disrupt the equilibrium of the treated system.

Grade Control - A grade control structure is a level shelf of a permanent material, such as stone, masonry, or concrete, over which stream water flows. A grade control structure is called a sill, weir, or drop structure, depending on the relation of its invert elevation to upstream and downstream channels.

A sill is installed at the preexisting channel bed elevation to prevent upstream migration of nick points. It establishes a firm base level below which the upstream channel can not erode.

A weir or check dam is installed with invert above the preexisting bed elevation. A weir raises the local base level of the stream and causes aggradation upstream. The gradient, velocity, and erosive potential of the stream channel are reduced. A drop structure lowers the downstream invert below its preexisting elevation, reducing downstream gradient and velocity. Weirs and drop structure control erosion by dissipating energy and reducing slope velocity.

When carefully applied, grade control structures can be highly versatile in establishing human and environmental benefits in stabilized channels. To be successful, application of grade control structures should be guided by analysis of the stream system both upstream and downstream from the area to be reclaimed.

**Examples**

The California Department of Water Resources began the Urban Stream Restoration Program in 1985. The program provides grant funds to municipalities and community groups to implement stream restoration projects. The projects reduce damages from streambank and watershed instability and floods while restoring streams' aesthetic, recreational, and fish and wildlife values.

In Buena Vista Park, upper floodway slopes are gentle and grassed to achieve continuity of usable park land across the channel of small boulders at the base of the slopes.

The San Diego River is a large, vegetative lined channel, which was planted in a variety of species to support riparian wildlife while stabilizing the steep banks of the floodway.

**References and Resources**

Ferguson, B.K. 1991. Urban Stream Reclamation, p. 324-322, *Journal of Soil and Water Conservation*.

Los Angeles County Stormwater Quality. Public Agency Activities Model Program. On-line: [http://ladpw.org/wmd/npdes/public\\_TC.cfm](http://ladpw.org/wmd/npdes/public_TC.cfm)

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Orange County Stormwater Program

[http://www.ocwatersheds.com/StormWater/swp\\_introduction.asp](http://www.ocwatersheds.com/StormWater/swp_introduction.asp)

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program (URMP) Municipal Activities Model Program Guidance. 2001. Project Clean Water. November.

United States Environmental Protection Agency (USEPA). 1999. Stormwater Management Fact Sheet Non-stormwater Discharges to Storm Sewers. EPA 832-F-99-022. Office of Water, Washington, D.C. September.

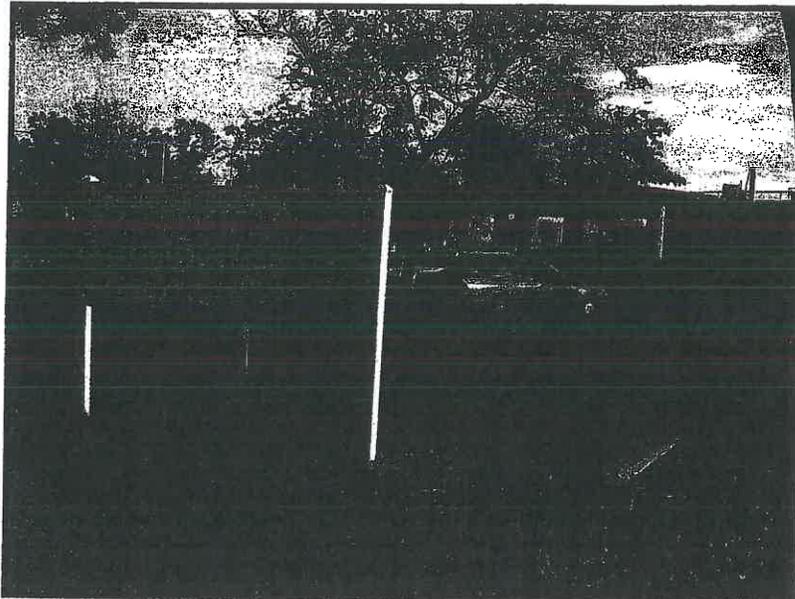
United States Environmental Protection Agency (USEPA). 1999. Stormwater O&M Fact Sheet Catch Basin Cleaning. EPA 832-F-99-011. Office of Water, Washington, D.C. September.

United States Environmental Protection Agency (USEPA). 2002. Pollution Prevention/Good Housekeeping for Municipal Operations Illegal Dumping Control. On line:

[http://www.epa.gov/npdes/menuofbmps/poll\\_7.htm](http://www.epa.gov/npdes/menuofbmps/poll_7.htm)

United States Environmental Protection Agency (USEPA). 2002. Pollution Prevention/Good Housekeeping for Municipal Operations Storm Drain System Cleaning. On line:

[http://www.epa.gov/npdes/menuofbmps/poll\\_16.htm](http://www.epa.gov/npdes/menuofbmps/poll_16.htm)



## Objectives

- Cover
- Contain
- Educate
- Reduce/Reuse

## Description

It is important to control litter to eliminate trash and other materials in stormwater runoff. Waste reduction is a major component of waste management and should be encouraged through training and public outreach. Management of waste once it is collected may involve reuse, recycling, or proper disposal.

## Approach

### *Pollution Prevention*

- Reuse products when possible.
- Encourage recycling programs with recycling bins, used oil collection, etc.

### *Suggested Protocols*

#### *Solid Waste Collection*

- Implement procedures, where applicable, to collect, transport, and dispose of solid waste at appropriate disposal facilities in accordance with applicable federal, state, and local laws and regulations.
- Include properly designed trash storage areas. If feasible provide cover over trash storage areas.
- Regularly inspect solid waste containers for structural damage. Repair or replace damaged containers as necessary.

## Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓



- Secure solid waste containers; containers must be closed tightly when not in use.
- Do not fill waste containers with washout water or any other liquid.
- Ensure that only appropriate solid wastes are added to the solid waste container. Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc. may not be disposed of in solid waste containers (see chemical/ hazardous waste collection section below).
- Do not mix wastes; this can cause chemical reactions, make recycling impossible, and complicate disposal.
- Refer to SC-34 Waste Handling and Disposal for more information regarding solid waste facilities.

#### *Waste Reduction and Recycling*

- Recycle wastes whenever possible. Many types of waste can be recycled, recycling options for each waste type are limited. All gasoline, antifreeze, waste oil, and lead-acid batteries can be recycled. Latex and oil-based paint can be reused, as well as recycled. Materials that cannot be reused or recycled should either be incinerated or disposed of at a properly permitted landfill.
- Recycling is always preferable to disposal of unwanted materials.
- Recycling bins for glass, metal, newspaper, plastic bottles and other recyclable household solid wastes should be provided at public facilities and/or for residential curbside collection.

#### *Controlling Litter*

- Post "No Littering" signs and enforce anti-litter laws.
- Provide litter receptacles in busy, high pedestrian traffic areas of the community, at recreational facilities, and at community events.
- Clean out and cover litter receptacles frequently to prevent spillage.

#### *Illegal Dumping*

Substances illegally dumped on streets and into the storm drain system and creeks include paints, used oil and other automotive fluids, construction debris, chemicals, fresh concrete, leaves, grass clipping, and pet wastes.

- Post "No Dumping" signs with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.
- Landscaping and beautification efforts of hot spots might also discourage future dumping.
- See SC-74 Drainage System Maintenance, and SC-10 Non-Stormwater Discharges.

## Requirements

### Costs

- The costs for a solid waste source control program vary depending on the type of method. The cost of a community education program or a plan to increase the number of trash receptacles can be very minimal. Costs for structural controls such as trash racks, bar screens, and silt traps can be quite costly ranging from \$250,000 to \$900,000.
- A collection facility or curbside collection for used oil may result in significant costs. Commercial locations (automobile service stations, quick oil change centers, etc.) as collection points eliminate hauling and recycling costs.
- Collection and disposal of hazardous waste can be very expensive and requires trained operators; laboratory and detection equipment; and extensive record keeping including dates, types, and quantities.
- Use of volunteer work forces can lower storm drain stenciling program costs. Stenciling kits require procurement of durable/disposable items. The stenciling program can aid in the cataloging of the storm drain system. One municipality from the state of Washington has estimated that stenciling kits cost approximately \$50 each. Stencils may cost about \$8 each including the die cost on an order of 1,000. Re-orders cost about \$1/stencil. Stencil designs may be available from other communities. Stencil kits should be provided on a loan basis to volunteer groups free of charge with the understanding that kit remnants are to be returned.

### Maintenance

- The primary staff demand for stenciling programs is for program setup to provide marketing and training. Ongoing/follow-up staff time is minimal because of volunteer services.
- Staffing requirements are minimal for oil recycling programs if collection/recycling is contracted out to a used oil hauler/recycler or required at commercial locations.
- Staff requirements for maintaining good housekeeping BMPs at waste handling sites is minimal.

## Supplemental Information

### *Further Detail of the BMP*

#### *Waste Reduction*

An approach to reduce stormwater pollution from waste handling and disposal is to assess activities and reduce waste generation. The assessment is designed to find situations where waste can be eliminated or reduced and emissions and environmental damage can be minimized. The assessment involves collecting process specific information, setting pollution prevention targets, and developing, screening and selecting waste reduction options for further study. Starting a waste reduction program is economically beneficial because of reduced raw material purchases and lower waste disposal fees.

## References and Resources

Best Management Practices Program for Pollution Prevention, City and County of San Francisco, Uribe & Associates, Oakland, California, 1990.

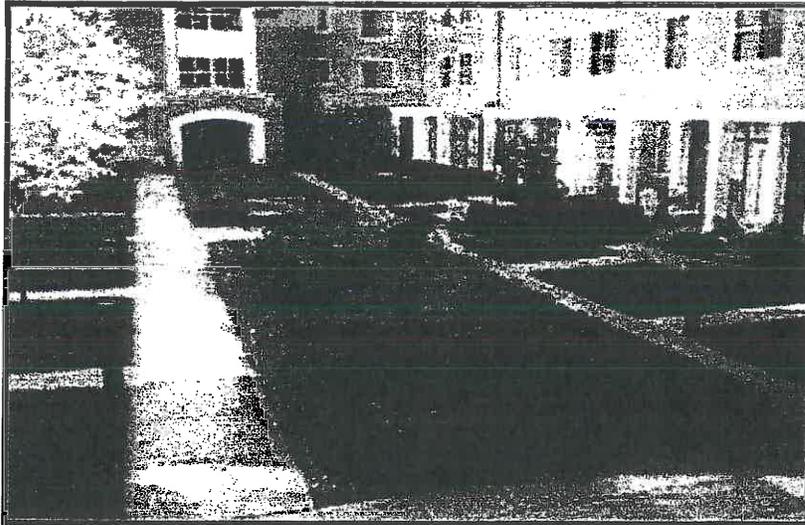
Harvard University. 2002. Solid Waste Container Best Management Practices – Fact Sheet On-Line Resources – Environmental Health and Safety.

Model Urban Runoff Program: A How-To-Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998. (Revised February 2002 by the California Coastal Commission).

Orange County Stormwater Program

[http://www.ocwatersheds.com/StormWater/swp\\_introduction.asp](http://www.ocwatersheds.com/StormWater/swp_introduction.asp).

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.



## Maintenance Concerns, Objectives, and Goals

- Clogged Soil or Outlet Structures
- Invasive Species
- Vegetation/Landscape Maintenance
- Erosion
- Channelization of Flow
- Aesthetics

## General Description

The bioretention best management practice (BMP) functions as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes. These facilities normally consist of a grass buffer strip, sand bed, ponding area, organic layer or mulch layer, planting soil, and plants. The runoff's velocity is reduced by passing over or through a sand bed and is subsequently distributed evenly along a ponding area. Exfiltration of the stored water in the bioretention area planting soil into the underlying soils occurs over a period of days.

## Inspection/Maintenance Considerations

Bioretention requires frequent landscaping maintenance, including measures to ensure that the area is functioning properly, as well as maintenance of the landscaping on the practice. In many cases, bioretention areas initially require intense maintenance, but less maintenance is needed over time. In many cases, maintenance tasks can be completed by a landscaping contractor, who may already be hired at the site. In cold climates the soil may freeze, preventing runoff from infiltrating into the planting soil.

## Targeted Constituents

✓ Sediment	■
✓ Nutrients	▲
✓ Trash	■
✓ Metals	■
✓ Bacteria	■
✓ Oil and Grease	■
✓ Organics	■
✓ Oxygen Demanding	■

## Legend (Removal Effectiveness)

● Low	■ High
▲ Medium	



<ul style="list-style-type: none"> <li>■ Inspect soil and repair eroded areas.</li> </ul>	Monthly
<ul style="list-style-type: none"> <li>■ Inspect for erosion or damage to vegetation, preferably at the end of the wet season to schedule summer maintenance and before major fall runoff to be sure the strips are ready for winter. However, additional inspection after periods of heavy runoff is desirable.</li> </ul>	Semi-annual inspection
<ul style="list-style-type: none"> <li>■ Inspect to ensure grass is well established. If not, either prepare soil and reseed or replace with alternative species. Install erosion control blanket.</li> </ul>	
<ul style="list-style-type: none"> <li>■ Check for debris and litter, and areas of sediment accumulation.</li> <li>■ Inspect health of trees and shrubs.</li> </ul>	
<ul style="list-style-type: none"> <li>■ Water plants daily for 2 weeks.</li> </ul>	At project completion
<ul style="list-style-type: none"> <li>■ Remove litter and debris.</li> </ul>	Monthly
<ul style="list-style-type: none"> <li>■ Remove sediment.</li> <li>■ Remulch void areas.</li> <li>■ Treat diseased trees and shrubs.</li> <li>■ Mow turf areas.</li> <li>■ Repair erosion at inflow points.</li> <li>■ Repair outflow structures.</li> <li>■ Unclog underdrain.</li> <li>■ Regulate soil pH regulation.</li> </ul>	As needed
<ul style="list-style-type: none"> <li>■ Remove and replace dead and diseased vegetation.</li> </ul>	Semi-annual
<ul style="list-style-type: none"> <li>■ Add mulch.</li> </ul>	Annual
<ul style="list-style-type: none"> <li>■ Replace tree stakes and wires.</li> </ul>	Every 2-3 years, or as needed
<ul style="list-style-type: none"> <li>■ Mulch should be replaced every 2 to 3 years or when bare spots appear. Remulch prior to the wet season.</li> </ul>	

**Additional Information**

Landscaping is critical to the function and aesthetic value of bioretention areas. It is preferable to plant the area with native vegetation, or plants that provide habitat value, where possible. Another important design feature is to select species that can withstand the hydrologic regime they will experience. At the bottom of the bioretention facility, plants that tolerate both wet and dry conditions are preferable. At the edges, which will remain primarily dry, upland species will be the most resilient. It is best to select a combination of trees, shrubs, and herbaceous materials.

**References**

Metropolitan Council, Urban Small Sites Best Management Practices Manual. Available at: <http://www.metrocouncil.org/environment/Watershed/BMP/manual.htm>

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July, 1998, revised February, 2002.

U.S. Environmental Protection Agency, Post-Construction Stormwater Management in New Development & Redevelopment BMP Factsheets. Available at:  
[cfpub.epa.gov/npdes/stormwater/menuofbmps/bmp\\_files.cfm](http://cfpub.epa.gov/npdes/stormwater/menuofbmps/bmp_files.cfm)

Ventura Countywide Stormwater Quality Management Program, Technical Guidance Manual for Stormwater Quality Control Measures. July, 2002.

## General Description

Vortex separators: (alternatively, swirl concentrators) are gravity separators, and in principle are essentially wet vaults. The difference from wet vaults, however, is that the vortex separator is round, rather than rectangular, and the water moves in a centrifugal fashion before exiting. By having the water move in a circular fashion, rather than a straight line as is the case with a standard wet vault, it is possible to obtain significant removal of suspended sediments and attached pollutants with less space. Vortex separators were originally developed for combined sewer overflows (CSOs), where it is used primarily to remove coarse inorganic solids. Vortex separation has been adapted to stormwater treatment by several manufacturers.

## Inspection/Maintenance Considerations

As some of the systems have standing water that remains between storms, there is concern about mosquito breeding. Also, a loss of dissolved pollutants may occur as accumulated organic matter (e.g., leaves) decomposes in the units.

Inspection Activities	Suggested Frequency
<ul style="list-style-type: none"> <li>Inspect for accumulated sediment/debris.</li> </ul>	As needed
Maintenance Activities	Suggested Frequency
<ul style="list-style-type: none"> <li>Remove of accumulated material with an eductor truck. It may be necessary to remove and dispose the floatables separately due to the presence of petroleum product.</li> </ul>	Annual, or more frequent as needed

## Maintenance Concerns, Objectives, and Goals

- Sediment/Debris Removal
- Vector Control

## Targeted Constituents

- ✓ Sediment
- ✓ Nutrients
- ✓ Trash
- ✓ Metals
- Bacteria
- ✓ Oil and Grease
- ✓ Organics
- ✓ Oxygen Demanding

### Removal Effectiveness

See New Development and Redevelopment BMP Handbook-Section 5.



## General Description

Drain inserts are manufactured filters or fabric placed in a drop inlet to remove sediment and debris. There are a multitude of inserts of various shapes and configurations, typically falling into one of three different groups: socks, boxes, and trays. The sock consists of a fabric, usually constructed of polypropylene. The fabric may be attached to a frame or the grate of the inlet holds the sock. Socks are meant for vertical (drop) inlets. Boxes are constructed of plastic or wire mesh. Typically a polypropylene "bag" is placed in the wire mesh box. The bag takes the form of the box. Most box products are one box; that is, the setting area and filtration through media occur in the same box. Some products consist of one or more trays or mesh grates. The trays may hold different types of media. Filtration media vary by manufacturer. Types include polypropylene, porous polymer, treated cellulose, and activated carbon.

## Inspection/Maintenance Considerations

Washout problems increase with rain intensity. At low flow rates, energy dissipater between gate and treatment areas can minimize re-suspension of accumulated sediment.

Inspection/Considerations	
<ul style="list-style-type: none"> <li>Inspect for sediment buildup and proper functioning.</li> </ul>	At the beginning of the wet season and after significant storms
<ul style="list-style-type: none"> <li>Verify that stormwater enters the unit and does not leak around the perimeter.</li> </ul>	After construction.
Maintenance	
<ul style="list-style-type: none"> <li>Remove sediment as needed.</li> </ul>	At the beginning of the wet season and as necessary

## Maintenance Concerns, Objectives, and Goals

- Sediment/Debris Removal

## Targeted Constituents

- ✓ Sediment
- ✓ Nutrients
- ✓ Trash
- ✓ Metals
- Bacteria
- ✓ Oil and Grease
- ✓ Organics
- ✓ Oxygen Demanding

### Removal Effectiveness

See New Development and Redevelopment BMP Handbook-Section 5.



**POTW Training Summary Information for FY 13-14.** Includes training sessions that cover inspection and enforcement skills, even if they were not specifically storm water.

<b>C.4.d.iii ► Staff Training Summary</b>				
<b>Training Name</b>	<b>Training Dates</b>	<b>Topics Covered</b>	<b>No. of Inspectors in Attendance</b>	<b>Percent of Inspectors in Attendance</b>
Commercial/Industrial Stormwater Inspection Training Workshop (Contra Costa County)	5/8/14	<ul style="list-style-type: none"> <li>• Outline available through CWP</li> </ul>	CCCSD-6 DDSD-2 WCWD-2	CCCSD-67 DDSD-67 WCWD-100
CCCSD Sampling Training	4/30/14	<ul style="list-style-type: none"> <li>• Proper sampling methods</li> <li>• Sample preservation and holding times</li> </ul>	CCCSD-8	CCCSD-89
CCCSD Customer Service Training	6/17/14	<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Non-verbal queues</li> </ul>	CCCSD-1	CCCSD-11
CWEA – NRTC	9/11-12/13	<ul style="list-style-type: none"> <li>• Stormwater education and outreach</li> <li>• Trash management</li> </ul>	CCCSD-1	CCCSD-11
CWEA Annual Conference	4/29/14	<ul style="list-style-type: none"> <li>• Inspector Training</li> <li>• Stormwater BMPs</li> <li>• Outreach</li> </ul>	CCCSD-1	CCCSD-11
CalEPA Basic Inspector Academy	3/11-14/14	<ul style="list-style-type: none"> <li>• Investigation</li> <li>• Evidence</li> <li>• Witness testimony</li> <li>• Case Development</li> <li>• Interagency Coordination</li> </ul>	CCCSD-1	CCCSD-11
Regulatory Investigative Techniques	1/24-27/14	<ul style="list-style-type: none"> <li>• Interview skills</li> <li>• Gathering and preserving evidence</li> </ul>	CCCSD-1	CCCSD-11
Environmental Enforcement Training	6/11/14	<ul style="list-style-type: none"> <li>• Report writing</li> <li>• Evidence</li> <li>• Developing a case</li> </ul>	CCCSD-2	CCCSD-22

[Inspections conducted by POTW (Contra Costa Central Sanitary District) ]

Name	Address	City	Program Category
Diamond Terrace	6401 CENTER Street	Clayton	Assisted Living
Clayton Club Saloon	6096 MAIN Street	Clayton	Bar Only
KinderCare	6095 MAIN Street	Clayton	Child Day Care
Dryclean USA	5435 CLAYTON Road M	Clayton	Dry Cleaner
Valley Cleaners	5425 CLAYTON Road	Clayton	Dry Cleaner
Facility	5901 HERITAGE TRAIL	Clayton	Fleet Operations
US Post Office	6150 CENTER Street	Clayton	Fleet Operations
Canesa's Brooklyn Heros	6026 MAIN Street	Clayton	Food Service
Carl's Jr Restaurant	1530 KIRKER PASS Road	Clayton	Food Service
Casa Gourmet Burrito	5435 CLAYTON Road F	Clayton	Food Service
Center Street Deli & Café	6101 CENTER Street	Clayton	Food Service
Restaurant	5415 CLAYTON Road	Clayton	Food Service
Coldstone Creamery	1536 KIRKER PASS Road B	Clayton	Food Service
Country Waffles	5435 CLAYTON Road B	Clayton	Food Service
Cup O' Jo	6054 MAIN Street	Clayton	Food Service
Ed's Mudville Grill	6200 CENTER Street	Clayton	Food Service
JJ Hawaiian BBQ	5435 CLAYTON Road A	Clayton	Food Service
La Veranda Café	6201 CENTER Street	Clayton	Food Service
Little Caesars Pizza	5433 CLAYTON Road L	Clayton	Food Service
Moresi's Chop House	6115 MAIN Street	Clayton	Food Service
Papa Murphy's Take 'N Bake	5433 CLAYTON Road H	Clayton	Food Service
Pavilion Bar and Grill	1508 KIRKER PASS Road	Clayton	Food Service
Skipolini's Pizza	1035 DIABLO Street	Clayton	Food Service
Starbucks Coffee	1536 KIRKER PASS Road A	Clayton	Food Service
Subway	1026 OAK Street 103	Clayton	Food Service
Subway	1536 KIRKER PASS Road C	Clayton	Food Service
Sweet Bakery	5435 CLAYTON E	Clayton	Food Service
Village Market	6104 MAIN Street	Clayton	Food Service
Oakhurst Country Club	1001 PEACOCK CREEK Drive	Clayton	Golf Course
Indianhead Maintenance	2500 INDIAN HEAD Way	Clayton	Golf Course
Safeway Food and Drug	5431 CLAYTON Road	Clayton	Grocery Store
Shop & Go Market	5421 CLAYTON Road	Clayton	Mini-Market
Sherwin - Williams	5443 CLAYTON Road	Clayton	Paint Shop
CVS Pharmacy	6490 CLAYTON Road	Clayton	Retail
R & M Pool Patio and Garden	6780 MARSH CREEK Road	Clayton	Retail
Walgreen Drug Store	5437 CLAYTON Road	Clayton	Retail
Maintenance Facilities	1001 PEACOCK Drive	Clayton	Vehicle Service

**Planned Inspections for Clayton (7/1/2014 to 6/30/2015)**

7/30/2014

Name	Address	City	Facility Type
<b>Inspection Cycle</b>			
Center Street Deli & Café	6101 CENTER Street	Clayton	Food Service
Clayton Club Saloon	6096 MAIN Street	Clayton	Bar Only
Dryclean USA	5435 CLAYTON Road M	Clayton	Dry Cleaner
Walgreen Drug Store	5437 CLAYTON Road	Clayton	Retail
Little Caesars Pizza	5433 CLAYTON Road L	Clayton	Food Service
Safeway Food and Drug	5431 CLAYTON Road	Clayton	Grocery Store
Country Waffles	5435 CLAYTON Road B	Clayton	Food Service
Starbucks Coffee	1536 KIRKER PASS Road A	Clayton	Food Service
Oakhurst CC Mainteance Indeanhead Way	2500 Unbdeanhead Way	Clayton	Maintenance

**Subtotal: 9**

TOTAL INSPECTION GOAL (110%)=9

Annual Goal = 8

Attachment C4b(2)

**Clean Water Inspections  
Fiscal Year 2013-14**

**Annual Report  
7/1/2013-6/30/2014**

Type	Facility Name	Address	STW City	Inspector	Date	Inspection Type	Billing Type	Enforcement?
Assisted Living	Diamond Terrace	6401 CENTER Street	Clayton	J. Talarico	4/14/2014	Reinspected	Add-on	None
Assisted Living	Diamond Terrace	6401 CENTER Street	Clayton	J. Talarico	4/21/2014	Follow-up	Targeted	None
Child Day Care	KinderCare	6095 MAIN Street	Clayton	J. Talarico	2/25/2014	Initial	Add-on	None
Food Service	Canesa's Brooklyn Heros	6026 MAIN Street	Clayton	J. Talarico	8/26/2013	Initial	Add-on	None
Food Service	Cinco De Mayo Mexican Restaurant	5415 CLAYTON Road	Clayton	J. Talarico	6/10/2014	Reinspected	Add-on	None
Food Service	Ed's Mudville Grill	6200 CENTER Street	Clayton	J. Talarico	12/4/2013	Reinspected	Add-on	None
Food Service	La Veranda Café	6201 CENTER Street	Clayton	J. Talarico	8/26/2013	Reinspected	Add-on	None
Food Service	La Veranda Café	6201 CENTER Street	Clayton	J. Talarico	9/5/2013	Follow-up	Add-on	None
Food Service	Sweet Bakery	5435 CLAYTON E	Clayton	J. Talarico	2/25/2014	Reinspected	Add-on	None
Golf Course	Oakhurst Country Club - Indianhead M	2500 INDIAN HEAD Way	Clayton	J. Talarico	9/26/2013	Partial	Add-on	None
Golf Course	Oakhurst Country Club - Indianhead M	2500 INDIAN HEAD Way	Clayton	J. Talarico	9/30/2013	Reinspected	Add-on	None
Paint Shop	Sherwin - Williams	5443 CLAYTON Road	Clayton	J. Talarico	2/25/2014	Initial	Add-on	None
Paint Shop	Sherwin - Williams	5443 CLAYTON Road	Clayton	J. Talarico	2/28/2014	Follow-up	Add-on	None
Vehicle Service	Oakhurst Country Club Maintenance Fa	1001 PEACOCK Drive	Clayton	J. Talarico	9/26/2013	Reinspected	Add-on	None

Total number of Initial Inspections and Reinspections: 10  
 Total number of Follow-up, Enforcement Follow-up, Surveillance, Consultation and Partial inspections: 4  
 Total number of closed or moved Inspections: 0

Total number of NOVs issued: 0  
 Total number of WNs issued: 0

7/15/2014

Attachment C4c

City of Clayton Inspection Tracking		Estimated Inspection Frequency Cycle					Actual Inspection Conducted by CCCSD											Planned Inspections	
Location/Name	Prior business	One Year	Two Year	Three Year	Five Year	Target business MRP year 1	Year 0 FY 02-03	Year 1 FY 03-04	Year 2 FY 04-05	Year 3 FY 05-06	Year 4 FY 06-07	Year 5 FY 07-08	Year 6 FY 08-09	Year 7 (Year 1 MRP) FY 09-10	Year 8 (Year 2 MRP) FY 10-11	Year 9 (Year 3 MRP) FY 11-12	Year 10 (Year 4 MRP) FY 12-13	Year 11 (Year 5 MRP) FY 13-14	Year 12 (Year 6 MRP) FY 14-15
<b>Clayton Station</b>																			
Pavilion Grill and Bar (opened 2/05)	restaurant				X														
Linguinis (closed 1/05)	restaurant				X							4/28/06 (NOV)	8/10/2006						
Gourmet Subs (business closed 1/07)	restaurant				X														4/17/2012
Blimpie Subs (out of business 6/08)	restaurant				X														
Olivero de Mayo (opened 1/09)	restaurant				X														
Shop and Go Market	convenience store			X	X														
Valley Cleaners	dry cleaners (drop off service)			X	X														
Safeway	Grocery deli/take out/bakery/Starbucks			X	X														
Walgreens	convenience store			X	X														
Caribee Jr	fast food restaurant			X	X														
Dry Clean USA	dry cleaners (drop off service)	X		X	X														
Starbucks	coffee shop			X	X														
Cold Stone	ice cream shop			X	X														
Subway Sandwiches	restaurant			X	X														
Cookies by Design (closed 12/10)	bakery			X	X														
Country Waffles	restaurant			X	X														
Englands Tea Cottage (closed 2/108)	restaurant			X	X														
LI Howlin BBQ	restaurant			X	X														
The Dog	restaurant			X	X														
Sweet Bakery Affair Cafe	restaurant			X	X														
Casa Gourmet Burrito	restaurant			X	X														
Pizza Manthos	restaurant			X	X														
LI Cessario's Pizza (opened 9/08)	restaurant (take out)			X	X														
Candy Bouquet	bakery			X	X														
Nail Salon 2001	beauty			X	X														
Beauty Supply Salon	beauty			X	X														
Ladies Hair Salon	beauty			X	X														
Great Clips	beauty			X	X														
Sherwin Williams (Opened 9/12/12)	retail paint store			X	X														
<b>Downtown</b>																			
R&M Pool-Patio	garden sales			X	X														
Ed's Mudville Grill	restaurant			X	X														
La Veranda	restaurant			X	X														
Slopedin's	restaurant			X	X														
Elysium (out of business on 6/30/06)	restaurant			X	X														
Fox & Fiddle (out of business on 8/30/04)	restaurant			X	X														
Moreni's Chophouse (opened 6/30/07)	restaurant			X	X														
Clayton Club	bar			X	X														
Cup o' Joe's	restaurant			X	X														
TLC	pet grooming			X	X														
Hair by Jim	beauty			X	X														
Barber Shop	beauty			X	X														
Clayton Mind Body	beauty			X	X														
Pumpkin Farm	garden sales			X	X														
US Post Office	post office			X	X														
Diamond Terrace	senior care center			X	X														
Childrens World - Kinder Care	day care center			X	X														
Learning Center Kidcare	day care center			X	X														
Village Market (reopened 5/1/08)	convenience store - deli			X	X														
CVS/Long's Drugs Store (opened 11/1/07)	commercial			X	X														
Center Street Deli (reopened 5/1/10)	restaurant			X	X														
changed ownership and name to Center Street Deli in FY 09/14																			
Subway (closed 3/1/11)	restaurant			X	X														
Compass Deli (opened 3/1/13)	restaurant			X	X														
<b>Oakhurst County Club</b>																			
Oakhurst CC Grill	restaurant			X	X														
Golf Maint (Indianhead Way)	main/tennis yard			X	X														
Oakhurst Golf Club (Peacock Ct Dr)	golf course (private)			X	X														
<b>Miscellaneous &amp; call outs</b>																			
LI Cessario's construction call out																			
Sunshine Pools res partial																			
Clayton Maintenance Yard	maint equip yard (City)																		
Endeavor Hall	Commercial rental hall w/kitchen																		

Note: X is planned inspection

Attachment C4c

## City of Clayton Emergency & Environmental Management Phone Numbers

### Local/County/Regional Governmental Contacts

#### **City of Clayton**

**Stormwater Contact:** Laura Hoffmeister  
6000 Heritage Trail, Clayton, CA 94517  
staff office: (925) 673-7300; direct/vm: 673-7308; or  
cell: (925) 250-8532 LHoffmeister@ci.clayton.ca.us  
After Hours: contact Clayton Police Dispatch  
ask for an officer on Duty (925) 673-7350

**Maintenance Dept.:** City of Clayton, 6000  
Heritage Trail, Clayton CA 94517: (925)  
673-7300

After Hours: contact Clayton Police Dispatch  
ask for an officer on Duty (925) 673-7350

**Local Police Department:** Clayton Police  
Department (925) 673-7350

**Local Fire District:** Contra Costa Fire Protection  
District, 2010 Geary Road, Pleasant Hill, CA 94523;  
Administration Office/Non-emergency: (925) 930-  
5500; Communications Center (925) 930-5551  
Emergency: 911 or 933-1313

**Contra Costa HazMat 24 Hour Emergency:**  
(925) 646-1112

**Wastewater Agency: City Sanitary Sewer Lines –**  
(City of Concord contract maintenance of City of Clayton sewer lines)  
City of Concord Public Works, 1455 Gasoline Alley,  
Concord, CA 94519: (925) 671-6448; After Hours  
contact Concord Police Dispatch at 671-3333

**Wastewater Agency: Treatment Plant – Central**  
Contra Costa Sanitary District, 5019 Imhoff Place,  
Martinez: (925) 933-0955

**Contra Costa Water District 24 Hour Emergency:**  
(925) 688-8095  
Marie Valmores - Env. Compliance Manager  
direct: (925)-688-8023

**HazWaste Facility:** Central Contra Costa Household  
Hazardous Waste Collection Facility, operated by  
Central Contra Costa Sanitary District, 4797 Imhoff  
Place, Martinez, CA 94553: Toll Free 1-800-646-  
1431

**East Bay Regional Park District – Fire District 24**  
Hour Line: (510) 881-1121

**San Francisco Bay Regional Water Quality**  
**Control Board:** (510) 622-2300

Central Valley Regional Water Quality Control Board:  
(916) 464-4730

### Adjacent Jurisdiction Contacts:

**Concord Contact:** Robert Ovadia, 1455 Gasoline  
Alley, Concord, CA 94519: (925) 671-3470  
Robert.Ovadia@cityofconcord.org  
Frank Kennedy (925) 451-4294/(925) 932-7857  
**Concord Public Works:** (925) 671-3448  
**Concord Police Dispatch:** (925) 671-3333

**Unincorporated County:** Cece Selgren (925) 313-2296  
After Hours—call HazMat or 911

**Contra Costa Sheriff's Communications Center:**  
(925) 646-2441

**CCC Environmental Health Services:**  
(925) 646-5225, 7:30 a.m. – 5 p.m. weekdays

### State & Federal Agencies

Cal. Highway Patrol: (925) 646-4980

Office of Emergency Services Spill Line:  
(800) 852-7550

Dept. Fish & Game – 24 Hour Dispatch during  
incident: (831) 649-2801

CAL EPA – Dept. of Toxic Substances Control  
(Region 2): (510) 540-3856

CAL Occupational Safety and Health  
Administration: (925) 602-6517

US Coast Guard – Marine Safety Office:  
(510) 437-3073

Bay Area Air Quality Management District:  
(415) 771-6000; or 1-800-334-6367

### Miscellaneous Contractors:

Rotomooter : (925) 798-2122; or (925) 939-3100

Aquatic Habitat: (925) 957-1903

Engineering Remediation Resources Group Inc: (925)  
969-0750

Terra Vac: (510) 351-8900

3-D Cleaning Services: (925) 671-7808

Diablo Steam Way: (925) 827-5757

Block Environmental Services: (925) 682-7200

Clean Bay: (925) 685-2800

## **CITY OF CLAYTON RESPONSE PROCESS TO ILLICIT DISCHARGE GENERAL SPILL RESPONSE PROCEDURES**

Call received by public to City Staff

(note: calls may also come in directly to other agencies such as Police, Fire, Hazmat, Water Quality, or Fish and Game, OES, etc.)

City Staff notifies Police (if other agency receives contact they are supposed to contact City Police Department as well)

Police go to site and assess and secure scene, call for Fire Dept., County Hazmat, Fish and Game, Water Quality staff, OES, and/or City Maintenance (if not already contacted) depending on the situation.

All first responders (Police/Fire) have call out numbers to other appropriate response agencies

One of the steps in securing the scene is to secure any potential for spill to flow into storm drains or creek. If in creek to contain the materials so that they do not flow further downstream. If in street curb, gutter or parking lot etc., block inlets and contain materials.

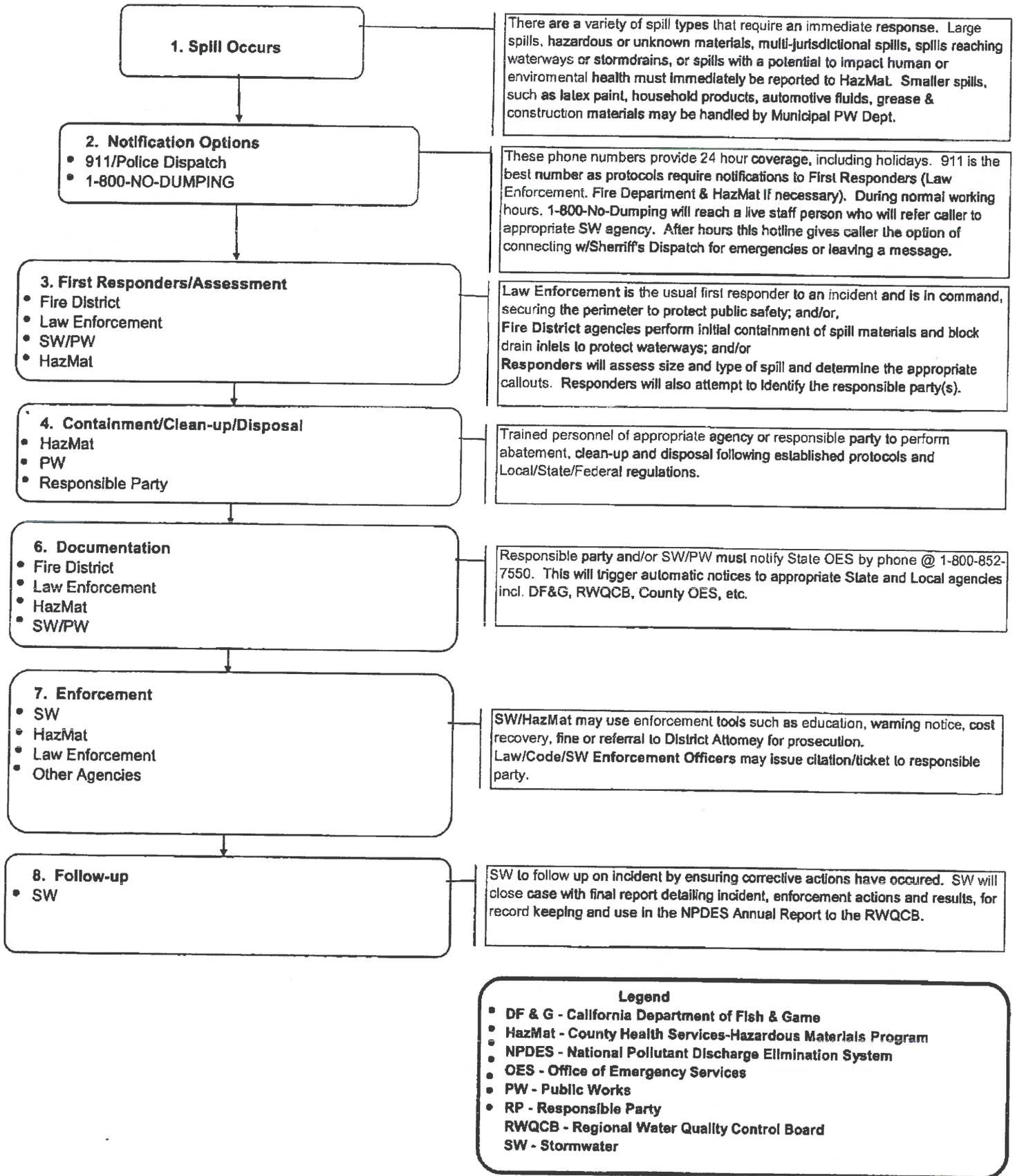
Hazardous materials are handled by Fire and Hazmat.

Non-Hazardous materials are cleaned up by Maintenance staff or contractor under city direction or public/private party if so identified; or left contained to evaporate and monitored as determined appropriate (i.e.: paint spill that has not gone down storm drain or creek). Clean Up (vacuumed or mopped) or flushing depending on material involved.

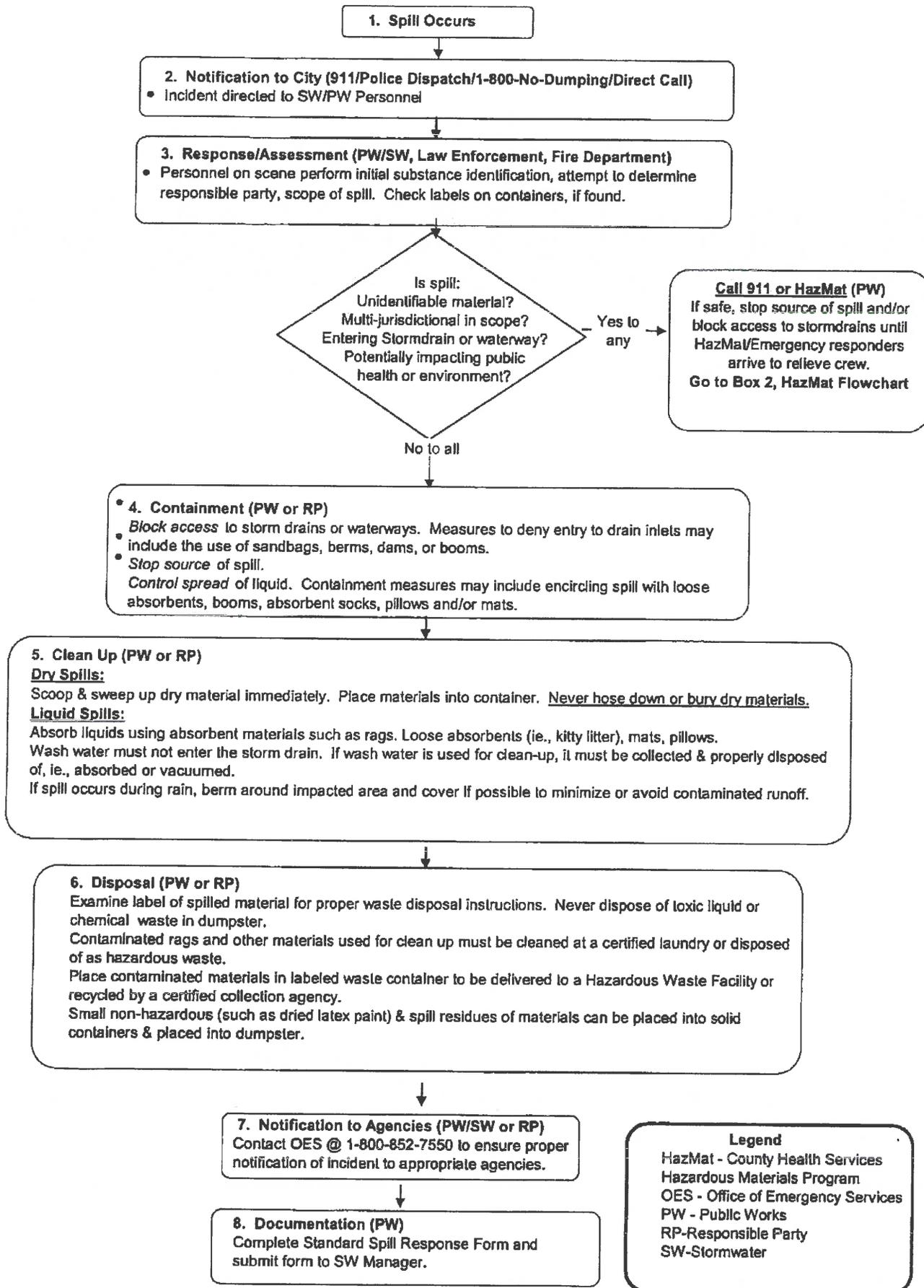
Note: Police Sergeants are trained in Spill and Hazardous materials response. There is a sergeant on duty at all times. Fire Department is trained in Spill and Hazardous materials response. Both of these departments are first responders. In most cases it is the first responder that goes to the site and assesses the situation and determines appropriate steps to take based upon their training. Police sergeant vehicles have spill containment kits. In rare circumstances if maintenance responds first they will contain/monitor and contact fire or another appropriate responder for further assessment and instructions the appropriate agency.

After incident contained police or maintenance notify city storm water manager and report incident verbally. Written response confirmation (Police Report, Maintenance Report, Hazmat report, etc..) copied to City storm water manager as part of follow up.

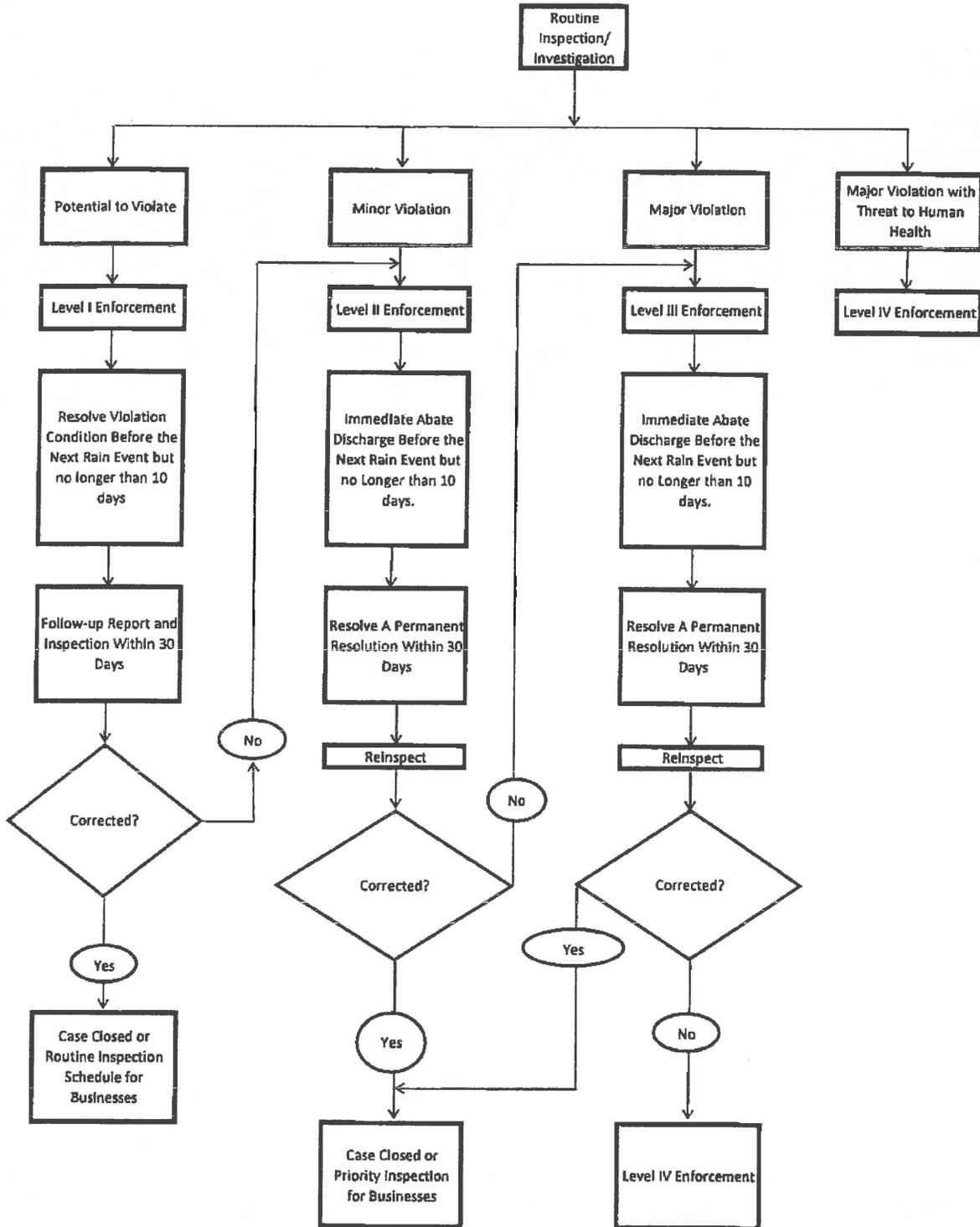
## General Overview of Spill Response Process for Any Spill Type



Municipal Field Response to Non-Hazardous Spills



City of Clayton  
 Construction Sites  
 Enforcement Response Plan  
 Flow Chart



**ORDINANCE NO. 444**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CLAYTON AMENDING CHAPTER 13.12 TO TITLE 13 OF THE MUNICIPAL CODE RELATING TO STORMWATER MANAGEMENT AND DISCHARGE CONTROL FOR COMPLIANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM (STORM WATER POLLUTION PREVENTION) MUNICIPAL REGIONAL PERMIT (MRP) IMPOSED BY THE REGIONAL WATER QUALITY CONTROL BOARD**

**THE CITY COUNCIL OF THE CITY OF CLAYTON FINDS AS FOLLOWS:**

**WHEREAS**, the 1987 Reauthorization of the Federal Clean Water Act, as well as similar State legislation, required local agencies to obtain a NPDES Permit for discharging the contents of municipal storm drainage water conveyance systems; and

**WHEREAS**, the Federal Clean Water Act and related permits are implemented and enforced by the State through the Regional Water Quality Control Board (San Francisco Bay Area Region), this permitting effort is intended to improve water quality in the Delta and San Francisco Bay Estuary System, protect endangered species, and safeguard public waters and waterways for continued economic, recreation and health purposes; and

**WHEREAS**, stormwater runoff pollution has been identified as a significant impact on water quality and wildlife in the Bay Area by the State and Federal Government; and

**WHEREAS**, the City of Clayton's National Pollutant Discharge Elimination System (NPDES) permit was reissued in 2009 by the San Francisco Water Quality Control Board in, which added various mandates, including that related to Stormwater Management and Discharge Control, and

**WHEREAS**, the public necessity, conveniences and general welfare require the adoption of the proposed ordinance for compliance with the City's NPDES permit through the Municipal Regional Permit (MRP) issued by the San Francisco Regional Water Quality Control Board; and

**WHEREAS**, on March 19, 2013 the City Council held a public meeting to consider amending the Municipal Code, as proposed in the Ordinance amendments "Stormwater Management and Discharge Control"; considered the information contained in the staff report and any other written and public testimony; introduced and held first reading of said Ordinance; and

**WHEREAS**, the additions to the Municipal Code are categorically exempt under the California Environmental Quality Act (CEQA) pursuant to Section 15307, Class 7; and Section 15308, Class 8--actions by regulatory agencies for the protection of natural resources and;

**WHEREAS**, there is no evidence that the additions will have the potential for any individual or cumulative adverse effect on fish and wildlife resources or their habitat, as defined in Section 711.2 of the Fish and Game Code.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CLAYTON DOES HEREBY ORDAIN AS FOLLOWS:**

**Section 1. Revocation and Amendment.**

Chapter 13.12 of Title 13 of the Clayton Municipal Code, as adopted by Ordinance No. 379 is hereby revoked in its entirety and amended to read as follows:

“Chapter 13.12. Stormwater Management and Discharge Control

**Section 13.12.010. Intent and Purpose.**

A. The intent of this Chapter is to protect and enhance the water quality in the City of Clayton's watercourses pursuant to, and consistent with the Porter-Cologne Water Quality Control Act (Water Code section 13000 et seq.) and the Federal Clean Water Act (33 U.S.C. section 1251 et seq.).

B. This Chapter also carries out the conditions in the City's National Pollutant Discharge Elimination System (NPDES) permit that require implementation of appropriate source control and site design measures and stormwater treatment measures for development projects.

C. It is the purpose of the City Council in enacting this Chapter to protect the health, safety and general welfare of Clayton's citizens by:

1. minimizing non-stormwater discharges, whose pollutants would otherwise degrade the water quality of local streams, to the stormwater system.

2. minimizing increases in nonpoint source pollution caused by stormwater runoff from development that would otherwise degrade local water quality.
3. controlling the discharge to the City's stormwater system from spills, dumping or disposal of materials other than stormwater.
4. reducing stormwater run-off rates and volumes and nonpoint source pollution whenever possible, through stormwater management controls and ensuring that these management controls are properly maintained and pose no threat to public safety.

Section 13.12.020. Definitions.

The following words and phrases when used in this Chapter shall be as defined herein. Words and phrases in this Chapter and not otherwise defined shall be interpreted as defined in the regulations issued by the U.S. Environmental Protection Agency to implement the provisions of the Federal Clean Water Act, and as defined by the State Water Resources Control Board to implement the Porter-Cologne Act:

- A. Best management practices or "BMP" are structural devices, measures, stormwater management facilities, activities, prohibitions, or practices, general good housekeeping, pollution prevention practices, maintenance procedures and other management practices, to prevent or reduce the discharge of pollutants directly or indirectly to "waters of the United States," including watercourses, water bodies, and wetlands.
- B. City's NPDES permit shall mean the NPDES permit issued to the City of Clayton, Permit No. CAS612008, and any subsequent amendment, reissuance or successor to the NPDES permit.
- C. Construction shall mean any project, including projects requiring coverage under the General Construction Permit, that involves soil disturbing activities, including but not limited to, clearing, grading, paving, and disturbances to ground such as stockpiling and excavating. Construction sites are also all sites with disturbed or graded land area not protected by vegetation or pavement that are subject to a grading or building permit.
- D. Development shall mean construction, rehabilitation, redevelopment or reconstruction of any public or private residential project (whether single-family, multi-unit, or planned unit development) or industrial, commercial, retail or other nonresidential project, including public agency projects.

E. Development runoff requirements shall mean the provisions in the City's NPDES permit that contain performance standards to address both the construction and post-construction phase impacts of new projects and redevelopment projects on stormwater quality, as well as any requirements imposed by the director pursuant to a permit or other regulatory action.

F. Director shall mean the City Manager of the City of Clayton or his or her designee.

G. Enforcement officer or Officer shall mean those individuals designated by the director to act as authorized enforcement officers.

H. Guidebook shall mean the most recent version of the Contra Costa Clean Water Program Stormwater C.3. Guidebook.

I. Non-stormwater discharge is any addition of any pollutant to the City's stormwater system, except discharges pursuant to a NPDES permit, or discharges further exempted in Section 13.12.060(c) and (d) of this Chapter.

J. Pollutant shall mean any material other than stormwater including, but not limited to, petroleum products or by-products, solid waste, incinerator residue, sewage, sewage sludge, garbage, heat, chemical waste, biological materials, radioactive materials, wrecked or discarded equipment, rock, sand, soil and industrial, municipal or agricultural waste discharged into the water or stormwater system.

K. Premises shall mean any land, building, structure, facility, or installation, (including a building's grounds or other appurtenances), and adjacent sidewalks and parking strips.

L. Redevelopment shall mean land disturbing activity that results in the creation, addition, or replacement of exterior impervious area on a site on which some past development has occurred.

M. Regional Board shall mean the California Regional Water Quality Control Board, San Francisco Bay Region.

N. Responsible person shall mean the owner or occupant of any premises or who engages in, permits, or oversees any activity from which there is or may be a non-stormwater discharge

or any person who releases pollutants to the City's stormwater system.

O. Stormwater shall mean storm water runoff, snow melt runoff, surface runoff and drainage flow on the surface of the ground resulting from precipitation.

P. Stormwater management facility shall mean any BMP or any device that utilizes detention, retention, filtration, harvest for reuse, evapotranspiration or infiltration to provide treatment (and/or control volume, flows, and durations) of stormwater for purposes of compliance with development runoff requirements.

Q. Stormwater control plan shall mean a plan that meets those criteria contained in the most recent version of the Contra Costa Clean Water Program Stormwater C.3. Guidebook.

R. Stormwater system is that system of facilities by which stormwater may be conveyed to any stream, watercourse, other body of water or wetlands, including flood control channels, any roads with drainage systems, city streets, catch basins, curbs, gutters, ditches, improved channels, storm drains or storm drain system, which are not part of a Publicly Owned Treatment Works ("POTW") as that term is defined in 40 CFR section 122.2.

Section 13.12.030. Responsibility for Administration.

The director or his or her designee shall administer this Chapter for the City.

Section 13.12.040. Construction and Application.

This Chapter shall be construed consistent with the requirements of the Federal Clean Water Act and amendments thereto or applicable implementing regulations and the City's NPDES permit.

Section 13.12.050 Stormwater Control Plan Required.

A. In accordance with thresholds and effective dates in the City's NPDES Permit, every application for a development project, including but not limited to a rezoning, tentative map, parcel map, conditional use permit, variance, site development permit, grading permit, encroachment permit, design review, or building permit that is subject to the development runoff requirements in the City's NPDES permit shall be accompanied by a stormwater control plan that meets the criteria in the most recent version of the Contra Costa Clean Water Program Stormwater C.3. Guidebook.

B. Implementation of an approved stormwater control plan and submittal of an approved stormwater control operation and maintenance plan by the applicant shall be a condition precedent to a final building inspection or the issuance of a certificate of occupancy for a project subject to this section.

C. All stormwater management facilities shall be designed in a manner to minimize the need for maintenance and reduce the chances of failure. Design guidelines are outlined in the Guidebook.

D. All stormwater management facilities shall be maintained according to the Guidebook and the approved stormwater control operation and maintenance plan. The person(s) or organization(s) responsible for maintenance shall be designated in the stormwater control operation and maintenance plan. Unless a different time period is provided for in the plan, those responsible for maintenance shall inspect the stormwater management facility at least annually. The stormwater control operation and maintenance plan shall also describe how the maintenance costs will be funded. Upon the failure of a responsible person to maintain a stormwater management facility in accordance with this Chapter or the plan, the City may perform the maintenance and recover its costs from the responsible person as provided in sections 13.12.100, 13.12.170 and 13.12.180.

E. A property owner shall, through recorded covenants or easements, provide the City, the Contra Costa Mosquito and Vector Control District, and the Regional Board access to stormwater management facilities for inspections and maintenance.

Section 13.12.060. Prohibited Discharges.

A. The discharge of non-stormwater to the City stormwater system is prohibited.

B. The discharge of stormwater from any premises and any activity that may cause or contribute to prohibited discharge, to a violation of receiving water limitations in the City's NPDES permit, or to a nuisance within the meaning of California Water Code section 13050 is prohibited.

C. The following discharges are exempt from the prohibition set forth in subsection (a) above, unless determined by the director to be a source of pollutants to or from the stormwater system or to receiving waters:

1. any discharge in compliance with a NPDES permit issued to the discharger.

2. flows from riparian habitats and wetlands, diverted stream flows, flows from natural springs, rising ground waters, uncontaminated and unpolluted groundwater infiltration, single-family homes' pumped groundwater, foundation drains, and water from crawl space pumps and footing drains, and pumped groundwater from drinking water aquifers.

D. The following discharges are exempt from the prohibition set forth in subsection (a) above, if and only if the director identifies such discharge as not being a source of any pollutant to the stormwater system or to a receiving water or if control measures required by the director and as set forth in Section C.15 of the City's NPDES permit are properly implemented: pumped groundwater from non-drinking-water aquifers; pumped groundwater from other sources, foundation drains, and water from crawl space pumps and footing drains;

air conditioning condensate; planned discharges from routine operation and maintenance activities in the potable water distribution system; unplanned discharges from breaks, leaks, overflows, fire hydrant shearing, or emergency flushing of the potable water distribution system; emergency discharges of the potable water distribution system as a result of firefighting, unauthorized hydrant openings, or natural or man-made disasters; individual residential car washing; swimming pool, hot tub, spa, and fountain water discharges, and discharges from irrigation water, landscape irrigation, and lawn or garden watering.

Section 13.12.070. Discharge in Violation of NPDES Permit.

Any discharge that may result in or contribute to a violation of the City's NPDES permit either separately considered or when combined with other discharges, is prohibited. Liability for any such discharge shall be the responsibility of the person causing or responsible for the discharge, and such person shall defend, indemnify and hold harmless the City in any administrative or judicial enforcement action relating to such discharge.

Section 13.12.080. Unlawful Discharge and Unlawful Connections.

A. It is unlawful to allow, permit, establish, use, maintain or continue unauthorized drainage connections to the City's stormwater system, or to commence or continue any unauthorized discharges to the City's stormwater system.

B. No discharge shall cause the following conditions, create a nuisance, adversely affect beneficial uses of waters of the State, or cause or contribute to a violation of any applicable water quality standard for receiving waters:

1. floating, suspended or deposited macroscopic matter or foam;
2. bottom deposits or aquatic growth;
3. alterations of temperature, sediment load, nutrient load, or dissolved oxygen, which cause significant adverse impacts to native aquatic biota;
4. visible, floating, suspended or deposited oil or products of petroleum origin; or,
5. substances present in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption.

Section 13.12.090. Best Management Practices and Standards.

A. Generally. Any person owning or operating premises that may contribute pollutants to the City's stormwater system shall undertake best management practices to reduce the potential for pollutants entering the system to the maximum extent practicable. Examples of

such premises include, but are not limited to, parking lots, gasoline stations, industrial facilities, and other commercial enterprises. Examples of best management practices include, but are not limited to, those described in publications by the United States Environmental Protection Agency, the California Water Boards, the California Stormwater Quality Association, the Bay Area Stormwater Management Agencies Association, the Contra Costa Clean Water Program, and the City of Clayton.

B. Litter. No person shall throw, deposit, leave, keep or permit to be thrown, deposited, placed, left or maintained, any refuse, rubbish, garbage or other discarded or abandoned objects, articles or other litter in or upon any street, alley, sidewalk, business place, creek, stormwater system, fountain, pool, lake, stream, river or any other body of water, or upon any public or private parcel of land so that the same might become a pollutant, except in containers or in lawfully established waste disposal facilities.

C. Sidewalks. The occupant or tenant, or in the absence of occupant or tenant, the owner or proprietor of any real property in front of which there is a paved sidewalk shall maintain said sidewalk free of dirt or litter to the maximum extent practicable. Sweepings from the sidewalk shall not be swept or otherwise made or allowed to go into the gutter or roadway, but shall be disposed of in receptacles maintained as required for the disposal of solid waste.

D. Maintenance of Facilities and Landscaped Areas. Every responsible person shall implement Best Management Practices to minimize the release of pesticides, fertilizers, herbicides, and other related materials used to maintain landscaping and facilities.

E. Parking Lots, Paved Areas and Related Stormwater Systems. Persons owning, operating or maintaining a paved parking lot, the paved areas of a gasoline station, a paved private street or road, or similar structure, and related stormwater systems shall clean those premises as frequently and thoroughly as practicable in a manner that does not result in the discharge of pollutants to the City's stormwater system. As part of an enforcement action pursuant to this Chapter, the director may require installation and maintenance of BMPs to prevent the discharge of trash or other pollutants from private parking lots, streets, roads, and drainage facilities into the stormwater system. Failure or refusal to comply with such a requirement is prohibited and shall constitute a separate violation of this Chapter.

F. Construction Activities. In addition to any other requirement imposed by this Chapter, all construction projects shall incorporate site-specific BMPs, which can be a combination of BMPs from the California BMP Handbook, Construction January 2003, the Caltrans Stormwater Quality Handbooks, Construction Site Best Management Practices, the San Francisco Bay Regional Water Quality Control Board Erosion and Sediment Control Field Manual, 2002, the City's NPDES Permit, the City's grading and erosion control ordinance, generally accepted engineering practices for erosion control, and any other conditions required by the director when undertaking construction activities. The director may establish controls on the rate, volume, and duration of stormwater runoff from new developments and redevelopment as may be appropriate to minimize the discharge and transport of pollutants.

G. Notification of Intent and Compliance with General Permits. Each discharger associated with construction activity or other discharger described in any general stormwater permit

addressing discharges, as may be adopted by the United States Environmental Protection Agency, the State Water Resources Control Board, or the Regional Board shall provide the director with the notice of intent, comply with and undertake all other activities required by any general stormwater permit applicable to such dischargers. Each discharger identified in an individual NPDES permit relating to stormwater discharges shall comply with and undertake all activities required by the permit.

H. **Development Runoff Requirements.** Every applicant for a new development and redevelopment project subject to the development runoff requirements shall submit a stormwater control plan and implement conditions of approval that reduce stormwater pollutant discharges through the construction, operation and maintenance of treatment measures and other appropriate source control and site design measures. Similarly, increases in runoff volume, flows, and durations shall be managed in accordance with the development runoff requirements.

I. **Stormwater Pollution Prevention Plan.** The director may require any business or utility in the City that is engaged in activities that may result in non-stormwater discharges or runoff pollutants to develop and implement a stormwater pollution prevention plan, which must include an employee training program. Business activities which may require a stormwater pollution prevention plan include maintenance, storage, manufacturing, assembly, equipment operations, vehicle loading, fueling, vehicle maintenance, food handling or processing, or cleanup procedures, carried out partially or wholly out of doors.

J. **Coordination with Hazardous Material Release Response and Inventory Plans.** Any business subject to the Hazardous Material Release Response and Inventory Plan, Division 20, Chapter 6.95 of the California Health and Safety Code (commencing with section 25500), shall include, in that Plan, provision for compliance with this Chapter, including the prohibitions of non-stormwater discharges and the requirement to reduce release of pollutants to the maximum extent practicable.

Section 13.12.100. Reserved.

Section 13.12.110. Authority to Inspect.

A. **Generally.** The director and officer shall have the authority to enter property and make an inspection to enforce and carry out the provisions of this Chapter. Routine or scheduled inspections shall be based upon as reasonable a selection process as may be deemed necessary to carry out the intent of this Chapter, including, but not limited to, random sampling or sampling in areas with evidence of stormwater contamination, evidence of the discharge of non-stormwater to the stormwater system, inspection of stormwater treatment and flow-control facilities for proper operation and evidence of routine and corrective maintenance, or similar activities. Inspections may also be conducted in conjunction with routine or scheduled inspections conducted by other public agencies or special districts, including but not limited to the Central Contra Costa Sanitary District, the Contra Costa County Fire Protection District, County Environmental Health Department, the Contra Costa Mosquito and Vector Control District, or the Regional Board. The City Council may by resolution establish a schedule of fees for inspections.

B. **Authority to Sample and Establish Sampling Devices.** With the consent of the owner or

occupant, or pursuant to a search or inspection warrant, the officer may establish on any property such devices as are reasonably necessary to conduct sampling or metering operations. During all authorized inspections, the officer may take any sample deemed necessary to aid in the pursuit of the inquiry or in the recordation of the activities on site.

C. Notification of Spills. All persons in charge of the premises or responsible for emergency response for the premises have a responsibility to train premises' personnel and maintain notification procedures to ensure that immediate notification is provided to the City of any suspected, confirmed or unconfirmed release of pollutants creating a risk of non-stormwater discharge into the City stormwater system.

As soon as any person in charge of the premises or responsible for emergency response for the premises has knowledge of any suspected, confirmed or unconfirmed release of non-stormwater discharge entering the City stormwater system, such person shall take all necessary steps to ensure the detection and containment and clean up of such release and shall notify the City of the occurrence by telephoning the director. This notification requirement is in addition to and not in lieu of other required notifications.

D. Requirement to Test or Monitor. The officer may require that any person engaged in any activity or owning or operating any premises that may cause or contribute to non-stormwater discharges, undertake such monitoring activities or analysis and furnish such reports as the officer may specify. The burden, including costs of these activities, analysis and reports shall bear a reasonable relationship to the need for the monitoring, analysis and reports and the benefits to be obtained. The recipient of such request shall undertake and provide the monitoring, analysis and reports required.

E. Cost Recovery. If an inspection pursuant to this section results in an enforcement action, the City may issue an invoice of costs and recover in an enforcement action its reasonable inspection costs.

#### Section 13.12.120. Violations Constituting Misdemeanors or Infractions.

The violation of any provision of this Chapter, or failure to comply with any of the mandatory requirements of this Chapter shall constitute a misdemeanor, except that notwithstanding any other provisions of this Chapter, any violation constituting a misdemeanor under this Chapter may, at the discretion of the director, officer or city attorney, be charged and prosecuted as an infraction.

#### Section 13.12.130. Penalty for Violation.

A. Upon conviction of a misdemeanor, a person shall be subject to payment of a fine, or imprisonment, or both, not to exceed the limits set forth in California Government Code section 36901.

B. Upon conviction of an infraction, a person shall be subject to payment of a fine, not to exceed the limits set forth in California Government Code section 36900.

#### Section 13.12.140. Continuing Violation.

Every day that any violation of this Chapter shall continue shall constitute a separate offense.

Section 13.12.150. Concealment.

Concealing, aiding or abetting a violation of any provision of this Chapter shall constitute a violation of such provision.

Section 13.12.160. Acts Potentially Resulting in Violation of the Federal Clean Water Act or Porter-Cologne Act.

Any person who violates any provision of this Chapter, or the provisions of any permit issued pursuant to this Chapter, or who releases a non-stormwater discharge, or who violates any cease and desist order, prohibition or effluent limitation, may also be in violation of the Federal Clean Water Act or the Porter-Cologne Act and may be subject to the enforcement provisions of those acts, including civil and criminal penalties. Any enforcement actions authorized pursuant to this Chapter may also include notice to the violator of such potential liability pursuant to federal or state law.

Section 13.12.170. Violations Deemed a Nuisance.

In addition to the penalties provided herein, any condition caused or permitted to exist in violation of any of the provisions of this Chapter is a threat to the public health, safety and welfare. Such condition is hereby declared and deemed to be a nuisance, which may be abated as provided in Chapter 8.08 of Title 8 (commencing with section 8.08.010) of this Code including the assessment of the costs of abatement which may be collected at the same time and in the same manner as ordinary municipal taxes as provided by Government Code section 38773.5, and by civil action to abate, enjoin or otherwise compel the cessation of such nuisance by the City Attorney.

Section 13.12.180. Civil Actions.

A. In addition to any other remedies provided in this Chapter, any violation of this Chapter may be enforced by civil action brought by the City. In any such action, the City may seek, as appropriate, any and all of the following remedies:

1. a temporary restraining order, preliminary injunction and permanent injunction;
2. an action for an unlawful business practice pursuant to Business and Professions Code section 17206;

B. Any person violating any provision of this Chapter shall be liable for:

1. reimbursement for the costs of any investigation, inspection or monitoring which led to the discovery of the violation;
2. costs incurred in removing, correcting, or terminating the adverse effect(s) resulting from the violation;
3. compensatory damages for the loss of, or destruction to, water quality, wildlife, fish or aquatic life. Costs and damages under this subsection shall be paid to the City and shall be used exclusively for costs associated with monitoring and establishing a stormwater discharge pollution control system and implementing or enforcing the provisions of this Chapter;

4. the cost of maintenance and repair of any BMP or stormwater management facility that is not maintained in accordance with the guidebook or the stormwater control plan;

5. the reasonable costs of preparing and bringing administrative action under this Chapter.

Section 13.12.190. Remedies Not Exclusive.

The remedies identified in this Chapter are in addition to, and do not supersede or limit, any and all other remedies, administrative, civil or criminal. The remedies provided for herein shall be cumulative and not exclusive.

Section 13.12.200. Administrative Remedies.

A. In addition to any other remedies provided in this Chapter, any violation of this Chapter may be enforced by the following administrative remedies:

1. Notice of Violation. The director or officer may deliver to the owner or occupant of any premises, or to any person responsible for a violation of any provision of this Chapter a Notice of Violation in accordance with Chapter 1.14 of Title 1 of this Code. The Notice of Violation shall identify the provision(s) of this Chapter or the applicable permit or regulatory order which has been violated and shall state that continued noncompliance may result in additional enforcement actions against the owner, occupant and/or responsible person.

2. Suspension or Revocation of Permit. The director may suspend or revoke any City-issued permit when it is determined that:

i. The permittee has violated any term, condition or requirement of the permit or any applicable provision of this Chapter; or

ii. The permittee's discharge or the circumstances under which the discharge occurs have changed so that it is no longer appropriate to except the discharge from the prohibitions on prohibited discharge contained within this Chapter; or

iii. The permittee fails to comply with any schedule for compliance issued pursuant to this Chapter; or

iv. Any regulatory agency, including EPA or a Regional Water Quality Control Board having jurisdiction over the discharge, notifies the City that the discharge should be terminated; or

v. Any other circumstances where the director determines in his or her sole discretion that continuation of the discharge will result in substantial harm to public health or the environment.

3. Permit Modification. The director may modify any permit provided that the permittee shall be informed of any change in the permit terms and conditions at least forty-five (45) business days prior to the effective date of the modified permit when it is determined that:

- i. Federal or state law requirements have changed in a manner that necessitates a change in the permit; or
- ii. The permittee's discharge or the circumstances under which the discharge occurs have changed so that it is appropriate to modify the permit's terms, conditions or requirements; or
- iii. A change to the permit is necessary to ensure compliance with the objectives of this Chapter or to protect the quality of receiving waters.

B. Cease and Desist Order. The director or officer may deliver to the owner or occupant of any premises, or to any person responsible for a violation of any provision of this Chapter a Cease and Desist Order. The Cease and Desist Order shall be delivered in accordance with Section 13.12.210. The Cease and Desist Order may direct the recipient to:

1. Immediately discontinue any action constituting a violation of this Chapter;
2. Immediately contain or divert any flow of non-stormwater off the premises where the flow is occurring in violation of any provision of this Chapter;
3. Clean up the area affected by the violation; and
4. Implement BMPs necessary to prevent a future violation.

Section 13.12.210. Notice.

Unless otherwise required under Chapter 1.14, any notice or order to be delivered pursuant to this Chapter shall be subject to the following:

A. The notice or order shall state that the recipient has a right to appeal the matter as set forth in Section 13.12.220 or in Section 1.14.060.

B. Delivery shall be deemed complete upon personal service to the recipient; deposit in the U.S. mail, postage pre-paid for first class delivery; or facsimile service with confirmation of receipt.

C. Where the recipient is the owner of the property, the address shall be the address from the most recently issued equalized assessment roll for the property or as otherwise appears in the current records of the City.

D. Where the owner or occupant of any property cannot be located after the reasonable efforts the notice shall be deemed delivered after posting on the property for a period of ten (10) business days.

Section 13.12.220. Appeal.

Except as provided for a notice of violation under Section 1.14.060, any person aggrieved by the decision of the officer, may file a written appeal to the director within 10 (ten) days following the date of delivery of the decision. Upon receipt of such request, the director shall request a report and recommendation from the officer and shall set the matter for hearing at the earliest practical date. At said hearing, all evidence and testimony deemed relevant and admissible by the Director shall be considered, and the Director may reject, affirm, or modify the officer's decision. Formal rules of evidence shall not apply. The decisions of the director shall be final. Failure to request a hearing or appear at the hearing shall constitute a waiver and failure to exhaust administrative remedies.

Section 13.12.230. Judicial Review.

The provisions of Code of Civil Procedure section 1094.5 are applicable to judicial review of determinations made by the director pursuant to this Chapter.”

**Section 2. Action to Challenge This Ordinance.**

Any action or proceeding to attack, review, set aside, void or annul this ordinance must

be commenced and the service made on the City no later than ninety (90) days after the effective date of the ordinance.

**Section 3. Conflicting Ordinances Repealed.**

Any ordinance or part thereof, or regulations in conflict with the provisions of this ordinance, are hereby repealed. The provisions of this ordinance shall control with regard to any provision of the Clayton Municipal Code that may be inconsistent with the provisions of this ordinance.

**Section 4. Severability.**

If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause or phrase thereof irrespective of the fact that any one or more section, subsection, sentence, clause or phrase thereof be declared unconstitutional, invalid or ineffective.

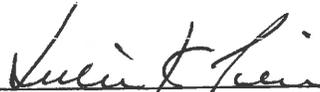
**Section 5. Effective Date and Publication.**

This ordinance shall become effective thirty (30) days after its adoption by the City Council. Within fifteen (15) days after the passage of the ordinance, the City Clerk shall cause a copy of the ordinance, including the names of the City Council members voting for and against it, to be posted in three (3) public places heretofore designated by resolution of the City Council for the posting of ordinances and public notices.

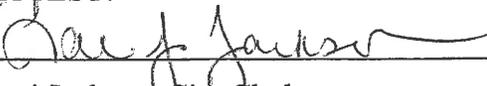
The foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Clayton held on the 19th day of March 2013, and PASSED, ADOPTED AND ORDERED posted at a regular meeting of the City Council of the City of Clayton on the 2nd day of April 2013, by the following vote:

AYES: Mayor Pierce, Vice Mayor Stratford, Councilmembers Diaz, Geller and Shuey.  
NOES: None.  
ABSENT: None.  
ABSTAIN: None.

APPROVED:

  
\_\_\_\_\_  
Julie K. Pierce, Mayor

ATTEST:

  
\_\_\_\_\_  
Laci Jackson, City Clerk

Laura/ordinance re stormwater management discharge control 2013

**Fiscal Year 2013/14 Public Information/Participation Program/BASMAA Events and Activities**

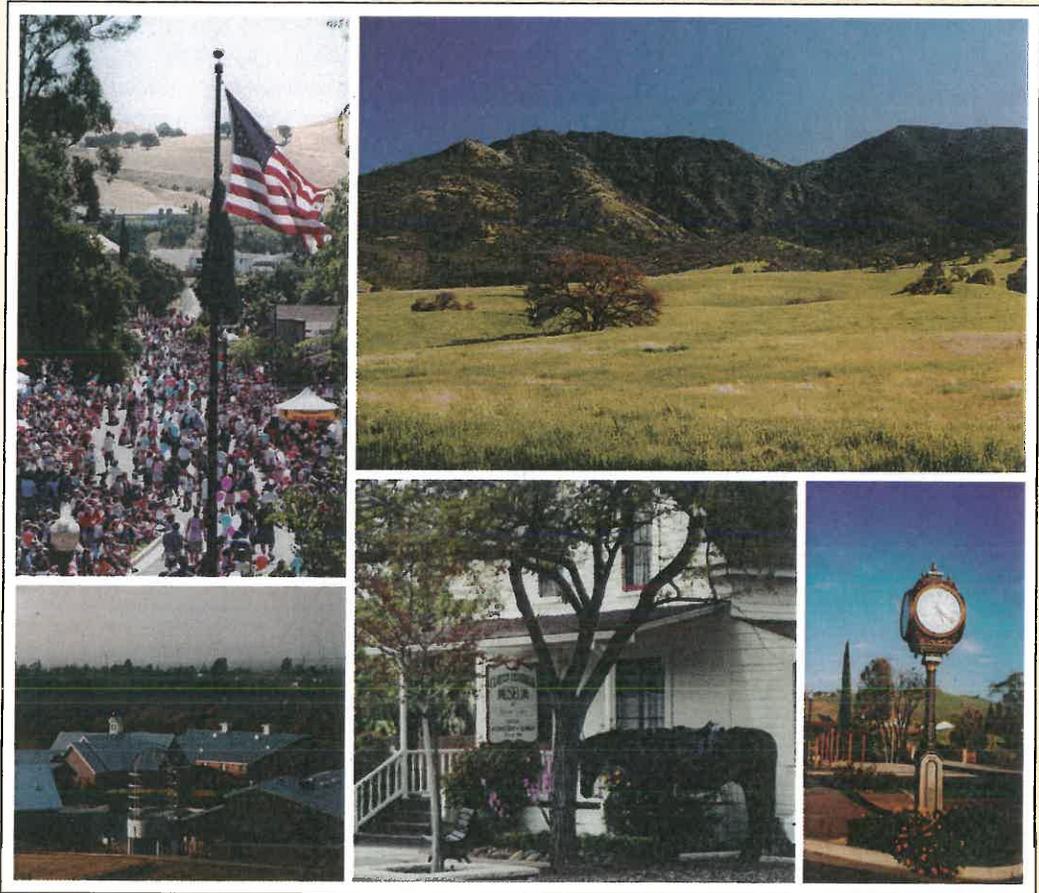
	<b>C.7.c. - Use of Free Media</b> - Participate in or contribute to a media relations campaign, at the program, regional, an/or local levels. Maximize use of free media.		<b>C.7.e. - Public Outreach Events</b> - Participate in and/or host events such as fairs, shows, workshops to reach a broad spectrum of the community with both general and specific stormwater runoff pollution prevention messages.		<b>C.7.f. - Watershed Stewardship Collaborative Events</b> - Individually or collectively encourage and support watershed stewardship collaborative efforts of community groups such as the CCWF, Friends of Creeks, etc.		<b>C.7.g. Citizen Involvement Events</b> - Individually or collectively support citizen involvement events which provide the opportunity for citizens to directly participate in water quality and aquatic habitat improvement, such as clean ups and volunteer monitoring.		<b>C.7.h. - School-Age Children Outreach</b> - Individually or collectively implement outreach activities designed to increase awareness of stormwater and/or watershed messages in school-age children (K-12).		<b>C.9.h. - Public Outreach to PCOs &amp; Residents</b> - Conduct outreach to consumers at point of purchase including participation in the Our Water Our World program. Outreach to residents who use or contract for structural or landscape pest control.	
	# Required	# Program / BASMAA events	# Required	# Program / BASMAA events	# Required	# Program / BASMAA events	# Required	# Program / BASMAA events	# Required	# Program / BASMAA events	# Required	# Program / BASMAA events
ANTIOCH	6	#3	5	#2, 7	1+	# 4, 8, 9	3	#1, 9, 10	1+	#5, 6	1+	#7, 11
BRENTWOOD	6	#3	4	#2, 7	1+	# 4, 8, 9	2	#1, 9, 10	1+	#5, 6	1+	#7, 11
<b>CLAYTON</b>	<b>6</b>	<b>#3</b>	<b>3</b>	<b>#2, 7</b>	<b>1+</b>	<b># 4, 8, 9</b>	<b>1</b>	<b>#1, 9, 10</b>	<b>1+</b>	<b>#5, 6</b>	<b>1+</b>	<b>#7, 11</b>
CONCORD	6	#3	5	#2, 7	1+	# 4, 8, 9	3	#1, 9, 10	1+	#5, 6	1+	#7, 11
COUNTY	6	#3	5	#2, 7	1+	# 4, 8, 9	3	#1, 9, 10	1+	#5, 6	1+	#7, 11
DANVILLE	6	#3	4	#2, 7	1+	# 4, 8, 9	2	#1, 9, 10	1+	#5, 6	1+	#7, 11
EL CERRITO	6	#3	3	#2, 7	1+	# 4, 8, 9	1	#1, 9, 10	1+	#5, 6	1+	#7, 11
FLOOD CONTROL	6	#3	6	#2, 7	1+	# 4, 8, 9	2	#1, 9, 10	1+	#5, 6	1+	#7, 11
HERCULES	6	#3	3	#2, 7	1+	# 4, 8, 9	1	#1, 9, 10	1+	#5, 6	1+	#7, 11
LAFAYETTE	6	#3	3	#2, 7	1+	# 4, 8, 9	1	#1, 9, 10	1+	#5, 6	1+	#7, 11
MARTINEZ	6	#3	3	#2, 7	1+	# 4, 8, 9	1	#1, 9, 10	1+	#5, 6	1+	#7, 11
MORAGA	6	#3	3	#2, 7	1+	# 4, 8, 9	1	#1, 9, 10	1+	#5, 6	1+	#7, 11
OAKLEY	6	#3	3	#2, 7	1+	# 4, 8, 9	1	#1, 9, 10	1+	#5, 6	1+	#7, 11
ORINDA	6	#3	3	#2, 7	1+	# 4, 8, 9	1	#1, 9, 10	1+	#5, 6	1+	#7, 11
PINOLE	6	#3	3	#2, 7	1+	# 4, 8, 9	1	#1, 9, 10	1+	#5, 6	1+	#7, 11
PITTSBURG	6	#3	4	#2, 7	1+	# 4, 8, 9	2	#1, 9, 10	1+	#5, 6	1+	#7, 11
PLEASANT HILL	6	#3	3	#2, 7	1+	# 4, 8, 9	1	#1, 9, 10	1+	#5, 6	1+	#7, 11
RICHMOND	6	#3	5	#2, 7	1+	# 4, 8, 9	3	#1, 9, 10	1+	#5, 6	1+	#7, 11
SAN PABLO	6	#3	3	#2, 7	1+	# 4, 8, 9	1	#1, 9, 10	1+	#5, 6	1+	#7, 11
SAN RAMON	6	#3	4	#2, 7	1+	# 4, 8, 9	2	#1, 9, 10	1+	#5, 6	1+	#7, 11
WALNUT CREEK	6	#3	4	#2, 7	1+	# 4, 8, 9	2	#1, 9, 10	1+	#5, 6	1+	#7, 11

1. 2014 Community Watershed Stewardship Grant Program
2. May 2014 "Bringing Back the Natives" Garden Tours
3. 6 "Use of Free Media" BASMAA Press Releases
4. Program Participation on the Contra Costa Watershed Forum
5. "Be Classy Not Trashy" Youth Outreach Litter Campaign
6. Mr. Funnelhead School, City/County Events and TV Ads
7. Our Water Our World (Includes Tabling/Outreach Events at Stores)
8. Green Business Program
9. Website: CCCleanWater.org Community Calendar
10. Website: MyGreenGarden.org
11. Pesticides Linger Pilot Implementation

Attachments  
 C7g,e,f,g,h

# 2014 CUSTOMER GUIDE

## Garbage, Recycling, Yard Waste Services



Clayton



Naturally Sustainable



Leave carts out by 6:00 a.m., and keep carts 4 feet apart.

# BROWN CART

## Weekly Recycling Service



### OK FOR RECYCLING

#### PAPER

- Books (paperback)
- Boxes, packages
- Carbonless paper
- Cardboard (cut to fit in cart)
- Catalogs
- Cereal boxes
- Colored and construction paper
- Computer paper
- Copy paper
- Coupons
- Detergent boxes
- Egg cartons (paper only; no Styrofoam)
- Envelopes with metal clasps
- Envelopes with plastic windows
- Frozen food packages (remove liners)
- Gift wrap (nonmetallic)
- Junk mail
- Magazines
- Manila folders
- Newspapers and inserts
- Office paper
- Paper (adhesive/Post-its)
- Paper bags
- Paper packaging with remnant tape



- Pizza boxes (no food residue)
- Telephone books
- Tissue paper (gift type)



#### METAL

- Aerosol cans (empty)
- Aluminum cans
- Aluminum foil (clean)
- Aluminum pie plates
- Cookie sheets
- Beverage cans
- Food cans (clean)
- Paint cans (empty, dried, latex)
- Pet food cans
- Pots and pans
- Scrap metal
- Small metal items
- Steel cans
- Tin cans

### REMINDERS

- Collections are WEEKLY on the same day as your garbage service.
- For missed service, please call within 24 hours.
- **No charge for larger or extra recycle cart.**
- Place all recyclables in brown cart. Cardboard may be placed next to the recycling cart. Please break down boxes.
- Extra cardboard can be recycled 4 times a year free with on-call recycling. See On-Call Recycling in Yard Waste section.
- Be sure cart lid is completely closed.
- Before discarding, consider reusing or donating.
- For recycling and reuse options for other materials call the Recycling Hotline at 1-800-750-4096 or visit [www.cccrecycle.org](http://www.cccrecycle.org).



#### PLASTIC

- (Containers only; rinsed, empty; with chasing arrows #1-#7)*
- Baby wipe containers
  - Bleach bottles
  - Buckets without handles
  - Beverage containers (soda, water, juice)
  - Detergent bottles
  - Food containers
  - Fruit basket (plastic, #1-#7)
  - Household cleaning containers
  - Milk jugs
  - Plant containers (plastic, #1-#7)
  - Prescription bottles (empty, #1-#7)
  - Salad dressing bottles
  - Shampoo, conditioner, toiletry bottles
  - Tub containers (yogurt, cottage cheese, margarine, #1-#7)
  - Water jugs

### NOT FOR BROWN CART

- ⊘ Appliances
- ⊘ Batteries
- ⊘ Ceramics
- ⊘ Electronic waste
- ⊘ Food waste
- ⊘ Garbage
- ⊘ Hangers (metal or plastic)
- ⊘ Hazardous waste
- ⊘ Ink cartridges
- ⊘ Milk cartons
- ⊘ Mirrors, windows
- ⊘ Plastic-coated paper
- ⊘ Plastic bags
- ⊘ Plastic wrap, packaging
- ⊘ Restroom waste
- ⊘ Sharps (needles, syringes, lancets)
- ⊘ Styrofoam
- ⊘ To-go cups and food packaging
- ⊘ Waxed paper
- ⊘ Yard waste



#### GLASS

- (Rinsed, empty; all colors; lids, caps OK)*
- Bottles
  - Beverage containers
  - Jars



# GREEN CART

## Weekly Yard Waste Service



**Leave carts out by 6:00 a.m., and keep carts 4 feet apart.**

### OK FOR RECYCLING

- |                  |                |  |
|------------------|----------------|--|
| Brush            | House plants   | Tree branches 6 inches or less in diameter, 3 feet or less in length |
| Cactus           | Lawn clippings | Weeds  |
| Flower cuttings  | Leaves         | Wood chips   |
| Flowers          | Prunings       | Yard waste   |
| Garden trimmings | Shrubbery      |  |
| Grass            | Straw          |  |
| Hay              |                |  |

### ON-CALL YW & RECYCLING CLEANUPS

Recycle extra yard waste (YW) or corrugated cardboard or both with up to 4 free on-call recycling cleanups per year. Household batteries and cell phones can be recycled **FREE** with your on-call recycling cleanups. To schedule a recycling cleanup, call Republic Services at (925) 685-4711 or visit [www.awsgcc.com](http://www.awsgcc.com) and request the service online. Recycling cleanups are in addition to weekly yard waste and recycling service and are scheduled for collection on the same day as your regular recycling and yard waste service. If you request a collection on a day other than your regular recycling and yard waste service day, a fee will apply.

#### Extra Yard Waste

- After filling yard waste cart, place extra leaves and yard clippings in cardboard boxes, paper bags and containers that are 32 gallons or less in volume. Maximum 50 lbs. per container. (No plastic bags.)
- Containers will not be taken away.
- Tree branches and prunings must be 3 feet or less in length and 6 inches or less in diameter. Bundle with string or cord.
- Place extra yard waste at curb by 6 a.m. of your pickup day or the night before.
- Keep extra material at least 4 feet away from carts.

#### Corrugated Cardboard

- Flatten corrugated cardboard and trim to 4 feet or less on each side. Bundle with cord or string. No maximum on bundle's thickness if less than 50 lbs.
- Place cardboard at the curb by 6 a.m. of your pickup day or the night before.
- Place the extra material next to your brown recycling cart.

#### Household Batteries and Cell Phones

- Place batteries in a clear, quart-size plastic bag, i.e., Ziploc. Single-use AA, AAA, C, D and 9V batteries only. No rechargeables.
- Place cell phones and chargers in a plastic bag, i.e., Ziploc. Broken phones OK.
- Maximum of 4 cell phones per household.
- Place bagged batteries, cell phones next to bundles or boxes (**NOT in carts**).



### REMINDERS

- **NOT** acceptable for regular or on-call yard waste recycling:
  - 1) Plastic bags
  - 2) Rocks and concrete
  - 3) Sod and dirt
  - 4) Loose fruits and vegetables
  - 5) Large tree trunks and stumps greater than 6 inches in diameter or more than 3 feet in length
  - 6) Palm fronds
  - 7) Pet waste
  - 8) Hazardous waste
  - 9) Garbage and inorganic materials including recyclables like plastics, glass, metal and paper.
- Collection is **WEEKLY** on the same day as garbage service.
- For missed service, please call within 24 hours.
- **No charge for larger or extra yard waste cart.**
- Be sure all materials fit inside the cart with lid closed.
- Keep cart 4 feet away from other carts and any objects including cars and mailboxes.



# BLUE CART

## Weekly Garbage Service

### ON CALL CLEANUPS

Residents in Clayton may schedule two **free** cleanups per year at any time. Cleanups can be used to discard up to two cubic yards (approx. fourteen 32-gallon bags) of extra trash and items that are too large for garbage carts. To schedule a cleanup, call Republic Services at (925) 685-4711. You can also schedule a pickup online by visiting our website at [www.awsccc.com](http://www.awsccc.com).

### Guidelines for Cleanups

- Place items at the curb by 6 a.m., preferably the night before your cleanup day.
- All items must be stacked in one place.
- Cut and tie branches, prunings or wood so bundles are 4 feet or less in length and less than 24 inches in diameter. Tree stumps cannot be collected.
- Bag or tie items with rope, cord or string strong enough to keep bundles intact or place in containers, including metal and plastic trash cans. All containers will be taken away.
- Place cleanup items in a single pile at a distance of 5 feet or more from your garbage cart.
- No loose piles.

### Unacceptable Materials

- No single item may weigh more than 150 lbs. or be longer than 4 feet. Bags cannot weigh more than 50 pounds.
- No large car parts (tires, transmission blocks, engines, etc.), large furniture or mattresses.
- No rocks, dirt or concrete.
- No tree stumps or large tree trunks.
- No microwave ovens, clothes dryers, space heaters, ovens or other appliances with mercury switches. These can be picked up for a fee.
- No hazardous wastes including paint, oil filters, motor oil, car batteries, anti-freeze, solvents, pesticides and cleaners. Hazardous waste must be taken to the Central Sanitary HHW Facility at 4797 Imhoff Place, Martinez.

### WHAT SHOULD GO IN YOUR GARBAGE CART

Please place as much **green waste** as possible in your **green yard waste cart**.

Place all the containers and materials listed in the **recycling** section in your **brown recycling cart**.

**Everything else** goes into your **blue garbage cart**.

If you have any questions, call us at (925) 685-4711.

### REMINDERS

- For missed service, please call within 24 hours.
- Be sure all materials fit inside the cart with lid closed.
- Before discarding items, consider reusing or donating.
- Place only trash in your garbage cart.
- Leave the cart out the night before or by 6 a.m. of your collection day.
- Leave at least four (4) feet of space between your garbage cart and any other object including your yard waste and recycling carts and from any street obstacles such as mailboxes, cars or portable basketball hoops.
- Don't place recyclables, yard waste or hazardous waste in garbage carts.

# BULKY ITEMS

## Free Pickup for E-Waste, Too

Clayton residents may have any item listed here, such as mattresses, furniture, appliances and other large pieces, picked up at no charge at the curbside.

Just call the office at (925) 685-4711 to schedule.

- Air conditioner (pickup & Freon removal)
- Computer monitors
- Couch/sofa
- Dishwasher
- Dryer
- Electronics
- Freezer (pickup & Freon removal)
- Hot water heater
- Hide-a-bed
- Double mattress
- Double box spring
- Twin mattress
- Twin box spring
- Queen mattress
- Queen box spring
- King mattress
- King box spring
- Refrigerator (pickup & Freon removal)
- Stove
- Washer
- Swamp cooler



- Tires (less than 19 inches)
- Tires with rim (less than 19 inches)
- Tires (larger than 19 inches)
- Tires with rim (larger than 19 inches)
- TV (32 inches or smaller)
- TV (32 inches or larger)

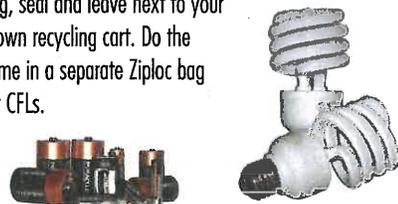
### Free E-Waste Pickups

There is no charge for collection of e-waste in Clayton. Call (925) 685-4711 to schedule a pickup.



### Recycle Batteries, CFLs

Household batteries and compact fluorescent lights can be recycled curbside. Place batteries in quart-size Ziploc bag, seal and leave next to your brown recycling cart. Do the same in a separate Ziploc bag for CFLs.



# The ECO-PAGE



## Helping You Help the Earth!

### What Happens to Recyclables & Garbage

**Q. What happens to my recyclables after I put them in my brown cart?**

**A.** After your recyclables are emptied into our truck, they are taken to Pacific Rim Recycling in Benicia.

The recyclables travel down a conveyor belt, and employees separate them into different commodities. The different material types are then baled together and sold.

**Q. What happens to my garbage after I put it in my blue cart?**

**A.** Anything put in the garbage becomes trash forever. What you put in your blue garbage cart (even recyclables like cardboard, cans, bottles) is taken to our Martinez Transfer Station to be compacted, then to Keller Canyon Landfill in Pittsburg.

Employees do NOT sort through garbage and pick out recyclable items. Please put all recyclable items in the brown recycling cart!

### Why You Cannot Recycle...

**Styrofoam:** There is no market for Styrofoam because it is low quality, cheaper to produce from virgin materials and usually contaminated with food. Since it is a useless commodity, it goes straight to the landfill. However, a large amount of Styrofoam products end up as litter and reach the ocean, where they break down into smaller bits and are ingested by birds and sea animals. Avoid Styrofoam whenever you can and tell your favorite restaurants to switch to greener packaging.



**Milk Cartons:** A waxy coating on paper or cardboard diminishes the value of the commodity and makes recycling difficult.



### Chipbags & Aseptic Packaging:

Both packaging materials are not recyclable because they are an amalgam of multiple material types. Aluminum foil is bound to plastic or in the case of aseptic packaging aluminum is bound to waxy cardboard. These materials cannot be separated for recycling so unfortunately they have to go in the garbage.



### Reuse Area at Central Sanitary

Need some paint? Gardening products? Cleaning chemicals? Stop by the Reuse Room at Central Sanitary's HHW Facility to drop off unwanted chemicals and pick up new ones, all at no charge! Open Monday through Saturday, 9 a.m. to 3:30 p.m.



### Old Pills Piling Up?

Don't dump medicines and over-the-counter drugs down the drain or toilet. Flushed drugs enter waterways, harming people, animals and the environment. Wastewater facilities cannot remove these chemicals. Remove labels and place containers in sealable plastic bag. Dispose of safely at:



- Police station, City Hall 2nd floor, 6000 Heritage Trail, Clayton (9-5, M-F), ph: (925) 673-7350.
- Sheriff's Substation at County Hospital, 2500 Alhambra Ave.; Sheriff's Field Ops Bldg., 1980 Muir Road; Martinez Police, 525 Henrietta St., all in Martinez (8-5, M-F).
- City Hall Lobby, 1666 N. Main St., Walnut Creek (8-5, M-F).

### Freecycle, Craigslist

Recycling is the last of the 3 Rs – Reduce, Reuse, Recycle. Incorporate the first two (Reduce & Reuse) into your everyday life through the free services at [Craigslist.org](http://Craigslist.org) and [Freecycle.org](http://Freecycle.org). They help you find new homes for unwanted goods, and they're great sources of free (or cheap) goods.

### Plastic vs. Reusable Bags

Americans use billions of plastic bags per year, many of which end up in the landfill or in the ocean. Consider using canvas or reusable bags at the grocery store. Some stores have reusable bags for purchase and often offer discounts for using reusables instead of plastic or paper bags.



We do not accept plastic bags (or any type of plastic film material) for recycling, but state law requires grocery stores to accept them for recycling. Visit [www.plasticbagrecycling.org](http://www.plasticbagrecycling.org) for information.

# Household Hazardous Waste

## Motor Oil, Filters, and Cooking Oil

Recycle oil filters and used motor oil curbside.

Recycle large amounts of cooking oil at the Central Sanitary District HHW Facility.

### Oil Filters, Motor Oil

- Pour **motor** oil into a clear plastic container like a milk jug.
- Tape lid to close it securely.
- Place jug **beside** your **recycling** cart.
- Maximum 3 gallons of oil per pickup.
- Place oil filters in sealable plastic bag, i.e., Ziploc bag, seal.
- Place bag **beside** your **recycling** cart.

### Cooking Oil

- Pour **cooking** oil into a clear plastic container like a plastic milk jug.
- Tape lid to close it securely.
- Recycle at the Central Sanitary District HHW Facility.



## Household Hazardous Waste

It is illegal to throw hazardous waste in your garbage or recycling cart. Recycle your car and household batteries, latex paint, antifreeze,



motor oil, oil filters, fluorescent bulbs, mercury thermometers, pesticides, solvents and other household chemicals **FREE OF CHARGE** at the Central Contra Costa Sanitary District HHW Facility, 4797 Imhoff Place, Martinez. For hours and information, call (800) 646-1431 or visit [www.centralson.org](http://www.centralson.org).

### Sharps

It is illegal to throw syringes, needles and lancets in garbage or recycling. Sharps must be placed in a medical sharps container and taken to an official drop-off site:

- Police station, 2nd floor, City Hall, 6000 Heritage Trail, Clayton, from 9-5, Mon-Fri.
- Call (925) 685-4711 or visit [www.awsccc.com](http://www.awsccc.com) for more sites.



## Electronic Waste

Republic Services will pick up at no charge e-waste such as CRTs (televisions, computer monitors), computers, keyboards, printers, fax machines, cellular phones, DVD players, VCRs, radios and other electronics. To schedule a pickup, call (925) 685-4711.



Electronic waste can also be taken to a licensed facility. Local e-waste companies offer free curbside pickup of electronic waste. For a list of e-waste facilities in your area, visit [www.awsccc.com](http://www.awsccc.com).

### Old Pills Piling Up?

Dispose of old medicines at the Clayton police station, 2nd floor, City Hall, 6000 Heritage Trail (9-5, M-F), (925) 673-7350, or at:

- Sheriff's Substation, County Hospital, 2500 Alhambra Ave., Martinez (8-5, M-F).
  - City Hall Lobby, 1666 N. Main St., Walnut Creek (8-5, M-F).
- Remove labels from containers and place in sealable plastic bag.



441 N. Buchanan Circle  
Pacheco, CA 94553

(925) 685-4711  
[www.awsccc.com](http://www.awsccc.com)



Naturally Sustainable

Republic Services is a green business and helps customers pursue "naturally sustainable" practices.



Leave carts out by 6 a.m. with 4 feet of space around each cart.

## Carts at the Curb Line

The City of Clayton's quality community standard calls for no carts at the curb before noon the day before collection, and please remove your carts by 10 p.m. the day of collection.



Printed on 100% Recycled Paper  
Content is 100% Post-Consumer Waste

Printed with Soy Ink

Presorted  
First-Class  
U.S. Postage Paid  
PLEASANT HILL, CA  
PERMIT NO. 122

# SERVICES

## Just Give Us a Call

Whoops! Too much trash. Lid should close.

### Extra Material

Please call at least 24 hours prior to your regular collection day to arrange for a pickup of extra garbage.

Our customer service representatives will be glad to provide you information about rates and scheduling.

Phone (925) 685-4711.



### Going on Vacation?

Please schedule vacation holds in advance:

- Minimum 2 weeks per hold.
- Maximum 4 holds per year.

Call customer service at (925) 685-4711 for additional information.

### Holiday Treecycling



Republic Services will notify you in your December solid waste bill of the holiday tree recycling program. No flocked trees will be taken.

### How to Reach Us; New Online Service

Questions about your service or bill can be answered by Customer Service. You can:

- Call one of our representatives at (925) 685-4711.
- Write us at 441 N. Buchanan Circle, Pacheco, CA 94553, attn: Customer Service Manager.
- Visit the Republic Services web site at: [www.awsccc.com](http://www.awsccc.com) where you can order a cart repair, schedule a cleanup, report a missed collection and request other services online.



- In person at the Republic Services office at 441 N. Buchanan Circle, Pacheco;

- By phone with American Express, Visa, MasterCard or Discover. We do not accept checks over the phone.

### Cart Sizes

Carts are available in the following sizes:

- Garbage: 20, 32, 64, 96 gallons
- Recycling: 64 gallons
- Yard Waste: 64 gallons
- Cart dimensions:

Size	Height	Width	Depth	Footprint
20 gal.	32.6"	19.8"	18.0"	<2.0 sq. ft.
32 gal.	38.5"	19.0"	22.0"	2.0 sq. ft.
64 gal.	42.0"	25.5"	27.0"	2.5 sq. ft.
96 gal.	46.5"	26.5"	33.5"	3.0 sq. ft.

Goodbye. I have to stay home.



### Missed Collection?

Please call within 24 hours to report that your garbage, recycle or yard waste cart has not been serviced.

### Moving?

If you are moving, please leave your recycling, yard waste and garbage carts in a secure location for the next resident. Call us to discontinue service.

# SERVICES

## Just Give Us a Call

Whoops! Too much trash. Lid should close.



**Extra Material**  
Please call at least 24 hours prior to your regular collection day to arrange for a pickup of extra garbage.

Our customer service representatives will be glad to provide you information about rates and scheduling.

Phone (925) 685-4711.

**Going on Vacation?**  
Please schedule vacation holds in advance:

- Minimum 2 weeks per hold.
- Maximum 4 holds per year.

Call customer service at (925) 685-4711 for additional information.

**Payment Options**  
Customers have four convenient ways to pay their garbage bills:

- Online. Make one-time payments or sign up for auto bill-pay with credit card or bank account at <http://onbillpay.inetbiller.com>. You may also call Customer Service at (925) 685-4711 to set up your auto bill-pay account;
- By mail, using the envelope provided with your bill;
- In person at the Republic Services offices at 441 N. Buchanan Circle, Pacheco, CA 94553;
- By phone with American Express, Visa, MasterCard or Discover. We do not accept checks over the phone.

**Holiday Recycling**  
Republic Services will notify you in your December solid waste bill of the holiday tree recycling program. No flocked trees will be taken.

**How to Reach Us: New Online Services**  
Questions about your service or bill can be answered by Customer Service. You can:

- Call one of our representatives at (925) 685-4711.
- Write us at 441 N. Buchanan Circle, Pacheco, CA 94553; attn: Customer Service Manager.
- Visit the Republic Services web site at [www.rsvc.com](http://www.rsvc.com) where you can order a cart repair, schedule a cleanup, report a missed collection and request other services online.

**Cart Sizes**  
Carts are available in the following sizes:

- Garbage: 20, 32, 64, 96 gallons
- Recycling: 64 gallons
- Yard Waste: 64 gallons
- Cart dimensions:

Goodbye. I have to stay home.



**Missed Collection?**  
Please call within 24 hours to report that your garbage, recycle or yard waste cart has not been serviced.

**Moving?**  
If you are moving, please leave your recycling, yard waste and garbage carts in a secure location for the next resident. Call us to discontinue service.

# The ECO-PAGE

## Helping You Help the Earth!

**What Happens to Recyclables & Garbage**  
**Q. What happens to my recyclables after I put them in my brown cart?**  
A. After your recyclables are emptied into our trucks, they are taken to Pacific Rim Recycling in Benicia.

The recyclables travel down a conveyor belt, and employees separate them into different commodities. The different material types are then baled together and sold.

**Q. What happens to my garbage after I put it in my blue cart?**

A. Anything put in the garbage becomes trash forever. What you put in your blue garbage cart (even recyclables like cardboard, cans, bottles) is taken to our Martinez Transfer Station to be compacted, then to Keller Canyon Landfill in Pittsburg. Employees do NOT sort through garbage and pick out recyclable items. Please put all recyclable items in the brown recycling cart!

**Why Your Cartes Recycle...**

**Syrofoam:** There is no market for Styrofoam because it is low quality, cheaper to produce from virgin materials and usually contaminated with food. Since it is a useless commodity, it goes straight to the landfill. However, a large amount of Styrofoam products end up as litter and reach the ocean, where they break down into smaller bits and are ingested by birds and sea animals. Avoid Styrofoam whenever you can and tell your favorite restaurants to switch to greener packaging.

**Milk Cartons:** A waxy coating on paper or cardboard diminishes the value of the commodity and makes recycling difficult.

**Chips & Aspic Packaging:** Both packaging materials are not recyclable because they are an amalgam of multiple material types. Aluminum foil is bound to plastic or in the case of aspic packaging aluminum is bound to waxy cardboard. These materials cannot be separated for recycling to unfortunately they have to go in the garbage.

**Reuse Area at Central Sanitary**  
Need some paint? Gardening products? Cleaning chemicals? Stop by the Reuse Room at Central Sanitary's HRW Facility to drop off unwanted chemicals and pick up new ones, all at no charge! Open Monday through Saturday, 9 a.m. to 3:30 p.m.

**Old Pills Piling Up?**  
Don't dump medicines and over-the-counter drugs down the drain or toilet. Flushed drugs enter waterways, harming people, animals and the environment. Wastewater facilities cannot remove these chemicals. Remove labels and place containers in sealable plastic bag. Dispose of safely at:

- Police station, City Hall 2nd floor, 6000 Heritage Trail, Clayton (95, MFL) ph. (925) 673-7350
- Sheriff's Substation of County Hospital, 2500 Muir Road, Martinez Police, 525 Henrietta St., all in Martinez (95, MR)
- City Hall Lobby, 1666 N. Main St., Walnut Creek (95, MR)

**Freecycle, Craigslist**  
Recycling is the last of the 3 R's - Reduce, Reuse, Recycle. Incorporate it! The first two (Reduce & Reuse) into your everyday life through the free services at [Freecycle.org](http://Freecycle.org) and [Craigslist.org](http://Craigslist.org). They help you find new homes for unwanted goods, and they're great sources of free (or cheap) goods.

**Plastic vs. Reusable Bags**  
Americans use billions of plastic bags per year, many of which end up in the landfill or in the ocean. Consider using canvas or reusable bags at the grocery store. Some stores have reusable bags for purchase and often offer discounts for using reusables instead of plastic or paper bags. We do not accept plastic bags (or any type of plastic film material) for recycling, but state law requires grocery stores to accept them for recycling. Visit [www.plasticbagrecycling.org](http://www.plasticbagrecycling.org) for information.

Republic Services  
U.S. ENVIRONMENTAL  
PROTECTION AGENCY  
PERMIT NO. 128

441 N. Buchanan Circle  
Pacheco, CA 94553  
(925) 685-4711  
<http://www.rsvc.com>

## Household Hazardous Waste

**Household Hazardous Waste**

Household hazardous waste (HHW) includes a wide range of household products that are flammable, corrosive, toxic, or otherwise hazardous. Examples include:
 

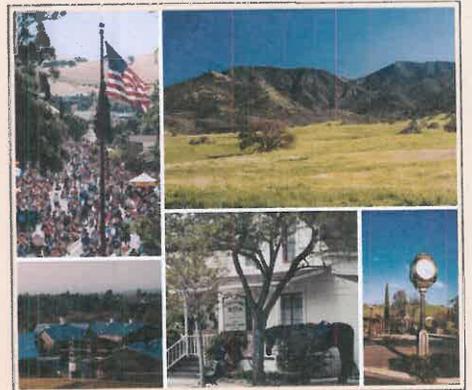
- Automotive fluids (oil, antifreeze, brake fluid)
- Aerosols (spray cans)
- Bleach, drain cleaners, and other household chemicals
- Flammable liquids (gasoline, oil, paint)
- Pesticides and herbicides
- Pool chemicals
- Refrigerators (Freon)
- Stoves (gas)
- Tires
- Waxes and polishes

These items should never be poured down the drain, flushed down the toilet, or thrown in the trash. They can be harmful to the environment and your health.

At Republic Services, we have a dedicated HHW collection program. We accept these items for free (or a small fee) at our collection centers. Please call (925) 685-4711 for more information.

# 2013 CUSTOMER GUIDE

## Garbage, Recycling, Yard Waste Services



CITY OPERATOR  
**Clayton**

**REPUBLIC SERVICES**

Naturally Sustainable



## Easier to Recycle More

To enhance the City of Clayton's curbside recycling program and create increased convenience for customers to recycle, Allied Waste Services is offering Clayton customers a number of expanded recycling services so at least 50% or more of all solid waste in Clayton is recycled as required by state law.

## New and Additional Services Provided at NO CHARGE

**NO CHARGE**  
for an additional  
recycling cart.



**NO CHARGE** for a  
bigger recycling cart.  
Curbside recycling  
collection is unlimited  
as long as materials  
stay in the cart to  
avoid littering.



**NO CHARGE**  
and no limit for  
curbside collection  
of bulky items. To  
arrange a pickup,  
please call  
customer service  
at (925) 685-4711.

**NO CHARGE**  
for an additional  
yard waste cart.



**NO CHARGE**  
for a larger  
yard waste cart.  
Exchange your  
64-gallon yard  
waste cart for a  
96-gallon one.



**RECYCLE** house-  
hold batteries and  
compact fluorescent  
bulbs curbside.  
Place in quart-size  
Ziploc bags next  
to recycling cart.

**QUESTIONS? Call (925) 685-4711.**



**NO CHARGE**  
for collection of  
e-waste. Call  
(925) 685-4711 to  
schedule a pickup.

**For Household  
Hazardous Waste**  
Call (800) 646-1431  
Central Sanitary District  
4797 Imhoff Pl., Martinez, CA



WWW.AWSCC.COM

# NEVER PUT SHARPS IN A RECYCLING OR TRASH CART



**NO SHARPS  
in Your  
Brown/Burgundy  
Recycle Cart**



## A BIOHAZARD

Unless properly disposed of, sharps (needles & lancets) can:

- Injure workers
- Cause infections
- Spread disease
- Harm the environment

*Please see other side for proper disposal and more information.*



**NO SHARPS  
in Your Blue  
Trash Cart**

## WHY YOU SHOULD NEVER PUT SHARPS IN A RECYCLING CART



Recyclables must be sorted by hand. Any sharp placed in your recycling cart/bin can stick a worker or puncture his or her gloves, left. See guidelines at right for the proper disposal of sharps.

## The Proper Way to Dispose of Sharps

By state law it is illegal to discard your sharps (needles and lancets) in household (or commercial) recycling or garbage.

They must be placed in a certified sharps container and dropped off or sent to facilities licensed to handle biohazardous materials. Local and nearby dropoff sites include the following:

- Alamo Sheriff's Substation — 150 Alamo Plaza, Suite C, Alamo
- Benicia Fire Station — 150 Military West, Benicia
- Clayton City Hall — 6000 Heritage Trail, 2nd Floor, Clayton
- Delta Household Hazardous Waste Collection Facility, 2500 Pittsburg-Antioch Hwy., Pittsburg
- Lafayette Fire Station — 3338 Mt. Diablo Blvd., Lafayette
- Moraga Fire Station — 1280 Moraga Way, Moraga
- Mt. View Sanitation District — 3800 Arthur Road, Martinez
- Orinda Police Department — 22 Orinda Way, Orinda
- Rossmoor Medical Center Pharmacy — 1220 Rossmoor Pkwy., Walnut Creek
- San Ramon Fire District — 1500 Ballinger Canyon Road, San Ramon
- Walnut Creek City Hall — 1666 N. Main St., Walnut Creek



Printed on Recycled Paper

**CENTRAL CONTRA COSTA  
SOLID WASTE AUTHORITY**  
www.wastediversion.org

**PACIFIC RIM  
RECYCLING**  
www.pacificrimrecycling.com

**DELTA DIABLO  
SANITATION DISTRICT**  
www.ddsd.org

**AW**  
HAZARDOUS WASTE SERVICES  
A REPUBLIC SERVICES COMPANY  
www.awsccc.com



City of Clayton Pharmaceutical and Sharps drop off bins available to public during office hours

Located at City Hall 2<sup>nd</sup> Floor (Police Dept. Lobby)

# Household Hazardous Waste Collection Facility

4797 Imhoff Place, Martinez, CA 94553-4392  
1-800-646-1431 • www.centrsan.org



Protecting Public Health and the Environment

## HOURS OF OPERATION

**Residents:**  
(no appointment needed)

Monday through Saturday:  
9 a.m. - 4 p.m.

**Businesses:**

Monday through Saturday

**By appointment only**

**Closed:**

Sunday  
and most major Holidays

## The Solution to Pollution

**M**any products in your home contain chemical compounds that can poison, corrode, explode, or ignite when handled improperly. (See list of items on reverse.) When discarded, these substances become household hazardous waste (HHW) and can threaten human health and the environment. For this reason, it is illegal to dispose of HHW in the trash or down any drain. That is why the Central Contra Costa Sanitary District established the HHW Program—to provide local residents with convenient and environmentally safe HHW disposal.

Hazardous wastes brought to our Household Hazardous Waste Collection Facility will never reach waterways through sewers, storm drains, or landfills. To help prevent pollution of our water environment, please bring your HHW to the facility.



**THERE IS NO DROP-OFF FEE FOR ELIGIBLE RESIDENTS!**

## COMMUNITIES ELIGIBLE TO USE THE FACILITY

The collection program services are paid for by members of the communities on the map at right as part of their sewer service charge. Partnership agreements between CCCSD, MVSD, Concord, Clayton, and San Ramon (for southern area) ensure that all central county residents have access to these services.



# What Can You Bring to the Household Hazardous Waste Facility?

## Household products

- Batteries
- Fluorescent bulbs & compact fluorescent lights (CFLs)
- Mercury thermostat switches
- Grouts/caulking
- Pool chemicals

## Paint and paint-related products

- Latex & oil-based paints
- Wood stain & varnishes
- Paint remover/paint thinner & solvents



## Household cleaning products

- Bleach
- Liquid cleaners
- Upholstery/rug cleaners
- Oven cleaners
- Furniture polishes
- Tub & tile cleaners

## Personal care products

- Mercury fever thermometers
- Fingernail polish & remover
- Hair care products
- Perfumes & colognes

## Automotive products

- Motor oil
- Gasoline
- Antifreeze
- Brake fluid
- Transmission fluid
- Solvents
- Car batteries
- Car cleaning products

## Garden care and pest-control products

- Pesticides
- Herbicides
- Fertilizers

## Other

- Cooking oils and grease (large quantities, as from a turkey fryer)
- Propane tanks (5 gallon or less)



## Free Stuff !

The facility has a Reuse Room stocked with items brought in for disposal that are still in useable condition. The inventory often includes paint, wood stain, garden products and a wide variety of cleansers—and they're all free to facility users! The Reuse Room is open Tuesday – Saturday, 9 a.m. – 3:30 p.m.

## We do not accept:

- Medicines
- Medical wastes (including sharps--syringes, needles, lancets, etc.)
- Electronic waste (computers, TVs, cell phones, etc.)
- Explosives (ammunition, picric acid, fireworks, etc.)
- Compressed gas cylinders (propane accepted)
- Wastes contaminated with PCBs (fluorescent light ballasts accepted)
- Treated wood wastes

State regulations limit the transportation of hazardous waste to 15 gallons or 125 pounds per visit. Individual containers are limited to 5-gallon capacity.

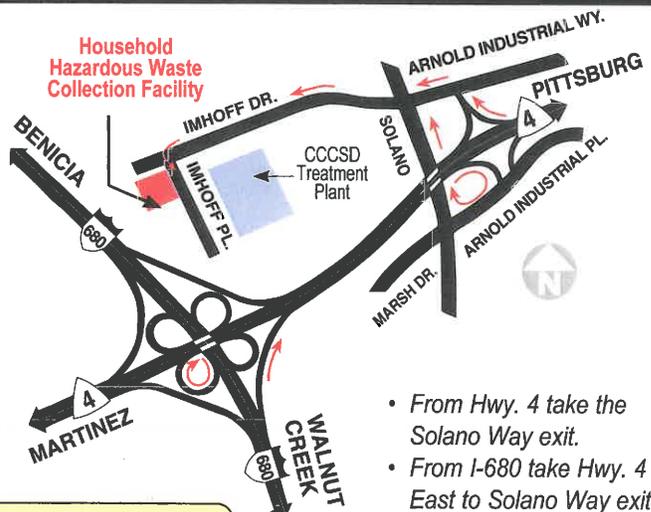
There is no drop-off fee and no appointment necessary for residents of central Contra Costa County. Small businesses require an appointment and are charged a nominal fee. For more information, please call 1-800-646-1431 or visit our website: [www.centrialsan.org](http://www.centrialsan.org)

## HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITY HOURS AND LOCATION

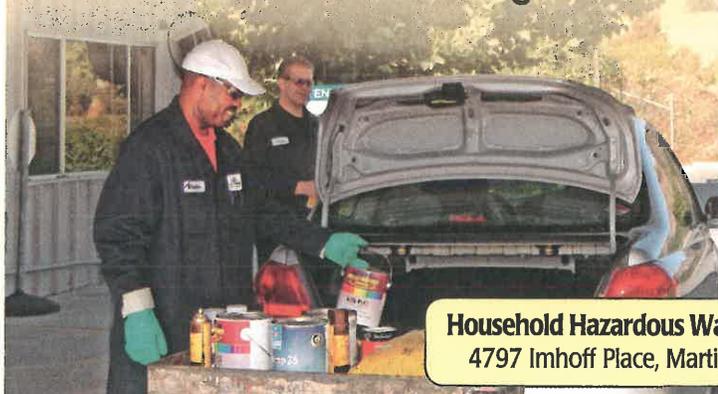
**Residents:** Monday – Saturday, 9 a.m. - 4 p.m.  
(Reuse Room closes at 3:30 p.m.)

**Businesses:** Monday – Saturday, by appointment only

**Phone: 1-800-646-1431**  
**[www.centrialsan.org](http://www.centrialsan.org)**



- From Hwy. 4 take the Solano Way exit.
- From I-680 take Hwy. 4 East to Solano Way exit.



**Household Hazardous Waste Collection Facility**  
4797 Imhoff Place, Martinez, CA 94553-4392



**REPUBLIC  
SERVICES**

## 2014 Holiday Schedule

Republic Services observes Christmas Day and New Year's Day holidays. If your collection day falls on those holidays or later in the week, service will be one day later.

### Residential Treecycling

#### Antioch

- Drop-off Locations: You can drop off your trees from 8 a.m. -5 p.m. **Saturday-Sunday, Dec. 28-29, 2013, & Jan. 4-5, 2014**, in the **designated areas** at the Prewett Family Water Park parking lot and at the Antioch Marina Overflow parking lot at 2nd and L streets. Please remove tree stands before drop-off.
- Boy Scout Treecycling: Scouts will pick up holiday trees **Saturday-Sunday, Dec. 28-29, 2013, & Jan. 4-5, 2014**. Have trees ready for pickup before 9 a.m. at the curb. Donations of \$10 for **unflocked** trees or \$1 per foot if taller than 10 feet or \$20 for flocked trees, payable to BSA, would be appreciated. For more information email the Boy Scouts at [treepickup@bdscouts.org](mailto:treepickup@bdscouts.org).
- Any yard waste week: Place **unflocked** trees in yard waste cart. Branches must be 6 inches or less in diameter and 3 feet or less in length. Cut off tree top. Remove tree stand. Lid must be closed.
- Recycling Center Drop-off Option: See "Drop-off Locations" on the back of insert for address, hours.
- Flocked trees can be picked up for a fee of \$40 or as one of your two, free, large-item pickups.
- Questions? Call customer service at (925) 685-4711.

#### Bay Point, Clyde

- **Monday, January 6, 2014.** **Unflocked** holiday trees will be picked up curbside. Please remove tree stand and decorations before leaving your tree at the curb.
- Boy Scout Treecycling: See Antioch information above. Bay Point schedule and contacts are same.
- Any yard waste week: Place **unflocked** trees in yard waste cart. Branches must be 6 inches or less in diameter and 3 feet or less in length. Cut off tree top. Remove tree stand. Lid must be closed.
- Drop-off Option: See "Drop-off Locations" on the back side of this notice.
- Questions? Call customer service at (925) 685-4711.

**NOTE: Flocked trees cannot be recycled. They can be collected curbside for a fee of \$40 per tree. Pickups must be scheduled in advance. Call (925) 685-4711. Flocked trees may also be included with one of your cleanups. If cut to fit inside with the lid closed, flocked trees may be placed in your trash cart.**



#### Clayton, Unincorporated Concord, Morgan Territory

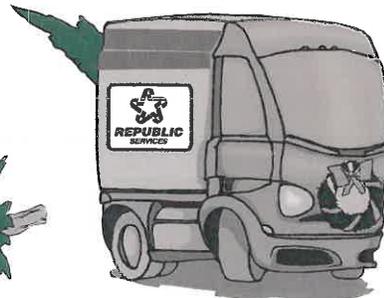
- **Sunday, Jan. 5, 2014:** Boy Scouts will pick up trees **in Clayton only**. Leave **unflocked** trees at the curb by 8 a.m. Donations would be appreciated. Mail checks (do not attach to tree) to BSA Troop 484, 807 Savignon Court, Clayton, 94517. Contact: Chris Llata at (925) 348-3319 or email [arbornut@gmail.com](mailto:arbornut@gmail.com).
- **January 6-10, 2014:** **Unflocked** trees will be picked up curbside on your regular garbage day that week. Remove tree stand, decorations.
- Any yard waste week: Place **unflocked** trees in yard waste cart. Branches must be 6 inches or less in diameter and 3 feet or less in length. Cut off tree top. Remove tree stand. Lid must be closed.
- Drop-off Option: See other side for "Drop-off Locations."
- Questions? Call customer service at (925) 685-4711.

#### Martinez, Alhambra Valley, Mt. View

- **January 6-10, 2014:** **Unflocked** trees will be picked up curbside on your regular garbage day that week. Remove tree stand, decorations.
- Any yard waste week: Place **unflocked** trees in yard waste cart. Branches must be 6 inches or less in diameter and 3 feet or less in length. Cut off tree top. Remove tree stand. Lid must be closed.
- Drop-off Option: See "Drop-off Locations" on the back side of this notice for address and hours.
- Questions? Call customer service at (925) 685-4711.

#### Pleasant Hill, Unincorporated Pleasant Hill, Pacheco

- **January 6-10, 2014:** **Unflocked** trees will be picked up curbside on your regular garbage day that week. Please remove tree stand and decorations.
- Any yard waste week: Place **unflocked** trees in yard waste cart. Branches must be 6 inches or less in diameter and 3 feet or less in length. Cut off tree top. Remove tree stand. Lid must be closed.
- Drop-off Option: See "Drop-off Locations" on other side of this notice for address, hours.
- Questions? Call customer service at (925) 685-4711.





**REPUBLIC  
SERVICES**

# 2014 Holiday Schedule

(continued)

## MULTI-FAMILY TREECYCLING

### Antioch

- The Boy Scouts will pick up **unflocked** trees in multifamily complexes. A donation of \$10 or \$1 per foot for trees taller than 10 feet or \$20 for flocked trees would be appreciated. To arrange a pickup, email the Boy Scouts at [treepickup@bdscouts.org](mailto:treepickup@bdscouts.org).

### Bay Point

- **Unflocked** trees will be picked up in your complex on **Monday, January 6, 2014**.
- Please leave your tree out by 6 a.m. on **Monday, January 6, 2014**.
- Ask your property manager where trees should be left. Please remove tree stand.

### Clayton

- **Unflocked** trees will be picked up in your complex the week of **January 6-10, 2014**.
- We cannot determine in advance what day your tree will be picked up. Please leave your tree out by 6 a.m., beginning **January 6, 2014**.
- Ask your property manager where trees should be left. Please remove tree stand.

### Martinez, Alhambra Valley, Mt. View, Pacheco, Pleasant Hill, Unincorporated Pleasant Hill

- **Unflocked** trees will be picked up in your complex the week of **January 6-10, 2014**.
- We cannot determine in advance what day your tree will be picked up. Please leave your tree out by 6 a.m., beginning **January 6, 2014**.
  - Ask your property manager where trees should be left. Please remove tree stand.



## DROP-OFF LOCATIONS

If you miss curbside collection or forget to put your **unflocked** tree in your yard waste cart, you can bring your tree to 444 N. Buchanan Circle in Pacheco, across from Republic Service's main office, between 8 a.m. and 4 p.m. Monday through Friday. Please do not drop off trees before or after the hours listed above.

## IMPORTANT

- Please remove lights, ornaments, tinsel, nails and stands from trees.
- No plastic bags.
- As part of our treecycling program, flocked, painted, fireproofed or artificial trees are not accepted.
- Flocked trees can be collected curbside for a fee of \$40 per tree. Pickups must be scheduled in advance. Call (925) 685-4711.

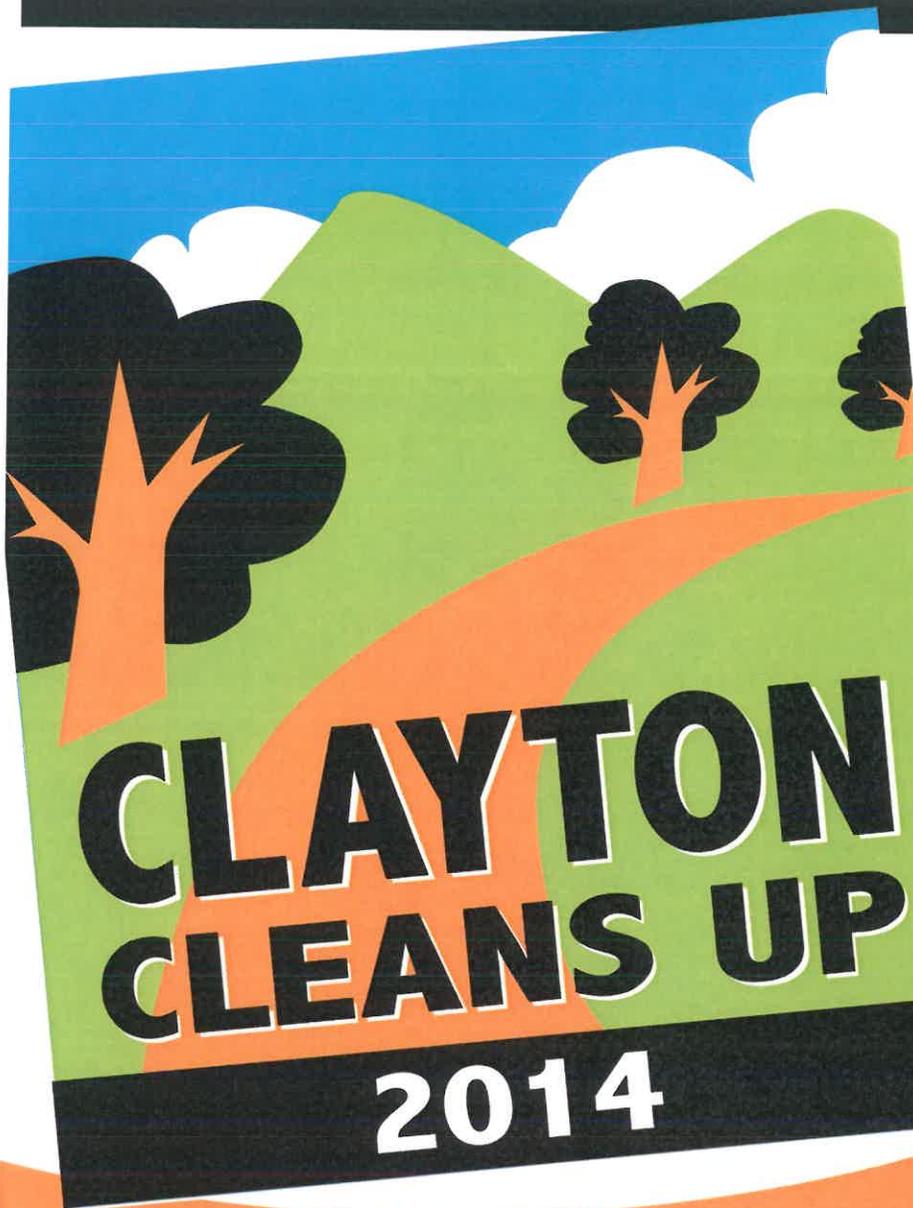


**Apr. 26  
Clayton Cleans Up**

Honor Earth Day with a town spring cleaning. Help pick up trash, pull weeds and share in community spirit. A great activity for clubs and organizations, school projects or a family outing. Meet at City Hall at 9 a.m., rain or shine. T-shirt, gloves and garbage bags provided. Barbecue at 11:30 a.m. Sponsored by the Clayton Pioneer and the city of Clayton with generous donations from Republic Services, the CBCA and many local merchants. 672-0500.

**Apr. 26 – 27  
Clayton Gardens Tour**

Six beautiful gardens on self-guided tour. Benefits Clayton Historical Society. 10 a.m. – 4 p.m. Starts at Clayton Museum, 6101 Main St. \$30. claytonhistory.org. 672-0240.



# CLAYTON CLEANS UP 2014

Help clean Clayton's trails and parks. Individuals, homeowner associations, neighborhood groups, service clubs... anyone is welcome!

**Saturday, April 26, 2014**

**from 9 a.m. - Noon. Rain or shine.**

**Meet at Clayton City Hall,  
6000 Heritage Trail.**

**Free barbecue.**



Artwork  
Courtesy of



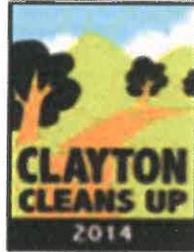
Janet White  
Fine Arts



**For more information, call 672-0500.**

## Clayton honors Earth Day with Clean Up Event

Rain or shine, hundreds of Claytonians flock to City Hall every year on a Saturday morning in April to pick up garbage bags and gloves before spreading out to city parks, trails and neighborhoods for Clayton Cleans Up.



This event, to honor Earth Day, is the perfect opportunity

for kids, adults, Scout Troops, service clubs, families and neighbors to spruce up the town for the Art and Wine Festival.

The free volunteer T-shirt is a special designer edition created by Creekside Artists Guild member, Janet White. "I have been very fortunate to live in the Clayton community for twenty years. It was a great privilege for me to

T-shirt design by Janet White.

## Clean Up, from page 1

design this year's T-shirt. I will wear it proudly as I walk the trail with my garbage bag," White says.

Volunteers meet at 9 a.m., Saturday, April 26, at City Hall to pick up a T-shirt, garbage bags and gloves. At 11:30, everyone meets back at City Hall for a barbecue lunch. Local organizations will be present or have information available for preserving the environment.

The event is sponsored by the Clayton Pioneer and the city of Clayton with generous donations from Republic Services, the CBCA, Travis Credit Union and local merchants.

*Download registration form from the Clayton Pioneer website and bring filled out to event: claytonpioneer.com. For more information, call the Pioneer at 672-0500.*

**See Clean up, page 2**

## Drama and drought watchwords of this year's Garden Tour



THIS DRAMATIC SOLARIUM AT THE CLAYTON HOME OF BOB AND ROBIN GRIFFITHS HOUSES A LARGE COLLECTION OF SUCкулENTS AND UNUSUAL POTTED PLANTS. THE GRIFFITHS RECENTLY REDUCED THE THIRSTY LANDSCAPING IN THE FRONT WITH A DROUGHT TOLERANT CACTUS GARDEN. THE HOME IS ONE OF SIX ON THE CLAYTON HISTORICAL SOCIETY'S ANNUAL GARDEN TOUR ON APRIL 26 & 27.

JOHN JACKSON  
Clayton Pioneer

When the six homeowners around the Clayton area open their gardens on the weekend of April 26-27 to show off their hard work at the 22nd annual Clayton Historical Society Garden Tour, don't be surprised if some of the bounty is edible.

Interest is always high for the popular tour, but this year could draw many eager onlookers looking for ideas in water conservation. Plus, this year's tour includes a look at a permaculture design at a local farm.

"Bumblebee Farm," owned by Rob Kingsbury and Nadine Findley, is a four-year-old food garden that rests on one acre of land. This type of garden has never been included on the tour before. Its permaculture practice takes advantage of 12 raised beds and several different types of soil to minimize water use and "take advantage of what nature can give us," says Kingsbury. His goal is to make the growth of his plants a fully sustainable and natural experience.

"When you look at nature, it does so much better through the whole season, whether it rains or not," he says. He wants to

See Garden Tour, page 3

April 11, 2014

Clayton Pioneer • www.claytonpioneer.com

## Garden Tour, from page 1

avoid a situation where "if something goes wrong with the weather pattern, we lose the whole crop."

Decks in the garden are made from reused materials and "rainwater catching" is carefully thought out for maximum effectiveness. All of this allows the garden to produce an incredibly robust crop that has something sprouting all year around. "Our

artichokes start coming up in the winter and we have three types. Right now we're eating the purple artichokes," Kingsbury says. He also points to a long list of organic fruits, vegetables and nuts that grow continuously from the garden: strawberries, raspberries, grapes, almonds, peaches, plums, apricots, limes, lemons, apples, and apricots are just the beginning.

Traditionally in the self-guided tour, flower gardens are the main event and this year they will exhibit water features, outdoor stonework, a waterfall, a pool surrounded by plant life, and a sunken seating area with a glass fire pit.

One of these gardens is owned and maintained by Lyle Swallow and Jack Becker, who believe that the "selling point of this yard is how to take a small space and make it as useable as possible." The entire lot that the home rests on is just .18 acre, offering significant challenges to designing a workable landscaping plan. "The challenge was how to make the yard useable, and we really did it in two pieces. We did the backyard first, then we did the front," says Swallow. They ended up creating three differently unique seating areas in the back with different themes: an herb garden, dining area and fire pit. In the front yard, they mixed a meadow theme with a traditional lawn, considering curb appeal as a high priority. Between the two spaces, they have carpet boxes, day lilies, papyrus and several grasses that grow all year. The result has been rewarding, according to Swallow.

"The thing that people say they like about a garden like this is that it is small. It's really easy to find interesting, big yards," Swallow says. "A lot of times, people want to know what creative things they can do with a small yard."

In all the gardens on the tour, drama is the watchword with imaginative stonework, wandering pathways, unique hill designs, inviting pools, waterfalls and natural plantings.

The Clayton Historical Society Garden Tour is April 26-27, 10 a.m. - 4 p.m. The Garden Tour is the major fundraiser for the Clayton Historical Society. Tickets for this tour are \$30. For more info or to buy tickets, go to [claytonhistory.org](http://claytonhistory.org).



BUMBLEBEE FARM AND GARDEN, ONE OF SIX HOMES ON THE CLAYTON HISTORICAL SOCIETY'S 22ND ANNUAL GARDEN TOUR, FEATURES A "PERMACULTURE" DESIGN THAT MAKES MAXIMUM USE OF RAINWATER AND RECYCLED MATERIALS.



## Clayton gardens and Concord's Markham featured on Natives tour

Two Clayton gardens and a Concord landmark will be part of the Bringing Back the Natives Garden Tour, which will take place Sunday, May 4, from 10 a.m. to 3 p.m. at various locations throughout Alameda and Contra Costa counties.

Karen and Jeremy Amos' garden, as well as Kelly Marshall and Mike Weidner's garden, will be among the 35 native plant showcase gardens on the free tour. Also featured is Concord's Markham Arboretum.

In the 10th anniversary of the popular self-guided garden tour, visitors have the opportunity to learn how to select and care for California native plants, lower their water bills, design a low-maintenance garden, attract butterflies, birds, and bees, and garden without using pesticides. More than 40 talks will be offered throughout the day. More than 6,000 people are expected to register for this annual event, which will fill up; early registration is suggested to ensure a place.

The collection of gardens offered this year range from five-acre lots in the hills to small front gardens in the flats, and from professionally designed gardens to those designed by homeowners. Garden styles run the gamut—from restoration gardens containing local native plants to the horticulturally available suite of natives from throughout California, and to gardens containing a mixture of native and Mediterranean plants.

The Amos' garden is actually two installations, a 1,500-square-foot front yard space and 3,000 square-foot backyard



*Courtesy of Bringing Back the Natives*  
**KELLY MARSHALL'S GARDEN IS A COLORFUL ARRAY OF HARDY NATIVES that can take Clayton's hot summers. The owners recently replaced a water-hogging back lawn with a drought-tolerant meadow of bunchgrasses and flowering native perennials.**

garden. The front garden is a terraced slope with a variety of Manzanita's, California lilac, lots of blue blooming native perennials to bring out the colors of the house. In the back garden a small play structure sits in a colorful meadow of grasses and wildflowers; a wooden boardwalk is bordered by the fragrant lilac verbenas, small Pacific reed grass, and its robust cousin, deer grass.

In Kelly Marshall and Mike Weidner's garden, Marshall selected a hardy and colorful array of natives that could take Clayton's hot summers, added a fountain and strategically placed seating areas and paths, and the front garden became a lovely place enjoyed by everyone in the family, and even the neighbors. Wanting more planting "real estate" and disliking the water-hogging back lawn, she recently convinced Mike to

finally let the lawn go — in its place she created a drought-tolerant meadow of bunchgrasses and flowering native perennials.

Meanwhile, the Markham Arboretum is a unique educational garden for the demonstration, collection and preservation of trees and other plants which are adapted to Northern California region.

A companion event, the Native Plant Sale Extravaganza, will take place on Saturday and Sunday, May 3 and 4. This sale features a number of native plant nurseries which carry large quantities of hard-to-find California natives.

Admission to the Bringing Back the Natives Garden Tour is free. Registration closes on April 26 or when the tour is full, whichever comes first. Register or volunteer at [www.bringingbackthenatives.net](http://www.bringingbackthenatives.net).

# CLAYTON PIONEER

IT'S YOUR PAPER

www.claytonpioneer.com

April 25, 2014

925.672.0500

**THIS WEEKEND**  
**Clayton**  
**Cleans Up**  
**April 26, 9 a.m.**  
City Hall Courtyard  
BBQ lunch for volunteers  
at 11:30

## Clayton Cleans Up this Sat.



Neil Brennan

**VOLUNTEERS AT CLAYTON CLEANS UP ON SAT., APR. 26,** will take home a designer t-shirt by Clayton artist Janet White. Pictured, are Pioneer staffers Pete Cruz, Pamela Wiesendanger and publisher Tamara Steiner.

Rain or shine, Clayton Cleans Up the town this Saturday. If it rains, it will be the first time it's ever rained on the event and you won't want to miss being part of that historic moment. The big orange trash bags can double as ponchos if it's raining. And if it's sunny, we'll all do a rain dance at the BBQ.

So, come on down to City Hall and check in by 9 a.m. Bring the kids, the church group, your scout troop, the neighbors and the dog. Volunteers are rewarded with a t-shirt, a BBQ lunch and the respect of a grateful community. This year's t-shirt design comes from the creative mind of local artist Janet White.

*The event is sponsored by the Clayton Pioneer, the city of Clayton with generous donations from Republic Services, CBCA, Travis Credit Union, Fresh and Easy, Orchard Supply Hardware, Peet's Coffee and TMT Branding.*

## Spring cleaning in Clayton honors Earth Day



More than 300 turned out for the annual Clayton Cleans Up honoring Earth Day 2014 on April 26. The morning dawned clear after two days of (much needed) rain and the trash was waiting. Volunteers donned their designer T-shirt, grabbed an orange bag and headed out to scour and scrub the streets and trails of cigarette butts, beer cans, Coke bottles and other assorted grubby items before returning to the City Hall courtyard for BBQ lunch.

The annual event is sponsored by the Clayton Pioneer and the city of Clayton with generous donations from Travis Credit Union, Republic Services, CBCA, Peets' Coffee, Fresh and Easy, Orchard Supply Hardware and TMT Branding.

*Clockwise from top left: Event coordinator, Pamela Wernsdorfer; Debbie Meylan as recycle patrol; Rob Ladd and Julie Todd head back to City Hall with two bags full; Grillmaster Howard Galen, Steve Pierce and Fred Repetto cook up lunch for the clean-up crew.*



# Mt. Diablo Recycling offers free environmental day camp for kids

**Penny Straz**  
Clayton Pioneer

School may be out for the summer, but local youths can still learn about the environment at Mt. Diablo Recycling's second annual free summer camp. MDR is offering four separate sessions that will each include a tour of their 90,000-square-foot recycling facility and recycling trucks, recycling games, an interactive activity about the 5 R's (Reduce-Reuse-Recycle-Respect-Recover), and a take-home craft.

The camp sessions will take place each Thursday in July from 9 to 11 a.m. at their facility located at 1300 Lovelidge Road in Pittsburg. The camp is free, though reservations are limited to 25 children per session.

"Respectful appreciation of our environment should be taking place year-round regardless of whether school is in," MDR Chief Executive Officer Joseph Garaventa said. "Mt. Diablo Recycling is committed to offering fun educational opportunities to East Bay youth, who will be making contributions to our community for years to come."

Since 2013, MDR has been expanding its educational efforts in Contra Costa County through programs such as its Earth Day celebration, winter camp, and the



Photo courtesy Mt. Diablo Recycling

**SPEND A DAY AT TRASH CAMP AND FIND OUT HOW** garbage is recycled and reused. The summer camps begin in July and are free, but a reservation is required.

launch of the first ever recycling contest with cash prizes for students. After the success of last year's inaugural summer camp, MDR is offering the program for the second year in a row.

To sign up for camp sessions on either July 10, July 17, July 24 or July 31, contact MDR's Adriana Medina by phone at 925-771-2721 or email at [Adriana@Garaventaent.com](mailto:Adriana@Garaventaent.com).

For more information about Mt. Diablo Recycling, go to [mt-diablorecycling.com](http://mt-diablorecycling.com).

**Nichols Landscape**  
Drought-tolerant landscaping is our specialty

**FREE ESTIMATES**

- Lawn & Plant Installation
- Paver Patio & Walkway
- Retaining Walls
- Drainage
- Low Voltage Lighting

15/18 2-9955

## Recycling contest targets creative students

Do you know a child who is passionate about recycling? If so, they can enter Mt. Diablo Recycling's first ever Recycling Contest for elementary, middle school and high school students.

The contest is an effort to encourage the youth of Contra Costa County to share their recycling knowledge and inspire the greater community to increase their recycling behavior.

Each contest entrant is being asked to answer the question, "How are you encouraging your family, friends and community to recycle?" by drawing a picture, writing an essay, or creating a video, depending on their age.

"There is no better way to influence the entire community about the importance of recycling than to educate and embolden our kids to share their knowledge," said Mt. Diablo

Recycling's Nicole Impagliazzo. "Small, daily steps that keep more and more items out of landfills will have a lasting effect on the health and sustainability of our neighborhoods."

Cash prizes range from \$50 to \$500. Recipients will be chosen by a panel of community experts based on the applicant's creativity and clarity, and the overall effectiveness of the recycling project. Winners will be announced at Mt. Diablo Recycling Earth Day event on April 26 at the Recycling Center, 1300 Loweridge Rd. in Pinnburg.

*Look for entry forms and full instructions for each age group on the Mt. Diablo Recycling website: [www.mt Diablo Recycling.com](http://www.mt Diablo Recycling.com). Click on the Recycling Contest tab. Submit completed entry by email to [irecycling@mt Diablo Recycling.com](mailto:irecycling@mt Diablo Recycling.com) by April 4.*

### Mt. Diablo Elementary Science Fair sizzles



## Excuses from litterbugs are garbage

You enter downtown Clayton, expecting to spend a sunny day in the park with your family. You are expecting to let your kids out and play while you also get some time to yourself, to enjoy the park, sit on a bench, and enjoy some calm relaxation. Nevertheless, you arrive and find the tables are full of trash with the surrounding ground likewise littered.

How does this happen? Too many people disregard the responsible trash cans around downtown Clayton. Too many people seem to not be able to walk these steps from a table to the nearest trashcan. Too many people do not care. The city of Clayton has made it so easy for every person visiting down-



**LIRIANA HERNANDEZ  
TEEN SPEAK**

town to throw away their trash, and yet much of it gets left out in the open. Many accuse each of this crime, and of course the question that follows is why?

The simple answer to this

question could be pure laziness. Indeed, it is easy to throw trash away, but many people just refuse to. In certain circumstances, it could be that one forgets that the trash is sitting there, or maybe one is in a hurry and hopes it there for someone else to pick up. Another reason may be just that some people are just used to others picking up after them.

It is easy for one to just leave something, seeing that for others to clean up the same thing happens at Clayton Valley Charter High School. One thing that has substantially changed with the opening of the charter has been the cleanliness of the campus. CH course,

this has been a product of not only the students' willingness to throw their trash away after lunch and brunch, but much of the administrative team and parents take action to pick up trash and make CVCHS look good.

With this in mind, I believe that many of those who do not throw away their trash do so because it is easy, and they are assured that someone it will get picked up.

*Liriana Hernandez is a Junior at Clayton Valley Charter High School. She likes to read and plans to pursue her career in writing in the future. Her email is her at lherndez@claytonpioneer.com.*

**Family Earth Day Celebration**



**Saturday, April 26 at Mt. Diablo Recycling**

**Reserve space for ONE FREE Earth Day Celebration session**  
**Session #1: 10:00 am to noon**  
**Session #2: 1:00 pm to 3:00 pm**

Location: Mt. Diablo Recycling, 1300 Leavitt Road, Pittsburg  
 Quadrant 2047, Address: Modesto, CA 95951 • Phone: 925-771-2723

**Each free-to-attend Family Earth Day Session includes:**  
 Recycled items and activities throughout the day  
 \$1000 worth of recycling benefits  
 Come on water recycle and earn 10 Recycling Dollars!



# Creekside Arts festival highlights fire



MICHAEL YASHAR'S OIL PAINTING, REFLECTION POND #2, is just one of several paintings on exhibit during the Creekside Arts Celebration next weekend at the Clayton library. Pictured are library staff members Doug Thomas and Karen Hansen-Smith.

The Clayton Community Library will celebrate its 25th birthday at the annual Creekside Arts festival March 21, 22 and 23.

"Creekside Arts 2014: Mount Diablo...Rising From the Ashes" will highlight the recent Morgan Fire, and the

regeneration of the local hillsides affected by the blaze.

Nature is just part of the focus of the festival, which celebrates the visual and performing arts and culture of the community through art sales, craft demonstrations and entertainment.

Here is a schedule of events:

**Friday, March 21, 6 to 8:30 p.m.:** Opening reception, sampling of art for sale, demonstrations by local artists, and refreshments.

**Saturday, March 22, 10 a.m. to 6 p.m.:** More than 40 artists will be on hand to demonstrate and sell their wares, including plein air painting with Patsy Taylor; members of Walnut Creek Civic Arts; a copper enameling demonstration by Rana Miller-Owen; and "Cori's Quilt," a Clayton Civil War tale of a young girl living on Mt. Diablo, told by Joy Koonin in authentic period clothing and including quilt square crafts. There will also be wildlife experts, including representatives from Save Mount Diablo, who will discuss "Mount Diablo Morgan Fire and Regeneration on the Mountain," with an outdoor tour to follow. Artist Jeffrey DeSalles will lead the Clayton Spring Artwalk tour through downtown Clayton, followed by a "Meet the Author, Artist, Eco Group" question and answer sessions.

**Sunday, March 23, 12 to 5 p.m.** (Library opens at 1 p.m.): Ongoing sales and exhibits by more than 40 East Bay vendors; children's entertainment; craft demonstrations; and a performance poetry workshop with Taz Yamamoto. Film "Upland" don.

Talko drumming by Diablo Talko.

Festival-goers can also vote for their favorite artwork in the People's Choice Award, to be announced at the end of the weekend.

The event will be held throughout the inside of the library, Hoyer Hall community room, adjoining outdoor courtyard and interpretive area in the certified wildlife habitat. For more information contact Arlene at 925-673-9777, email creeksideartsfest@gmail.com, or visit claytonlibrary.org.

**NEW**  
**Two-Year**  
**PLUS 10% di**

**Clayton Valley**  
**Auto**

3/18

more go to

# CREEKSIDE ARTS 2014

## Mt. Diablo - Rising from the Ashes

**March 21 6-8:30pm**  
**March 22 10-6pm**  
**March 23 1-5pm**

GUIDED  
NATURE &  
ART TOURS

ART

ACTIVITIES FOR  
ALL AGES

AUTHORS

NATURE  
PRESENTATIONS

Clayton Community Library  
 6125 Clayton Road  
 Clayton, CA 94517  
 (925) 673-0659  
[www.claytonlibrary.org](http://www.claytonlibrary.org)

Watercolor, oil, acrylics, collage, jewelry, pen & ink, photography, recycled art, miniature crochet, quilts, natural organic soaps & candles, copper enameling, a cappella, handbags, succulents and more!  
 Vote for your favorite People's Choice Award!

POETRY

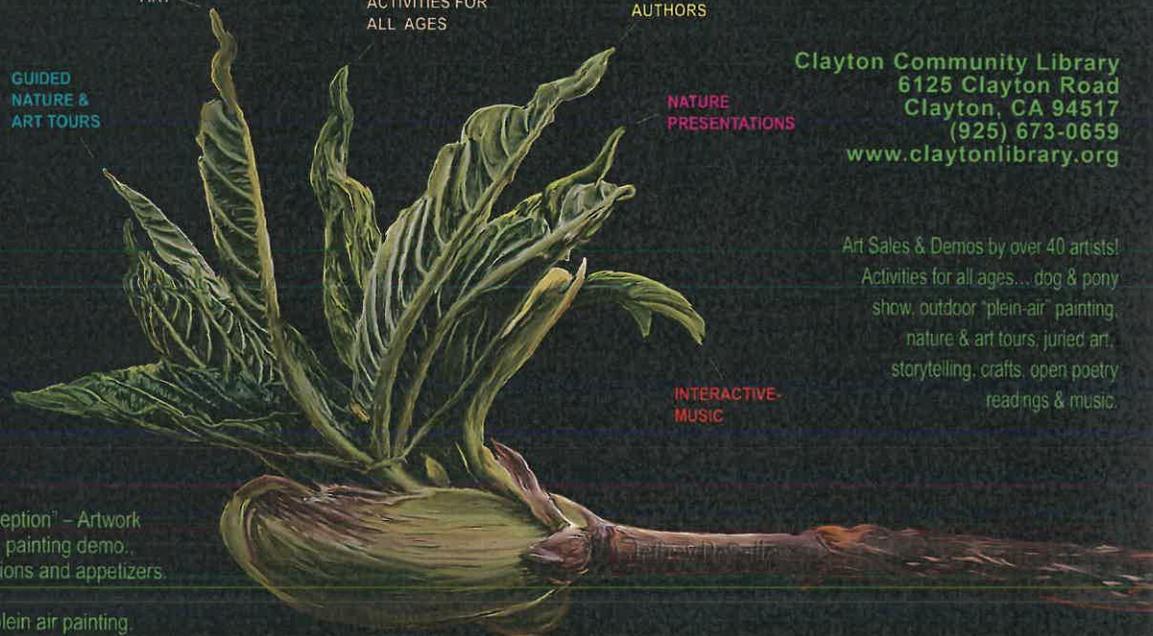
INTERACTIVE-  
MUSIC

Art Sales & Demos by over 40 artists!  
 Activities for all ages... dog & pony show, outdoor "plein-air" painting, nature & art tours, juried art, storytelling, crafts, open poetry readings & music.

**Friday (6-8:30pm)** "Opening Reception" - Artwork Exhibition of juried theme, dog & pony show, painting demo, sale preview, silent auction, award presentations and appetizers.

**Saturday (10-6pm)** Arts & Eco, plein air painting, copper enameling demo, crafts, face painting, quilts, storytelling, outdoor creekside and artwalk tours and activities.

**Sunday (1-5pm)** "Poetry & Musicians" - Art Sales - Continue with "Live" demonstrations, "plein-air" outdoor painting, crafts, and kids' activities, Taiko drumming and a ukulele jam.



**Creekside Arts 2014!**  
***“Mount Diablo...Rising from the Ashes”***

**Schedule of events-**

**MARCH 21 (Open Reception: 6-8:30pm), MARCH 22 (10-6),**  
**MARCH 23 (12-5, Library opens @ 1)**

**Sponsored by: The Clayton Community Library Foundation in cooperation with the City of Clayton**

**FRIDAY** (6-8:30pm)-“OPENING RECEPTION”, mini sampling of ART for sale, music, light refreshments, PLUS...

**6:30 p.m.** – Art Demonstrations: Seema Mahboob, oil palette knife painting, Leslie Wilson, watercolors

**7:00 p.m.** – “LIVE” GREAT HORNED OWL, “OBI-WAN” by Corvid Connection, Elaine Friedman, sketch this local raptor with painter, Leslie Wilson, CA Watercolor Assoc.

**7:30 p.m.** –Presentation of Art Awards, juried by Bedford Gallery, California Writer’s club, Art Concepts, Inc., and Arts & Culture Commission of CCC.

**SATURDAY** (10-6) – Ongoing ART SALES&ECO GROUPS, "LIVE" art demo's, face painting, crafts, PLUS:..

**10:00-12:00** OUTDOOR PLEIN AIRE painting, join Patsy Taylor, Walnut Creek Civic Arts

**11:00-12:00** \*NEW\* COPPER ENAMELING demonstration, Rana Miller-Owen

**1:00-1:30** CORA'S QUILT: A Civil War Tale in Clayton, Joy Koonin, storytelling dressed in character as a young girl living on a farm on Mt. Diablo during the Civil War period. Craft with authentic quilt patterns afterwards for attendees through 5th grade.

**2:00-4:00** "DOC" HALE, Wildlife Field Biologist, ethnobotanist, and SAVE MT. DIABLO discuss the "Mt. Diablo Morgan fire and the regeneration”, with an outdoor Interpretive Tour to follow with photo opportunities beginning at the library’s Creekside Habitat.

**3:00-5:00** CLAYTON ARTWALK SPRING TOUR, Jeffrey DeSalles, artist will be your tour guide throughout downtown Clayton beginning at the library, city hall, museum, more.

**3:30-4:30** \*NEW\* MEET THE AUTHOR, ARTIST, ECO GROUP, join us for Q & A.

**SUNDAY** (12-5, Library opens @ 1)–Ongoing ART SALES & ECO–GROUPS, face painting, crafts, interactive music, PLUS...

**12:00–1:00** \*NEW\* PERFORMANCE POETRY WORKSHOP, Taz Yamaguchi, national award winner, filmmaker, leads this fun, interactive workshop. Light refreshments.

**1:00-2:00** PERFORMANCE POETRY OPEN READINGS, led by Taz

**2:00-2:30** UKULELE JAM, Robert & Ehu Alidon, bring your ukulele to join in!

**2:30-3:00** DIABLO TAIKO, experience this powerful Japanese drumming firsthand with audience participation.

**4:00-4:30** – PEOPLE’S CHOICE AWARD announcement! Come vote for your favorite!

The Clayton Community Library, 6125 Clayton Rd., Clayton, CA 94517 \* [www.claytonlibrary.org](http://www.claytonlibrary.org) \* Questions? [Arlene, akiksen@aol.com](mailto:Arlene.akiksen@aol.com), 925.673-9777

# CLAYTON PIONEER

IT'S YOUR PAPER

www.claytonpioneer.com

September 13, 2013

(925) 672-0500



MT. DIABLO LOOKED LIKE AN ERUPTING VOLCANO ON SUNDAY NIGHT, SEPT. 8, as a fast moving wildfire spread from 400 acres to nearly 2000 overnight. By press time on Monday night, the fire had burned nearly 4000 acres, North Peak was charred, the summit of Mt. Diablo was threatened and the fire had spread northeast toward Russelmann Ranch Road. It was still only 20 percent contained.

## Morgan Fire chars thousands of acres on Mt. Diablo

TAMARA STINEY  
Clayton Pioneer

Temperatures nearing 100 degrees coupled with a dry winter, off-shore winds and dense, bone-dry fuel set the stage for the biggest Mt. Diablo wildfire in 36 years.

The fire started at the mercury mines on Morgan Territory Road on Sunday around 1:30 p.m. The cause is officially "under investigation," but neighbors say it was sparked by someone target shooting.

By 3 p.m. on Sunday, the fire dubbed the "Morgan Fire," had burned over 800 acres, threatening homes and power lines and forcing evacuations from Oak Hill Lane and Curry Canyon.

AirCloud Communications, which provides internet service to the Morgan Territory and Marsh Creek areas, lost electrical power to their communication equipment on North Peak around 11 p.m. Sunday night.

With the fire spreading fast, the critical issue was getting the horses and other large animals out of the area. By late Sunday

See FIRE, page 4

## Fire, from page 1

afternoon, SUVs and trucks pulling horse trailers joined the steady stream of fire trucks, bulldozers and heavy equipment lining Morgan Territory Road.

The steep, ragged and densely wooded east side of Mt. Diablo presented huge challenges to fire fighters and equipment trying to gain access. The fire raged out of control through Sunday night, growing to 2000 acres by Monday morning. At 10 a.m., the fire was only 10 percent contained according to East County Fire Chief Hugh Henderson.

The fire continued to grow Monday, spreading south toward San Ramon with the heaviest activity on the east side of Mt. Diablo above Curry Canyon and on the north edge of North Peak above Russelmann Road.

According to CalFire Public

Information Officer, Dave Shew, more than 800 personnel from CalFire, CCCFPD, ECFPD and dozen other local fire districts were on scene. Two DC 10s were on the fire until late afternoon, when they were called to another major fire burning near Shasta.

A Red Cross evacuation center set up at the Clayton Library drew mostly government officials and locals looking for information or just to connect with others. Most of the evacuees found lodging with friends or relatives in the area.

Curry Creek resident Virginia Fraser came with her cat, Emma. She saw the black smoke and flames around 2 p.m. on Sunday and alerted her neighbors before leaving. "I thought it'd be a nice quiet day, sitting there reading the Sunday papers," she said. "Then, boom - all this."

As of 3 p.m. Monday, according to the CalFire incident website, the fire had burned 3,718 acres and threatened 100 homes and was still only 20 percent contained.

Monday night when this paper went to press at midnight, the fire was still active. Earlier in the evening, flames flared up on Morgan Territory Road near the origin, jumping the road at one point and causing more evacuations.

At press time, the CalFire site had not been updated since early in the day Monday. The CalFire media information office had no map showing the boundaries of the fire, active areas or containment lines, leaving residents in the fire zone dependent on local blog sites and social media for critical information.

The last huge fire on the mountain was in 1977, when lightning sparked a fire that burned 6000 acres.

# Hardy Rockrose shrub is back



**NICOLE HACKETT  
GARDEN GIRL**

Plants go in and out of style as fashion does. Red Fountain Grass, Tipton Verbena, and Carpet Roses are just a handful of plants

for which customers once sustained the nursery. Then, for one season or another their popularity began to fade, and suddenly the urgency to install these plants faded.

This was not the case with the shrub commonly called Rockrose. Rockrose was the "it" shrub 20 years ago. Its popularity soared as the Oakhurst Development was being landscaped. Now, Rockrose is back by popular demand. This is a perfect shrub for our Clayton Valley climate and growing conditions.

Cistus is the botanical name for Rockrose. This evergreen isn't picky about soil. Rockrose can handle our sticky clay, as well as rocky hills. Cistus is drought-tolerant once established, needing only small amounts of summer water to survive. There is no need to fertilize Rockrose. Depending on the variety, Rockrose can have flowers in light or dark pink, white or blushed. Rockrose has the typical early spring flower display that can last four to six weeks depending on the weather. Growers can also expect a repeat of flowers in autumn.

Cistus laurifolius is a variety of Rockrose with a dark green leaf and contrasting red stem. In March and April, a



white flower with a crimson blush covers this evergreen shrub. Flowers can be two- to two-and-a-half-inch round. The flower of a Rockrose is simple-shaped, having only five or six petals surrounding a center. Cistus laurifolius can grow four-feet tall and six-feet wide. Consider the mature growth when planting. You want Rockrose to grow and thrive. You don't want to have so control its size. You'll take away from the shrub's natural shape.

Orchard pink flowers with a magenta blush covers the Rockrose called Cistus purpureus in early spring. This selection of Rockrose has a bold color scheme and complements red foliated grasses well. Purpureus can reach heights of four feet and can grow eight-feet wide.

Rockrose is a perfect companion to summer blooming

scrap myrtle shrubs or trees, or multi-trunk smoke trees. White Blooming Marantia Carmel Set or the Blue Flowers of Yankee Point exantheum would both make fine, hardy ground covers to plant along a Rockrose.

Consider planting Rockrose along fence lines, hillsides and side yards. When planting, take care to dig a wide enough hole. Water plant before installing, and mix soil conditioner in with the native soil. Water thoroughly after planting.

Cistus shrubs are hardy, some foundation plants with pretty spring flower. They are tough to kill in our Clayton Valley landscapes.

*Write to the Garden Girl at 11001 Pine Drive, Clayton, California. Contact her and gardeners at rockrose at ClaytonPioneer.com*

**BRUNCH AT OAKHURST COUNTRY CLUB**

11 a.m. & 1 p.m.

by Brunch, Oakhurst Country Club, and beautiful surroundings.

1:99\*\* Children (ages 4-12); [info@oakhurstcc.com](mailto:info@oakhurstcc.com)

oakhurstcc.com



**NICOLE HACKETT  
GARDEN GIRL**

It's time to talk about grass — not your lawn, but the ornamental types. For a couple of months already folks have been making their way to the nursery looking for these types of billowy accents for their landscape, garden beds, containers and pool backdrops. Many of the more popular ornamental grasses run a winter dormancy; this year the early warmth of January got our ornamental grasses going sooner than usual. Thus, many varieties are ready for the choosing. Once you know the differences in mature sizes, it'll make picking your favorite ornamental grasses all the easier.

Miscanthus has many family members that are very appealing in our Clayton Valley landscapes. Morning Light is a variegated Miscanthus. It has slender leaves. This selection is tall and will gracefully grow to five- to six-foot tall and wide. During the summer months, Morning Light is topped with feathery beige flower clusters.

Another showy Miscanthus worth mentioning is Miscanthus Strictus. This selection of ornamental grass



## Ornamental grasses liven up local landscapes

**MISCANTHUS 'MORNING LIGHT'**

has medium-green leaves with horizontal yellow variegation. The variegation is fairly random and natural looking. During the summer months you can expect Miscanthus Strictus to grow up to eight-inches tall and three-foot wide, which includes the reddish-bronze plumes that rise above the foliage. Miscanthus is a perennial ornamental grass. Each year in March, prune your Miscanthus down near the ground. It will re-grow as spring warms.

Blue Oat grass is a favorite selection of many that are interested in ornamental grasses. The mature size of the Blue Oat grass is only two- to three-foot tall and wide. Blue Oat Grass grows in graceful tufts of blue-gray fountains. The botanical name of Blue Oat

Grass is Helictotrichon sempervirens. This ornamental grass likes better drainage than some of our clay allows. A good hint when installing is to leave just about an inch of the rootball above the soil grade.

Calamagrostis "Karl Foerster" is another smaller growing ornamental grass. This selection is commonly called Feather Reed Grass. It has lovely, feather-reed grassy spikes with reddish-brown plumes in the summer. The plumes last into fall.

Panicum "Heavy Metal" is another larger growing selection. It matures seasonally to five-foot tall. "Heavy Metal" grows in a weeping fashion. The grass leaves are metallic gray. During the summer the plumes of "Heavy Metal" are purplish-green and loosely

stacked above the foliage. As fall approaches, it turns yellow, adding to its appeal.

Ornamental grasses all look about the same size when purchased. Be wary and read up on a potential selection before installing. It is always easier to install a plant rather than remove it. Make the right choice first. Most ornamental grasses need full or at least six hours of sun to be happy. All the mentioned varieties need a hard prune in the earliest days of spring. If you are unsure about growing ornamental grasses, try in a container at first to see if the effect is what you desire.

*Nicole is the Garden Girl at R&M Pfl. Patis, Gifts and Garden. Contact her with questions or comments at [Gardengirl@claytonpioneer.com](mailto:Gardengirl@claytonpioneer.com)*

# Gardens need mulch work this month



**NICOLE HACKETT  
GARDEN GIRL**

With the hot summer days in our future, garden-lovers should do their plants a favor. They should mulch every square inch of bare and thinning soil areas, as well as planting areas. Mulch helps the ground retain its moisture by protecting its surface from the harsh sun and drying winds.

I know that many in Clayton Valley have weekly gardeners that spend their visits blowing the soil clean. This ridiculous practice has robbed our ground of its protective layers. The layers of leaves that have fallen beneath trees and shrubs create topsoil. When "gardeners" blow dirt clean they are really blowing away your topsoil. Topsoil is your plants protective coating. It shelters their roots by keeping the ground cooler in the summer and warmer in the winter. Now more than ever we should get out and spread whatever type of mulch you are attracted to.

Are you a bark person? Shredded bark, micro or medium? Do you prefer spreading topdressing of soil conditioner with a good percentage of red

cedar?

Straw?

Whatever it is, our landscape, veggie/flower beds, and bare areas would benefit from three-to-four inches of product.

Micro bark is the most popular mulch sold. The size is very appealing. Micro bark is available dyed or natural. Dark color barks can create contrast to the plants in the yard; over time the color of the dyed barks washes out with sun and rain. Natural barks start off light and ages darker. Regardless of color, both selections will have to be touched up annually to keep desired thickness.

Shredded bark or gorilla hair is a perfect selection for hills, or hilly areas. The shape of the shreds can grip the soil better, preventing frustrating slipping. Slipping is more obvious on soil that hasn't had mulch applied in years. After time, and layers, you'll find that the slippage to not be a problem anymore.

Straw is an excellent topdressing for our vegetable beds, either raised or in the ground. A thick three-to-four inches of

straw will absolutely help the ground from water loss through evaporation. We want to be able to water our vegetable gardens without as guilt, and using straw will help us.

Some folks don't like the look of traditional bark and mulch. Spreading layers of soil conditioner throughout landscape and garden beds satisfies the plants needs, too. Reapplication of this process is necessary more often. The finer organic matter in soil conditioner allows for faster breakdown. Reapplication can be expensive, so some use this process mostly on the perennial flowerbeds.

One final thought regarding the importance of mulching our landscapes: Mulch makes the soil surface darker, preventing many weeds from germinating. Also, weeds that germinate atop mulch are easier to pull.

*Nicole is the Garden Girl at R&M Book, Pottery, Gifts and Garden. Contact her with questions or comments at [GardenGirl@claytonpioneer.com](mailto:GardenGirl@claytonpioneer.com)*

# Try this beautiful, water-wise sage



**NICOLE HACKETT  
GARDEN GIRL**

Salvia Clevelandii Winifred Gilman is an exceptional sage that any Clayton Valley landscape lover would be proud to grow. It is a sturdy, evergreen perennial with fragrant foliage, and a long bloom season. Salvia Clevelandii is a California native shrub that is easy to find and adapts quickly once planted.

Maturing to four- to five-foot-tall and wide, Salvia Clevelandii can be utilized in the landscape as a foundation plant. It can visually stand up against a fence or property line. Since it keeps its leaves throughout the winter, Salvia Clevelandii also makes a nice backdrop for deciduous trees.

Considering this year's water issues, Salvia Clevelandii is the type of plant that Clayton Valley residents should consider installing. This shrub is very water-wise, surviving on very little water, and still thriving.

There are many members to the Salvia Clevelandii family. Winifred Gilman is one of the best. The foliage of Winifred Gilman is mostly gray, while the stems are a dark eggplant color. In the summer, whirls of light lavender, two-lipped shaped flowers bloom in rows atop this evergreen's strong stems. Both bees and hummingbirds are attracted to this sage.

Install Salvia Clevelandii with companion plants that require similar watering. Mix with other water-wise native plants such as manzanita, arbutus, other salvia, and sedum. Many non-native plants would also mix well with Salvia Clevelandii. Consider installing with crape myrtle, smoke bush, teucrium, nepeta and lavender.

A couple tricks to remember when purchasing and planting Salvia Clevelandii Winifred Gilman is not to buy too large

of a container at the nursery. Actually, the smaller the container the better. With native plants, you want one that hasn't live for too long in a pot. Four-inch sizes are the best, with one gallon coming in second. When installing, avoid any planting mix with built-in fertilizers. Natives do best with a hand full of soil conditioner.

Once installed, Salvia Clevelandii Winifred Gilman will need babysitting the first three weeks after planting. Week one, the plant should be watered every day, week two, you should water every other day, and week three, skip three days between watering. After the three week establishing period, your plant should only need water a couple times a week its first summer.

Water-wise, drought tolerant, whatever you want to call these types of plants, just understand that they all don't have to look like dry grass. Many beautiful, desirable plants are water-wise and ready to be discovered.

*Nicole is the Garden Girl at R2M Pool, Patio, Gifts and Garden. Contact her with questions or comments at [Gardengirl@claytonpioneer.com](mailto:Gardengirl@claytonpioneer.com)*



## Colorful lantana thrives in Clayton Valley



**NICOLE HACKETT  
GARDEN GIRL**

When the weather gets blazing hot and the sun pounds the landscape relentlessly, there is a common family of plants that thrives through every bit of it. It's the family called lantana, and it is stupendous in our Clayton Valley climate.

Lantana is a very common plant family in our area. Your neighbors probably grow it. You see it in public landscape areas and even along meridians. Some lantana grows as ground covers and others as shrubs. They all have globe-shaped clusters of tiny flower and hardy textured leaves. Lantana is both bee and butterfly attractive. It thrives in full sun, and is very drought tolerant. It is almost perfect from June through November. Once the weather chills for the winter, lantana typically goes deciduous, resting and storing up energy for another fabulous growing

season next year.

The groundcover selections of lantana are very sought-after. Lavender lantana was once the most favored. Then, about 10 years ago, the trailing white lantana hit the scene. They called it White Lightning, and sometimes, Silver Mound. Then everyone had to have that selection. These days, the New Gold variety seems to be the most desirable. The flowers are a deep, butter-yellow color. New Gold can seriously stand up to the sun, never fading as some color can do. New Gold Lantana can really pop out of the landscape, screaming "Look at me!"

Shrub lantana can be slightly more frost-sensitive, yet their colors are so provocative that they are worth the risk, with multi-color clusters of flowers that open one color and mature to another. Shrub Lantana is very distinctive, and in the right spot, they will thrive for many years. Irene, Radiation, Dallas Red and Confetti are among the most desirable shrub lantana selection.

Landscapes love lantana. Groups plants here and there to add bold color. Use lantana to accent a large boulder. Install beneath a spring blooming deciduous tree to extend the flower power in the area. Plant along the property line, or near a



fence to define the boundaries. If you are planting a large container, lantana makes an excellent container addition.

Be careful, as lantana is toxic. It should not be consumed. We like to inform folks about toxic plants, in case any potential planters have samplers in their household. There is a positive note to planting this toxic plant: gophers, rabbits and deer will leave it alone. Warn the children not to eat it, and watch the dog.

Planting lantana is simple. It hardly has any needs. Dig a hole

one-and-one-half times the depth and width of the container. Use a planting mix with installing. You do not need to plant with a fertilizer in the hole, or in the soil. Water thoroughly once planted, and keep your eyes on the new installation through the first summer in the ground.

*Nicole is the Garden Girl at Rejoice Pool, Patio, Gifts and Garden. Contact her with questions or comments at [Gardengirl@claytonpioneer.com](mailto:Gardengirl@claytonpioneer.com)*

# 10 easy ways to save water in your garden

## 1. Cycle & soak

Use the cycle and soak method for watering your lawn and landscape. For fixed and pop-up spray sprinklers, water three cycles per day, four to six minutes each cycle. Schedule start times one hour apart. If you have rotating sprinklers, water three cycles per day, 10 to 12 minutes each cycle.



## 2. Adjust watering

Shrubs, or lawn in shade (north/east side of your house), will generally require up to 50 percent less water than the same plants in full sun (south/west side). Adjust your watering to account for different microclimates in your garden.

## 3. Water early

Don't water during the middle of the day. This can scorch the leaves. It's best to water in the early morning as the sun is rising and temperatures are cool.



## 4. Check your sprinklers

Check your irrigation system every couple of weeks for broken or misaligned sprinkler heads. This can save a significant amount of water and keep your landscape looking great!



## 5. Manage your timer

Every two to four weeks, adjust the watering schedule to reflect changes in the weather. Reducing the watering schedule by one-minute on each sprinkler station can save more than 50 gallons per day!



## 6. Reduce your lawn

Reduce the size of your water-thirsty lawn and replace it with water-efficient low-maintenance plants.

## 7. Mow

Mow lawns to 2 1/2 to 3-inches during the summer. This will improve the quality of the lawn and reduce water demand.

## 8. Mulch

Mulch is the little-noticed workhorse of many smart gardeners' landscapes. Maintain a 2- to 3-inch layer of organic mulch in all planting areas.

## 9. Use a broom

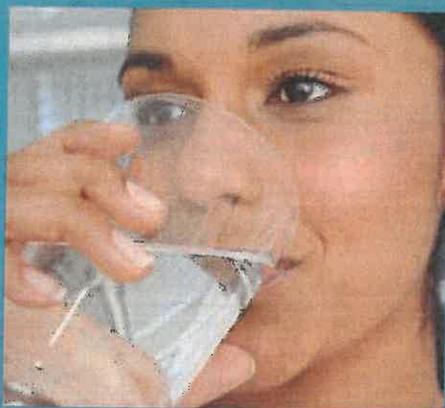
Use a broom instead of a hose to clean your driveway and save up to 80 gallons of water every time.

## 10. Aerate

Aerate your lawn. This allows water and oxygen to get to the roots. You can either leave the soil plugs on the lawn or remove them to another part of the garden.

# 10 easy ways to save water in your home

It's time to renew your conservation efforts and ensure you are using water efficiently. Saving water has never been so easy.



## 1. Insulate pipes

Insulate hot water pipes so less water needs to be run for hot water to reach the faucet. This also helps save energy.

## 2. Replace old toilets

You can save 60 percent by replacing your older (pre-1992) toilet with a new High-Efficiency Toilet (HET).

## 3. Replace old washer

By replacing your older top-loading washer with a new high-efficiency model, you use 50 percent less water and energy. They are also kinder to your clothes.

## 4. Check for leaks

Test your toilets for leaks. Place food coloring in the tank. If the color appears in the bowl, you have a leak. Either your water level is too high, or your flapper needs to be replaced.

## 5. Run full loads

Run your clothes washer & dishwasher with full loads to maximize water & energy efficiency.

## 6. Keep water cool

Keep a container of water in the fridge so you don't need to run water down the drain until it's cool enough to drink.



## 7. Plug it up

Put a plug in the bathroom sink when shaving rather than rinsing your razor under running water.

## 8. Save while showering

If your showerhead can fill a one-gallon bucket in less than 20 seconds, replace it with a high-efficiency showerhead. Drop by CCWD and pick up a free high-quality, high-efficiency showerhead.

## 9. Brush & conserve

When brushing your teeth, remember to keep the water off until you are ready to rinse your brush. Every drop counts.

## 10. Always aerate

Make sure there are aerators on all of the faucets in your home. Faucets without aerators can use more than three times the water.



# Water Conservation Adds Up Every Day For a Typical Family

Old, inefficient toilets use 75 gallons  
High-efficiency toilets use 27 gallons  
**48 gallons of water saved daily!**

Showers with standard heads use 46 gallons  
Showers with low-flow heads use 36 gallons  
**10 gallons of water saved daily!**

Typical landscaping uses 150 gallons  
Landscaping with well-managed irrigation uses 75 gallons  
**75 gallons of water saved daily!**

Faucets without aerators use 43 gallons  
Faucets with aerators use 32 gallons  
**11 gallons of water saved daily!**

Old, inefficient dishwasher uses 6 gallons  
New, efficient dishwasher uses 4 gallons  
**2 gallons of water saved daily!**

Standard clothes washer uses 60 gallons  
High-efficiency washer uses 36 gallons  
**24 gallons of water saved daily!**



For detailed information about rebates on water-saving appliances, free water-saving devices and water saving tips, go to [www.ccwater.com](http://www.ccwater.com) or call (925) 688-8320.

**Before Conservation:** The family used **380 gallons** per day.

**After Conservation:** The family used **210 gallons** per day.

**Conservation Saved 170 gallons of water every day!**



CONTRA COSTA  
WATER DISTRICT



## LOSE A LAWN • GET A GARDEN



**\$1,000 REBATES** (up to)

- Replace Lawn with Water-Wise Landscaping
- Rebate is \$1.00 per sq. ft. replaced
- Pre-Approval is required
- Non-residential sites call for details

For Program Eligibility and Information  
Call: **(925) 688-8320** or  
Visit: **[www.ccwater.com/consERVE](http://www.ccwater.com/consERVE)**





CONTRA COSTA  
WATER DISTRICT

P.O. Box H20  
Concord, CA 94524-2099

PRSR7 STC  
U.S. Postage  
PAID  
Permit No. 58  
Oakland, CA

## Important Information

### Re: 2014 Drought Program

CCWD has numerous programs, including free water use evaluations, rebates, and more. For Drought Updates and Conservation Program information, visit [www.ccwater.com](http://www.ccwater.com).

#### QUICK CONSERVATION

- Focus on cutting outdoor water use.
- Reduce sprinkler timer for significant water savings.
- Sign up for the Water Saver e-Newsletter at [www.ccwater.com/conserve/](http://www.ccwater.com/conserve/).

## Contra Costa Water District 15% Voluntary Drought Program



CONTRA COSTA  
WATER DISTRICT

The Contra Costa Water District (CCWD) wishes to inform you of the voluntary drought program that was approved by the CCWD Board of Directors at its March 19, 2014 meeting.

**During the drought, customers are asked to voluntarily reduce their overall use by 15% from their baseline (historical) use. Historical use for your property can be found on the back of your water bill. The historical use is an average of 2005–2007 water use at your residence. Recent conservation efforts are appreciated and are not counted against customers.**

California is facing a significant water crisis from several consecutive dry years. In January, Governor Jerry Brown formally declared a statewide drought emergency. The severity of the water shortage stems from the small amount of precipitation and snowpack received this winter. The District is not raising water rates as a component of this drought program. Customers who meet the voluntary conservation goals under the drought program will save money due to reduced usage.

The goal of this program is to reduce consumption to conserve available water supplies and save water in Los Vaqueros in case drought conditions continue into next year. The drought program focuses on reducing outside water use, while minimizing impacts to jobs and the local economy. Additional information is available at the District Office, 1331 Concord Avenue, Concord, CA 94520, or at [www.ccwater.com](http://www.ccwater.com).

## It pays to replace that thirsty lawn

**N**ow that spring weather has arrived we will all start spending more time outside. If that means mowing, fertilizing and spraying those weeds coming up in your front lawn, then the Contra Costa Water District has an alternative. The District has a rebate program that will pay you to replace that water thirsty lawn with a water-efficient garden.

Converting a 30 x 30 foot lawn can save more than 25,000 gallons per year. But the rewards go far beyond the water savings. "What people find out is that they love the new look of their yard," says CCWD's Bob Eagle. "They find they have replaced their green with a beautiful, eye catching front yard full of color."

Remove the front laws, and you remove that pesky weekly commitment to water, mow and fertilize. "Now, you don't

have to spend time trying to figure out how to kill the crab grass," Eagle says. "Now you have more time to do what you want."

Single-family residential customers can receive a rebate of up to \$500.

Commercial and municipal customers can receive a rebate up to \$5,000 when they replace their front lawns and other publicly visible lawns with water-efficient landscaping.

The rebate program will last only for a limited time. The program is not retroactive, and properties must be pre-approved by CCWD before any work is started in order to be eligible for the rebate.

*Complete program details can be obtained by visiting [www.ccwater.com/consERVE](http://www.ccwater.com/consERVE), or by calling (925) 688-8320 for a program brochure.*

# \$500 REBATES

## LOSE THE LAWN, GET A GARDEN

**CCWD is offering rebates to encourage customers to replace their front lawns with Water-Efficient Landscaping**

Up To \$500 for  
Residential  
Homes

Up to \$5,000 for  
Commercial  
Properties



**Funding is  
limited, so  
call today!**

For program information:

**[www.ccwater.com/consERVE](http://www.ccwater.com/consERVE) or call (925) 688-8320**

## Professional Tree Management

**\$50 off** any service  
of \$300  
or more

or

**\$100 off** any service  
of \$1000  
or more

---

- Arborist Consulting
- Landscape Division
- Crane Services
- Firewood

- Stump Grinding
- Pruning
- Removals
- Installation

Contractors License # 878423  
Arborist License # WE7372A

**FREE ESTIMATES**  
**925-250-0334**

**www.waranertreeexperts.com**

## Good for the earth, easy on the eyes.

925.250.0334

**Organic**  
*No dyes like phthalates or chemically treated woods*

**Local**  
*Returning local materials back to local grounds*

**Tree Source**  
*Made only from raw wood removed or removed trees*

*Presented By Waraner Tree Experts*

*a beautiful way to save water*

*Landscape color that requires no water? Good for soils and plants, Earth Blend's rich color and consistent texture make it a satisfying design element as well as mulch.*

**Pricing**

**Natural -**  
\$29 per yard

**Colored -**  
\$50 per yard

**Top Soil -**  
\$39 per yard

**FREE DELIVERY**

**www.EarthBlendMulch.com**

FAIR

# CLAYTON PIONEER

IT'S YOUR PAPER

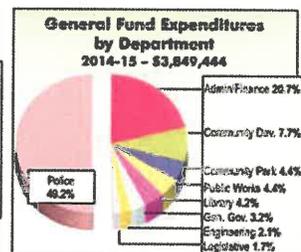
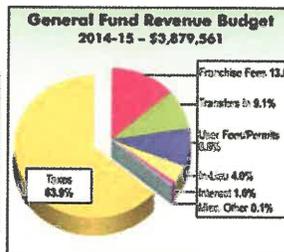
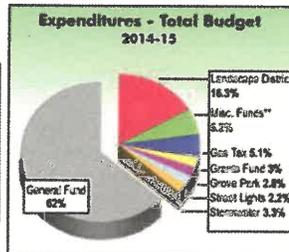
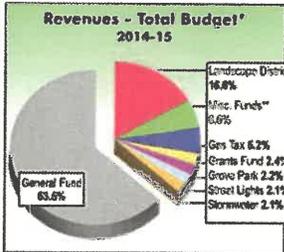
**SUMMER FREE**  
 3 Day Sale from 16 to 18 Zen Environment  
**Join today!**  
 925-672-6700  
 5436 Ygracia Valley Rd. #130  
 Concord  
 (Clayton Valley Shopping Center)

www.claytonpioneer.com

June 13, 2014

925.672.0500

## Clayton balances 2014-15 budget with small surplus



At the June 3 city council meeting, city staff proposed a \$9.37million budget for 2014-2015 which includes \$3.26 million in fiduciary funds. The General Fund budget balances with a small \$30k surplus which assumes Misc. Employees' salaries and benefits remain status quo. This surplus is supported by a healthy uptick in real property assessed values and further return of a portion of former Redevelopment Agency revenues to the General Fund. Capital projects planned for next year include a federal collector street rehab project targeting Keller Ridge Drive, a new SUV police car and replacement of a 23 year old Maintenance tractor. Last year's budget suffered one-time spikes for audit delays/ finance dept. illness, overtime expenses for Clayton PD staffing shortages, and water overages caused by constant irrigation breakages at Community Park. Landscape District planned improvements include trail bridge renovations, a neighborhood median landscaping and refurbishing the downtown planters. Source: City Manager Gary Napper.

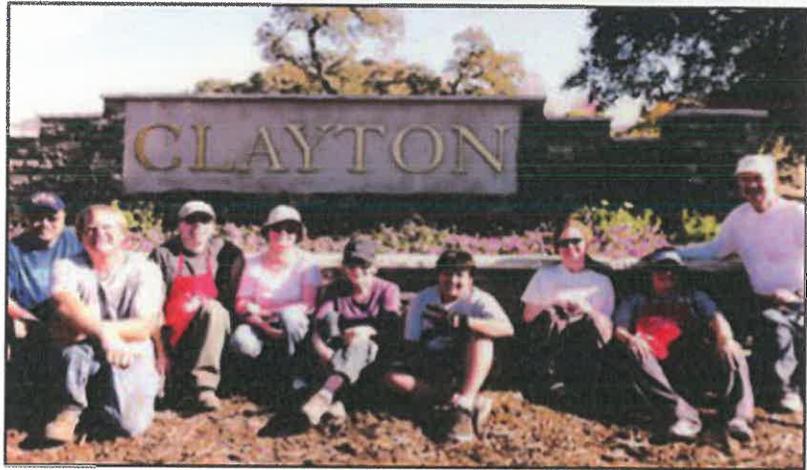
### Clayton Valley Garden Club

Clayton's Daffodil Hill will bloom bigger and brighter than ever this spring.

Early last month, 16 volunteers from the Clayton Valley Garden Club donated and planted another 500 bulbs on Clayton's gateway at Clayton and Marsh Creek Roads.

The volunteers worked in production line fashion to plant bulbs, using an electric clay spade to dig and finishing each hole by hand. Each trumpet yellow bulb was accompanied to their hole with some bone meal and covered with soil mix and mulch.

*The Clayton Valley Garden Club meets at 7 p.m. on the second Wednesday of the month, February through November, at Diamond Terrace, 6401 Center St., Clayton. For more information, go to [claytonvalleygardensclub.org](http://claytonvalleygardensclub.org).*



**CLAYTON VALLEY GARDEN CLUB MEMBERS** Ben Shikano, Nick Cospar, Steve Lane, Valerie Austin, Alyce Shikano, Erik Ortiz, Ingala Nielsen, Michelle Ortiz and Bruce Balha expect a show of nearly 1000 daffodil blooms in the spring

[www.cityofclayton.org](http://www.cityofclayton.org) **2014 CLAYTON COMMUNITY EVENTS** rev. 4/28/14

**February 16** – 37<sup>th</sup> Annual **Camellia Tea**, Clayton Historical Society, 6101 Main Street, 1 to 4. Coffee, tea, and treats honoring Clayton's Pioneering Families. A great opportunity to tour the Museum decorated in the season's bloom of camellias. For more information call Mary Spryer 672-7232 or [www.claytonhistory.org](http://www.claytonhistory.org).

**March 2<sup>nd</sup>** – 14<sup>th</sup> Annual **Chili Cook Off** – **Clayton Club Saloon**, 6096 Main Street, 10am – 4pm; judging noon-1pm. Prizes-awards for top three of 20 entries. Entry forms at Clayton Club. For info [www.claytonclubsaloon.com](http://www.claytonclubsaloon.com); or email at [steve@claytonclubsaloon.com](mailto:steve@claytonclubsaloon.com); (925) 998-0549.

**March 8<sup>th</sup>** – **Library 19<sup>th</sup> Birthday Recognition Program** – Annual Library Birthday recognition, Foundation meeting and volunteer recognition Clayton Library Hoyer Hall 10 am to 11 am. For more info contact Joyce Atkinson at 672-3850.

**March 21, 22 and 23** -- **Annual Clayton Library Birthday Celebration and Creekside Arts Celebration**  
Friday 6pm-8:30pm; Saturday 10am- 6pm; Sunday 1-5pm – Clayton Community Library 6125 Clayton Road; for info call Ariene Nielson 673-9777 or email at [akiksen@aol.com](mailto:akiksen@aol.com)

**April 1 through 31** – **April on the Mountain** – various hikes and nature activities within Mt. Diablo State Park and nearby regional park areas. For information call 673-2891 or 972-7222.

**April 9 through October 29**-- Wednesday evenings **Classic Cars and Classic DJ Rock and Roll** music 6pm-8pm Main and Diablo Streets downtown Clayton. For more information call Skipolini's Pizza at 672-1111.

**April 11,12, 13** – **Spring Book Sale**. The Semi Annual Library Foundation pre owned Book Sale @ Clayton Library Community Room, 6125 Clayton Rd. (Fri. 4-7 CCLF members only- memberships can be purchased at the door; general public--Sat. 10-6; Sun. Noon-4) information call 672-3672 [www.claytonlibrary.org](http://www.claytonlibrary.org)

**April 30** – Annual **Spaghetti Feed** – 5pm – 8pm at Endeavor Hall, 6008 Center Street, Downtown Clayton, AAUW American Association of University Women for information contact Linda Pinder at 672-7815 or email: [LJPinder@comcast.net](mailto:LJPinder@comcast.net)

**April 26<sup>th</sup> and 27<sup>th</sup>** – Annual **Gardens Tour** 10am – 4pm Rain or Shine various homes in the Clayton Valley area, Information - call Clayton Historical Society at (925) 672-0240 or [www.claytonhistory.org](http://www.claytonhistory.org)

**April 26** – Spring **Clayton Cleans Up** - Rain or shine, 9 am to Noon. Meet at City Hall Courtyard, 6000 Heritage Trail, for Information - call Pamela at Clayton Pioneer at 672-0500 or email: [pamela@claytonpioneer.com](mailto:pamela@claytonpioneer.com).

**April 26** –20<sup>th</sup> Annual **Devil Mountain Double Century Bicycle Ride**- starts and ends in San Ramon-- Pine Hollow Rd, Mt Zion to Clayton Rd, to Main Street to Marsh Creek Rd, 7:30am- 9:30am for info contact Scott Halversen (510)-882-6727, email: [syh\\_cpa@pacbell.net](mailto:syh_cpa@pacbell.net) or [www.quackcyclists.com](http://www.quackcyclists.com)

**May 3<sup>rd</sup> and 4<sup>th</sup>** -- Annual **Art and Wine Festival** **Sat: 10am – 7:00 p.m.; Sun: 10am – 5pm**, Main Street downtown Clayton. Art, Crafts, Food, Music, Kiddieland. Information - Call CBCA at 672-2272; or [www.claytoncbca.org](http://www.claytoncbca.org)

**May 10 through October 25** – **Clayton Farmers Market** Saturday's 8am-Noon – Downtown Clayton on Diablo Street (between Main and Center Streets). For more information contact Pacific Coast Farmers Market at [www.pcfma.com](http://www.pcfma.com) or call 1-800-949-3276 (no market on August 30 and October 4).

**May 10** – Annual **Plant Sale**, Clayton Valley Garden Club, Rain or shine. Endeavor Hall Parking Lot 8 am-1pm. Call Deborah Eistetter at (925) 808-8123 for information. [www.claytonvalleygardenclub.org](http://www.claytonvalleygardenclub.org)

**May 10** -- **Concerts in the Grove** kick off 6pm – 8:30pm – Grove Park Gazebo Downtown Clayton --Main Street-- **California Beach Boys** - known for their precise harmonies, this band is the top **Beach Boys tribute band** in northern CA. They will bring yo back to the days of sock hops, drive in movies, beach parties and clean living. [www.californiabeachboys.com](http://www.californiabeachboys.com)

**May 19** -- Annual Clayton Business and Community Association **Golf Tournament**, Oakhurst Golf Course; noon shotgun start, dinner afterwards. Contact CBCA at 672-2272 or [www.claytoncbca.org](http://www.claytoncbca.org)

**May 24** -- Sat Night **Concerts in the Grove** --- 6pm – 8:30 pm Grove Park Gazebo Downtown Clayton --Main Street - **Boys of Summer**, with spot-on vocals, that plays the true musical heart and sound of the **Eagles music**. This is a get up and dance band. recreates the sounds and harmonies, but most important, the feel of the Eagle's music. [www.boysofsummertribute.com](http://www.boysofsummertribute.com)

**May 27** – Annual **Memorial Day Program** by the VFW Post 1525, 10am Downtown Clayton Flagpole, Main and Oak Streets. Information call Paul Carroll at 628-9508 or [paulgcarroll@sbcglobal.net](mailto:paulgcarroll@sbcglobal.net).

**June 7 – Sat Night Concerts in the Grove** — 6pm – 8:30 pm Grove Park Gazebo Downtown Clayton --Main Street the “**Band TBD**” a music style of band goes here . [www.band web site here.com](http://www.bandweb.site/here.com) for more info.

**June 12 – Thurs. Night Grove Concert** – 7pm - 8:30 pm pm Grove Park Gazebo Downtown Clayton --Main Street - **The Houserockers** bring elements of rock, swing, blues, 60s soul and R&B. This 10-piece rock and soul band from Los Gatos plays the greatest songs recorded. Known for their high energy and fun performances, you will dance to the *music of the Rolling Stones, Earth Wind and Fire, Tower of Power, Springsteen and much more.* [www.svhouse rocker.com](http://www.svhouse rocker.com)

**June 21 – Sat Night Concerts in the Grove** — 6pm – 8:30 pm Grove Park Gazebo Downtown Clayton --Main Street “**The City Swing Big Band**” with vocalist Joyce Grant and special guest vocal ensemble LGCSF Chorus present "A Night To Remember." Featuring the *big-band sounds of the 40s, 50s, and 60s*, including swing and our favorite “crooner tunes” of yesteryear through today. 40 professional musicians! [www.cityswingband.com](http://www.cityswingband.com)

**July 4 – Annual Pancake Breakfast & Parade**– Downtown Clayton, Pancakes at Endeavor Hall at 7am Clayton Valley Sunrise Rotary, \$5 adults and \$3 kids 12 and under); parade on Main Street 10 am, for info: Sandy Johnson at 693-0463 or main parade application at [www.cityofclayton.org](http://www.cityofclayton.org)

**July 5 – Sat. Night Concerts in the Grove** – 6pm – 8:30 pm Grove Park Gazebo Downtown Clayton - Main Street “**The Fundamentals**” present a high-energy stage show with three dynamic lead vocalists, the hottest horn players around and a super tight four-piece rhythm section. “Red Hot Rockin’ Soul” for the last 15 years. From Michael Jackson, Earth Wind & Fire and Beyoncé to Journey and Bon Jovi, you will hear your favorite *R&B, rock, pop and soul tunes.* [www.thefundamentals.com](http://www.thefundamentals.com)

**July 10 – Thurs. Night Concert in the Grove** – 7pm - 8:30 pm pm Grove Park Gazebo Downtown Clayton --Main Street “**Band TBD**” type of music here . [www.band web site here.com](http://www.bandweb.site/here.com) for more info.

**July 11 tentative - Friday Night Family Movies** – “movie TBD outdoor movies and social in the parking lot next to the Clayton Community Church offices, 8pm-10pm, 6055 Main Street downtown Clayton, for information call 673-9060. [www.claytoncc.com](http://www.claytoncc.com)

**July 18 tentative - Friday Night Family Movies** – “Movie TBD” outdoor movies and social in the parking lot next to the Clayton Community Church offices, 8pm-10pm, 6055 Main Street downtown Clayton, for information call 673-9060 [www.claytoncc.com](http://www.claytoncc.com)

**July 19<sup>th</sup> – Community 5k Fun Run** – 8am – 11:00 am Start at Diablo View Middle School end at Clayton Community Park – for information contact Sarah Owen email: [owen44@comcast.net](mailto:owen44@comcast.net)

**July 19 – Sat Night Concerts in the Grove** - 6pm to 8:30 pm Grove Park Gazebo Downtown Clayton --Main Street - **Rachel Steele & Road 88** band features *modern country and high-energy dance music.* Singing the greatest new country hits of today with some great rock-n-roll and standards of country music. A little bit country and a little bit rock-n-roll. [www.road88music.com](http://www.road88music.com)

**July 24 - Thurs. Night Concert in the Grove** – 7pm - 8:30 pm pm Grove Park Gazebo Downtown Clayton --Main Street “**Band TBD**” type of music here . [www.band web site here.com](http://www.bandweb.site/here.com) for more info.

**July 26 tentative - Friday Night Family Movies** – “movie TBD” outdoor movies and social in the parking lot next to the Clayton Community Church offices, 8pm-10pm, 6055 Main Street downtown Clayton, for information call 673-9060. [www.claytoncc.com](http://www.claytoncc.com)

**August 1 tentative - Friday Night Family Movies** – “movie TBD” outdoor movies and social in the parking lot next to the Clayton Community Church offices, 8pm-10pm, 6055 Main Street downtown Clayton, for information call 673-9060. [www.claytoncc.com](http://www.claytoncc.com)

**August 2 – Sat Night Concerts in the Grove** — 6pm – 8:30 pm Grove Park Gazebo Downtown Clayton--Main Street – **Diamond Dave Hosley** is back for the 7th consecutive year with his ability to cover *all round hit music from yesterday to today.* With capacity crowds at every Clayton concert, he is truly one of Clayton’s favorites. [www.davehosley.com](http://www.davehosley.com)

**August 7 – Thurs Night Grove Concert** — 7:00 pm – 8:30 pm Grove Park Gazebo Downtown Clayton--Main Street band to be determined

**August 9 - tentative – 5<sup>th</sup> Annual Rib Cook-Off** 10 am – 6pm; CBCA Annual Event at Clayton Club patio 6096 Main Street – for more info contact Sue White at 672-2272 or [www.claytoncbca.org](http://www.claytoncbca.org) or [www.claytonclubsaloon.com](http://www.claytonclubsaloon.com)

**August 16 – Relay For Life** – American Cancer Society -- Clayton Valley Charter High School, [contact Lindsay.Davis@cancer.org](mailto:Lindsay.Davis@cancer.org) or at (925) 788-0064 or [relayforlife.org/california](http://relayforlife.org/california)

**August 16 – Sat. Night Concerts in the Grove** 6pm to 8:30 pm Grove Park Gazebo Downtown Clayton --Main Street **AJA VU** plays the *music of Steely Dan and Chicago*, performs the music with conviction and pure love for the melodic hooks, harmonies and unique storytelling of the original classic recordings. [www.ajavu.com](http://www.ajavu.com)

**August 21 – Thurs Night Grove Concert** – 6:30-8:30 pm Grove Park Gazebo Downtown Clayton --Main Street “**band TBD.**”

**August 30<sup>th</sup> – Eleventh Annual Soap Box Derby and Classic Car Show** 9 am – 3 pm, Main Street Downtown Clayton. For information call Clayton Community Church (925) 673-9060.

**August 30<sup>th</sup> - Sat Night Concerts in the Grove** –6pm to 8:30 pm Grove Park Gazebo Downtown Clayton --Main Street - **Apple Z's** -- powerhouse popular dance band deliver **crowd-pleasing classics covering the 60s through today's top 40**. Enjoy the hits of the **Rolling Stones, Beatles, U2, The Police, Lady Gaga, Maroon 5, Bruno Mars,** & today's hits [www.applezband.com](http://www.applezband.com)

**September 11 (tentative) -- 9/11 Remembrance**, 7pm at Station 11 Firehouse lawn – corner of Center and Clayton Rd. bell ringing and candlelight walk to downtown flagpole for information call Clayton Community Church at 673-9060.

**September 13 – Concerts in the Grove** -- last concert of the summer 6pm – 8:30 pm Grove Park Gazebo Downtown Clayton -- Main Street – **East Bay Mudd** -- This 10-piece cover dance band with a powerful four-man horn section, will keep you dancing all night long. Their upbeat and commanding take on **contemporary classics, soul, funk and R&B tunes** leaves you asking for more. Always a great band to end our concert season. [www.eastbaymudd.net](http://www.eastbaymudd.net)

**September TBD** — Clayton Valley Charter High School **Homecoming Parade** —4-6pm, Main Street, call Ms. Ljepava, 682-7474 for information.

**Oct. 3<sup>rd</sup>, 4<sup>th</sup>, & 5<sup>th</sup> – Oktoberfest kids Carnival** – Main/Oak St. CC Church offices parking lot & field Friday Oct 4, 5pm-10pm Sat Oct 5, 11am-10pm; Sunday Oct 6, 11 am to 9 pm Information - Call CBCA at 672-2272; or [www.claytonoktoberfest.com](http://www.claytonoktoberfest.com)

**October 4<sup>th</sup> & 5<sup>th</sup> – Oktoberfest** Sat: 11am - 8pm; Sun: 10 - 6pm; Main Street Downtown Clayton. Art, Crafts, Food and kids Carnival rides. Information - Call CBCA at 672-2272; or [www.claytonoktoberfest.com](http://www.claytonoktoberfest.com)

**October 11 tentative – Clayton Valley Charter High School – Bands/Music March – A – Thon.** 9am to noon- Downtown, to Library, Easley Drive, Stranahan Circle and Grove Park. For info contact Vicki Anderson at [vickianderson@comcast.net](mailto:vickianderson@comcast.net).

**October 17, 18, 19 – Fall Book Sale.** Semi Annual Library Foundation pre owned Book Sale @ Clayton Library Community Room, 6125 Clayton Rd. (Fri. 4-7 CCLF members only- memberships can be purchased at the door; general public --Sat. 10-6; Sun. Noon-4) information call 672-3672. [www.claytonlibrary.org](http://www.claytonlibrary.org)

**November 1 tentative – Annual "Stampede"** Mt. Diablo Elementary School 1k and 5k Fun Run/Walk fundraiser – for information contact Cindy Knapp [cindyknapp10@yahoo.com](mailto:cindyknapp10@yahoo.com)

**November 21<sup>st</sup>, 22<sup>nd</sup> & 23<sup>rd</sup>** -- Annual Clayton Valley Woman's Club **Holiday Boutique Sale** ; 11am to 4pm, Clayton Community Meeting Room, 6125 Clayton Road. Information call Peggy Arundell at 672-2043 or Priscilla Manlove at 672-3039.

**December 6 -- Annual Caroling and Tree Lighting.** Rain or Shine --Downtown Clayton, Grove Park to Main and Oak Streets,- Carriage Rides 4:30-6:30; Caroling 6pm; Tree Lighting 6:30 pm . Information Call CBCA at 672-2272.

**December TBD** – Annual **Hospice Tree Lighting** @ Concord John Muir Hospital Parking Lot, Almond /East Street 5:30 pm., for info contact at 925-887-5678 or at [www.hospiceeastbay.org](http://www.hospiceeastbay.org)

**December 11 tentative -- Annual Christmas Cookie Contest** Judging Reception, 6:30 pm at Clayton Community Library Meeting Room, 6125 Clayton Road. Contest Deadline 10<sup>th</sup> . Call Clayton Pioneer at 672-0500 for information, or [www.claytonpioneer.com](http://www.claytonpioneer.com)

**December 13 -- Annual Christmas Tea with Mrs. Claus and Santa** 11 am – 2 pm, Endeavor Hall, 6008 Center Street - Call CBCA at 672-2272

**December 13 tentative – Annual Holiday Toy Collection** Clayton Valley Charter High School Lacrosse Team – new toy donations being accepted 10 am to 2pm, at the Grove Park Gazebo, downtown Clayton – for info contact Tracy Morse, CVHS Men's Lacrosse Team Rep, Tel: 925-207-0382; email: [traceymorse@gmail.com](mailto:traceymorse@gmail.com) more info at [www.cvlacrosse.com](http://www.cvlacrosse.com).

**December 14 – Annual Holiday Home Tour** Noon - 7pm Various homes in the Clayton Valley area, Information - call Clayton Historical Society at (925) 672-0240 or [www.claytonhistory.org](http://www.claytonhistory.org).

---

## **Other events, activities, and local organizations**

### **Clayton Community Gym and Recreation: All year**

Various activities for youth and adults including basketball and volleyball through a management partnership with the All Out Sports League (AOSL). Gym rental available for kids parties and events too. Contact the Clayton Community Gym located at Diablo View Middle School call (925) 203-5626; [www.alloutsportsleague.com](http://www.alloutsportsleague.com)

**Clayton Community Library** various programs and activities: 6125 Clayton Road; [www.claytonlibrary.org](http://www.claytonlibrary.org); or call 673-0659.

**Clayton Museum** various history exhibits 6101 Main Street (Joel Clayton Home)

-- Open Wednesdays and Sundays 2pm to 4pm; and Saturdays June 1 through August 31<sup>st</sup> from 10 am – Noon;

or by appointment and during some special downtown community events. 6101 Main Street;  
[www.Claytonhistory.org](http://www.Claytonhistory.org) or phone 672- 0240 for more information.

### **Little League Season**

March 14 through July 24: contact Clayton Valley Little League, Kevin Christiansen at [Christiansen.kevin@gmail.com](mailto:Christiansen.kevin@gmail.com)

### **Soccer Season**

Youth – August 1- November 20: contact Mt. Diablo Soccer League, Stephani Cicconi 925-383-1989  
email: [stephanicicconi@yahoo.com](mailto:stephanicicconi@yahoo.com)

Adult – July – Sept.: contact Clayton Soccer Club, Rob Sears at 925-451-1110

**Oakhurst Country Club** (private membership golf, tennis, swim, swim team and gym club) [www.oakhurstcc.com](http://www.oakhurstcc.com)

Or call 672-9797 x205; x210; x217

**Oakhurst Business Networking Mixer** – First Thursday of every Month. Open to the Public, free. Oakhurst Country Club, 1001 Peacock Creek Dr. (925) 519-8753; <http://oakhurstcc.eventbrite.com/>

**Dana Hills Cabana Swim Club** (memberships to the public available) contact Shauna Maffei 925-381-2021;  
[shaunamaffei@gmail.com](mailto:shaunamaffei@gmail.com) or [www.danahillsotters.com](http://www.danahillsotters.com)

**Dana Hills Swim Team (Otters)** contact: Cathy Meyers 683-2125 or [cathy@diabloValley.net](mailto:cathy@diabloValley.net); or  
Lauren Velez 768-6685 [velezfamily@comcast.net](mailto:velezfamily@comcast.net) (pentathlon meet is mid July at Dana Hills) [www.danahillsotters.com](http://www.danahillsotters.com)

**Clayton Community Emergency Response Team (CERT)** - The Community Emergency Response Team (CERT) provides opportunities for residents a, businesses and those that work in the community training to be prepared and have a formal structure in the event of an emergency. Training on home and neighborhood safety and response in various emergency and disaster is provided as well as training on hands only CPR. [www.claytoncert.org](http://www.claytoncert.org) for more information.

**Mt. Diablo Trail Ride Association-** is a local non-profit organization dedicated to horsemanship, with 200 acres next to Mt Diablo off Russelman Road just at Clayton's easterly boarder. The MDTR Association has equestrian facilities, club house with pool, and monthly social potlucks, complete equestrian facilities, a club house with pool, horse boarding, horse camping, rentals, a cross country jump course, clinics, events and very affordable membership fees. For more info [www.cmdtra.org](http://www.cmdtra.org)

**Clayton Business and Community Association (CBCA)** a non-sectarian, non-partisan and non-profit community organization. working together to improve the general welfare, prosperity and common good of the entire Clayton community. Members are local professionals, businesses and individuals The CBCA provides the vehicle for social networking and camaraderie through fund raising activities, meetings and social gatherings, and for working as a group for our community. The CBCA annually presents four major Clayton events, the Art and Wine Festival, Golf Tournament, Rib Cook -Off, and the Oktoberfest, along with the annual downtown Holiday decorations, Tree lighting with Santa, and Mrs. Claus Tea. Funds raised by the CBCA go back to projects in the community and local schools. [www.claytoncbca.org](http://www.claytoncbca.org)

**Clayton American Association of University Women (AAUW)** The AAUW promotes equity for women and girls, lifelong education, and positive societal change. The Clayton Branch is highly active in community programs. One notable program is the Clayton Library which was begun by the branch and supported by the members. [www.claytonaauw.org](http://www.claytonaauw.org)

**Clayton Valley Woman's Club - CVWC** members are community-minded women of all ages, from the Clayton/Concord area and beyond, who have joined together to provide community service through volunteering and fundraising. We are dedicated to meeting the needs and interests of all members as we meet the needs in our community. [www.claytonvalleywomansclub.org](http://www.claytonvalleywomansclub.org)

**Clayton Valley Garden Club** – formed to bring together people in that area with an interest in gardening including community projects such planter boxes on Main Street and near the Clayton Library and the daffodils at the town center entry at old Marsh Creek Rd and Clayton Road. [www.claytonvalleygardenclub.org](http://www.claytonvalleygardenclub.org)

**Clayton Historical Society** – membership open to all that have in interest in wanting to learn more and help preserve the local history of the community. It works to research, collect, record, preserve, display, borrow, share, and interpret local history information and memorabilia, and to promote understanding of Clayton origins and development. Its volunteers operate and maintain the Clayton Historical Museum for visitors and hosts student classes an special tours . It locates, records, inventories, publicizes and marks historic sites, buildings and natural features making recommendations. The Society has developed a "twinning" bond with Joel Clayton's birth town, Bugsworth, England, and the town he founded. [www.claytonhistory.org](http://www.claytonhistory.org)

**Diablo Vista Soroptimist** – a service organization that focuses on ways to improve the lives of women and girls in our local community and throughout the world. [www.sidiablovista.org](http://www.sidiablovista.org)

**Clayton Valley Sunrise Rotary** -- non-governmental, non-religious, non-political service organization serving humanitarian goals in the world with time and effort to help others through service in the local communities. The club is involved in many projects around the world but and has projects that are important in the local community as well. Meeting are breakfast every Thursday morning at 7:00 a.m. at the Oakhurst Country Club, 1001 Peacock Drive, Clayton, CA. [www.claytonvalleyrotary.org](http://www.claytonvalleyrotary.org)

**School fundraisers and events contact various schools:**

**Mt. Diablo Elementary School Parent Faculty Club (PFC)** Pres. Holly Tillman at [hollytillman@gmail.com](mailto:hollytillman@gmail.com)  
or Yolanda Kowalewski at [yodroz@sbcglobal.net](mailto:yodroz@sbcglobal.net) ph: 672-4544  
[www.mdusd.k12.ca.us/mountdiabloelementary](http://www.mdusd.k12.ca.us/mountdiabloelementary) OR <http://mtdiabloelementary.mdusd.org/PFC>

**Diablo View Middle School Parent Faculty Club (PFC)** Megan Kommer President at [kommer@sbcglobal.net](mailto:kommer@sbcglobal.net)  
or ph 348-3831; Sharon McNulty [sharonmcnulty@gmail.com](mailto:sharonmcnulty@gmail.com), ph: 348-0999  
[www.mdusd.k12.ca.us/diabloview](http://www.mdusd.k12.ca.us/diabloview) OR <http://www.mdusd.k12.ca.us/diabloview/PFC/pfc.html>

**Clayton Valley Charter Higher School (CVCHS)** – a public charter high school conversion of Clayton Valley High for more information regarding the Charter High (925) 682-7474 or [www.claytonvalley.org](http://www.claytonvalley.org) OR <http://sites.google.com/site/claytonvalleycharterhighschool>; registrar Helen Bendoyro at (925) 682-7474 x 3109.  
parent boardmember/liaison — Alison Bacigalupo, [abacigalupo@comcast.net](mailto:abacigalupo@comcast.net); or [alison.bacigalupo@claytonvalley.org](mailto:alison.bacigalupo@claytonvalley.org)  
ph (925) 672-4241



COMMUNITY DEVELOPMENT (925) 673-7340  
ENGINEERING (925) 363-7433

6000 HERITAGE TRAIL • CLAYTON, CALIFORNIA 94517-1250  
TELEPHONE (925) 673-7300 FAX (925) 672-4917

*City Council*  
HANK STRATFORD, *MAYOR*  
DAVID T. SHUEY, *VICE MAYOR*  
JIM DIAZ  
HOWARD GELLER  
JULIE K. PIERCE

September 4, 2014

Via fax (916) 558-3177

The Honorable Edmund "Jerry" Brown  
Governor, State of California  
State Capitol Building, Suite 1173  
Sacramento, CA 95814

**Re: Request for Signature: SB 270 (Padilla, de León, and Lara) Single-Use Grocery Bags Bill**

Dear Honorable Governor Brown,

The City Council of Clayton **strongly supports Senate Bill 270**, which will reduce bag pollution and waste by restricting single-use plastic grocery bags and placing a ten cent minimum charge on paper and reusable bags. We respectfully urge you to sign the bill into law.

As a small populated city (11,000+) in Contra Costa County with limited governmental revenues, our City Council has long desired to ban within our community the single-use plastic grocery bags. Unfortunately, we cannot endure the plastic industry's opposition to this objective, threats of litigation, nor suffer the expense of preparing our own environmental study to enact the local ban. SB 270 offers a universal statewide approach to this desired ban, one which will aid in keeping our community's streams, creeks and sensitive habitats free of clogging plastic bags.

Plastic bags are a costly, environmentally damaging, and easily preventable source of litter and pollution. Light and aerodynamic, plastic bags are uniquely litter-prone even when properly disposed of, and pose a serious threat to the riparian and marine environment and wildlife. When no longer visible to the naked eye, plastic bags have degraded into tiny particles that absorb toxins and contaminate our food chain and water and soil quality.

There is no free bag. Single use plastic bags are costly to both consumers and taxpayers. The more than 13 billion single use plastic bags distributed by California grocers cost over \$200 million annually. The costs of these one-time use products are passed on to consumers in the form of higher grocery prices.

Californian taxpayers pay a second time. In 2013, California communities reported to NRDC that they are spending \$428 million every year to prevent and clean up litter that pollutes our waterways. Based on litter studies, plastic bags represent as much as 10%-25% of litter; plastic bag pollution prevention may represent up to \$43-107 million in local government costs. And waste management facilities are losing as much as \$1 million each year to deal with plastic bags in their machinery, as reported by the City of San Jose in 2010.

Numerous cities and towns in our Bay Area have already adopted local bans on plastic bags and would be grandfathered into this bill. Our City wishes it could join them – **SB 270** provides us that uniform opportunity. The results from these existing policies demonstrate both environmental and economic success, and public support. The City of Clayton supports extending this solution statewide.

The economic and environmental costs of single-use plastic bags simply outweigh any short-term benefit. Phasing out single use plastic bags will reduce plastic pollution and the costs associated with it.

Please sign SB 270 into California law and once again provide national leadership on this issue.

Sincerely,



Hank Stratford  
Mayor

cc:

Gareth Elliot, Legislative Secretary, Office of the Governor, [Gareth.Elliott@GOV.CA.GOV](mailto:Gareth.Elliott@GOV.CA.GOV)  
Graciela Castillo-Krings, Deputy Legislative Secretary, Office of the Governor, [Graciela.Castillo-Krings@GOV.CA.GOV](mailto:Graciela.Castillo-Krings@GOV.CA.GOV)  
Caroll Mortensen, Director of CalRecycle, [Caroll.Mortensen@calrecycle.ca.gov](mailto:Caroll.Mortensen@calrecycle.ca.gov)  
Californians Against Waste, [suevang@cawrecycles.org](mailto:suevang@cawrecycles.org)  
Honorable Clayton City Council Members

City of Clayton

Republic Services Curbside Collection Data for FY 13/14

	7/1/2013	8/1/2013	9/1/2013	10/1/2013	11/1/2013	12/1/2013	1/1/2014	2/1/2014	3/1/2014	4/1/2014	5/1/2014	6/1/2014	Total
Oil filters	32	20	23	32	24	21	31	23	15	31	20	15	287
Batteries	46	77	64	64	59	27	53	43	56	324	399	546	1758
Lightbulbs	34	39	63	26	11	40	57	6	50	34	79	44	483
Mattresses	10	6	4	3	5	7	8	2	8	16	16	10	95
E-waste	7	13	7	12	3	4	9	2	1	12	12	11	93
White Goods	13	8	0	11	10	6	4	3	2	8	8	8	81
Used Oil	146.23	115.1	91.1	111.45	72.41	111.81	161.75	119.31	115.36	142.95	144.17	141.38	1473.02

Attachment C7d

**City of Clayton  
Emergency & Environmental Management  
Phone Numbers**

**Local/County/Regional Governmental Contacts**

**City of Clayton**

**Stormwater Contact:** Laura Hoffmeister  
6000 Heritage Trail, Clayton, CA 94517  
staff office: (925) 673-7300; direct/vm: 673-7308; or  
cell: (925) 250-8532 LHoffmeister@ci.clayton.ca.us  
After Hours: contact Clayton Police Dispatch  
ask for an officer on Duty (925) 673-7350

**Maintenance Dept.:** City of Clayton, 6000  
Heritage Trail, Clayton CA 94517: (925)  
673-7300  
After Hours: contact Clayton Police Dispatch  
ask for an officer on Duty (925) 673-7350

**Local Police Department:** Clayton Police  
Department (925) 673-7350

**Local Fire District:** Contra Costa Fire Protection  
District, 2010 Geary Road, Pleasant Hill, CA 94523;  
Administration Office/Non-emergency: (925) 930-5500;  
Communications Center (925) 930-5551  
Emergency: 911 or 933-1313

**Contra Costa HazMat 24 Hour Emergency:**  
(925) 646-1112

**Wastewater Agency: City Sanitary Sewer Lines** – (City  
of Concord contract maintenance of City of Clayton sewer lines)  
City of Concord Public Works, 1455 Gasoline Alley,  
Concord, CA 94519: (925) 671-6448; After Hours  
contact Concord Police Dispatch at 671-3333

**Wastewater Agency: Treatment Plant** – Central  
Contra Costa Sanitary District, 5019 Imhoff Place,  
Martinez: (925) 933-0955

**Contra Costa Water District 24 Hour Emergency:**  
(925) 688-8095  
Marie Valmores - Env. Compliance Manager  
direct: (925)-688-8023

**HazWaste Facility:** Central Contra Costa Household  
Hazardous Waste Collection Facility, operated by  
Central Contra Costa Sanitary District, 4797 Imhoff  
Place, Martinez, CA 94553: Toll Free 1-800-646-1431

**East Bay Regional Park District** – Fire District 24 Hour  
Line: (510) 881-1121

**San Francisco Bay Regional Water Quality Control  
Board:** (510) 622-2300

Central Valley Regional Water Quality Control Board:  
(916) 464-4730

**Adjacent Jurisdiction Contacts:**

**Concord Contact:** Robert Ovadia, 1455 Gasoline Alley,  
Concord, CA 94519: (925) 671-3470  
Robert.Ovadia@cityofconcord.org  
Frank Kennedy (925) 451-4294/(925) 932-7857  
**Concord Public Works:** (925) 671-3448  
**Concord Police Dispatch:** (925) 671-3333

**Unincorporated County:** Cece Selgren (925) 313-2296  
After Hours—call HazMat or 911

**Contra Costa Sheriff's Communications Center:**  
(925) 646-2441

**CCC Environmental Health Services:**  
(925) 646-5225, 7:30 a.m. – 5 p.m. weekdays

**State & Federal Agencies**

Cal. Highway Patrol: (925) 646-4980

Office of Emergency Services Spill Line:  
(800) 852-7550

Dept. Fish & Game – 24 Hour Dispatch during incident:  
(831) 649-2801

CAL EPA – Dept. of Toxic Substances Control  
(Region 2): (510) 540-3856

CAL Occupational Safety and Health  
Administration: (925) 602-6517

US Coast Guard – Marine Safety Office:  
(510) 437-3073

Bay Area Air Quality Management District:  
(415) 771-6000; or 1-800-334-6367

**Miscellaneous Contractors:**

Rotomooter : (925) 798-2122; or (925) 939-3100

Aquatic Habitat: (925) 957-1903

Engineering Remediation Resources Group Inc: (925)  
969-0750

Terra Vac: (510) 351-8900

3-D Cleaning Services: (925) 671-7808

Diablo Steam Way: (925) 827-5757

Block Environmental Services: (925) 682-7200

Clean Bay: (925) 685-2800

## **City of Clayton - IPM Administrative Policy**

---

It is the purpose and intent of this IPM Policy to ensure that the City of Clayton departments and all those who apply pesticides to property owned and/or managed by the City of Clayton utilize integrated pest management (IPM) practices and reduce pesticide applications on public-owned and/or City of Clayton managed property to the maximum extent feasible and as required by State and Regional Stormwater regulation.

The City of Clayton, in carrying out its pest management operations, shall focus on long term prevention or suppression of pest problems with minimum impact on human health, non-target organisms, and the environment.

The goal of the City of Clayton is to reduce its use of pesticide use and use to maximum extent possible non-toxic methods to control pests on City of Clayton property. The City of Clayton recognizes that pesticides are potentially hazardous to human health and the environment, and non-pesticide alternatives will be considered over toxic pesticides on City of Clayton property. The first level consideration will be the least toxic method that is both effective and feasible. The City of Clayton has a IPM Standard Operating Procedures and Practices that will outline all the IPM activities that will be implemented to ensure that less toxic methods, that are effective and feasible, are used to control pests on City of Clayton property.

These documents may be updated as needed from time to time.

# **City of Clayton**

## **Standard Operating Procedures & Practices**

### **Administrative Policy for Pesticide Use**

The following are standard operating procedures for **the City of Clayton** for pesticide use in the IPM operational practices within the City's jurisdiction. These procedures include all Municipal Regional Permit (MRP) stormwater requirements under Provision C.9, Pesticides Toxicity Control The City of Clayton and the Contra Costa Clean Water Program work in conjunction to track and participation in regulatory processes, interface with the County Agricultural Commissioner, and conduct public outreach. For guidelines regarding the City of Clayton IPM program please refer to Attachment B, the City of Clayton's IPM Policy. The staff person or IPM Coordinator responsible for implementing, overseeing, reviewing and updating, and reporting the IPM program is Mark Janney, Maintenance Supervisor and their number is **(925) 673-7327**; or email at [mjanney@ci.clayton.ca.us](mailto:mjanney@ci.clayton.ca.us).

### **IPM Standard Operating Procedures**

#### **General**

The City uses very limited pesticides, it is currently limited to use at city buildings for ants and similar pests. The City Contracts with Western Exterminator for building pest management. Periodically the City Contracts with a Contra Costa County Department of Agriculture approved IPM contractor for management of ground squirrels in certain areas when damage is occurring. The City also contracts with Environtech for management of non native invasive plant species of Star Thistle and Artichoke Heart in the Oakhurst Open Space. This is a limited area of apx. 125 acres. The EIR mitigation measures required management of this plant. The contractor is trained in IPM. Herbicide applications are targeted to these two plant species. The City maintenance mostly involves limited use of herbicides – specifically spot spraying of weeds in landscape areas, and pre-emergent in the fall and spring to minimize weed growth in certain landscape areas. The maintenance staff also applies slow release fertilizer periodically on active use lawn areas such as the park or sports play fields. All application are done according to the manufactures application specifications.

#### **Pesticide Use**

Pesticide use within the City of Clayton is determined by an assessment of each pest situation. Each assessment includes identification of the pest causing the damage (e.g., weed, insect, rodent, etc.), evaluation of prevention, exclusion and sanitation measures that will contribute to

successful pest management, evaluation of both non-chemical and chemical options for eliminating or reducing pest numbers, and then developing an integrated management plan using as many management options as practical and economical. Pesticides are generally used as a last resort and are chosen and applied in a manner that is least harmful to people and the environment. The pest problem should then be monitored to evaluate the success of the management strategy.

Particular scrutiny will be used to evaluate the necessity of using the pesticides of concern listed in the Permit under Section C.9: organophosphorous pesticides (chlorpyrifos, diazinon and malathion); pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin).

Environmental impacts of the products are also considered. Pesticides of concern listed in C.9 of the MRP will go through a more rigorous process of review prior to considering their use. Each pesticide used are carefully monitored and recorded using a pesticide management database (see Attachment C).

### **Pesticide Applicators**

All pesticide applicators and IPM providers have IPM training and certification as required by the MRP. All IPM contractors have IPM language in their contracts as required by the MRP. All IPM providers are required to follow these standard operating procedures.

### **IPM Training**

All pesticide applicators will be trained annually in IPM. IPM training may include local, countywide, that included with PAPA licensing or regional efforts. All staff associated with planning, design, construction, and maintenance of buildings and landscaping shall receive an orientation to these standards operating procedures and their roles and responsibilities in implementing IPM within their work duties.

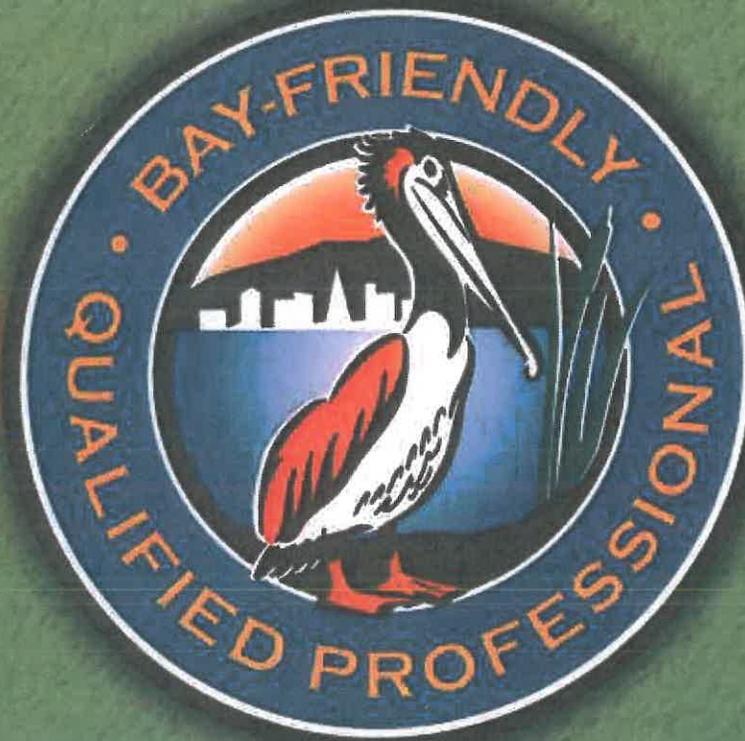
### **IPM Outreach**

Pesticide application information will be provided to the public upon request. Public outreach for IPM includes point of purchase outreach and contractor outreach by the Bay Area Stormwater Management Agencies Association (BASMAA) as required by the MRP.

## **Reporting**

A copy of the City of Clayton's IPM policy shall be included in the annual report. To the extent practicable and data is available, trends in quantities and types of pesticides used shall also be reported, as well as reasons for any increases. The annual report shall also include the percentage of City of Clayton employees who apply pesticides that have been trained in IPM. For any city hired contractor who applies pesticides, a copy of their contract specification; or certification; or other similar acceptable documentation shall also be included in the annual report. For regional regulatory, interface or outreach efforts, the City of Clayton may reference those regional reports.

# City of Clayton



2012

2014

**BAY-FRIENDLY MAINTENANCE  
PROFESSIONALS ON STAFF**

# City Maintenance Staff Use/Application

## Information for storm water report

### Herbicide common name, usage, and active ingredient

Trade Name: RANGER

Usage in 13/14: 16.5 gallons

Active ingredient: Glyphosate N (phosphonmethyl) glycine in form of isopropylamin salt

Trade Name: Surflan

Usage in 13/14: 25 gallons

Active Ingredient: oryzain 3.5-dinitro-N4-N4-dipropylsulfanilamide

Trade Name: Gallery 75 Dry Flowable

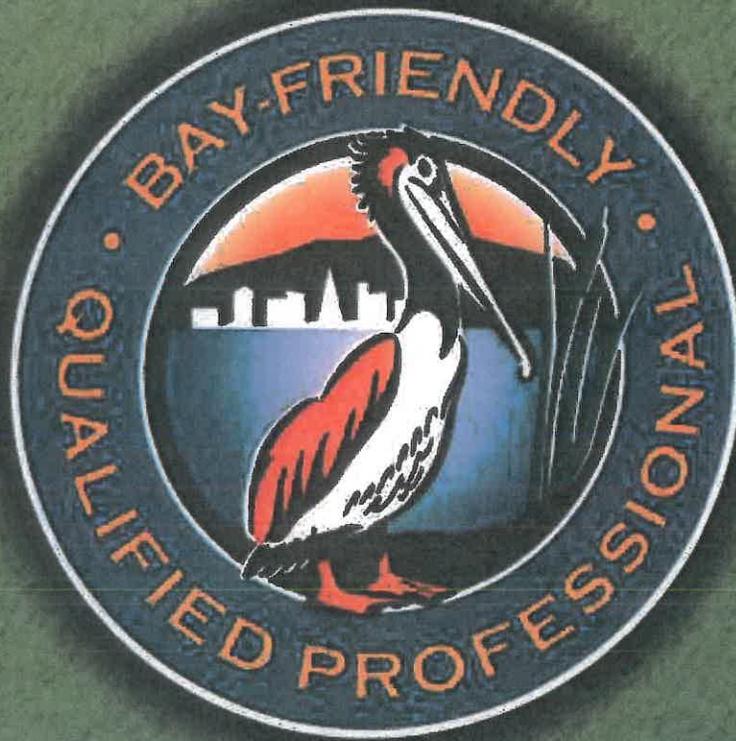
Usage in 13/14: 160oz

Active Ingredient: isoxaben:N[3(1-ethyl-1-methylpropyl)-5-isoxazolyl] 2,6-dimethoxybenzamide and isomers

**Fertilizers Usage:** 4800 pounds of fertilizer used citywide on lawns - it was slow release.

Training 3 Full time in pesticide application with IPM training at PAPA seminars Train 5 seasonal in pesticide application 2/19/14 and 6/14/14

# City of Clayton

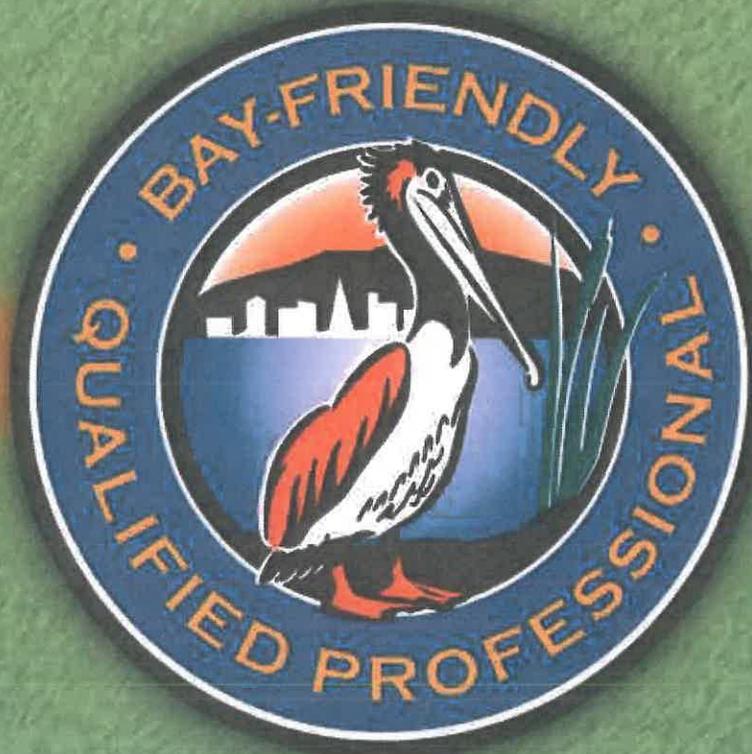


2012

2014

**BAY-FRIENDLY MAINTENANCE  
PROFESSIONALS ON STAFF**

**John Johnston  
City of Clayton**



**2012**

**2014**

**BAY-FRIENDLY LANDSCAPE  
MAINTENANCE PROFESSIONAL**

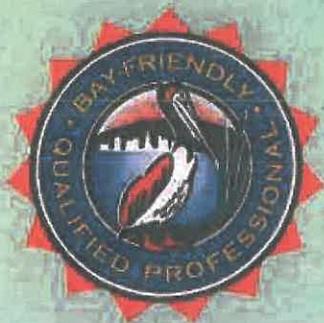
*The Bay-Friendly Landscaping & Gardening Coalition confirms that*

**John Squadroni**

*has met the requirements to become a*

**Bay-Friendly Qualified Landscape  
Maintenance Professional**

*effective April 20, 2012.*



*Debi Tidd*

Debi Tidd  
Bay-Friendly Landscaping & Gardening Coalition

**From:** Justin Breck [<mailto:justin@bayfriendlycoalition.org>]  
**Sent:** Thursday, January 9, 2014 2:26 PM  
**To:** 'environjon@aol.com'  
**Subject:** Your Bay-Friendly Requalification

Dear John,

Thank you for renewing your status as a Bay-Friendly Qualified Professional, which includes a 2-year membership in the Bay-Friendly Landscaping & Gardening Coalition. In addition to your 2-year membership, you now have exclusive access to the most recent Bay-Friendly Qualified Professional (BFQP) seal, which makes it easy for you to share with clients and colleagues your commitment and qualification status. The digital seal is attached to this e-mail. We would also like to offer you free admission to one of the two upcoming February Brad Lancaster presentations. Simply type "REQUAL" into the promo code field in the registration portal. You can learn more about the presentations (and how to register) here: <http://www.bayfriendlycoalition.org/Calendar.shtml>

Your commitment to Bay-Friendly Landscapes is greatly appreciated. As we build the network and influence of Bay-Friendly Qualified Professionals in the coming year, we plan to leverage our programs to expand markets for your services and work toward a goal of making Bay-Friendly principles representative of the highest standards of sustainability in the landscape.

Thank you again for your commitment and contribution toward our efforts to create healthy & beautiful urban environments.

Kind regards,

Justin

Justin Breck | Administration and Operations Manager

*Bay-Friendly Landscaping & Gardening Coalition*

(510) 859 8026 ext. 707 | [www.bayfriendlycoalition.org](http://www.bayfriendlycoalition.org)

 Please consider the environment before printing this message.



**BAY-FRIENDLY**  
**Landscape Maintenance**  
**Professional**

**Laura Hoffmeister**

---

**Subject:** FW: City of Clayton information needed

---

**From:** [Environjon@aol.com](mailto:Environjon@aol.com) [<mailto:Environjon@aol.com>]

**Sent:** Friday, September 12, 2014 9:53 AM

**To:** [lhoffmeister@ci.clayton.ca.us](mailto:lhoffmeister@ci.clayton.ca.us)

**Subject:** Re: Information for City of Clayton nonnative Oakhurst open space weed management

This is to notify the City of Clayton that Envirotech used from July 1, 2013 – June 30, 2014 the following quantities on selected areas within an apx. 125 acres for noxious weed non-native weed abatement of star thistle and artichoke heart pursuant to the contract with the City of Clayton and the oakhurst development mitigation measures related to non-native weed management in the City owned open space- [ I also renewed by Bay Friendly certification early and have provided to you as well]

Garlon 3a 75 gallons

Transline 2.5 gallons

Milestone 2.5 gallons

John Squadroni  
Envirotech – Bay Friendly IPM Certified



**CITY OF CLAYTON**

**CONTRACTING SERVICES AGREEMENT**

In entering into this Contracting Services Agreement ("Agreement") this 22<sup>nd</sup> day of APRIL, 2013 ("Effective Date"), the City of Clayton, a California municipal Corporation ("City") and Environtech Enterprises ("Contractor") (each a "party," and collectively the "parties"), do mutually agree and promise as follows:

1. Special Conditions:

- A) Contractor's Name & Address: Environtech Enterprises  
1032 Mariposa Street  
Vallejo, CA 94591  
Ph. (707) 643-3355
- B) Payment Limit: \$ 177,000.00
- C) Expense Limit: \$ 0
- D) Completion Date: 12/31/15
- E) Contractor Federal Tax I.D. or SSN: 68-0259915

2. Employment; Independent Contractor: The City employs Contractor on an independent contractor basis, and Contractor is not an employee of the City. Contractor accepts such employment and shall provide materials, labor and equipment necessary to perform the services, described more fully in Exhibit A, which is attached to this Agreement and incorporated herein by this reference, (the "services") upon the terms and in consideration of the payments stated herein. The services required by this Agreement shall be performed by Contractor or under its supervision. Contractor shall determine the means, method and details of performing the services subject to the requirements of this Agreement. Contractor retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the services under this Agreement on behalf of Contractor shall not be employees of City and shall at all times be under Contractor's exclusive direction and control. Contractor shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of services under this Agreement and as required by law. Contractor shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, certified payrolls, income tax withholding, unemployment insurance, and workers' compensation insurance.

3. Insurance: Contractor shall, at no cost to the City, obtain and maintain during the term hereof: (a) Workers' Compensation Insurance pursuant to State Law, and (b) Comprehensive Liability Insurance including coverage for owned and non-owned automobiles, with a minimum combined single limit coverage of \$1,000,000 for all damages due to bodily injury, sickness or disease, or death to any person and damage to property, including the loss of use thereof, arising out of each accident or occurrence. The Workers' Compensation policy shall include a waiver of subrogation. Contractor shall furnish evidence of such coverage, naming the City of

Clayton, its officers and employees as additional insured and requiring 30 days written notice of policy lapse or cancellation, to the City prior to the commencing work under this Agreement and as a condition precedent to the Agreement being effective. Insurance procured pursuant to these requirements shall be written by insurers that are admitted carriers in the state of California and with an A.M. Bests rating of A- or better and a minimum financial size VII.

4. Payment: The City of Clayton shall pay the Contractor for services performed at the rates shown in Exhibit B, attached to this Agreement and incorporated herein by this reference, which rates shall include all overhead and incidental expenses. In no event shall the total amount paid to the Contractor exceed the payment limit specified in Sec. 1 C) and D) without prior written approval of the City Manager, City of Clayton. Contractor's statement of charges shall be submitted at convenient intervals. Payment will be made within thirty (30) days after receipt of each statement.
5. Time of Completion. Unless the time is extended in writing by the City, the Contractor shall complete all services covered by this agreement no later than the completion date listed above. Interim completion dates, if any, will be established as shown in Exhibit A.
6. Record Retention; Inspection. Except for materials and records delivered to the City, the Contractor shall retain all material and records prepared or obtained in the performance of this Agreement, including financial records, for a period of at least three (3) years after Contractor's receipt of the final payment under this Agreement. Upon request by the City, the Contractor shall make such materials and records available to the City at no additional charge and without restriction or limitation on their use. The Contractor shall also make such materials and records available to authorized representatives of the State and Federal Governments at no additional charge.
7. Documentation: The Contractor shall prepare and deliver to the City at no additional charge the items, if any, described in Exhibit A to document the performance of this Agreement and shall furnish to the City such information as is necessary to enable the City to monitor the performance of this Agreement.
8. Extra Work: Any work or services in addition to the work or services described in Exhibit A shall be performed by the Contractor at rates as stated in Exhibit B. The Contractor shall be paid for the extra work at a rate mutually agreed on prior to commencement of the extra work. In no event shall the Contractor be entitled to compensation for extra work unless a written authorization or change order describing the work and payment terms has been executed by the City prior to the commencement of the work.
9. Termination By The City: At its option, the City shall have the right to terminate this Agreement at any time by written notice to the Contractor, whether or not the Contractor is then in default. Upon such termination, the Contractor shall, without delay, deliver to the City all materials and records prepared or obtained in the performance of this Agreement and shall be paid, without duplication, all amounts due for the services rendered up to the date of termination.
10. Contract Extension: At its sole option, the City shall have the right to extend the contract for three one-year terms. Contractor shall have the option to request a fee increase with each extension. Such increase may not exceed 2/3 of the annual increase in San Francisco, All Items, All Urban Consumers Price Index, with a maximum increase in any one year not to exceed 4%.

11. Abandonment By Contractor: In the event that the Contractor ceases performing services under this Agreement or otherwise abandons the project prior to completing all of the services described in this Agreement, the Contractor shall, without delay, deliver to the City all materials and records prepared or obtained in the performance of this Agreement, and shall be paid for the value of the services performed up to the time of cessation or abandonment.
12. Breach: In the event that the Contractor fails to perform any of the services described in this Agreement or otherwise breaches this Agreement, the City shall have the right to pursue all remedies provided by law or equity. Any dispute relating to the performance of this Agreement shall not be subject to non-judicial arbitration.
13. Compliance with Laws: In performing this Agreement, the Contractor shall keep itself fully informed of and in compliance with all applicable laws, statutes, ordinances, rules, regulations and reporting requirements, whether federal, state or local in origin, including without limitation all applicable Cal/OSHA and environmental regulations, of any nature. Contractor shall obtain and maintain in full force and effect all licenses required to perform the services under this Agreement for the duration of this Agreement.
14. Assignment: This Agreement shall not be assignable or transferable in whole or in part by the Contractor, whether voluntarily, by operation of law or otherwise provided, however, the Contractor shall have the right to sub-contract that portion of the services for which the Contractor does not have the facilities to perform so long as the Contractor notifies the City of such sub-contracting prior to execution of this Agreement. Any other purported assignment, transfer or sub-contracting shall be void.
15. Indemnification: The Contractor shall defend, indemnify, save and hold harmless the City and its agents, officers and employees from any and all claims, costs and liability, including attorneys fees, expert fees and litigation costs, for any damages, injury or death arising directly or indirectly from or in any way in connection with the services provided under this Agreement, due to or claimed or alleged to be due to negligent, whether active or passive, or wrongful acts, errors or omission of Contractor or any person under its control, save and except claims or litigation arising through the sole gross negligence or sole willful misconduct of the City. All City expenses, including attorneys fees, experts fees and litigation costs, related to any claims or litigation shall be paid by the Contractor as they are incurred.
16. Prevailing Wages: The Contractor and each of its sub-contractors shall pay all workers employed to perform the services under this Agreement not less than the wages specified in the General Prevailing Wage Determination made by the Director of Industrial Relations in effect on the date of this Agreement, and shall comply with all applicable requirements of California Labor Code Section 1720, *et seq.*, and 1770, *et seq.*, as well as California Code of Regulations, Title 8, Section 16000, *et seq.* ("Prevailing Wage Laws"). City shall provide Contractor with a copy of the prevailing rates of per diem wages in effect at the commencement of this Contract. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Contractor's principal place of business and at the project site. Contractor shall defend, indemnify and hold the City, its elected officials, officers, consultants, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.
17. Equal Opportunity Employment: Contractor represents that it is an equal opportunity employer and it shall not discriminate against any employee or applicant for employment because of

race, religion, color, national origin, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

- 18. Attorneys Fees: If an action is commenced by either party against the other party to enforce the terms of this Agreement, the prevailing party shall be entitled to an award of reasonable attorneys' fees..
- 19. Heirs, Successor and Assigns: This Agreement shall inure to the benefit of and bind the heirs, successors, executors, personal representatives and assigns of the parties.
- 20. Entire Agreement. This Agreement contains the entire agreement of the parties with respect to the subject matter hereof, and supersedes all prior or contemporaneous negotiations, understandings or agreements, whether written or oral. This Agreement may only be modified by a writing signed by both parties.
- 21. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California. Venue shall be in Contra Costa County.
- 22. Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel, or otherwise.
- 23. No Third-Party Beneficiaries. There are no intended or incidental third-party beneficiaries of any right or obligation assumed under this Agreement by the parties.
- 24. Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.
- 25. Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original and all of which shall constitute one fully executed Agreement.

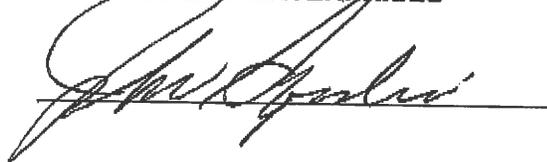
IN WITNESS WHEREOF, the undersigned duly authorized signatories have executed this Agreement on behalf of the respective parties, with the intent that it be effective on the Effective Date, on the respective dates shown:

CITY OF CLAYTON

BY

  
\_\_\_\_\_  
City Manager

ENVIRONTECH ENTERPRISES

  
\_\_\_\_\_  
OWNER

(Designate official capacity in the business)

DATE:

04-22-13

DATE:

4/19/13

Attachments: Exhibit A and Exhibit B, attached behind this page

## EXHIBIT A

### ENVIRONTECH ENTERPRISES OPEN SPACE MANAGEMENT PROPOSAL CITY OF CLAYTON

The following work is proposed for the open space under management by the City of Clayton. This proposal was designed and implemented by ENVIRONTECH and is identical in its design and method to that which was accepted for the Clayton open space areas since 1991. The scope of the work has been expanded, over the years, to include the original target species, as well as other invasive species. Contract to be fulfilled by ENVIRONTECH.

Artichoke thistle or Cardoon, Mustard, Star thistle, Milk thistle (whose population has had a dramatic increase), are the main species of noxious weed that exist on the Clayton open space. Management of the initial three species has resulted in a marked population reduction. The following proposal targets all the above noxious weeds through the use of an integrated pest management program the main objective of which is to eliminate and eventually exhaust the local seed source.

**METHODOLOGY** (Identical methods apply for both North and South areas)

**Artichoke thistle, Milk thistle, and prickly clot burr** will be treated with the best and safest modern herbicides to insure destruction of the parent plants before seeding occurs. The termination of parent plants will result in the elimination of the local seed source and a gradual reduction in the population.

**Yellow Star thistle and Mustard** will be chemically treated by spraying areas of infestation with herbicide where applicable. New herbicides have proven extremely effective on thistle and broadleaf weeds in very low concentrates. Herbicides will be applied with the use of specially equipped ATV's or pickup trucks, as well as with backpack sprayers.

Broad leaf specific pre-emergent will be used early in the season and in problem areas to head off an early bolt. Annuals will be sprayed at any time before seed for best effect.

Initial annual abatement for Artichoke, Milk thistle, Yellow Star thistle and Mustard is January 1<sup>st</sup> through June. Work will continue through that time period or until annual budget is exhausted and will include monthly monitoring. Clot Burr and other pioneer weeds will be treated as encountered as well as other infestations of pioneer noxious weeds.

#### **PROPOSED HERBICIDES AND EQUIPMENT**

The following is a list of the herbicides proposed for this project.

Telar – Broadleaf specific pre-emergent herbicide with no toxicity above high water marks. Can be used in early season for grass release and to prevent early bolt due to unseasonable weather .

## EXHIBIT A

Garlon 3A – Broadleaf specific non volatile herbicide with rapid degradation. Safe for use up to edge of streams and bodies of water. Non toxic to grazing animals. Used on Mustard directly, and used in conjunction with other herbicides for use on thistles. Carries DANGER label for being an eye irritant but becomes CAUTION when diluted.

Renovate – Basically Garlon 3A with an aquatic label for use in drainages and riparian areas where other chemicals are legally prohibited.

Garlon 4 – Broadleaf specific but volatile. Used for quick knockdown when weather and temperature allow (typically early season). Ester formula of Garlon carries CAUTION label. Not to be used near water.

Milestone – Broadleaf specific virtually non toxic chemical that is specific to thistles. Some short term residual effects. Very effective and safe to use up to waterline. Carries CAUTION label.

ENVIRONTECH is equipped with three six wheel drive ATV's of heavy load capacity (over 600 lbs.) with 55 gallon tanks, 300 ft. of  $\frac{3}{4}$  inch hose on reels with delivery of 10 gallons/minute at 280 PSI, along with boom sprayer attachment and automatic boom valves.

ENVIRONTECH also inventories two mobile spray rigs with 4 wheel drive, one of which carries 150 ft of 1 inch hose, 200 gallon capacity with delivery of 30 gallons/minute at 150 PSI.

### QUALIFICATIONS

John Squadroni and ENVIRONTECH has been in the business of Native Habitat Restoration, Vegetation Management and Fire Hazard Reduction since 1990 and has been the contractor on this project for the City of Clayton and Wildland Resource Management since 1991. He has a Bachelors of Science degree in Forest Resource Management from the University of Washington and carries an active California QAL (#32335) in categories BCEF, DPR business license (#30038) and a valid California C-27 contractor's license (#691133), and has current IPM certifications. ENVIRONTECH has completed four weed abatement for restoration projects IN THE PAST YEAR including the City of Clayton open space (since 1991). References are attached.

ENVIRONTECH is fully insured with L/D and workers compensation when required.

**EXHIBIT B**

**FEE QUOTE  
WEED ABATEMENT SERVICES  
IN CITY OWNED OPEN SPACE PARCELS  
IN THE OAKHURST COUNTRY CLUB DEVELOPMENT  
FOR YEARS 2013 THROUGH 2015**

The following quote is submitted in response to all provisions of the City of Clayton request for Quote.

**ANNUAL COSTS**

**A). Area North of Peacock Creek**

1) Artichoke/Milk/Italian Thistles, and Clot Burr			
Labor			
Qualified Applicator	100 hours @ \$60.00/hour		\$ 6,000.00
Additional labor	50 hours @ \$40.00/hour		\$ 2,000.00
Materials			
Herbicides			\$ 2,000.00
Equipment			
Spray Rigs			\$ 500.00
Other			included
<b>Subtotal</b>			<b>\$10,500.00</b>
2) Mustard and Star Thistle			
Labor			
Qualified Applicator	200 hours @ \$60.00/hour		\$12,000.00
Additional labor	50 hours @ \$40.00/hour		\$ 2,000.00
Materials			
Herbicides			\$4,500.00
Equipment			
Spray Rigs			\$500.00
Other			included
<b>Subtotal</b>			<b>\$19,000.00</b>
<b>Total Annual Cost for area North of Peacock Creek</b>			<b>\$29,500.00</b>

## EXHIBIT B

### B). Area South of Peacock Creek

1) Artichoke/Milk/Italian Thistles, and Clot Burr			
Labor			
Qualified Applicator	100 hours @ \$60.00/hour		\$ 6,000.00
Additional labor	50 hours @ \$40.00/hour		\$ 2,000.00
Materials			
Herbicides			\$ 2,000.00
Equipment			
Spray Rigs			\$ 500.00
Other			included
<b>Subtotal</b>			<b>\$10,500.00</b>
2) Mustard and Star Thistle			
Labor			
Qualified Applicator	200 hours @ \$60.00/hour		\$12,000.00
Additional labor	50 hours @ \$40.00/hour		\$ 2,000.00
Materials			
Herbicides			\$4,500.00
Equipment			
Spray Rigs			\$500.00
Other			included
<b>Subtotal</b>			<b>\$19,000.00</b>
<b>Total Annual Cost for area South of Peacock Creek</b>			<b>\$29,500.00</b>
<b>Total Annual Cost</b>			<b>\$59,000.00</b>



**REQUEST FOR QUOTE  
FOR  
WEED ABATEMENT SERVICES  
IN  
CITY-OWNED OPEN SPACE PARCELS  
IN THE  
OAKHURST COUNTRY CLUB  
DEVELOPMENT  
FOR YEARS  
2013 THROUGH 2015**

February 5, 2013  
Revised February 8, 2013

Prepared by  
City of Clayton  
Engineering Department  
925/363-7433

**REQUEST FOR QUOTE  
 FOR  
 WEED ABATEMENT SERVICES  
 IN  
 CITY-OWNED OPEN SPACES PARCEL  
 IN THE  
 OAKHURST COUNTRY CLUB DEVELOPMENT  
 FOR YEARS  
 2013 THROUGH 2015**

**TABLE OF CONTENTS**

BACKGROUND..... 1

AREAS OF WORK..... 1

SCOPE OF WORK..... 1

ARTICHOKE THISTLE REMOVAL..... 2

YELLOW STAR THISTLE REMOVAL..... 2

SCHEDULE ..... 2

EQUIPMENT/HERBICIDES ..... 2

REPORTING REQUIREMENTS..... 3

LICENSES/MISCELLANEOUS..... 3

SITE VISIT..... 3

FEE QUOTE SUBMITTAL ..... 4

**ATTACHMENTS**

ATTACHMENT 1	CITY OF CLAYTON – IPM ADMINISTRATIVE POLICY
ATTACHMENT 2	MAP – AREA NORTH OF PEACOCK CREEK
ATTACHMENT 3	MAP – AREA SOUTH OF PEACOCK CREEK
ATTACHMENT 4	SAMPLE FEE QUOTE SUBMITTAL
ATTACHMENT 5	STANDARD CITY CONTRACT FORM

**REQUEST FOR QUOTE  
FOR  
WEED ABATEMENT SERVICES  
IN  
CITY-OWNED OPEN SPACES PARCEL  
IN THE  
OAKHURST COUNTRY CLUB DEVELOPMENT  
FOR YEARS  
2013 THROUGH 2015**

***Background***

As part of the development of the Oakhurst Country Club in the 1990's, several large open space parcels were created and transferred to City ownership.

Most of the open space parcels were left undeveloped with the exception of some hiking and fire trails. As part of the management of the property, the City has, since 1992, undertaken an ongoing weed management program in order to control the growth and expansion of undesirable vegetation. The current contract for the weed management program expired on 12/31/12 and the City is seeking proposals for the continuation of the program for the next three calendar years (2013 through the end of 2015, with the option of three one-year extensions).

***Areas of Work***

There are two areas of work as shown on Attachments 1 and 2. The area labeled "North of Peacock Creek" is approximately 167 acres in size and is generally bounded by single family residences (Eagle Peak and Falcon Ridge subdivisions) on the north, the Oakhurst Golf Course on the west, the easterly City Limits on the east, and Peacock Creek on the south. The terrain for this area is generally very steep and there is only limited access for vehicles and equipment.

The second area, labeled "South of Peacock Creek", is approximately 230 acres in size and is generally bounded by single family residences (Peacock Creek Estates subdivision) on the north, Peacock Creek Drive and Clayton Road on the west, Diablo View Middle School and the Clayton Community Park on the south, and the easterly City Limits on the east. This area is primarily rolling hills and is generally accessible by vehicles and equipment.

***Scope of Work***

Artichoke Thistle, mustard, yellow star thistle, milk thistle and prickly clot burr are the main species of noxious weeds found to exist on the City's open space parcels. The primary objective of the City's ongoing weed management program has been to promote the growth of grasses and favorable herbaceous plants through the reduction of noxious weed seed sources.

***The following described scope and schedule of work is generally based upon past practices. The contractor may propose alternative methods and schedules with the understanding that control and elimination of all noxious weed sources must be achieved during the entire term of the contract. The work will be overseen and inspected on behalf of the City by the City's Maintenance personnel. Should, in the sole opinion of the City, additional treatment, manpower, equipment or materials be***

*required to achieve the stated goal, such treatment, manpower, equipment or materials shall be provided by the contractor at no additional cost to the City of Clayton.*

#### Artichoke Thistle Removal

Artichoke thistle, milk thistle, and prickly clot burr shall be spot treated to ensure destruction of the parent plants before seeding occurs. Continued spot application of herbicide shall continue throughout the contract term. The elimination of parent plants will result in the elimination of the local seed source and a gradual reduction in the thistle plant population.

Spot infestation of pioneering noxious weeds (e.g., Russian thistle) and milk thistle will be either mowed or cut out, or sprayed with an appropriate herbicide as encountered.

#### Yellow Star Thistle Removal

A tractor equipped with a flail or cutter bar shall be used in areas of concentration and where slopes allow wheeled vehicles. Where slopes preclude the use of wheeled tractors, a weed-eater with a brush blade shall be used to cut the plants. The use of herbicides may be allowed where applicable.

#### Schedule

Initial annual abatement for artichoke and milk thistle is February through mid-July. Twice monthly follow-ups shall occur between mid-July and January 31.

Clot burr shall be treated as encountered.

Yellow star thistle and mustard abatement shall begin approximately mid-summer (depending upon weather), just after flower emergence.

Spot infestation pioneering noxious weeds shall be treated as encountered.

Annuals shall be cut at the initial flowering stage. Since the cut will stimulate new growth, a second cut, as determined by Wildland Resource Management, may be required and shall be included in the quote submitted. Where mustard is targeted, cutting of the targeted area will be required annually. The use of selective herbicides to augment cutting may be permitted where concentrations are localized and access with cutting equipment difficult.

#### ***Equipment/Herbicides***

The contractor shall provide equipment in order to securely and safely negotiate unimproved roads and terrain. This equipment shall minimize soil disturbance by covering as large an area as possible from single point, and to deliver large volumes of material to the site while minimizing drift from herbicide application:

The bidder must have full knowledge of herbicides to be used for greatest effect and minimum environmental impact.

1. Contractor must submit a herbicides proposal. Use of anything other than Garlon 3a, Renovate, or Garlon 4 in open areas away from forest and drainage will not be approved. These are the safest herbicides to use, typically have no effect on grasses and

- a minimal effect on wild flowers and other native herbaceous plants. Most are approved for use right up to water line in riparian zones.
2. The bidder must have broad knowledge of noxious weeds, must identify and seek out noxious weeds, locate infestations and terminate invading species. Must also have broad knowledge of native species to minimize damage.
  3. The bidder must be familiar with and willing to follow the City's IPM operating procedures and practices (see Attachment 1).
  4. At a minimum, bidder shall have an active QAL license in DPR categories BCEF.
  5. A current "Bay Friendly" certification.
  6. Must carry and submit insurance certificates and proof of workman's comp.

### ***Reporting Requirements***

Immediately upon completion of a treatment cycle, the contractor shall report the pounds/volume of all pesticides and/or herbicides applied (reporting the amount of the active ingredient applied is a plus) as well as the IPM methods used prior to applying chemicals.

### ***Licenses/Miscellaneous***

Contractor shall submit, with his fee quote, copies of current State-issued pesticide applicator licenses, proof of his "Bay Friendly" certification, and proof of experience with references. The City retains the right to perform the desired work with its own forces and shall not be under any obligation to award a contract for this work.

The contractor, if any, awarded this contract shall be required to obtain and maintain a business license from the City of Clayton prior to receiving any payment. The cost of obtaining and maintaining a business license, or any other required license, shall be included in the fee quote and no additional compensation will be allowed therefor. In addition, Contractor will be required to pay prevailing wages to his employees and, if requested, provide certified payroll reports to the City.

Prior to execution of the contract by the City, Contractor shall provide certificates of insurance naming the City of Clayton as an additional insured, for his general liability, vehicle and workman's compensation insurance policies as required in the City's standard contract as shown in Attachment 4.

### ***Site Visit***

All bidders are encouraged to inspect the areas covered under the proposed scope of work. Submittal of a fee quote shall constitute evidence of the contractor's familiarity with the work sites and their condition, accessibility, etc. No additional compensation will be allowed for any unforeseen conditions or problems.

### *Fee Quote Submittal*

The fee quote submittal shall describe the services and schedule for work in each area (i.e., North of Peacock Creek and South of Peacock Creek). The fee quote shall describe the equipment, manpower and materials to be used in each area along with estimates of the anticipated man-hours required.

The lump sum fees quoted shall be on annual basis for each of the three years proposed for the contract term.

Attachment 3 is a sample quote sheet intended to provide format guidance only.

The fee quote shall be submitted to Rick Angrisani, Clayton City Engineer, no later than 4:00 PM on Friday, February 22, 2013, at his office at 5375 Clayton Road, Concord, CA 94521. Any questions may be directed to Mr. Angrisani by phone at 925/363-7433 or e-mail at [ricka@permcoengineering.com](mailto:ricka@permcoengineering.com)

**ATTACHMENT 1**

**CITY OF CLAYTON IMP  
ADMINISTRATIVE POLICY**

## **City of Clayton - IPM Administrative Policy**

---

It is the purpose and intent of this IPM Policy to ensure that the City of Clayton departments and all those who apply pesticides to property owned and/or managed by the City of Clayton utilize integrated pest management (IPM) practices and reduce pesticide applications on public-owned and/or City of Clayton managed property to the maximum extent feasible and as required by State and Regional Stormwater regulation.

The City of Clayton, in carrying out its pest management operations, shall focus on long term prevention or suppression of pest problems with minimum impact on human health, non-target organisms, and the environment.

The goal of the City of Clayton is to reduce its use of pesticide use and use to maximum extent possible non-toxic methods to control pests on City of Clayton property. The City of Clayton recognizes that pesticides are potentially hazardous to human health and the environment, and non-pesticide alternatives will be considered over toxic pesticides on City of Clayton property. The first level consideration will be the least toxic method that is both effective and feasible. The City of Clayton has a IPM Standard Operating Procedures and Practices that will outline all the IPM activities that will be implemented to ensure that less toxic methods, that are effective and feasible, are used to control pests on City of Clayton property.

These documents may be updated as needed from time to time.

# **City of Clayton**

## **Standard Operating Procedures & Practices**

### **Administrative Policy for Pesticide Use**

The following are standard operating procedures for **the City of Clayton** for pesticide use in the IPM operational practices within the City's jurisdiction. These procedures include all Municipal Regional Permit (MRP) stormwater requirements under Provision C.9, Pesticides Toxicity Control. The City of Clayton and the Contra Costa Clean Water Program work in conjunction to track and participation in regulatory processes, interface with the County Agricultural Commissioner, and conduct public outreach. For guidelines regarding the City of Clayton IPM program please refer to Attachment B, the City of Clayton's IPM Policy. The staff person or IPM Coordinator responsible for implementing, overseeing, reviewing and updating, and reporting the IPM program is Mark Janney, Maintenance Supervisor and their number is **(925) 673-7327**; or email at [mjanney@ci.clayton.ca.us](mailto:mjanney@ci.clayton.ca.us).

## **IPM Standard Operating Procedures**

### **General**

The City uses very limited pesticides, it is currently limited to use at city buildings for ants and similar pests. The City Contracts with Western Exterminator for building pest management. Periodically the City Contracts with a Contra Costa County Department of Agriculture approved IPM contractor for management of ground squirrels in certain areas when damage is occurring. The City also contracts with an approved IPM contractor for management of non-native invasive plant species of Star Thistle and Artichoke Heart in the Oakhurst Open Space. This is an area of approx. 400 acres. The EIR mitigation measures for the Oakhurst Country Club development required management of these plants. Herbicide applications are targeted to these two plant species. Maintenance by City staff mostly involves limited use of herbicides – specifically spot spraying of weeds in landscape areas, and pre-emergent in the fall and spring to minimize weed growth in certain landscape areas. The maintenance staff also applies slow release fertilizer periodically on active use lawn areas such as the park and sports play fields. All applications are done according to the manufacturer's application specifications.

### **Pesticide Use**

Pesticide use within the City of Clayton is determined by an assessment of each pest situation. Each assessment includes identification of the pest causing the damage (e.g., weed, insect, rodent, etc.), evaluation of prevention, exclusion and sanitation measures that will contribute to successful pest management, evaluation of both non-chemical and chemical options for eliminating or reducing pest numbers, and then developing an integrated management plan using as many management options as practical and economical. Pesticides are generally used

as a last resort and are chosen and applied in a manner that is least harmful to people and the environment. The pest problem should then be monitored to evaluate the success of the management strategy.

Particular scrutiny will be used to evaluate the necessity of using the pesticides of concern listed in the Permit under Section C.9: organophosphorous pesticides (chlorpyrifos, diazinon and malathion); pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin).

Environmental impacts of the products are also considered. Pesticides of concern listed in C.9 of the MRP will go through a more rigorous process of review prior to considering their use. Each pesticide used is carefully monitored and recorded using a pesticide management database (see Attachment C).

### **Pesticide Applicators**

All pesticide applicators and IPM providers have IPM training and certification as required by the MRP. All IPM contractors have IPM language in their contracts as required by the MRP. All IPM providers are required to follow these standard operating procedures. In addition, all IPM providers must be certified as "Bay Friendly".

### **IPM Training**

All pesticide applicators will be trained annually in IPM. IPM training may include local, countywide, that included with PAPA licensing or regional efforts. All staff associated with planning, design, construction, and maintenance of buildings and landscaping shall receive an orientation to these standards operating procedures and their roles and responsibilities in implementing IPM within their work duties.

### **IPM Outreach**

Pesticide application information will be provided to the public upon request. Public outreach for IPM includes point of purchase outreach and contractor outreach by the Bay Area Stormwater Management Agencies Association (BASMAA) as required by the MRP.

### **Reporting**

A copy of the City of Clayton's IPM policy shall be included in the annual report. To the extent practicable and data is available, trends in quantities and types of pesticides used shall also be reported, as well as reasons for any increases. The annual report shall also include the percentage of City of Clayton employees who apply pesticides that have been trained in IPM. For any city hired contractor who applies pesticides, a copy of their contract specification; or certification; or other similar acceptable documentation shall also be included in the annual report. For regional regulatory, interface or outreach efforts, the City of Clayton may reference those regional reports.

**ATTACHMENT 2**

**MAP**

**AREA NORTH OF PEACOCK CREEK**



**ATTACHMENT 3**

**MAP**

**AREA SOUTH OF PEACOCK CREEK**



Clayton, CA

Gold Run Ct

Image Contra Costa County

© 2009 Google

© 2009 Google

Imagery Date: Feb 29, 2008

37° 56' 52.48" N 121° 55' 18.01" W elev 966 ft

Eye alt 7835 ft

[www.ecowisecertified.org](http://www.ecowisecertified.org)



Integrated Pest Management

# CERTIFICATE OF COMPLETION

**Michael Swetnam**

has successfully completed the requirements for

**EcoWise Certified Practitioner**

on

July 30, 2013

**Certificate Expires on** July 29, 2016

Certificate No. **C-142**  
(verify at [www.ecowisecertified.org](http://www.ecowisecertified.org))

**Ceil Scandone**  
**Senior Regional Planner**  
**Association of Bay Area Governments**



Administered by  
**Association of Bay Area Governments**  
[www.abag.ca.gov](http://www.abag.ca.gov)

**William Quarles**  
**Program Manager**  
**EcoWise Certified**

[www.ecowisecertified.org](http://www.ecowisecertified.org)



Integrated Pest Management

# CERTIFICATE OF COMPLETION

**William Seniff**

has successfully completed the requirements for

**EcoWise Certified Practitioner**

on

November 3, 2011

**Certificate Expires on** November 2, 2014

Certificate No. **C-111**  
(verify at [www.ecowisecertified.org](http://www.ecowisecertified.org))



**Cell Scandone**  
Senior Regional Planner  
Association of Bay Area Governments



Administered by  
**Association of Bay Area Governments**  
[www.abag.ca.gov](http://www.abag.ca.gov)

**William Quarles**  
Program Manager  
EcoWise Certified



Family pride in excellence since 1921

(866) 237-2065

Homes & Apartments Commercial Termites Pest ID About Contact Blog



REQUEST AN APPT.

MONEY SAVING OFFER

MR. LITTLE'S

CLASSROOM

THE HOT BUG



### Any time. Any pest.

"The only thing we have to sell is service. So let's make it good."

It was a simple philosophy. But over 90 years later, it still works. **Back in 1921**, few people knew very much about pest control. But they knew about service and reliability. And they knew that's what they could count on with Western. People still know that today.

Our Yellow Trucks with the "Little Man" are ready to help, any time of the day or night — whatever you need. We know you have a business to run and don't need to manage your pest control program too. Our professional technicians have the training and expertise to perform the service right the first time. We understand that protecting your brand is your primary concern, and as your pest professional partner, that's our primary concern too. Whether you have a food handling establishment, warehouse, office building, hospital, airplane or cruise ship, no matter how big or small, our Western team is the one to trust!

#### IPM (Integrated Pest Management)

Integrated Pest Management (IPM) is an effective and environmentally-sensitive approach to pest management that relies on a combination of common-sense practices. Western's IPM programs use current, comprehensive information on the life cycles of pests and their interaction with the environment. In combination with available pest control methods, you are assured of the most effective pest control program with the least possible hazard to people, property and the environment. Prevention is always the first component, and only when required, necessary control measures are used.

Western Exterminator Company is dedicated to protecting your products, reputation and working environment through our Integrated Pest Management programs that ensure consistency, accountability, responsiveness and effectiveness to provide you the best in



pest management solutions. Our commitment to you: to minimize your concerns related to pests and the problems they cause.

#### Customized Solutions to Protect Your Brand:

- Complete **commercial termite and pest control services**, including **termite inspections for real estate transactions**
- **Rodent control and exclusion**
- Stored product pest control and elimination
- Bee control and removal
- **Bird control** without harming the birds
- **Bed Bug specialists**, including **canine inspections**
- Air curtain systems
- Commodity, trailer & rail car fumigations
- Flying insect control
- Drain services - no more drain flies, drain odors & clogging
- Integrated food handling facility services - Western's program, supplemented by our on-staff entomologists and registered sanitarians, helps assure compliance with food safety regulations. We can provide complete inspections, assessments, vendor audits, third-party certifications and reports (AIB-American Institute of Baking, ASI-American Sanitation Institute, FDA- Food and Drug Administration, USDA-United States Department of Agriculture)
- Pest management solutions and account management for facilities throughout North America

**More pest control. Less pesticide. Western has earned the top certifications in the industry.**



**Green Shield Certified** is an award-winning, independent, non-profit certification program that promotes practitioners of effective, prevention-based pest control while minimizing the use of pesticides.

**Green Shield Certified** gives you the confidence of an independent, third-party verification and requires that pest management companies adhere to a strict set of standards.



**GreenPro** is the world's largest and most credible green certification program for pest management professionals. The GreenPro certification means that your pest management provider must comply with a multitude of qualifications to ensure that you receive a safe and effective service each time they arrive at your door.

For more information about Western commercial services, contact our Commercial Services Team at 1-800-640-0694 or at [littleman@west-ext.com](mailto:littleman@west-ext.com)



# Commercial Services

Seasonal Tips...



Family Pride In Excellence Since 1921

- Residential Services
- Commercial Services
- Bugs & Pests
- About Western
- For Staff
- Contact Us
- Site Map
- Home

**1-800-WEST-EXT**  
1-800-637-1338

Schedule an Appointment

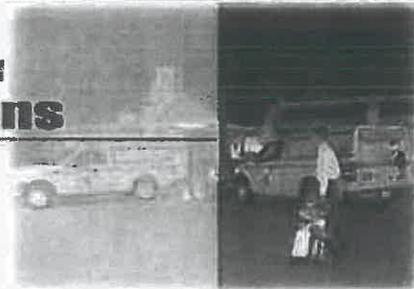


**Our Promise to You**  
Your Complete Satisfaction is Guaranteed!

*Michael Katz, President*

Catch these great **WEB SPECIALS!**  
Before they catch you!

## Customized Solutions



### Have Pests Invaded Your Business?

We understand that your business can't afford a pest infestation. Our Yellow Trucks with the "Little Man" are ready to come to your aid, any time of the day or night---whatever you require. Since 1921, Western continues to provide peace of mind and our personal guarantee against pest infestation.

Our professionals will make a complete survey of your facilities and provide you with a report covering existing pest problems, plus any housekeeping and sanitation conditions along with our recommendations for corrections. We guarantee to offer you with the most efficient and cost effective solutions to insure your business is pest free, giving peace of mind to both you and your customers.

### Customized Solutions To Fit Your Needs:

- Complete Commercial Termite and Pest Control Services, Including Termite Inspections for Real Estate Transactions
- Rodent Control and Exclusion
- Stored Product Pest Control and Elimination
- Bee Control and Removal
- Bird Control
- Integrated Pest Management (IPM)
- IPM Inspections and Reporting Per Industry and Government Standards (AIB-American Institute of Baking, ASI-American Sanitation Institute, FDA- Food and Drug Administration, USDA-United States Department of Agriculture)
- Air Curtain Systems
- Commodity, Trailer & Rail Car Fumigations
- Flying Insect Control
- Bioremediation Services -No More Drain Flies, Drain Odors & Clogging
- Integrated Food Handling Facility Services- Western's program, supplemented by our on by our on staff Entomologists and Sanitarians, helps assure compliance with food safety regulations. We can provide complete inspections, assessments, vendor audits, 3rd party certifications and reports.
- A National Copesan Pest Solutions Partner Serving the Entire United States

### Rely on the West's Best to Solve Your Pest Problems

Copyright © 2007 Western Exterminator Company. All Rights Reserved



901 76th Avenue  
Oakland, Ca. 94621  
(510) 569-8889 (925) 935-0599

Family Pride in Excellence Since 1921

## Service Inspection Report Service Report #970505590C1R03455264

**Client:** 130965  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 970505590  
CITY OF CLAYTON  
6000 HERITAGE TRL - City Hall Bldg  
CLAYTON, CA 94517-1249

**Customer Signature:**

laci jackson

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 07/30/2013 02:42:31 PM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 07/30/2013 03:08:12 PM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
970505590C1R03455264	BLANKET NON-FD COMME	1	\$99.00	\$99.00
<b>SubTotal:</b>				<b>\$99.00</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$99.00</b>
<b>Amount Due:</b>				<b>\$99.00</b>

**Service Comments**

Tech Comment: thank you for using western exterminator company

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
Niban Granular Bait	64405-2 n/a	Orthoboric Acid 5	8.000 Ounces 8.000 Ounces	General	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity      Quantity

*None Noted.*

**Device Summary**

Device Type      With Activity      Without Activity      Total Inspected      Device Exceptions  
Replaced      Removed      Skipped

*None Noted.*

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



901 76th Avenue  
Oakland, Ca. 94621  
(510) 569-8889 (925) 935-0599

Family Pride In Excellence Since 1921

## Service Inspection Report Service Report #010528354C1R03455262

**Client:** 126004  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 10528354  
CITY OF CLAYTON  
6008 CENTER ST - Endeavor Hall Bldg  
CLAYTON, CA 94517-1302

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 07/30/2013 06:30:00 AM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 07/30/2013 06:52:45 AM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
010528354C1R03455262	BLANKET NON-FD COMME	1	\$95.50	\$95.50
<b>SubTotal:</b>				<b>\$95.50</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$95.50</b>
<b>Amount Due:</b>				<b>\$95.50</b>

**Service Comments**

Tech Comment: see account 970505590 for sig

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
Niban Granular Bait	64405-2 n/a	Orthoboric Acid 5	5.000 Ounces 5.000 Ounces	General	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity	Quantity
<i>None Noted.</i>	

**Device Summary**

Device Type	With Activity	Without Activity	Total Inspected	Device Exceptions Replaced	Removed	Skipped
<i>None Noted.</i>						

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



901 76th Avenue  
Oakland, Ca. 94621  
(510) 569-8889 (925) 935-0599

Family Pride In Excellence Since 1921

## Service Inspection Report Service Report #504119678C1R03455263

**Client:** 133900  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 504119678  
CITY OF CLAYTON  
6125 CLAYTON RD - *Library Bldg*  
CLAYTON, CA 94517-1241

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 07/30/2013 06:53:35 AM    **Terms:** INVOICE TO FOLLOW  
**Time Out:** 07/30/2013 07:17:37 AM    **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
504119678C1R03455263	BLANKET NON-FD COMME	1	\$103.00	\$103.00
				<b>SubTotal: \$103.00</b>
				<b>Tax: \$0.00</b>
				<b>Total: \$103.00</b>
<b>Amount Due:</b>				<b>\$103.00</b>

**Service Comments**

Tech Comment: see account 970505590 for sig

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
Niban Granular Bait	64405-2 n/a	Orthoboric Acid 5	16,000 Ounces 16,000 Ounces	General	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity	Quantity
<i>None Noted.</i>	

**Device Summary**

Device Type	With Activity	Without Activity	Total Inspected	Device Exceptions		
				Replaced	Removed	Skipped
<i>None Noted.</i>						

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



901 76th Avenue  
Oakland, Ca. 94621  
(510) 569-8889 (925) 935-0599

## Service Inspection Report Service Report #960300036C1R03455265

**Client:** 126272  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 960300036  
CITY OF CLAYTON  
7411 MARSH CREEK RD - *Community Park Restroom Bldg*  
CLAYTON, CA 94517

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 07/30/2013 07:43:30 AM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 07/30/2013 08:02:13 AM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
960300036C1R03455265	BLANKET NON-FD COMME	1	\$44.50	\$44.50
<b>SubTotal:</b>				<b>\$44.50</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$44.50</b>
<b>Amount Due:</b>				<b>\$44.50</b>

**Service Comments**

Tech Comment: see account 970505590 for sig

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
Niban Granular Bait	64405-2 n/a	Orthoboric Acid 5	3.000 Ounces 3.000 Ounces	General	
<i>Target Pests: Ants Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

**Pest Activity**      **Quantity**

*None Noted.*

**Device Summary**

**Device Type**      **With Activity**      **Without Activity**      **Total Inspected**      **Device Exceptions**  
Replaced      Removed      Skipped

*None Noted.*

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

## Service Inspection Report Service Report #970505590C1R03564207

**Client:** 130965  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 970505590  
CITY OF CLAYTON  
6000 HERITAGE TRL - City Hall Bldg  
CLAYTON, CA 94517-1249

**Customer Signature:**

Jaci Jackson

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 08/27/2013 12:51:28 PM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 08/27/2013 01:14:21 PM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
970505590C1R03564207	BLANKET NON-FD COMME	1	\$102.00	\$102.00
				<b>SubTotal: \$102.00</b>
				<b>Tax: \$0.00</b>
				<b>Total: \$102.00</b>
			<b>Amount Due:</b>	<b>\$102.00</b>

**Service Comments**

Tech Comment: thank you for using western exterminator company

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
ECOPCO WP X	67425-25 n/a	2-Phenethyl Propionate 0.031	0.500 Gallons 0.250 Ounces	General	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity      Quantity

*None Noted.*

**Device Summary**

Device Type

*None Noted.*

With Activity	Without Activity	Total Inspected	Device Exceptions		
Replaced	Removed	Skipped			
<i>None Noted.</i>					

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

Family Pride In Excellence Since 1921

# Service Inspection Report

## Service Report #010528354C1R03564205

**Client:** 126004  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 10528354  
CITY OF CLAYTON  
6008 CENTER ST - *Endeavor Hall Bldg*  
CLAYTON, CA 94517-1302

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 08/27/2013 06:37:04 AM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 08/27/2013 07:02:26 AM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
010528354C1R03564205	BLANKET NON-FD COMME	1	\$98.50	\$98.50
<b>SubTotal:</b>				<b>\$98.50</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$98.50</b>
<b>Amount Due:</b>			<b>\$98.50</b>	

**Service Comments**

Tech Comment: see account 970505590 for sig

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
ECOPCO WP X	67425-25 n/a	2-Phenethyl Propionate 0.031	0.500 Gallons 0.250 Ounces	General	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity	Quantity
<i>None Noted.</i>	

**Device Summary**

Device Type	With Activity	Without Activity	Total Inspected	Device Exceptions Replaced	Removed	Skipped
<i>None Noted.</i>						

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

# Service Inspection Report

## Service Report #504119678C1R03564206

**Client:** 133900  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 504119678  
CITY OF CLAYTON  
6125 CLAYTON RD - Library Bldg  
CLAYTON, CA 94517-1241

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 08/27/2013 07:03:39 AM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 08/27/2013 07:30:27 AM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
504119678C1R03564206	BLANKET NON-FD COMME	1	\$106.50	\$106.50
<b>SubTotal:</b>				<b>\$106.50</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$106.50</b>
<b>Amount Due:</b>			<b>\$106.50</b>	

### Service Comments

Tech Comment: see account 970505590 for sig

### Material Summary

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
ECOPCO WP X	67425-25 n/a	2-Phenethyl Propionate 0.031	1.000 Gallons 0.500 Ounces	General	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

### Open Conditions

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

### Conditions Resolved This Visit

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

### Pest Summary

Pest Activity      Quantity

*None Noted.*

### Device Summary

Device Type      With Activity      Without Activity      Total Inspected      Device Exceptions  
Replaced      Removed      Skipped

*None Noted.*

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8899 (925) 935-0599

Family Pride In Excellence Since 1921

## Service Inspection Report Service Report #960300036C1R03564208

**Client:** 126272  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 960300036  
CITY OF CLAYTON  
7411 MARSH CREEK RD - *Community Park Restroom Bldg*  
CLAYTON, CA 94517

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 08/27/2013 08:27:13 AM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 08/27/2013 08:43:06 AM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
960300036C1R03564208	BLANKET NON-FD COMME	1	\$46.00	\$46.00
<b>SubTotal:</b>				<b>\$46.00</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$46.00</b>
<b>Amount Due:</b>				<b>\$46.00</b>

**Service Comments**

Tech Comment: see account 970505590 for sig

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
ECOPCO WP X	67425-25 n/a	2-Phenethyl Propionate 0.031	0.300 Gallons 0.150 Ounces	General	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity      Quantity

*None Noted.*

**Device Summary**

Device Type      With Activity      Without Activity      Total Inspected      Replaced      Device Exceptions  
Removed      Skipped

*None Noted.*

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

Family Pride In Excellence Since 1921

# Service Inspection Report Service Report #970505590C1R04156721

**Client:** 130965  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 970505590  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517-1249

**Customer Signature:**

**Technician Signature:**

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

janit

MIKE SWETNAM

**Time In:** 02/25/2014 12:04:01 PM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 02/25/2014 12:23:36 PM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
970505590C1R04156721	BLANKET NON-FD COMME	1	\$102.00	\$102.00
<b>SubTotal:</b>				<b>\$102.00</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$102.00</b>
<b>Amount Due:</b>			<b>\$102.00</b>	

**Service Comments**

Tech Comment: thank you for using western exterminator company

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
Essentria G	n/a n/a	Eugenol, Thyme Oil 3.5	12.000 Ounces 12.000 Ounces	Broadcast	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity      Quantity

**Device Summary**

Device Type      With Activity      Without Activity      Total Inspected      Device Exceptions  
Replaced      Removed      Skipped

*None Noted.*

*None Noted.*

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

Family Pride In Excellence Since 1921

# Service Inspection Report Service Report #010528354C1R04156719

**Client:** 126004  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 10528354  
CITY OF CLAYTON  
6008 CENTER ST  
CLAYTON, CA 94517-1302

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 02/25/2014 06:14:47 AM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 02/25/2014 06:34:55 AM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
010528354C1R04156719	BLANKET NON-FD COMME	1	\$98.50	\$98.50
<b>SubTotal:</b>				<b>\$98.50</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$98.50</b>
<b>Amount Due:</b>				<b>\$98.50</b>

**Service Comments**

Tech Comment: see account 970505590 for sig

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
Essentria G	n/a n/a	Eugenol, Thyme Oil 3.5	12.000 Ounces 12.000 Ounces	Broadcast	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity      Quantity

*None Noted.*

**Device Summary**

Device Type      With Activity      Without Activity      Total Inspected      Device Exceptions  
Replaced      Removed      Skipped

*None Noted.*

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

Family Pride In Excellence Since 1921

# Service Inspection Report Service Report #504119678C1R04156720

**Client:** 133900  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 504119678  
CITY OF CLAYTON  
6125 CLAYTON RD  
CLAYTON, CA 94517-1241

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 02/25/2014 06:37:10 AM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 02/25/2014 07:00:27 AM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
504119678C1R04156720	BLANKET NON-FD COMME	1	\$106.50	\$106.50
<b>SubTotal:</b>				<b>\$106.50</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$106.50</b>
<b>Amount Due:</b>			<b>\$106.50</b>	

**Service Comments**

Tech Comment: see account 970505590 for sig

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
Essentria G	n/a n/a	Eugenol, Thyme Oil 3.5	24,000 Ounces 24,000 Ounces	Broadcast	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity      Quantity

**Device Summary**

Device Type

With Activity      Without Activity      Total Inspected      Device Exceptions  
Replaced      Removed      Skipped

*None Noted.*

*None Noted.*

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

Family Pride In Excellence Since 1921

# Service Inspection Report

## Service Report #960300036C1R04156722

**Client:** 126272  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 960300036  
CITY OF CLAYTON  
7411 MARSH CREEK RD  
CLAYTON, CA 94517

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 02/25/2014 07:26:53 AM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 02/25/2014 07:45:28 AM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
960300036C1R04156722	BLANKET NON-FD COMME	1	\$46.00	\$46.00
<b>SubTotal:</b>				<b>\$46.00</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$46.00</b>
<b>Amount Due:</b>			<b>\$46.00</b>	

**Service Comments**

Tech Comment: see account 970505590 for sig

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
ECOPCO WP X	67425-25 n/a	2-Phenethyl Propionate 0.031	0.300 Gallons 0.150 Ounces	General	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity	Quantity
<i>None Noted.</i>	

**Device Summary**

Device Type	With Activity	Without Activity	Total Inspected	Device Exceptions		
				Replaced	Removed	Skipped
<i>None Noted.</i>						

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

## Service Inspection Report Service Report #970505590C1R04439692

**Client:** 130965  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 970505590  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517-1249

**Customer Signature:**

janit

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 05/27/2014 12:33:33 PM    **Terms:** INVOICE TO FOLLOW  
**Time Out:** 05/27/2014 12:52:44 PM    **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
970505590C1R04439692	BLANKET NON-FD COMME	1	\$102.00	\$102.00
				<b>SubTotal: \$102.00</b>
				<b>Tax: \$0.00</b>
				<b>Total: \$102.00</b>
<b>Amount Due:</b>				<b>\$102.00</b>

### Service Comments

Tech Comment: thank you for using western exterminator company

### Material Summary

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
Termidor SC	7969-210 n/a	Fipronil 0.06	0.500 Gallons 0.400 Ounces	General	
<i>Target Pests: Ants Areas Applied: Exterior</i>					

### Open Conditions

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

### Conditions Resolved This Visit

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

### Pest Summary

Pest Activity      Quantity

*None Noted.*

### Device Summary

Device Type	With Activity	Without Activity	Total Inspected	Device Exceptions		
				Replaced	Removed	Skipped

*None Noted.*

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

## Service Inspection Report Service Report #010528354C1R04941450

**Client:** 126004  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 10528354  
CITY OF CLAYTON  
6008 CENTER ST  
CLAYTON, CA 94517-1302

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 10/28/2014 06:00:45 AM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 10/28/2014 06:26:44 AM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
010528354C1R04941450	BLANKET NON-FD COMME	1	\$103.00	\$103.00
<b>SubTotal:</b>				<b>\$103.00</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$103.00</b>
<b>Amount Due:</b>				<b>\$103.00</b>

**Service Comments**

Tech Comment: see account 970505590 for sig

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
Essentria G	n/a n/a	Eugenol, Thyme Oil 3.5	16.000 Ounces 16.000 Ounces	Broadcast	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity	Quantity
<i>None Noted.</i>	

**Device Summary**

Device Type	With Activity	Without Activity	Total Inspected	Device Exceptions		
				Replaced	Removed	Skipped
<i>None Noted.</i>						

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

## Service Inspection Report Service Report #504119678C1R04941451

**Client:** 133900  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 504119678  
CITY OF CLAYTON  
6125 CLAYTON RD  
CLAYTON, CA 94517-1241

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 10/28/2014 06:28:11 AM    **Terms:** INVOICE TO FOLLOW  
**Time Out:** 10/28/2014 06:57:48 AM    **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
504119678C1R04941451	BLANKET NON-FD COMME	1	\$111.50	\$111.50
				<b>SubTotal: \$111.50</b>
				<b>Tax: \$0.00</b>
				<b>Total: \$111.50</b>
<b>Amount Due:</b>				<b>\$111.50</b>

**Service Comments**

Tech Comment: see account 970505590 for sig

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
Essentria G	n/a n/a	Eugenol, Thyme Oil 3.5	48.000 Ounces 48.000 Ounces	Broadcast	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Condition	Action	Severity Responsibility	Created Last Inspected
Exterior	to much plant growth all around build	plants and bushes need trimmed back off of building all around	Low Client	09/23/14 10/28/14
	<b>Comments:</b> 10/28/14 03180: deficiency still exists			

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity    Quantity

**Device Summary**

Device Type    With Activity    Without Activity    Total Inspected    Device Exceptions  
Replaced    Removed    Skipped

*None Noted.*

*None Noted.*

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

Family Pride In Excellence Since 1921

## Service Inspection Report

### Service Report #960300036C1R04941453

**Client:** 126272  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 960300036  
CITY OF CLAYTON  
7411 MARSH CREEK RD  
CLAYTON, CA 94517

**Customer Signature:**

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 10/28/2014 07:32:44 AM    **Terms:** INVOICE TO FOLLOW  
**Time Out:** 10/28/2014 07:57:51 AM    **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
960300036C1R04941453	BLANKET NON-FD COMME	1	\$48.50	\$48.50
			<b>SubTotal:</b>	<b>\$48.50</b>
			<b>Tax:</b>	<b>\$0.00</b>
			<b>Total:</b>	<b>\$48.50</b>
			<b>Amount Due:</b>	<b>\$48.50</b>

**Service Comments**

Tech Comment: see account 970505590 for sig

**Material Summary**

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
ECOPCO WP X	67425-25-AA-655 n/a	2-Phenethyl Propionate 0.031	0.400 Gallons 0.200 Ounces	General	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

**Open Conditions**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Conditions Resolved This Visit**

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

**Pest Summary**

Pest Activity	Quantity
<i>None Noted.</i>	

**Device Summary**

Device Type	With Activity	Without Activity	Total Inspected	Device Exceptions		
				Replaced	Removed	Skipped
<i>None Noted.</i>						

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



3481 Arden Road  
Hayward, Ca. 94545  
(510) 569-8889 (925) 935-0599

# Service Inspection Report Service Report #970505590C1R04941452

**Client:** 130965  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517

**Service Location:** 970505590  
CITY OF CLAYTON  
6000 HERITAGE TRL  
CLAYTON, CA 94517-1249

**Customer Signature:**

Jessica

**Technician Signature:**

MIKE SWETNAM

**Licenses/Certifications**

CA - 18797  
CA - FR11051  
CA - SC 1000-085

**Time In:** 10/28/2014 12:43:55 PM **Terms:** INVOICE TO FOLLOW  
**Time Out:** 10/28/2014 01:07:08 PM **PO #:**

Order #	Service Description	Qty	Unit Cost	Amount
970505590C1R04941452	BLANKET NON-FD COMME	1	\$107.00	\$107.00
<b>SubTotal:</b>				<b>\$107.00</b>
<b>Tax:</b>				<b>\$0.00</b>
<b>Total:</b>				<b>\$107.00</b>
<b>Amount Due:</b>				<b>\$107.00</b>

### Service Comments

Tech Comment: thank you for using western exterminator company

### Material Summary

Material Applied	EPA # Lot #	Active Ingredient AI Concentration	Finished Quantity Undiluted Qty	Application Equipment Application Method	Application Area Weather
Essentria G	n/a n/a	Eugenol, Thyme Oil 3.5	16.000 Ounces 16.000 Ounces	Broadcast	
<i>Target Pests: Ants</i>					
<i>Areas Applied: Exterior</i>					

### Open Conditions

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

### Conditions Resolved This Visit

Area	Severity Responsibility	Created Last Inspected
<i>None Noted.</i>		

### Pest Summary

Pest Activity      Quantity

*None Noted.*

### Device Summary

Device Type	With Activity	Without Activity	Total Inspected	Device Exceptions		
				Replaced	Removed	Skipped
<i>None Noted.</i>						

*Additional pest findings may have been observed. Please see conditions and comments for more details.*



155 Mason Circle  
Concord, CA 94520  
phone (925) 685-9301  
fax (925) 685-0266  
[www.ccmvcd.dst.ca.us](http://www.ccmvcd.dst.ca.us)

Date: April 1, 2013

TO: Government Agencies in Contra Costa County

SUBJECT: **ANNUAL NOTICE OF INTENT TO APPLY PUBLIC HEALTH PESTICIDES FOR VECTOR CONTROL PURPOSES WITHIN AND ADJACENT TO CONTRA COSTA COUNTY**

1. Pursuant to the Statewide National Pollutant Discharge Elimination System Permit for Residual Pesticide Discharges to Waters of the United States from Vector Control Applications, as required under item VIII.B of the General Permit, it is the intent of the Contra Costa Mosquito & Vector Control District (CCMVCD) to apply pesticides in Contra Costa County.
2. A list of potential materials to be used are included. See attachment.
3. Mosquitoes are suppressed to protect the public from mosquito-borne diseases and pest mosquitoes.
4. Applications may occur anywhere in the county at any time of the year.
5. There are no known water use restrictions or precautions during treatment.
6. Interested persons may contact the district office at (925) 685-9301 to obtain additional information or visit our website [www.ContraCostaMosquito.com](http://www.ContraCostaMosquito.com)

*Protecting Public Health Since 1927*

**BOARD OF TRUSTEES**

President **JEFF BENNETT** Hercules • Vice President **JIM PINCKNEY** Contra Costa County • Secretary **H. RICHARD MANK** El Cerrito  
Antioch **JOSE SAAVEDRA** • Brentwood **ROLANDO VILLAREAL** • Clayton **PEGGIE HOWELL** • Concord **PERRY CARLSTON** • Contra Costa County Vacant • Contra Costa County **CHRIS COWEN**  
Danville **RANDALL DIAMOND** • Lafayette **JAMES FITZSIMMONS** • Martinez **DANIEL PELLEGRINI** • Moraga **MYRTO PETREAS, PhD** • Oakley **MICHAEL KRIEG** • Orinda **DIANE WOLCOTT**  
Pinole **WARREN CLAYTON** • Pittsburg **RICHARD AINSLEY, PhD** • Pleasant Hill **RICHARD MEANS** • Richmond **SOHEILA BANA, PhD** • San Pablo Vacant • San Ramon **SHARYN ROSSI** • Walnut Creek **MORRIS JONES PhD**

Please see the following references regarding selection and use of pesticides in CCMVCD's program.

- a. Best Management Practices for Mosquito Control in California. 2010. California Department of Public Health, Vector-Borne Disease Section <http://www.westnile.ca.gov/resources.php>
- b. California Mosquito-Borne Virus Surveillance & Response Plan. 2010. California Department of Public Health, Vector-Borne Disease Section <http://www.westnile.ca.gov/resources.php>
- c. Operational Plan for Emergency Response to Mosquito-Borne Disease Outbreaks. 2010. California Department of Public Health, Vector-Borne Disease Section <http://www.westnile.ca.gov/resources.php>
- d. Overview of Mosquito Control Practices in California. 2008. California Department of Public Health, Vector-Borne Disease Section <http://www.westnile.ca.gov/resources.php>
- e. Epidemic/Epizootic West Nile Virus in the United States: Guidelines for Surveillance, Prevention and Control. 2003. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention <http://www.cdc.gov/ncidod/dybid/westnile/>
- f. Contra Costa Mosquito & Vector Control District Mosquito-Borne Virus Surveillance & Response Plan. 2006. [http://contracostamosquito.com/npdes\\_docs.htm](http://contracostamosquito.com/npdes_docs.htm)
- g. Pesticides and Public Health: Integrated Methods of Mosquito Management. 2001. U.S. Environmental Protection Agency <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2631680/>

**ATTACHMENT A – LIST OF PERMITTED ADULTICIDE PRODUCTS**

<b>Product Name</b>	<b>EPA Registration No.</b>
Pyrocide Mosquito Adulticiding Concentrate for ULV Fogging 7395	1021-1570
Evergreen Crop Protection EC 60-6	1021-1770
Pyrenone Crop Spray	432-1033
Prentox Pyronyl Crop Spray	655-489
Pyrocide Mosquito Adulticiding Concentrate for ULV Fogging 7396	1021-1569
Aquahalt Water-Based Adulticide	1021-1803
Pyrocide Mosquito Adulticide 7453	1021-1803
Pyrenone 25-5 Public Health Insecticide	432-1050
Prentox Pyronyl Oil Concentrate #525	655-471
Prentox Pyronyl Oil Concentrate or 3610A	655-501
Permanone 31-66	432-1250
Kontrol 30-30 Concentrate	73748-5
Aqualuer 20-20	769-985
Aqua-Reslin	432-796
Aqua-Kontrol Concentrate	73748-1
Kontrol 4-4	73748-4
Biomist 4+12 ULV	8329-34
Permanone RTU 4%	432-1277
Prentox Perm-X UL 4-4	655-898
Allpro Evoluer 4-4 ULV	769-982
Biomist 4+4	8329-35
Kontrol 2-2	73748-3
Scourge Insecticide with Resmethrin/Piperonyl Butoxide 18%+54% MF Formula II	432-667
Scourge Insecticide with Resmethrin/Piperonyl Butoxide 4%+12% MF Formula II	432-716
Anvil 10+10 ULV	1021-1688
AquaANVIL Water-based Adulticide	1021-1807
Duet Dual-Action Adulticide	1021-1795
Anvil 2+2 ULV	1021-1687
Zenivex E20	2724-791
Trumpet EC Insecticide	5481-481
Fyfanon ULV Mosquito	67760-34

**ATTACHMENT B – LIST OF PERMITTED LARVICIDE PRODUCTS**

<b>Product Name</b>	<b>EPA Registration No.</b>
Vectolex CG Biological Larvicide	73049-20
Vectolex WDG Biological Larvicide	73049-57
Vectolex WSP Biological Larvicide	73049-20
Vectobac Technical Powder	73049-13
Vectobac-12 AS	73049-38
Aquabac 200G	62637-3
Teknar HP-D	73049-404
Vectobac-G Biological Mosquito Larvicide Granules	73049-10
Vectomax CG Biological Larvicide	73049-429
Vectomax WSP Biological Larvicide	73049-429
Vectomax G Biological Larvicide/Granules	73949-429
Zoecon Altosid Pellets	2724-448
Zoecon Altosid Pellets	2724-375
Zoecon Altosid Liquid Larvicide Mosquito Growth Regulator	2724-392
Zoecon Altosid XR Extended Residual Briquets	2724-421
Zoecon Altosid Liquid Larvicide Concentrate	2724-446
Zoecon Altosid XR-G	2724-451
Zoecon Altosid SBG Single Brood Granule	2724-489
Mosquito Larvicide GB-1111	8329-72
BVA 2 Mosquito Larvicide Oil	70589-1
BVA Spray 13	55206-2
Agnique MMF Mosquito Larvicide & Pupicide	53263-28
Agnique MMF G	53263-30
Abate 2-BG	8329-71
5% Skeeter Abate	8329-70
Natular 2EC	8329-82
Natular G	8329-80
Natular XRG	8329-83
Natular XRT	8329-84
FourStar Briquets	83362-3
FourStar SBG	85685-1
Aquabac XT	62637-1
Spheratax SPH (50 G) WSP	84268-2
Spheratax SPH (50 G)	84268-2

**City of Clayton – Trash Capture Locations**

- 1) Marsh Creek Rd. Westside approximately 400' South of Old Marsh Creek Rd. and Clayton Rd.

This catch basin is by Diablo View Middle School across from street light #1175S.

- 2) Marsh Creek Rd. Northeast corner of Marsh Creek Rd. and Regency Dr. by the community park.
- 3) Marsh Creek Rd. Eastside approximately 400' North of Old Marsh Creek Rd. and Clayton Rd. by Diablo View Middle School across from street light #1175N.
- 4) Marsh Creek Rd. Southeast corner of Old Marsh Creek Rd. and Clayton Rd. at Diablo View Middle School entrance.
- 5) Northeast corner of Oakhurst Dr. and Clayton Rd. in front of the Water Feature.
- 6) Oakhurst Dr. Southeast corner of Oakhurst Dr. and Eagle Peak.
- 7) Eagle Peak East Southeast corner of Eagle Peak and Oakhurst Dr.
- 8) Eagle Peak East Northeast corner of Eagle Peak and Oakhurst Dr.
- 9) Oakhurst Dr. Northeast corner of Oakhurst Dr. and Eagle Peak.
- 10) Old Marsh Creek Rd. Northeast corner of Old Marsh Creek Rd. and Main St.
- 11) Center St. Southeast corner of Center St. and Morris St.
- 12) Center St. Southside in front of 6008 Center St. Endeavor Hall.
- 13) Oak St. Southeast corner of Oak St. and Main St.
- 14) Oak St. Southwest corner of Oak St. and Main St.
- 15) Main St. Southside 120' west of Main St and Marsh Creek Rd.
- 16) Marsh Creek Rd East side approximately 400' north of Regency Dr.

- 17) Marsh Creek Rd East side approximately 600' north of Regency Dr.
- 18) City Hall parking lot Northeast corner.
- 19) City Hall parking lot East side of Police parking entrance.
- 20) City Hall parking lot West side of Police parking entrance.
- 21) City Hall parking lot East side Heritage Trail at the bottom of hill.
- 22) City Hall parking lot West side Heritage Trail at the bottom of hill.
- 23) Center St. Southeast corner by Mudville Grill.
- 24) Center St. Northeast corner across from Mudville Grill.
- 25) City Maintenance Yard in the far Northwest corner.

**(1)**

**Marsh Creek Rd. Westside approximately 400' South of Old Marsh Creek Rd. and Clayton Rd. This catch basin is by Diablo View Middle School across from street light #1175S.**

Protect our Waterways, Beaches and Oceans



## Stormwater Debris Screens & Filters



### Catch Basin Trash Capture Devices: Connector Pipe Screens (CPS)

- Certified "full capture" device by Los Angeles & San Francisco Water Quality Boards
  - Captures all particles > 5 mm
  - Meets hydraulic design standards of > flow rate from 1-year, 1 hour storm and bypass of maximum inlet design capacity
- GRATE and Wavy Trash Catchers made from innovative corrugated perforated screen:
  - Meets hydraulic standards in less space
  - Ensures bypass requirement compliance
- Increases catch basin holding capacity:
  - Reduces time intervals between clean-outs & maintenance costs
  - Minimizes flooding potential
- Best (and sometimes only) solution for shallow, narrow, smaller & longer catch basins
- Designed by Mike Soliman, P.E. former Assistant Head, Design Div., LA County Public Works, Flood Control & Water Quality
- Constructed from 304 Stainless Steel: Permanent installations, expected life of 15 -20 years, 5 year warranty.
- Also made in cost-saving, non-leaching, high-strength Plastic.
- Conventional (non-corrugated) Waterway Solutions' Connector Pipe Screens (CPS) available for less-challenging catch basins



GRATE Trash Catcher™  
Wavy Trash Catcher™  
Conventional CPS

Trash Capture Devices for  
ANY type of Catch Basin!



"Wavy" Corrugated CPS: Increased effectiveness in a smaller footprint



"Grate Trash Catcher" CPS:  
Effective in catch basins as  
small as 18" x 18" x 18"



---

City of Clayton Master Location  
Map of Installed Trash Capture  
Devices and Hot Spot Location:  
(See Detail maps for more precise  
location and ABAG Trash Tracker  
Program for GPS location data)

Devices are inspected at minimum  
of one time per year, more if  
needed.

They are cleaned based upon the  
inspection results and at least one  
time per year.

All data is inputted into Trash  
Tracker program.

---

Trash Hot spot Clayton Station Shopping Center (behind Safeway)

City Maintenance Yard

City Hall Parking Lot

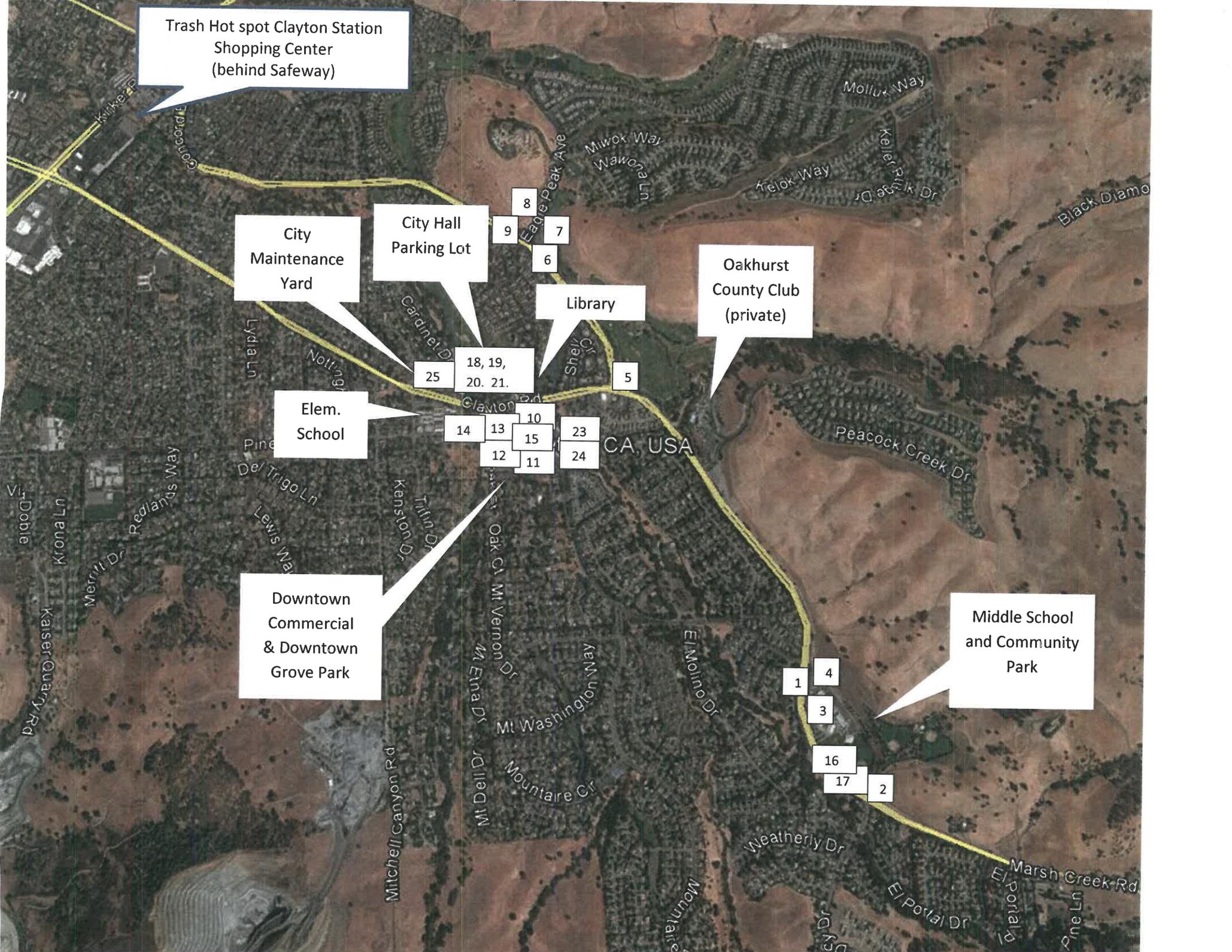
Library

Oakhurst County Club (private)

Elem. School

Downtown Commercial & Downtown Grove Park

Middle School and Community Park



18, 19, 20, 21.

25

14

13

10

15

23

12

11

24

5

8

9

7

6

1

4

3

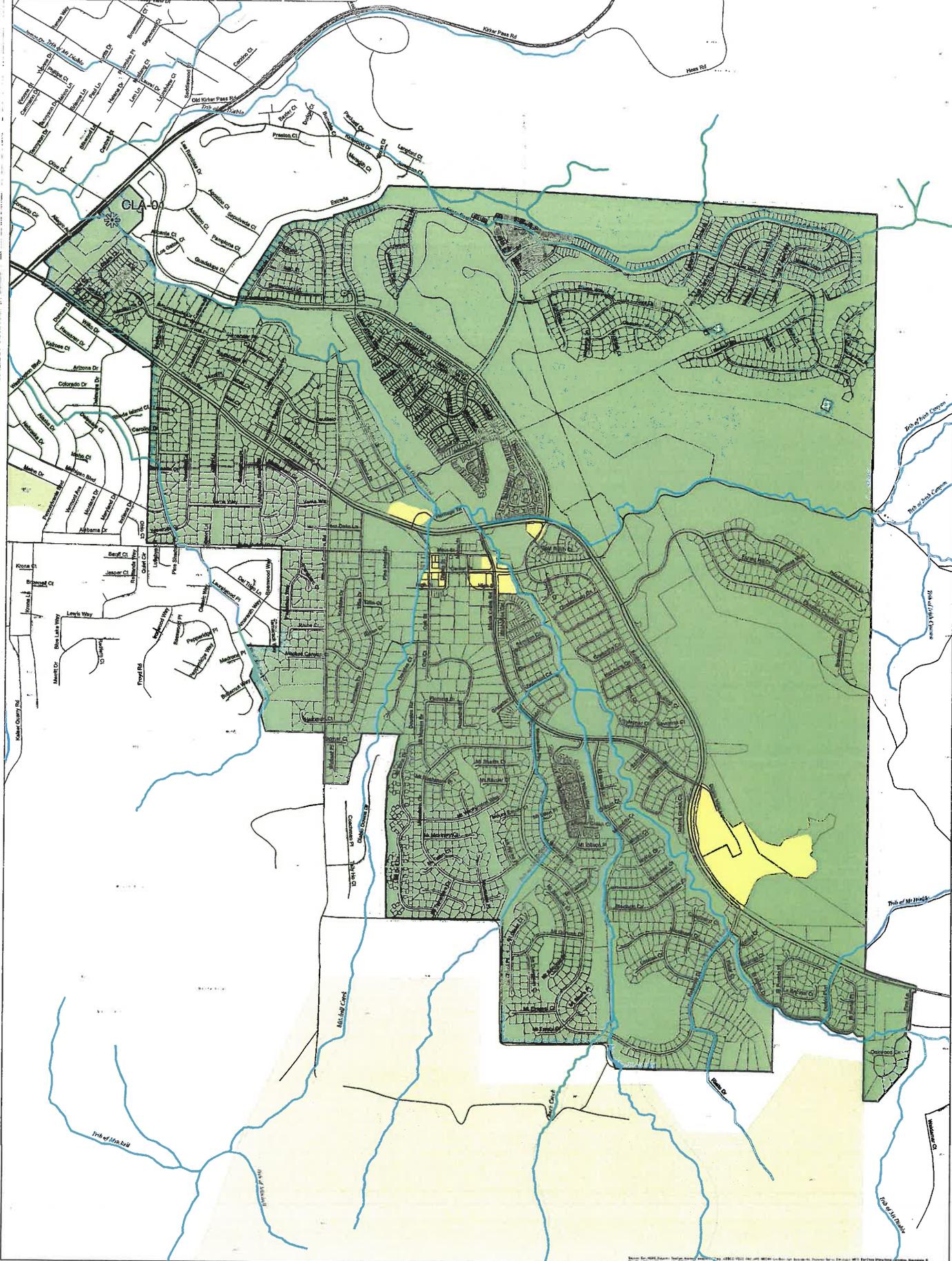
16

17

2



# City of Clayton Trash Generation Map



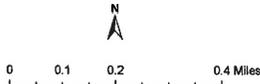
**Legend**

**Trash Generation Category**

- Low
- Medium
- High
- Very High

- Creek/Shoreline Hotspot
- Non-Jurisdictional (Dot color = Generation Category)

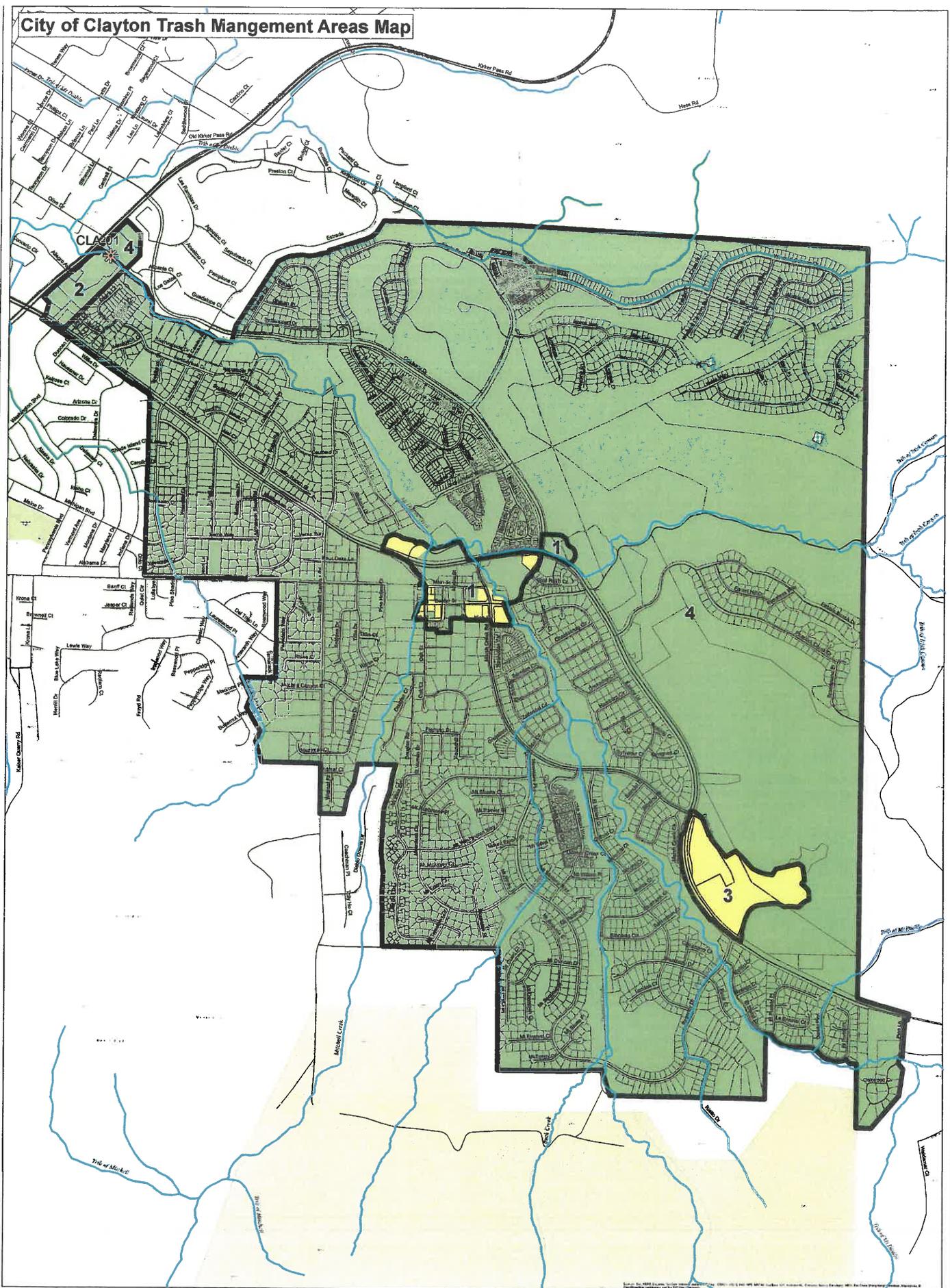
- Streets
- Agency Boundary
- Creeks
- Parcel Boundary



Data Sources:  
 Roads: Tele Atlas  
 City Boundaries: Contra Costa County  
 Background: ESRI World Topographic Map

Map Created By:  
 EOA, Inc.  
 Date:  
 November 11th, 2014

# City of Clayton Trash Management Areas Map



**Legend**

**Trash Generation Category**

- Low
- Medium
- High
- Very High

**Other Symbols:**

- Creek/Shoreline Hotspot
- Trash Management Area
- Non-Jurisdictional (Dot color = Generation Category)
- Streets
- Agency Boundary
- Creeks
- Parcel Boundary

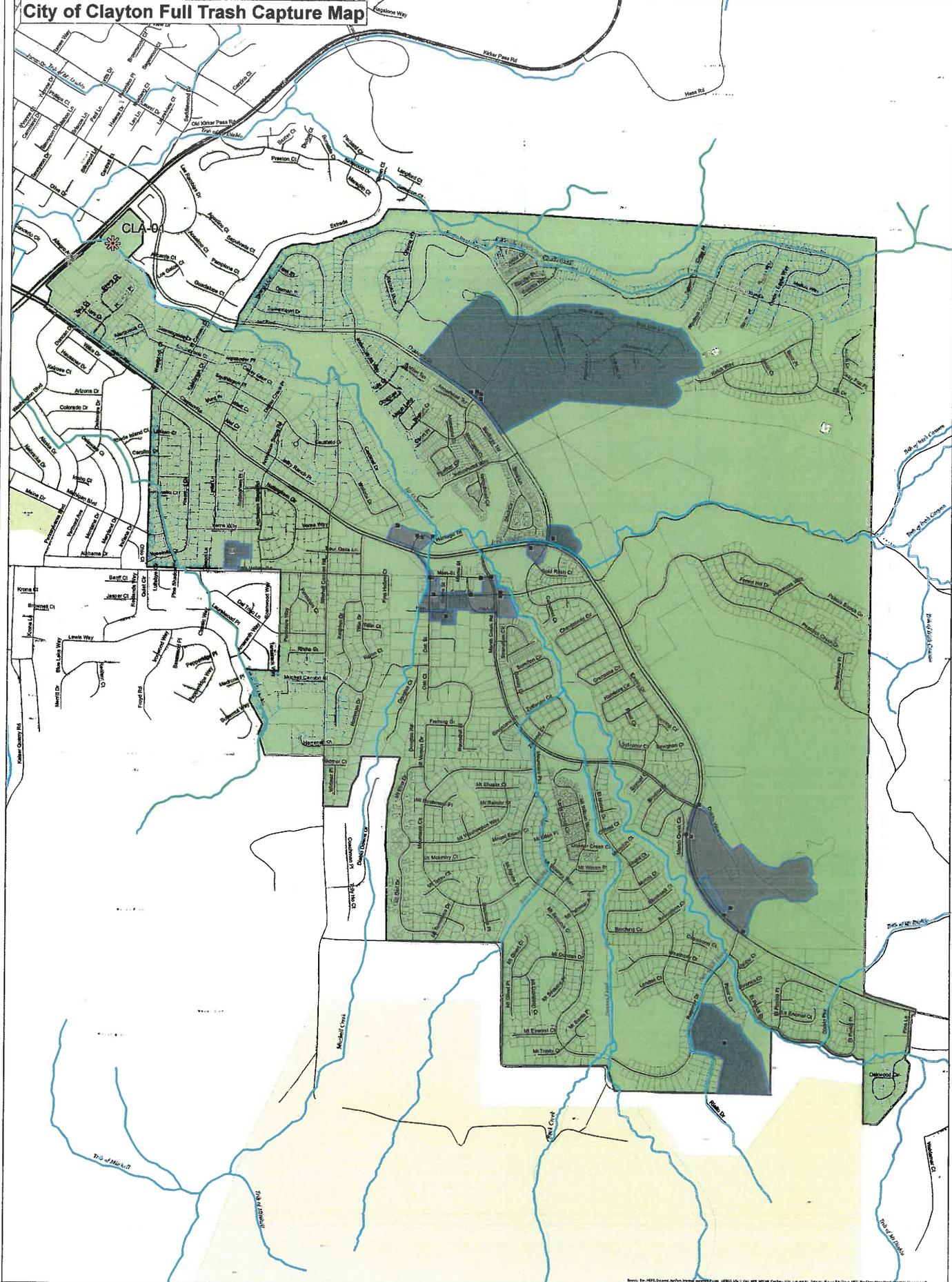


**Data Sources:**  
 Roads: Tele Atlas  
 City Boundaries: Contra Costa County  
 Background: ESRI World Topographic Map

**Map Created By:**  
 EOA, Inc.

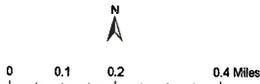
**Date:**  
 November 6th, 2014

# City of Clayton Full Trash Capture Map



**Legend**

Low	Creek/Shoreline Hotspot	Streets
Medium	Full-Capture Location	Agency Boundary
High	Full Trash Capture	Creeks
Very High	Non-Jurisdictional (Dot color = Generation Category)	Parcel Boundary



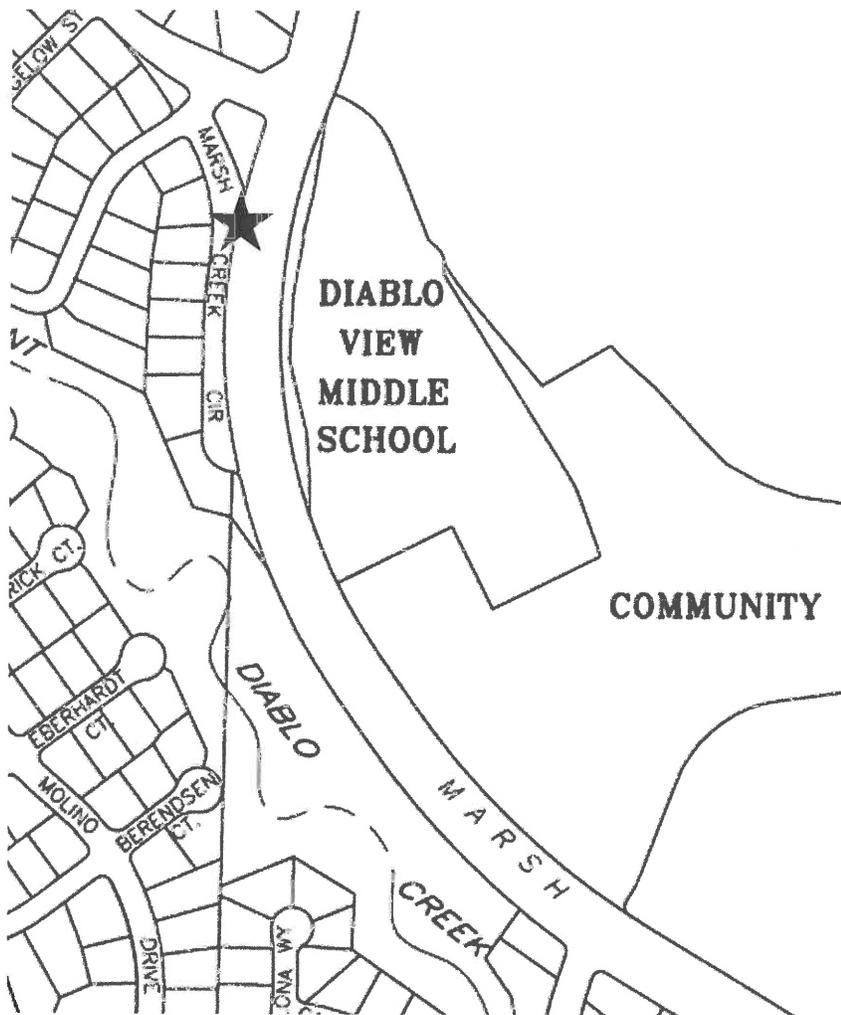
**Data Sources:**  
 Roads: Tele Atlas  
 City Boundaries: Contra Costa County  
 Background: ESRI World Topographic Map

**Map Created By:**  
 EOA, Inc.  
**Date:**  
 November 6th, 2014

City of Clayton DI insert maintenance July 2013 (FY 13/14)								
Municipality Assigned ID	Address Description	Date of Installation	Date of maintenance event	Materials removed: Cubic Feet of Plastic	Materials removed: Cubic Feet Paper	Materials removed: Cubic Feet Sediment	Materials removed: Cubic Feet Leaves	total all materials removed cubic feet
TC-1	By Diablo View Middle School	Aug 2012	7/26/2013	0.02	0.02	0.36	1.6	
TC-2	NE Cor. MCR & Regency Dr.	Aug 2012	7/29/2013	0.02	0.04	0.54	1.4	
TC-3	By middle school	Aug 2012	7/26/2013			1	1	
TC-4	Diablo Middle School entrance	Aug 2012	7/26/2013		0.1	1.3	0.6	
TC-5	Water Feature	Aug 2012	7/29/2013	0.06	0.03	2.7	0.21	
TC-6	Eagle Peak Hill	Aug 2012	7/29/2013	0.04	0.06	1.2	0.7	
TC-7	Eagle Peak Hill	Aug 2012	7/29/2013			2		
TC-8	Eagle Peak Hill	Aug 2012	7/29/2013				1	
TC-9	Eagle Peak Hill	Aug 2012	7/29/2013	0.8	0.2		4.5	
TC-10	Old Marsh by Plaza	Aug 2012	7/26/2013	0.6	0.6	0.3	5	
TC-11	Center & Morris Downtown	Aug 2012	7/26/2013	2	2	1	6	
TC-12	Endeavor Hall	Aug 2012	7/26/2013	0.25	0.25	0.5	4	
TC-13	Oak & Main Downtown	Aug 2012	7/26/2013	2	2		6	
TC-14	Oak & Main Downtown	Aug 2012	7/26/2013	0.5	1.5	1	6	
TC-15	Main St By the Grove Park	Aug 2012	7/26/2013	0.75	0.75	0.5	3	
TC-17	MCR by community park	Aug 2012	7/26/2013		0.01		0.99	
TC-18	City Hall Hill	Aug 2012	7/26/2013			1	2	
TC-19	City Hall hill	Aug 2012	7/26/2013	0.04			3.96	
TC-20	Police parking entrance	Aug 2012	7/26/2013			1	4	
TC-21	Police parking entrance	Aug 2012	7/26/2013	0.04	0.04		3.92	
TC-22	City Hall Parking lot	Aug 2012	7/26/2013		0.1		0.9	
TC-23	Across from Mudville Grill	Aug 2012	7/26/2013	0.28	0.42	11.2	2.1	
TC-24	Mudville Grill	Aug 2012	7/26/2013	0.28	0.42	9.8	3.5	
TC-25	Corp Yard	Nov 2012	7/29/2013			0.8	1	
<b>total materials</b>				<b>7.68</b>	<b>8.54</b>	<b>36.2</b>	<b>57.38</b>	<b>109.8</b>

(1)

Marsh Creek Rd. Westside approximately 400' South of Old Marsh Creek Rd. and Clayton Rd. This catch basin is by Diablo View Middle School across from street light #1175S.



## TC- 1 (By Diablo View Middle School)

# 37.931142,-121.923538

---

### Small Full Trash Capture Device

### Device ID USW-1, Connector Pipe Screen

[View all installations for this device](#)

Municipality:	Clayton
Date Installed:	8/14/12
Land Use:	School
Catchbasin Dimensions:	H: 5 ft. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	15.0
Installation notes:	30 cubic foot capacity.



7/30/2013 [Delete](#)



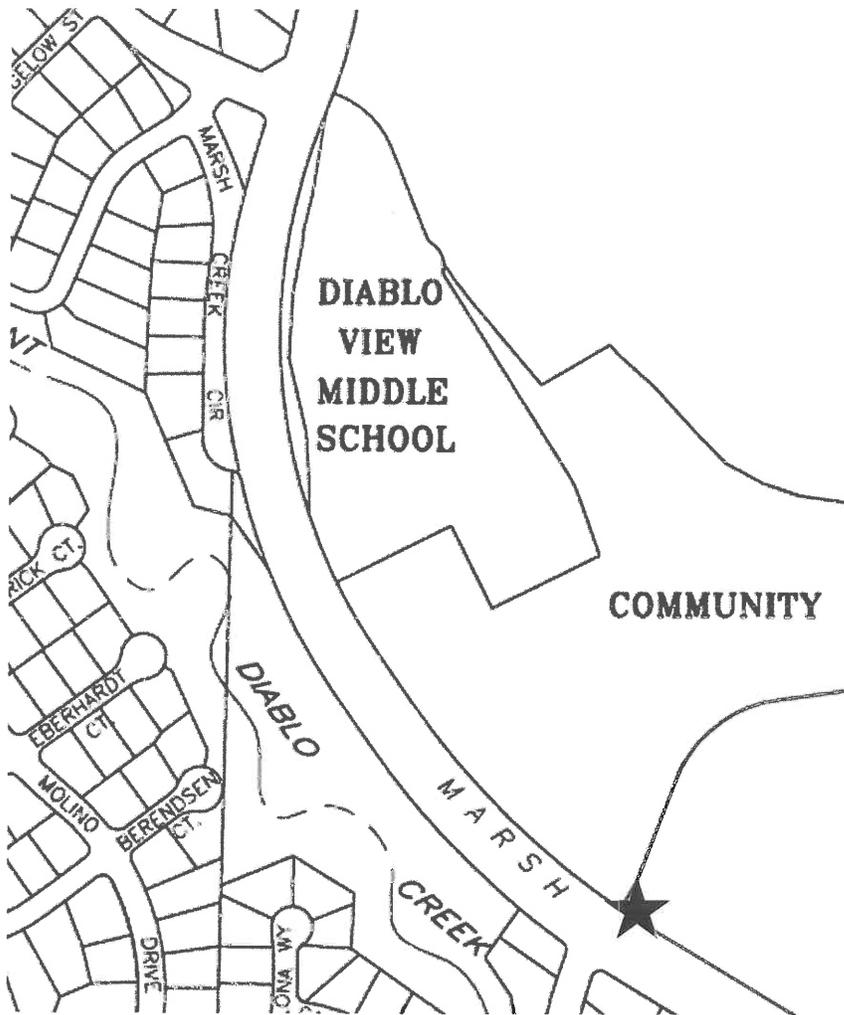
7/30/2013 [Delete](#)



7/30/2013 [Delete](#)

(2)

Marsh Creek Rd. Northeast corner of Marsh Creek Rd. and Regency Dr. by the community park.



## TC-2 (NE Corner MCR & Regnecy Dr)

**37.927325,-121.920531**

---

### Small Full Trash Capture Device

Device ID USW-1, Connector Pipe Screen

[View all installations for this device](#)

Funded by SFEP

Municipality:	Clayton
Date Installed:	8/14/12
Land Use:	Park
Catchbasin Dimensions:	H: 51 in. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	15.0
Installation notes:	25.5 cubic foot capacity.



7/30/2013 Delete



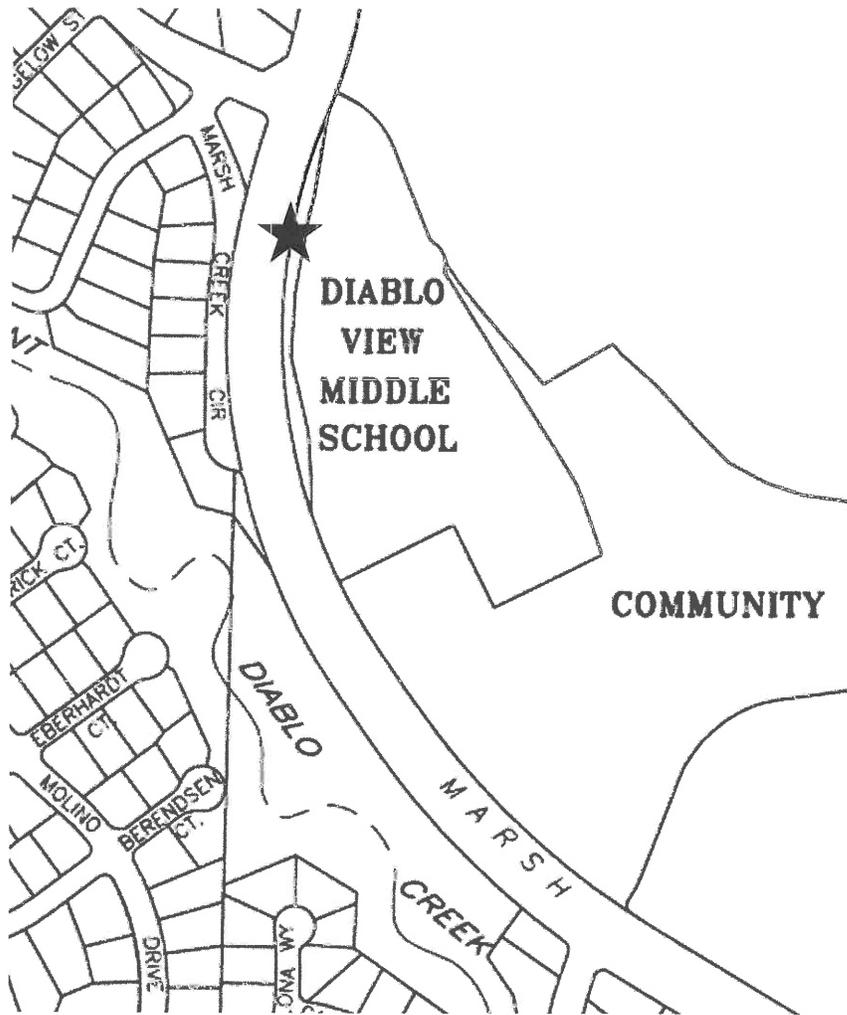
7/30/2013 Delete



7/30/2013 Delete

(3)

Marsh Creek Rd. Eastside approximately 400' North of Old Marsh Creek Rd.  
and Clayton Rd. by Diablo View Middle School across from street light #1175N.



## TC-3 (By Middle School)

**37.931058,-121.923293**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/14/12
Land Use:	School
Catchbasin Dimensions:	H: 51 in. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	15.0
Installation notes:	25.5 cubic foot capacity



7/30/2013 [Delete](#)



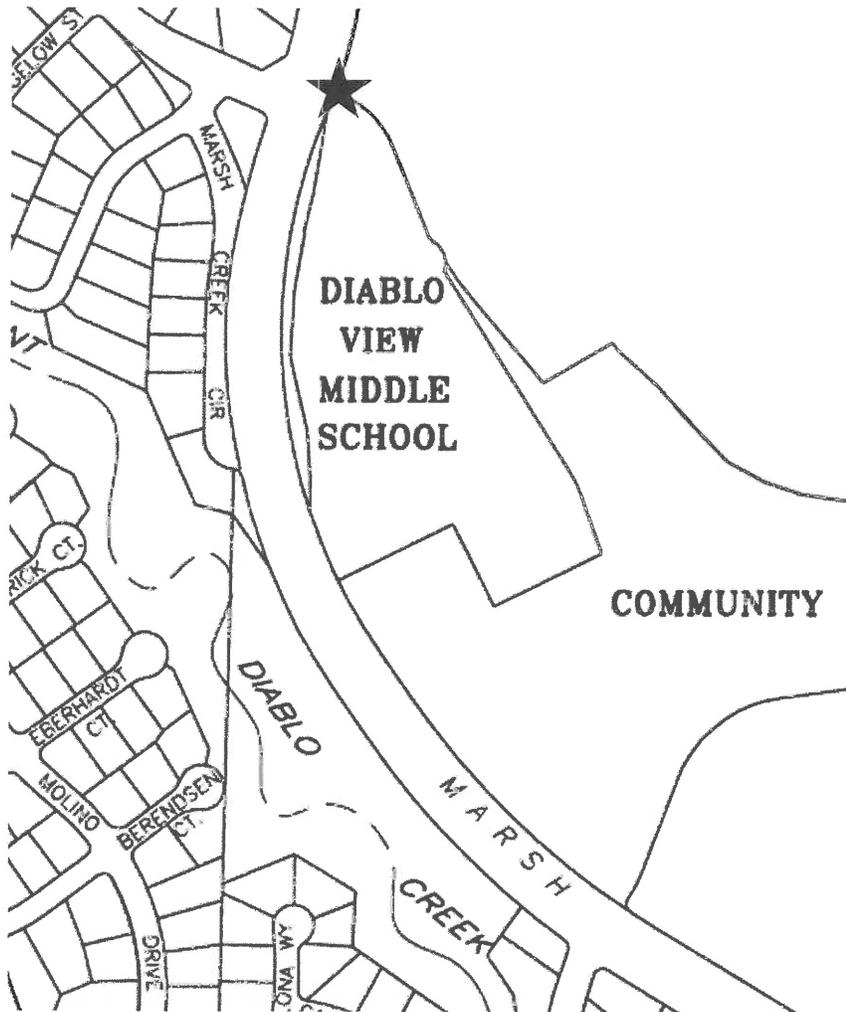
7/30/2013 [Delete](#)



7/30/2013 [Delete](#)

(4)

Marsh Creek Rd. Southeast corner of Old Marsh Creek Rd. and Clayton Rd. at  
Diablo View Middle School entrance.



## TC-4 (Diablo View Middle School entrance)

**37.932331,-121.922912**

---

### Small Full Trash Capture Device

Device ID USW-1, Connector Pipe Screen

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/14/12
Land Use:	School
Catchbasin Dimensions:	H: 6 ft. ft./in. W: 3 ft. ft./in. H: 4 ft. ft./in.
Outflow pipe diameter:	19.0
Installation notes:	72 cubic foot capacity.



7/30/2013 [Delete](#)



7/30/2013 [Delete](#)



7/30/2013 [Delete](#)

(5)

Northeast corner of Oakhurst Dr. and Clayton Rd. in front of the Water Feature.



## TC-5 (Water Feature)

**37.942822,-121.930625**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	<b>Clayton</b>
Date Installed:	<b>8/15/12</b>
Land Use:	<b>Commercial</b>
Catchbasin Dimensions:	<b>H: 51 in. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.</b>
Outflow pipe diameter:	<b>12.0</b>
Installation notes:	<b>25.5 cubic foot capacity.</b>



7/31/2013 Delete



7/31/2013 Delete



7/31/2013 Delete

(6)

Oakhurst Dr. Southeast corner of Oakhurst Dr. and Eagle Peak.



## TC-6 (Eagle Peak Hill)

# 37.948345,-121.93445

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/15/12
Land Use:	Commercial, Residential
Catchbasin Dimensions:	H: 65 in. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	24.0
Installation notes:	32.5 cubic foot capacity.



7/31/2013 [Delete](#)



7/31/2013 [Delete](#)



7/31/2013 [Delete](#)

(7)

Eagle Peak East Southeast corner of Eagle Peak and Oakhurst Dr.



## TC- 7 (Eagle Peak Hill)

# 37.948529,-121.934444

---

### Small Full Trash Capture Device

Device ID USW-1, Connector Pipe Screen

[View all installations for this device](#)

### Funded by SFEP

Municipality:	Clayton
Date Installed:	8/15/12
Land Use:	Commercial, Residential
Catchbasin Dimensions:	H: 6 ft. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	15.0
Installation notes:	36 cubic foot capacity.



7/31/2013 [Delete](#)



7/31/2013 [Delete](#)



7/31/2013 [Delete](#)

(8)

Eagle Peak East Northeast corner of Eagle Peak and Oakhurst Dr.



## TC- 8 (Eagle Peak Hill)

**37.948648,-121.934663**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	<b>Clayton</b>
Date Installed:	<b>8/15/12</b>
Land Use:	<b>Commercial, Residential</b>
Catchbasin Dimensions:	<b>H: 7 ft. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.</b>
Outflow pipe diameter:	<b>15.0</b>
Installation notes:	<b>32 cubic foot capacity.</b>



7/31/2013 [Delete](#)



7/31/2013 [Delete](#)



9/30/2014 [Delete](#)

(9)

Oakhurst Dr. Northeast corner of Oakhurst Dr. and Eagle Peak.



## TC- 9 ( Eagle peak Hill)

**37.948621,-121.934939**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/15/12
Land Use:	Commercial, Residential
Catchbasin Dimensions:	H: 5 ft. ft./in. W: 3 ft. ft./in. H: 4 ft. ft./in.
Outflow pipe diameter:	24.0
Installation notes:	42 cubic foot capacity.



7/31/2013 Delete



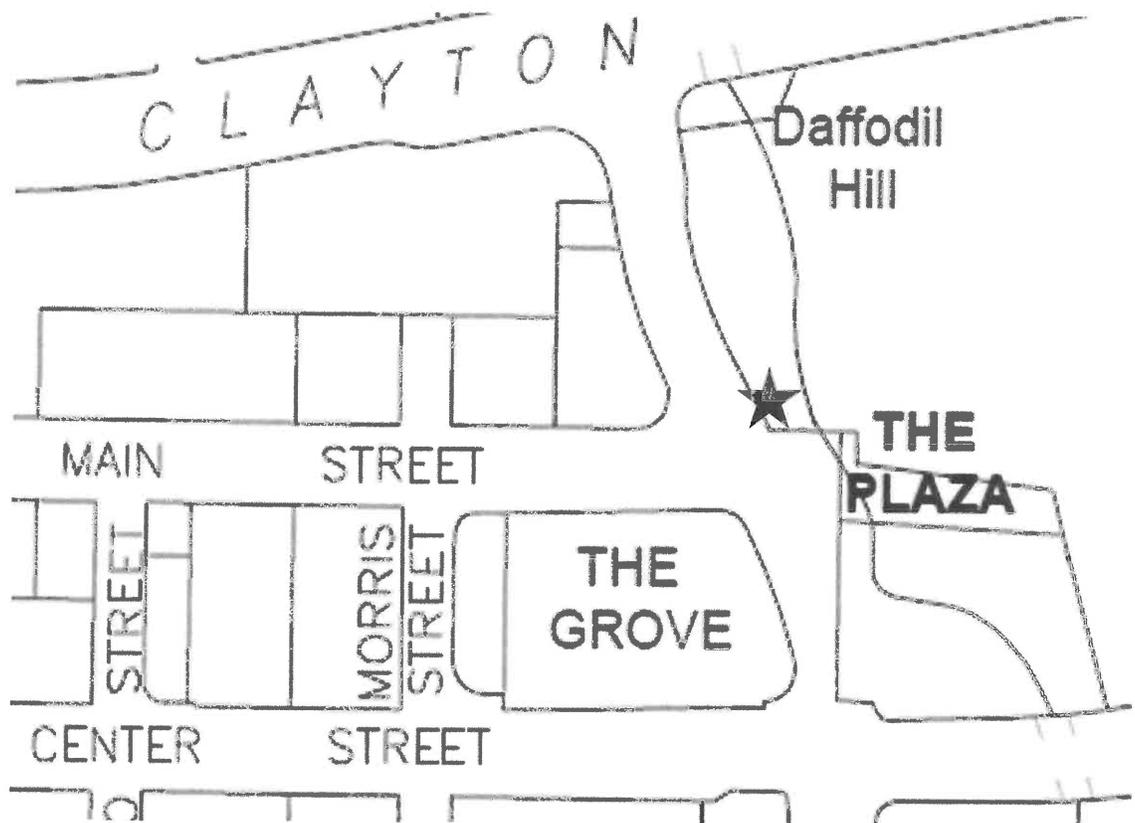
7/31/2013 Delete



7/31/2013 Delete

(10)

Old Marsh Creek Rd Northeast corner Old Marsh Creek Rd and Main St. by Kiosk.



## TC-10 (Old March by Plaza)

# 37.941247,-121.933722

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/16/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 6 ft. ft./in. W: 4 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	15.0
Installation notes:	72 cubic foot capacity.



7/31/2013 [Delete](#)



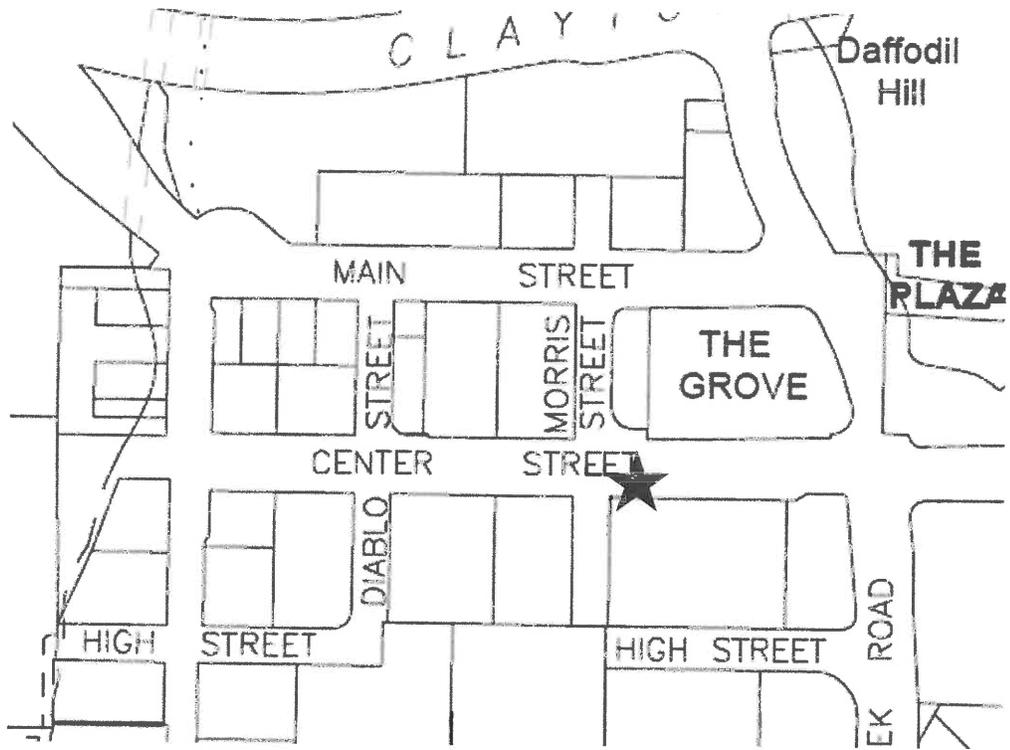
7/31/2013 [Delete](#)



7/31/2013 [Delete](#)

(11)

Center St. Southeast corner of Center St. and Morris St.



## TC-11 (Center & Morris Downtown)

# 37.940506,-121.934722

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/16/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 4 ft. ft./in. W: 3 ft. ft./in. H: 4 ft. ft./in.
Outflow pipe diameter:	12.0
Installation notes:	48 cubic foot capacity.



7/30/2013 [Delete](#)



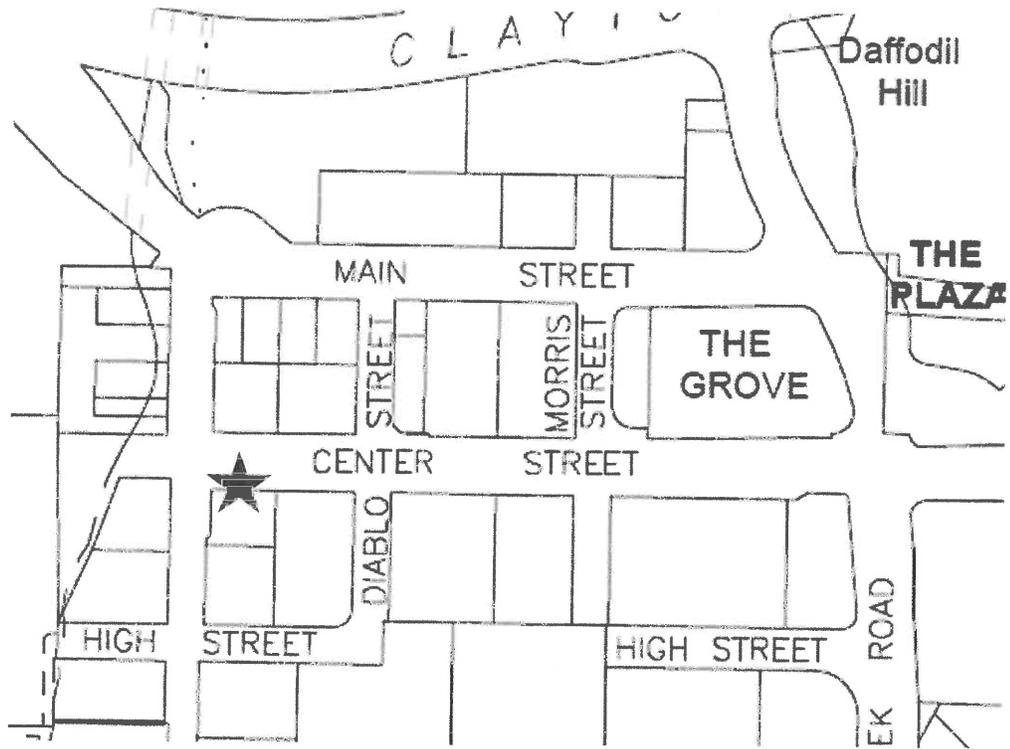
7/30/2013 [Delete](#)



7/30/2013 [Delete](#)

(12)

Center St. Southside in front of 6008 Center St. Endeavor Hall.



## TC-12 (Endeavor Hall)

**37.940498,-121.936591**

---

### Small Full Trash Capture Device

Device ID **USW-1, Connector Pipe Screen**

[View all installations for this device](#)

### Funded by SFEP

Municipality:	Clayton
Date Installed:	8/16/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 55 in. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	15.0
Installation notes:	28 cubic foot capacity.



7/30/2013 Delete



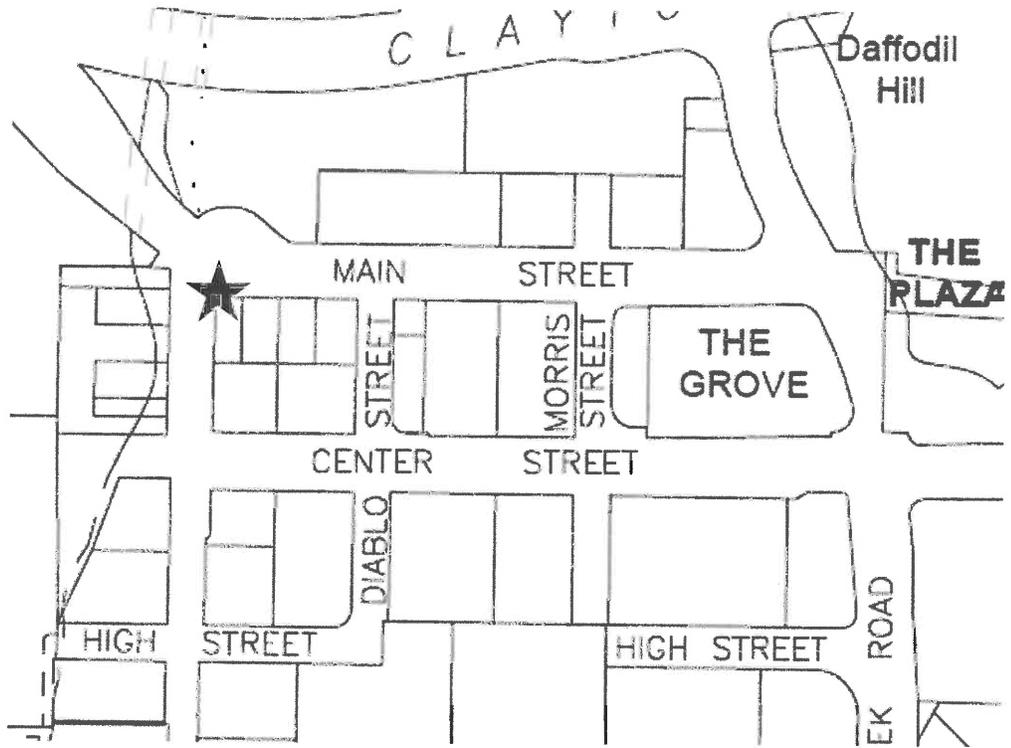
7/30/2013 Delete



7/30/2013 Delete

(13)

Oak St. Southeast corner of Oak St. and Main St.



## TC-13 (Oak & Main Downtown)

**37.941169,-121.936705**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/20/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 27 in. ft./in. W: 4 ft. ft./in. H: 4 ft. ft./in.
Installation notes:	36 cubic foot capacity.



7/30/2013 Delete



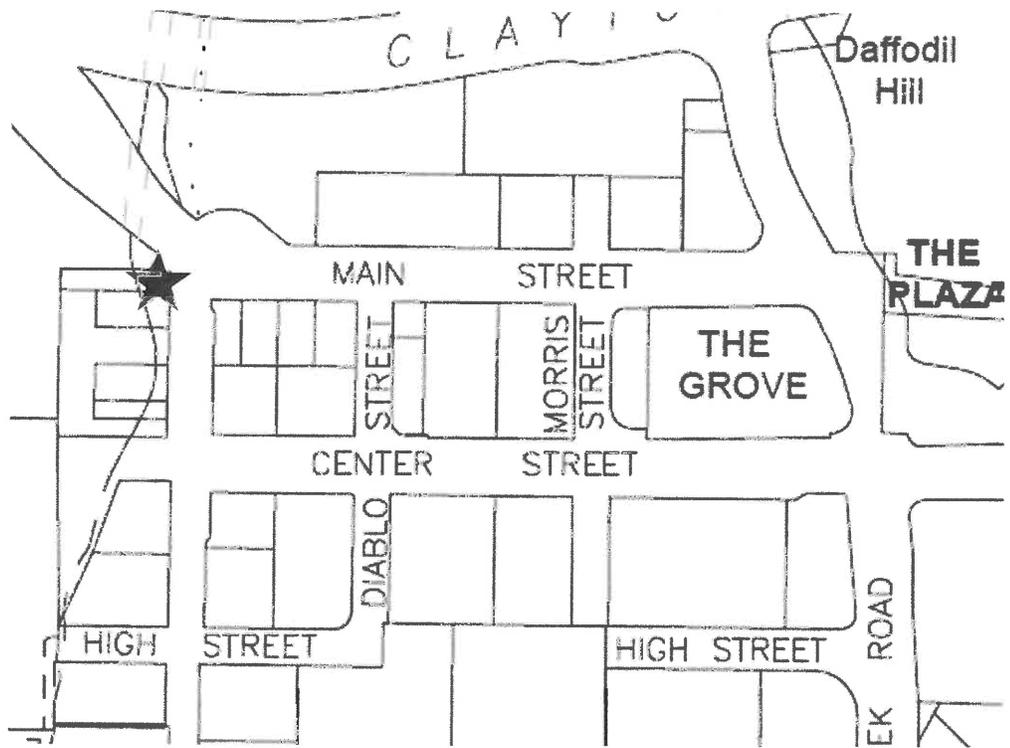
7/30/2013 Delete



7/30/2013 Delete

(14)

Oak St Southwest corner of Oak St. and Main St.



## TC-14 (Oak & Main Downtown)

**37.941178,-121.936797**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/20/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 5 ft. ft./in. W: 3 ft. ft./in. H: 4 ft. ft./in.
Outflow pipe diameter:	15.0
Installation notes:	60 cubic foot capacity.



7/30/2013 [Delete](#)



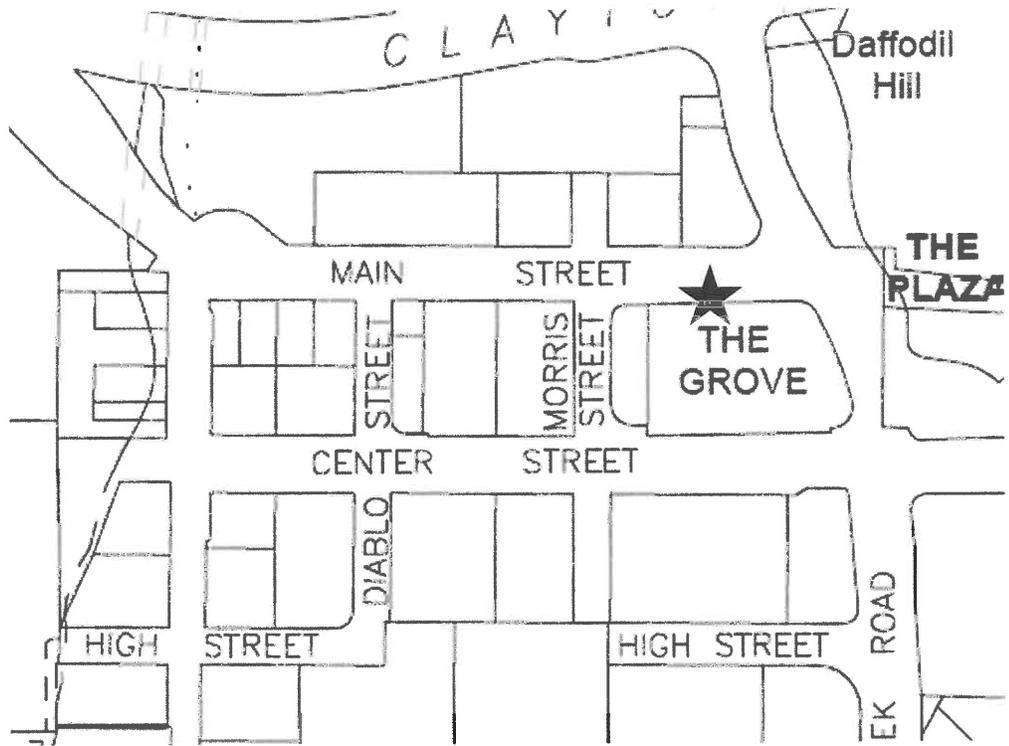
7/30/2013 [Delete](#)



7/30/2013 [Delete](#)

(15)

Main St. Southside 120' west of Old Marsh Creek Rd and Main St by The Grove.



## TC-15 (Main St by Grove Park)

**37.941183,-121.93423**

---

### Small Full Trash Capture Device

Device ID USW-1, Connector Pipe Screen

[View all installations for this device](#)

### Funded by SFEP

Municipality:	Clayton
Date Installed:	8/16/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 5 ft. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	15.0
Installation notes:	30 cubic foot capacity.



7/31/2013 [Delete](#)



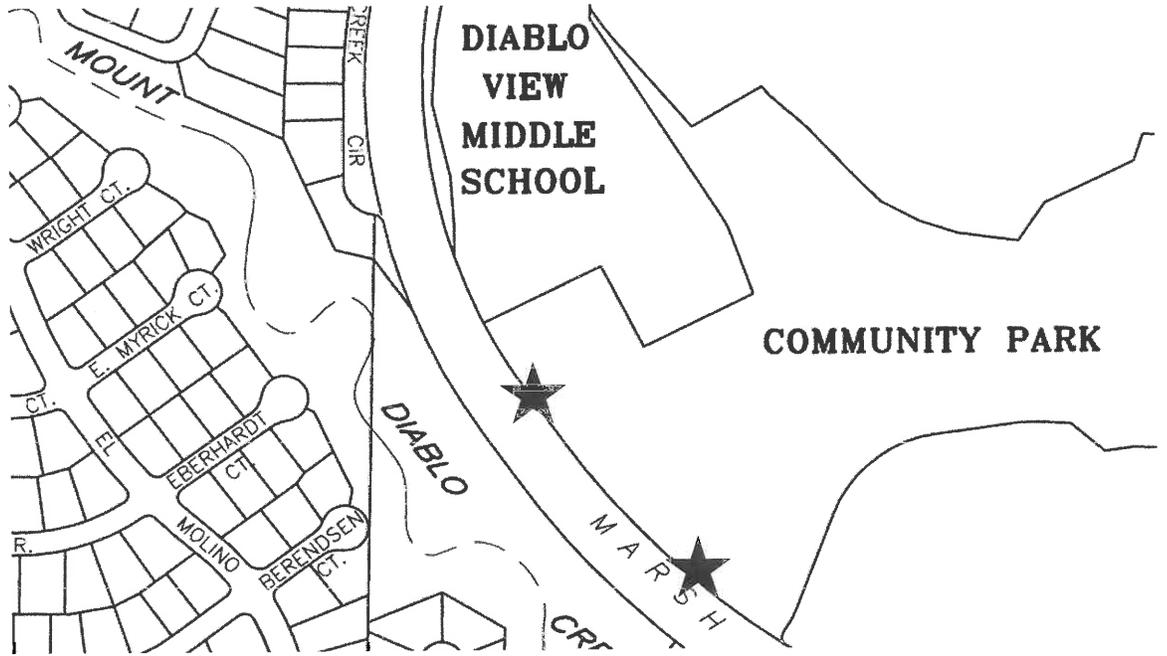
7/31/2013 [Delete](#)



7/31/2013 [Delete](#)

**(16 & 17)**

**Marsh Creek Rd Eastside approx. 400 & 600 feet North of Regency Drive**



# TC-16 (MCR East by Community Park)

**37.927955,-121.921534**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/15/12
Land Use:	Park
Catchbasin Dimensions:	H: 7 ft. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	24.0
Installation notes:	42 cubic foot capacity.



9/24/2014 [Delete](#)



9/24/2014 [Delete](#)



9/24/2014 [Delete](#)



9/24/2014 [Delete](#)



9/30/2014 [Delete](#)

## TC- 17 ( MCR by Community Park)

**37.928253,-121.9211887**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	<b>Clayton</b>
Date Installed:	<b>8/15/12</b>
Land Use:	<b>Park</b>
Catchbasin Dimensions:	<b>H: 7 ft. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.</b>
Outflow pipe diameter:	<b>24.0</b>
Installation notes:	<b>42 cubic foot capacity.</b>



7/30/2013 [Delete](#)



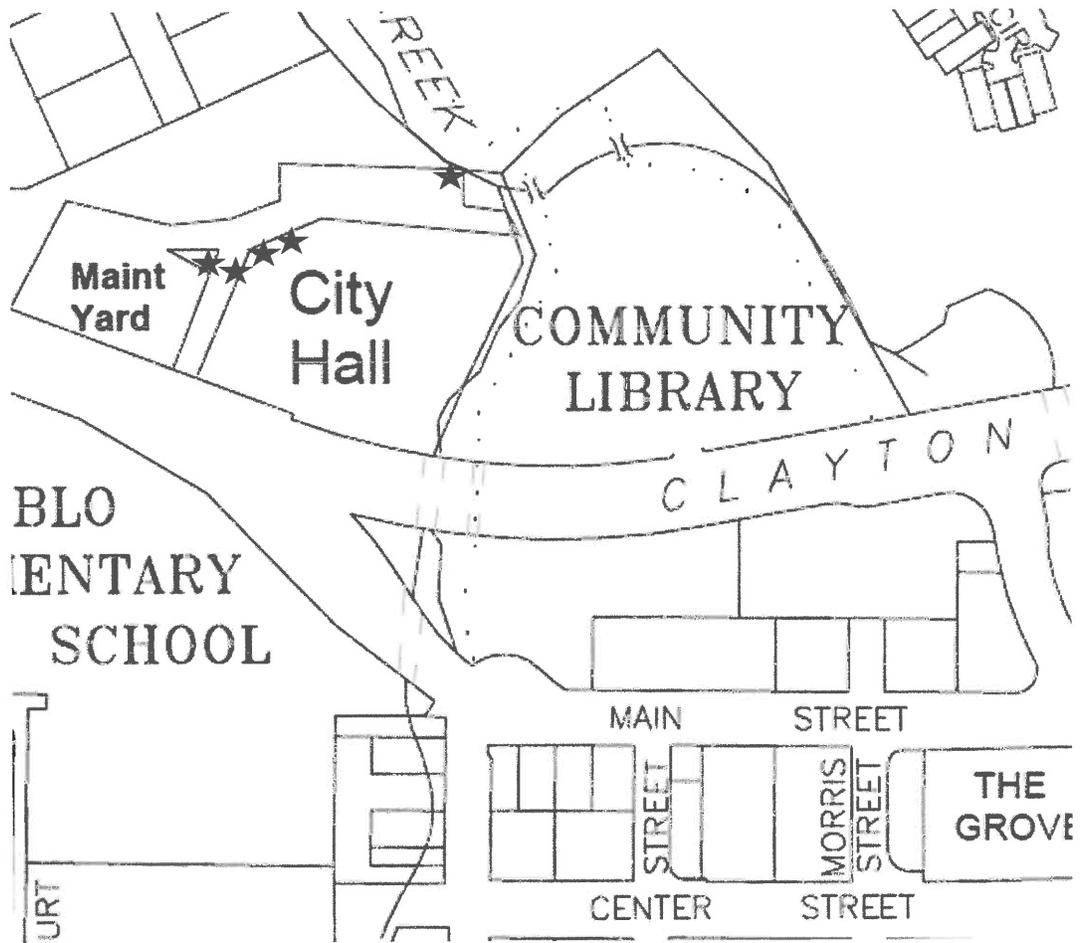
7/30/2013 [Delete](#)



7/30/2013 [Delete](#)

(18, 19, 20, 21, 22)

City Hall Parking Lot .



## TC- 18 ( City Hall hill)

**37.942823,-121.937473**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/16/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 4 ft. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	12.0
Installation notes:	24 cubic foot capacity.



7/31/2013 [Delete](#)



7/31/2013 [Delete](#)



7/31/2013 [Delete](#)

## TC – 19 (City Hall hill)

**37.942782,-121.937442**

---

### Small Full Trash Capture Device

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

### Funded by SFEP

Municipality:	Clayton
Date Installed:	8/15/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 4 ft. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	12.0
Installation notes:	24 cubic foot capacity.



7/31/2013 Delete



7/31/2013 Delete



7/31/2013 Delete

## TC-20 (Police parking entrance)

**37.942764,-121.937326**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/15/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 50 in. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	12.0
Installation notes:	25 cubic foot capacity.



7/31/2013 Delete



7/31/2013 Delete



7/31/2013 Delete

## TC- 21 (Police Parking entrance)

**37.942779,-121.937267**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/15/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 50 in. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	12.0
Installation notes:	25 cubic foot capacity.



7/31/2013 Delete



7/31/2013 Delete



7/31/2013 Delete

## TC – 22 ( City Hall Parking Lot)

**37.942801,-121.936693**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/15/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 42 in. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	12.0
Installation notes:	21 cubic foot capacity.



7/31/2013 Delete

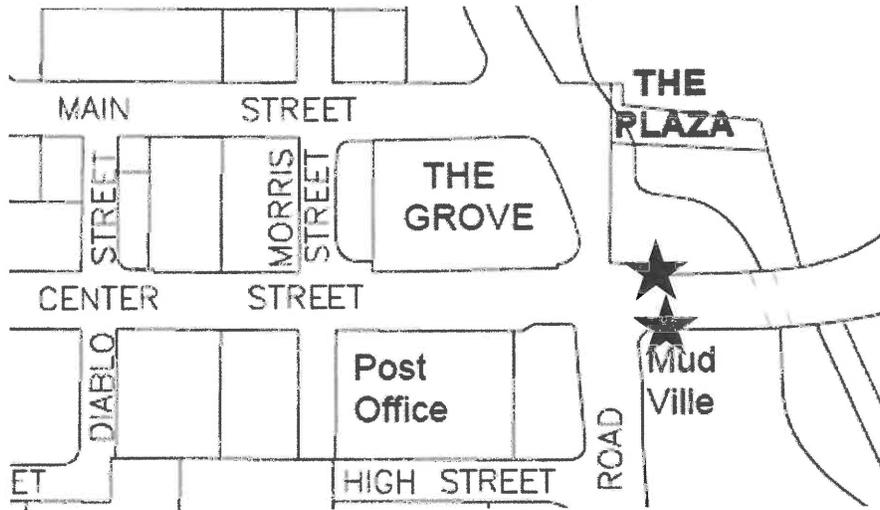


7/31/2013 Delete



7/31/2013 Delete

**(23, 24)**  
**Center St by Mudville Grill**



## TC-23 (Across from Mudville Grill)

**37.940625,-121.933251**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/16/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 5 ft. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	36.0
Installation notes:	30 cubic foot capacity.



7/30/2013 Delete



7/30/2013 Delete



7/30/2013 Delete

## TC-24 (Mudville Grill)

**37.940467,-121.933244**

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	8/16/12
Land Use:	Commercial
Catchbasin Dimensions:	H: 52 in. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Outflow pipe diameter:	36.0
Installation notes:	26 cubic foot capacity.



7/30/2013 [Delete](#)

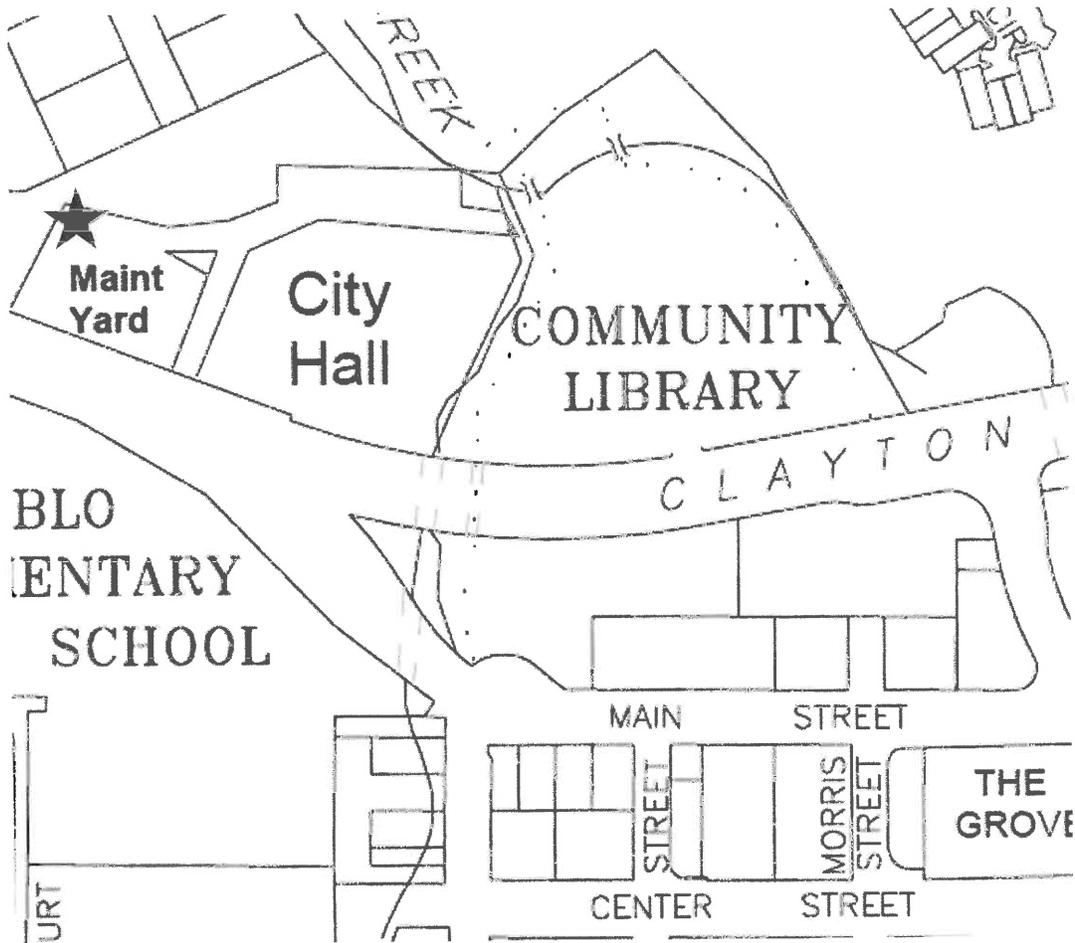


7/30/2013 [Delete](#)



7/30/2013 [Delete](#)

25  
City Maint Yard



## TC- 25 ( Corp Yard)

# 37.943211, -121.938488

---

**Small Full Trash Capture Device**

**Device ID USW-1, Connector Pipe Screen**

[View all installations for this device](#)

**Funded by SFEP**

Municipality:	Clayton
Date Installed:	November 2012
Land Use:	Commercial
Catchbasin Dimensions:	H: 30 in. ft./in. W: 2 ft. ft./in. H: 3 ft. ft./in.
Installation notes:	15 cubic feet capacity



7/31/2013 Delete

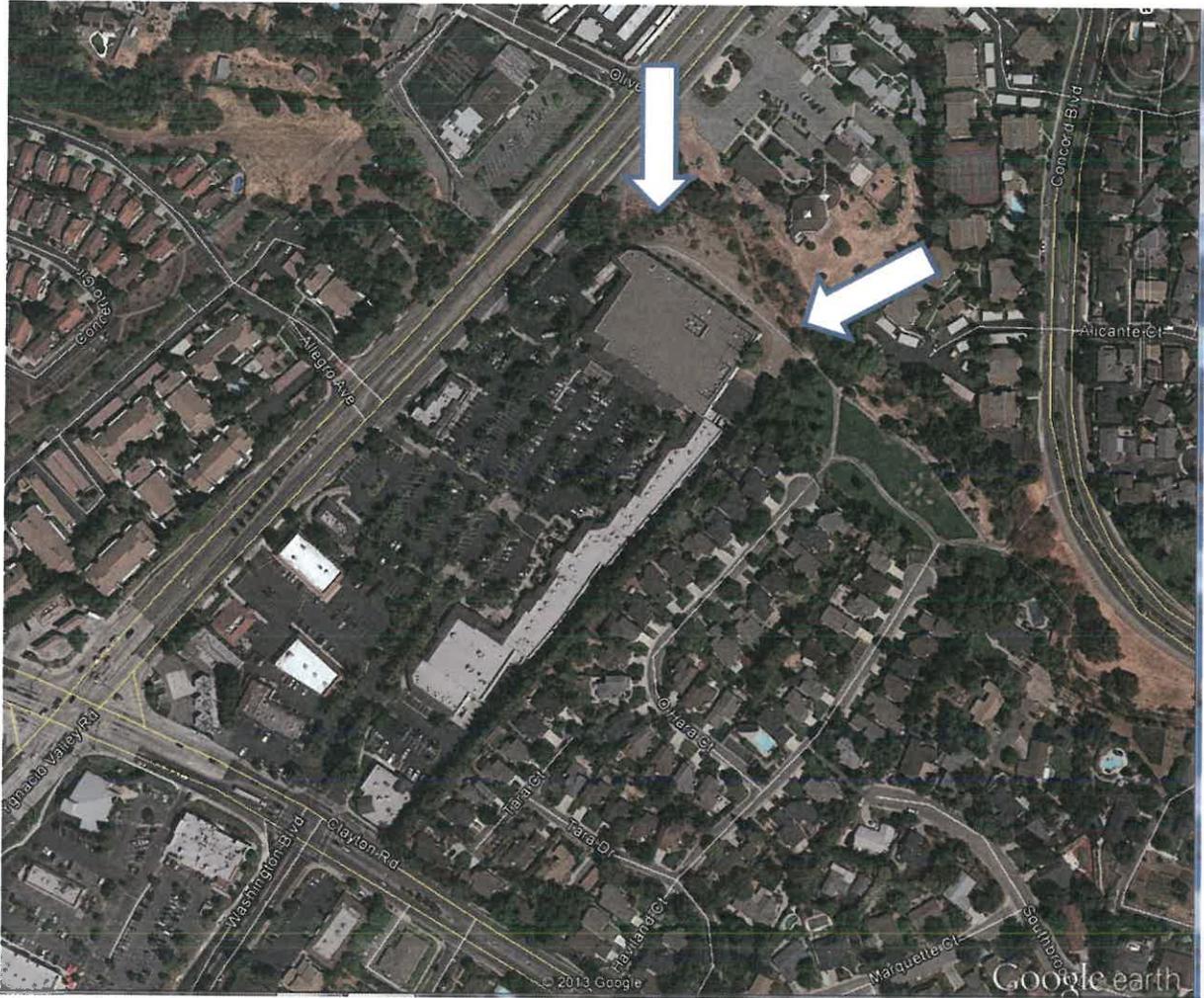


7/31/2013 Delete



7/31/2013 Delete

City of Clayton Trash Hot Spot Location – Clayton Station (behind Safeway) Mt. Diablo Creek (segment)



City of Clayton MRP – Trash Hot Spot Location

behind Safeway – Mt Diablo Creek segment near city public easement trail – creek is privately owned by Las Trampas Investments (Clayton Station Shopping Center – Clayton Road/Kirker Pass Road)



# TRASH HOT SPOT PHOTO LOCATIONS 2014



**AREA #1 BEFORE ( Plastic Bags and wrappers)**



**AREA #1 DEBRIS**



**AREA #1 AFTER**



**AREA #2 ( NO TRASH FOUND)**



**AREA #3 BEFORE (Plastic Bags, wrappers, and spray can)**



**AREA #3 DEBRIS**



**AREA #3 AFTER**



**AREA #4 BEFORE (Shopping cart and wood pile)**



**AREA #4 DEBRIS**



**AREA #4 AFTER**



**AREA #5 ( NO TRASH FOUND)**



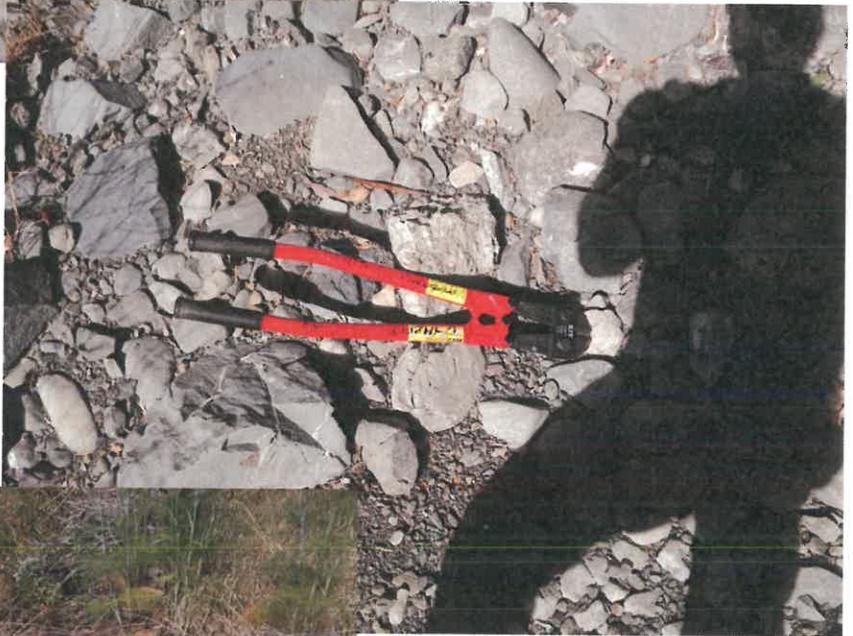
**AREA #6 (NO TRASH FOUND)**



**AREA #7 BEFORE**



**AREA #7 DEBRIS**



**AREA #7 AFTER**



**AREA #8 BEFORE (Plastic bags and wrappers)**



**AREA #8 DEBRIS**



**AREA #8 AFTER**





### Trash Hot Spot Cleanup Data Collection Form

Name of Recorder: John Johnston

Cleanup Date:

6/27/2014

#### I. Site Information

Site ID# CAL-01  
 Lat: 37.954434 Long: -121.953852 Watershed: Mt. Diablo  
 Ownership: Las Trampas Investment Jurisdiction(s): City of Clayton Waterbody: Mt. Diablo Creek

#### II. Trash Information

1. Describe trash type (Provide % of total trash by volume):

\*List of potential trash items on back

Item:	Percentage:	amount	Item:	Percentage:	amount
Plastic bags	73.00%	15 bags	Construction debris*		
Convenience/Fast Food items*	5.00%	various	Toxic substances*		
Bottles (plastic or glass)			Large items*	3.00%	Shopping Cart
Aluminum cans			Miscellaneous items*	3.00%	Bolt Cutter
Styrofoam (pieces or pellets)			Fabric and cloth*		
Other plastic products*			Yard waste (incl. trees)	10.00%	Branches
Paper and cardboard*	5.00%	various	Leaf litter piles		
Cigarette butts			Glass pieces		
Spray paint cans	1.00%	1 can	Golf or tennis balls		
Metal products*			Other*		
Biohazards*			Other*		

2. Potential trash pathways/sources (Check all that apply):

- |  |   |                                  |
|--|---|----------------------------------|
| <input checked="" type="checkbox"/> Trash accumulation | <input type="checkbox"/> Homeless encampments | <input type="checkbox"/> Other   |
| <input checked="" type="checkbox"/> Litter             | <input type="checkbox"/> Outfall              | <input type="checkbox"/> Unknown |
| <input checked="" type="checkbox"/> Illegal dumping    | <input type="checkbox"/> Multiple             |                                  |

3. Identify adjacent land uses to trash area (Check all that apply):

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Residential (Single-family)           | <input type="checkbox"/> Industrial           | <input type="checkbox"/> Other Developed |
| <input checked="" type="checkbox"/> Residential (High-density) | <input type="checkbox"/> Public/Institutional |  |
| <input checked="" type="checkbox"/> Commercial                 | <input type="checkbox"/> Mixed-use            |  |

**III. Trash Removal**

Volume of Trash Removed During Cleanup:

Size of trash bag (in gallons): 30 Gal OR Cubic Yards: \_\_\_\_\_  
Total # of bags: 1/4 bag 7.5 gallons

**IV. Photo Documentation**

Photo#	Before Cleanup Photograph ID	Photo#	After Cleanup Photograph ID
<u>1</u>	<u>TARGET AREA</u>	<u>1</u>	<u>TARGET AREA</u>
<u>2</u>	<u>AREA #1</u>	<u>2</u>	<u>AREA #1</u>
<u>3</u>	<u>AREA #2</u>	<u>3</u>	<u>AREA #2</u>
<u>4</u>	<u>AREA #3</u>	<u>4</u>	<u>AREA #3</u>
<u>5</u>	<u>AREA #4</u>	<u>5</u>	<u>AREA #4</u>
<u>6</u>	<u>AREA #5</u>	<u>6</u>	<u>AREA #5</u>
<u>7</u>	<u>AREA #6</u>	<u>7</u>	<u>AREA #6</u>
<u>8</u>	<u>AREA #7</u>	<u>8</u>	<u>AREA #7</u>
<u>9</u>	<u>AREA #8</u>	<u>9</u>	<u>AREA #8</u>

NOTES: Very little trash. A shopping cart was returned to Safeway; bolt cutters and small wood pile where taken to the maintenance yard.

See attached for photo documentation.

**Potential Data Points with Definitions**

<b>Data Points</b>	<b>Definitions</b>
<b>I. Site Information</b>	
Site ID#	The unique identification number assigned to the site consisting of Municipal Initials/Identification (ex. 'WCR' for the City of Walnut Creek) and Site ID (ex. 01). The site ID# will be used to track trash hot spot activities within databases or other tabular formats.
Latitude	The geographic coordinate north or south of the equator. Latitude should be taken at the downstream end of the trash hot spot (preferably in decimal degrees to at least four decimal places) with a GPS receiver. Record the datum setting of the unit preferably in NAD83/ WGS84.
Longitude	The geographic coordinate east or west of the prime meridian (0 degrees longitude). Longitude should be taken at the downstream end of the trash hot spot (preferably in decimal degrees to at least four decimal places) with a GPS receiver. Record the datum setting of the unit preferably in NAD83/ WGS84.
Watershed	The watershed where the trash hot spot is located. Go to <a href="http://cocowaterweb.org/resources/ccwf-publications/watershed-atlas">http://cocowaterweb.org/resources/ccwf-publications/watershed-atlas</a> for more information.
Waterbody	The waterbody (i.e., creek, river or other waterway) where the trash hot spot is located.
Ownership	The owner of the land where the trash hot spot is located. Possible answers are public, private, or unknown.
Jurisdiction(s)	The jurisdiction(s) responsible for trash hot spot assessment and cleanup. Multiple jurisdictions may exist for certain water bodies.
<b>II. Trash Information</b>	
<b>1. Potential Trash Items</b>	
Convenience/Fast Food Items	Waste packaging, (i.e., plastic or paper) from convenience foods (e.g., potato chips, snack foods, candy bars, gum, etc.) and other wastes (e.g., bags, napkins, etc.) generated from fast food establishments or carry out restaurants.
Other Plastic Products	Plastic Bottle Caps, Plastic Cup Lid/Straw, Plastic Pipe Segments, Plastic Six-Pack Rings, Plastic Wrappers, Soft Plastic Pieces, Hard Plastic Pieces, Fishing Line, Tarp
Paper and Cardboard	Cups, Boxes, Newspapers, Magazines, Mail, Flyers and all other products made of paper or cardboard.
Metal Products	Aluminum Foil, Aluminum or Steel Cans, Bottle Caps, Metal Pipe Segments, Auto Parts, Wire (barb, chicken wire etc.), Metal Objects
Biohazards	Human Waste/Diapers, Pet Waste, Syringes or Pipettes, Dead Animals
Construction Debris	Concrete (not placed), Rebar, Bricks, Wood Debris
Toxic Substances	Chemical Containers, Oil/Surfactant on Water, Lighters, Small Batteries, Vehicle Batteries
Large Items	Appliances, Furniture, Garbage Bags of Trash, Tires, Shopping Carts
Miscellaneous Items	Synthetic Rubber, Foam Rubber, Balloons, Ceramic Pots/Shards, Hose Pieces
Fabric and Cloth	Synthetic Fabric, Natural Fabric (cotton, wool)
Other	All other materials or products not on the above list.

<b>2. Potential Trash Pathways/Sources</b>	
Trash Accumulation	Litter/trash observed to be accumulating in creeks below the high water line. Litter/trash is may be worn and aged in appearance; consist of light-weight, persistent and buoyant trash items (e.g., plastic bags, plastic bottles); and observed caught in surrounding vegetation, tree branches and rocks.
Litter	Improperly disposed/discarded wastes or other items observed in creek channels and/or creek banks. Commonly referred to as "trash". Litter/trash appears relatively "new" in appearance. Litter/trash is usually located in areas accessible to the public.
Illegal Dumping	Illegal dumping or discarding of larger quantities/sizes of litter/trash directly into a waterway or in close proximity to a creek. Garbage bags of trash or other unwanted items, appliances, furniture, tires, shopping carts and other large items are usually observed at illegal dump sites.
Homeless Encampments	Areas where homeless individuals live or congregate.
Outfall	The point where the storm drain system discharges (i.e., usually from a pipe) into a receiving water or channel.
Multiple	The contribution of more than one trash pathway/source listed above. List all potential pathways/sources.
Other	All other potential sources not described above.
Unknown	Trash source can not be determined or are known.
<b>3. Adjacent Land Uses to Trash Areas</b>	
Adjacent Land Uses to Trash Areas	Residential (Single-family), Residential (High-density), Commercial, Industrial, Public/Institutional, Mixed-use, Other Developed
<b>III. Trash Removal</b>	
<b>Volume of Trash Removed During Cleanup</b>	
Size of Trash Bag (in gallons)	Size of trash bag (in gallons) used to remove trash during cleanup.
Total Bags	Total number of bags of trash removed during cleanup.
Cubic Yards	Estimated cubic yards of trash removed during cleanup.
<b>IV. Photo Documentation</b>	
Photo #	The number assigned to a photograph taken during the trash cleanup process. The photo number will also be associated with a before or after photograph ID.
Before Cleanup Photograph ID	Photographs are taken to indicate trash hot spot conditions before a trash assessment is conducted. Refer to the photograph file labeling instructions provided within the Program's Photograph Documentation Protocol.
After Cleanup Photograph ID	Photographs are taken to indicate trash hot spot conditions after a trash assessment is conducted. Refer to the photograph file labeling instructions provided within the Program's Photograph Documentation Protocol.
Notes	Comments or other notes regarding photo documentation.



Attachment C10d

COMMUNITY DEVELOPMENT (925) 673-7340  
ENGINEERING (925) 363-7433

6000 HERITAGE TRAIL • CLAYTON, CALIFORNIA 94517-1250  
TELEPHONE (925) 673-7300 FAX (925) 672-4917

City Council  
HANK STRATFORD, MAYOR  
DAVID T. SHUEY, VICE MAYOR  
JIM DIAZ  
HOWARD GELLER  
JULIE K. PIERCE

September 4, 2014

Via fax (916) 558-3177

The Honorable Edmund "Jerry" Brown  
Governor, State of California  
State Capitol Building, Suite 1173  
Sacramento, CA 95814

**Re: Request for Signature: SB 270 (Padilla, de León, and Lara) Single-Use Grocery Bags Bill**

Dear Honorable Governor Brown,

The City Council of Clayton **strongly supports Senate Bill 270**, which will reduce bag pollution and waste by restricting single-use plastic grocery bags and placing a ten cent minimum charge on paper and reusable bags. We respectfully urge you to sign the bill into law.

As a small populated city (11,000+) in Contra Costa County with limited governmental revenues, our City Council has long desired to ban within our community the single-use plastic grocery bags. Unfortunately, we cannot endure the plastic industry's opposition to this objective, threats of litigation, nor suffer the expense of preparing our own environmental study to enact the local ban. SB 270 offers a universal statewide approach to this desired ban, one which will aid in keeping our community's streams, creeks and sensitive habitats free of clogging plastic bags.

Plastic bags are a costly, environmentally damaging, and easily preventable source of litter and pollution. Light and aerodynamic, plastic bags are uniquely litter-prone even when properly disposed of, and pose a serious threat to the riparian and marine environment and wildlife. When no longer visible to the naked eye, plastic bags have degraded into tiny particles that absorb toxins and contaminate our food chain and water and soil quality.

There is no free bag. Single use plastic bags are costly to both consumers and taxpayers. The more than 13 billion single use plastic bags distributed by California grocers cost over \$200 million annually. The costs of these one-time use products are passed on to consumers in the form of higher grocery prices.

Californian taxpayers pay a second time. In 2013, California communities reported to NRDC that they are spending \$428 million every year to prevent and clean up litter that pollutes our waterways. Based on litter studies, plastic bags represent as much as 10%-25% of litter; plastic bag pollution prevention may represent up to \$43-107 million in local government costs. And waste management facilities are losing as much as \$1 million each year to deal with plastic bags in their machinery, as reported by the City of San Jose in 2010.

Numerous cities and towns in our Bay Area have already adopted local bans on plastic bags and would be grandfathered into this bill. Our City wishes it could join them – SB 270 provides us that uniform opportunity. The results from these existing policies demonstrate both environmental and economic success, and public support. The City of Clayton supports extending this solution statewide.

The economic and environmental costs of single-use plastic bags simply outweigh any short-term benefit. Phasing out single use plastic bags will reduce plastic pollution and the costs associated with it.

Please sign SB 270 into California law and once again provide national leadership on this issue.

Sincerely,



Hank Stratford  
Mayor

cc:

Gareth Elliot, Legislative Secretary, Office of the Governor, [Gareth.Elliott@GOV.CA.GOV](mailto:Gareth.Elliott@GOV.CA.GOV)

Graciela Castillo-Krings, Deputy Legislative Secretary, Office of the Governor, [Graciela.Castillo-Krings@GOV.CA.GOV](mailto:Graciela.Castillo-Krings@GOV.CA.GOV)

Caroll Mortensen, Director of CalRecycle, [Caroll.Mortensen@calrecycle.ca.gov](mailto:Caroll.Mortensen@calrecycle.ca.gov)

Californians Against Waste, [suevang@cawrecycles.org](mailto:suevang@cawrecycles.org)

Honorable Clayton City Council Members

City of Clayton

Republic Services Curbside Collection Data for FY 13/14

	7/1/2013	8/1/2013	9/1/2013	10/1/2013	11/1/2013	12/1/2013	1/1/2014	2/1/2014	3/1/2014	4/1/2014	5/1/2014	6/1/2014	Total
Oil filters	32	20	23	32	24	21	31	23	15	31	20	15	287
Batteries	46	77	64	64	59	27	53	43	56	324	399	546	1758
Lightbulbs	34	39	63	26	11	40	57	6	50	34	79	44	483
Mattresses	10	6	4	3	5	7	8	2	8	16	16	10	95
E-waste	7	13	7	12	3	4	9	2	1	12	12	11	93
White Goods	13	8	0	11	10	6	4	3	2	8	8	8	81
Used Oil	146.23	115.1	91.1	111.45	72.41	111.81	161.75	119.31	115.36	142.95	144.17	141.38	1473.02

City of Clayton Street Sweeping FY 13-14

**CLEANSTREET DEBRIS REPORTS BY MONTH**

**DATE:** 11/12/2014.  
**CUSTOMER** **CLAYON**  
**LANDFILL** Contra Costa Transfer Station  
**PERIOD** July 2013 to June 2014

<b>DATE:</b>	<b>TOTAL</b>	<b>TONNAGE</b>
July-13	<b>841.52</b>	<b>9.64</b>
August-13	<b>555.74</b>	<b>6.36</b>
September-13	<b>717.05</b>	<b>8.21</b>
October-13	<b>997.56</b>	<b>11.42</b>
November-13	<b>1,014.42</b>	<b>11.62</b>
December-13	<b>769.94</b>	<b>8.82</b>
Jan 14	<b>842.41</b>	<b>9.65</b>
Feb 14	<b>557.35</b>	<b>6.38</b>
Mar 14	<b>747.36</b>	<b>8.56</b>
Apr 14	<b>535.55</b>	<b>6.13</b>
May 14	<b>662.94</b>	<b>7.59</b>
Jun 14	<b>575.50</b>	<b>6.59</b>
	<b>8,817.34</b>	<b>100.98</b>

**ORDINANCE NO. 455**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CLAYTON, ADDING  
CHAPTER 9.35 TO THE CLAYTON MUNICIPAL CODE REGARDING CAMPING**

**THE CITY COUNCIL  
City of Clayton, California**

**THE CITY COUNCIL OF THE CITY OF CLAYTON DOES ORDAIN AS FOLLOWS:**

**Section 1. Amendment.** Chapter 9.35 is hereby added to the Clayton Municipal Code to read in full as set forth in the attached Exhibit A, incorporated by this reference.

**Section 2. Severability.** If any section, subsection, sentence, clause, or phrase of this Ordinance, or the application thereof to any person or circumstances, is held to be unconstitutional or to be otherwise invalid by any court competent jurisdiction, such invalidity shall not affect other provisions or clauses of this Ordinance or application thereof which can be implemented without the invalid provisions, clause, or application, and to this end such provisions and clauses of the Ordinance are declared to be severable.

**Section 3. Conflicting Ordinances Repealed.** Any ordinance or part thereof, or regulations in conflict with the provisions of this Ordinance, are hereby repealed. The provisions of this Ordinance shall control with regard to any provision of the Clayton Municipal Code that may be inconsistent with the provisions of this Ordinance.

**Section 4. Effective Date and Publication.** This Ordinance shall become effective thirty (30) days from and after its passage. Within fifteen (15) days after the passage of the Ordinance, the City Clerk shall cause it to be posted in three (3) public places heretofore designated by resolution of the City Council for the posting of ordinances and public notices. Further, the City Clerk is directed to cause Section 1 of this Ordinance to be entered into the City of Clayton Municipal Code.

The foregoing Ordinance was introduced at a regular public meeting of the City Council of the City of Clayton held on April 15, 2014.

Passed, adopted, and ordered posted by the City Council of the City of Clayton at a regular public meeting thereof held on May 6, 2014 by the following vote:

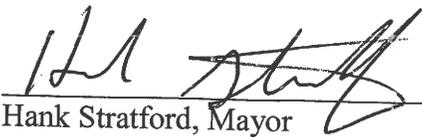
AYES: Mayor Stratford, Vice Mayor Shuey, Councilmembers Geller and Pierce.

NOES: None.

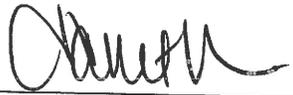
ABSENT: Councilmember Diaz.

ABSTAIN: None.

THE CITY COUNCIL OF CLAYTON, CA

  
Hank Stratford, Mayor

ATTEST

  
Janet Brown, City Clerk

APPROVED AS TO FORM



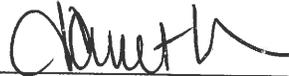
Malathy Subramanian, City Attorney

APPROVED BY ADMINISTRATION



Gary A. Napper, City Manager

I hereby certify that the foregoing Ordinance was duly introduced at a regular meeting of the City Council of the City of Clayton held on April 15, 2014 and was duly adopted, passed, and ordered posted at a regular meeting of the City Council held on May 6, 2014.



Janet Brown, City Clerk

**EXHIBIT A**

**Chapter 9.35**

**CAMPING**

**Sections:**

- 9.35.010**      **Definitions.**
- 9.35.020**      **Camping.**
- 9.35.030**      **Public urination.**
- 9.35.040**      **Enforcement.**

**9.35.010**      **Definitions.**

Unless the particular provisions or context requires otherwise, the definitions contained in this section shall govern the construction, meaning and application of words and phrases in this chapter.

“Camp facilities” include, but are not limited to, tents, huts, or temporary shelters, trailers, and any other vehicle.

“Camp paraphernalia” includes, but is not limited to, collapsible shelters, cots, beds, sleeping bags, bed rolls, hammocks, barbeques, open fires, portable stoves or other cooking equipment not provided or approved by the city.

“Store” means to put aside or accumulate for use when needed, to put for safekeeping, or to place or leave in a location.

**9.35.020**      **Camping.**

A. No person shall camp anywhere in the city, whether on public or private property, except as hereinafter expressly permitted. “To camp” means to do any of the following:

1. Sleeping (10:00 p.m. to 8:30 a.m.). To sleep at any time between the hours of 10:00 p.m. and 8:30 a.m. in any of the following places:

- (a) Outdoors, with or without camp paraphernalia.
- (b) In, on, or under any structure not intended for human occupancy, whether with or without bedding, tent, hammock, or other similar protection or equipment.

2. Setting up camping paraphernalia (10:00 p.m. to 8:30 a.m.). To establish or maintain, outdoors or in, on, or under any structure not intended for human occupancy, at any time between the hours of 10:00 p.m. and 8:30 a.m., a temporary or permanent place for sleeping by setting up any camp facilities or camp paraphernalia in such a manner as to be immediately usable for sleeping purposes.

3. Setting up campsite (any time). It shall be unlawful for any person to store personal property, including camp facilities and camp paraphernalia, in the following areas, except as otherwise provided:

- (a) Any park.
- (b) Any street or right of way, including sidewalks, bus stops and public landscaping; and
- (c) Any parking lot, yard, building set-back, vacant land, open space or any other area open or accessible to the public, improved or unimproved.

B. Camping is permitted in the city only in the following circumstances:

1. Camping in public areas specifically set aside and clearly marked for public camping purposes;
2. Camping events authorized by the city;
3. Camping in the yard of a residence, with the consent of the owner or occupant of the residence, where the camping is in the rear yard of the residence or where the camping is in an area of a side yard of the residence that is separated from view from the street by a fence or hedge or other obstruction; except that camping shall not be permitted under this subsection where it is conducted in such a manner as to constitute a nuisance because of noise, inadequate sanitation, or other matters offensive to persons of ordinary sensibility; nor shall camping be permitted under this subsection where the camping in any yard is of such frequency, intensity, or duration as to constitute a use of land prohibited by any provision of this Code; nor shall camping be permitted under this subsection where any fee, charge, or other monetary consideration is collected for the privilege of camping or for any services or the use of any facilities related thereto; and
4. Camping events for minors sponsored by any nonprofit organization; except that camping shall not be permitted under this subsection where it is conducted in such a manner as to constitute a nuisance because of noise, inadequate sanitation, or other matters offensive to persons of ordinary sensibility; nor shall camping be permitted under this subsection where the camping at any location is of such frequency, intensity, or duration as to constitute a use of land prohibited by any provision of this Code.

**9.35.030 Public urination.**

No person shall urinate or defecate in public except when using a urinal, toilet or commode located in a restroom, or when using a portable or temporary toilet or other facility designed for the sanitary disposal of human waste and which is hidden from public view. No person shall urinate or defecate in or upon any public street, sidewalk, alley, plaza, park, public building or other publicly maintained facility or place, or upon the private property of another without the consent of the owner or person in lawful possession, or in any place open to the public or exposed to public view.

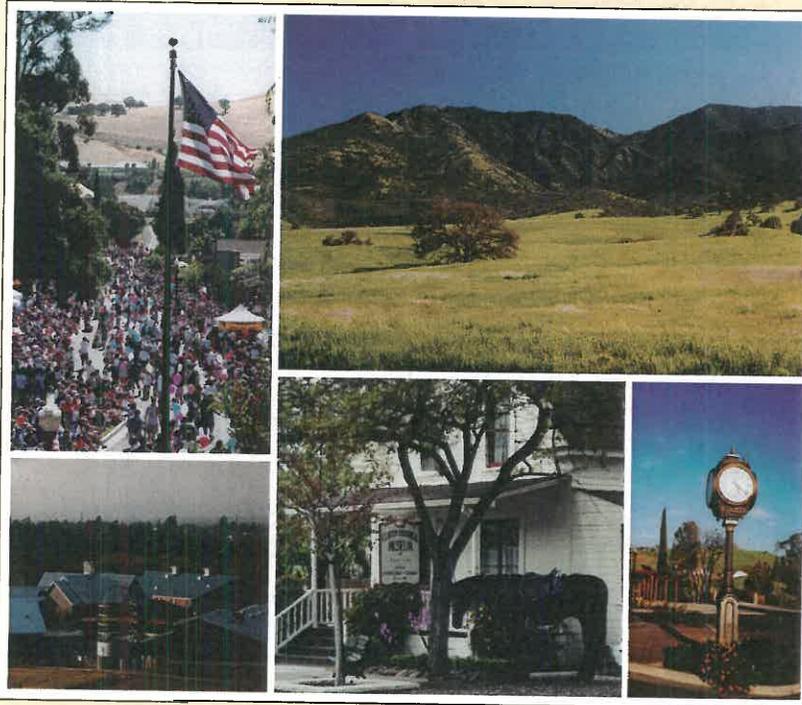
Ordinance No. 455

**9.35.040 Enforcement.**

A violation of this chapter shall be a misdemeanor punishable in accordance with section 1.20.010 or as otherwise provided for in this Code.

# 2014 CUSTOMER GUIDE

## Garbage, Recycling, Yard Waste Services



Attachment C11

# BULKY ITEMS

## Free Pickup for E-Waste, Too

Clayton residents may have any item listed here, such as mattresses, furniture, appliances and other large pieces, picked up at no charge at the curbside. Just call the office at (925) 685-4711 to schedule.

- Air conditioner (pickup & Freon removal)
- Computer monitors
- Couch/sofa
- Dishwasher
- Dryer
- Electronics
- Freezer (pickup & Freon removal)
- Hot water heater
- Hide-a-bed
- Double mattress
- Double box spring
- Twin mattress
- Twin box spring
- Queen mattress
- Queen box spring
- King mattress
- King box spring
- Refrigerator (pickup & Freon removal)
- Stove
- Washer
- Swamp cooler



- Tires (less than 19 inches)
- Tires with rim (less than 19 inches)
- Tires (larger than 19 inches)
- Tires with rim (larger than 19 inches)
- TV (32 inches or smaller)
- TV (32 inches or larger)

### Free E-Waste Pickups

There is no charge for collection of e-waste in Clayton. Call (925) 685-4711 to schedule a pickup.



### Recycle Batteries, CFLs

Household batteries and compact fluorescent lights can be recycled curbside. Place batteries in quart-size Ziploc bag, seal and leave next to your brown recycling cart. Do the same in a separate Ziploc bag for CFLs.



# Household Hazardous Waste Collection Facility

4797 Imhoff Place, Martinez, CA 94553-4392  
1-800-646-1431 • [www.centrsan.org](http://www.centrsan.org)



Protecting Public Health and the Environment

## HOURS OF OPERATION

**Residents:**  
*(no appointment needed)*

Monday through Saturday:  
9 a.m. - 4 p.m.

**Businesses:**

Monday through Saturday

**By appointment only**

**Closed:**

Sunday  
and most major Holidays

## The Solution to Pollution

**M**any products in your home contain chemical compounds that can poison, corrode, explode, or ignite when handled improperly. (See list of items on reverse.) When discarded, these substances become household hazardous waste (HHW) and can threaten human health and the environment. For this reason, it is illegal to dispose of HHW in the trash or down any drain. That is why the Central Contra Costa Sanitary District established the HHW Program—to provide local residents with convenient and environmentally safe HHW disposal.

Hazardous wastes brought to our Household Hazardous Waste Collection Facility will never reach waterways through sewers, storm drains, or landfills. To help prevent pollution of our water environment, please bring your HHW to the facility.



**THERE IS NO DROP-OFF FEE FOR ELIGIBLE RESIDENTS!**

## COMMUNITIES ELIGIBLE TO USE THE FACILITY

The collection program services are paid for by members of the communities on the map at right as part of their sewer service charge. Partnership agreements between CCCSD, MVSD, Concord, Clayton, and San Ramon (for southern area) ensure that all central county residents have access to these services.



# What Can You Bring to the Household Hazardous Waste Facility?

## Household products

- Batteries
- Fluorescent bulbs & compact fluorescent lights (CFLs)
- Mercury thermostat switches
- Grouts/caulking
- Pool chemicals

## Paint and paint-related products

- Latex & oil-based paints
- Wood stain & varnishes
- Paint remover/paint thinner & solvents



## Household cleaning products

- Bleach
- Liquid cleaners
- Upholstery/rug cleaners
- Oven cleaners
- Furniture polishes
- Tub & tile cleaners

## Personal care products

- Mercury fever thermometers
- Fingernail polish & remover
- Hair care products
- Perfumes & colognes

## Automotive products

- Motor oil
- Gasoline
- Antifreeze
- Brake fluid
- Transmission fluid
- Solvents
- Car batteries
- Car cleaning products

## Garden care and pest-control products

- Pesticides
- Herbicides
- Fertilizers

## Other

- Cooking oils and grease (large quantities, as from a turkey fryer)
- Propane tanks (5 gallon or less)



## Free Stuff !

The facility has a Reuse Room stocked with items brought in for disposal that are still in useable condition. The inventory often includes paint, wood stain, garden products and a wide variety of cleansers—and they're all free to facility users! The Reuse Room is open Tuesday – Saturday, 9 a.m. – 3:30 p.m.

## We do not accept:

- Medicines
- Medical wastes (including sharps--syringes, needles, lancets, etc.)
- Electronic waste (computers, TVs, cell phones, etc.)
- Explosives (ammunition, picric acid, fireworks, etc.)
- Compressed gas cylinders (propane accepted)
- Wastes contaminated with PCBs (fluorescent light ballasts accepted)
- Treated wood wastes

State regulations limit the transportation of hazardous waste to 15 gallons or 125 pounds per visit. Individual containers are limited to 5-gallon capacity.

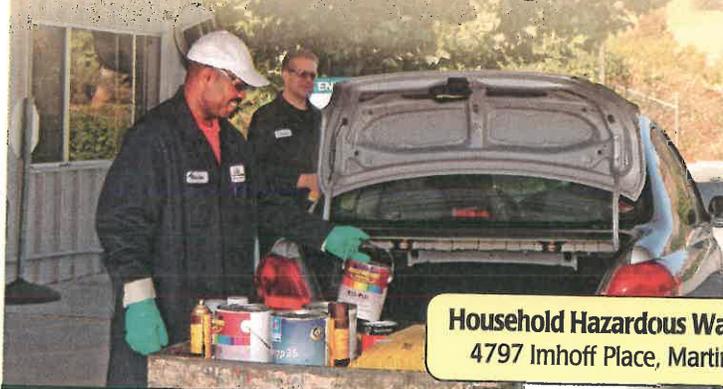
There is no drop-off fee and no appointment necessary for residents of central Contra Costa County. Small businesses require an appointment and are charged a nominal fee. For more information, please call 1-800-646-1431 or visit our website: [www.centrialsan.org](http://www.centrialsan.org)

## HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITY HOURS AND LOCATION

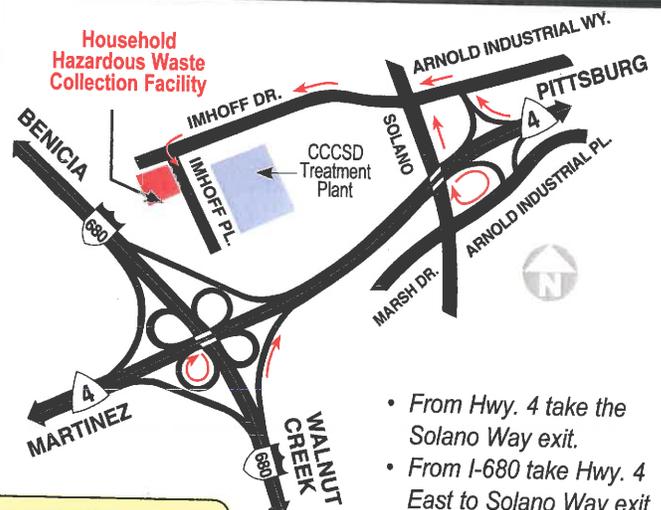
**Residents:** Monday – Saturday, 9 a.m. - 4 p.m.  
(Reuse Room closes at 3:30 p.m.)

**Businesses:** Monday – Saturday, by appointment only

**Phone: 1-800-646-1431**  
**[www.centrialsan.org](http://www.centrialsan.org)**



**Household Hazardous Waste Collection Facility**  
4797 Imhoff Place, Martinez, CA 94553-4392



- From Hwy. 4 take the Solano Way exit.
- From I-680 take Hwy. 4 East to Solano Way exit.

## What HHW is Accepted

This list does not include everything we accept. If you have any questions, please call the HHW InfoLine at 1-800-646-1431.



Home, Garden, & Misc. Products	Automotive Products	Paint & Paint-Related Products	Household Cleaning Products & Items	Personal Care Products
<ul style="list-style-type: none"> <li>• Grouts</li> <li>• Cements</li> <li>• Caulking</li> <li>• Sealants</li> <li>• Fertilizers</li> <li>• Pesticides</li> <li>• Herbicides</li> <li>• ant stakes</li> <li>• fluorescent lamps (all types)</li> <li>• household batteries</li> <li>• mercury thermometers</li> <li>• mercury switches</li> <li>• propane cylinders (5 gal. or less)</li> <li>• ballasts</li> <li>• pool chemicals</li> <li>• chlorine</li> <li>• bromine</li> <li>• cooking oil</li> <li>• fire extinguishers</li> <li>• aerosol sprays</li> </ul>	<ul style="list-style-type: none"> <li>• motor oil</li> <li>• car batteries</li> <li>• brake fluid</li> <li>• transmission fluid</li> <li>• antifreeze</li> <li>• waxes</li> <li>• polishes</li> <li>• car cleaners</li> <li>• car paints</li> <li>• refrigerants</li> <li>• grease</li> <li>• degreasers</li> <li>• solvents</li> <li>• wheel cleaners</li> <li>• road flares</li> </ul>	<ul style="list-style-type: none"> <li>• paints</li> <li>• stains</li> <li>• varnishes</li> <li>• water</li> <li>• repellants</li> <li>• glazes</li> <li>• wax</li> <li>• wood oils</li> <li>• aerosol paints</li> <li>• thinners</li> <li>• coatings</li> <li>• paint additives</li> <li>• curatives</li> <li>• epoxy resins</li> <li>• wall paper pastes</li> <li>• adhesives</li> <li>• wall paper removers</li> <li>• paint removers</li> <li>• asbestos (special disposal requirements)</li> </ul>	<ul style="list-style-type: none"> <li>• liquid cleaners</li> <li>• upholstery cleaners</li> <li>• oven cleaners</li> <li>• furniture polish</li> <li>• tub &amp; tile cleaners</li> </ul>	<ul style="list-style-type: none"> <li>• shampoos</li> <li>• hair sprays</li> <li>• hair care products</li> <li>• lotions</li> <li>• perfumes/ colognes</li> </ul>



## More Information About Asbestos



### **Where Can Asbestos Be Found?**

Asbestos is present in many common building materials used in private homes and in public buildings. An asbestos containing product cannot be determined by sight. The only way to determine if asbestos is definitely present in a building material is through a microscopic analysis by an approved laboratory.

### **Is Asbestos Dangerous?**

The process of removing asbestos can be hazardous. Special techniques and equipment are needed to minimize the risks. Without precautions, you can expose yourself as well as other household members to air-borne asbestos. Asbestos fibers are lightweight, so they can stay suspended in the air for many hours. You should consider removal only if encapsulation is not practical. Hire qualified contractors that have been state licensed or EPA certified if removal is necessary.

### **Asbestos Waste Acceptance (Friable Asbestos Only)**

The Central Contra Costa Sanitary District HHW Facility accepts friable asbestos containing materials (FACM) only. Friable asbestos is any material containing more than one percent asbestos and that can be crumbled or reduced to powder by hand pressure. Forms of friable asbestos can be found in materials and products made prior to the mid 1970's such as "popcorn" ceiling coatings, uncoated pipe insulations (without the pipe or ducting), appliance insulation, and ceiling tiles. A certification by a licensed laboratory showing the material contains asbestos may be required.

### **Packaging Asbestos**

The FACM must be wet-down to prevent dusting. Do not soak or over-wet the FACM to cause free liquids to be present. Double-bag asbestos waste into 6mil (or greater) plastic bags. Seal individual bags with duct tape. Label each double bag boldly with "ASBESTOS CONTAINING MATERIAL". This can be done by marking a strip of duct tape on at least two sides of the bags or attaching a marked tag at the closure point. Each bag may not weigh more than 50 pounds. The maximum amount of FACM that can be transported at one time is 125 pounds.

### **Non-Friable Asbestos Disposal**

Forms of Non-Friable asbestos are material such as floor tiles, asbestos pipe, transite siding or pipe, and coated pipe insulation. These materials can be taken to the following sites:

#### **NORCAL WASTE SYSTEMS**

6426 Hay Road  
Vacaville, CA 95687  
(707) 678-4718

#### **WASTEMANAGEMENT ALTAMONT LANDFILL**

10840 Altamont Pass Road  
Livermore, CA 94550  
(800) 449-6349

Chapter 17.80

LANDSCAPE WATER CONSERVATION STANDARDS

Sections:

- 17.80.010 Title and Purpose
- 17.80.020 Definitions
- 17.80.030 Applicability
- 17.80.040 Landscape Project Application (LPA) Requirements
- 17.80.050 Water Efficient Landscape Standards
- 17.80.060 Landscape Plan Requirements
- 17.80.070 Landscape Water Audit Requirements
- 17.80.080 Certifications
- 17.80.090 Landscape and Irrigation Maintenance Schedule
- 17.80.100 Stormwater Management
- 17.80.110 Provisions for Existing Landscapes
- 17.80.120 Public Education

17.80.010 Title and Purpose. This Chapter shall be known and may be cited as the Landscape Water Conservation Standards Ordinance of the City of Clayton for the purpose of implementing within Clayton the Water Conservation in Landscaping Act of 2006.

17.80.020 Definitions. Certain words and phrases are defined within this Chapter and the definitions herein apply to this Chapter only. Where it appears from the context of such words, phrases, or provisions that a different meaning is intended, the definition shall be determined by the Community Development Director.

- A. "Applicant" means the individual or entity submitting a Landscape Project Application (LPA) required under Section 17.80.040 of this Chapter to request a permit, plan check, or design review from the City of Clayton, or requesting new or expanded water service from the local water district. A project applicant may be the property owner or his or her designee.

- B. “Applied water” means the portion of water supplied by the irrigation system to the landscape.
- C. “Backflow prevention device” means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.
- D. “Certified irrigation system auditor” means a person certified by the U.S. Environmental Protection Agency’s WaterSense Irrigation Partners Program.
- E. “Conversion factor (0.62)” means the number that converts acre-inches per acre per year to gallons per square foot per year.
- F. “Emission Device” means any device that is contained within an irrigation system that is used to apply water. Common emission devices in an irrigation system include, but are not limited to, spray and rotary sprinkler heads, bubblers, and drip irrigation emitters.
- G. “Estimated Total Water Use (ETWU)” means the estimated total water used for the landscape, as described in the City of Clayton Water Allowance Work Sheet.
- H. “ET adjustment factor (ETAF)” means a factor of 0.7, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape. ETAF for a Special Landscape Area shall be 1.0.
- I. “ETo” stands for Reference Evapotranspiration, and means the water loss from a large field of 4-7 inch-tall, cool-season grass that is not water stressed. Local ETo numbers can be found through the California Irrigation Management Information System (CIMIS).
- J. “Evapotranspiration” means the combination of water transpired from plants and evaporated from the soil and plant surfaces.
- K. “Flow rate” means the rate at which water flows through pipes, valves, and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.
- L. “Geometry” means the size, shape, and angles of an area.
- M. “Hardscape” means any durable material (pervious and non-pervious).
- N. “Hydrozone” means a portion of the landscaped area having plants with similar water needs. This ordinance uses the publication *Water Use Classification of Landscape Species* (WUCOLS) to determine a plant’s water needs. A hydrozone may be irrigated or non-irrigated.

- O. “Landscape water audit” means an in-depth evaluation of the installed landscape to verify the landscape complies with the Water-Efficient Landscape Standards of the City of Clayton Landscape Water Conservation Standards Ordinance, and completes the Certificate of Compliance for a Landscape Water Audit.
- P. “Irrigation efficiency (IE)” means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The irrigation efficiency for purposes of this Chapter is 71%. Greater irrigation efficiency can be expected from well-designed and well-maintained systems.
- Q. “Irrigation survey” means an evaluation of an irrigation system that is less detailed than an irrigation audit. An irrigation survey includes, but is not limited to, inspection, system test, and recommendations to improve performance of the irrigation system.
- R. “Irrigation water use analysis” means an analysis of water use data based on meter readings and billing data.
- S. “Landscape area” means all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel, or stone walks, or other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).
- T. “Landscape contractor” means a person licensed by the State of California to construct, maintain, repair, install, or subcontract the development of landscape systems.
- U. “Lateral line” means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.
- V. “Maximum Applied Water Allowance (MAWA)” means the upper limit of annual applied water for the established landscaped area, as specified in the City of Clayton “Water Allowance Work Sheets”.
- W. “Medians” mean any planting area that separates traffic lanes on streets and parking areas in parking lots.
- X. “Mulch” means any organic material, such as leaves, bark, straw, or compost; or inorganic mineral materials, such as rocks, gravel, and decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.

- Y. “Non-Permeable” means any surface or material that will not allow the passage of water through that surface or material into the underlying soil at a rate that ensures run-off will not occur.
- Z. “Operating pressure” means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.
- AA. “Overhead irrigation” means systems that deliver water through the air (e.g., sprayheads and rotors).
- BB. “Overspray” means the irrigation water that is delivered beyond the target area.
- CC. “Permit” means an authorizing document issued by local agencies for new construction or rehabilitated landscapes.
- DD. “Plant factor” or “plant water use factor” is a factor that, when multiplied by ETo, estimates the amount of water needed by plants. The plant factors for this Chapter are from the WUCOLS publication.
- EE. “Precipitation rate” for this Chapter means the rate of application of water measured in inches per hour.
- FF. “Project” means the total area comprising the landscape area, as defined in this Chapter.
- GG. “Rain switch” or “rain sensing shutoff device” means a component that automatically suspends an irrigation event when it rains.
- HH. “Reference evapotranspiration” or “ETo” means a standard measurement of environmental parameters that affect the water use of plants.
- II. “Rehabilitated landscape” means any re-landscaping project that requires a permit, plan check, or design review, or requires a new or expanded water service application.
- JJ. “Retail water supplier” means any entity, including a public agency, city, county, district or private water company that provides retail water service.
- KK. “Runoff” means water that is not absorbed by the soil or landscape to which it is applied and that flows from the landscape area.
- LL. “Smart irrigation controllers” means controllers using weather information or soil moisture readings along with site information to automatically adjust the irrigation schedule on a daily basis.
- MM. “Soil moisture sensor” or “soil moisture sensing device” means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

- NN. “Special Landscape Area (SLA)” means an area of the landscape dedicated solely to edible plants, such as vegetable gardens or orchards, areas irrigated with recycled water, water features using recycled water, cemeteries, and areas dedicated to active play, such as parks, sports fields, and golf courses where turf provides a playing surface.
- OO. “Sprinkler head” means a device that delivers water through a nozzle.
- PP. “Station” means an area served by one valve or by a set of valves that operate simultaneously.
- QQ. “Turf” means a ground cover surface of mowed grass. Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are examples of cool-season grasses. Bermuda grass, Kikuyu grass, Seashore Paspalum, St. Augustine grass, Zoysia grass, and Buffalo grass are examples of warm-season grasses.
- RR. “Valve” means a device used to control the flow of water in the irrigation system.
- SS. “Water feature” means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied).
- TT. “WUCOLS” means the Water Use Classification of Landscape Species, published by the University of California Cooperative Extension, the Department of Water Resources, and the Bureau of Reclamation, 2000. (WUCOLS) report is available at <http://www.water.ca.gov?wateruseefficiency/publications/>. Search for WUCOLS, and then go to Part 2 WUCOLS III\* 1999 Edition.

17.80.030 Applicability. After October 21, 2010 the indicated provisions of this Chapter shall apply to landscape projects as follows:

- A. Developer Projects: New and rehabilitated landscape development for commercial, multi-family, and single family projects with irrigated landscape areas cumulatively equal to or greater than 2,500 square feet and requiring a building permit, grading permit, plan check, or design review shall complete the Landscape Project Application (LPA) described in Section 17.80.040, and comply with all other Sections of this Chapter.
- B. Municipality and Public Agency Projects: New and rehabilitated projects designed and installed by the City of Clayton with irrigated landscape areas cumulatively equal to or greater than 2,500 square feet shall comply with Sections 17.80.050, 17.80.060, 17.80.070, 17.80.080, 17.80.090, and 17.80.100.

- C. Owner-Directed Single Family Projects: New and rehabilitated owner-directed single family projects with irrigated landscape areas cumulatively equal to or greater than 5,000 square feet and requiring a building permit, grading permit, plan check, or design review shall complete the Landscape Project Application (LPA) described in Section 17.80.040, and comply with all other Sections, except Section 17.80.090, of this Chapter.
- D. Existing Landscapes: Existing landscapes are only subject to the provisions in Section 17.80.110, "Provisions for Existing Landscapes" and Section 17.80.120, "Public Education".
- E. The provisions of this Chapter shall not apply to:
  - 1. Landscapes that are only temporarily irrigated for establishment purposes and landscapes that are not irrigated with a permanent irrigation system.
  - 2. Registered local, state or federal historical sites, or as determined by the City Council;
  - 3. Community gardens, botanical gardens and arboretums open to the public.

17.80.040 Landscape Project Application (LPA) Requirements. Applicant shall choose one of the two options below to comply with this Chapter:

- A. Option A: Proposed landscape project does not include any:
  - 1. Water features with more than 100 square feet of total surface area;" or
  - 2. Turf or other high water use plants, unless they qualify as a "Special Landscape Area. High water use plants are those designated as 'high water use' in the Water Use Classification of Landscape Species (WUCOLS) report<sup>1</sup>.

The applicant shall complete the following:

- 1. Project Application Sheet.
  - 2. Certification Sheets.
  - 3. Landscape Plans (See Section 17.80.060);
  - 4. Maintenance Schedule (See Section 17.80.090).
- B. Option B: Proposed landscape project does include:
    - 1. Water features with more than 100 square feet of total surface area; or

---

<sup>1</sup> Water Use Classification of Landscape Species (WUCOLS) report which is available at <http://www.water.ca.gov?wateruseefficiency/publications/> A Guide to Estimating, Part 2.

2. Turf or other high water use plants not qualifying as a “Special Landscape Area.” The Estimated Total Water Use (ETWU) for the proposed landscape shall not exceed the Maximum Applied Water Allowance (MAWA) for the site. The MAWA formula will use an ET Adjustment Factor of 0.7.

The applicant shall complete the following:

1. Project Application Sheet.
2. Certification Sheets.
3. Water Allowance Work Sheets.
4. Landscape Plans (See Section 17.80.060).
5. Maintenance Schedule (See Section 17.80.090).

An applicant requesting design review approval shall submit, at a minimum, a preliminary landscaping plan with the design review application; however, the applicant must submit all components of the Landscape Project Application (LPA) concurrently with the application for building permit or grading permit for the project.

The Community Development Director or his/her designee shall review each LPA for compliance with the provisions of this Chapter and may withhold issuance of zoning approval for a building permit or grading permit for which its corresponding LPA does not comply with this Chapter.

17.80.050 Water Efficient Landscape Standards. The proposed landscape design shall incorporate the most recent acceptable best management practices as determined by the City of Clayton for water-efficient landscape design and shall comply with the following standards:

A. Plant Design:

1. Plants selected shall be well suited to the area’s climate and the site’s soil conditions.
2. The proposed landscape shall be designed so that distinct hydrozones are irrigated separately by one or more irrigation valves. A hydrozone is an area with similar sun exposure, irrigation precipitation rate, soil conditions, slope, and plant material with similar water needs. Refer to the WUCOLS report for plant water needs.
3. Plants shall be spaced appropriately based on their expected mature spread.
4. If the geometry of the planting area does not conform to the spray pattern of the sprinkler, resulting in overspray onto the adjacent pavement, then overhead irrigation shall not be used.

5. Plants shall be spaced so that at mature size they do not block sprinklers.
6. Turf shall not be planted on slopes steeper than 15%.
7. Turf shall not be planted in any medians or in areas narrower than 8'0".

B. Irrigation System:

The irrigation system design shall comply with the following requirements:

1. Smart irrigation controller(s) using one of the below methods shall be required on all irrigation systems:
  - a. Daily evapotranspiration data; and
  - b. Daily soil moisture sensor data.
2. Specify a dedicated landscape water meter for landscapes with an irrigated area greater than 5,000 square feet, or per retail water supplier regulations.
3. Recycled water shall be used for landscape irrigation if it is available at the project site.
4. Specify technology and practices to prevent runoff, low head drainage, overspray, or other water waste.
5. Overhead irrigation shall not be permitted within 12" of any non-permeable surface.
6. Specify sprinkler heads and other emission devices that have matched precipitation rates within each irrigation zone. No irrigation zone shall specify a precipitation rate greater than 1.2 inches per hour. On slopes steeper than 25%, the specified precipitation rate shall not exceed 0.75 inches per hour.
7. Specify irrigation controls so the dynamic water pressure at sprinkler head or other emission device is within manufacturer's recommended optimal operating range.
8. No overhead irrigation shall be specified in planting areas less than 8'0" wide in any dimension, unless demonstrated that water waste will not occur.
9. Specify a manual shut-off valve for each point of connection and specify that each shut-off valve be identified on the controller map.
10. Prepare a controller map and programming table and specify that this be stored in the controller cabinet. The controller map shall visually differentiate each controller zone. For each irrigation valve, the controller programming table shall list the plant water requirement (high, medium,

low, or very low), the sun exposure, irrigation emission device type, precipitation rate, station flow rate, optimal pressure, soil type, infiltration rate, square foot area, and degree of slope.

11. Each irrigation valve shall control irrigation to only one distinct hydrozone. A hydrozone is an area with similar sun exposure, irrigation precipitation rate, soil conditions, slope, and plant material with similar water needs. Refer to the WUCOLS report for plant water needs.
12. Specify a separate irrigation valve and hydrozone for the top of a slope and the bottom of a slope.

C. Water Features:

1. All water features shall have re-circulating water systems.
2. Fountain(s) shall be designed so that no wind drift or overspray occurs.

D. Grading and Soil Preparation:

The landscape design shall:

1. Comply with Storm Water Control Plan requirements (C.3), if applicable.
2. Be designed to improve or maintain the infiltration rate of landscape soils typical of their soil texture and minimize soil erosion.
3. Be designed to avoid drainage onto non-permeable hardscapes within the property lines and prevent runoff of all irrigation and natural rainfall outside property lines.
4. Only specify soil amendments if appropriate for the selected plants.
5. Specify a minimum two-inch layer of mulch shall be applied on all exposed soil surfaces of planting areas unless there is a horticultural reason not to use mulch in a portion of the planting area. Mulch, such as shredded bark, shall be specified in bioretention areas so that they will stay in place during rain events.

17.80.060 Landscape Plan Requirements. The Landscape plans shall demonstrate that all the water-efficient landscape standards have been met:

A. The planting plan shall:

1. Identify Special Landscape Areas. Special Landscape Areas include: landscape dedicated solely to edible plants, such as vegetable gardens or orchards, areas irrigated with recycled water, water features using recycled water, cemeteries, and areas dedicated to active play, such as parks, sports fields, and golf courses where turf provides a playing surface.

2. Identify plants by their common and botanical names.
  3. Identify type and surface area of water features.
- B. The irrigation plan shall:
1. Show the location and size of the landscape irrigation water meter.
  2. Show the location, type and size of all components of the irrigation system, including, but not limited to, controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices.
  3. Identify the static water pressure at the point of connection to the public water supply.
  4. Identify the flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station.
- C. Landscape plans shall include details and specifications reflecting the most recent acceptable best management practices as determined by the City of Clayton for water-efficient landscape design.

17.80.070 Landscape Water Audit Requirements. A landscape water audit shall be performed to ensure that the installed landscape meets the requirements of this Chapter.

- A. A landscape water audit shall be conducted within thirty (30) days of the start of the landscape maintenance period or, if no maintenance period, then upon completion of the landscape installation. An EPA WaterSense certified Irrigation System Auditor shall conduct the landscape audit and submit a Certificate of Compliance, Landscape Water Audit sheet.
- B. The Landscape Auditor shall inform the applicant of all non-compliance issues with the Ordinance. This shall include, but not be limited to, all items listed on the Certificate of Compliance, Landscape Water Audit sheet.
- C. All non-compliance issues shall be repaired and the site shall be re-audited for compliance with the criteria of this Chapter prior to final inspection/permit and final sign off.

17.80.080 Certifications. Water Efficiency Landscape Checklist/Certification sheets will be part of the Landscape Project Application (LPA) requirements.

- A. The person(s) creating the landscape design shall complete the Certificate of Compliance, Landscape Design sheet certifying the landscape has been designed to comply with the criteria of this Chapter.

- B. The Landscape Contractor/Installer shall complete the Certificate of Compliance, Landscape Installation sheet certifying the landscape has been installed, as specified in the Landscape Plans, and complies with the criteria of this Chapter.
- C. The Landscape Auditor shall complete the Landscape Certificate of Compliance, Water Audit sheet certifying the landscape and irrigation system have been installed, as specified in the Landscape Plans, and comply with the criteria of this Chapter.
- D. The Maintenance Contractor/Person shall complete the Certificate of Compliance, Landscape Maintenance sheet certifying the landscape maintenance contractor agrees to manage the property using less water than the Maximum Applied Water Allowance.
- E. While standards applications are not required for Municipality and Public Agency Projects involving “City” projects conducted by City staff, certifications (i.e., Design, Installation, Maintenance, and Auditing) are needed and the City’s Maintenance Supervisors may sign-off on them.

17.80.090 Landscape and Irrigation Maintenance Schedule. The landscape designer or installer shall develop a landscape maintenance specification and schedule for the landscape project that is consistent with the most recent acceptable best management practices as determined by the City of Clayton for landscape maintenance. Schedules shall be submitted with the Certification of Completion.

- A. An annual landscape maintenance schedule shall include at least the following: routine inspection; adjustment and repair of the irrigation system and its components; aerating turf areas; replenishing mulch; seasonal pruning; weeding in all landscape areas; and removing obstructions to emission devices;
- B. Repair of all irrigation equipment shall be done with the originally installed components or their equivalents;
- C. Project shall be irrigated so that total annual water applied is less than or equal to the Maximum Applied Water Allowance (MAWA) (if applicable).

17.80.100 Stormwater Management. The proposed landscape shall comply with the requirements of the National Pollutant Discharge Elimination System intended to implement storm water best management practices into the planting, irrigation, and grading plans to minimize runoff and to increase on-site retention and infiltration.

17.80.110 Provisions for Existing Landscapes. This section applies to existing landscapes that were installed before [*insert effective date of Ordinance*].

- A. Irrigation Survey and Irrigation Water Use Analysis

To ensure the efficient use of landscape water, each owner of property in the City of Clayton is encouraged to utilize resources and services, such as

irrigation surveys and landscape water use analyses that are offered by the local retail or wholesale water utility.

B. Water Waste Prevention

Each owner of property in the City of Clayton shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff from the target landscape areas due to excessive irrigation or inappropriate run times related to time of day, seasonal and/or variable weather conditions, low head drainage, overspray, or other similar conditions where water flows onto an adjacent property, walks, roadways, parking lots, or structures.

17.80.120      Public Education.

- A. All new model homes that are landscaped shall use signs, brochures and other written information to demonstrate the principles of water-efficient landscapes that are described in this Chapter.
- B. The architectural guidelines of a common interest development, which include homeowner associations, community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit conditions that have the effect of prohibiting the use of low water use plants as a group.
- C. For new homes/commercial developments, applicant/owner is required to provide the irrigation controller map and programming table and annual maintenance schedules to new tenants or owners at transfer of ownership/maintenance responsibility.
- D. The City of Clayton shall provide on its website links to resources that offer information about the principals of designing, installing, and maintaining water-efficient landscapes. An example of a link is to the local water utility, the Contra Costa Water District, and the landscape water conservation information that Agency offers.”



## Water Allowance Work Sheets

Water Allowance Work Sheets are used to calculate water use in the form of Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU) for the landscape project.

These sheets are required if the project has turf or other high water use plants not qualified as a 'Special Landscape Area' or has water feature(s) with more than one hundred (100) total square feet of surface area. This is referred to as Option B of the Landscape Project Application Requirements of the Water-Efficient Landscape Ordinance.

Special Landscape Area is defined as an area of the landscape dedicated solely to edible plants, areas irrigated with recycled water, water features using recycled water, and areas dedicated to active play, such as parks, sports fields and golf courses where turf provides a playing surface.

The ETWU for the project can not exceed the MAWA for the project.

Calculate the MAWA for the project using the below formula and Factors:

$$\text{MAWA} = (\text{ETo}) (0.62) [(0.7 \times \text{LA}) + (0.3 \times \text{SLA})]$$

Where:

MAWA	=	Maximum Applied Water Allowance (gallons per year)
ETo	=	Reference Evapotranspiration (inches per year)
0.62	=	Conversion Factor (to gallons)
0.7	=	ET Adjustment Factor (ETAF)
LA	=	Landscape Area including SLA (square feet)
0.3	=	Additional Water Allowance Factor for SLA
SLA	=	Special Landscape Area (square feet)

Step one: Multiple total project landscape area by 0.7, the ET Adjustment Factor

LA	Multiply	0.7	Equals	0.7 x LA
	x		=	

Step two: Multiple total Special Landscape Area by 0.3, the Additional Water Allowance Factor

SLA	Multiply	0.3	Equals	0.3 x SLA
	x		=	

Step 3: Add Adjusted LA and adjusted SLA Water Allowances

0.7 x LA	Plus	0.3 x SLA	Equals	0.7 x LA + 0.3 SLA
	+		=	

Step four: Multiple Reference Evapotranspiration by the conversion factor and Total Adjusted Water Allowance

ET <sub>o</sub>	Multiply	Conversion factor	Multiply	0.7 x LA + 0.3 x SLA	Equals	<b>MAWA</b>
	x	0.62	x		=	

Calculate the ETWU for the project using the below formula and Factors. A Hydrozone Table will need to be completed prior to completing the ETWU calculation, to determine the total area by hydrozone type.

$$ETWU = (ET_o)(0.62) \left( \frac{PF \times HA}{0.71} + SLA \right)$$

Where:

- ETWU = Estimated Total Water Use per year (gallons)
- ET<sub>o</sub> = Reference Evapotranspiration (inches)
- PF = Plant Factor (see Definitions)
- HA = Hydrozone Area [high, medium, low and very low water use areas] (square feet)
- SLA = Special Landscape Area (square feet)
- 0.62 = Conversion Factor
- 0.71 = Irrigation Efficiency

Step one: Multiple the Plant Factor by the total area of that plant water need category

Plant Factor	Multiply	Total Hydrozone Area	Equals	PF x HA
High (0.8)	x		=	
Medium (0.5)	x		=	
Low (0.3)	x		=	
Very Low (0.1)	x		=	

Step two: Add up the Total Adjusted Hydrozone Allowances

High PF x HA	Plus	Medium PF x HA	Plus	Low PF x HA	Plus	Very Low PF x HA	Equals	Total PF x HA
	+		+		+		=	

Step three: Divide the Total Adjusted Hydrozone Allowance by 0.71, minimum Irrigation Efficiency

Total PF x HA	Divided by	Irrigation Efficiency	Equals	Total PF x HA / 0.71
	/	0.71	=	

Step four: Add the SLA Area to the total (PF x HA / 0.71)

Total PF x HA / 0.71	Plus	Total Special Landscape Area	Equals	Total PF x HA / 0.71 + SLA
	+		=	

Step five: Multiply the yearly ETo times the Conversion Factor times the total (PF x HA / 0.71 + SLA)

Yearly ETo	Multiple	Conversion Factor	Multiple	PF x HA / 0.71 + SLA	Equals	ETWU (must be equal to or lower than the MAWA)
	x	0.62	x		=	

Record Project's square footage, by station number, on the Hydrozone Table, under the correct category. Use WUCOLS to determine the correct hydrozone category for the plants watered by each irrigation valve. Use the highest water needing plant irrigated by a valve to set that valve's water need category.

Hydrozone Table

Station Number	High Water Needs (sq. Ft.)	Medium Water Needs (Sq. Ft.)	Low Water Needs (Sq. Ft.)	Very Low Water Needs (Sq. Ft.)	Special Landscape Area (Sq. Ft.)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					

20					
21					
22					
23					
24					
Totals					



## Certificate of Compliance Landscape Installation

Project name: \_\_\_\_\_

Project Address/Parcel No.: \_\_\_\_\_

Applicant Name: \_\_\_\_\_

Applicant Address: \_\_\_\_\_

- Installed Project Area Measurements match those of the Landscape Design Plans.
- Plant material is the same as that specified in the plans and any substitutes are determined to be equivalent or less in water need, per *Water Use Classification of Landscape Species (WUCOLS)*.
- Installation incorporates most recent acceptable best management practices for water efficient landscape design.
- Any plant substitutes are well suited to the local climate and soil conditions.
- All plants are located per the design plan.
- Irrigation hydrozones are the same as plans and any field-adjusted irrigation zones were installed so that distinct hydrozones are irrigated separately by one or more irrigation valves.
- Changes to irrigation system or plant material shall maintain distinct hydrozones that are irrigated separately by one or more irrigation valves
- No turf is installed in medians, areas narrower than eight feet, or on slopes greater than 15%.
- All irrigation equipment is the same as specified, and any substitutes are equivalent.
- Automatic irrigation controller(s) installed utilize ET or soil moisture sensors.
- Point of connection (POC) is the same as specified in the plans.
- System has been installed and tested to prevent run-off, low head drainage, and overspray.
- No overhead irrigation is installed within 12 inches of any non-permeable surface.
- Sprinkler stations have matched precipitation rates for each irrigation zone, with a maximum precipitation rate of 1.2 inches per hour or 0.7 inches per hour for all slopes of 25% or greater.
- No overhead irrigation is used in areas less than eight feet wide in any direction.
- Manual shutoff valves are specified at each POC.
- A controller map and programming table were placed in all irrigation controller cabinets.
- Separate irrigation valves were installed and hydrozones created for the top of a slope and bottom of a slope.

- All water systems have functioning re-circulating water systems.
- Fountain(s) and their nozzles are maintained so that no wind drift or overspray will occur.
- Installation complies with Storm Water Control Plan requirements.
- Installation work minimized any soil erosion and maintained or improved the landscape soil's infiltration rate.
- Installation avoids drainage onto non-permeable hardscapes within the project and prevents run-off irrigation and rainfall outside property lines.
- Only specified soil amendments that are appropriate for the selected plants were used.
- A minimum of 2 inches of mulch for all exposed soil surfaces in non-turf planting areas.

**I/We certify that the landscape has been installed as specified in the landscape plans for the above-listed project to comply with the Water-Efficient Landscape Standards and Landscape Plan Requirements of the City of Clayton Water Efficient Landscape Ordinance.**

\_\_\_\_\_  
Installer's Name

\_\_\_\_\_  
Company Name

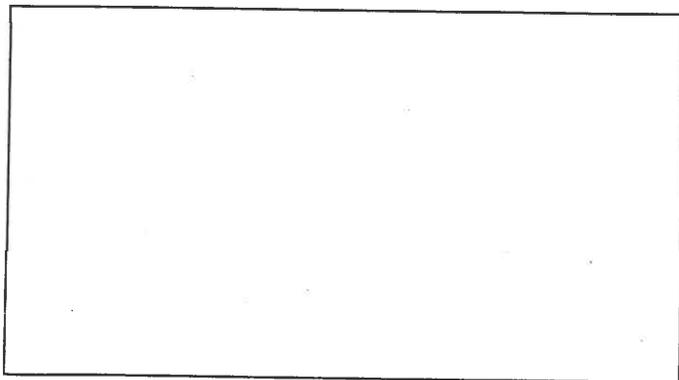
\_\_\_\_\_  
Address

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
E-Mail

\_\_\_\_\_  
Professional License Number

\_\_\_\_\_  
Date



Professional Stamp



## Certificate of Compliance Landscape Water Audit

Project name: \_\_\_\_\_

Project Address/Parcel No.: \_\_\_\_\_

Applicant Name: \_\_\_\_\_

Applicant Address: \_\_\_\_\_

- Installed Project Areas match those of the Landscape Design Plans.
- Plant material is the same as that specified on the plans, with any plant material substitutes being equivalent or less in water need per *Water Use Classification of Landscape Species (WUCOLS)*.
- Project has incorporated most recent acceptable best management practices for water-efficient landscape design.
- Plants used are well suited to the local climate and soil conditions.
- Plants are spaced appropriately based on their expected mature size.
- Overhead irrigation was not used where it would result in overspray.
- Plants are spaced so at mature size they do not block sprinklers.
- Distinct hydrozones are irrigated separately by one or more irrigation valves.
- No turf is planted in medians, areas narrower than eight feet, or on slopes greater than 15%.
- Smart irrigation controller(s) utilizing ET or soil moisture sensors are installed.
- Point of Connection (POC) is same as specified in plans.
- Recycled water is used, if available.
- Irrigation system has no runoff, low head drainage, and overspray.
- No overhead irrigation is installed within 12 inches of any non-permeable surface.
- Sprinkler stations have matched precipitation rate for each irrigation zone, with a maximum precipitation rate of 1.2 inches per hours or 0.7 inches per hour for all slopes of 25% or greater.
- Dynamic water pressure at sprinkler heads and other emission devices is within manufacturer's specifications.
- No overhead irrigation is installed in areas less than eight feet wide in any direction.
- Manual shutoff valves are installed at each POC.
- Controller map(s) and programming table(s) are in all irrigation controller cabinets.
- Separate irrigation valves are installed for the top of a slope and bottom of a slope, and designated as separate hydrozones.
- A re-circulation system has been installed for all water features.
- Fountains and their nozzles have no wind drift or overspray.

- Project complies with Storm Water Control Plan requirements.
- Site's landscape soils infiltration rate is the same as or better than native soil of area.
- Project does not drain onto non-permeable hardscapes within the project, and no runoff of irrigation and rainfall can occur outside property lines.
- Only specified soil amendments that are appropriate for the selected plants were used on project.
- A minimum of two inches of mulch is installed for all exposed soil surfaces in non-turf planting areas.

**I/We certify that the landscape for the above-listed project complies with the Landscape Water Conservation Standards of the City of Clayton Landscape Water Conservation Ordinance.**

\_\_\_\_\_  
Auditor's Name

\_\_\_\_\_  
Company Name

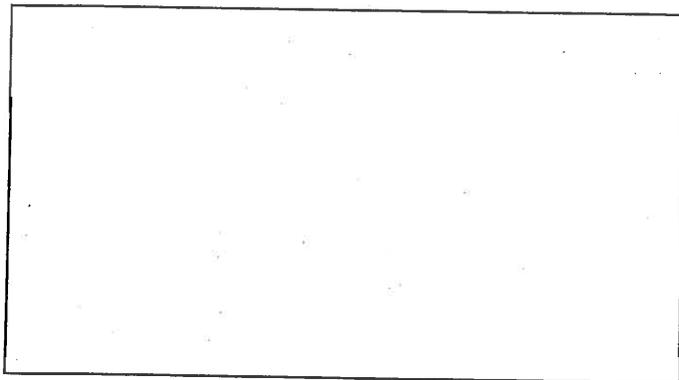
\_\_\_\_\_  
Address

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
E-Mail

\_\_\_\_\_  
Professional License Number

\_\_\_\_\_  
Date



Professional Stamp

## **INTRODUCE ORDINANCE AMENDING THE MUNICIPAL CODE TO INCLUDE THE 2013 STATE REGULATORY BUILDING CODES.**

One of the most significant changes in the California Building Code is the reformatting of the accessibility standards for non-residential buildings to correspond to the format used by the Americans with Disabilities Act.

The new format is easier for staff and designers to understand and clarifies areas of regulation that were not well-defined in the previous versions. The regulations now require temporary construction trailers that are used for offices, plan reading, and/or administrative functions to be fully accessible and temporary trailers used solely for construction material storage not to be subject to the accessibility regulations. This is a significant change as most construction sites have trailers for these uses and will be subject to these provisions.

One important change in both the California Building Code and the California Residential Code is that the codes now exempt fences 7 feet or less in height from requiring a building permit to construct, regardless of the material used for the fence. This is a relaxation of the current code requirements, which exempts fences up to 6 feet in height.

The California Green Building Standards Code (CALGreen) has undergone significant change. It now addresses residential buildings four stories or more in height. The new code now includes additions, remodels, and improvements to both residential and non-residential projects as triggers to the green building standards. The current 2010 California Green Building Standards Code only applies to brand new residential buildings three stories or less and to brand new non-residential buildings. Thus, the new standards will have a significant impact on alterations, additions, and tenant improvement projects in the City.

An additional change in the CALGreen regulations is that it will require single-family residential buildings undergoing permitted alterations, additions, or improvements to replace non-compliant plumbing fixtures with water-conserving plumbing fixtures. It will also require multifamily residential real property and commercial real property to replace non-complying plumbing fixtures with low-flow fixtures under any of the following circumstances:

- Building additions that would increase the floor area by more than 10 percent would require the plumbing fixtures throughout the building to be upgraded.
- Alterations or improvements greater than \$150,000 would require existing plumbing fixtures that service the area of alterations or improvements to be upgraded.
- Regardless of the cost of construction of the alteration or improvement, existing plumbing fixtures in the same room undergoing an alteration or improvement would be required to be upgraded. Fixture replacements under these conditions would be required prior to issuance of a certificate of occupancy or final of the permit in all cases. These CALGreen changes essentially implement the requirements of Civil Code Sections 1101.1 through 1101.8.

The Chief Building Official will need to create policies around what permitted work will trigger these provisions. In order to have consistency between jurisdictions, the Chief Building Official will be working with TUCC, the California Building Officials (CALBO) organization, and the development community to help develop consistent interpretations and policies in the region. The lack of specific definitions of terms for alterations or improvements, as they are used in the CALGreen code and Civil Code, generates the need for the Chief Building Official to interpret the definitions and the intent in these cases. As an example, re-roof permits are typically considered repairs and not considered to be alterations or improvements.

CALGreen continues to offer local jurisdictions the option of adopting more stringent green building standards by adopting one of two code-specified and defined tiers (Tier 1 and Tier 2) that increase the level of green building compliance. Staff is recommending that the City not adopt additional requirements over and beyond the basic mandatory requirements during this code adoption cycle to allow staff time to evaluate the CALGreen mandatory regulations during this cycle and observe the impacts on local development. As part of the City's adopted 2012 Climate Action Plan, staff will be considering bringing to City Council in FY2014-15 a proposed ordinance to incorporate Tier 1 into the CALGreen requirements.

Note that the 2013 California Fire Code is not part of this adoption. The Fire District will be taking proposed amendments to the County Board of Supervisors for approval over the next couple of months. Staff will be returning to the City Council sometime before the end of the first quarter of calendar year 2014 with the Fire District's amendments for ratification and adoption shortly after the Board of Supervisors' approval. The Fire Marshal has indicated to staff that the proposed Fire District amendments for the 2013 California Fire Code will not be changed significantly from the current amendments to the 2013 edition. In fact, the technical amendments regulating photovoltaic construction have been incorporated into the national fire code and, therefore, will be removed from the amendments. There will only be two administrative changes, per the Fire Marshal. The Fire Marshal also indicated that there will not be any break in Fire District service if the City of Concord postpones adoption of the 2013 California Fire Code.

#### ***Additional Code Adoption and Updates***

To provide for the administration and enforcement of all the California construction codes required to be enforced by the City of Concord, staff is also proposing for the first time the local adoption of the 2013 editions of the California Energy Code, California Historic Building Code, and Existing Building Code. By adopting these codes, the City will have the administrative remedies in place to enforce the codes when violations occur. No amendments to these codes are proposed. To provide consistent and up-to-date codes, the Swimming Pool, Spa, and Hot Tub code of Chapter 14 Article XI is also being updated from the 1997 edition to the 2012 edition.

**ORDINANCE NO. 452**

**AN ORDINANCE AMENDING THE CLAYTON MUNICIPAL CODE, CHAPTERS 15.01, 15.02, 15.03, 15.04, AND 15.05 TO BRING THE CITY'S BUILDING, ELECTRICAL, PLUMBING AND MECHANICAL CODES INTO COMPLIANCE WITH AND THEREBY ADOPT THE 2013 EDITIONS OF THE RESPECTIVE CALIFORNIA BUILDING STANDARDS CODES WITH CHANGES, ADDITIONS, AND DELETIONS AS ALLOWED BY STATE LAW (ZOA-06-13)**

**THE CITY COUNCIL  
City of Clayton, California**

**THE CITY COUNCIL OF THE CITY OF CLAYTON DOES HEREBY ORDAIN AS FOLLOWS:**

**Section 1      Purpose, Intent, and Findings**

This ordinance is adopted by the City Council of the City of Clayton ("City") to adopt the California Building Standards Commission's adopted and published 2013 Building Standards Code, which is comprised of the 2013 California Building, Residential, Green Building Standards, Electrical, Plumbing, and Mechanical codes. This Ordinance adopts the 2013 California Building Code (Volume I & Volume II), the 2013 California Residential Code, the 2013 California Green Building Standards Code, the 2013 California Electrical Code, the 2013 California Plumbing Code, and the 2013 California Mechanical Code, with changes, additions, and deletions that are necessary because of unique local conditions as set forth in Exhibit A to this Ordinance. It is adopted to mirror the Codes of the County of Contra Costa as required by the contract entered into between the City of Clayton and the County of Contra Costa wherein the County Building Inspection Division provides permitting and enforcement of these Codes for the City of Clayton. As of the effective date of this Ordinance, the provisions of this Building Code are controlling and enforceable within the limits of this jurisdiction. Further, this Ordinance is adopted pursuant to Health and Safety Code sections 17922, 17958, 17958.5, and 17958.7, and Government Code sections 50020 through 50022.10, based upon the findings set forth in attached Exhibit B, which are incorporated herein by reference.

**Section 2      Action to Challenge This Ordinance**

Any action or proceeding to attack, review, set aside, void or annul this ordinance must be commenced and the service made on the City no later than ninety (90) days after its effective date.

**Section 3      Conflicting Ordinances Repealed**

Any ordinance or part thereof, or regulations in conflict with the provisions of this ordinance, are hereby repealed. The provisions of this ordinance shall control with regard to any provision of the Clayton Municipal Code that may be inconsistent with the provisions of this ordinance.

**Section 4      Severability**

If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The Clayton City Council has declared that it would have passed this ordinance and each section, subsection, sentence, clause or phrase thereof irrespective of the fact that any one or more section, subsection, sentence, clause or phrase thereof be declared unconstitutional, invalid or ineffective.

**Section 5      Public Hearing and Notice**

The City held a public hearing on February 4, 2014 at which time all interested persons had the opportunity to appear and be heard on the matter of adopting this ordinance. The City published notice of the aforementioned public hearing pursuant to California Government Code Section 6066 on January 21, 2014 and January 28, 2014.

**Section 6      Effective Date and Publication**

This ordinance shall become effective thirty (30) days from and after its passage. The City Clerk shall certify to the adoption of this ordinance and shall cause a summary thereof to be published at least five (5) days prior to the meeting at which the proposed ordinance is to be adopted and shall post a certified copy of the proposed ordinance in the office of the City Clerk, and within fifteen (15) days of its adoption, shall cause a summary of it to be published, including the vote for and against the same, and shall post a certified copy of the adopted ordinance in the office of the City Clerk, in accordance with California Government Code Section 36933.

**Section 7      Penalty for Violations**

Any violation of this ordinance shall be subject to applicable provisions of Clayton Municipal Code Section 1.20.010. Penalty for Violations - Infractions and Misdemeanors.

**Section 8      CEQA**

The City Council finds that it can be seen with certainty that adoption of this ordinance will not have a significant adverse effect on the environment and is therefore exempt from California Environmental Quality Act pursuant to Section 15061(b)(3) of the CEQA Guidelines. Staff is directed to file a notice of exemption within five (5) days of the adoption of this ordinance.

The foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Clayton held on the 7<sup>th</sup> day of January, 2014.

Passed, adopted and ordered posted at a regular meeting of the City Council of the City of Clayton on February 4, 2014, by the following vote:

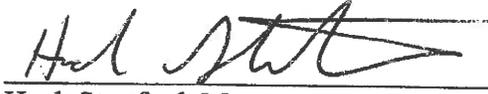
AYES:

NOES:

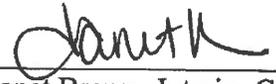
ABSENT:

ABSTAIN:

The City Council of Clayton, California

  
\_\_\_\_\_  
Hank Stratford, Mayor

ATTEST:

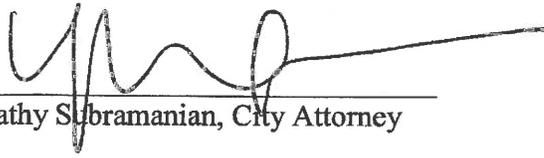
  
\_\_\_\_\_  
Janet Brown, Interim City Clerk

**Attachments:**

- Exhibit A: Amended Chapter 15.09 of the Clayton Municipal Code
- Exhibit B: Findings for Adoption of Ordinance No. 452

X:\Com Dev\Z O A\2013\ZOA-08-13 - 2013 Building Codes\Ord.No.452 - 2013 Bldg. Code - final.docx

APPROVED AS TO FORM:



---

Malathy Subramanian, City Attorney

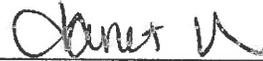
APPROVED AS TO ADMINISTRATION:



---

Gary A. Napper, City Manager

I hereby certify that the foregoing Ordinance was duly introduced at a regular meeting of the City Council of the City of Clayton held on the 7<sup>th</sup> day of January, 2014 and was duly adopted, passed and ordered posted at a regular meeting of the City Council held on February 4, 2014.



---

Janet Brown, Interim City Clerk

# EXHIBIT A

## Chapter 15.01

### GENERAL PROVISIONS

#### Sections:

- 15.01.002 Application of general provisions.
- 15.01.020 Reference to officials in adopted codes.
- 15.01.101 Construction working hours.
- 15.01.202 Permits.
- 15.01.204 Fees.
- 15.01.206 State license required.
- 15.01.208 Misrepresentations in permit application.
- 15.01.210 Permit not approval of violations or determination of ownership.
- 15.01.211 Liability of City.
- 15.01.212 Expiration of permit.
- 15.01.214 Refunds.
- 15.01.402 Abatement procedure.
- 15.01.404 Stop work orders.
- 15.01.406 Entry on premises.
- 15.01.408 Correction notice.
- 15.01.410 Withhold permit.
- 15.01.412 Disconnection of utility service.
- 15.01.414 Power companies to notify City building official.
- 15.01.416 Enforcement of state law.
- 15.01.602 Reference to officials in adopted codes
- 15.01.604 General safety.
- 15.01.606 Liability of county.

15.01.002 Application of general provisions. These general provisions shall apply to all Chapters of this Title.

15.01.020 Reference to officials in adopted codes. Whenever reference is made in this Title or the codes adopted by reference in this title, to the “building inspector”, “inspector”, “electrical inspector”, “plumbing inspector”, “mechanical inspector”, “building official”, “Director of the Building Inspection Department”, “City building inspector” or “City building official”, it shall mean the Contra Costa County director of building inspection, county building official, building inspector, or any of his or her duly authorized deputies during such period when the County of Contra Costa is providing building inspection services for the City of Clayton an while such officials are acting as the City’s representatives in such matters. These terms shall also include the City Manager, Community Development Director or City Engineer and their designees when enforcing the provisions of this title. Furthermore, references to “state” shall mean the State of California, to “Housing Act” shall mean the Housing Act of this state, to “county

building official, administrative authority, or fire chief” shall mean the director of building inspection of Contra Costa County, and to “county” shall mean the County of Contra Costa.

15.01.101 Construction working hours. All grading and excavation, construction, demolition, renovation, and other works of improvement within the City of Clayton and the on-site maintenance and servicing of construction equipment in the City shall occur only between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday. Any such work beyond said hours and days is strictly prohibited unless previously specifically authorized in writing by the City Engineer or designee or by project conditions of approval. This provision shall not apply to homeowner home improvements.

15.01.202 Permits. No person, firm, or corporation shall erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish any building or structure regulated by this title, or cause the same to be done, or install or connect any equipment regulated by this title, or perform any work regulated by this title, without first obtaining the necessary permits from the City building official.

15.01.204 Fees.

- (a) Fees shall be paid with the submission of an application for any permit required by this title. No application may be filed and accepted as complete until all required fees have been paid. Any permit issued without the payment of all required fees is invalid and of no force and effect. Permit fees and other fees will be in amounts set forth in fee schedules adopted by the City Council and the Contra Costa County Board of Supervisors.
- (b) A person who starts any work for which a permit is required under this title without first having obtained a permit shall, if later issued a permit for such work, pay double the permit fee. This provision does not apply to emergency work if the City building official determines that the emergency work was urgently necessary and that it was not practicable to obtain a permit before starting the work. In all such cases, a permit must be obtained as soon as it is practicable to do so, and if there is an unreasonable delay in obtaining the permit, a double fee shall be charged.

15.01.206 State license required.

- (a) No permit shall be issued to a person to do or cause to be done any work regulated by this title except to the holder of a valid, unexpired and unrevoked license in good standing, issued under Chapter 9, Division 3 of the California Business and Professions Code. Permits may be issued to persons and for work exempt from that statute, and as otherwise provided in this section.
- (b) Building permits. A building permit may be issued to a person holding a valid, unexpired, unrevoked California general contractor’s license. If the permit applicant is the owner of the structure occupied by or designed to be occupied by the owner and the owner performs all work under the permit, a building permit may

be issued to the owner for work in a one-family dwelling used exclusively for living purposes, including the usual accessory buildings and quarters.

(c) Electrical permits.

(1) An electrical permit may be issued to a person holding a valid, unexpired, unrevoked California electrical contractor's license, or to a person holding a valid, unexpired, unrevoked California general contractor's license where the contractor is working on a permitted job and is performing two or more crafts on the permitted job. If the permit applicant is the owner of the structure occupied by or designed to be occupied by the owner and the owner performs all work under the permit, an electrical permit may be issued to the owner for work in a one-family dwelling used exclusively for living purposes, including the usual accessory buildings and quarters.

(2) Instead of a separate permit for each building, structure, premises, installation or alteration, an annual electrical permit may be issued to any person regularly employing one or more electricians for electrical work in premises owned or occupied by the applicant for the permit. In the first 15 days of each calendar month, the holder of an annual permit shall report to the City building official on all electrical work done under the annual permit during the preceding month.

(d) Plumbing permits. A plumbing permit may be issued to a person holding a valid, unexpired, unrevoked California plumbing contractor's license, or to a person holding a valid, unexpired, unrevoked California general contractor's license where the contractor is working on a permitted job and is performing two or more crafts on the permitted job. If the permit applicant is the owner of the structure occupied by or designed to be occupied by the owner and the owner performs all work under the permit, a plumbing permit may be issued to the owner for work in a one-family dwelling used exclusively for living purposes, including the usual accessory buildings and quarters.

(e) Mechanical permits. A permit for the erection, installation, moving alteration, repair or replacement of any heating or cooling equipment may be issued to a person holding a valid California warm air heating, ventilating, and air conditioning contractor's license, or to a person holding a valid, unexpired, unrevoked California general contractor's license where the contractor is working on a permitted job and is performing two or more crafts on the permitted job. If the permit applicant is the owner of the structure occupied by or designed to be occupied by the owner and the owner performs all work under the permit, a mechanical permit may be issued to the owner for work in a one-family dwelling used exclusively for living purposes, including the usual accessory buildings and quarters.

15.01.208 Misrepresentations in permit application. No person shall make a false statement or misrepresentation in or in connection with an application for a permit under this title. Any permit issued under this title may be revoked or suspended at any time by the City building official for fraud, misrepresentation or false statement contained in an

application for a permit, or for violation of this title in connection with work done under the permit.

15.01.210 Permit not approval of violations or determination of ownership. The issuance of a permit or approval of plans and specifications shall not be construed as a permit for an approval of any violation of this title or code or determination that the permittee is the owner of the subject property or otherwise authorized to do the work for which the permit has been issued. No permit presuming to give authority to violate or cancel the provisions of this title shall be valid except insofar as the work or use which it authorizes is lawful. The issuance of a permit based on plans and specifications shall not prevent the City building official from later requiring the correction of errors in the plans and specifications or from preventing building operations being carried on under the permit in violation of this title or other regulation of this City.

15.01.211 Liability of City. This title shall not be construed to impose on the City any liability or responsibility for damage resulting from defective building, plumbing, mechanical or electrical work; nor shall the City, or any official or employee of the City, be held to assume this liability or responsibility because of the inspection authorized under this title. The issuance of a building permit under this title shall not be construed as a determination by the City that the permittee has legally sufficient proprietary rights to perform the work on the property for which the permit has been issued or shall it be construed as permission or license to enter on, occupy or otherwise utilize private or non-city property without the express consent of the owner or agent in possession thereof.

15.01.212 Expiration of permit. Every permit issued by the City building official becomes void if the building or work authorized is not begun within 180 days from the permit's date, or if it is suspended or abandoned for 180 continuous calendar days without excuse satisfying the City building official as being beyond control and remedy by the permittee. Evidence of starting work shall consist of at least one required inspection within 180 days of the permit issuance date or the date the permit was suspended or the work was abandoned. Once a permit becomes void, a new permit shall be obtained before any work is commenced or recommenced, and a new permit fee shall be paid. Any permittee holding an unexpired permit may apply for a permit extension upon a showing of good and satisfactory reason acceptable to the City building official. If the permittee is unable to commence work within the time required by this section, the City building official may extend the time of the permit for a period not exceeding 180 days upon written request by the permittee. No permit shall be renewed more than once.

15.01.214 Refunds. The City building official may authorize the refund of required permit fees as follows:

- (a) Unused Building Permit. On the voiding of a permit within 60 days after issuance, no work having been done, the holder may be allowed a refund of the amount in excess of fifteen (15) dollars but not more than 80 percent of the permit fee paid. On the voiding of a permit during the period between sixty days and one year after issuance, no work having been done, the holder may be allowed a refund of the amount in excess of fifteen (15) dollars or one-half the total amount paid for the

permit, whichever is smaller. No refunds of plan check fees for issued permits shall be allowed. Any unused plumbing, electrical, or mechanical permit(s) taken in conjunction with a building permit are governed by the refund procedures in subsection (b) of this section.

- (b) Unused plumbing, electrical, or mechanical permits. No refund of deposits for these permits (including subpermits issued in conjunction with building permits, and miscellaneous permits) shall be allowed, except that on the voiding of a permit within one year after issuance, no work having been done, the holder may be allowed a refund of the amount in excess of ten (10) dollars.

15.01.402     Abatement procedure. Any condition existing in violation of this title is a public nuisance. The procedure for the abatement of any building or any other condition declared to be a public nuisance in violation of this title is the procedure specified in the Clayton Municipal Code as set forth in Chapter 8.08. As an alternative to this procedure, abatement may be performed pursuant to the procedure specified in Article 6 (Action and Proceedings) of Subchapter 1 (State Housing Law Regulations) of Chapter 1 of Division 1 of Title 25 (Housing and Community Development) of the California Code of Regulations (25 C.C.R., § 48 et seq.). That procedure is adopted by this reference as though fully set forth herein.

15.01.404     Stop work orders. Whenever any work is being done contrary to this title or any other law or regulation (including, but not limited to, the following: zoning, health, sanitation, grading, fire protection and safety, or flood control) relating to or affecting the work, the City building official may order the work stopped by notice in writing served on any persons engaged in the doing or causing of the work; and these persons shall stop work immediately until authorized by the City building official to proceed with the work. The stop work order will state the reason for the order and the conditions under which the cited work may be permitted to resume. If the work continues after the issuance of a stop work order, each day the work continues is a separate code violation.

15.01.406     Entry on premises.

- (a) Whenever it is necessary to make an inspection to enforce the provisions of this title, or whenever the City building official has cause to believe that there exists in any building or upon any premises any violation of this title or any condition that makes the building or premises unsafe, unsanitary, dangerous or hazardous, the City building official may enter the building or premises at all reasonable times to inspect or to perform the duties imposed upon the City building official by this code. If entry is refused, the City building official has recourse to every remedy provided by law to secure entry.
- (b) No person shall conceal any work until it is inspected and written approval to proceed is given. No person shall cover electrical work, or allow it to be covered, to prevent or hinder its inspection, or remove any notice not to cover placed by the City building officials.

15.01.408     Correction notice. If the City building official finds any work as out of compliance with this title, the building official will give written notice to the person engaged in the work. Within 10 days after this notice, or within any reasonable further time that the City building official may prescribe, the person doing the work shall change or remove the work or equipment as the City building official may require to make it comply fully with this division.

15.01.410     Withhold permit. The City building official may, in his or her sole discretion, withhold the issuance or reinstatement of a permit for any structure on a parcel of land concerning either or both of which there exists any violation of law or regulation (including but not limited to the following: building, grading, zoning, fire protection and safety, health, sanitation, or flood control) relating to or affecting that permit. In determining whether a permit shall be issued, the City building official will also consider whether the existing violation constitutes an unlawful occupancy or a hazard to life or property. The City building official may require correction of a violation before issuing a permit, or as a condition of issuance within a stated period of time including any extensions granted for good cause shown. Failure to comply with such condition is a ground for revocation as provided by law.

15.01.412     Disconnection of utility service.

- (a) The City building official may shut off or disconnect any or all utility service to any structure or facility or to any electrical conductor or apparatus that is in violation of any state, City or county law or regulation relating thereto or that endangers the public health, safety or welfare, or the City building official may order this done.
- (b) If the City building official finds that the violation involves an immediate danger to person(s) or properties or to the public health, safety or welfare, the City building official may have the action taken as quickly as he or she deems necessitated by the danger; otherwise the City building official will give 10 days advance notice thereof by mail to the utility and to the owner as shown on the last assessment roll and by conspicuous posting on the property; and the City building official will post notice of the orders and the action taken, which no person shall remove, tamper with or disobey. The City building official will rescind or modify such action which it becomes proper to do so in view of the danger or violation.

15.01.414     Power companies to notify City building official.

- (a) Notice. Whenever in, on or about any building any person engaged in the distribution or sale of electrical energy or natural gas sets, resets, installs or reinstalls any meter for the measurement of electrical energy or natural gas, or connects or reconnects to, or supplies or services any installation of electrical equipment or natural gas, or change the nominal voltage of electrical supply or service to any installation of electrical equipment, or changes any electrical supply or service from two-wire to three-wire or vice versa, or from single-phase to polyphase or vice versa, or from direct current to alternating current or vice versa,

that person shall within two (2) days thereafter, exclusive of Sundays and holidays, give written notice thereof to the City building official specifying the location and address of the installation affected.

- (b) **Thirty-Day Exception.** This notice need not be given for work expressly approved by the City building official within 30 days after inspection approval.
- (c) **Authorization Required.** No person engaged in the distribution or sale of electrical energy shall connect a distribution system, including windpower generators, or any live supply or service conductor(s) therefrom, to any electrical equipment in, on or about any building or cause or allow any energizing of such connections, including windpower or emergency/stand by electrical generation until the City building official inspects the electrical equipment and authorizes such connections. No gas utility provider engaged in the distribution or sale of natural gas shall connect a distribution system to any natural gas equipment in, on or about any building until the City building official inspects the natural gas installation and authorizes such connections.
- (d) **Permit required.** A permit shall be obtained from the City building official to restore electrical or gas service to any structure that has been without such service for 90 days or more. The City building official will notify the servicing utility that the electrical service equipment and associated wiring has been inspected and approved before electrical or gas service may be reinstated.
- (e) **Waiver.** The City building official may, at his or her discretion, temporarily or permanently waive any or all requirements of this article by giving written notice of such waiver to all persons involved. The City building official may likewise at any time revoke such waiver by similar notice.

15.01.416     **Enforcement of state law.** By authority of Section 18300 of the Health and Safety Code, the county assumes the responsibility for enforcement of Part 2.1 of Division 13 of the Health and Safety Code relating to mobilehomes and mobilehome parks, including regulations adopted thereunder and contained in Chapter 2 (Mobilehome Parks Act) of Division 1 of Title 25 of the California Code of Regulations (25 C.C.R. §§ 1000 et seq.) and to the extent allowed by such laws and regulations, may enforce by the remedies allowed under Division 14 of this code.

15.01.602     **Reference to officials in adopted codes.** In the codes adopted by reference in this title, references to “city” mean the City of Clayton; to “city council or mayor” mean the City Council and Mayor of Clayton; to “state” mean the state of California; and to “building official,” “chief building inspector,” “administrative authority,” or “authority enforcing this code” mean the director of building inspection referred to in Section 15.01.020.

15.01.604     **General safety.** All work shall be performed, and all equipment shall be constructed, installed, protected, operated, repaired, used and maintained, in accordance with the requirements of this division and in such manner as to be reasonably safe and

free from risk of accident or injury to person or property. No person shall act contrary to this general regulation or neglect to act as required hereby.

15.01.606     Liability of county. This title shall not be construed to impose on the county any liability or responsibility for damage resulting from defective building, plumbing, mechanical or electrical work; nor shall the county, or any official or employee of the county, be held to assume this liability or responsibility because of the inspection authorized under this title. The issuance of a building permit under this title shall not be construed as a determination by the county that the permittee has legally sufficient proprietary rights to perform the work on the property for which the permit has been issued nor shall it be construed as permission or license to enter on, occupy or otherwise utilize private or noncounty property without the express consent of the owner or agent in possession thereof.

CHAPTER 15.02

2013 CALIFORNIA BUILDING CODE WITH AMENDMENTS

Sections:

- 15.02.001 Adoption.
- 15.02.002 Amendments (California Building Code).
- 15.02.003 Amendments (California Residential Code).

15.02.001 Adoption.

- (a) The building code of this City is the 2013 California Building Code (California Code of Regulations, Title 24, Part 2, Volumes 1 and 2), the 2013 California Residential Code (California Code of Regulations, Title 24, Part 2.5), and the 2013 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), as amended by the changes, additions, and deletions set forth in this ordinance and Division 72 of the Contra Costa County Code.
- (b) The 2013 California Building Code, with the changes, additions, and deletions set forth in this chapter and Division 72 of the Contra Costa County Code is adopted by this reference as though fully set forth in this ordinance.
- (c) The 2013 California Residential Code, with changes, additions, and deletions set forth in this chapter and the previously referenced Division 72, is adopted by this reference as though fully in this ordinance.
- (d) The 2013 California Green Building Standards Code, with changes, additions, and deletions set forth in this chapter and the previously referenced Division 72, is adopted by this reference as though fully in this ordinance.
- (e) At least one copy of this building code is now on file with the building inspection division, and the other requirements of Government Code section 50022.6 have been and shall be complied with.
- (f) As of the effective date of this ordinance, the provisions of the building code are controlling and enforceable within the City.

15.02.002 Amendments. The 2013 California Building Code (“CBC”) is amended by the changes, additions, and deletions set forth in this chapter and Division 72 of the Contra Costa County Code. Section numbers used below are those of the 2013 California Building Code.

- (a) CBC Chapter 1 is amended by the provisions of Division 72 Section of this code and as follows:

- (1) Sections 103, 109, 112, 113, 114, and 116 of CBC Chapter 1 are deleted.
- (2) Section 105.2 (Work Exempt from Permit) of CBC Chapter 1, subsection 4 is amended to provide that a building permit is not required for the following work:

4. Retaining walls that are not more than three feet in height, measured from the top of the footing to the top of the wall, unless supporting a surcharge or ground slope exceeding 1(vertical):2(horizontal) or impounding class I, II, or III-a liquids.

All other work listed in Section 105.2 of CBC Chapter 1 is also exempt from a permit.

- (3) Section 107.1 (Submittal Documents-General) of CBC Chapter 1 is amended by deleting the exception.

- (4) Section 107.2.1 (Information on Construction Documents) of CBC Chapter 1 is amended to read:

**107.2.1** Construction documents shall include dimensions and shall be drawn to scale on suitable material. Electronic media documents may be submitted when approved in advance by the building official. Construction documents shall be sufficient clarity to indicate the location, nature and extent of the work proposed and to show in detail that it will conform to this code and all relevant laws, ordinances, rules and regulations. The first sheet of each set of plans shall give the house and street address of the work and the name and address of the owner and of the person who prepared the plans. Plans shall include a plot plan showing all existing property lines labeled and fully dimensioned, the elevation of the top and toe of cuts and fills, and the location of the proposed building with distances to all property lines and of every existing building on the property. Instead of detailed specifications, the building official may approve references on the plans to a specific section or part of this code or other ordinances or laws.

- (5) Section 110.1 (Inspections – General) is amended by adding the following to the end of the section:

At the time of first inspection by the City building official, a licensed Land Surveyor or Civil Engineer shall certify in writing that the structure is placed according to the approved set of plans. The written certification must include the site address and permit number. This requirement does not apply to alterations or repairs to existing structures that do not affect the exterior limits of the existing structures.

- (b) Section 907.2.11.5.6 (Existing Group R-3 Occupancies) of CBC Chapter 9 (Fire Protection Systems), is amended to read:

**907.2.11.5.6 Existing Group R Occupancies.** In existing flat roof buildings, the installation of a smoke detector that complies with Section R314.4 shall be required when a pitch roof is added on top of the existing flat roof and the solid seating of the flat roof is not removed.

- (c) Section 1406.5 is added to Section 1406 (Combustible Materials on the Exterior Side of Exterior Walls) of CBC Chapter 14 (Exterior Walls), to read:

**1406.5 Wood shakes or shingles.** Wood shakes or shingles uses for exterior wall covering shall be fire treated unless there is a minimum of 10 feet from the exterior wall (including shakes or shingles) to the property line of all sides, except for any sides of exterior walls facing the street.

- (d) In Section 1705.3 (Concrete Construction) of CBC Chapter 17 (Structural Tests and Special Inspections), Exception 1 is amended to read:

Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength of no greater than 2,500 pound per square inch (psi) (17.2 Mpa).

- (e) Section 1809.8 (Plain Concrete Footings) of CBC Chapter 18 (Soils and Foundations) is deleted.

- (f) Section 1810.3.9.3 (Placement of reinforcement) of CBC Chapter 18 (Soils and Foundations) is amended by deleting Exception No. 3.

- (g) Section 1905.1 (Modification of ACI 318 – General) of CBC Chapter 19 (Concrete) is amended to read:

**1905.1 General.** The text of ACI 318 shall be modified as indicated in Sections 1905.1.1 through 1905.1.9.

- (h) Section 1906 (Structural Plain Concrete) of CBC Chapter 19 (Concrete) is deleted.

- (i) Section 1907.1 (Minimum Slab Provisions – General) of CBC Chapter 19 (Concrete) is amended by adding the following sentence to that section:

Slabs shall have six inches by six inches by ten gauge wire mesh or equal at midheight.

- (j) Appendix C and Appendix I of the CBC are incorporated into the City building code. Appendix A, Appendix B, Appendix D, Appendix E, Appendix F, Appendix

G, Appendix H, Appendix J, Appendix K, Appendix L and Appendix M of the CBC are excluded from the City building Code.

15.02.002     Amendments to CRC. The 2013 California Residential Code (“CRC”) is amended by the changes, additions, and deletions set forth in this chapter and Division 72 of the Contra Costa County Code. Section numbers used below are those of the 2013 California Residential Code.

- (a) Sections R103, R108, R111, R112, R113, and R114 of CRC Chapter 1 are deleted.
- (b) In Section R105.2 (Work exempt form permit) of CRC Chapter 1 (Scope and Application), subsection 3 of the paragraph exempting certain building work from the requirement to obtain a permit is amended to exempt the following retaining wall from the requirement to obtain a permit:
  - 3. Retaining walls that are not more than three feet in height, measured from the top of the footing to the top of the wall, unless supporting a surcharge or ground slope exceeding 1(vertical):2(horizontal) or impounding class I, II, or III-a liquids.
- (c) Section R403.1.3 (Seismic reinforcing) of CRC Chapter 4 (Foundations) is amended to delete the exception.
- (d) Section R404.1.4.1 (Masonry foundation walls) of CRC Chapter 4 (Foundations) is amended to read:

**R404.1.4.1 Masonry foundation walls.** In addition to the requirements of Table R404.1.1(1), plain masonry walls in buildings assigned to Seismic Design Category D<sub>0</sub>, D<sub>1</sub>, or D<sub>2</sub> shall comply with the seismic requirements of Section 1.18.4.4 of TMS 402, ACI 530, or ASCE 5.
- (e) Section R404.1.4.2 (Concrete foundation walls) of CRC Chapter 4 (Foundations) is amended to read:

**Section R404.1.4.2 Concrete foundation walls.** Concrete foundation walls in buildings assigned Seismic Design Category D<sub>0</sub>, D<sub>1</sub>, or D<sub>2</sub> shall comply with ACI 318, ACI 332, or PCA 100.

CHAPTER 15.03

2013 CALIFORNIA ELECTRICAL CODE WITH AMENDMENTS

Sections:

- 15.03.002 Adoption.
- 15.03.606 Unlawful wiring, electric fences, warning.
- 15.03.608 Power from generators.
- 15.03.612 Public nuisance lighting.

15.03.002 Adoption.

- (a) The electrical code of this City is the 2013 California Electrical Code (California Code of Regulations, Title 24, Part 3, as amended by the changes, additions, and deletions set forth in this ordinance.
- (b) The 2013 California Electrical Code, with the changes, additions, and deletions set forth in this chapter and Division 72 of the Contra Costa County Code are adopted by this reference as though fully set forth in this ordinance.
- (c) At least one copy of this electrical code is now on file with the building inspection division, and the other requirements of Government Code section 50022.6 have been and shall be complied with.
- (d) As of the effective date of this ordinance, the provisions of the electrical code are controlling and enforceable within the City.

15.03.606 Unlawful wiring, electric fences, warning.

- (a) Prohibition. Except as hereinafter provided, no person shall construct or maintain any spring gun, or any electric wiring device, designated or intended to injure and/or shock animals or persons, or any contrivance or apparatus for such purpose.
- (b) Livestock Exception. Persons principally engaged in the business of handling livestock as a primary means of production or income may electrify fences to control or confine livestock upon complying with all the following requirements:
  - (1) Any contrivance or mechanism to control electrical current in such fences shall be listed by an approved testing laboratory, and shall include a suitable interrupting device and such other safety devices to prevent dangerous currents getting on the fence at any time.
  - (2) Any electrical fence to which the public may have access, except cross fences to confine and control livestock, shall be posted with a warning notice containing the following or similar wording: "DANGER.

ELECTRIC FENCE,” or “DANGER. HIGH VOLTAGE.” This notice shall be posted along any such main fence at intervals of not more than 200 feet and in letters at least two inches high.

15.03.608     Power from generators.

- (a) All occupancies that have commercially supplied electricity shall connect to the commercial supplier.
- (b) Any occupancy that has commercially supplied electricity shall not use a permanent or temporary generator(s), provided that a generator(s) may be used for commercial purposes when authorized by the building official.

15.03.612     Public nuisance lighting. Lighting fixtures shall be so installed, controlled or directed that the light will not glare or be blinding to pedestrians or vehicular traffic or on adjoining property.

CHAPTER 15.04

2013 CALIFORNIA PLUMBING CODE WITH AMENDMENTS

Sections:

15.04.002 Adoption.

15.04.002 Adoption.

- (a) The plumbing code of this City is the 2013 California Plumbing Code (California Code of Regulations, Title 24, Part 5, as amended by the changes, additions, and deletions set forth in this ordinance.
- (b) The 2013 California Plumbing Code, with the changes, additions, and deletions set forth in this chapter and Division 72 of the Contra Costa County Code, is adopted by this reference as though fully set forth in this ordinance.
- (c) At least one copy of this plumbing code is now on file with the building inspection department, and the other requirements of Government Code section 50022.6 have been and shall be complied with.
- (d) As of the effective date of this ordinance, the provisions of the plumbing code are controlling and enforceable within the City.

CHAPTER 15.05

2013 CALIFORNIA MECHANICAL CODE WITH AMENDMENTS

Sections:

15.05.002 Adoption.

15.05.002 Adoption.

- (a) The mechanical code of this City is the 2013 California Mechanical Code (California Code of Regulations, Title 24, Part 4 [based on the 2006 Uniform Mechanical Code]), as amended by the changes, additions, and deletions set forth in this ordinance.
- (b) The 2013 California Mechanical Code, with the changes, additions, and deletions set forth in Division 72 of the Contra Costa County Code, is adopted by this reference as though fully set forth in this ordinance.
- (c) At least one copy of this mechanical code is now on file with the building inspection division, and the other requirements of Government Code section 50022.6 have been and shall be complied with.
- (d) As of the effective date of this ordinance, the provisions of the mechanical code are controlling and enforceable within the City.

X:\Com Dev\Z O A\2013\ZOA-06-13 - 2013 Building Codes\Exhibit A - (CleanCopy) to Ord.No.452 - 2013 Bldg.Code.docx

# **EXHIBIT B**

## **City of Clayton**

### **FINDINGS IN SUPPORT OF CHANGES, ADDITIONS, AND DELETIONS TO STATEWIDE 2013 BUILDING STANDARDS CODE**

The California Building Standards Commission has adopted and published the 2013 Building Standards Code, which is comprised of the 2013 California Building, Residential, Green Building Standards, Electrical, Plumbing, and Mechanical codes. These codes are enforced in the City of Clayton by the City and Contra Costa County Building Inspection Division of the Department of Conservation and Development.

Although these codes apply statewide, Health and Safety Code sections 17958.5 and 18941.5 authorize a local jurisdiction to modify or change these codes and establish more restrictive building standards if the jurisdiction finds that the modifications and changes are reasonably necessary because of local climatic, geological or topographical conditions.

City of Clayton Ordinance No. 452 adopts the statewide codes and amends them to address local conditions, consistent with Contra Costa County.

Pursuant to Health and Safety Code section 17958.7, the Clayton City Council finds that the more restrictive standards contained in Ordinance No. 452 are reasonably necessary because of the local climatic, geological, and topographic conditions that are described below.

#### **I. Local Conditions**

##### **A. Geological and Topographic**

###### **1. Seismicity**

###### **(a) Conditions**

Are reasonably necessary as Contra Costa County is located in Seismic Design Categories D and E, which is the worst earthquake area in the United States. Buildings and other structures in these zones can experience major seismic damage. Contra Costa County is in close proximity to numerous earthquake faults including the San Andreas Fault and contains all or portions of the Hayward, Calaveras, Concord, Antioch, Mt. Diablo, and other lesser faults. A 4.1 earthquake with its epicenter in Concord occurred in 1958, and a 5.4 earthquake with its epicenter also in Concord occurred in 1955. The Concord and Antioch faults have a potential for a Richter 6 earthquake and the Hayward and Calaveras faults have the potential for a Richter 7

earthquake. Minor tremblers from seismic activity are not uncommon in the area.

A study released in 1990 by the United States Geological Survey says that there is a 67% chance of another earthquake the size of Loma Prieta during the next 30 years, and that the quake could strike at any time, including today. Scientists, therefore, believe that an earthquake of a magnitude 7 or larger is now twice as likely to happen as to not happen.

Interstates 680, 80, 580 and State Route 4 run the length throughout Contra Costa County. These interstates and state routes divide the County into a west, south, north and east. An overpass or undercrossing collapse would significantly alter the response route and time for responding emergency equipment. This is due to limited crossings of the interstate and that in some areas there is only one surface street, which runs parallel to the interstate, which would be congested during a significant emergency.

Earthquakes of the magnitude experienced locally can cause major damage to electrical transmission facilities and to gas and electrical lines in buildings, which in turn start fires throughout the County. The occurrence of multiple fires will quickly deplete existing fire department resources; thereby reducing and/or delaying their response to any given fire.

(b) Impact

A major earthquake could severely restrict the response of all Contra Costa County Fire Districts and their capability to control fires involving buildings of wood frame construction, with ordinary roofing materials and flammable exteriors, or with large interior areas not provided with automatic smoke and fire control systems. Also, when buildings not equipped with earthquake structural support move off their foundations, gas pipes may rupture. Fires develop from line ruptures and spread from house to house, causing an extreme demand for fire protection resources. The proximity of large areas within the County to fault traces, necessitates adopting stricter structural construction standards.

2. Soils

(a) Conditions

The area is replete with various soils, which are unstable, clay loam and alluvial fans being predominant. These soil

conditions are moderately to severely prone to swelling and shrinking, are plastic and tend to liquefy.

Throughout Contra Costa County, the topography and development growth has created a network of older, narrow roads. These roads vary from gravel to asphalt surface and vary in percent of slope, many exceeding twenty (20) percent. Several of these roads extend up through the winding passageways in the hills providing access to remote, affluent housing subdivisions. The majority of these roads are private with no established maintenance program. During inclement weather, these roads are subject to rock and mudslides, as well as down trees, obstructing all vehicle traffic. It is anticipated that during an earthquake, several of these roads would be unpassable so as to prevent fire protection resources from reaching fires cause by gas line ruptures or other sources.

### 3. Topographic

#### (a) Conditions

##### i. Vegetation

Highly combustible dry grass, weeds, and brush are common in the hilly and open space areas adjacent to built-up locations six (6) to eight (8) months of each year. Many of these areas frequently experience wildland fires, which threaten nearby buildings, particularly those with wood roofs, or sidings. This condition can be found throughout Contra Costa County, especially in those developed and developing areas of the County. Earthquake gas fires due to gas line ruptures can ignite grasslands and stress fire district resources.

##### ii. Surface Features

The arrangement and location of natural and manmade surface features, including hills, creeks, canals, freeways, housing tracts, commercial development, fire stations, streets and roads, combine to limit feasible response routes for Fire District resources in and to District areas.

##### iii. Buildings, Landscaping and Terrain

Many of the newer large buildings and building complexes have building access and landscaping features and designs, which preclude or greatly limit

any approach or operational access to them by Fire District vehicles. In addition, the presence of security gates and roads of inadequate width and grades that are too steep for Fire District vehicles adversely affect fire suppression efforts.

When Fire District vehicles cannot gain access to buildings involved with fire, the potential for complete loss is realized. Difficulty reaching a fire site often requires that fire personnel both in numbers and in stamina. Access problems often result in severely delaying, misdirecting or making impossible fire and smoke control efforts. In existing structures where pitch roofs have been built over an existing roof, smoke detectors should be required to warn residents of smoke and fire before the arrival of fire personnel.

(b) Impact

The above local geological and topographical conditions increase the magnitude, exposure, accessibility problems, and fire hazards presented to the County fire resources. Fire following an earthquake has the potential of causing greater loss of life and damage than the earthquake itself. Most earthquake fires are created by natural gas developed from gas line ruptures. Hazardous materials, particularly toxic gases, could pose the greatest threat to the largest number, should a significant seismic event occur. Public safety resources would have to be prioritized to mitigate the greatest threat, and may likely be unavailable for smaller single dwellings that were caused by broken gas lines.

Other variables may tend to intensify the situation:

1. The extent of damage to the water system.
2. The extent of isolation due to bridge and/or freeway overpass collapse.
3. The extent of roadway damage and/or amount of debris blocking the roadways.
4. Climatic condition (hot, dry weather with high winds).
5. Time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours.
6. The availability of timely mutual aid or military assistance.
7. The large portion of dwellings with wood shake or shingle coverings (both on the roof diaphragm and

- sides of the dwellings) could result in conflagrations.
8. The large number of dwellings that slip off their foundations and rupture gas lines and electrical systems resulting in further conflagrations.

## B. Climatic

### 1. Precipitation and Relative Humidity

#### (a) Conditions

Precipitation ranges from 15 to 24 inches per year with an average of approximately 20 inches per year. Ninety-six (96) percent falls during the months of October through April and four (4) percent from May through September. This is a dry period of at least five (5) months each year. Additionally, the area is subject to occasional drought. Relative humidity remains in the middle range most of the time. It ranges from forty-five (45) to sixty-five (65) percent during spring, summer, fall, and from sixty (60) to ninety (90) percent in the winter. It occasionally falls as low as fifteen (15) percent.

#### (b) Impact

Locally experienced dry periods cause extreme dryness of untreated wood shakes and shingles on buildings and non-irrigated grass, brush and weeds, which are often near buildings with wood roofs and sidings. Such dryness causes these materials to ignite very readily and burn rapidly and intensely. Gas fires due to gas line ruptures can also spark and engulf a single family residence during these dry periods.

Because of dryness, a rapidly burning gas fire or exterior building fire can quickly transfer to other buildings by means of radiation or flying brands, sparks or embers. A small fire can rapidly grow to a magnitude beyond the control capabilities of the Fire District resulting in an excessive fire loss.

### 2. Temperature

#### (a) Conditions

Temperatures have been recorded as high as 114° F. Average summer highs are in the 75° to 90° range, with average maximums of 105° F in some areas of unincorporated Contra Costa County.

#### (b) Impact

High temperatures cause rapid fatigue and heat

exhaustion of firefighters, thereby reducing their effectiveness and ability to control large building, wildland fires, and fires caused by gas line ruptures.

Another impact from high temperatures is that combustible building material and non-irrigated weeds, grass and brush are preheated, thus causing these materials to ignite more readily and burn more rapidly and intensely. Additionally, the resultant higher temperature of the atmosphere surrounding the materials reduces the effectiveness of the water being applied to the burning materials. This requires that more water be applied, which in turn requires more fire resources in order to control a fire on a hot day. High temperatures directly contribute to the rapid growth of fires to an intensity and magnitude beyond the control capabilities of the Fire Districts in Contra Costa County. The change of temperatures throughout the County between very low and extreme highs contributes to a voltage drop in conductors used for power pole lines. This necessitates that voltage drops be considered.

### 3. Winds

#### (a) Conditions

Prevailing winds in many parts of Contra Costa County are from the north or northwest in the afternoons. However, winds are experienced from virtually every direction at one time or another. Velocities can reach fourteen (14) mph to twenty-three (23) mph ranges, gusting to twenty-five (25) to thirty-five (35) mph. Forty (40) mph winds are experienced occasionally and winds up to fifty-five (55) mph have been registered locally. During the winter half of the year, strong, dry, gusty winds from the north move through the area for several days creating extremely dry conditions.

#### (b) Impact

Winds such as those experienced locally can and do exacerbate fires, both interior and exterior, to burn, and spread rapidly. Fires involving non-irrigated weeds, grass, brush, and fires caused by gas line ruptures can grow to a magnitude and be fanned to an intensity beyond the control capabilities of the fire services very quickly even by relatively moderate winds. When such fires are not controlled; they can extend to nearby buildings, particularly those with untreated wood shakes or shingles.

Winds of the type experienced locally also reduce the effectiveness of exterior water streams used by all Contra Costa County Fire Districts on fires involving large interior areas of buildings, fires which have vented through windows and roofs due to inadequate built-in fire protection and fires involving wood shake and shingle building exteriors. Local winds will continue to be a definite factor toward causing major fire losses to buildings not provided with fire resistive roof and siding materials and buildings with inadequately separated interior areas, or lacking automatic fire protection systems, or lacking proper gas shut-off devices to shut off gas when pipes are ruptured, or lacking proper electrical systems. National statistics frequently cite wind conditions, such as those experienced locally, as a major factor where conflagrations have occurred.

II. Necessity of More Restrictive Standards

Because of the conditions described above, the Clayton City Council finds that there are building and fire hazards unique to the City that require the increased fire protection and structural and design load requirements set forth in Ordinance No. 452. The ordinance amends the statewide codes by requiring the installation of a smoke detector in existing flat roof buildings when a pitch roof is added on top of the existing flat roof and the solid sheathing of the flat roof is not removed. (§15.02.002(b).) The ordinance amends the statewide codes by requiring most wood shakes or shingles used for exterior wall covering to be fire treated. (§15.02.002(c).) The ordinance amends the statewide code by requiring special inspections for concrete at certain foundations to be consistent with code requirements for concrete at other locations. (§15.02.002(d).) The ordinance modifies the statewide codes by requiring masonry foundation walls and concrete foundation walls of residential structures to comply with more restrictive seismic requirements. (§ § 15.02.003(d), (e).)

**From:** Justin Breck [<mailto:justin@bayfriendlycoalition.org>]

**Sent:** Thursday, January 9, 2014 2:26 PM

**To:** 'environjon@aol.com'

**Subject:** Your Bay-Friendly Requalification

Dear John,

Thank you for renewing your status as a Bay-Friendly Qualified Professional, which includes a 2-year membership in the Bay-Friendly Landscaping & Gardening Coalition. In addition to your 2-year membership, you now have exclusive access to the most recent Bay-Friendly Qualified Professional (BFQP) seal, which makes it easy for you to share with clients and colleagues your commitment and qualification status. The digital seal is attached to this e-mail. We would also like to offer you free admission to one of the two upcoming February Brad Lancaster presentations. Simply type "REQUAL" into the promo code field in the registration portal. You can learn more about the presentations (and how to register) here: <http://www.bayfriendlycoalition.org/Calendar.shtml>

Your commitment to Bay-Friendly Landscapes is greatly appreciated. As we build the network and influence of Bay-Friendly Qualified Professionals in the coming year, we plan to leverage our programs to expand markets for your services and work toward a goal of making Bay-Friendly principles representative of the highest standards of sustainability in the landscape.

Thank you again for your commitment and contribution toward our efforts to create healthy & beautiful urban environments.

Kind regards,

Justin

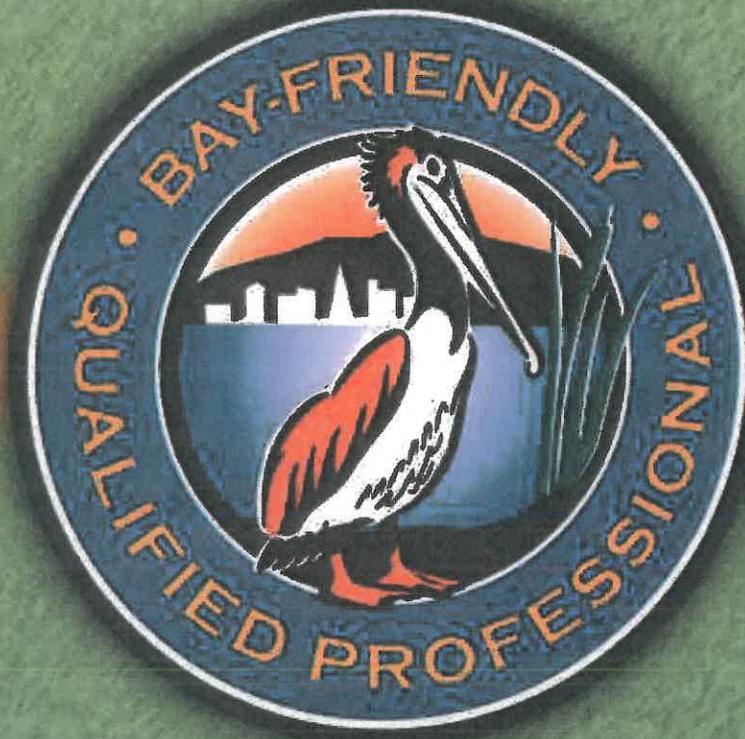
**Justin Breck | Administration and Operations Manager**

*Bay-Friendly Landscaping & Gardening Coalition*

(510) 859 8026 ext. 707 | [www.bayfriendlycoalition.org](http://www.bayfriendlycoalition.org)

 Please consider the environment before printing this message.

**John Johnston  
City of Clayton**



**2012**

**2014**

**BAY-FRIENDLY LANDSCAPE  
MAINTENANCE PROFESSIONAL**

*The Bay-Friendly Landscaping & Gardening Coalition confirms that*

**John Squadroni**

*has met the requirements to become a*

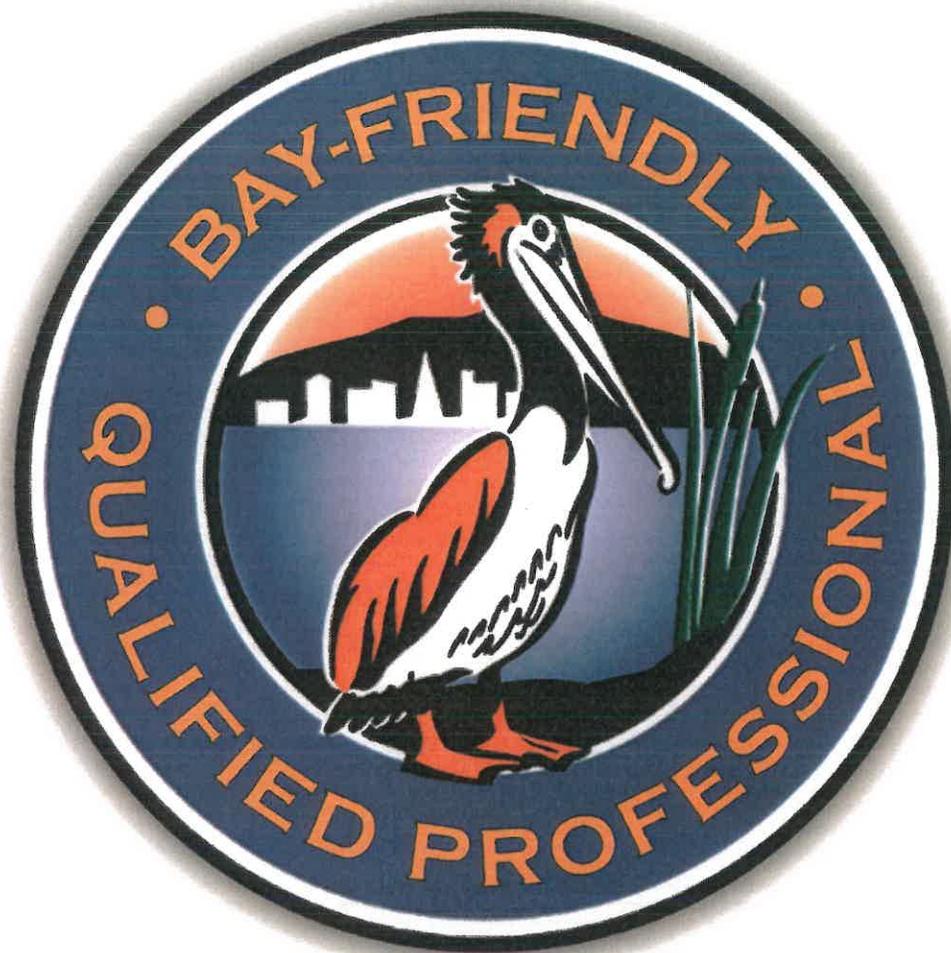
**Bay-Friendly Qualified Landscape  
Maintenance Professional**

*effective April 20, 2012.*



*Debi Tidd*

Debi Tidd  
Bay-Friendly Landscaping & Gardening Coalition



**BAY-FRIENDLY**  
Landscape Maintenance  
Professional

[www.ecowisecertified.org](http://www.ecowisecertified.org)



Integrated Pest Management

# CERTIFICATE OF COMPLETION

**Michael Swetnam**

has successfully completed the requirements for

**EcoWise Certified Practitioner**

on

July 30, 2013

**Certificate Expires on** July 29, 2016

Certificate No. **C-142**  
(verify at [www.ecowisecertified.org](http://www.ecowisecertified.org))

**Cell Scandone**  
Senior Regional Planner  
Association of Bay Area Governments



Administered by  
Association of Bay Area Governments  
[www.abag.ca.gov](http://www.abag.ca.gov)

**William Quarles**  
Program Manager  
EcoWise Certified

[www.ecowisecertified.org](http://www.ecowisecertified.org)



Integrated Pest Management

# CERTIFICATE OF COMPLETION

**William Seniff**

has successfully completed the requirements for

## EcoWise Certified Practitioner

on

November 3, 2011

**Certificate Expires on** November 2, 2014

Certificate No. **C-111**  
(verify at [www.ecowisecertified.org](http://www.ecowisecertified.org))



**Cell Scandone**  
Senior Regional Planner  
Association of Bay Area Governments



Administered by  
Association of Bay Area Governments  
[www.abag.ca.gov](http://www.abag.ca.gov)

**William Guzman**  
Program Manager  
EcoWise Certified

# 10 easy ways to save water in your garden



## 1. Cycle & soak

Use the cycle and soak method for watering your lawn and landscape. For fixed and pop-up spray sprinklers, water three cycles per day, four to six minutes each cycle. Schedule start times one hour apart. If you have rotating sprinklers, water three cycles per day, 10 to 12 minutes each cycle.

## 2. Adjust watering

Shrubs, or lawn in shade (north/east side of your house), will generally require up to 50 percent less water than the same plants in full sun (south/west side). Adjust your watering to account for different microclimates in your garden.

## 3. Water early

Don't water during the middle of the day. This can scorch the leaves. It's best to water in the early morning as the sun is rising and temperatures are cool.

## 4. Check your sprinklers

Check your irrigation system every couple of weeks for broken or misaligned sprinkler heads. This can save a significant amount of water and keep your landscape looking great!

## 5. Manage your timer

Every two to four weeks, adjust the watering schedule to reflect changes in the weather. Reducing the watering schedule by one-minute on each sprinkler station can save more than 50 gallons per day!



## 6. Reduce your lawn

Reduce the size of your water-thirsty lawn and replace it with water-efficient low-maintenance plants.

## 7. Mow

Mow lawns to 2 1/2 to 3-inches during the summer. This will improve the quality of the lawn and reduce water demand.

## 8. Mulch

Mulch is the little-noticed workhorse of many smart gardeners' landscapes. Maintain a 2- to 3-inch layer of organic mulch in all planting areas.

## 9. Use a broom

Use a broom instead of a hose to clean your driveway and save up to 80 gallons of water every time.

## 10. Aerate

Aerate your lawn. This allows water and oxygen to get to the roots. You can either leave the soil plugs on the lawn or remove them to another part of the garden.



# 10 easy ways to save water in your home

It's time to renew your conservation efforts and ensure you are using water efficiently. Saving water has never been so easy.



## 1. Insulate pipes

Insulate hot water pipes so less water needs to be run for hot water to reach the faucet. This also helps save energy.

## 2. Replace old toilets

You can save 60 percent by replacing your older (pre-1992) toilet with a new High-Efficiency Toilet (HET).

## 3. Replace old washer

By replacing your older top-loading washer with a new high-efficiency model, you use 50 percent less water and energy. They are also kinder to your clothes.



## 4. Check for leaks

Test your toilets for leaks. Place food coloring in the tank. If the color appears in the bowl, you have a leak. Either your water level is too high, or your flapper needs to be replaced.



## 5. Run full loads

Run your clothes washer & dishwasher with full loads to maximize water & energy efficiency.

## 6. Keep water cool

Keep a container of water in the fridge so you don't need to run water down the drain until it's cool enough to drink.



## 7. Plug it up

Put a plug in the bathroom sink when shaving rather than rinsing your razor under running water.

## 8. Save while showering

If your showerhead can fill a one-gallon bucket in less than 20 seconds, replace it with a high-efficiency showerhead. Drop by CCWD and pick up a free high-quality, high-efficiency showerhead.

## 9. Brush & conserve

When brushing your teeth, remember to keep the water off until you are ready to rinse your brush. Every drop counts.

## 10. Always aerate

Make sure there are aerators on all of the faucets in your home. Faucets without aerators can use more than three times the water.

# Water Conservation Adds Up Every Day For a Typical Family

Old, inefficient toilets use 75 gallons  
High-efficiency toilets use 27 gallons  
**48 gallons of water saved daily!**

Showers with standard heads use 46 gallons  
Showers with low-flow heads use 36 gallons  
**10 gallons of water saved daily!**

Typical landscaping uses 150 gallons  
Landscaping with well-managed irrigation uses 75 gallons  
**75 gallons of water saved daily!**

Faucets without aerators use 43 gallons  
Faucets with aerators use 32 gallons  
**11 gallons of water saved daily!**

Old, inefficient dishwasher uses 6 gallons  
New, efficient dishwasher uses 4 gallons  
**2 gallons of water saved daily!**

Standard clothes washer uses 60 gallons  
High-efficiency washer uses 36 gallons  
**24 gallons of water saved daily!**



For detailed information about rebates on water-saving appliances, free water-saving devices and water saving tips, go to [www.ccwater.com](http://www.ccwater.com) or call (925) 688-8320.

**Before Conservation:** The family used **380 gallons** per day.

**After Conservation:** The family used **210 gallons** per day.

**Conservation Saved 170 gallons of water every day!**



CONTRA COSTA  
WATER DISTRICT



## LOSE A LAWN • GET A GARDEN



**\$1,000 REBATES** (up to)

- Replace Lawn with Water-Wise Landscaping
- Rebate is \$1.00 per sq. ft. replaced
- Pre-Approval is required
- Non-residential sites call for details

For Program Eligibility and Information

Call: **(925) 688-8320** or

Visit: [www.ccwater.com/conserve](http://www.ccwater.com/conserve)





CONTRA COSTA  
WATER DISTRICT

P.O. Box H2O  
Concord, CA 94524-2099

PRSR T S  
U.S. Post  
PAID  
Permit No.  
Oakland, CA

## Important Information

Re: 2014 Drought Program

CCWD has numerous programs, including free water use evaluations, rebates, and more. For Drought Updates and Conservation Program information, visit [www.ccwater.com](http://www.ccwater.com).

### QUICK CONSERVATION

- Focus on cutting outdoor water use.
- Reduce sprinkler timer for significant water savings.
- Sign up for the Water Saver e-Newsletter at [www.ccwater.com/conserves/](http://www.ccwater.com/conserves/).

# Contra Costa Water District 15% Voluntary Drought Program



The Contra Costa Water District (CCWD) wishes to inform you of the voluntary drought program that was approved by the CCWD Board of Directors at its March 19, 2014 meeting.

**During the drought, customers are asked to voluntarily reduce their overall use by 15% from their baseline (historical) use. Historical use for your property can be found on the back of your water bill. The historical use is an average of 2005–2007 water use at your residence. Recent conservation efforts are appreciated and are not counted against customers.**

California is facing a significant water crisis from several consecutive dry years. In January, Governor Jerry Brown formally declared a statewide drought emergency. The severity of the water shortage stems from the small amount of precipitation and snowpack received this winter. The District is not raising water rates as a component of this drought program. Customers who meet the voluntary conservation goals under the drought program will save money due to reduced usage.

The goal of this program is to reduce consumption to conserve available water supplies and save water in Los Vaqueros in case drought conditions continue into next year. The drought program focuses on reducing outside water use, while minimizing impacts to jobs and the local economy. Additional information is available at the District Office, 1331 Concord Avenue, Concord, CA 94520, or at [www.ccwater.com](http://www.ccwater.com).

# Hardy Rockrose shrub is back



**NICOLE HACKETT  
GARDEN GIRL**

Plants go in and out of style as fashion does. Red Fountain Grass, Taples Verbesa, and Carpet Roses are just a handful of plants

for which customers once swarmed the nursery. Then for one season or another their popularity began to fade, and suddenly the urgency to install these plants faded.

This too was the case with the shrub commonly called Rockrose. Rockrose was the "it" shrub 20 years ago. Its popularity soared as the Oakhurst Development was being landscaped. Now, Rockrose is back by popular demand. This is a perfect shrub for our Clayton Valley climate and growing conditions.

Cistus is the botanical name for the Rockrose. This evergreen isn't picky about soil. Rockrose can handle our sticky clay, as well as rocky hills. Cistus is drought-tolerant once established, needing only small amounts of summer water to survive. There is no need to fertilize Rockrose. Depending on the variety, Rockrose can have flowers in light or dark pink, white or bi-colored. Rockrose has the typical early spring flower display that can last four to six weeks depending on the weather. Growers can also expect a repeat of flowers in autumn.

Cistus laurifolius is a variety of Rockrose with a dark green leaf and contrasting red stem. In March and April, a



white flower with a crimson blotch covers this evergreen shrub. Flowers can be two- to two-and-a-half-inch round. The flowers of a Rockrose is simple-shaped, having only five or six petals surrounding a center. Cistus laurifolius can grow four-feet tall and six-feet wide. Consider the mature growth when planting. You want Rockrose to grow and thrive. You don't want to have to control its size. You'll take away from the shrub's natural shape.

Dark-red pink flowers with a rusted blotch covers the Rockrose called Cistus parviflorus in early spring. This selection of Rockrose has a bold color scheme and complementary red foliage grasses well. Purpureus can reach heights of four feet and can grow eight-feet wide.

Rockrose is a perfect companion to summer blooming

escape myrtle shrubs or trees, or multi-trunk smoke trees. White blooming Manzanita Carmel Sue or the blue flowers of Yankee Point eranthus would both make fine, hardy ground covers to plant along a Rockrose.

Consider planting Rockrose along fence lines, hillsides and side yards. When planting, take care to dig a wide enough hole. Water plants before installing, and mix soil conditioner in with the native soil. Water thoroughly after planting.

Cistus shrubs are hardy, some foundation plants with pretty spring flowers. They are tough to kill in our Clayton Valley landscapes.

*Write to the Garden Girl at Pismo Beach, Pismo, Calif. and Clayton Valley for soil samples or answers at GardenGirl@claytonpismo.com*

**BRUNCH AT ENTRY CLUB**

5:30pm - 1pm

by brunch, Oakhurst Country Club, and beautiful surroundings.

1.99\*\* Children (ages 4-12)

info@oakhurstcc.com

oec.com



**NICOLE HACKETT  
GARDEN GIRL**

It's time to talk about grass — not your lawn, but the ornamental types. For a couple of months already folks have been making their way to the nursery looking for these types of billowy accents for their landscape, garden beds, containers and pool backdrops. Many of the more popular ornamental grasses run a winter dormancy; this year the early warmth of January got our ornamental grasses going sooner than usual. Thus, many varieties are ready for the choosing. Once you know the differences in mature sizes, it'll make picking your favorite ornamental grasses all the easier.

Miscanthus has many family members that are very appealing in our Clayton Valley landscapes. Morning Light is a variegated Miscanthus. It has slender leaves. This selection is tall and will gracefully grow to five- to six-feet tall and wide. During the summer months, Morning Light is topped with feathery beige flower clusters.

Another showy Miscanthus worth mentioning is Miscanthus Strictus. This selection of ornamental grass



## Ornamental grasses liven up local landscapes

**MISCANTHUS 'MORNING LIGHT'**

has medium-green leaves with horizontal yellow variegation. The variegation is fairly random and natural looking. During the summer months you can expect Miscanthus Strictus to grow up to eight-inches tall and three-feet wide, which includes the reddish-brown plumes that rise above the foliage. Miscanthus is a perennial ornamental grass. Each year in March, prune your Miscanthus down near the ground. It will re-grow as spring warms.

Blue Oat grass is a favorite selection of many that are interested in ornamental grasses. The mature size of the Blue Oat grass is only two- to three-feet tall and wide. Blue Oat Grass grows in graceful tufts of blue-gray fountains. The botanical name of Blue Oat

Grass is Helictotrichon sempervirens. This ornamental grass likes better drainage than some of our clay allows. A good hint when installing is to leave just about an inch of the rootball above the soil grade.

Calamagrostis "Karl Foerster" is another smaller growing ornamental grass. This selection is commonly called Feather Reed Grass. It has lovely, feather-reed grassy spikes with reddish-brown plumes in the summer. The plumes last into fall.

Panicum "Heavy Metal" is another larger growing selection. It matures seasonally to five-feet tall. "Heavy Metal" grows in a weeping fashion. The grass leaves are metallic gray. During the summer the plumes of "Heavy Metal" are purplish-green and loosely

stacked above the foliage. As fall approaches, it turns yellow, adding to its appeal.

Ornamental grasses all look about the same size when purchased. Be wary and read up on a potential selection before installing. It is always easier to install a plant rather than remove it. Make the right choice first. Most ornamental grasses need full or at least six hours of sun to be happy. All the mentioned varieties need a hard prune in the earliest days of spring. If you are unsure about growing ornamental grasses, try in a container at first to see if the effect is what you desire.

*Nicole is the Garden Girl at RCHM Pool, Patio, Gifts and Gardens. Contact her with questions or comments at [GardenGirl@claytonpioneer.com](mailto:GardenGirl@claytonpioneer.com)*

# Gardens need mulch work this month



**NICOLE HACKETT  
GARDEN GIRL**

With the hot summer days in our future, garden-lovers should do their plants a favor. They should mulch every square inch of bare and thinning soil areas, as well as planting areas. Mulch helps the ground retain its moisture by protecting its surface from the harsh sun and drying winds.

I know that many in Clayton Valley have weekly gardeners that spend their visits blowing the soil clean. This ridiculous practice has robbed our ground of its protective layers. The layers of leaves that have fallen beneath trees and shrubs create topsoil. When "gardeners" blow dirt clean they are really blowing away your topsoil. Topsoil is your plants protective coating. It shelters their roots by keeping the ground cooler in the summer and warmer in the winter. Now more than ever we should get out and spread whatever type of mulch you are attracted to.

Are you a dark person? Shredded bark, micro or medium? Do you prefer spreading topdressing of soil conditioner with a good percentage of red

cedar?

Straw?

Whatever it is, our landscape, veggie/flower beds, and bare areas would benefit from three-to-four inches of product.

Micro bark is the most popular mulch sold. The size is very appealing. Micro bark is available dyed or natural. Dark color barks can create contrast to the plants in the yard; over time the color of the dyed barks washes out with sun and rain. Natural barks start off light and ages darker. Regardless of color, both selections will have to be touched up annually to keep desired thickness.

Shredded bark or gorilla hair is a perfect selection for hills, or hilly areas. The shape of the shreds can grip the soil better, preventing frustrating slipping. Slipping is more obvious on soil that hasn't had mulch applied in years. After time, and layers, you'll find that the slippage to not be a problem anymore.

Straw is an excellent topdressing for our vegetable beds, either raised or in the ground. A thick three-to-four inches of

straw will absolutely help the ground from water loss through evaporation. We want to be able to water our vegetable gardens without as guilt, and using straw will help us.

Some folks don't like the look of traditional bark and mulch. Spreading layers of soil conditioner throughout landscape and garden beds satisfies the plants needs, too. Reapplication of this process is necessary more often. The finer organic matter in soil conditioner allows for faster breakdown. Reapplication can be expensive, so some use this process mostly on the perennial flowerbeds.

One final thought regarding the importance of mulching our landscapes: Mulch makes the soil surface darker, preventing many weeds from germinating. Also, weeds that germinate atop mulch are easier to pull.

Reach us the Garden Girl at R&M Pool, Patio, Gifts and Garden. Contact her with questions or comments at [Gardengirl@claytonpioneer.com](mailto:Gardengirl@claytonpioneer.com)

# Try this beautiful, water-wise sage



**NICOLE HACKETT  
GARDEN GIRL**

Salvia Clevelandii Winifred Gilman is an exceptional sage that any Clayton Valley landscape lover would be proud to grow. It is a sturdy, evergreen perennial with fragrant foliage, and a long bloom season. Salvia Clevelandii is a California native shrub that is easy to find and adapts quickly once planted.

Maturing to four- to-five-foot-tall and wide, Salvia Clevelandii can be utilized in the landscape as a foundation plant. It can visually stand up against a fence or property line. Since it keeps its leaves throughout the winter, Salvia Clevelandii also makes a nice backdrop for deciduous trees.

Considering this year's water issues, Salvia Clevelandii is the type of plant that Clayton Valley residents should consider installing. This shrub is very water-wise, surviving on very little water, and still thriving.

There are many members to the Salvia Clevelandii family. Winifred Gilman is one of the best. The foliage of Winifred Gilman is mostly gray, while the stems are a dark eggplant color. In the summer, whirls of light lavender, two-lipped shaped flowers bloom in rows atop this evergreen's strong stems. Both bees and hummingbirds are attracted to this sage.

Install Salvia Clevelandii with companion plants that require similar watering. Mix with other water-wise native plants such as manzanita, arbutus, other salvia, and sedum. Many non-native plants would also mix well with Salvia Clevelandii. Consider installing with crape myrtle, smoke bush, teucrium, nepeta and lavender.

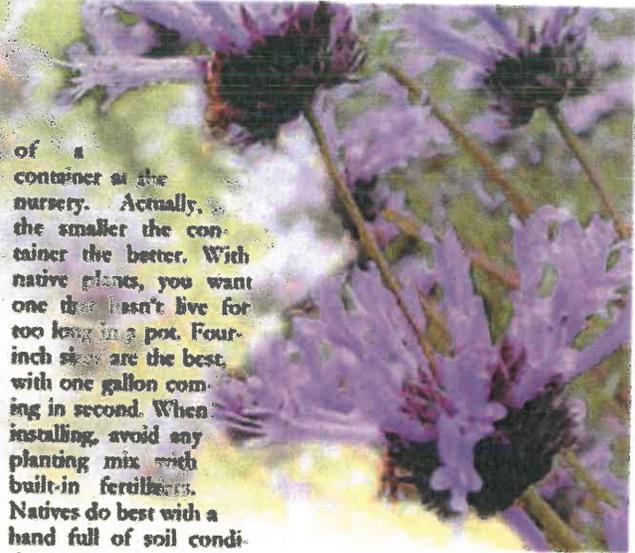
A couple tricks to remember when purchasing and planting Salvia Clevelandii Winifred Gilman is not to buy too large

of a container at the nursery. Actually, the smaller the container the better. With native plants, you want one that hasn't lived for too long in a pot. Four-inch sizes are the best, with one gallon coming in second. When installing, avoid any planting mix with built-in fertilizers. Natives do best with a hand full of soil conditioner.

Once installed, Salvia Clevelandii Winifred Gilman will need babysitting the first three weeks after planting. Week one, the plant should be watered every day, week two, you should water every other day, and week three, skip three days between watering. After the three week establishing period, your plant should only need water a couple times a week its first summer.

Water-wise, drought tolerant, whatever you want to call these types of plants, just understand that they all don't have to look like dry grass. Many beautiful, desirable plants are water-wise and ready to be discovered.

*Nicole is the Garden Girl at R2M Pool, Patio, Gifts and Garden. Contact her with questions or requests at [Gardengirl@claytonpioneer.com](mailto:Gardengirl@claytonpioneer.com)*



## Colorful lantana thrives in Clayton Valley



**NICOLE HACKETT  
GARDEN GIRL**

When the weather gets blazing hot and the sun pounds the landscape relentlessly, there is a common family of plants that thrives through every bit of it. It's the family called lantana, and it is stupendous in our Clayton Valley climate.

Lantana is a very common plant family in our area. Your neighbors probably grow it. You see it in public landscape areas and even along meridians. Some lantana grows as ground covers and others as shrubs. They all have globe-shaped clusters of tiny flower and hardy textured leaves. Lantana is both bee and butterfly attractive. It thrives in full sun, and is very drought tolerant. It is almost perfect from June through November. Once the weather chills for the winter, lantana typically goes deciduous, resting and storing up energy for another fabulous growing

season next year.

The groundcover selections of lantana are very sought-after. Lavender lantana was once the most favored. Then, about 10 years ago, the trailing white lantana hit the scene. They called it White Lightning, and sometimes, Silver Mound. Then everyone had to have that selection. These days, the New Gold variety seems to be the most desirable. The flowers are a deep, butter-yellow color. New Gold can seriously stand up to the sun, never fading as some color can do. New Gold Lantana can really pop out of the landscape, screaming "Look at me!"

Shrub lantana can be slightly more frost-sensitive, yet their colors are so provocative that they are worth the risk, with multi-color clusters of flowers that open one color and mature to another. Shrub Lantana is very distinctive, and in the right spot, they will thrive for many years. Irene, Radiation, Dallas Red and Confetti are among the most desirable shrub lantana selection.

Landscapers love lantana. Groups plants here and there to add bold color. Use lantana to accent a large boulder. Install beneath a spring blooming deciduous tree to extend the flower power in the area. Plant along the property line, or near a



fence to define the boundaries. If you are planting a large container, lantana makes an excellent container addition.

Be careful, as lantana is toxic. It should not be consumed. We like to inform folks about toxic plants, in case any potential planters have samplers in their household. There is a positive note to planting this toxic plant: gophers, rabbits and deer will leave it alone. Warn the children not to eat it, and watch the dog.

Planting lantana is simple. It hardly has any needs. Dig a hole

one-and-one-half times the depth and width of the container. Use a planting mix with installing. You do not need to plant with a fertilizer in the hole, or in the soil. Water thoroughly once planted, and keep your eyes on the new installation through the first summer in the ground.

*Name is the Garden Girl at RCM Pool, Patio, Gifts and Garden. Contact her with questions or comments at [Gardengirl@claytonpioneer.com](mailto:Gardengirl@claytonpioneer.com)*

## It pays to replace that thirsty lawn

**N**ow that spring weather has arrived we will all start spending more time outside. If that means mowing, fertilizing and spraying those weeds coming up in your front lawn, then the Contra Costa Water District has an alternative. The District has a rebate program that will pay you to replace that water thirsty lawn with a water-efficient garden.

Converting a 30 x 30 foot lawn can save more than 25,000 gallons per year. But the rewards go far beyond the water savings. "What people find out is that they love the new look of their yard," says CCWD's Bob Eagle. "They find they have replaced their green with a beautiful, eye catching front yard full of color."

Remove the front laws, and you remove that pesky weekly commitment to water, mow and fertilize. "Now, you don't

have to spend time trying to figure out how to kill the crab grass," Eagle says. "Now you have more time to do what you want."

Single-family residential customers can receive a rebate of up to \$500.

Commercial and municipal customers can receive a rebate up to \$5,000 when they replace their front lawns and other publicly visible lawns with water-efficient landscaping.

The rebate program will last only for a limited time. The program is not retroactive, and properties must be pre-approved by CCWD before any work is started in order to be eligible for the rebate.

*Complete program details can be obtained by visiting [www.ccwater.com/conserv](http://www.ccwater.com/conserv), or by calling (925) 688-8320 for a program brochure.*

# \$500 REBATES

## LOSE THE LAWN, GET A GARDEN

**CCWD is offering rebates to encourage customers to replace their front lawns with Water-Efficient Landscaping**

Up To \$500 for  
Residential  
Homes



Up to \$5,000 for  
Commercial  
Properties



**Funding is  
limited, so  
call today!**

For program information:

[www.ccwater.com/conserv](http://www.ccwater.com/conserv) or call (925) 688-8320

## Professional Tree Management

**\$50 off** any service  
of \$300  
or more

OR

**\$100 off** any service  
of \$1000  
or more

- Arborist Consulting
- Landscape Division
- Crane Services
- Firewood



- Stump Grinding
- Pruning
- Removals
- Installation





Contractors License # 879423  
Arborist License # WE7372A

**FREE ESTIMATES**  
**925-250-0334**



**www.waranertreeexperts.com**

## Good for the earth, easy on the eyes.

925.250.0334



**Organic**  
*No debris like  
plastic or  
chemically  
treated woods*



**Local**  
*Returning local  
materials back to  
local grounds*



**Tree Source**  
*Made only from  
raw woods  
planned or  
removed trees*



Presented By Warner Tree Experts



*a  
beautiful  
way to save  
water*

*Landscape color  
that requires no  
water? Good for  
soils and plants,  
Earth Blend's rich  
color and consist-  
ent texture make  
it a satisfying  
design element as  
well as mulch.*

**Pricing**

**Natural -**  
\$29 per yard

**Colored -**  
\$50 per yard

**Top Soil -**  
\$39 per yard

**FREE  
DELIVERY  
CALL  
925.250.0334**

**www.EarthBlendMulch.com**

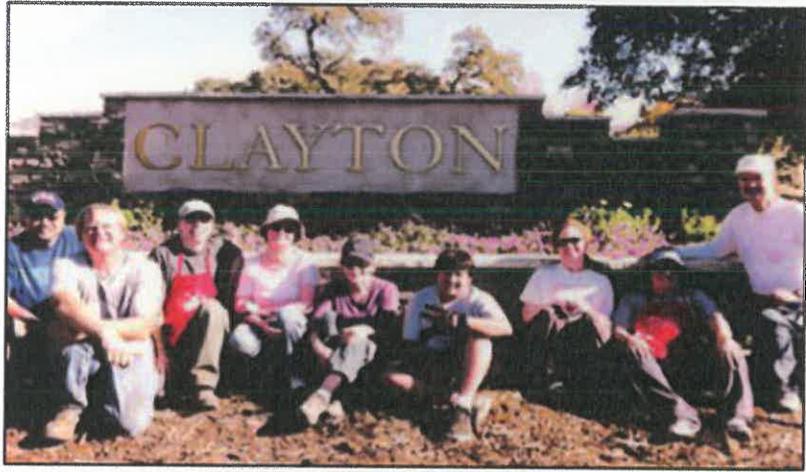
### Clayton Valley Garden Club

Clayton's Daffodil Hill will bloom bigger and brighter than ever this spring.

Early last month, 16 volunteers from the Clayton Valley Garden Club donated and planted another 500 bulbs on Clayton's gateway at Clayton and Marsh Creek Roads.

The volunteers worked in production line fashion to plant bulbs, using an electric clay spade to dig and finishing each hole by hand. Each trumpet yellow bulb was accompanied to their hole with some bone meal and covered with soil mix and mulch.

*The Clayton Valley Garden Club meets at 7 p.m. on the second Wednesday of the month, February through November, at Diamond Terrace, 6401 Center St., Clayton. For more information, go to [claytonvalleygardensclub.org](http://claytonvalleygardensclub.org).*



**CLAYTON VALLEY GARDEN CLUB MEMBERS** Ben Shikano, Nick Caspar, Steve Lane, Valerie Austin, Alyca Shikano, Erik Ortiz, Ingela Nielsen, Michelle Ortiz and Bruce Balha expect a show of nearly 1000 daffodil blooms in the spring