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Electronic copy of: 2006-2007 Annual Report (enclosed in sleeve)

Executive Summary

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INTRODUCTION

A. NPDES Program History.

The City of Salinas is in the third year of its second five-year Permit, Order No. R3-2004-0135, as a Phase I City under the National Pollutant Discharge Elimination System. The NPDES program's goal is to protect water quality by reducing pollutants in the City's storm water. The City is required to implement program activities that address pollution prevention activities for municipally owned drainage facilities including streets, highways, storm drains, and flood control channels. The City is required to effectively prohibit non-stormwater discharges to municipal storm sewer systems and to implement controls to reduce pollutants in stormwater to the maximum extent practicable (MEP). Pollution prevention activities in the City include, but are not limited to, best management practices in municipal maintenance, public education and outreach, storm water monitoring, commercial and industrial business discharge oversight, and construction and development regulation to eliminate pollutants in water bodies.

B. Stakeholder Collaboration.

The City of Salinas's urban watershed management and protection activities integrate the resources of many municipal departments while collaborating with other critical stakeholders toward the goal of protecting the quality of water that is so vital to the community and to the environment of Salinas. To assist the City in its development of NPDES and stormwater related documents, the Salinas City Council authorized the formation of an NPDES Stakeholders Committee which is comprised of members of the local business, development and environmental communities.

C. Program Management.

Generally, the NPDES program is a citywide program that involves all City departments on various levels. The NPDES program activities are divided into categories including program coordination, maintenance activities, planning, inspection, emergency response, regulatory, administrative, financial and legal. The primary departments involved in the management of the

City's NPDES program are the Development and Engineering Services Department, the Maintenance Services Department and the City Attorney's Office. Each department has specific responsibilities for program activities relative to the implementation of the NPDES program. Moreover, a subcommittee of City staff was formed and has worked among themselves and collaboratively with Regional Board staff to revise the City's Storm Water Management Plan (SWMP). The SWMP was revised for a third time during this reporting period and was submitted to Regional Board staff for review and for comment. It is expected the SWMP will be posted on the Regional Board's website for public review in October 2007.

Maintenance Services Department.

The Maintenance Services Department facilities general program coordination. Staff of the Maintenance Services Department utilizes Best Management Practices (BMPs) in performing maintenance and inspection activities on the City's sewer systems (industrial, storm and sanitary), street sweeping, roads, sidewalks, traffic signals, street lights, parks, public landscapes, street trees, City vehicles and equipment, and City buildings. Inspection of industrial facilities is done through this department utilizing contract inspection staff from the Monterey Regional Water Pollution Control Agency (MRWPCA). The department's maintenance operations implement the Storm Water Ordinance in coordination with the City's Development and Engineering Services Department and the City Attorney's Office.

Development and Engineering Services Department

The Development and Engineering Services Department performs construction inspection, building permit issuance and inspection, planning services and engineering services. Code Enforcement is another primary function of this department. The Code Enforcement staff utilizes an escalating enforcement policy to gain compliance with regard to NPDES program matters. The Department is primarily responsible for implementation of the City's General Plan, Zoning Code, Grading Standards, Development and Design Standards, as well as the Storm Water Ordinance. This department is also facilitating the planning and design of the City's Future Growth Areas and as part of its function in this regard, the department is educating the development community on new standards related to and incorporating Low Impact Development strategies and practices.

Office of the City Attorney

The City Attorney's Office provides legal guidance to all departments in the implementation of NPDES related regulations and standards. Enforcement of the City's ordinances, codes and standards is managed by the City Attorney.

D. Regulatory Authority.

The City of Salinas is a Charter City with corporate powers derived directly from the California Constitution. California Constitution, Article XI, Sec. 3(a). Through its Charter, the City has supremacy over municipal affairs subject only to conflicting provisions of state or federal constitutions and preemptive state laws on matters of statewide concern. Unless preempted by state legislation of matters of statewide concern, the City's laws will prevail over inconsistent state laws.

Consistent with this authority, the City has adopted a Zoning Code to regulate land use and development, and a municipal code. During this reporting period the City's Grading Standards

were updated, along with the City's Storm Water Ordinance which has been incorporated into the City's Code.

STRATEGIES TO PROTECT WATER QUALITY

A. Public Outreach and Education.

The population growth of the City of Salinas requires City leaders to address pollution control strategies that are associated with people in close proximity to waterways. Public outreach and education is important to changing awareness and perceptions about potential impacts on water quality. Providing access to information will enable the community to implement lifestyle changes that will work to protect water quality. The cultural makeup of the community effects the City's approach to public outreach and education. Information material provided to the residents is made available in both English and Spanish to reach the largest audience possible. Bilingual staff members are available to answer questions and receive reports of hazardous spills, illicit discharges, and other water quality concerns.

B. Monitoring.

The City recognizes the impacts of the agricultural runoff from lands immediately adjacent to the City's boundaries and incorporates the impact into the analysis of water quality in the determination of the sources of pollution. Pollutants identified in water flowing into the City include pesticides, fertilizers, sediments, fecal coliform, and vegetable residues. Collaboration between the city and the Ag Waiver Program is important to establishing a water pollution solution for the total watershed.

The City's monitoring program, QAPP, and the information sharing with other monitoring groups help to identify the sources of pollutants. During this reporting period, the City contracted with Pacific Ecorisk to perform monitoring and analysis.

C. Inspection.

Storm Sewer. Wastewater Division staff are assigned to, and trained for, inspecting the City's stormwater system.

Building/Construction Inspection Services. These staff members inspect construction activities to verify compliance with all applicable standards and regulations, including standards and regulations related to the City's NPDES program and LID strategies and techniques.

Industrial Inspection. The team of industrial inspectors is comprised of City staff and of inspectors from the Monterey Regional Water Pollution Control Agency (MRWPCA). The City also works closely with the Monterey County Department of Health to assure that business operations are not creating sources of pollutants that may impact storm water quality. The inspection activities of the inspectors include inspections of numerous packing and processing plants for fresh and frozen vegetables, as well as facilities of other local industries.

D. Coordinated Emergency Response.

The transportation of goods in and through the City has the potential to impact water quality. Spills of large quantities of fuels, fertilizers, pesticides, and agricultural commodities, have resulted in accidents that potentially impacted the City's storm drain systems and watercourses.

Effective spill response, haz mat training, and an effective network of emergency responders have been hallmarks of the City's NPDES program. This includes the City's Fire Department and Hazardous Materials Team, as well as the Monterey County Environmental Health Department. Annually, these two agencies facilitate an Environmental Compliance Workshop to train businesses and individuals on protecting the environment with effective pollution prevention strategies. Additionally, all City public safety. Maintenance Services Department, and leadership staff in other departments have been certified as National Incident Management System (NIMS) and State Incident Management System (SIMS) emergency response personnel in the Incident Command System during this reporting period.

FISCAL ANALYSIS

A. Program Funding.[1]

Key to successful implementation of the City's NPDES program are its resources. The City's NPDES Permit requires the City to expend the funds necessary to comply with the requirements of the permit. Current program activities are funded by a combination of development fees, the general fund and enterprise funds established for purposes of the City's NPDES program. Expenditures from these sources include operating budget costs, as well as capital improvements. The City's attempts to establish a dedicated funding source have thus far been unsuccessful and no new separate, dedicated funding sources have been identified to date, although staff continues to work on funding strategies.

Regardless of its unsuccessful attempts to establish a dedicated funding source, as indicated in this Annual Report, the City has allocated a substantial amount of resources to its NPDES Program. Even with this level of investment, additional resources are necessary, including the diversion of resources from other programs and activities. To achieve the unfunded aspects of the program, the City must pursue other alternatives to meet program costs including collaborations with local stakeholders. Through this collaborative approach, the City hopes to maximize the funds available for NPDES activities. The City is committed to broadening its collaborative efforts as opportunities arise.

PROGRAM HIGHLIGHTS; ANNUAL REPORT CONTENTS

A. Summary.

During this reporting period, the City of Salinas has increased its pollution prevention activities consistent with its NPDES Permit requirements. Details of these activities will be provided in this Annual Report under each section. Of particular note is increased staff training, greater agency collaboration, further development of a Storm Water Management Plan, completion of a Quality Assurance Program Plan (QAPP), and further development of Low Impact Development (LID) design standards specific to the City. Each individual element of this Annual Report includes a summary of activities. These activities are described in both a quantifiable and qualified format. Additionally, in each section's report is a discussion of the BMPs for each reporting work unit.

[1] This Annual Report covers the period October 1, 2006 through September 30, 2007. This is not in-line with the City's Fiscal Accounting Period which runs from July 1, 2006 through June 30, 2007. Thus, a portion of two fiscal years is allocated to program activities covered in this Annual Report.

With respect to monitoring results, the City has again utilized the services of Pacific Ecorisk to provide Annual Report monitoring data and analysis required by the City's NPDES Permit.

B. Assessment of Effectiveness of Storm Water Control.

In assessing the effectiveness of the City's storm water controls, City staff compared a number of factors. Each section of this Annual Report includes a discussion of the effectiveness of controls in each program area. This year, an even greater focus has been undertaken on staff training and on community education on protecting water quality. Public education has also been expanded in this reporting period. In cases where the City has had insufficient resources to take on this function alone, agency collaboration has helped to implement this expanded outreach and education effort. An example includes the agency collaborations with the Monterey County Environmental Health Department and the Monterey Regional Water Pollution Control Agency.

Low Impact Development (LID) has been a major topic of concern during this reporting period. To that end, the City has required LID implementation in all applicable projects, examples of which are included within this Annual Report.

One of the most effective control methods reported on in this Annual Report is the aboveground visual inspection of the City's storm drain system by City staff trained to observe storm drains and waterways. Now all street sweeper operators, park maintenance workers, street maintenance employees, and other municipal employees are trained to identify potential problems in and near storm drains and waterways. This has reduced the delays in reporting problems from the field related to pollution potential.

The City's NPDES program continues to grow and to evolve with a focus toward improving all program activities. As technologies change and as strategies and as knowledge of storm water techniques and strategies grow, opportunities continue to become available to incorporate changes to the City's program. Each section of this Annual Report thus contains an accounting of the actions taken during this reporting period by the various work units involved.

2006-2007

Annual Report

Introduction

BACKGROUND

Understanding the Salinas community, the environment in which it lives, and the economy to which it contributes is vital to understanding the City of Salinas's role in implementing a water pollution prevention program. The following paragraphs and the following chapters of this Annual Report address these issues and summarize some of the key factors influencing the City's implementation of its Urban Water Runoff Management Program.

People

The City of Salinas is located in Monterey County and has a population of 152,677. It is the largest city in Monterey County and its population is over 64% (64.1) Hispanic. The remaining population is divided into three principal groups: 45.2% Caucasian, 6.2% Asian and 3.3% African American with the small balance from other ethnicities (2000 U.S. Census). Immigrant populations make up a substantial percentage of the Salinas regional labor pool and are important to local industries including agriculture, construction, and hospitality.

The large immigrant population also impacts municipal programs including public education and outreach activities. Design and implementation of the City's Urban Runoff Management Program are no exception. Two key effects are 1) Salinas's median educational levels are lower than statewide averages, and 2) the community is multi-cultural with a significant number of residents speaking only Spanish. Lower educational levels and language barriers require development and implementation of outreach activities that are responsive to the community's needs.

Environment

Salinas enjoys a mild climate and is approximately thirteen miles southeast of the Monterey Bay. The Salinas River drains the watersheds of the Salinas Valley between the Gabilan and Santa Lucia mountain ranges. The Valley extends south past Salinas; its rich alluvial soil and moderate climate is ideal for many of the field grown and green house crops produced in Salinas and the surrounding areas.

The Gabilan and Natividad Watersheds are prominent environmental features in the City of Salinas. Reclamation Ditch # 1065 also helps to convey storm water runoff to the Salinas River and eventually into Monterey Bay. These waterways are conduits for sediment loads that are a result of some of the highly erodible soils and poor erosion control practices in county areas adjacent to Salinas.

Economy

Salinas is the seat of Monterey County; commercial agri-business and agricultural related operations are the primary industries that help to support the local economy. These include growing, packaging, and transportation of agricultural products. Significant valley crops that are grown and processed in and around Salinas include salad crops, strawberries, artichokes and broccoli. Seafood is transported to Salinas from Monterey for processing and packing. Transportation through Salinas includes significant long haul truck traffic, railroad and limited air transportation. Agribusiness and the increasing urban expansion of Salinas also impact the environmental health of the City.

STORMWATER MANAGEMENT PLAN

During this Reporting Year, several major planning projects have required a great amount of City resources: (1) the preparation and submittal of the Stormwater

Management Plan, (2) development and approval of the Grading Standards, (3) development and approval of the Stormwater Ordinance, and (4) review and editing of various versions of the Low Impact Development Manual/Design Standards.

Three iterations of the City's comprehensive Stormwater Management Plan have been developed. The first was submitted to the RWQCB in October of 2006. The second Plan, which was a revised version of the first iteration, was submitted to the RWQCB in January of 2007. The third revision was submitted on July 2007. All these versions are currently posted on the City's website for public review. Regional Board staff members are currently reviewing the July draft and are expected to provide formal written comments before the end of 2007.

COORDINATED EMERGENCY RESPONSE

Transportation of goods in and through Salinas has the potential to impact water quality. During this reporting period, accidents resulting in spills of large quantities of fuels, fertilizers, pesticides and agricultural commodities, have potentially impacted Salinas's storm drain systems and at times watercourses. Effective spill response, haz mat training and an effective network of emergency responders have been one of Salinas's strongest program qualities to date. This includes the Salinas Fire Department and Hazardous Materials Team, as well as an effective coordination with the Monterey County Environmental Health Department.

Annually Salinas and Monterey County Environmental Health Department facilitate an Environmental Compliance Workshop to train businesses and individuals on protecting the environment with effective pollution prevention strategies. The City was also a co-sponsor of an event to plan emergency strategies for rail car and tanker rollovers. These emergencies occur in communities that are transportation hubs such as Salinas. Consequently, Salinas continues to prepare for these emergencies so that it can appropriately mitigate the environmental impacts of such events when they occur and their potential for injury and property damage. In October 2006, all Salinas public safety staff, Maintenance Services Department staff and management staff in other departments were certified as National Incident Management System (NIMS) and State Incident Management System (SIMS) emergency response personnel in the Incident Command System.

PHASE I PERMIT

The City of Salinas is in the third year of a five- year NPDES Permit term—Order # R3-2004-0135. The NPDES Program's goal is to protect water quality by reducing pollutants in Salinas's storm water. Salinas is required to implement program activities that address pollution prevention activities for municipally owned drainage facilities, including streets, highways, storm drains, and flood control channels. Municipalities are required to effectively prohibit non-stormwater discharges to municipal storm sewer systems and to implement controls to reduce pollutants in stormwater to the maximum extent practicable (MEP). Pollution prevention activities in the City of Salinas include, but are not limited to, best management practices in municipal maintenance, public education and outreach, storm water monitoring, commercial and industrial business discharge oversight, and construction and development regulation to eliminate pollutants into water bodies.

FISCAL ANALYSIS and PROJECT FUNDING

Background

A key component of the NPDES program is the program's resources. The NPDES Permit requires that Salinas expend the funds necessary to comply with the requirements of the Permit.

Salinas is primarily an agricultural based economy, which is characterized by relatively low wages. The median family income in 1999 dollars was $44,667 (2000 U.S. Census). Less than 13% (12.8) of all families were below the national poverty level; this figure compares with a national figure of 9.2% (2000 U.S. Census). The constituency income level shapes the City's fiscal environment resulting in a relatively low revenue base. As a means of comparison, the per capita revenue for the Salinas general fund is only 29% of that of the City of Monterey. In the prior reporting year, fiscal year 2005-2006 per capita general fund revenues were $480/person. In this reporting year, fiscal year 2006-2007, the per capital general fund revenues have increased to $582. The FY 2006-2007 per capita revenue reflects increased revenue realized as the result of a recently passed tax measure (Measure V).

Funding of the enlarged NPDES program in the City of Salinas is problematic because of the scarcity of available funds. This was especially critical during the past three years with economic downturns, escalating PERS health insurance costs, county and state funding take backs and an inability to sustain a dedicated funding source due to statutory restrictions of Proposition 218. Additionally, the County of Monterey is doubling its property tax collection fees, yet not providing any additional services.

Economically, Salinas has had to fund state mandated water quality activities by using other limited general fund monies that would have otherwise provided basic city services such as public safety, libraries, youth programs, and maintenance activities. The establishment of a dedicated funding source for mandated NPDES water quality activities remains an unsolved fiscal challenge.

NPDES Program Funding History

To meet the costs associated with the federally mandated NPDES program, in 1999, the City of Salinas implemented a citywide stormwater utility and imposed a "storm drainage fee" for those using the City's stormwater system. The Sixth District Court of Appeal struck down this fee in 2002. (Howard Jarvis Taxpayers Association v. City of Salinas, (6th Dist. June 3, 2002) 98 Cal. App. 4th 1351) The court indicated that the fee was a property-related fee under Proposition 218 and therefore the fee was subject to Proposition 218's notice and hearing procedures and its voter approval procedures.

In 2006, the California Supreme Court issued a unanimous decision that interprets what constitutes a "property-related fee" under Proposition 218 that seems to coincide with the decision in the Salinas case. (Bighorn-Desert View Water Agency v. Verjil (July 4, 2006) 39 Cal. 4th 205.) Prior to the decision from the Court, many local-government

attorneys believed that stormwater fees were not subject to Proposition 218. With the California Supreme Court decision, Salinas and many other cities, have been forced to consider various alternate funding mechanisms to pay the escalating costs of funding mandated stormwater activities

Since this ruling, other cities in the State have had their stormwater programs challenged and have changed their NPDES program funding as a result. The City of Salinas has regularly supported State legislation that adds stormwater services to the list of Proposition 218 exemptions; however, no such proposed state legislation has ever passed.

Measure V

Given the recent history of Salinas-area election measures, voter approval for funding specifically dedicated to NPDES program activities would be highly unlikely. Measures for publicly highlighted and much needed basic services such as ambulance, hospital, and road improvements have historically failed. Even the initial library and public safety voter measure failed to garner a 50% majority. Only after substantial outcry, including national press for library closures in “John Steinbeck’s hometown” and over $700,000 in private contributions to keep the libraries open, did a Measure V, a general tax funding measure, pass.

Over a period of three fiscal years beginning in April 2003, the Salinas City Council reduced City programs and services funded by the General Fund budget by a total of $15.3 million dollars or 24%. These reductions were required to maintain the City’s financial solvency. The financial crisis was the result of a combination of factors including a weak economy evidenced by sales tax actually decreasing for two years.

On November 8, 2005, Salinas’s voters approved an ordinance establishing a Temporary Transactions and Use Tax at the rate of one-half of one percent (0.50%) to be in effect for a period of ten (10) years. Initial collection of the tax (now referred to as Measure V) began April 1, 2006 with the first receipt of revenues from the tax received in July 2006.

The tax approved by the voters is a general tax. As such, the City may use the revenue from the tax for any general governmental purpose, including without limitation, police, fire safety, paramedics, libraries, crossing guards, graffiti removal, anti-gang programs, and street and park maintenance.

Measure V, while not specifically funding NPDES water quality activities, does provide the maintenance funding support to begin restoring activities critical to water quality protection. This includes funding for infrastructure repairs and increases to the maintenance staff. This is especially true for the Maintenance Services Department NPDES support activities. Funding increases in Park Maintenance staff to hire an additional seven staff members begins to restore the capability of the Parks Division to more effectively address issues of effective weed control, plant health, public safety and maintenance of greenspaces near urban waterways. This has resulted in increased litter removal and a decrease in a reliance on pesticides and fertilizers. Staff increases also provide more eyes on the issue of storm water quality protection.

Measure V provided an annual allotment of $50,000 in fiscal year 2007/08 for tree planting. In prior years, the tree-planting program was completely eliminated. Salinas recognizes the critical environmental role that trees play in biofiltration, erosion control, air quality improvement, restoration of native habitats, carbon sequestration, and increased soil permeability. As a Low Impact Development (LID) component, tree planting is vital.

Fiscal Year 2006/07 Expenditures

Enterprise Funds, Other Funds

The fiscal year budget for the NPDES Storm Drain Sewer enterprise account # 5180 was $678,128. Of that, the largest expenditure, $455,100 was for employee services to perform the NPDES activities. An allocation of $74,500 was budgeted for professional services support to provide other system repairs or professional technical services that were beyond the scope of expertise of City staff. The NPDES Street Sweeping enterprise account # 5185 was budgeted for $636,800 in fiscal year 2006/07. Of that amount, $430,600 was authorized for employee services and $26,000 was allocated for contract maintenance services. The Sanitary Sewer enterprise account # 5170 had a budget of $2,547,291 in fiscal year 2006/07. Of that amount, $813,600 was authorized for employee services; $17,000 was authorized in this account for contract maintenance service activities. There are no specific funding measures in place to account for all other water quality activities that are performed using the general fund, development fees or other non-enterprise accounts. These generally are associated with employee services and are estimated to exceed $1,000,000 during fiscal year 2006/07.

Capital Improvement Project Funds

The following is a detailed list of capital improvement projects and their authorized funding for the fiscal year 2006-07:

NPDES Projects	2006-2007
Project # 9139 Storm Sewer Drainage	$ 250,000
Project # 9365 Street Sweeper Acquisition	$ 127,700
Project # 9436 Storm Water Monitoring	$ 300,000
Project # 9512 NPDES Public Education	$ 100,000
Project # 9735 Priority 1 Storm Sewer Lines	$ 300,000
Total Capital Improv. NPDES Project Funds	**$1,077,700**
Sanitary Sewer Projects	
Project # 9283 Sewer Mgt System	$ 50,000
Project # 9348 WDR Grease Traps	$ 50,000
Project # 9529 Sewer Master Plan	$ 265,000
Project # 9743 Lift Station Repairs	$ 100,000
Project # 9742 Sewer Pipe Repairs	$ 185,000
Project # 9853 Priority 1 Sewer Lines	$ 700,000

Total Capital Improv. Sanitary Sewer Project Funds	**$1,350,000**

Fiscal Years 2007/08 and 2008/09

General Fund Budget

The City of Salinas Fiscal Year 2007-2008-2009 Operating Budget reflects continued modest improvements in service delivery and programs, as the City is able to utilize Measure V funds. A modest growth to the General Fund revenues was realized in FY 2006-2007. The restoration of services reflects a "status quo" situation as the restorations and services initially approved in FY 2006-2007 are for the most part implementing programs and services that were in place in FY 2000-2001.

The fiscal year 2008-2009 General Fund revenue projections anticipate continued modest economic growth with total General Fund revenue estimated at $79,816,000, an overall increase in current General Fund revenue of 3.1%. Salinas City Council approved funding for a two-year budget to include operations and capital improvement projects. The NPDES Annual Report period is from October 1 of 2006 through September 30, 2007. This reporting period is not consistent with the City of Salinas fiscal year accounting periods. The municipal fiscal year is from July 1, through June 30. A portion of two fiscal years is allocated to the program activities covered in this annual Report accounting period.

NPDES activities are incorporated in a number of City departments and require support activities to be funded by a range of funding sources. The funding sources are General Funds, Gas Tax, Development Impact Fees, the Sanitary Sewer Fund ("Sewer Fund") and Solid Waste Franchise Fees ("3% Franchise Fee"), which are funds collected to implement street sweeping activities.

In Fiscal Years 06/07 through 08/09, the City has planned to fund approximately $7.6 million dollars of program related activities. These expenditures include NPDES enterprise operating budget costs, city costs associated with inspections, planning, permitting, plan review and program coordination activities, as well as capital improvements.

Staff estimates that in excess of $1,000,000 annually has come from department costs not included in the designated NPDES budgets. Administration, overhead, other departmental staff time, permitting and inspection costs are not fully represented in this accounting of costs. There has been no specific accounting put in place to account for the actual staff time required to administer and facilitate many of the activities required by the Phase I NPDES Permit. Administrative duties include preparation of the required RWQCB mandated reports, review and analysis of Permits and official correspondence by the Office of the City Attorney, other staff response to Board inquiries, meeting time for the NPDES Coordinating Committee, facilitation of public meetings for outreach on program activities, public inquiry response, Stakeholder Committee facilitation, major program development efforts and training time required for staff to effectively implement program mandates. Support activities include the cost of repairs, clean-ups, recycling, and oversight of volunteer activity for stenciling, creek clean-ups, park clean-up activities

and signage preparation are but a few of the activities that require funding to meet the Permit requirements.

The lack of dedicated program funds requires that these activities be absorbed by General Fund sources. An estimate of additional funds required for these types of support activities throughout all City departments could easily require an additional one million dollars allocation annually to fund through a dedicated funding source, should one be approved and implemented.

Enterprise Funds-NPDES

The NPDES Storm Sewer enterprise funds are funds to be used exclusively for specified water quality protection activities. These two programs provide a dedicated source of funds in FY 2006-2007, FY 2007-2008 and FY 2008-2009 as follows:

	2007-2008	2008-2009
NPDES Storm Drain Sewer# 5180	$1,449,000	$1,434,200
NPDES Street Sweeping# 5185	$ 729,800	$ 733,500
Total NPDES Enterprise Funding	**$2,178,800**	**$2,167,700**

These funds provide the means to finance maintenance operations for the entire storm drain sewer system, including inspection and service to 2,500 catch basins. The street sweeping budget funds the sweeping of city streets once every two weeks for all residential areas and weekly for commercial areas. An estimated 18,850 curb miles are anticipated to be completed annually.

In the NPDES Storm Drain Sewer Fund, Account # 5180, $466,100 is authorized for employee services. A portion of that amount, $100,600 is authorized for contract maintenance services and professional services. A further $5,000 is authorized for staff training and an additional $17,500 is authorized for capital outlays. The remaining allocations are for utilities, supplies, materials, and other operational costs.

In the NPDES Street Sweep Account # 5185, $475,900 is authorized for employee services. An allocation of $26,000 is authorized for contract maintenance services. The remaining balance in the account funds supplies, materials utilities and other operational costs.

Enterprise Funds-Sanitary Sewer

Portions of other enterprise funds also play a key role in the implementation of activities in support of water quality protection. This is especially true for the Sanitary Sewer Enterprise Fund. The maintenance of an effective sanitary sewer pipeline system is a key element to protecting water quality from preventable spills of human waste and other forms of pollution. Although this funding allocation is not exclusively dedicated to water quality activities, without this investment in the sanitary sewer system, water quality protection would be at substantial risk of pollution from this urban source. Enterprise funds associated with these activities include:

	2007-2008	2008-2009
	$2,345,400	$2,346,400
Total	**$2,345,400**	**$2,346,400**

In the Sanitary Sewer Fund, Account # 5170, $835,500 is authorized for employee services. Contract services and other professional services have a combined funding of $65,500. Staff training is funded for $4,500. The remaining balance in this account is for utilities, supplies, materials, other operational costs and bond principal and interest payments for sewer lines repair projects.

Capital Improvement Project Funds

Funding for public education and outreach, inspections and monitoring, acquisition of capital equipment and major repairs to the storm drain pipeline system are funded as capital repair projects. Capital Project that are specific to NPDES activities include the following:

	2007-2008	2008-2009
NPDES Projects		
Project # 9139 Storm Sewer Drainage Repairs	$ 250,000	$ 250,000
Project # 9365 Street Sweeper Acquisition	$ 86,800	$ 86,800
Project # 9436 Storm Water Monitoring	$ 300,000	$ 300,000
Project #9512 NPDES Public Education	$ 150,000	$ 165,000
Project # 9513 NPDES Storm System Mapping		$ 115,000
Project # 9735 Priority 1 Storm Sewer Lines	$ 300,000	$ 300,000
Sanitary Sewer Projects		
Project # 9283 Sewer Mgt System	$ 50,000	$ 50,000
Project # 9348WDR Grease Traps	$ 200,000	$ 200,000
Project # 9529 Sewer Master Plan	$ 180,000	
Project # 9743 Lift Station Repairs	$ 100,000	$ 100,000
Total Capital Improvement Project Funding	**$ 1,616,800**	**$ 1,566,800**

The total funding represents a substantial investment of public funds to address stormwater activities, inclusive of capital projects, facility and construction inspection, program development, and maintenance activities.

Collaborative Cost Sharing

Even with this level of investment in stormwater activities, additional resources will be necessary to meet the Permit requirements. To achieve the unfunded aspects of the program, the City must continue to pursue other avenues to cut the program costs through collaborations with local stakeholders. Through this collaborative approach, the City hopes to maximize the funds available for activities not achievable otherwise. The

combined benefits of a regional collaboration with stakeholders have the effect of reducing all participants' costs and affecting a broader coverage with the pollution prevention efforts. Salinas is committed to broadening the collaborative approach as opportunities arise for a more effective program implementation.

New Funding Opportunities

Unless state legislation is changed, if the City is going to adequately fund the NPDES Program it will need to take one or more of the following actions to institute a new stormwater fee: (1) Secure two-thirds approval of the general electorate; (2) Secure sufficient support of property owners; or (3) Develop a legally defensible alternate strategy. Meeting any of these requirements is a formidable challenge.

The City of Salinas will monitor the progress of recent cases involving test claims filed by several California local agencies with the California Commission on State Mandates seeking reimbursement for carrying out provisions in their MS4 permits. (County of Los Angeles, et. al. v. Commission on State Mandates, 2007 Cal. App. Lexis 711)

On July 12th, 2007, Council approved a Resolution in support of Senate Constitutional Amendment 12 (SCA 12) 2007 drafted by Senators Torlakson and Yee. This Constitutional Amendment would amend the California constitution to add exemptions for fees and charges for stormwater and surface water drainage to the sewer, water and refuse collection fees or charge exceptions already included in the current language of Proposition 218.

Stormwater activities are not currently eligible for an exemption to the 2/3-vote requirement in Proposition 218. The likelihood of successfully passing new fees with the required 2/3-majority vote is very small. The outcome of not being able to pass fees for these types of mandated services results in a continuing financial burden on municipal general funds or other funds that are necessary for providing basic essential municipal services.

PROGRAM ADMINISTRATION/ IMPLEMENTATION

Organization

NPDES is a citywide program that involves most City departments on various levels and effects how Salinas does business. Generally the NPDES program activities are divided into categories that include: program coordination, maintenance activities, planning, inspection, emergency response, regulatory, administrative, financial and legal. The primary departments involved in the NPDES program are the Maintenance Services Department, Development and Engineering Services, and the City Attorney's Office.

The City Council is responsible for approval of NPDES program documents and authorizing the portion of the City budget that is used for NPDES activities. The City Manager directs all departmental operations associated with the program. The program steering committee is the Salinas NPDES Committee. The Committee is made up of department representatives from the Development and Engineering Department, the

Maintenance Services Department and the City Attorney's Office. This Committee is responsible for planning and integration of the NPDES program.

Departmental NPDES Activities

Staffing

Maintenance Services Department

Staff of the Maintenance Services Department utilizes best management practices (BMPs) in performing maintenance and inspection activities on the sewer systems (industrial, storm and sanitary), street sweeping, roads, sidewalks, traffic signals, street lights, parks, public landscapes, street trees, City vehicles and equipment, and City buildings. Inspection of industrial facilities is done through this department, utilizing contract inspection staff from the Monterey Regional Water Pollution Control Agency, (MRWPCA). The department's maintenance operations implement the Stormwater Ordinance in coordination with the City's Permit Center. The Water Resource Planner in the Maintenance Services Department has the responsibility to develop the SWMP document, incorporating the input and expertise of the SWMP Subcommittee.

The Wastewater Division of the Maintenance Services Department has the only enterprise funded, dedicated staff for NPDES activities. These staff members are also funded to perform sanitary sewer related maintenance activities. The following is the staff of that division as funded for the next two fiscal years:

	FY 2007-2008	FY 2008-2009
Pump Mechanic		
Wastewater Manager	1	1
Public Service Crew Supervisor	1	1
Public Service Maintenance Worker IV	1	1
Public Service Maintenance Worker III	2	2
Public Service Maintenance Worker II	10	10
Equipment Mechanic I	1	1
Motor Sweeper Operator	3	3
Senior Environmental Compliance Inspector*	1	1

*New position approved by Council in 2007 but not as yet hired

This department has hired contract resources for industrial/commercial inspections, public education/outreach, monitoring and laboratory analysis. Grant funding and volunteer assistance implemented NPDES activities in areas of public education and outreach, watershed and community clean-ups, watershed restoration plantings and stenciling activities. The Maintenance Services Department collaborates with other local agencies on commercial and industrial inspections, public education activities, water quality planning, and emergency response to hazardous materials spills.

Development and Engineering Services Department

The Development and Engineering Services Department performs construction site inspection, building permit issuance and inspection, advanced and current planning, and

engineering for all City construction projects. What's more, the review of draft design, development and construction standards are primarily done by this department. This department is also primarily responsible for implementation of the City General Plan, Zoning Code, Grading Ordinance, Development and Design Standards, as well as portions of the Stormwater Ordinance. The Deputy City Engineer is one of three members of the SWMP Subcommittee that is tasked with developing the SWMP. This department is also facilitating the planning for the "Future Growth Areas" of Salinas. In this process, staff is preparing the development community for the implementation of new standards that incorporate Low Impact Development strategies and techniques. Activities associated with this transition have included workshops presented by Kennedy/Jenks. Kennedy/Jenks's work in this regard was funded by the RWQCB through a grant program.

Office of City Attorney

The City Attorney's Office provides legal guidance to all City departments including those tasked with development and review of documents associated with the NPDES Program. The office is also responsible for issues related program legal authority. The City Attorney's Office reviews case law related to stormwater programs and researches funding options for program activities. NPDES enforcement issues also generally require participation of the City Attorney's Office.

Public Safety-Police/Fire

The Salinas Police Department and Fire Department, although not primarily involved in program implementation, perform critical services related to protecting storm water quality. They are typically the lead department for hazardous materials spill incidents and accidents. This typically includes fires and vehicle accidents. This department collaborates with other fire public safety agencies for training and educational events.

Finance Department

The City's Finance Department is responsible for oversight of all City budgets, including the NPDES Storm Sewer budget and the NPDES Street Sweeping budget. Capital expenses related to the NPDES program are all facilitated through the Finance Department's Office.

Redevelopment Agency

The Redevelopment Agency was established to address urban renewal development programs as authorized by the State of California health and Safety Code. Its primary involvement is in connection with downtown and East Salinas revitalization and neighborhood improvement programs. In addressing conditions of blight and infrastructure deterioration, this department will, consistent with the Stormwater Ordinance and Draft Development Standards, integrate wherever feasible, principles of Low Impact Development.

COLLABORATIVE EFFORTS

The City of Salinas's urban watershed management and sustainable environment activities integrate the resources of several municipal departments while collaborating with community and regional stakeholders toward the goal of protecting the quality of water that is so vital to the residents, economy and environment in Salinas.

Stakeholders's Committee

In August of 2007, the Salinas City Council formed an NPDES Stakeholders's Committee and directed staff to work with the Committee to review documents and standards to be updated as part of the City's NPDES obligations. This committee is comprised of nine (9) individuals representing a diversity of interests, concerns and responsibilities within the Salinas area (including the Monterey Bay):

PERSON	**REPRESENTING**
Steve Shimeck	Otter Project and Coast Keepers
Robin Lee	Save the Whales/Return of the Natives
Gary Shallcross	Return of the Natives
Ken Tunstall	Tunstall Engineering
Dan Mathies	Wood-Rodgers, Inc.-Future Growth Area Engineer
Sue Shaffer	Creekbridge Homes-Future Growth Area Developer
Tracy Roberts	Farm Bureau-Agriculture Waiver Program
Bob Meyer	Monterey County Water Resource Agency
Benjamin Tiscareno	Planning Commissioner, Architect

Agency Collaboration

Recognizing the necessity to collaborate for effectiveness and to provide a cost-effective program has meant that the City has engaged new pollution prevention partners, in addition to the collaborations that have previously existed. These new partners include the Ag. Waiver monitoring group, Ecology Action, the Stormwater Education Alliance and the Salinas Elementary Unified School District. A contract services provider/partner in this reporting term is Pacific EcoRisk, an environmental consulting, testing firm. Agency collaborations currently include, but are not limited to, Monterey County Environmental Health, the Farm Bureau, the National Marine Sanctuary, Monterey County Water Resources, California State University at Monterey Bay (CSUMB) Watershed Institute, the Future Growth Development Community Group, Big Sur Land Trust, NOOA, Stormwater Education Alliance, the Otter Project, Salinas Valley Solid Waste Authority, and the Salinas school districts.

On July 11, 2007, the City hosted a watershed stakeholders meeting at the City Corporation Yard. This meeting included twenty-five (25) people representing a variety of agencies and interests involved in water quality protection. Topics of discussion included sharing resources and eliminating overlap in watershed activities for greater effectiveness. Follow-up meetings will be convened during this upcoming reporting year. On September 7, 2007, the Maintenance Services Director participated in a Watershed Mixer facilitated by the Farm Bureau. The purpose of this meeting was to also assemble

resource lists and agency information about water quality and food safety efforts in Monterey County. Tracy Roberts of the Farm Bureau and Director Denise Estrada agreed to merge mailing lists for the two meeting groups in an effort to have the next stakeholders meeting include both groups of invitees.

The NPDES Permit requires Salinas to coordinate with the Salinas Valley Solid Waste Authority (SVSWA). Salinas is a member of this joint powers agency. A member of the Salinas City Council serves as a Board member of the SVSWA. Associated with this coordination, the Director of Maintenance Services serves as a member of the Monterey County Integrated Waste Management Task Force and the 3 Rs Committee (Reduce, Reuse and Recycle) to carry out the City's commitment to reducing potential pollutants and the impacts of solid waste on landfill capacity. The work of these bodies is consistent with pollution prevention through waste reduction and the safe handling of waste products that have pollution potential for storm water. The work in 2005 was focused on plastic pollution prevention. It included participation in community outreach events at local grocery stores, media information, two county fairs, and numerous community clean-up events.

City Council members have each sponsored neighborhood clean-up events in their districts to prevent illegal dumping and to educate and engage their constituents in proper disposal and recycling of items that would otherwise have potential for pollution in waterways. Return of the Natives, the Watershed Institute of CSUMB have facilitated a program funded by the City and grant funds, to engage volunteers in educational hands on activities at Natividad Creek Park, the Natividad Retention Basin and Gabilan Creek. These activities have facilitated the frequent cleaning of the creeks as volunteers pull shopping carts, litter, and other objects from the City's creeks. The City has also collaborated with citizen monitoring groups that are active in monitoring the health of Santa Rita Creek and performing clean-up activities similar to the efforts at Natividad and Gabilan Creeks.

The City and its franchise waste hauler, BFI sponsored two free trash turn in days at three locations in Salinas. Hazardous waste, including tires, e-waste, and now universal waste products is sorted and disposed of in such a way as to eliminate its potential for pollution of storm water. During this reporting term, the focus has been to vigorously address illegal dumping and the safe disposal of universal waste. This has included public outreach events to inform tri-county residents how to safely dispose of batteries. Staff has received training and disposal containers to facilitate the safe disposal of batteries in the workplace. An exhibit was presented in August of 2007 at the Monterey County Fair for public education and outreach on waste reduction and pollution prevention.

REPORT ORGANIZATION

The Annual Report summarizes City activities under eight categories. They are as follows:

1. Construction Site Management
2. Development and Engineering

3. Commercial/Industrial Facilities
4. Municipal Maintenance Chapter
5. Illicit Discharge and Illegal Connection
6. Public Education and Outreach
7. Water Quality Sampling and Monitoring

The organization of the information within this Annual Report follows the organization of the SWMP. Within each element area, the report contains program activities, Best Management Practices specific to the Element category, and a work plan for the upcoming reporting year.

PROPOSED MODIFICATIONS TO THE SWMP/MONITORING PROGRAM

The Draft SWMP has been posted to the City website for public review. The SWMP is a comprehensive document and a responsible program commitment. The monitoring program has begun and will be most successful as the CCAMP data and the Ag Waiver data are compared with City monitoring data to determine the full scope of pollutant sources. The City suggests that the RWQCB make efforts with the three monitoring groups to facilitate an open and timely sharing of data. This is likely to be the most effective way of encouraging an open and joint collaboration on information sharing.

Work Plan

In the upcoming reporting year, the City will finalize the hiring of an additional position, the Senior Environmental Compliance Inspector in the Maintenance Services Department. This staff position will play a key role in the expansion of inspection services to the industrial, commercial and business operations within Salinas. By the end of 2007, the NPDES Committee will have completed the work of NPDES document review through the Stakeholder Committee. In fiscal year 2008/09, the second of a two-year budget that has been authorized will be utilized to expand the NPDES activities to fund the required activities that are contained in Attachment 6 of the City's Phase 1 Permit Orders in order to complete them by the mandated timelines. Collaboration with other agencies involved in water quality activities will be of particular importance to accomplish the effective utilization of limited resources in the implementation of water quality objectives. Agencies that will be of particular focus in this effort will be the Monterey County Water Resources Agency, Monterey County Environmental Health Department, the National Marine Sanctuary, California State University at Monterey Bay and other agencies tasked with water quality protection.

2006-7

Annual

Report

Development Standards & Construction Site Management

Introduction

The Development and Engineering Services Department is made up of two primary Sections; the Engineering-Design Section, and the Development/Permit Services Section; and provides management of the City's public infrastructure. The Department reviews all projects and inspects construction sites to ensure compliance with NPDES requirements, and is the Department that plans and implements the Development Standards section of City's Municipal Permit and associated Stormwater Management Plan. These divisions also plan and implement public capital improvements, examine private development plans and proposals to ensure responsible growth as it relates to traffic and public infrastructure. Development and Engineering Services also administers programs and enforces governmental regulations.

The Development/Permit Services Section's primary function is to regulate and control the design, construction, use and occupancy of buildings to safeguard life, health, property and public welfare. This includes performing plan checks, issuing building permits and conducting inspections to verify compliance with all applicable codes and laws. Code Compliance inspections are also performed to eliminate sub-standard housing. Encroachment permits are issued and inspections conducted for work performed within the street right-of-way to assure compliance with the City standards and to protect the City's infrastructure. Inspections are also conducted to assure that the City constructs new streets, including utilities, in compliance with the City standards prior to their acceptance for maintenance. During this reporting year, Development and Engineering staff has continued to require and enforce the installation and maintenance of construction site BMP's to control erosion and runoff. These are summarized below and in the Table attached to this portion of the Annual Report.

GOAL

Salinas's goal is to reduce, to the maximum extent practicable, the impacts of new development and redevelopment on storm water and urban runoff through the integration of watershed management principles into the City's land use planning and development activities. All actions to achieve the goal are detailed in the Draft SWMP in Table 4.3, Summary of Best Management Practices, and those actions occurring during the reporting period are listed in the table attached.

ACTIVITIES

Permit Services

The City of Salinas Development and Engineering Department has reviewed all projects and inspects construction sites to ensure compliance with NPDES requirements. During this reporting year, D&E staff has continued to require and enforce the installation and maintenance of construction site BMP's to control erosion and runoff. (Please refer to the attached summary table for summaries of these activities). The City has continued education for both staff and the public to help raise awareness of and compliance with Low Impact Development (LID) concepts and NPDES requirements. (See details in Table).

Two other significant events that affect the enforcement of storm water regulations occurred during this reporting year. The first was the purchase of a permit tracking software system, which was implemented and fully functional in February 2007. The software has enhanced the organization of data, computerize inspection data for efficient retrieval, and will strengthen the City's ability to track the installation, maintenance and reporting of NPDES related activity.

All projects during this reporting year that involved grading or had potential for erosion were required to install and maintain BMP's during construction. The majority of these projects was less than one acre and did not require a state Storm Water Pollution Prevention Plan (SWPPP). Smaller residential projects with potential for erosion are also required to install appropriate BMP's, which typically include placing straw wattles/fiber rolls on the downstream side of construction, placing gravel bags over nearby drainage inlets, and sweeping streets/sidewalks on a periodic basis as determined by the City inspector. Projects that did require a state SWPPP were larger and the plans reflected a greater understanding of the requirements to protect storm water runoff from being a site source of pollutants. With the NPDES information provided by City staff to design professionals and the overall increase in industry information about storm water protection, the City has found that the quality of plans and level of compliance improved significantly. The City has developed an informational brochure on BMP's for that is available at the Permit Center to contractors and the public. The City plans to develop more brochures in the next reporting year.

On August 8, 2006, the Salinas City Council approved the purchase of a permit tracking software program, "Trakit", from CRW Associates of San Diego. Initial implementation

of this program will cost approximately $500,000, including hardware. This program is designed to track in detail the course of projects and permits from date of submittal until final occupancy. It can also automatically schedule inspections and follow-ups, track violations and track any other property-related items. Implementation of “Trakit” began on September 2006, and fully initiated in March, 2007. The “Trakit” program upgraded the capability of the City to ensure adequate inspections of active construction sites, track NPDES requirements throughout the course of projects and produce comprehensive statistical reports. Outside agencies and the public will also have access via the Internet too much of the data contained in the program.

In November 2005, Salinas’s voters passed Measure V, which allowed for a half-cent sales tax increase to fund City services. In March 2006, the City Council chose to use a portion of Measure V funds to create three new positions in the Code Enforcement Division. This increases the Code Enforcement staffing level from two Officers to five. With additional staffing, Code Enforcement has been able to assist other City Departments and responsible staff to enforce Storm Water regulations. More enforcement staff will also allow further use of Administrative Remedies Ordinance provisions to enforce Storm Water regulations.

The Code Enforcement positions were filled by the end of 2006, and new staff members have been trained. At this time, the Code Enforcement Teams are able to assist the Wastewater Management Division and associated personnel with enforcing the City’s Storm Water regulations.

Development Engineering

During the Permit term, Development and Engineering staff has worked to incorporate watershed protection principles into the planning procedures and policies. The work of staff is focused on identifying and minimizing the impacts of post-development construction in new development. The details of these activities are discussed on the attached Table. Program highlights are summarized herein.

The City of Salinas has continued the use of LID techniques in its development, environmental review and construction management processes.

During this reporting period, City staff supported Kennedy/Jenks Consultants on the preparation of a draft LID Development Standards Plan, as required in the NPDES MS4 permit. Under contract to the RWQCB, Kennedy/Jenks analyzed the City’s storm water environment, draft Development Standards Plan is being used as a foundation for the preparation of the City’s Storm Water Development Standards, a document to be adopted by the City. The Development Standards Plan is a comprehensive guidance document for LID implementation.
On July 12, 2007 from 4-6pm, the City hosted the RWQCB workshop for the on LID and the Development Standards Plan are presented by Kennedy/Jenks; the Regional Board’s Low Impact Development (LID) consultant. The event was well attended by members of the community and interested outside parties.

Staff has worked with Kennedy/Jenks Consultants during the reporting period to ensure that LID applications in the City are consistent with the pending Development Standards Plan. Questions derived from specific plan submittals were forwarded to Kennedy/Jenks and resolved in follow-up consultations. City LID policies were consistent with the NPDES permit, Kennedy/Jenks recommendations, and Contra Costa Clean Water Program guidance document.

On all projects involving LID, staff has met a with the project engineer/architects to provide detail information regarding City LID requirements and how it would apply to the proposed project. Following project plan submittal, staff met with project representative(s) a minimum of one meeting to review compliance and to require modifications. Most LID projects required several meetings. Permit Center inspectors followed-up with site inspections during construction to ensure both construction BMPs and post-construction LID elements were properly installed.

Review of these LID projects for 2006-7 reporting period is reviewed in a separate section of this report.

Staff has published a revised draft Storm Water Management Plan affirming the City's commitment to ensure that development activities conducted within the City meet the objectives of the City's NPDES Permit.

Additionally, the City's primary growth in the next 15-25 years is located in what is commonly referred to as the City's Future Growth Area, located north and east of Boronda Road. Development within this area is being master planned and will comply with the requirements of the City's NPDES permit. Staff meets regularly with the development teams/interests and property owners associated with development of the Future Growth Area. City staff are working collaboratively with Future Growth Area engineers to develop hydrologic mitigation approaches to address both volumetric and qualitative treatment of storm water in the new area. In September 2007, City staff forwarded copies of draft analyses to the Regional Board's staff.

On August 7, 2007 the City of Salinas City Council approved the creation of an NPDES Stakeholder Committee. This committee was formed as a result of concerns expressed by members of the public regarding their desire to participate in the development NPDES documents. The committee is composed of nine members of the community representing diverse interests. The first meeting of this group is planned for October 1, 2007 and it is anticipated the bulk of the committee's work will be completed by December 2007.

MEASURES OF EFFECTIVENESS

Permit Services

The City of Salinas Development and Engineering Services Department continues to review plans and monitor construction sites to ensure that NPDES requirements are met. One hundred percent (100%) of plans submitted are reviewed for compliance with the City's NPDES permit and LID requirements.

Staff has exceeded the City's permit requirements for construction site inspections, and typically reviews each site that is greater than 1 acre in size on a weekly basis to ensure compliance.

All projects having at least one NPDES element have been monitored over the course of this reporting period. During this reporting period the construction inspection team conducted 1146 inspections on 757 projects which have included some element of the NPDES program. This does not include the City's own capital improvement projects which are inspected daily during the course of construction.

The City has both conducted and attended a number of training activities during this reporting period. To facilitate future and ongoing training efforts, the City is in the process of adding a conference room in its Permit Center partially to allow viewing of web casts.

Development Engineering

The City has generally met the goals established in its draft Stormwater Management Plan for the reporting period. Perhaps most importantly, the City has required LID in all applicable projects during the reporting period and has inspected such projects to ensure the proper installation of these developing strategies and techniques.[1] Maintenance agreements are prepared and recorded against the properties upon which such features are located to ensure their proper and ongoing maintenance and functioning. The City has also revised and adopted an updated Stormwater Ordinance and updated Grading Standards and worked cooperatively with Regional Board staff and its consultant, Kennedy/Jenks, on the Development Standards Plan.

RY 2007-2008 WORK PLAN

The major project in the Work Plan for the combined activities of the Development and Engineering Services Department is to complete the drafting of the Stormwater Design Standards, release these draft standards for public review and comment, adopt the standards and continue implementation of LID in the City. City staff will respond to comments, address any needed modifications, and seek City Council approval of the

[1] Included within this chapter beginning at page 2-40 is an outline of priority development projects within the City of Salinas for this reporting period (October 1, 2006 through September 30, 2007).

package. Regional Board staff will be provided draft standards during the drafting process.

Following promulgation of the new Stormwater Design Standards, the City will host a public workshop to provide training on the new standards and the required permit process detailed in the standards document.

Future Growth Area planning will continue to integrate LID and hydromodification into the next step of planning, which is the formation of specific plans.

Staff will complete additional training to become more technically trained in the elements of LID.

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SWMP	Permit	Development Standards Activity	Status	Date	Accomplishment Quantifiable Measure
Entire	III a	Minimize short and long-term impacts on receiving water quality from development	√		The City of Salinas has continued the use of LID techniques in its development, environmental review and construction management processes. Staff has published a revised "draft" Storm Water Management Plan in June 2007 affirming the City's commitment to ensure that development activities conducted within the City meet the objectives of the City's NPDES Permit. Revised City of Salinas Grading Standards to comply with the 2005 NPDES Permit and low impact development concepts adopted June 19, 2007. Revised Storm Water Ordinance to comply with the 2005 NPDES Permit and low impact development (LID) adopted July 5, 2007 The City has also collaborated with the RWQCB and Kennedy/Jenks Consultants on the preparation of the Development Standards Plan, which was finalized in July 2007 and provided in a public workshop in July

[2] Status: Where a check mark is provided, activity has been implemented

[3] Date indicates when activity will be implemented

Entire		Minimize short and long-term impacts on receiving water quality from development (cont.)	√		2007 in Salinas. Revised City of Salinas Standard Specifications, Design Standards, and Standard Plans to incorporate revised grading standards and other updates. Draft updated to be posted for public review in October 2007.

4.6 D	III a I	Incorporate watershed protection principles into planning procedures and policies, e.g. General Plan and Specific Plans	√		Staff meets on a regular, monthly basis with the development interests and property owners in the Future Growth Area proposed to be annexed into the city limits. This FGA is located to the northeast of the existing community and includes portions of the watershed flowing from the Gabilan Mountains through Gabilan and Natividad Creeks. Storm water management has been a constant item of consideration for the planned development of this community. Engineers working with the City's Future Growth Area have developed hydrologic mitigation approaches to assure both volumetric and qualitative treatment of storm water in the new area. Documents related to this were forwarded to Regional Board staff in September 2007. During the year the City Staff maintained General Plan Policies that support LID and the City's NPDES permit, including the following: Proposed development projects (both public and private) within Salinas must incorporate structural and non-structural BMPs to preclude significant water quality impact from non-point source pollutants. (Conservation and Open Space

4.6 D	III a I	Incorporate watershed protection principles into planning procedures and policies, e.g. General Plan and Specific Plans (cont.)	√		Element, page COS –4) Ensure that negative impacts of future growth on environmental quality and quality of life are minimized and adequate levels and quality of urban services and facilities are maintained (Policy LU 2.5) Manage future growth to minimize impacts to the existing community and surrounding agricultural lands (Goal LU-2) Require new development, to the extent feasible, to provide flood control facilities that are visually attractive and ecologically beneficial, and require on-going maintenance of the facilities by the development through a maintenance district (Policy LU 8.3). Apply a system of managing growth based on the timely provision of public services and facilities of public services and facilities and general thresholds or standard for their adequacy. (Policy LU2.2) Encourage clustering of development on sites within the Future Growth Area to minimize

4.6 D	III a I	Incorporate watershed protection principles into planning procedures and policies, e.g. General Plan and Specific Plans (cont.)	√		impacts on agricultural and open space resources. (Policy LU 2.3) Locate and design water retention area and preserve important wildlife habitat areas to contribute to the visual quality of the City's open space system (Policy CD 1.6). Develop and maintain an integrated system of open-space corridors and trails along utility easements, power-transmission-line rights of way, the reclamation ditch stream banks, drainage ways, slopes and other natural features (COS 7.11). Utilize well-designed in-fill development, and selectively increase density within Focused Growth Areas to maintain compact city form (Policy LU 2.4). Participate in and support regional programs and projects that target the improvement and conservation of the region's groundwater and surface water supply (Policy LU 6.3) Actively promote water conservation by City residents,

4.6 D	III a I	Incorporate watershed protection principles into planning procedures and policies, e.g. General Plan and Specific Plans (cont.)	√		businesses and surrounding agricultural producers (Policy LU 6.4). Review projects subject, such as residential projects with 500 or more units, for compliance with Sections 10910-10915 of the California Water Code (Policy LU 6.5). Review development proposals to ensure that adequate sewer collection and treatment facilities are available to meet the needs of the development without negatively impacting the existing community (Policy LU-7.2). Apply appropriate development standards and fees to improve present drainage systems and provide adequate stormwater detention basins and sedimentation ponds with new construction (Policy LU-8.2). Continue the use of Carr Lake as a reclamation and flood control facility in addition to its other functions in addressing water quality, enhancing traffic/circulation and creating recreational opportunities (Policy LU-8.4).

4.6 D	III a I	Incorporate watershed protection principles into planning procedures and policies, e.g. General Plan and Specific Plans (cont.)	√		Create a “park-like” atmosphere for the city with greenways, landscaped streets and medians and parks distributed through the community at convenient locations (Policy CD 1.5). Avoid large un-landscaped parking areas and blank building walls facing streets or adjoining properties (Policy CD 2.8). Create a community that promotes a pedestrian-friendly, livable environment (CD Goal 3). Create and preserve distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics. Specifically, each neighborhood should have the following characteristics: An approximately [sic] 5-minute walk from perimeter to center…(Policy CD3.1). Promote the use of alternative modes of transportation,

4.6 D	III a I	Incorporate watershed protection principles into planning procedures and policies, e.g. General Plan and Specific Plans (cont.)	√		including bus, rail, bicycling and walking (Policy CD3.8). “In order to slow traffic, standard residential streets shall be no more than 34 feet wide with parking on both sides.” (Ibid, page CD-28) Cooperate with local, regional, and state water agencies to develop new water sources (Policy COS 1.1). Cooperate with Monterey County Water Resources Agency, the State Water Resources Control Board and the Regional Water Quality Control Board to implement programs that address the two primary causes of poor water quality in the planning area: salt water intrusion and nitrate contamination (Policy COS 1.5) Participate in and implement local and regional programs that promote water conservation (Policy 2.1). Apply standards that promote water conservation in agricultural, residential and non-residential uses (Policy COS 2.4)

4.6 D	III a I	Incorporate watershed protection principles into planning procedures and policies, e.g. General Plan and Specific Plans (cont.)	√		Explore with Monterey County the potential for creation of a Gabilan Creek Regional Park extending along the creek from the urban edge to the headwaters in the Gabilan Mountains (Policy COS 5.2). Staff will work cooperatively with Monterey County, the Regional Water Quality Control Board Central Coast (Region 3) and the Monterey County Water Resources Agency, providing technical assistance when necessary to help identify, protect and preserve critical aquifer recharge areas so that their function is maintained and ground water quality is not further degraded. (COS-3 Implementation Program) “Encourage water conservation throughout Salinas in the following ways: Implementing the Salinas

4.6 D	III b	Development Standards Plan	√		Urban Water Conservation Plan, the purpose of which is to reduce pumping of water from the Salinas Valley Groundwater Basin for urban uses to the maximum extent feasible and to reduce the overall pumping from the Salinas Valley Groundwater Basin by fifteen percent from the pumping [levels] that occurred in 1987"; Supported development of LID Standards Plan by the RWQCB consultant Kennedy/Jenks. Final DSP submitted by Kennedy/Jenks in July 2007. In conjunction with RWQCB sponsored public workshop on new LID Development Standards Plan, open a public review period in Salinas with a website posting of the Plan in July 2007. Following public comment from local and state input on the

4.6 O	III f	Maintenance Agreement and Transfer	√		Development Standards Plan, the Storm water Design Standards will be created. City staff is presently working on the creation of this document.
4.6 P	III i	Targeted Employee Training	√		The City has initiated the requirement for maintenance agreement and transfers in the permitting process during this reporting period.

4.6 A	III a 1	Minimize amount of impervious surfaces and directly connected impervious surfaces; use on-site infiltration in areas with appropriate soils.	√		The City of Salinas has continued the expanded use of LID techniques in its development, environmental review and construction management processes. All new development plans in the City have switched from standard design for roof storm drain direct connections to LID concepts which take roof runoff to engineered swales, planters and bioretention areas for biofiltration, bioremediation and infiltration. The consulting engineering teams planning the Future Growth Area have conducted soils testing to determine appropriate locations capable of on-site storm water infiltration. These engineers have completed an area stormwater analysis for an approach for mitigating stormwater runoff issues. These reports have been released to the RWQCB in September 2007.
4.3	III a 2	Implement pollution prevention methods supplemented by source controls; use strategies that control sources to minimize their transportation offsite.	√		All new developments are using LID BMPs to treat stormwater on-site.
4.6 A	III a 3	Preserve, and where possible, create/restore areas important to water quality, such as riparian corridors, wetlands, etc.	√		City staff implementing Salinas General Plan Community Design, Conservation and Open Space and Land Use Element Goals, Policies and Implementation Programs work in concert to protect and restore these

					water quality and habitat resources. See CD -1.6, COS-1, COS –5, COS-5.1, COS 5.2, COS-7.2, COS-7.11 COS Implementation 1, 3 and 4, LU-2, LU-2.5, LU-6.3, LU-6.4, LU-6.5, LU-8.2, LU-8.3, LU-8.4
4.6 A	III a 4	Limit disturbances to natural drainage systems caused by development	√		See above General Plan Policies
4.6 C	III a 5	Require submittal of pre- and post project pollutant load and flow analyses. Require BMPs to mitigate projected increases in pollutant load runoff.	√		Draft SWMP includes provisions to require the submittal of a stormwater analysis as part of the development review process.
4.6 E	III a 6	Identify, minimize and regulate development in areas particularly susceptible to erosion and sediment loss; or establish development guidance to protect areas.	√		All development in the Future Growth Area is subject to the preparation of a Specific Plan demonstrating the following: The following Smart Growth principles will be considered BMPs: a. For projects identified within the City's NPDES Municipal Permit as *priority development projects*, developers will prepare and submit a stormwater control plan that analyzes pre-and post-development project pollutant loads, including sediment, and flows (volume and velocity) resulting from proposed development, and

4.6 E	III a 6	Identify, minimize and regulate development in areas particularly susceptible to erosion and sediment loss; or establish development guidance to protect areas (cont.).	√		explain how the design will reduce urban runoff to MEP. A licensed engineer or other trained and licensed professional capable of conducting this study shall prepare this analysis. For all other projects, a simpler Stormwater Control Plan will be required. b. For some projects, one page identifying pollutants of concern, summarizing the proposed BMPs and their maintenance schedules, and including them on the plans and specifications may suffice. These less rigorous documents may not require preparation by a licensed professional. c. The following planning principles <u>will be considered</u> during the preparation of the Development Design Standards: Reducing street width areas as authorized by the City's Traffic Engineer and Fire Chief. Include sunken landscaped islands in street designs. Assess the potential to reduce

4.6 E	III a 6	Identify, minimize and regulate development in areas particularly susceptible to erosion and sediment loss; or establish development guidance to protect areas (cont.).	√		future parking lot sizes/parking stall requirements by encouraging shared parking as appropriate and as provided for in the Zoning Code Update. Providing incentives for opportunities for structured parking (multi-level) rather than surface parking. Increasing the street tree requirements within parking lots from 1 tree per 6 stalls to 1 tree per 5 stalls. Include porous pavers and/or porous pavement in parking overflow areas when accessibility will not be compromised. <u>Site Design BMPs:</u> Minimize Impervious Areas Incorporate Smart Growth (traditional neighborhood development) principles and design concepts that implement Salinas' General Plan; ▪ Develop streetscapes that minimize impervious surfaces and maximize tree canopy; ▪ Incorporate landscape buffer areas between sidewalks and streets; ▪ Avoid residential cul-de-sacs and incorporate landscape

4.6 E	III a 6	Identify, minimize and regulate development in areas particularly susceptible to erosion and sediment loss; or establish development guidance to protect areas (cont.).	√		areas; ▪ Increase building density while decreasing building footprints; ▪ Use cluster development that incorporates smaller lot sizes and maximizes open space; and, ▪ Reduce overall lot imperviousness by promoting alternative driveway and parking lots surfaces and designs. <u>Increase Rainfall Infiltration</u> ▪ Encourage sustainable building design; ▪ Direct runoff from rooftops and hardscape to landscape areas; avoid routing runoff to the roadway or the urban runoff conveyance system; ▪ Use permeable materials for private sidewalks, driveways, parking lots, and interior roadway surfaces, while ensuring compliance with ADA/Title 24 access requirements; and, ▪ Where soils percolate freely, consider other infiltration designs. <u>Maximize Rainfall Interception</u>

4.6 E	III a 6	Identify, minimize and regulate development in areas particularly susceptible to erosion and sediment loss; or establish development guidance to protect areas (cont.).	√		▪ Maximize canopy interception and water conservation by preserving native and existing vegetation, especially trees, and by planting low water using street trees, and large shrubs; ▪ Encourage the use of cisterns to retain rainfall for later landscape irrigation; and, ▪ Design landscape areas to receive roof and surface drainage. <u>Minimize Directly Connected Impervious Areas</u> ▪ Drain rooftops into adjacent/nearby landscape areas prior to discharge into storm drain; ▪ Drain parking lots into landscape areas that serve also as bio-filtration areas; and ▪ Drain roads, sidewalks and paths into adjacent landscaped areas rather than directly into the street. <u>Slope and Channel Protection</u> ▪ Use natural drainage systems to maximum extent practicable; ▪ Stabilize permanent channel

4.6 E	III a 6	Identify, minimize and regulate development in areas particularly susceptible to erosion and sediment loss; or establish development guidance to protect areas (cont.).	√		crossings; ▪ Select native, indigenous or water-thrifty plants appropriate for the local ecosystem with deep root structures for slopes; and ▪ Use energy dissipaters, such as river stones or riprap at drain outfalls of new storm drains, culverts, conduits, or channels that enter other unlined channels. <u>Source Control BMPs</u> ▪ Use/encourage sustainable building design, including low impact development (LID) ▪ Use water-thrifty landscape designs with efficient irrigation systems, such as drip systems, rather than spray, to eliminate runoff. <u>Treatment Controls BMPs Bio-filters</u> ▪ Grass swales; ▪ Grass strips; ▪ Vegetated swale; and ▪ Bio-retention.

4.6 E	III a 7	Implement source/treatment controls to protect receiving waters from increased pollutant loads from runoff.	√		All development in the Future Growth Area is subject to the preparation of a Specific Plan demonstrating the following: <u>Source Control BMPs</u> ▪ Use/encourage sustainable building design, including low impact development (LID) ▪ Use water-thrifty landscape designs with efficient irrigation systems, such as drip systems, rather than spray, to eliminate runoff. <u>Treatment Controls BMPs Bio-filters</u> ▪ Grass swales; ▪ Grass strips; ▪ Vegetated swale; and ▪ Bio-retention.
4.6 I	III a 8	Control post-development peak storm runoff rates and velocities to protect stream habitat and prevent/reduce erosion.	√		In addition to required Low Impact Development strategies, which attempts to have new development mimic predevelopment hydrology; the City has detention/retention requirements to limit stormwater discharge to the ten-year pre-development rate, and store/detain the difference in storm water volume.
4.6 I	III a ii	Review and require that all proposed development is in compliance with City codes, regulations, and policies prior to issuing a permit.	√		Building permit will not be issued without first confirming that the proposal is in compliance with all of the City's land use and development regulations.

4.6 D	III b	Prepare and submit for public review a Development Standards Plan (DSP) within 1 year of permit adoption. DSP must be consistent with WQ 2000-11[4]	√		The City has cooperated with the RWQCB, who has contracted with Kennedy/Jenks Consultants for the preparation of the DSP.
4.6 L	III c	Ensure that all development meeting Municipal Permit criterion are reviewed and conditioned to comply with the permit and development.	√		All discretionary projects shall include conditions to comply with the NPDES permit. All ministerial projects (not discretionary) shall incorporate BMPs as appropriate prior to issuance of building permits.
4.6 O	III c ii	DSP shall include a list of recommended source and/or structural treatment control BMPs.	√		RWQCB consultant Kennedy/Jenks has indicated in an outline of the DSP that LID source control BMPs will be shown.
4.6 D 4.6 O	III c iii III c iv	Ensure that municipal sizing criteria is comparable to Volume- or Flow-based criteria (24-hr, 85th percentile storm event; flow by 85th percentile hourly rainfall intensity) Or: May develop or use equivalent numeric sizing criteria to above	√		City staff has used the Bay Area RWQCB std of 0.2 inches/hr for flow based BMPs and is now using the 24hr, 85th percentile storm event criteria for volume based BMPs and twice the 85th percentile for hourly intensity for flow based BMPs.
4.6 D		DSP shall identify roles and responsibilities of municipal departments.	√		The City is cooperating with the RWQCB, who has contracted with Kennedy/Jenks Consultants for the

					preparation of the DSP.
4.6 N	III c vii	Restrict structural BMPs to protect groundwater quality	√		Structural BMPs will be used as a "last resort" when other source controls are not feasible. Structural controls will likely only be used in smaller redevelopment or infill development.
4.6 D	III c ix	Process shall consider measures to control peak storm volumes and rates to protect downstream habitat.		12/07	LID measures to be required in the Stormwater Design reduce peak runoff Existing development requirements limit discharge to the ten year pre development rate and require detention to store the difference between the ten year pre-development and the 100 year post development runoff for most all developments.
4.6 F	III c x	DSP shall include a description of modifications to existing codes, etc.	√		The City has adopted a Stormwater Ordinance and revised grading standards to comply with the second 5-year NPDES permit.
4.6 L	III f	Require all development subject to Development Standards to provide verification of maintenance provisions.	√		The City is beginning implementation of procedures to require maintenance provisions.

4.2	III g	Incorporate stormwater quality impacts into CEQA processing (Initial Study)	√		Revised its initial study checklist as required in the NPDES permit.
4.6 4.6 A	III h i III h ii	Evaluate and amend as necessary General Plan to include watershed quality and quantity management considerations when relevant elements are amended. Provide Regional Water Quality Control Board with draft General Plan amendments	√		The Salinas General Plan has been reviewed and determined to support the implementation of the City's NPDES permit.
4.6 P	III h i	Annually train City employees engaged in planning and development.	√		The City has on-going training programs for its Development and Engineering Personnel in the NPDES program and LID requirements. Training provided for the design and planning staff focused on the NPDES program requirements, the concepts of Low Impact Development, and stormwater quality concerns. Use of webcasts, seminars, and staff-led training. The City has conducted annual internal training for those employees in the Development and Engineering Department whose position involves design or inspection of NPDES. Additional training was conducted for those whose position involves review of plans for NPDES compliance and/or public interface for

					conveyance of NPDES/LID concepts and requirements. Additional training included: National Association of Local Government Environmental Professional Webcast “LID and Watershed Management” March 21, 2007 Izaak Walton League of America “Alternative Practices for Highway Stormwater Management Design, Construction and Maintenance” Webcast October 26, 2006 International Erosion Control Association Workshop “Integrating Smart Growth and Low Impact Development into Municipal Stormwater Programs” February 13, 2007 Reno Nevada American Public Works Association Public Works Congress Educational Sessions on Stormwater September 9-12, 2007 including: “Water Knows No Boundaries: Regional Watershed Management” “Stormwatch – A Powerful Weapon for Stormwater Engineers” “Designing Stormwater Management Facilities as a

					Community Amenity” “Best Management Practice: Quality, Flood Protection” “NPDES Program Update” “NPDES Phase I and Phase II panel” “Impact of Increased Stormwater Runoff on Urban Drainage Systems” Conference held in San Antonio Tx Gary Minton PhD two day seminar “ Stormwater Treatment for the Practicing Engineer (and Scientist) September 19-20, 2007 Ontario, CA In the following years, training will be focus more on the requirements and details regarding the stormwater design standards document, especially the application of BMPs in stormwater treatment. Those reviewing development plans will receive more frequent training in order to them to provide guidance to the general public regarding LID development compliance.
4.2	III g	Incorporate stormwater quality impacts into CEQA processing (Initial Study)	√		The City has revised its initial study checklist as required in the NPDES permit.

4.6 D	III j ii	Within 1 year of adopting DSP make hardcopy available to development community.	√	July 2007	The DSP is available on the City' Website and a hardcopy of the DSP is available for review at the Permit Center and Engineering Counter.
4.6 O		Development Standards shall include: a) source and treatment control design criteria BMPs; b) peak flow control criteria; c) expected pollutant removal performance ranges from BMPs; and d) maintenance factors.		12/07	The City is developing the Stormwater Standards from the DSP and CASQA and other stormwater standards.

SWMP	Permit	Construction Site Management Activity	Status	Date	Accomplishment Quantifiable Measure
5.2	OD.1.a.i.	Comply with the Order, including all Attachments, the SWMP, and any approved modifications	√		
5.2	OD.1.a.ii.	Coordinate with Internal Departments and Outside Agencies	√		
5.3	A4.II.	Develop & Implement Construction Site Mgmt Program	√		
5.4	A4.II.a	Projects >1 ac: require Submittal of WDID#	√		25 active projects in this reporting year required State WDID #'s.
5.3	A4.II.a.i	Control sediment using source control and structural BMP's	√		All active construction sites involving grading are required to control sediment through BMP's. The City has ensured proper measures for said sites. The City's primary development at this time (Monte Bella development) has constructed a de-siltation basin and an interceptor ditch at its interface with agricultural lands. This was done to address siltation problems that have historically occurred from said farm areas. A

[5] Status: Where a check mark is provided, activity has been implemented and on-going

[6] Date indicates when activity will be implemented

					second de-siltation basin should be completed by the end of 2006
5.6 A	A4.II.a.ii.	Retain construction-related materials at project site	√		All active construction sites are required to retain construction materials at the site, and provide measures to ensure no illicit discharges to the storm water system. Inspections occur on a weekly basis to ensure conformity.
5.6 A	A4.II.a.iii.	Contain unauthorized non-storm water at project site	√		Construction sites are required to retain unauthorized non-storm water on site. Eight (8) projects installed concrete washout facilities. Weekly inspections were provided.
5.6 A	A4.II.a.iv.	Control erosion from slopes with source control and other BMP's	√		Slopes on construction sites are required to be protected with appropriate BMP's. Development and Engineering ensures adequate controls (both construction and long-term measures) are provided as part of new development and public infrastructure improvements.
5.4	A4.II.a.	Require submittal of SWPPP to City of Salinas	√		All projects > 1 acre must submit a SWPPP. There were 16 projects greater than 1 acre this reporting year involving grading that were required to show BMP's on the plans as well as field inspections.

5.4	A4.II.a.iv.	Meet CRWQCB San Francisco Bay Region Erosion and Sediment Control Field Manual Requirements	√		Used as basis for all inspections of BMP's. A new software tracking program was implemented in early 2007, and will provide better documentation and archiving of this information.
5.4.B	A4.II.b.	Inventory active construction projects	√		We currently use 2 Access databases and a City database to track projects. The City Permit Center has recently purchased permit-tracking software which will allow all tracking within one system. This program has already been implemented into the City's processes.
5.4 B	A4.II.b.	Develop and implement an effective tracking system	√		See above comment.
5.4 B	A4.II.b.	Update Construction and Grading Projects Inventory as new projects are submitted	√		All new projects are entered into City database at time of submittal.
5.6 A	A4.II.c.	Implement Construction BMP's, or provide justification with SWPPP	√		All projects with grading are required to implement appropriate construction site BMP's.

5.6 A	A4.II.c.	Stabilize construction exit (sometimes referred to as “construction entrance”)	√		Required on 41 projects this reporting year.
5.4 F	A4.II.c.	Schedule grading operations to minimize exposed, and unprotected, graded areas during wet weather season	√		25 projects were monitored for wet season requirements this reporting year.
5.6 A	A4.II.c.	Implement downstream sediment controls	√		Required on 41 projects this reporting period.
5.6 A	A4.II.c.	Implement concrete washouts	√		Required on 18 projects this reporting year.
5.6 A	A4.II.c.	Implement storm inlet protection	√		Required on all active construction sites – 41 this reporting period.
5.4	A4.II.c.	Implement Slopes/Channel Protection	√		Required on 3 projects this reporting year. (Note: most areas of Salinas are relatively flat; slope protection often is not required).
5.6	A4.II.c.	Implement good housekeeping practices at site	√		Required on 41 projects – housekeeping maintenance is inspected routinely throughout the course of projects.
5.8	A4.II.c.	Prepare & distribute construction site BMP’s brochure	√		Brochure prepared and distributed. Additional informational brochures will be prepared next reporting period.

5.4	A4.II.d.i.	Require proof of NOI submittal prior to permit issuance	√		Required prior to permit issuance on 21 projects this reporting period.
5.4 F	A4.II.e.	Inspect all active construction sites once/month during wet season	√		Active construction sites are inspected at least monthly during the wet season. 336 inspections were conducted this year.
5.4 F	A4.II.e.	Inspect all Active construction sites once every other month during dry season	√		Active construction sites are inspected at least every other month during the dry season. 123 inspections were conducted this year.
5.4 F	A4.II.e.	Inspect high priority sites (>5 AC@min) once/week during wet season	√		High priority sites are inspected at least once a week during the wet season. 338 inspections were conducted this year.
5.5	A4.II.e.	Establish criteria for high priority sites in SWMP	√		Criteria have been established. High priority sites include sites > 5 acres, projects adjacent to a water body, sites tributary to a 303(d) impaired water body or environmentally sensitive area.
5.5	A4.II.e.	Inspections to include: BMP's, sediment controls, and records keeping	√		15 inspection/monitoring criteria and procedures have been listed in the Storm Water Management Plan.

5.7	A4.II.f.	Develop ordinance, and enforce regulations	√		Regulations are routinely enforced through the issuance of correction notices by Construction Inspection personnel.
5.7	A4.II.f.	Prepare escalating enforcement ordinance/policy with sanctions	√		The City adopted an Administrative Remedies Ordinance in October 2003. This allows for escalating fines and administrative compliance orders. Additional Code Enforcement staff have been trained and are available to assist Construction Inspection personnel to administer this ordinance.
5.7	A4.II.g.	Refer construction noncompliance orally to CRWQCB within 5 business days	√		One referred this year.
5.7	A4.II.g. & 4.IV.h.	Refer non-filers (General Construction Permit) to CRWQCB, in writing, within 10 business days	√		One referred this year.
5.3	A4.II.h.	Train plan check employees on development plan check and inspection issues	√		Plan check and inspection staff has received 94 total hours of training in 4 workshops this reporting year. Other field inspection staffs, including Building Inspectors and Code Enforcement Officers, have received 20 total hours of training in 3 workshops to help them recognize proper BMP's and potential violations.

5.3	4.IV.e.	Train inspectors of commercial and industrial facilities See Section on Commercial and Industrial Facilities	N/A		N/A
5.7	4.IV.h.	Refer (orally) non-filers to CRWQCB within 5 business days	√		See above.
5.4	4.IV.h.	Refer non-filers needing NOI or WDID # to CRWQCB within 10 business days	√		See above.
5.4 D	4.IV.i.	Provide annual Training for commercial/Industrial inspections See Section on Commercial and Industrial Facilities	N/A		N/A
5.8	A4.V.g.	Annually inspect City of Salinas owned facilities/activities and train inspectors	N/A		N/A
5.7	A4.V.g.	Record all inspections (database, photos, checklist, etc.)	√		All inspection results are currently tracked in Access and City databases. New software (TrakIt) has been implemented and allows for attachment of digital photos and other documents to project files. Construction Inspection staff logged 727 hours on 797 inspections this reporting year.
5.3.f	4.VI.c.	Maintain record of drive-by inspections	√		Currently recorded in Access and City databases.
5.3.a	4.VII.g.	Conduct small (<1 acre) construction outreach	√		One workshop was held this reporting period.
5.8	4.VII.g.	Prepare and distribute construction brochure of BMP's consistent w/ NPDES Permit	√		A brochure has been developed and is available to the public at the Permit Center. More informational brochures will be prepared in the next reporting year.

5.2	A4.II.g.	Comply with the Order, including all Attachments, the SWMP, and any approved modifications	√		

Current Development within the City of Salinas
Implementing LID (10/1/2006 to 9/30/2007)

Per Section III c. of the City NPDES Storm Water Discharge Permit, the City plan review staff has reviewed all projects in conjunction with the "priority development" criteria as outlined in Section III, Attachment 4 of said permit for this reporting period. Projects that have crossed the "priority development" threshold for LID, have been required to include long-term LID BMPs in their site design. The following list outlines priority development projects within the City of Salinas for the reporting period of 10/1/2006 to 9/30/2007.

Attached to this list is a copy of the "Storm Water Development Process" which can be broken into 4 primary steps: (1) project development; (2) planning permit process; (3) building/site improvement permit process; (4) construction. The status of each project to, in conjunction with each of these steps is stated.

Kohl's (at Boronda Crossing)

Location: 1950 North Davis Road
Use: Commercial retail.
Size: 7.9 acres (344.6 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Complete.

This project is the construction of a new "big-box" commercial/retail facility, and involves addition of over 7 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 13,400 square foot bio-swale system that is connected by a sub-drain to the City storm water system The bio-swales are integrated into site landscaping in the parking areas and open space areas. The foot-print of the roof for this facility drains into an elevated planter area that utilizes the same soil-filter section as the bio-swales, and is included in the total square footage for the bio-swale system.

Home Depot (at Boronda Crossing)

Location: 1890 North Davis Road
Use: Commercial retail.
Size: 12.5 acres (542.5 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Complete.

This project is the construction of a new “big-box” commercial/retail facility, and involves addition of 11.6 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 22,200 square foot bio-swale system that is connected by a sub-drain to the City storm water system. The bio-swales are integrated into site landscaping in the parking areas and open space areas.

Tony’s Corner (at Boronda Crossing)

Location: 1900 to 1940 North Davis Road
Use: Commercial retail and quality restaurant
Size: 7 acres (305 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is construction of new commercial/retail, and involves addition of 7 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 14,200 square foot bio-swale system that is connected by a sub-drain to the City storm water system. The bio-swales are being integrated into site landscaping in the parking areas and open space areas.

Boronda Square

Location: Boronda & Sanborn Roads
Use: Commercial retail & fast-turnover restaurants
Size: 6.9 acres (302 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is construction of anew commercial/retail center, and involves addition of 6.9 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 14,200 square foot bio-swale system that is connected by a sub-drain to the City storm water system. The bio-swales are being integrated into site landscaping in the parking areas and open space areas.

Sherwood Senior Housing

Location: 808 North Main Street
Use: Senior adult housing.
Size: 3 acres (130 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is a conversion of an existing 173 room motel into a 124 unit “affordable” senior apartment complex. The project involved complete reconstruction of 1.41 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 2,700 square foot, below-ground bio-swale that is connected by a sub-drain to the City storm water system. The bio-swale will be located below a landscaped common patio/gathering area.

Tynan Village

Location: 303/313/323 Front Street
Use: High-density, low-income housing with neighborhood commercial and retail.
Size: 6.1 acres (265 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the conversion of an existing paved lumber yard into a 171 unit “affordable” multi-family residential complex with commercial/retail uses for the Housing Authority of Monterey County. Although the project actually reduces impermeable surfacing, the project involved complete reconstruction of 1.5 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 3,000 square foot bio-swale system that is connected by a sub-drain to the City storm water system. The bio-swales will be integrated into site landscaping and open spaces surrounding the new facilities and parking.

Mission Linen

Location: 435 West Market Street
Use: Industrial/institutional laundry service
Size: 2.5 acres (107.4 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the re-construction of 1.1 acres of an existing 2.5 acre laundry service that was burned down in a fire. The project involves complete reconstruction of 1.1 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 2,300 square foot planter-box/bio-swale that is connected by a sub-drain to the City storm water system. The bio-swale is integrated into site landscaping at the rear of the facility.

Grower's Ice

Location: 1351 Harkins Road
Use: Industrial maintenance yard.
Size: 9.7 acres (421.8 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Complete.

This project is an addition to an existing industrial site, that consists of an industrial maintenance yard. The project involved addition of ½-acre of impermeable surfacing, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 900 square foot bio-swale that discharges to a natural depression used for storm water retention/infiltration. The bio-swale is integrated into site landscaping southerly of the new facility and parking area.

Iglesia Bautista

Location: 1125 Garner Avenue
Use: Religious assembly area with parking.
Size: 2.6 acres (112.6 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is an addition to an existing church site, that will consist of a religious assembly area, gym and parking. The project involved the addition of over an acre of impermeable surfacing, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a bio-swale system that is connected by a sub-drain to the City storm water system. The bio-swales will be integrated into site landscaping surrounding the new facilities and parking.

Breadbox Parking Lot Improvements

Location: 745 North Sanborn Road
Use: Public & Semipublic
Size: 1 acre (43.6 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Complete.

This project is the construction of additional parking for an existing City of Salinas recreational facility. The project involved the addition of over 6,500 square feet of impermeable surfacing, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a bio-swale system that is utilizing infiltration for discharge. The bio-swale is integrated into site landscaping adjoining the new parking.

McDonald's Restaurant

Location: 1365 N. Main Street

Use: fast-turnover restaurant
Size: 1.1 acres (49.4 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the re-construction of a 1.1 acre site for a fast-turnover restaurant. The project involves complete reconstruction of said 0.8 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. Due to site constraints related to the site, the LID BMP featured is a "vegetated swale" that is being integrated into site landscaping surrounding the perimeter of the facility.

MY Nissan Auto Display Lot

Location: 1990 North Davis Road
Use: Commercial retail.
Size: 1.5 acres (63.7 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Complete.

This project is the construction of a new “display” parking facility for an auto dealership, and involves addition of 2.5 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 4,450 square foot bio-swale system that is connected by a sub-drain to the City storm water system. The bio-swales are integrated into site landscaping areas.

SVMH Office Building

Location: 611 Abbott Street
Use: Commercial
Size: 2.0 acres (60.9 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the conversion of an existing automobile dealership into a commercial/medical office use for the Salinas Valley Memorial Hospital. The project involves complete reconstruction of 1.8 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 4,620 square foot bio-swale system that is connected by a sub-drain to the City storm water system. The bio-swales will be integrated into site landscaping and open spaces surrounding the new facilities and parking.

Malone's Collision Repair Shop

Location: 559 Work Street
Use: Industrial General Commercial
Size: 1 acres (42.2 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the construction of a new automotive repair facility, and involves addition of 1 acre of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 2,000 square foot bio-swale that is connected by a sub-drain to the City storm water system. The bio-swale will be integrated into site landscaping at the rear of the property.

Palma High School – Track & Athletic Field

Location: 939 Iverson Street
Use: Public and Semipublic
Size: 13.8 acres (603 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the construction of a new crumb-rubber/astro-turf track-and-field facility at a local high school. Although the astro-turf field is permeable, the 36,000 crumb-rubber is impermeable, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a vegetated dry-pond/evapo-transpiration system that is to be integrated into site landscaping in an un-used portion of the high school athletic facilities.

El Pollo Loco Restaurant

Location: 336 E. Market Street
Use: Industrial -General Commercial
Size: 0.7 acres (29.8 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the conversion of an existing paved “used” automotive dealership into a fast-turnover restaurant. The project involves complete reconstruction of said 0.7 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 1,400 square foot bio-swale system that is connected by a sub-drain to the City storm water system. The bio-swales are being integrated into site landscaping adjoining new facilities and parking.

Holiday Inn Express

Location: 195 Kern Street
Use: Commercial Thoroughfare
Size: 3.3 acres (142.5 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the construction of a new 72-room hotel facility with parking, and involves addition of 3.3 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 6,300 square foot bio-swale system that is connected by a sub-drain to the City storm water system. The bio-swales will integrated into site landscaping areas adjoining the parking facilities.

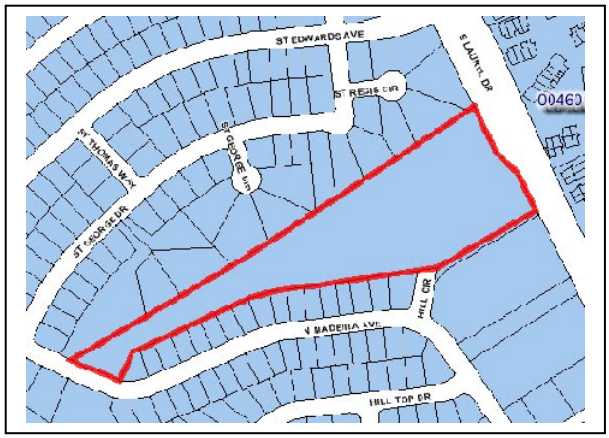
Harden Foundation

Location: 1636 Ercia Street
Use: Public and Semipublic
Size: 5.8 acres (253.2 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the construction of an additional parking facility, and involves addition of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a bio-swale system that is connected by a sub-drain to the City storm water system. The bio-swales will integrated into site landscaping areas adjoining the parking facilities.

Los Laureles Senior Housing

Location: 11 Hill Circle
Use: Low Density Residential
Size: 7.6 acres (331.2 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Ongoing.
Construction: Ongoing.



This project is the construction of a new low-density residential “affordable” senior apartment complex. The project involve of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP to be featured for this project has not been decided as of yet.

9 Condominium Units

Location: 75 Castro Street
Use: Industrial -General Commercial
Size: 0.6 acres (24.1 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Ongoing.
Construction: Ongoing.

This project is the conversion of an existing low-density residential us into a 9-unit condominium subdivision The project involves complete reconstruction of said 0.6 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 1,100 square foot bio-swale that is connected by a sub-drain to the City storm water system The bio-swale will be integrated into site landscaping at the front entrance of the property.

Mitsubishi Dealership

Location: 151 & 157 Auto Center Circle
Use: Industrial -General Commercial
Size: 1.8 acres (79.6 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the construction of a new auto dealership, and involves addition of 1.8 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 3,500 square foot bio-swale system that is connected by a sub-drain to the City storm water system The bio-swales are integrated into site landscaping areas.

Suzuki Dealership

Location: 1980 North Davis Road
Use: Commercial Retail
Size: 2.0 acres (87.7 ksf)
Project Development: Complete.
Planning Permit Process: Ongoing.
Building Permit Process: Ongoing.
Construction: Ongoing.

This project is the construction of a new auto dealership, and involves addition of 2.0 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP to be featured has not been decided as of yet.

Gateway Apartments

Location: 25 Lincoln Avenue
Use: Mixed Use
Size: 0.6 acres (25.1 ksf)
Project Development: Complete.
Planning Permit Process: Ongoing.
Building Permit Process: Ongoing.
Construction: Ongoing.

This project is the conversion of an existing parking facility into a 4-story 52-unit apartment complex with a 41-stall parking facility and 3,000 square foot retail/commercial/office area. The project involves complete reconstruction of said 0.6 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP to be featured is a green-roof system with rain water “catchment” and recirculation for landscape irrigation.

Pacific, Capital Bank Na

Location: 1023 South Main Street
Use: Mixed Use
Size: 0.3 acres (11.7 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the conversion of an existing paved parking lot into a new bank/office facility. The project involves complete reconstruction of said 0.3 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 700 square foot bio-swale system that is connected by a sub-drain to the City storm water system The bio-swales are being integrated into site landscaping adjoining new facilities and parking

Sam Linder Honda/Display Lot

Location: 147 Auto Center Circle
Use: Industrial/General/Commercial
Size: 0.7 acres (31.8 ksf)
Project Development: Complete.
Planning Permit Process: Ongoing.
Building Permit Process: Ongoing.
Construction: Ongoing.

This project is the construction of a new “display” parking facility for an auto dealership, and involves addition of 0.7 acres of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP to be featured for this project has not been decided as of yet.

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Starbucks

Location: 917 North Main Street
Use: Industrial/General/Commercial
Size: 6.8 acres (298.0 ksf)
Project Development: Complete.
Planning Permit Process: Complete.
Building Permit Process: Complete.
Construction: Ongoing.

This project is the conversion of an existing paved parking lot into a fast-turnover coffee shop. The project involves complete reconstruction of said 17,000 square feet of impermeable site improvements, thus initiating the requirement for inclusion of LID into the project. The LID BMP featured is a 700 square foot bio-swale system that is connected by a sub-drain to the City storm water system The bio-swales are being integrated into site landscaping adjoining new facilities and parking.

Municipal Maintenance

2006-2007

Annual Report

Introduction and Goals

City departments have responsibilities that affect natural resource management. The City's Maintenance Services Department's (Department) primary role is to maintain municipal facilities. These include parks, buildings, streets, vehicles, and sewage and stormwater facilities. The Department maintains over 60 properties and provides sewage conveyance and stormwater drainage maintenance services to the more than 150,000 people in an area that covers 12,000 acres.

The Department includes five divisions (Administration, Parks and Urban Forestry, Wastewater, Streets, Building Facilities, and Fleet Management) all of which played a role in protecting water resources during Reporting Year 2006-2007.

All the Department's divisions share three common goals regarding urban water runoff. They include a mutual responsibility for (1) Protection of local water resources by reducing pollutants from municipal activities and operations to the maximum extent practicable, (2) Showcasing and exemplifying best management practices that could be implemented in the community at large, and (3) Developing and implementing management activities that use municipal resources effectively and efficiently.

Parks Maintenance and Urban Forestry Division

Goals

The Park Maintenance Division includes Urban Forestry operations. The goal of the division's work is to maintain park and landscape areas in a safe, healthy and attractive manner commensurate with available resources.

To achieve this goal, the Park Maintenance Division has established a strategy that includes environmental protection as part of its maintenance charge. This includes meeting the goals of the City's Storm Water Management Plan to eliminate downstream pollution from landscape maintenance operations. Implementation of the following activities are will enable the division to achieve its goals:

- Participate in plan review process for capital repair and construction projects to ensure appropriate measures are included that address pollution control methods, including Low Impact Development (LID) techniques.
- Participate in public education and outreach activities associated with pollution prevention in Park Maintenance related responsibilities. For example, providing information and education on preventing pollution of watershed areas in or near park facilities by disposing of litter and garbage, recyclable cans and bottles, and other pollutants generated from park use in the proper place and manner. This can be done at schools, environmental events, and other public events via flyers, pamphlets, web information, presentations or information booths.
- Educate leadership staff on methods of identifying pollutants and eliminating their source or route of entry to the stormwater system.
- Train all staff in new pollution prevention techniques and Best Management Practices (BMP's) for maintenance.
- Monitor and inspect maintenance operations for compliance with pollution prevention strategies.
- Typical pollutants of concern in Park Maintenance Division operations include sediment, nutrients, trash (garbage, litter, electronic waste, shopping carts, etc.), Greenwaste, human and animal waste, bacteria, metals, oils and grease, organics, pesticides, and oxygen demanding substances. These materials result from grounds or landscape maintenance operations, recreational day use, vehicle traffic in the parking lots, illegal dumping, illicit homeless encampments, and park or facility construction and repair.

ACTIVITIES / ACCOMPLISHMENTS: PARK DIVISION

This narrative summarizes the accomplishments of the Park Maintenance and Urban Forestry Divisions in meeting our commitments in the City of Salinas Stormwater Management Plan and the required actions of the NPDES Permit for the period of October 1, 2006 through September 31, 2007. These activities are summarized in Table 3.1 of the Stormwater Management Plan and further described in the Municipal Maintenance Component (V.) of Attachment 4 of the NPDES Permit.

In April of 2007, maintenance and operation of the Fairways Golf Course was contracted to a private firm and the obligations to meet the conditions of the City's NPDES Permit and to conform to urban watershed management practices are required of that contractor. This decision freed-up City staff for other activities. Salinas Park's Division absorbed five (5) maintenance workers, one (1) crew supervisor, and one (1) manager from the Golf Course Division. The additions have partially addressed some of the serious reductions in staff which occurred during the previous four years. This division is currently staffed with (1) Park Manager,

(3) Park Maintenance Supervisors, (1) Power Mower Operator, and (18) fulltime Park Maintenance Workers. Manpower resources are scheduled to ensure the City meets the necessary health and safety requirements of its maintenance programs, including the BMP's of the SWMP.

The contractor maintaining the Fairways Golf Course Facility is expected to adhere to the same requirements and policies of the Storm Water Management Plan as described in the Park Facility Inventory # M041. The Park and Urban Forestry Manager (former Golf Course Superintendent) provides contract oversight to ensure effective compliance with the policy. The maintenance activities and procedures in the following sections apply to the ongoing Golf Course operations.

In accordance with the goals of the Municipal Maintenance Program to protect local water resources, showcase best management practices (BMP'S) for the community-at-large, and to develop and implement management activities that efficiently and effectively utilize municipal resources, Park and Urban Forestry Division has performed the following activities:

Park's Division Program Development

- Continued refinement and use of the SWPPPs for park sites prepared in Reporting Years 1 and 2 as a maintenance and training tool and for use in the Municipal Maintenance Program targeted to park and public grounds facilities. The SWPPPs or inventories describe site locations, uses, and activities of each facility, and includes assessments of the various surface types and permeability, drainage patterns (with regard to possible runoff into SWRCB 303(d) watersheds), and maintenance activities.

- The following Park Division facility maintenance activities have been completed within the parameters of the designated BMP's during this 2006-2007 SWMP period:

1. <u>Creek Channel and Detention Basin Maintenance, (where areas are part of a park facility), including the following</u>:

    - El Dorado Park, McKinnon Park, and Fairways Golf Course - daily detention basin litter, garbage, and landscape debris inspection and removal with an annual pre storm season cleanup.

    - Cesar Chavez Park - quarterly cleanup of litter and debris, including a pre storm season cleanup in the 3 detention basins.

    - Upper Carr Lake -biweekly cleanup of litter and debris, including a pre storm-season cleanup, (a 100% increase over the previous years monthly cleanups).

    - Expo Park and PG & E site - monthly cleanup of the drainage ditch to control litter, garbage, and pollutants. Daily inspections of the site during the annual 10-day carnival held at the park in July of 2007 to prevent illicit waste dumping or contamination from the equipment, activities, or personnel living quarters (RV's and Trailers). City of Salinas Inspectors, Monterey County Health Department, and Park Maintenance Supervisors made daily inspections to ensure

compliance with NPDES policies that could affect the adjacent drainage ditch and stormwater system, or groundwater.

- In addition to City basin and creek channel maintenance, there were 26 watershed trash and litter cleanups involving over 1083 volunteers at nine locations, including park sites: Soledad Street, Cesar Chavez and Gabilan Creek, Lower Natividad Creek, Laurel Pond, Constitution Soccer Fields, Davis Road, and Upper Carr Lake. This was an increase of 160% over last year and involved over 100% more volunteers and over 100% more sites. The total cleanup events yielded 86 tons of debris including (11) tons of trash and (75) tons of Greenwaste.

- Homeless Encampment Cleanup Policy– The Park and Urban Forestry Division responds to notification of illicit homeless encampments received from the public, City of Salinas Police reports, and from daily inspections of facilities by park staff. The incidents are reported to the appropriate managers and supervisors who initiate a cleanup. These efforts may also involve the Monterey County Health Department, County Public Works, City Code Enforcement, Salinas Police Department, and various other City departments.

  City staff completed at least (5) major cleanups and restorations at illicit homeless encampments, eliminating significant sources of contaminants and pollutants from watershed areas as per the following:

  - Gabilan Creek (3 separate sites/times) – 57 cu. yards of household garbage removed and 12 cu. yards of metal removed and recycled.

  - Chavez Park (2 separate locations/times) – 48 cu. yards of trash and garbage removed for disposal and 12 cu. yards of metal removed and recycled.

2. <u>LID and Park, Public Grounds, and Urban Landscape Facility Renovations and Construction</u>

   - Central and Closter Parks – Construction of (2) replacement park restroom facilities designed with LID principles. Construction includes replacement of existing, old, damaged, sewer lines and drains, which will prevent future ground water contamination. Concrete structures and roofs drain to permeable turf areas and are free of copper and other metals. Permeable pavers are being used for the hardscape aprons. Construction to be completed by October of 2007.

   - Breadbox Recreation Center - Construction of a parking lot and landscaped areas behind Recreation Building included drainage of all parking surface to mulched landscape areas and turf area for biofiltartion of sediments and other pollutants. Landscaped area designed with drip irrigation to eliminate over watering and runoff.

- Market St. and Front St. Underpass Medians, and Davis Road Medians, and island at John and Work St. – Replacement and renovation of landscape and hardscape center islands was completed in 2007. The areas renovated included malfunctioning, inefficient, overhead irrigation systems; loose, eroded soil surfaces; and failing plant features. These all contributed to increased runoff of water and sediments before being shut down completely. The renovation included permeable surfaces and bio-swales where feasible on the Market/ Front area, and on all of the Davis Road Island. Combined with new plant palettes and runoff-free drip irrigation systems, the new areas are a major improvement in appearance and significantly reduce runoff, erosion, and the resultant pollutant impacts on the stormwater systems.

- Urban Forestry Tree Planting Program – The Urban Forestry Department planted over (350) trees in city parks, facilities, and right-of-ways. Tree planting is an important LID strategy and provides numerous environmental as well as aesthetic benefits to the City and to the watershed. The trees are selected to be pest resistant, are properly planted, and mulched. Many of the trees were planted in areas that have been bare for years, such as the Davis Road median. The root zones increase soil infiltration and permeability, while the canopy and foliage increase evapo-transpiration. These factors reduce runoff volumes and reduce overall City heat signatures and air pollutant levels.

- Fairways Golf Course – since the Facility inventory of 2004-2005, the Fairways Golf Course underground fuel tank has been removed and replaced with a modern, aboveground system with integrated spill containment. This eliminates the potential for serious contamination of groundwater and or runoff to storm systems by containing any spills and allowing proper removal and disposal. It also removes the potential of unobservable fuel leaks from the previous underground tank.

3. Parking Lot and other Hardscape Maintenance

- Performed manual sweeping and debris removal operations on a monthly schedule at Natividad Creek Park; performed clean-up on a quarterly schedule at Sherwood Park; and conducted daily litter removal and inspection at all park and golf facility parking lots, with more thorough sweeping performed as needed. Additionally, Sherwood Park has received biannual power sweeping from the Street Division to control the large amounts of landscape debris and vehicle traffic pollutants. The Rodeo Association performed an additional annual cleanup after their use of the Sherwood Park and Salinas Municipal Stadium facility for the California Rodeo in July.

- Tennis Court Washdowns – 5/22/07—Sherwood Park - Implemented use of Sediment Filters on all affected drains to screen pollutants and sediments washed off of courts during Tennis Center surface cleaning. All debris retrieved was distributed into adjacent landscape beds. These procedures will be used during all future hardscape and surface cleanings.

4. Litter and Garbage Control, Facility Maintenance

   - City of Salinas, in conjunction with the Salinas Valley Solid Waste Authority and the City's franchise waste hauler, BFI, has continued the program for recycling to the MEP 100% of generated green waste, as well as all other recyclable materials, including batteries, hazardous materials, electronics, and metals resulting in the following actions:

   - 100% of employees were instructed to recycle items listed above in the appropriate manner.

   - All 48 parks and golf facilities were inspected daily with removal of litter in all areas including turf and landscape, parking lots, hardscape areas, and sports fields. All collected litter and debris plus garbage from the refuse cans provided at strategic locations in all facilities was disposed of in dumpsters at various city facilities, including the City Maintenance Yard. All garbage was then removed by BFI.

   - Constitution Soccer Fields – Recycling Center – 8/30/07, the City provided the facility and Soccer Leagues with a large recycle center to collect recyclable materials from soccer events and concessions instead of disposing of the materials in garbage loads.

   - Restroom facility cleaning – Park division initiated a trial program of "Green", biodegradable cleaning products for daily sanitizing and disinfecting of public restroom facilities.

5. Landscape Operations and Greenwaste Recycling

   - 3/5/07 - The Park and Urban Forestry Division added (2) Greenwaste dumpsters at City Corporation Yard and Natividad Creek Park to the existing Sherwood Park dumpster, for the use of landscape and maintenance crews. These dumpsters have generated 280 cubic yards (47 tons) of green waste that was recycled through the BFI Greenwaste Diversion operation. This is a 10% increase over last year and only includes numbers since tracking began in February. The actual numbers would be roughly double.

   - The City has had all vehicles that can conceivably be used for the transport of landscape debris weighed and registered at the Sun Street Greenwaste Facility, so that all Greenwaste generated by the City and acceptable for recycling can be taken directly to the facility. This has generated a total of 44 tons of recycled Greenwaste.

   - Additionally, all employees have been trained and instructed to take all landscape materials generated from their facility cleanup or landscape maintenance activities directly to the Sun Street Facility for disposal or to use the provided Greenwaste dumpsters which will then be sent to the facility.

- Landscape green waste control – ongoing city landscape, turf, and tree maintenance projects have resulted in large amounts of green waste. The Urban Forestry Division generated 355 tons of chips through in-house operations and contract operations. One hundred percent (100%) of this material has been distributed to City parks and facilities, schools, and City of Salinas residents for use as mulch in landscape areas, resulting in significant reduction in weed growth and the need for additional pesticide use.

- Sherwood Park – spread 500 cu. yards of mulch generated from Forestry operations over approximately one acre of landscape area as weed prevention mulch.

- Fairways Golf Course - a tree removal project generated 610 tons of wood from removal of dead/dying trees. Ten percent (10%) of this was distributed to local residents or organizations to be used as landscape weed control mulch; 90% was sent to Stockton and used in a cogeneration plant.

- Turf Mowing - City parks are mowed weekly; weather permitting, and all clippings are left to grass cycle, or in the case of heavy clippings, swept up and recycled in green waste dumpsters.

6. Pesticides and Fertilizers

- Integrated Pest Management practices such as increased hand weeding, reduction in use of turf pre-emergent herbicides (primarily used on sports fields as needed), use of traps instead of rodenticides when possible, etc., were used whenever possible to reduce the use and need for pesticides. Pesticides were applied when there were no viable alternatives and according to all label and Manufacturer Safety Data Sheet (MSDS) requirements to ensure safe and effective use. Applied pesticides were kept from entering and negatively impacting the storm water drainage system. They were applied under proper conditions, including: no winds, irrigation, or imminent rainfall that would carry chemicals offsite. The chemicals were allowed to dry on the target before irrigation was resumed and were absorbed and bound by the target to prevent contamination of offsite facilities or water systems.

- During the 2006-2007 stormwater year the Parks Division used 33.65 gallons of Roundup and 32.4 gallons of Surflan; a reduction of 42% and 51%, respectively, over the 2004-2005 year. These applications were made to control major weed infestations in landscape areas before they could germinate and spread in City parks suffering from two years of reduced maintenance. In 2006, no Round Up or Surflan applications were made. No pesticide use, ideal weather and growing conditions, and lack of manpower caused weed growth to increase dramatically, stressing the landscape. In 2007, a program of directed, spot control prevented propagation of new seeds and the continued spread of damaging infestations that would not have been controllable with our current service levels and resources.

- However, the increase of park staff, described earlier, has provided the resources to restore a part of the ongoing park and facility landscape maintenance that has been impossible to perform in recent years. We have completed major landscape cleanups in all city parks in the 5 months since the additional staffing was available, utilizing IPM techniques of mechanical and cultural controls to maintain the results of the successful pesticide application. By the end of the Stormwater year 100% of city parks and medians will have been edged, pruned, and trimmed, minimizing the amount of pesticide necessary for control in the future.

- 100% of used pesticide containers were cleaned, triple-rinsed, and recycled as per Monterey County Agricultural Department procedures in 2006-2007.

- The Parks Division continued to maintain turf areas in 06-07 without the use of pre-emergent or post-emergent herbicides, relying on mowing, proper watering schedules, and the acceptance of some weeds such as English daisies and clover in some park areas. We will continue to follow IPM techniques and only use spot treatments of infestations at athletic fields or heavy infestations that threaten overall turf health and cannot be manually removed with current resources.

- The Parks Division continued and increased use of contract landscape companies to maintain medians and large landscape areas with mechanical pruning, trimming, and weed removal, minimizing our use of pesticides in those areas. These areas include Blanco Road, Natividad Road, Westridge Drive, and Davis Road. We also increased the frequency of mechanical mowing in large, open, natural areas such as Greenbriar, Natividad Creek Park, and Cesar Chavez Park and eliminated the need for extensive herbicide use in those areas.

- The Urban Forestry Division has not used pesticides since 2003. The current policy is that insect infestations do not normally kill trees, and while the trees may suffer in appearance, they will survive the completion of the insect's lifecycle or infestation. If tree damage presenting a hazard to the public does occur it will be corrected or the tree will be removed. Replacement trees and new plantings have been selected with pest resistance as an important characteristic.

- Park and Forestry Division did not apply fertilizer during this stormwater plan year due to lack of resources. Future fertilizer applications will be evaluated for the health of the plants, turf surfaces and to maintain safe playing conditions on athletic fields. Applications will be consistent with BMPs, including covering storm drains, targeting landscaping only, and keeping fertilizer off of hardscape areas to prevent it from washing into storm systems.

7. Landscape Irrigation Maintenance

- The Parks Division responded within 20 minutes to emergency public notifications and staff reports of irrigation problems such as line breaks, stuck

valves, improper sprinkler adjustment, etc. Systems were shut down or repaired immediately to ensure that further irrigation did not cause erosion and/or excessive runoff carrying unwanted sediments and pollutants into the stormwater system.

- Park Staff observed turf conditions and monitored irrigation operations on a daily basis during routine park routes. Excess irrigation, line breaks, broken sprinklers, and improperly functioning controllers were immediately repaired, or were shut down and reported to the supervisor to be repaired by the irrigation crew. This minimized or prevented improper watering of hardscape areas, erosion in landscape areas from broken lines and sprinklers, and excess runoff from malfunctioning valves and controllers, all of which lead to sediments and other pollutants entering the stormwater system.

- With the influx of new park staff in 2007, we have begun a systematic evaluation and inventory of irrigation systems and controllers, in addition to the daily inspections by Park Maintenance workers. There are approximately (80) separate controllers in the (47) park facilities and Public Works medians and landscaped areas. We have completed evaluation of 37% of controllers. This has resulted in the replacement of 8 controllers, with 4 others scheduled for replacement, and the repair and proper adjustment of sprinkler patterns and schedules in 50 % of the facilities listed in the Park Division inventory of sites. Estimated completion of another 10% of sites will occur before the end of this stormwater plan year.

- Backflow Prevention – 100% of City backflow prevention devices were inspected, repaired, and certified this year (annually) by licensed contractors.

- Golf Course irrigation is done with the Rainbird Cirrus System, which uses an on-site weather station to control irrigation rates based on evapo-transpiration and current conditions to minimize water use and runoff.

8. Training - Parks, Golf Course, and Urban Forestry Division conducted and attended various training exercises during 2006-2007, including:

   Division managers with Pesticide Advisor Licenses administer the pesticide application program. They are required to attend 40 hours of education over a two-year period to maintain their license. Supervisors with Qualified Applicator Certificates (QAC) direct pesticide applicators. Certificate holders are required to attend 20 hours of continuing education over a two-year period to remain current on laws and regulations, and to maintain their license. All applicators are trained annually as per the California Pesticide Regulatory Association (CPRA) in laws, regulations, safety, and proper application techniques, including hazardous spill control.

   - (2) Pesticide Advisor's Licenses (40 Hours of biennial P.A.P.A certified training needed for recertification) including the Maintenance Services Director and the Park Maintenance Manager

- (7) Licensed Applicators (Qualified Applicator Certificates) (20 Hours of biennial P.A.P.A certified training needed for recertification): including: (1) Maintenance Services Director, (1) Park Maintenance and Urban Forestry Manager, (3) Park Maintenance Supervisors, 1 Forestry Supervisor, (2) Park Maintenance Worker, (1) Urban Forestry Tree Trimmer

- 2007 Annual Pesticide Applicator Training (see Appendix E) - 78% of total Park, Golf, and Urban Forestry Crew (including all four supervisors, the department manager, and the division director). The remaining 22% included employees on medical or military leave and employees hired after the training, one of which received subsequent training from his supervisor. This is an increase of 6% over last year.

- The Director of Maintenance Services and one of three Crew Supervisors attended a two-day training course on integrated pest management (IPM) in Napa, California.

Ninety-five percent (95 %) of Park and Forestry Division staff attended an in-house NPDES related training on the following topics:

- Stormwater Pollution Training Orientation for New Employees- 100% of new employees – 5/10/07
- NPDES & SWMP Annual Training - 3/27/07
- NPDES and the Pesticide Applicator - 3/27/07
- Hazardous Spills, Containment and Decontamination- 3/27/07
- (4) Division Tailgate Trainings on: Storm Pollution Prevention Cross Training, Pesticide Storage and Container Disposal Methods, Plastics in the Environment, and Green Cleaning Products and Methods.

In addition, the following training programs and seminars were attended, with subsequent briefings to the Park Maintenance crews:

- AAIE/IPM Conference (Ecological Pest Management) - Maintenance Services Director and one Park Maintenance Crew Supervisor attended a two-day training on 2/05/07 in Napa, CA.
- NPDES – Webcast on “Building a Local Program to Maintain Your Stormwater Practices – 13 Managers, supervisors and Maintenance III’s.
- Ecology Action Green Gardner Training –, 8 sessions ending on 11/07/06 - 20% of division staff attended at least one session.
- Monterey County Environmental Compliance Workshop - 9/26/07 – 50% of division staff attended this all day workshop.
- Waterwise Landscape Symposium (3/23/07) - 6 staff
- Pesticides and Water Surface Quality – Salinas River Watershed – 1 Supervisor – 6/22/07
- LID Construction Project Requirements (in-house) – Dept. Director and 1 Park Supervisor – 1/9/07
- LID Construction Materials/Procedures/Permeable Surfaces Granite Rock – 9 City Staff – 2/14/07

9. Education

- Ecology Action - Park staff assisted with the 8 week Green Gardener Certification Training Series, including setup and irrigation training, as well as providing materials for various field courses. – 11/7/06
- Park staff provided educational display and information on Watershed Stewardship in Seaside, Monterey, and Salinas. Total attendance of approximately 9,100 people at 9 events:

    1. City of Salinas Health Fair – 10/04/06
    2. CSUMB War on Weeds Symposium – 11/17/06
    3. Earth Day at Natividad Creek Park – 41/21/07
    4. Hebbron Heights Comm. Center Neighborhood CleanUp Day 6/2/07
    5. World Environment Day Fair at HSBC, Salinas – 6/5/07
    6. World Ocean Day at Monterey Bay aquarium – 6/9/07
    7. Public Environment Education Event at Salinas City Hall – 6/16 to 6/22/07
    8. Chuck Haugen Conservation Fund Award Picnic at Toro Park – 6/23/07

MEASURE OF PROGRAM EFFECTIVENESS

In summary, during the 2006-2007 Reporting Year, the Parks and Urban Forestry Division was successful in reducing pollutants from municipal activities to the MEP with existing revenue and manpower. This has been accomplished through the ongoing training in the goals of the NPDES and SWPP, and implementation of the BMP's in a maintenance program. The results have included training for all employees, including pesticide training for 100% of applicators, and hazard and NPDES (BMP) training for 95% of the staff. The training and knowledge of the goals of this program have made employees more aware of the results and benefits of their daily activity, increased productivity in specific areas that effect water quality, and more efficient and productive in the use of pesticides.

The Parks Division had no violations of pesticide application laws and regulations, NPDES regulations, or any other laws, regulations, and policies that concern park facility activities and their affect on water quality under the Storm Water Management Program or the NPDES Municipal Permit during the 2006-2007 Plan Year.

Parks Division had recommended that all parking areas receive monthly power sweeping to increase pollutant controls. Budget and manpower constraints have not allowed a monthly power sweeping of these facilities as was recommended last year; however, the Park Section staff hand swept, raked, and cleaned the areas quarterly at Sherwood Park, Natividad Creek Park, El Dorado Park and other park facilities with small parking lots, as per SWMP section 3.5 V c ii, and Sherwood Park was power swept three times during the year.

The Parks Division has continued recruiting, coordinating, and working with volunteer groups and organizations, including:

- Return of the Natives, public information and education in local schools and conservation events. Watershed Restoration field work within the Gabilan, Natividad, and Santa Rita Creek watersheds
- Ecology Action, public information and education events to businesses and public agencies.
- Monterey County Office of Education, Alvarez High School, Hands and Feet Ministry, and Monterey Bay Federal Credit Union have volunteered and participated in park and watershed cleanups.

These efforts, combined with our daily maintenance program of litter and garbage control, park and facility inspection, landscape Greenwaste recycling, pesticide use reduction, increased adoption of IPM techniques such as landscape mulching and manual weed control, and monitoring and maintenance of irrigation systems have reduced, to the maximum extent currently possible, debris, garbage, pesticides, and other potential pollutants entering the storm water system from park facilities.

PROPOSED 2007-2008 REPORTING YEAR WORK PLAN

The following are the components of the Park Division's SWMP Work Plan for the period of 10/1/07 to 9/31/08. The components of the work plan are built on the requirements of the City of Salinas NPDES Municipal Permit, the commitments in the City of Salinas Storm Water Management Plan, and the practices and procedures described in the BMP's selected for the maintenance of our facilities under those documents.

1. Municipal Maintenance Program Development: BMPs and SOP's

   - The development of a comprehensive Municipal Maintenance Program and manual has been slowed by the staffing and resource limitations of the last year, as well as the recent reorganization of our division with the transfer of Golf Course personnel to our division. While providing more personnel and management that will increase future productivity and effectiveness in stormwater management issues and practices, the initial period has been a time consuming transition and reorganization period.

   - Park and Urban Forestry division, with the recent addition of a new manager, crew supervisor, and additional staff will have the resources to complete the Standard Operating Procedures and Maintenance Manual for Parks and Urban Forestry as begun in the preliminary 2006 - 2007 Park and Forestry Maintenance Manual. This manual will further develop the Standard Operating Procedures (SOP's) and will include techniques, goals, and schedules for specific aspects of maintenance as they apply to the control of pollutants from Maintenance Services activities and facilities and the protection of local waterways. The SOP's will be a refinement and documentation of existing and ongoing maintenance practices and BMPs implemented in 2005-2006.

   - The activities addressed will include:

     1. Litter and Garbage Control

2. Facility Maintenance – Janitorial Procedures, graffiti removal procedures
3. Facility Maintenance – Construction Procedures, painting, etc.
4. Landscape Maintenance; including mowing, landscape bed maintenance, shrub and tree pruning, and disposal of green waste
5. Pesticide, Herbicide, and Fertilizer Application Practices
6. Parking lot and Hardscape cleanup and maintenance procedures
7. Irrigation System operation, monitoring, and repair
8. Contractor practices regarding working within BMP and Stormwater procedures

2. Training and Education:

- Annual Pesticide Applicator Training for all potential pesticide, herbicide, or fertilizer applicators. (As per SWMP section 3.5 V e)
- Continue PAPA training and certification for all Pesticide Advisor License, Qualified Applicator Certificate, and ISA license holders. (As per SWMP section 3.5 V e)
- Annual NPDES training session for 100% of municipal maintenance employees in requirements of the SWMP, including BMP's, schedules, and record keeping. (As per SWMP section 3.5 V i)
- Annual Hazardous Spill and Containment Response Training for 100% of municipal maintenance employees. (As per SWMP section 3.5 V i)
- Monthly tailgate training, (First Tuesday of every month), on individual BMP's (contained In the City of Salinas BMP Manual), to include standard operating procedures for daily implementation of the included elements.
- Additional continued education and training of Maintenance Services personnel in IPM, SWMP, and NPDES programs as available from outside agencies, i.e. Green Gardener Program, Ecology Action IPM seminars, the CSUMB Watershed Institute seminars, and Monterey County Environmental Compliance Workshops.

3. Municipal Maintenance Programs and Operations:

- <u>Waste Disposal</u>
    - Meet with Solid Waste Authority and BFI to evaluate the effectiveness of the current Greenwaste and Recycling Program and to implement changes or improvements, if necessary, for the recycling of trash, garbage, and litter from municipal sites and operations to the maximum extent practicable (MEP), including Greenwaste, hazardous materials, e-waste, metals, cardboard, etc.

- Increase available garbage disposal and recycling cans in City facilities, as needed, to encourage proper litter disposal from the public. Will inventory cans and recycle centers at beginning of stormwater year and compare to end of year figures.
- Install "No Dumping" or "No Littering" signs as needed in City facilities.

- IPM, LID, and Landscape Maintenance and Development
  - Use IPM methods to evaluate pesticide, herbicide, and fertilizer use with the goal of continuing to maintain landscaping in a safe and healthy state while reducing pesticide use to the MEP.
  - Increase IPM training of applicators and supervisors to increase efficiency and reduce the need for use of pesticides.
  - Continue and increase existing IPM methods currently used, i.e. landscape area mulching, grass cycling mowing operations, Green waste recycling, manual weed removal operations and contracts, and mechanical weed control through mowing in open spaces, greenbelts and drainage/detention basins.
  - Maintain stock of storm drain covers, filtration devices, and hazardous spill containment materials as needed for maintenance service personnel to use during spill response, pesticide, and fertilizer application (cover storm drains at application sites during operations), and hardscape surface cleaning.
  - Train managers and supervisors in Low Impact Development (LID) techniques.
  - Evaluate all proposed park and facility construction or renovation plans for MEP incorporation of LID techniques such as porous pavement, bioswales, raingardens, etc. to reduce stormwater impact and runoff on the system.
  - Park facility and public right-of-way projects currently being planned for 2008, LID improvements include Alisal Underpass, Natividad Road Medians, and the side-slope, landscaped areas along the Market/Front St. underpass.

- Parking Lot and other hardscape maintenance
  - Develop parking lot maintenance schedule and SOP's for park facilities, including minimum quarterly sweeping as per BMP's and SWMP section 3.5 V c ii.

- *Drainage, detention basin, and creek channel maintenance.*
  - Continue assisting the Wastewater Division with drainage, detention basin, and creek channel maintenance in park facilities; i.e. Natividad Creek, Constitution Soccer Fields, Veteran's Memorial Park, McKinnon Park, Chavez Park, El Dorado Park, and Expo Site, including garbage and litter

control, mowing, illicit dumping and discharges, and pre-storm season cleanups.

- o Continue to coordinate and solicit assistance of volunteer groups and organizations in large scale trash and litter removal, manual weed control, and mulching operations to supplement City maintenance and IPM efforts in these areas as well as greenbelts, medians, and other park landscape areas.

4. Program Management:

- Develop format for, and implement, annual SWMP facility inspections for Park division sites.
- Record and maintain all records of training, education, and licenses and permits, including pesticide application records and updated MSDS's.
- Evaluate and update municipal facility inventory, applicable BMP's, and maintenance procedures (SOP's).
- Document 2007-2008 SWMP activities, projects, accomplishments, volunteer programs, and response to complaints, events etc. for evaluation of program effectiveness and preparation of Annual Reports.
- Prepare 2008-2009 Division Annual Report and Work Plan for October 1, 2008

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SWMP	Permit	Park Division Maintenance Activity	Status	Date	Park Division Accomplished (Quantifiable Measure)
3.1	III b	• Adopt standard engineering pre-caste design detail • Adopt "No dumping—flows to bay" standard engineering pre-caste design detail for all new storm drain curb inlets	√	06-07	NOTE: Developed Low Impact Development design standards, including stormwater drain inlets and manhole cover design detail.
3.9	V d	• Monitor weather conditions before pesticide application • 100% of spraying will be conducted when weather is dry and air is calm: no rain or winds over 10 mph are predicted for the next 24 hours	Ongoing	06-07	➢ 100 % -See narrative for more details. Page 3-7/3-8 ➢ During the 2006-2007 stormwater year The Parks Division used 33.65 gallons of Roundup and 32.4 gallons of Surflan; a reduction of 42 % & 51%, respectively, over the 2004-2005 year. ➢ 100% of used pesticide containers were cleaned, triple-rinsed, and recycled as per Monterey County Agricultural Department procedures in 2006-2007. ➢ The Parks Division continued to maintain 100 % turf areas in 06-07 without the use of preemergent or post-emergent herbicides. ➢ Park and Forestry Division did not apply fertilizer during this stormwater plan year due to lack of resources. ➢ The Urban Forestry Division has not used pesticides since 2003.

3.10a 3.10 b 3.10 c	V d	• Designate and implement BMP's • Annually test and repair irrigation systems prior to irrigation season (April) to ensue proper operation (no excess runoff), as determined by observation and inspection Turn off until repairs occur • During irrigation season (April through October), monitor City irrigation systems weekly to ensure: automated systems irrigate when activated, prevention of overspray, excessive runoff, or leaks. Make adjustments/ and repairs as needed. • During irrigation season, make daily observations regarding landscape conditions; adjust watering schedules accordingly, including meeting City water conservation principals, such as shut-off devices on all hoses and not just leaving manual systems on and unattended for more than 30 minutes	Ongoing	06-07	➢ See narrative for more details. Page 3-8/3-9 ➢ The Parks Division responded within 20 minutes to emergency public notifications and staff reports of irrigation problems ➢ We have completed evaluation of 37 % of controllers. This has resulted in the replacement of (8) controllers, with 4 others scheduled for replacement, and the repair and proper adjustment of sprinkler patterns and schedules in 50 % of the facilities listed in the Park Division inventory of sites. Estimated completion of another 10 % of sites will occur before the end of this stormwater plan year. ➢ Backflow Prevention – 100% of city backflow prevention devices were inspected, repaired, and certified this year (annually) by licensed contractors. ➢ Golf Course irrigation is done with the Rainbird Cirrus System, which uses an on-site weather station to control irrigation rates based on evapotranspiration and current conditions to minimize water use and runoff.
3.13	V d	• Store all fluids covered away from exposure to weather • 100% of all hazardous materials stored consistent with	Ongoing	06-07	➢ All paints, pesticides, oils, and gas cans are stored according to hazardous material procedures in properly vented, covered, and labeled areas. ➢ See above

		Maintenance Services Department's Spill Prevention Control and Response Plan. Spills responded to 100% of time consistent with SCRP			
3.14	V d	• Use SWPP's/maintenance manuals and field observations to schedule repairs and remodels	Ongoing	06-07	➢ The Park and Forestry Department participates in the plan review process for capital repair and construction projects to ensure appropriate measures are included that address pollution control methods, including Low Impact Development (LID) techniques. ➢ See pages 3-5 to 3-6 for details of 3rd year construction.
3.15	V d	• Remove trash, debris, animal waste and plastics from downstream water resources. • Daily inspect sites, pick up debris and empty 100% of all trash containers from municipal sites	Ongoing	06-07	➢ See pages 3-4 to 3-5 for details of Detention Basin and Creek Channel garbage and debris removal, as well as homeless encampment. ➢ All 48 parks and golf facilities were inspected daily with removal of litter in all areas including turf and landscape, parking lots, hardscape areas, and sports fields.
3.16	V d	• Purchase recycled and environmentally sustainable (green) products where practical	Ongoing	06-07	➢ Park Division initiated a trial program of "Green", biodegradable cleaning products for daily sanitizing and disinfecting of 100 % of it's public

		• Document purchase types and quantities			restroom facilities.
3.17	V d	• Apply wood chips from Urban Forestry Division trimmings as weed-preventative mulch to parks and landscaped areas. Mulch will be applied to a depth of 3 inches as site conditions dictate	√	06-07	➢ Spread 500 cu. yards of mulch generated from Forestry operations over approximately one acre of landscape area as weed prevention mulch. ➢ Urban Forestry Division generated 355 tons of chips through in-house operations and contract operations. 100% of this material has been distributed to city parks and facilities, schools, and City of Salinas residents for use as mulch in landscape areas, ➢ Fairways Golf Course - a tree removal project generated 610 tons of wood from removal of dead/dying trees. 10 % of this was distributed to local residents or organizations to be used as landscape weed control mulch. 90 % was sent to Stockton and used in a cogeneration plant. ➢ New Lid landscape medians were completed at Davis Rd. and John and Work St with mulched tree planted islands.
3.21	V d V e	• Designate and implement BMP's • As new development occurs, street trees will exclude species and varieties that are known to require regular use of pesticides • Urban Forestry staff will update list and conduct plan checks to	√ Ongoing	06-07 Ongoing	➢ 350 new trees planted in Salinas with pesticide resistance as selection criteria in 2006-2007. ➢ LID plant list will be completed by July 2008

		ensure consistency with new lists to assure planting plans achieve goals for new development planting in City rights of way. Update street tree list.			
3.23	V d V e	• Designate and implement BMP's • Implement pesticide, herbicide, and fertilizer application • Foliar pesticide application to existing street trees will be reduced by 25% during Permit term from 2004 levels. • Replace use of summer and dormant oils with a variety of more environmentally safe materials	√	06-07	The Urban Forestry Division has not used pesticides since 2003. The current policy is that insect infestations do not normally kill trees, and while the trees may suffer in appearance, they will survive the completion of the insect's lifecycle or infestation. If tree damage presenting a hazard to the public does occur it will be corrected or the tree will be removed. Replacement trees and new plantings have been selected with pest resistance as an important characteristic.
3.24 3.25 3.26	V d V e V g	• Designate and implement BMP's • Implement pesticide, herbicide, and fertilizer application • 100% of chemicals will be performed in areas away from storm drains and water bodies • Apply no pesticides in Gabilan Creek Wilderness. Eliminate all use of chemicals included on State 303(D) listed water bodies within City limits. • Keep an accurate and up-to-date inventory of all the materials delivered and stored on-site.	√	06-07	➢ All applications were made as per criteria see Page 3-7/3-8 for further details. ➢ Contract landscapers are required to manually remove and control all weeds in the Gabilan Wilderness area. No pesticides were applied. ➢ Park inventory of chemicals updated 2007.

3.27 3.29	V d V e V i	• Designate and implement BMP's • Provide annual training • Through departmental training and tailgate session, inform staff regarding proper use and handling of chemicals consistent with Monterey County Environmental Health Department and County Agricultural Commissioner's Office. City will be 100% compliant with County of Monterey Agricultural Commissioner's Office • Report quantity and type of chemicals used each 9/1	√	06-07	➢ 100 % of available duty Park/Forestry personnel attended Annual Pesticide Applicator Training and NPDES training. ➢ 100 % of new employees attended orientation on SWMP ➢ All licensed applicators; advisor's and ISA employees completed necessary training to maintain licenses. ➢ See Page 3-10/3-11 for complete training class and attendance figures. ➢ All chemical uses were properly documented and submitted to MCDA.
3.30 3.31 3.32 3.33	V e	• Implement pesticide, herbicide, and fertilizer application • Monthly, all municipal recyclable containers will be disposed of and recycled at the Monterey County Agricultural Commissioner's events • Materials handling. Pesticides tanks will be emptied of all pesticides as part of the application process • Apply fertilizers on as needed	√	06-07	➢ 100 % of recyclable pesticide containers were properly cleaned and disposed. ➢ All other criteria were met. ➢ Park Division made no fertilizer applications.

		basis • Cover storm drains during fertilizer application if an area where run-off may degrade water quality			➢ See Above.
3.36 3.37 3.39 3.40 3.41	V i	• Provide annual training • Train relevant Maintenance Services Dept. staff on OSHA - required health and safety training. Track and report by 9/1 • Train new hires within three-months of employment • Co-produce and/or attend Monterey County Annual Environmental Compliance Workshop • Educate City Maintenance Services Department personnel regarding local, state and Federal regulation and basic operations, as well as management protocols, hazardous material storage and handling to protect downstream receiving waters.	√	06-07	➢ See Page 3-10/3-11 for complete training data. ➢ 100 % of available duty Park/Forestry personnel and pesticide applicator's attended Annual Pesticide Applicator Training and NPDES training, as well as tailgate safety meetings. ➢ 100 % of new hires received City Employee Orientation, including safety policies and SWMP Orientation. ➢ 50 % of Park/Forestry staff attended Environmental Compliance Workshop. Other 50 % of original staff, plus all new transfers and hires are scheduled for 9/26/07 attendance. ➢ See Page 3-10/3-11 of narrative for complete training data. Also see table 3.27 and 3.29 above for applicable training.

3.44		• At least three times each year, MS Dept. staff will attend/conduct training session on the proper selection, handling and implementation of BMP's re: landscape and building maintenance practices with and emphasis on reducing environmental/ personal injury from the use of potentially hazardous chemicals			See additional training programs on LID and BMP practices on page 3-12 of narrative.
3.46		• Two MS staff members will attend a 2-day conference "Ecological Pest Management" and present lessons learned at tailgate sessions and departmental management meeting			➢ AAIE / IPM Conference (Ecological Pest Management) - Maintenance Services Director and one Park Maintenance Crew Supervisor attended a two-day training on 2/05/07 in Napa, CA.
3.49	V ii c	• Reduce/prevent non-stormwater discharges to municipal facilities.			➢ See narrative for more details. Page 3-8 to 3-10. ➢ Park Division – see Irrigation Control Practices – all efforts made to inspect and control all aspects of irrigation systems and procedures to minimize or prevent runoff were made.

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WASTEWATER DIVISION

GOALS

Maintain the storm drainage system in a safe and sanitary condition by providing periodic maintenance. Comply with local and regional goals through the federally mandated NPDES requirements and “Best Management Practices” (BMPs). NPDES refers to the City’s National Pollutant Discharge Elimination System Permit that outlines BMPs to reduce or eliminate pollution from the storm water runoff or illicit discharges from identified sources.

Typical pollutants for maintenance operations in the Wastewater Division include human waste, trash, vehicle fluids, wash water, sediment, pesticides, industrial/commercial pollutant run off including leafy agricultural by-products, cooling water, heavy metals, fertilizers, paint, gray water discharges, shopping carts, electronic waste in waterways, other pollutants required to be sampled in the City’s monitoring program.

The Wastewater Division strategy to eliminate pollution from the maintenance operations is:

- Educate leadership staff on new methods to identify pollutants and eliminate sources of pollutants.
- Train the Wastewater Division staff in the new methods or technology to address pollution prevention.
- Facilitate refresher training for Wastewater staff in established Best Management Practices applicable to division maintenance operations.
- Participate in and contribute to public education and outreach activities associated with improved pollution prevention practices appropriate to Wastewater Division activities.
- Monitor and inspect maintenance operations for compliance with pollution prevention strategies.
- Participate in the plan review process for capital repair and construction projects that include stormwater facilities or that may impact water quality flowing to the City’s stormwater system or other water bodies within the City’s jurisdiction.

ACTIVITIES /ACCOMPLISHMENTS: WASTEWATER DIVISION

Storm Drain Inventory: During the 2006-2007 season the Wastewater Department re-inventoried and documented maintenance of the City's storm drain inlets, which originally consisted of 3,200 storm drains. Due to new development, other growth within the City and reassessment of the base inventory the total number has grown to 3,557 storm drain inlets. The City's Information Systems Division, with the assistance of Wastewater staff upgraded maps with aerial photography and digitized storm drains, outfalls, and major storm trunk line locations.[1] Information Systems also developed an electronic database to document and record information obtained while inspecting and cleaning storm drains and outfalls. Information obtained: work performed, storm drain stenciling, and damages to storm drain and outfall structures. These maps and information have helped to ensure the storm drain system is properly operated and maintained. This document is included in the submittal of the 2007 Storm Water Management Annual Report.

Storm Drain Maintenance: From October 2006 through October 2007 the Wastewater Department inspected the City's 3,557 storm drain inlets. Two types of routine maintenance activities are performed by the Division to assure proper functioning of the stormdrain system. Storm drains are inspected and bulk items such as leaves; trash and sediment are manually removed from the inlets, manholes and pipeline system. A second type of maintenance activity involves mechanically vacuuming out storm lines. In May of 2007, the Wastewater Crew began the annual cleaning in preparation of the upcoming storm season. To date, 20% of the system has been cleaned with the goal of inspecting 100% of the system and cleaning all of the system that requires it, before the winter rains begin. During the year, cleaning of the system is a continuous process on an as needed basis. This is responsive to inspection by staff and to reports of areas that need cleaning from the public. Approximately 20% of the City's storm drains were serviced and service is ongoing as needed. Storm sewer line flushing continues; during 2005-2006 there were 8,500 linear feet of line serviced.

Two types of camera systems are being utilized to identify inlets and storm lines in need of cleaning. The Wastewater Division has received the new Vac-Con sewer truck that was approved by the City Council during this reporting period. This critical tool acquisition has further enabled the division to perform improved maintenance service to maintain the city's storm drains and conveyance system.

[1] A copy of the City's inventory accompanies the submittal of this Annual Report.

Storm Drain Stenciling: The attached Table of Wastewater Division Activities provides the details of the quantifiable measures for activities performed by the Wastewater Crew. This includes details of the storm drain stenciling activities performed by City staff, volunteers and the B-Wet Grant personnel. In the next reporting period, staff will be installing storm drain markers that say, “No Dumping. Drains to the Bay”, instead of stenciling stormdrain locations. This method of alerting potential polluters will be incorporated into a new construction detail adopted by the City. This method has greater longevity and visibility, increasing its effectiveness. It is still anticipated that some volunteer activities may require the use of stencils, particularly in areas outside of the City right-of-way.

Storm Water Lift Stations: Inspections on all the Wastewater lift stations are ongoing. The division has one full-time Pump Mechanic, inspecting and maintaining the City’s storm sewer and sanitary sewer lift stations. The performance goal is to have all storm and sanitary sewer lift stations monitored daily or at a minimum, once weekly to ensure maximum performance. The Wastewater Department during the 2006 through 2007 time period purchased backup replacement motors and digi-gauges for our high flow sanitary sewer lift stations. The purchasing of this equipment will further ensure timely repairs during times of mechanical failures or preventative maintenance work where the equipment will be offline. Work will also begin on three of the City’s sewer lift stations with the installation of backup generators. The City will have 7 of 11 sewer-lift stations on backup generators by the end of this reporting period. This will eliminate the inefficient reliance on the use of portable generators, which required a delayed response time to arrive at the station and hookup during power outages.

Street Sweeping: All City streets continue to be swept quarterly. The commercial sweeping route is done weekly and the residential sweeping route is done every two weeks. Additional sweeping of our long route is scheduled every other week. Median island and main thoroughfares are completed quarterly. The division’s high-density crew continues to maintain areas that the street sweeper can’t access efficiently. This requires a manual effort to hand sweep around parked cars or hard to get locations. During the 2006-2007 time period City Council approved an additional street sweeper operator position and sweeper. This additional sweeper operator will operate five days a week. The sweeper operator will pick up sweeping curb miles from new development streets and will complete median-island and main thoroughfare sweeping in a timelier manner.

Creek Channel/ Ditch/ Basin Cleaning: During October 2006 through October 2007 the Wastewater Division completed a number of cleaning projects. Two times during this period the Division competed removal of debris and garbage from two of the waterways: Santa Rita Creek and Natividad Creek. Also included in the cleanups were Carpenter hall ditch, Noice ditch and Bernal ditch. These projects continue as needed to protect our waterways from pollutants. Weed abatement by mechanical means was implemented to reduce the dependency on pesticides to control weeds. During the 2007 period the Wastewater Division purchased walk-behind mowers for weed abatement activities around waterways. During this period, the use of other types of mowers has worked to control the weed abatement problem reducing use of pesticides 100%.

Training: The Wastewater Department is a major player in regards to the clean water program. Staff responds to an array of problems, such as HAZMAT calls, sewer calls, spills and illegal dumping. From October 2006 through October 2007 the following trainings were conducted:

1. Annual Pesticide Training -100% of staff
2. Annual N.P.D.E.S Training -100% of staff
3. Annual Monterey County Environmental Compliance Workshop -100% of staff
4. Confined Space Training- 100% of staff
5. Hazmat Training- Hazmat Containment Procedures-100% of staff
6. Emergency Response Training-100% of staff
7. Ammonia Safety Training- eight staff members

MEASURE OF PROGRAM EFFECTIVENESS

Storm and Sanitary sewer lift stations inspections have been very effective. Preventative maintenance has reduced lift station problems and there have been no spills as the result of lift station failures. Drive by inspections by sweeper operators has been very effective. These drive-bys have ensured quick spill response and containment of pollutants. Sweeper operators accounted for 20% of illicit discharge notifications while driving sweeping routes.

Sanitary Sewer maintenance has been very successful due in part to the continued use of new technology such as the use of the chain flail head and bulldog spinning head used on our sewer trucks for our high grease areas. These heads scour the entire interior circumference of the pipe allowing less frequency of cleaning of these areas. These new cleaning tools have allowed more time to complete other needed maintenance. Other tools used that have been very successful are the Hot Spot list inspections that identify slow moving or surcharged manholes in high priority areas. These tools have reduced sanitary sewer spills in the past year by 63% further eliminating the chance of any effluents making it to any of the City's waterways. Hazmat response continues to be effective in eliminating spills from reaching the City's storm drainage system. Responses range from 5 to 10 minutes to address initial mitigation.

WORK PROGRAM RY 2007-2008—WASTEWATER DIVISION

Work plan for this upcoming year October 1, 2007 through September 30, 2008 will consist of the following:

- Winter Leaf Sweeping Program: Starts October 1, 2007 through February 1, 2008. Wastewater will assign one additional sweeper operator and the Vac-all sweeper to follow the City's list of streets of heavy tree areas. This list consists of streets and time of leaf drop on particular tree species.

- Routine Street Sweeping Program: Routine street sweeping is ongoing. Commercial sweeping is scheduled weekly and the residential sweeping is scheduled bi-weekly. As mentioned in the Waste Water Activities section City Council approved an additional sweeper operator and sweeper. This additional sweeper will operate five days a week thus enabling the department to assign a new sweeping route. Sweeping will consist of additional curb miles from new development and Island and thoroughfare sweeping, which was completed quarterly.

- High Density Cleaning: High density sweeping is ongoing: High density sweeping assists with all sweeping programs to take care of hard to get areas such as around parked cars. High Density crew is also responsible for inspecting and replacing damaged trashcans. BFI is under contract to dump all City owned trashcans on a weekly basis, dumping approximately 40 trashcans per week.

- Storm Drain Cleaning and inspection Program: Storm drain cleaning and inspections continue through the end of October 2007 or prior to winter rains. The 2008 season will start May 1, 2008 and continue through October or prior to winter rains.

- Outfall Inspection Program: Outfall inspections schedule starts May 1, 2008 through October 2008 prior to the rainy season. Outfall cleaning is done on an as needed basis.

- Creek Channels/ Ditch/ & Basin Cleaning Program: Creek/Ditch and Basin cleaning for removal of weeds, garbage, and silt buildup is ongoing as needed. Schedule of cleanups- three times annually, including once in the fall prior to the rains, and then again in the spring and summer. Mowing projects for weed abatement of the channel and ditches are scheduled twice annually to control weed growth.

- Sanitary Sewer Program: Sanitary Sewer maintenance program is ongoing. Sewer routing and vacuuming maintenance continues on a daily basis along with sewer hot spot location inspections of the City's sanitary sewer system.

- Storm Water Lift Stations: Inspections on all the Wastewater lift stations are ongoing. The department has one full time staff member inspecting and maintaining the City's storm sewer and sanitary sewer lift stations. All storm and sanitary sewer lift stations are monitored daily or once weekly to ensure maximum performance.

- Camera Inspection Program: Camera inspection of the City's Storm and Sanitary sewer system is ongoing.

- Illicit Discharge, Hazmat, and Spill Response: The program is ongoing and being reviewed annually for effectiveness. City staff has hired Pacific EcoRisk to assist with sourcing non-storm water discharges at time of screening or sampling per Attachment 5.

- Completion of Outfall and Inlet maps: Work on mapping continues. Info Systems with the assistance of Wastewater developed the first edition storm drain system-mapping book. Due to new development and other growth within the City the inventory has grown to 3,557storm drain inlets. Info Systems with the assistance of Wastewater staff upgraded maps with aerial photography and digitized storm drain locations adding outfalls and major storm trunk lines during this reporting period.

- Database for Illicit Discharges: Wastewater Department has forms on file documenting all illicit discharges that the Department responds to. Developing a database will further ensure compliance and documentation.

- Wastewater Staff Training: Staff training is ongoing. Staff are trained monthly in-house with monthly tailgates. During this upcoming year the department will be increasing training in hazardous waste response, water sampling and screening, and illicit discharge.

	Muni. Permit	Wastewater Division Activity	Status[2]		Accomplished (Quantifiable Measure of Implementation)
	V a	Prepare an inventory and map of all inlets and outfalls to MS4	√		The First Edition Storm Drain Map Book was completed in April 2007 and is being submitted along with this Annual Report. This book replaces last year's storm drain book that used manual technology. The First Digitized Edition Storm Drain and Outfall book contains aerial photography of the City along with digitized locations of storm drains, outfalls and main storm truck lines. These digitized locations have a specific grid and number assigned to them to identify them during inspection and cleaning activities. The inventory of storm drains changed from 3200 locations to 3557. Along with the new mapping book Info Systems developed an electronic data base to record data obtained during inspections and cleaning activities
	V b	Ensure storm drain system is properly operated and maintained	√ On Going		Implemented BMP SE-74 Drainage Systems Maintenance / BMP SE-75 Waste Handling and Disposal ➢ Schedule for activities May through Oct. prior to rainy season ➢ 3,557 Storm Drains inspected Oct. 2006- Oct. 2007

[2] Status: Where an activity has been implemented, a check mark is shown
[3] Date refers to the date that the activity or activities will be implemented.

	Muni. Permit	Wastewater Division Activity	Status[2]		Accomplished (Quantifiable Measure of Implementation)
					➢ 20% Storm Drains cleaned Oct. 2006- Oct. 2007 ➢ Storm Sewer Line flushing and cleaning ongoing/ approx. 8,500 liner feet serviced 2006 to 2007 ➢ All City Outfalls were inspected twice during the 2007 season once in the spring and again during the fall prior to rainy season. Follow up cleaning of outfalls completed during May 2007 and again prior to rainy season as needed ➢ Debris removed from outfall cleaning aprox. 5 cubic yards ➢ Dry weather cleaning of wet pits completed Oct. 2006 to Oct. 2007 quarterly or as needed. ➢ Storm Water Lift Stations Inspected 239 times ➢ Sanitary Sewer Lift Stations inspected 1819 times ➢ Miscellaneous other pump inspections 168 times
	V d I	Implement BMPs within 1 year			

	Muni. Permit	Wastewater Division Activity	Status[2]		Accomplished (Quantifiable Measure of Implementation)
	V c ii	➢ Sweep all roads quarterly ➢ Residential Street Sweeping every two weeks ➢ Commercial Street Sweeping every week ➢ Island Sweeping& Thoroughfare Sweeping done quarterly ➢ High Density Sweeping done daily	√ On Going		Implemented BMP SE-7 for Street Sweeping and Vacuuming / BMP SE-75 Waste Handling and Disposal ➢ Street sweeping curb miles sweep 21,658 from Oct.2006 through Oct. 2007 ➢ Debris Removed on Residential and Commercial Street Sweeping 10,298 cubic yards ➢ Island Sweeping &Thoroughfare Sweeping 100% complete Oct. 2006 to Oct. 2007 ➢ Debris Removed on Island and Thoroughfare Sweeping Aprox. 750 Cubic Yards ➢ Winter Leaf Sweeping: 100% completed Oct. 2006 to Oct. 2007 ➢ Debris Removed on Winter Leaf Sweeping Approx. 1,500 Cubic Yards ➢ High Density Locations cleaned 1,152 Annually (48 locations cleaned twice monthly)

	Muni. Permit		Wastewater Division Activity	Status[2]		Accomplished (Quantifiable Measure of Implementation)
	V d		Designate and ensure BMP implementation for municipal maintenance activities. Include in a manual	√ On Going		Implemented BMP SE-74 Drainage System Maintenance / BMP SE-75 Waste Handling and Disposal ➢ Creek Channel / Ditch/ Basin Cleaning completed Oct. 2006 to Oct. 2007. Cleaning Activities completed twice annually or as needed to remove pollutants from waterways. ➢ Debris removed during creek cleaning aprox. 150 Cubic yards 1. Natividad Creek 2. Santa Rita Creek 3. Carpenter Hall Ditch 4. Bernal Ditch 5. Noice Ditch 6. Laurel Retention Basins
	V e		Implement BMPs to reduce the effects of pesticides/ herbicides/ fertilizers.	√		Implemented BMP's SC-41/SC-73 Grounds Maintenance /Landscape Maintenance ➢ Wastewater implemented mechanical mowing from Oct. 2006 to Oct. 2007 to complete ditch and lift station weed abatement. Mowing work was completed three times during the 2007 time period. 100% completed with mechanical means. Reducing the need for pesticide applications.
	V e		BMPs shall include 5 components, including education, IPM, etc. By end of 5th year, eliminate all	√		Implemented BMP SC-75 Waste Handling and Disposal ➢ Storm Drain Stenciling Ongoing ➢ California University Monterey Bay -Return of the Natives

	Muni. Permit	Wastewater Division Activity	Status[2]		Accomplished (Quantifiable Measure of Implementation)
		use of pesticides on SWRCB 303(d) list for the lower Salinas River. Annually train employees using non-registered pesticides, herbicides, or fertilizers.			and Save the Whales stenciled 128 storm drains in high traffic areas- Northridge Mall, Westridge shopping center, Old Town Salinas shopping area, Alisal street commercial business area ➢ Annual Pesticide Training completed Oct. 2006 to Oct. 2007 100% complete for Wastewater Department staff. ➢ Training conducted: 1. IPM training 2. Spill containment 3. Safe pesticide handling 4. N.P.D.E.S training 5. M.S.D.S and Label training ➢ On-going pesticide training through P.A.P.A for continuing education C.E.U's / 20 Units needed for recertification every 2 years (2 Wastewater staff maintain Qualified Applicator Licenses)
	V g	Annually inspect all municipal facilities. Record results.	√		Implemented BMPs SC-34& SC-75 Waste Handling and Disposal ➢ CDS Oil and Sand separators installed in City yard serviced twice a month or as needed ➢ Oct.06 thru Oct.07 Serviced 18 times ➢ Debris Removed: 108 Cubic Yards ➢ Hazmat containment area inspected monthly ➢ 06 Oct. thru Oct. 07 shipped (24) 55 gallon barrels of Non-RCRA hazardous materials 2 barrels of Liquids and 22

Muni. Permit	Wastewater Division Activity	Status[2]		Accomplished (Quantifiable Measure of Implementation)
				barrels of solids
V I	Annually train staff members	√ On Going		➢ Wastewater Training Conducted between Oct. 2006 to Oct. 2007 1. Monterey County Environmental Compliance Workshop 100% staff 2. N.P.D.E.S training 100 % staff 3. Confined Space Training 100% staff 4. Pesticide training 100% staff 5. Ammonia Training 8 staff members 6. Hazmat Training (Hazmat Procedures) 100 % of staff 7. Emergency Response Training 100 % of staff

STREET MAINTENANCE DIVISION

Goals

Maintain City streets, curbs, and gutters, sidewalks and traffic control signs, street marking, striping. All road maintenance operations, concrete repair, street marking and stripping are performed consistent with BMPs SC-70 and NS-3. Typical pollutants for maintenance operations in the Street Division are asphalt, sediment, concrete, paint, thermo-plastic, solvents, vehicle and equipment fluids, trash, pesticides, wash water. The division understands that educating the community on ways to identify pollutants and eliminate sources of pollution is an effective strategy to eliminating pollution from the maintenance operations in streets. Training staff in new methods of pollution prevention and providing refresher training for staff in established BMPS will support that strategy. Monitoring and inspecting maintenance operations for compliance with pollution prevention strategies, participating in plan review process for capital repair and construction projects is also important to ensure appropriate measures are included that address pollution control processes, including Low Impact Development strategies.

ACTIVITIES / ACCOMPLISHMENTS: STREET DIVISION

Road Repairs: The street paving crew has utilized a pavement-milling machine for all removal of asphalt. This process has generated over 2,500 tons of recyclable asphalt millings. As the asphalt roadway is milled it is loaded directly into a transport truck by conveyor belt leaving little or no spoils to infiltrate the storm drain system. The utilization of this milling machine has eliminated the need for asphalt saw cutting and thus the slurry that would be generated as a possible pollutant. BMP SC-70 from CASQA are utilized on all paving job sites; this BMP is practiced on a daily basis as all loose material is swept-up and either disposed of or recycled, preventing it from going into the storm drain system. Equipment is inspected daily for any leaks and drip pans are placed under heavy equipment and equipment is covered when not in use to prevent any wash off of any oils or loose material into the storm drain system.

Sidewalk Repairs: The concrete repair crew has also taken measure to eliminate any contamination into the storm drain system by utilizing a diamond dry cut blade for most saw cutting operations. When this is not possible and a wet cut blade is utilized the crew incorporates a wet dry vacuum to vacuum the slurry prior to run off. Any remnants of slurry are also removed by broom and shovel as needed. The crew utilizes a storm inlet sock to prevent any contamination into the storm system. All wash up of tools and equipment is done with a 20-gallon container on site and then properly disposed of at the end of the day to avoid any concrete sediment pollution. This crew generated 260 yards of recyclable concrete in this period. This recycled concrete material is taken to a local plant where it is recycled into base rock.

Pesticide Application: The street paving crew is also responsible for right of way and island herbicide spraying. All licensed QAC (2 Qualified Applicator's) and or PCA (1

Pest Control Advisor) attend year round training; all other members of this crew participate in an annual in-house training of pesticide safety. Two points of emphasis of this training are proper spill containment and equipment calibration and usage. All employees are trained to recognize weather conditions and wind speed to avoid drift from the target to any other surface, which may be washed off into the storm drain system. This program is a biannual program utilizing two herbicides Round-up Pro and Karmax in the early Fall at the end of October for post and pre-emergence weed control and Round-up Pro in the Spring at the end of April for spot spraying. We have noticed the utilization of Karmax as a pre-emergence spray in the fall has reduced the amount of needed weed spray in the spring. The crew performs weed control operations including flail mowing and pesticide applications over 92 acres during the biannual spray season.

Litter Abatement: There are two aspects of this crew, one of which is the Work Alternative Program. This is a crew of County court assigned individuals under the supervision of a City employee who's main task is to go throughout the City checking right of way alleys and various other City property for litter clean-up. This crew removed and safely disposed of over 1500 tons of litter. The second part of this program is litter abatement generated by illegal dumping, homeless encampments, and local area clean-ups. These tasks are typically performed with the Work Alternative Program and regular City work forces. These special litter abatements have generated 1,300 yards of litter (see table MMT SEC 3.4). These crews have also participated in the clean up of homeless encampments along Gabilan Creek and Natividad Creek pulling shopping carts and other litter and debris, which are extremely important as the locations' proximity to the waterways where a public health hazard may exist. City staff also participates on the Monterey County illegal dumping task force creating a draft ordinance to increase fines and enforcement procedure.

Pavement Marking/Striping/Signage: The Sign, Striping, Streetlight and Traffic Signal Section are responsible for pavement markings. This crew applied 435 gallons of paint and 7 tons of thermo-plastic. Along with durability and longevity of using thermo-plastic reducing the need to re-paint, the City uses a lead free thermo-plastic reducing any possible contamination into the storm drain system. All paint buckets are allowed to air dry and disposed into the proper waste stream. The crew has also placed 4 No Trespassing signs along Salinas's waterways in hope of preventing illegal homeless encampment set-ups. They have also placed 10 No Dumping signs throughout the City. To ensure that painting operations protect water resources, crewmembers have been trained in BMP SC -11 proper spill containment. This section also generated 172 lbs of recyclable aluminum.

Training

- All Street Division employees received review of BMPs training 9/10/06.
- 6-division employees participated in pesticide application training see MMT 3.27.
- 2-division employees participated in Haz. Wopper training.

- 2 division employees trained on Alternative Highway Storm water Management Practices 11/29/06.
- 1 new employee see: MMT 3.37
- 3 employees trained annually 1 PCA and 2 QAC, licensing for pesticide application and IPM.

Miscellaneous

- Participate on special events committee and establish guidelines for recycling of materials and trash clean up at events.

- Assist Wastewater Division during storm events in cleaning and maintaining storm drain in-lets

- Respond and assist in spill clean-ups, staff trained in BMPs SC-11

MEASUREMENT OF PROGRAM EFFECTIVENESS

The division practices BMPs SC-70, SC-11, SC-60, SC-33, SC-21 and NS-3. This is a measure of the knowledge that staff have in preventing the discharge of pollutants. The on-the-job training and instruction of staff has also made them aware of the potential of pollutants from illegal dumping. Their removal and safe disposal of tons of litter and potential pollutants have been a proactive measure to protect the quality of the storm water. In the pesticide applications, no pesticide spills or overspray have occurred that would result in pollution to the storm drains. This is as a result of pesticide applicator training and sound technical guidance from the supervision staff.

PROPOSED WORK PROGRAM RY 2007-2008—STREETS DIVISION

In 2007/2008, the Street Division will increase employee training and public awareness of the importance to mitigate any illegal discharge into the storm drain system. This will be accomplished through more tailgate sessions on BMPs and a continuation of education on integrated pest management practices that will lead to more mechanical weed control operations and a lessening reliance on pesticides for weed abatement. Equipment will be evaluated to determine if there is a necessity to replace equipment that may be a liability for pollutants as a result of leaks or other problems that could add pollutants to roadways. Spill kits and other emergency response equipment will be replaced to assure that all materials are readily available for timely mitigations of hazardous materials in roadways or other areas. Staff will continue to practice good housekeeping practices. They will also inspect work areas and equipment weekly to make sure there is no release of pollutants. Illegal dumping signs will be replaced, as needed and new illegal dumping signs will be posted in problem areas.

	Muni. Permit	Street Division Activity	Status[4]	Date[5]	Accomplished (Quantifiable Measure of Implementation)
3.5	V c	Inventory and establish maintenance requirements/schedules for all municipal facilities—roads, buildings, parking lots, etc.	√		Inventory was taken and is included in the SWMP
3.5	V c ii	Sweep all roads quarterly	√	On Going	In conjunction with the Street Sweeping Program the City pays for supervision of The Work Alternative Program that picks up litter daily along roads, alleys, vacant City property, homeless encampments and illegal dumping sites. This clean up generated over 2300 tons of litter. The City has posted 12 locations throughout the City with No Dumping Signs. City sponsors many community clean-up events as described in Section 2.4, including 3 neighborhood clean-up events (total 1200 volunteer hours) Generating over 32 tons of litter and debris, 2 city-wide clean-up events with 3 drop-off locations Generated 297 tons. City promoted anti-littering messages throughout 05-06.
3.5	V d	Designate and ensure BMP implementation for municipal maintenance activities. Include in a	√	On Going	Number of projects with BMP's required: 100%-- all City street maintenance projects follow criteria set forth by BMP's SC-70 And NS-3. City staff conducted street

[4] Status: Where an activity has been implemented, a check mark is shown
[5] Date refers to the date that the activity or activities will be implemented.

	Muni. Permit	Street Division Activity	Status[4]	Date[5]	Accomplished (Quantifiable Measure of Implementation)
		manual			maintenance and minor repairs on a daily bases. City staff performed 5 major street improvements. Major street improvements are contracted out, currently 2 major contract projects.
3.5	V e	BMPs shall include five components, including education, IPM, etc.	√	On Going	Five staff members receive annual in-house training in proper use and handling of pesticides. This training encompasses spill containment, PPE, respirator protection, MSDS & Labels, Mixing and Applying, Triple rinse and Disposal of containers. 3 staff members receive annual training to maintain QAC and PCA licensing.
3.5 B	V g	Annually inspect all municipal facilities. Record results; begin by 2/07	√	2/07 and On Going	Roads were inspected as part of street sweeping operations and by Street Division staff in the routine performance of their duties. Staff report back issues during monthly division meetings.
3.5 A	V h	Annually review maintenance procedures and management practices. Make revisions < 90 days and report in annual report.	√	On Going	Street Division met monthly to review issues. At the end of the Fiscal Year the Division met to review procedures. No changes were needed from last year's protocols.
	V I	Annually train staff members	√	On Going	Two staff members received annual certification for HAZ-WHOPPER Thirteen (13) staff members received annual training on NPDES and BMPs.

FACILITIES MAINTENANCE

Typical pollutants for maintenance operation in Facilities Maintenance Division are paint, construction debris, asbestos, cleaning chemicals, vehicle and equipment fluid leaks, trash, rain gutter sediment and green waste runoff from roofs, metal filings, sawdust, and wash water.

Goals

The Facilities/Fleet Maintenance Division's goals to eliminate pollution from maintenance operations include the follow:

1. Protect local water resources by reducing pollutants from municipal activities and operations to the maximum extent practicable (MEP).

2. Lead the community by example: showcase best management practices that could also be implemented in the community at-large.

3. Develop and implement management activities that use municipal resources effectively and efficiently.

4. Participate in public education and outreach activities associated with pollution prevention in division related responsibilities.

5. Educate leadership staff on ways to identify pollutants and eliminate sources of pollutants.

6. Train staff in new methods of pollution prevention.

7. Monitor and inspect maintenance operations for compliance with pollution prevention strategies

8. Ensure that all storm water runoff from municipal facilities remain pollutant free.

ACTIVITIES / ACCOMPLISHMENTS: FACILITIES

Facilities Maintenance adheres to *CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) BEST MANAGEMENT PRACTICES (BMP): SC-10, NON STORMWATER DISCHARGES; SC-11, SPILL PREVENTION, CONTROL AND CLEANUP; SC-34, WASTE HANDLING AND DISPOSAL; SC-41, BUILDING AND GROUNDS MAINTENANCE; SC-60, HOUSEKEEPING PRACTICES, and SC-72 FOUNTAIN AND POOL MAINTENANCE.*

Facilities Maintenance undertakes a daily visual inspection of areas that may have the greatest potential for contributing to storm water pollution. A systematic monthly inspection using a standardized printed checklist and periodic preventive maintenance activity on City buildings and facilities is completed to ensure that rainwater runoff is not contaminated with roofing, paint

or other foreign material residue. A primary objective of Facilities Maintenance activities is to ensure that no accidental discharges of contaminants to storm water occur.

Inspections

Staff conducts daily vehicle inspections for fluid leaks and safe operating condition, monthly NPDES inspections both inside and outside of the Facilities Maintenance Shop and of the aboveground emergency generator fuel storage tank at City Hall. Inspection checklists are retained in the Shop office. A quarterly inspection log is completed for each division's external workspace area at the Corporation Yard. The results of this effort are determined at the annual Environmental Health Department's workplace inspection. Nicole Munoz, Environmental Heath Specialist for the Monterey County Department of Environmental Health, conducts this annual inspection, and an audit of the Business Response Plan for the Corporation Yard and City Hall. The most recent inspection occurred on September 1, 2006. The inspection results, which found no deficiencies, are placed as an addendum in the Business Response Plan, and are located in the Maintenance Services Administration and Risk Management offices, respectively.

Semi-annual monitoring of air quality is conducted at City Hall by air quality engineering contractors, requiring an evacuation of the premises for purposes of the testing. The purpose of this monitoring is to determine if there is a presence of asbestos in the air circulating throughout City Hall and if there is, determine if this pollutant is a safety issue. To date, the air quality tests for asbestos have been confirmed to be absent asbestos.

Training

Education and training is the key to the success of BMP implementation. The City provides annual training sessions. In addition to City sponsored training, staff also attends local, regional, statewide, or national training seminars or workshops related to storm water management and water quality conducted by other organizations.

A storm water orientation and training is given to all new employees and training on hazardous materials handling, spill prevention and response is conducted as tailgate safety training to all staff on a quarterly basis. An Environmental Compliance Workshop by the Monterey County Department of Environmental Health covering hazardous materials spill response training is conducted annually. Fifty-percent of staff from each section attend the training and become trainers for the remaining staff.

MEASURE OF EFFECTIVENESS

Spills

Because of prior training and awareness, no spills resulting in runoff of pollutants to storm drains have occurred within the Facilities Maintenance Shop. Staff has been thoroughly trained to prevent spills from reaching storm drains and any such spills are contained within the Shop and with dry absorbent. All used absorbent is collected in a DOT hazardous waste drum and disposed of as hazardous waste by Evergreen Environmental Services. Any maintenance operations related spills in close proximity to the Facilities Maintenance Shop have been

contained and cleaned up consistent with *BMP-SC-11,* resulting in no pollutants being discharged to the storm drain system. Annual rain gutter cleaning is accomplished to prevent roofing, sediment and other pollutants of concern from being discharged to storm drains

Recycling

All used or waste paint and other maintenance chemicals are recycled or disposed of as per established activities plan. Approximately 800 pounds of fluorescent light tubes were taken to the Household Hazardous Waste (HHW) Facility on Sun Street this past year. Two hundred pounds of used flashlight batteries and other Universal Waste have also been taken to HHW.

Training

Annual in-house training for all staff on hazardous materials handling, spill prevention and response was conducted on August 16, 2007 as part of the preparation for our annual Business Response Plan audit. The annual Winter Preparedness Training, provided to 100% of the department staff contained two components to help protect the water quality in the City's storm drain system. One module was called "Storm Drain Cleaning" and was taught by Wastewater Manager and Wastewater Supervisor. An introduction to NPDES session was provided to 13 Facilities Division staff. The session focused on the relationship of humankind's activities and how it affects downstream receiving waters. The video Water Journey—the River Returns was shown.

PROPOSED 2007-2008 WORK PROGRAM: FACILITIES

In the upcoming reporting period, the Facilities Division of the Maintenance Services Department will:

- Continue to employ CASQA BMPs *SC-10, SC-11, SC-34, SC-41, and SC-60.*
- Monitor Facilities Maintenance activities for compliance with NPDES Annual Report.
- Conduct annual refresher training on proper spill response procedures.
- Conduct in-house NPDES update and hazardous material handling training workshops for Facilities Maintenance personnel quarterly.
- Participate in Association of Monterey Bay Area Governments (AMBAG), Energy Advisory Committee (EAC), and other training regarding the United States Green Building Council (USGBC), Leadership in Environmental Design (LEED), Local Government Energy Professionals Network, and the tri-county Facility Managers Forum.
- Direct and train staff to perform daily facility and equipment inspections for conditions that would lead to contamination of rainwater, and to eliminate those conditions.
- Train and Monitor staff compliance with appropriate safe material handling practices and proper spill response procedures.

- Inspect buildings and grounds for proper storage of materials that would lead to non-storm water discharge and take appropriate action to prevent or eliminate any occurrence.

FLEET MAINTENANCE

Typical pollutants for maintenance operation in Fleet Maintenance Division are: Vehicle and equipment fluid leaks, wash water, metal waste products, battery leachate, cleaning chemicals, solvents, paint, trash, and sediment.

Goals

The division strategy to eliminate pollution from the maintenance operation of vehicle and equipment maintenance is:

- Participate in public education and outreach activities associated with pollution prevention in division related responsibilities.
- Educate leadership staff on ways to identify pollutants and eliminate sources of pollutants.
- Train staff in new methods of pollution prevention,
- Monitor and inspect maintenance operations for compliance with pollution prevention strategies
- Protect local water resources by reducing pollutants from municipal activities and operations to the maximum extent practicable (MEP).
- Lead the community by example: showcase best management practices that could also be implemented in the community at-large.
- Develop and implement management activities that use municipal resources effectively and efficiently.
- Ensure that all storm water runoff from the Vehicle Maintenance Facility remains pollutant free.

ACTIVITIES / ACCOMPLISHMENTS: *FLEET MAINTENANCE*

Fleet Maintenance adheres to *CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) SOURCE CONTROL BEST MANAGEMENT PRACTICES (BMP) SC-10, (NON STORMWATER DISCHARGES); SC-11, (SPILL PREVENTION, CONTROL AND CLEANUP); SC-20, (VEHICLE AND EQUIPMENT FUELING); SC-21, (VEHICLE AND EQUIPMENT CLEANING); SC-22 (VEHICLE AND EQUIPMENT REPAIR); SC-32, (OUTDOOR EQUIPMENT MAINTENANCE); SC-34, WASTE HANDLING AND DISPOSAL; SC-43, (PARKING/STORAGE AREA MAINTENANCE); SC-60, (HOUSEKEEPING PRACTICES); SC-61, (SAFER ALTERNATIVE PRODUCTS); AND SC-75, (WASTE HANDLING AND DISPOSAL).*

Division staff recognizes that the common pollutants associated with fleet operations are grease, oil, metals, and sediment. Vehicles that are poorly maintained can leak fluids and other pollutants to the streets of Salinas. The shop strives to perform efficient maintenance on each vehicle and responds to repair in a timely manner as to avoid pollution resulting from leaking fluids or other substances. Stored vehicles and equipment are covered to prevent polluted run-off during rainy seasons. Any leaking vehicles have drip pans with absorbent material placed below the leaks as a temporary measure until the repair can be made to stop the leak. Vehicles are washed in an area

where runoff water is directed to a continuous deflective separation unit that traps pollutants. The Wastewater Division cleans the separator weekly.

To prevent pollution of the storm waters by these and other pollutants, the shop operations recycle all used oils, coolant, used oil filters and batteries. Used oils and coolant are collected and recycled by Evergreen Environmental Services. All used lead acid batteries are collected and recycled by a local battery retailer. All used batteries are stored in a non-corrosive covered container. Used oil is collected and stored in a double wall tank inside the shop. Used coolant is likewise stored inside the shop. Shop parts washers are closed loop systems. As an agency member of the Salinas Valley Solid Waste Authority (SVSWA), used filters from the parts washers, vehicles and equipment are recycled using the SVSWA used oil recycling drop off at the Household Hazardous Waste Facility at Sun Street Center.

Oil and coolant drums and used oil filter drums are covered and placed on spill containment devices. All shop floor drains are permanently sealed to prevent spills from reaching sanitary sewer or storm drains. Any shop spills are contained and collected within the Shop using dry absorbent. All oily waste, used absorbent and oily wipes are collected in a DOT hazardous waste drum and disposed of as hazardous waste by Evergreen Environmental Services.

Good housekeeping of shop workspaces is required at all times. Weekly NPDES inspections are performed both inside and outside the Fleet Maintenance Shop. Inspection checklists are retained in the Shop office. Annual inspections by the County of Monterey Department of Environmental Health are conducted. Inspection results are retained in the Shop office.

In-House hazardous materials handling and spill prevention training is conducted annually. The County of Monterey Department of Environmental Health conducts additional hazardous materials' training annually.

A primary objective of Fleet Maintenance activities is to ensure that all City vehicles and equipment are kept in good working order and free of fluid and contaminate leaks.

Inspections

The City maintains a combined inventory of 650 vehicles and pieces of power equipment. Of that number, the Fleet Maintenance Shop maintains 350 vehicles. All vehicles and equipment in the shop for maintenance and inspection are inspected for fluid leaks. All commercial vehicles are inspected daily before use. The City is enrolled in the Department of Motor Vehicles (DMV) Biennial Inspection of Terminals (BIT) Program, which requires all operators to conduct a systematic, daily inspection of their vehicle and note the results of the inspection in a logbook kept in the vehicle. A copy of the inspection checklist is provided for Fleet Maintenance for the vehicle maintenance record. Additionally, these vehicles are given a thorough quarterly mandated preventive maintenance inspection.

Under the BIT Program, every two years an inspector from the California Highway Patrol (CHP) performs a detailed inspection of the City's commercial vehicle maintenance records and a random sampling of vehicles. Because The City of Salinas has had no deficiencies in its prior inspections, Fleet's inspections are an Administrative Review of Records, which usually takes less than an hour rather than two whole days and the dedicated effort of at least one mechanic, for the full BIT Inspection.

Weekly NPDES inspections are performed both inside and outside of the Fleet Maintenance Shop to identify conditions that would lead to contamination of rainwater, and to eliminate those conditions. Inspection checklists are retained in the Shop office. An annual inspection, and an audit of the Business Response Plan for the Corporation Yard is conducted by Nicole Munoz, Environmental Heath Specialist for the Monterey County Department of Environmental Health. The most recent inspection occurred on September 1, 2006. The inspection results, which found no deficiencies, are placed as an addendum in the Business Response Plan. The Business Response Plan is located in the Maintenance Services Administration office. There have been sporadic inspections by the Monterey Regional Water Quality Control Agency and advisory reviews by Cal-OSHA

Training

Education and training is the key to the success of BMP implementation. The City provides annual training sessions. In addition to City sponsored training, staff also attends local, regional, statewide, or national training seminars or workshops related to storm water management and water quality conducted by other organizations.

A storm water orientation and training is given to all new employees and training on hazardous materials handling, spill prevention and response is conducted as tailgate safety training to all staff on a quarterly basis. An Environmental Compliance Workshop by the Monterey County Department of Environmental Health covering hazardous materials spill response training is conducted annually. Fifty-percent of staff from each section attend the training and become trainers for the remaining staff.

MEASURE OF EFFECTIVENESS

Spills:

All spills within the Fleet Maintenance facility have been contained within the facility and have been prevented from entering the Storm Drains or Sanitary Sewers. All maintenance related spills in close proximity to the Fleet Maintenance Shop have been contained and cleaned up consistent with *BMP-SC11*.

Recycling:

All used lubricants, coolant, filters and batteries were recycled as per established activities plan. This past year, approximately, 2,200 gallons of used oil (8.7 tons), over

200 gallons of used coolant (0.8 tons), one ton of used oil filters, 300 used tires (4 tons), 8 tons of paper and cardboard, 40 tons of metal, 1,400 pounds of lead-acid batteries, and 200 pounds of aluminum were recycled.

All used or waste paint and other maintenance chemicals are recycled or disposed of as per established activities plan. Approximately 800 pounds of fluorescent light tubes were taken to the Household Hazardous Waste (HHW) Facility on Sun Street this past year. Two hundred pounds of used flashlight batteries and other Universal Waste have also been taken to HHW.

Training:

Annual in-house training on hazardous materials handling and spill response to prevent non-stormwater discharges was conducted on September 13, 2006, and April 24, 2007. Periodic monthly tailgate training sessions include recent developments in spill control and recycling products.

PROPOSED WORK PLAN 2007-2008: FLEET

Continue to employ CASQA BMPs *SC-10, (NON STORMWATER DISCHARGES); SC-11, (SPILL PREVENTION, CONTROL AND CLEANUP); SC-20, (VEHICLE AND EQUIPMENT FUELING); SC-21, (VEHICLE AND EQUIPMENT CLEANING); SC-22 (VEHICLE AND EQUIPMENT REPAIR); SC-32, (OUTDOOR EQUIPMENT MAINTENANCE); SC-34, WASTE HANDLING AND DISPOSAL; SC-43, (PARKING/STORAGE AREA MAINTENANCE); SC-60, (HOUSEKEEPING PRACTICES); SC-61, (SAFER ALTERNATIVE PRODUCTS); AND SC-75, (WASTE HANDLING AND DISPOSAL)* and monitor Fleet Maintenance activities for compliance with NPDES Annual Report.

Conduct annual refresher training on proper spill response procedures. Conduct in-house NPDES update and hazardous material handling training workshops for Fleet Maintenance personnel quarterly. Participate in Association of Monterey Bay Area Governments (AMBAG), Energy Advisory Committee (EAC), and other training regarding the United States Green Building Council (USGBC), Leadership in Environmental Design (LEED), Local Government Energy Professionals Network, and the tri-county Facility Managers Forum.

Direct and train staff to perform daily facility and equipment inspections for conditions that would lead to contamination of rainwater, and to eliminate those conditions.

Train staff to monitor safe material handling practices and proper spill response procedures.

Inspect buildings and grounds for proper storage of materials that would lead to non-storm water discharge and take appropriate action to prevent or eliminate any occurrence.

Increase training. Conduct in-house NPDES update and hazardous material handling training workshops for Fleet Maintenance personnel twice per calendar year.

Perform daily vehicle and equipment inspections on the inventory of 650 pieces of equipment for leak detection.

Review specifications of new vehicles and equipment to ensure manufacturer incorporates leak prevention designs.

Spill kits and other emergency response equipment will be replaced to assure that all materials are readily available for timely mitigations of hazardous materials

This will be accomplished through more tailgate sessions on BMPs and a continuation of education on integrated pest management practices. Equipment will be evaluated to determine if there is a necessity to replace equipment that may be a liability for pollutants as a result of leaks or other problems.

Commercial and Industrial Facilities

2006-2007

Annual Report

INTRODUCTION

The City of Salinas is home to major agriculture-based industries as well as hundreds of smaller commercial and industrial operations dispersed throughout the City. Pollution threats from these operations are addressed through adherence to longstanding pollution prevention activities and through adherence to the requirements of the City's NPDES Permit.

ACTIVITIES

During this reporting period the City prepared inventories of all industrial and high-risk commercial facilities and activities and established BMPs for each business type. These inventories are, by nature, dynamic and are routinely assessed. For example, the industrial inventory incorporated into the SWMP identifies some 157 industries. This inventory was developed from the City business license database and the Monterey County Health Department business inventory.

The City has developed and maintains an industrial inspection program. In preparation for industrial inspections during 2006, City staff investigated and conducted site visits to approximately 95 business locations identified in the City's SWMP to assess for inclusion in the industrial inspection program. Through these inspections, City staff were able to identify industries and uses exempt from such inspections and which could be removed from the City's inspection list. This list was completed and all industries were also inspected within the 2nd permit year meeting the requirement of the City's permit. The 2007 inspections have been completed and two industries will be removed from the list due to business closures. The updated list includes 71 industries subject to inspection. A synopsis of activities are included with this Annual Report

Pollutant Source Identification

The City has identified and inventoried all high-priority commercial facilities and all industrial facilities located within its municipal limits. Inventories are included in a separate City document. High-risk commercial inventory data includes (1) name of business, (2) address, and (3) the nature of the business or activity that best reflects the principal facility product or service. The industrial inventory will be updated annually. The commercial inventory shall be updated by

the third year of the permit term and annually thereafter. The City continuously assesses the storm water pollution characteristics of other types of businesses to ensure that its inventory is complete and appropriate.

A. High-risk Commercial Facilities

Within the category of commercial operations, the City has assigned a high-risk to five types of operations based on their potential to contribute to stormwater pollution. Best Management Practices have been tailored to the characteristics of these five categories. The five categories include:

1. Food Services – (299 facilities) Major water quality concerns associated with food service establishments include high water use, generation of solid waste, and wastewater discharge. Wastewater is disposed through drains leading to a sewer, or directly into storm water drains. Food service pollutants of concern (POCs) can include organic materials and trash (food wastes), bacteria, fats, oils, grease, toxic chemicals in cleaning products, disinfectants and pesticides.

2. Automotive Repair Facilities – (220 facilities) This category includes automotive repair facilities, aviation repair facilities, and all other engine repair facilities. POCs may include heavy metals, hydrocarbons, solvents, chlorinated compounds, acids, alkalis, trash and debris.

3. Retail Gasoline Outlets – (42 RGOs) This category includes commercial facilities that provide vehicle-fueling services, including self-service facilities as well as those that include a convenience store. Potential pollutant sources from this category can include fueling spills, air and water dispensing areas, outdoor cleaning of impervious surfaces, as well as dumpsters. Typical POC include heavy metals, hydrocarbons, toxic chemicals (benzene, toluene, xylene, MTBE), detergents, food wastes and trash.

4. Commercial Car Washes — (16 facilities) Major water quality issues derive from wastewater discharge to the City sewer system. Common POC produced by commercial car washers can include heavy metals, hydrocarbons, suspended solids, nutrients detergents, and hazardous waste materials.

5. Mobile Cleaners – (48 commercial businesses categorized as carpet cleaners, upholstery, and dry cleaners). Typical pollutants produced by carpet cleaners can include toxic organic compounds and suspended solids.

Inspections and Enforcement

The City was delayed in inspecting 20% of the high priority commercial businesses identified in the 2005-2006 permit year due to insufficient staffing resources to fully implement the program. To address this staffing issue, the Salinas City Council approved the hiring of an Environmental Compliance Inspector and the Maintenance Services Department is in the process of defining the position and implementing a recruitment.

Even though the City was unable to inspect the commercial facilities there has been an ongoing regulatory presence and ongoing inspection activities at businesses identified in the City Commercial Business inspection program. As noted in last year's report the City has had informal discussions with the Monterey County Health Department to include an NPDES

Inspection component into its program operations to assist the City in meeting the commercial business inspection permit requirement. No agreement has been formalized between the two agencies for this activity; however, the Monterey County Health Department has communicated to the City that the Health Department completed the following inspections during the City's 2006-2007 permit term:

- 405 inspections were performed at gas stations, auto repair and body shops, agricultural chemical suppliers and other businesses inspected for handling hazardous materials, generating hazardous waste, and/or having underground storage tanks.

- 356 inspections of restaurants of other food handling service facilities were performed within the City of Salinas. Some of the total inspections included re-inspection for compliance when required.

These inspections included many of the City's high-priority businesses and are notable as the Health Department's staff of inspectors have received training regarding NPDES issues. This training enables Health Department inspectors to address potential stormwater issues when performing their inspections. Although the inspections do not include a formal NPDES Inspection form the Health Department, Health Department inspectors informally address stormwater concerns and will make note of specific issues of concern. The activities of this other regulatory agency are noted specifically to identify an active regulatory presence at high priority businesses addressing environmental concerns that included a stormwater and pollution prevention component.

Enforcement Activities

The City of Salinas enforces its ordinances and permits to maintain compliance with the City's NPDES Permit. Inspection results and findings are recorded and maintained by the City. Follow up inspections are performed as necessary.

Violations of the City's ordinances and Municipal Permit are enforced using a progressively escalating enforcement procedure and include both monetary and non-monetary administrative, civil, and criminal remedies. If conditions pose a risk to the public or threaten resources, the City can take action to abate the risk. When the City is unsuccessful in obtaining compliance and has exhausted its administrative and legal remedies, it will provide notification to the CRWQCB. Such notification shall be provided orally within five (5) business days followed by written notification within ten (10) days of the incident. Additionally, the City shall refer non-filers to the Regional Board within ten (10) business days of discovery.

Enforcement activities at Commercial sites during this reporting period included:

- Notice of Violation and Compliance Order issued to multiuse commercial facility following an unscheduled site inspection. Evidence of an illicit discharge to the City storm system noted. Facility is a commercial multiuse facility including vehicle repair, pallet storage, cold room food storage and office space. Site is under Compliance Order for multiple violations of the City Code and failure to implement appropriate BMPs. Discharges to the storm system were abated.

B. Industrial Facilities

Most of the City's industrial sites are located near the City's southern boundary where an industrial waste pipeline conveys process water to the City's Industrial Wastewater Treatment Facility for treatment and disposal of agricultural process-water discharged from these industries. All other industrial facilities throughout the City have their wastewater (sanitary sewage and any process water) treated by the Monterey Regional Water Pollution Control Agency at the regional wastewater plant in Marina or discharge to local waterways under permits from the CCRWQCB. Industrial facilities may produce a variety of non-storm water contaminants such as sediments, nutrients, metals, organics, toxicants, floatable materials, oxygen-demanding substances, oil and grease, bacteria, and pesticides.

Best Management Practices (BMPs)

The City has established two categories of BMPs. The first is a set of seven broad recommended strategies that, if incorporated into the procedures of each commercial and industrial operation in the City of Salinas, work toward preventing or reducing watershed pollution.

The second type of BMP includes sets of practices tailored to the specific categories of operation and activities. For commercial operations, Source Control BMPs have been established for the primary activities associated with each of the five categories of high risk commercial facilities identified.

For industrial operations, three progressive levels of BMPs from the City's *Industrial Inspection Guidance Manual* are listed in the City's SWMP. These include Storm Water Discharge Elimination BMPs, Source Control BMPs, and Treatment Control BMPs.

It is the responsibility of the owner/operators of high-risk commercial facilities and industrial facilities to achieve compliance with the NPDES storm water requirements through the effective implementation of the required BMPs. Each owner/operator is responsible for the effectiveness of BMPs and the facility's discharge to the storm drains.

The above-referenced activities are included in the City's Stormwater Management Plan.

A. Recommended Strategies – For BMP Implementation for Commercial and Industrial Facilities.

1. Use smaller quantities of toxic materials or substitute less toxic materials.
2. Minimize the volume of cleaning water to decrease wastewater.
3. Provide signage to remind or instruct employees and customers of proper procedures to eliminate waste.
4. Implement a spill response plan.
5. Segregate and recycle wastes.
6. Provide a schedule of preventive maintenance.
7. Train employees in pollution prevention.

B. Required BMPs for Commercial Facilities

In accordance with Section A4.IV.c of the City's Municipal Permit all commercial businesses designated as high-risk must implement business or activity specific BMPs.

Detailed source control BMPs for each of the five high-risk commercial facility types are presented in Appendices D-1 through D-5 of the SWMP. With the exception of those identified as voluntary (*italicized,* and designated with an asterisk -*), each BMP is mandatory. In cases where commercial facilities are found to not meet MEP during an inspection described in Section 7.5.A after applying BMPs for high-risk businesses, the City will require implementation of structural BMPs to meet MEP. Structural BMPs may include the following:

- Overhead coverage of outdoor work areas or chemical storage
- Retention ponds, basins, or surface impoundments that confine storm water to the site
- Berms and concrete swales or channels that divert run-on and runoff from pollutant sites
- Secondary containment structures

C. Required BMPs for Industrial Facilities

Industrial facilities are required to comply with the BMPs in the order stated in the City's *Industrial Inspection Guidance Manual, 2000*. The manual describes a progression of three types of BMPs: Storm Water Discharge Elimination, Source Controls and Treatment Controls. If Discharge Elimination measures and Source Control BMPs are found unsuccessful in removing pollutants of concern to the MEP, Treatment Control BMPs may be required. Required industrial facilities BMPs include:

1. Storm Water Discharge Elimination BMPs

a) Eliminate the discharge. Examples include recycling the discharge back into the system (closed loop system) and effective spill prevention and cleanup measures. However this BMP may not be possible for certain continuous discharges depending on the facility's operation.

b) Minimize pollutant generation through effective BMPs (remove the pollutants from the discharge or reduce to insignificant levels).

c) Re-route the discharge to the sanitary sewer system (illicit connections such as floor drains, wash waters, and other wastewaters). Wastewaters, such as wash waters and process waters, should be discharged to the sanitary sewer, if allowed by the Monterey Regional Water Pollution Control Agency (MRWPCA). The MRWPCA has specific requirements regarding allowable discharges to the sanitary sewer system, and some discharges may require pretreatment or have discharge limits on certain parameters.

d) Implement structural or treatment controls that would treat the storm water before it enters the storm drain system. Temporary BMPs should be put in place to minimize pollutants until the permanent BMPs are in place.

Obtain an individual NPDES permit from the Central Coast Regional Board for discharge to the storm drain system. This may be an unattractive option given the time and costs that would be required to obtain and implement an individual NPDES permit adopted by the Regional Board. The permit may also include requirements for reporting, treating, monitoring, and achieving discharge limits.

Inspections and Enforcement

The City's inspections and enforcement program ensures that the objectives of the City's NPDES compliance strategy are met. Inspectors identify and provide information on BMPs that site managers may wish to consider along with required practices. Approximately 50 Industries received BMP handouts during the 2006-07 inspection cycle and all of the industries inspected received a poster depicting a "No Dumping Flows to Bay" logo superimposed over an ocean environment. The poster is produced by the Storm Water Education Alliance (SEA) of Monterey Bay.

A. Inspections

The following table depicts the finalized list for the industrial inspection program. The list has been abbreviated to exclude other detailed information such as contact names and phone numbers for the purpose of this Annual Report. A site map with corresponding numbers for each of the industries listed is attached with this report. The list is needed to identify each industry with the numbered segment on the map.

Industrial Inspection Site List
Table 1

No.	Business Name	St. #	Street Name	Type of Business
1	Abbott Street Station	1511	Abbott St.	Petroleum/Oil Dist/Gas Station
2	BFI Waste Systems	271	Rianda St.	Garbage Collection
3	Blanton Produce Co.	777	Vertin Ave	Produce Shipping
4	Bin Doctor (Former Western Cooling and Logistics)	1037	Abbott St.	Plastic Bin
5	Cemex	54	Summer St.	Cement Mixing
6	Central Coast Cooling #1 (Growers Complex)	1107	Merrill St.	Produce Cooling/Shipping
7	Central Coast Cooling #2 (Growers Complex)	1155	Merrill St.	Produce Cooling/Shipping
8	Central Coast Cooling #3 (Growers Complex)	1166	Growers St.	Produce Cooling/Shipping
9	Cleugh's Rhubarb Company	950	Sanborn Rd.	Food Processing
10	Cool Pacific Land Company	750	Airport Blvd.	Produce Cooling/Shipping
11	Coastal Ford Tractor	10	Harris Pl.	Tractor Equip/Sales-Service
12	Dales Welding & Fabrication	1112	Abbott St. #A	Welding Fabrication
13	Dandy Cooling Company, LLC	1252	Growers St.	Produce Cooling/Shipping
14	Driscoll Strawberry Associates	930	E. Blanco Rd.	Strawberry Packing/Shipping
15	Express Cooling (Growers Express)	1225	Abbott St.	Produce Cooling
16	Fresh Express	900	E. Blanco Rd	Produce/Salad Processing
17	General Farm Investment Company	1037	Abbott St.	Produce Cooling
18	Georgia Pacific Corporation**	741	Vertin Ave.	Box Distributor
19	Golden Gate Petroleum	1020	Terven Ave.	Petroleum Distributor
20	Granite Batch Plant	721	Work St.	Asphalt Batch Plant
21	Growers Ice Co	1060	Growers St.	Ice Production
22	Growers Street Cooling^ (Growers Ice)	1069	Growers St.	Produce Cooling
23	Harris Moran Seed Company	1155	Harkins Rd.	Seed Conditioning/Packing
24	Helena Chemical Company	1355	Abbott St.	Pesticide/Fertilizer Distributor
25	John Pryor Company (Soilserv)	1505	Abbott St.	Fertilizers

No.	Business Name	St. #	Street Name	Type of Business
26	Mann Packing Company Inc	1250	Hansen St.	Produce Cooling/Shipping
27	Meyers Equipment	29	Clark St.	Transportation/Trucking Yard
28	Mission Packing	1129	Harkins Rd.	Produce/Salad Processing
29	Monterey Fish Company, Inc	1222	Merrill St.	Box Storage (Fish Co. Closed)
30	Monterey Fish Sanborn	960	S. Sanborn Rd.	Fish Processing
31	Monterey Gourmet Foods (Monterey Pasta)	1528	Moffett St.	Food Process/Shipping
32	Monterey Salinas Transit	443	Victor Way	Transportation/Transit Bus Yd.
33	Newstar Fresh Foods, LLC	900	Work St.	Produce Cooling/Shipping
34	NH3 Service Company	945	Johnson Ave.	Fertilizer Distributor
35	Nunes Cooling Inc	930	Johnson Ave.	Produce Cooling/Shipping
36	P & O Cold Logistics LLC	950	S Sanborn Rd	Produce Cooling/Storage
37	Pepsi Cola Bottling Co*	135	Martella St.	Soft Drink Distributor
38	Quality Water Enterprises*	625	West Market St.	Water Conditioning Service
39	Rapid Harvest Co, LLC	1057	Pellet Ave	Farm Equip. Rental/Repair
40	Red Blossom Farms (Formerly Spectra)	1370	Dayton St.	Produce Cooling/Shipping
41	River Ranch Fresh Foods LLC	1085	Abbott St.	Produce/Salad Processing
42	Salinas Concrete/Granite Rock	400	Work St.	Concrete Mix/Supplies
43	Salinas Municipal Airport	30	Mortensen Ave.	Municipal Airport
44	Salinas Newspapers Inc	123	W. Alisal St.	Paper/Newspaper Printing
45	Salinas Real Property	880	Airport Blvd.	Transportation/Trucking Co.
46	Salinas School Trans Dept	13	Villa St.	Transportation/School Bus Yd.
47	Salinas Tallow Company	1	Work Circle	Animal Processing Plant
48	Salinas Valley Wax Paper, Inc	1111	Abbott St.	Paper Mill Products
49	Seed Dynamics, Inc.	1081	Harkins Rd #B	Seed Processing
50	Shelby Petroleum	220	Commission St.	Petroleum/Fuel Storage
51	Smurfit-Stone Container Corp	1078	Merrill St.	Paper Mill Products
52	Soilserv Inc	1427	Abbott St.	Pesticide/Agriculture Spraying
53	Steinbeck Country Produce, Inc (Semco)	9	Harris Pl #A	Produce Refrigeration/Cooling
54	T&M Fabrication	743	S. Sanborn Pl.	Welding/Fabrication
55	Taylor Farms California Inc	1211	Abbott St.	Produce/Salad Processing
56	Taylor Farms (Hansen Facility)	1275	Hansen St.	Produce/Salad Processing
57	Taylor Farms (Shilling Facility)	1400	Schilling Pl.	Produce Shipping
58	The Nunes Company, Inc	925	Johnson Ave.	Produce Cooling
59	Toro Petroleum-Salinas Plant	308	W. Market St.	Petroleum/Fuel-Oil Transfer Yd.
60	Tri-Counties Packing Co.	845	Vertin Ave.	Produce Packing
61	Uni-Kool Company- Market St. Plant	710	W. Market St.	Produce Cooling/Processing
62	Uni-Kool Company- John St. Plant	308	John St.	Produce Cooling
63	United States Postal Service*	100	W. Alisal St.	Postal Facility
64	United States Postal Service*	1011	Post Drive	Postal Facility
65	United States Postal Service*	303	N. Sanborn Rd.	Postal Facility
66	United States Postal Service*	701	La Guardia St.	Postal Facility
67	Western Cooling And Logistics, LLC	1350	Schilling Pl	Produce Cooling
68	Western Farm Service Inc	1143	Terven Ave.	Pesticide Storage/Ag Spraying
69	Weyerhaeuser Company	1215	Hansen St.	Paper Mill Industry

No.	Business Name	St. #	Street Name	Type of Business
70	Weyerhaeuser Paper Company	1345	Harkins Rd.	Box Assembly
71	Wilder Machinery Company*	1094	Harkins Rd.	Machine Shop

The industrial inventory represents a wide variety of business types each with unique characteristics even within similar business types. Table 1 below shows the general breakdown of business types from the Industrial Inventory list.

Table 2.

Type of Industry	Number of Facilities
Produce/Food Cooling, Packing or Shipping	30
Paper / Box Products	7
Pesticide/Fertilizer	5
Petroleum Products	4
Transportation Facilities Trucking, Transit & School	4
Post Office Facility	4
Welding / Fabrication / Machine Shop	3
Cement/Asphalt Facilities	3
Seed Processing/Storage	2
Tractor/Equipment	2
Paper Printing	1
Municipal Airport	1
Soft Drink Distributor	1
Water Service	1
Fish Processing	1
Garbage Collection	1
Animal Rendering/Process Plant	1

The City inspected all industrial facilities during this reporting period. BMPs were disseminated to 70% of the inspected industries specific to each industry's activities. All inspection activities are noted on an inspection form signed by the inspector and the site manager participating in the inspection. A copy is given to the responsible site person, and copies retained by the inspector and the City of Salinas.

Most of the industries listed discharge to the sanitary sewer system or the City's Industrial Wastewater Treatment Facility. Some have no process discharge, but have potential exposure to storm water concerns at their facility.

The City of Salinas also operates a unique Industrial Wastewater sewer pipeline and treatment facility. While most municipalities maintain a Storm Sewer and a Sanitary Sewer only, Salinas maintains a third collection system for a portion of the industrial service area at the southern end of the City. The Industrial Wastewater Treatment Facility receives industrial wastewater discharges from 24 sites via permitted connections and conveys the discharge to a treatment facility located southwest of the City along the Salinas River. These facilities are regularly visited by the City's contract source control inspector from the Monterey Regional Water Pollution Control Agency with emphasis on compliance with the City's industrial waste discharge permit. However, the source control inspector also participated in the Annual NPDES Industrial Inspections and is responsive to storm water issues at these facilities as well. This gives an

extra eye on activities in the industrial area throughout the year beyond that of the annual inspection process.

B. Enforcement

The City of Salinas enforces its ordinances and permits to maintain compliance with the City's Municipal Permit. Inspection results and findings are recorded and maintained by the City. Follow up inspections are performed as necessary.

Violations of the City's ordinances and Municipal Permit are enforced using a progressively escalating enforcement procedure and include both monetary and non-monetary administrative, civil, and criminal remedies. If conditions pose a risk to the public or threaten resources, the City can take action to abate the risk. When the City is unsuccessful in obtaining compliance and has exhausted its administrative and legal remedies, it will provide notification to the CRWQCB. Such notification shall be provided orally within five (5) business days followed by written notification within ten (10) days of the incident. Additionally, the City shall refer non-filers to the Regional Board within ten (10) business days of discovery.

Enforcement activities at industrial sites included:

- Four facilities were issued Notice of Violation (NOV) and Compliance Orders. With the exception of one facility, these NOVs were issued as the result of City staff's identification of illicit discharges prior to the annual inspection process. The threat to storm water from each of these discharges was abated and a compliance order for BMP implementation is in progress. Further discussion of these illicit discharges is provided in the Illicit Discharge and Illegal Connection chapter of this Annual Report.

- One NOV is pending following an illicit discharge of process water to the storm system following a facility power outage. This is discussed in greater detail in the Illicit Discharge and Illegal Connection Chapter of this Annual Report.

- Two additional NOVs will be issued, one which results from City Staff's observing during an annual industrial site inspection of water dripping into the storm system from a vegetable trailer. The other will result from a discharge from a failed sump pump while washing down an outside equipment area allowing an overflow of water into the City Street.

The City may remove facilities from the commercial and industrial inventory if an inspection reveals the facility's industrial or commercial processes meet the requirements for a conditional exclusion for "no exposure" under 40 CFR 122.2.

During this reporting period, two businesses were removed from the City's inspection list, Crown Packing and Talamantes Welding, because both businesses have ceased operations.

C. Training

The City's in-house and contract inspection staff attended industrial inspection training which included on-site training at a local industrial facility. This inspector has several years of experience in handling NPDES related issues and has and will provide training for small employee groups for industries in the City's industrial inspection program. Most recently this inspector has been approached to provide training for an industry that is currently subject to an

NOV and Compliance Order. In 2007 he attended NPDES training at a City of Monterey sponsored training event. He also attended the 6th Annual Environment Compliance Workshop in 2006 and the 7th Annual Environmental Compliance Workshop in September 2007 with focus on Session 1, Environmental Compliance for Management Level Personnel, Mastering Environmental Organization and Compliance Inspections. All annual industrial inspections are conducted by the MRWPCA's professional staff.

City staff, including the City's Wastewater Manager, performed inspections at industrial and commercial facilities during this reporting period. These inspections generally result from the sourcing of an illicit or suspected illicit discharge to specific site locations. To facilitate his inspection activities, the Manager participated in industrial inspection training and has attended the Annual Environmental Compliance Workshop. The Manager also attended the 2007, 7th Annual Environmental Compliance Workshop with focus on Session 1, Environmental Compliance for Management Level Personnel, Mastering Environmental Organization and Compliance Inspections. The Wastewater Manager is often accompanied by MRWPCA staff when an additional inspection is required at a specific site.

The City will work to identify available training opportunities with a more specific focus on NPDES and environmental issues. The City will continue its efforts to find resources to meet its specific training requirements. The City is confident in the training and experience of its contract industrial inspector; however, to meet the training goals, employees in targeted positions (whose jobs or activities are engaged in industrial or commercial inspections) will receive additional formalized training during the upcoming Permit term.

MEASURES OF PROGAM EFFECTIVENESS

Measures of program performance include the number of activities undertaken, the number or percentage of participation, and feedback from participating commercial and industrial operations. The measures will provide management data for making decisions on future program budgets and staffing needs.

Effectiveness measures can also assess the degree to which program activities reduce pollutants to the MEP or eliminate prohibited non-storm water discharges. Effectiveness will be measured from data obtained on inspection reports, observations, and/or monitoring. Inspection reports and feedback from inspectors will provide opportunities to evaluate actual improvements in compliance with the City's NPDES Permit.

The industrial Inspection program began during the previous Permit term and during this reporting period 100% of the industrial inspections (71) were completed. The effectiveness of this program can best be demonstrated by the number of industrial facilities found in compliance during the 2006-07 inspection cycle. Comparison data shows that in 2001 nineteen industries had NPDES BMP issues that required re-inspection for compliance. Inspections for the 2006-07 reporting period exhibited success in that 66 of the 71 industries are successfully implementing BMP practices that protect stormwater from illicit discharges. Four facilities have received Notices of Violations and Compliance Orders for illicit discharges. Three have been instructed to submit Notices of Intent to enroll in the CCRWQCB General Stormwater Permit program. Three industries are pending issuance of NOV's. It is important to note that with the exception of one facility the illicit discharges from industries receiving NOV's were discovered as the result of the City's ongoing oversight of these facilities and not as part of the formal Industrial Inspection Program. Each facility immediately abated the discharges and each is currently in compliance.

BMPs were disseminated to 70% of inspected industries specific to each industry's activities. The City's monitoring and reporting program is ongoing in this reporting period. The resulting data may assist in locating potential pollution from industrial discharge outside the scope of the industrial inspection process.

WORK PROGRAM FOR RY 2007-2008

The City will continue industrial facility inspections at the 71 industries listed in Table 1 above and begin commercial facility inspections in the 2007-2008 permit year.

The list for Industrial and Commercial facilities will be reviewed for inclusion of new businesses or deletion of closed businesses or facility status change.

The City's contract industrial inspector is trained, experienced and well qualified to successfully perform the required industrial inspections for storm water compliance. Additional training specific to industrial inspections will be implemented in the next permit reporting period for personnel and specifically targeted positions providing support for the program. Dissemination of BMPs will be provided as required and pollution prevention and reduction or elimination of non-stormwater discharges will be emphasized.

The City's inspection and enforcement activities are effective in identifying potential sources of pollutant discharges. Most industries on the list have been in the program for several years and are aware of the City's annual industrial inspections and implement good housekeeping and BMP practices. Minor BMP discrepancies are corrected at the time of the inspection or are scheduled for correction by site managers.

The City will hire an Environmental Compliance Inspector for implementation of Commercial Business inspections during the 2007-08 permit term to continue meeting this Permit requirement. Industrial facility inspections will continue during the upcoming Permit term with the goal of completing 100% of annual inspections before October 1 of each year for inclusion in subsequent annual reports.

The City has recently entered into a formal agreement with the Monterey Regional Water Pollution Control Agency for development and implementation of a Grease Source Control Program at restaurants or other food preparation facilities with an informal agreement to include an NPDES component for this high priority commercial business activity. This activity will be implemented in the upcoming Permit term.

SWMP	Permit	Commercial / Industrial Activities	Status[1]	Date[2]	Accomplished (Quantifiable Measure)
7.2.B	A4.IV.a	Identify and inventory all industrial facilities and activities	√		Implemented • The SWMP identified 157 potential industrial sites for inspection. Site assessments found many not appropriate for industrial inspection program. • List revised to include 71 industries • The list is intended to be a dynamic document expanding or shrinking due to new businesses, business closures or identification a “No Storm Water Exposure” • Two facilities removed from list: One business closure, one change of business.

[1] A checkmark indicates tasks were completed or is on-going.

[2] Date indicates when task will commence if not on-going.

SWMP	Permit	Commercial / Industrial Activities	Status[1]	Date[2]	Accomplished (Quantifiable Measure)
7.4.A		Inspect 20% of all High-Risk Commercial		07-08	Implementation of 2006-07 program delayed (insufficient staffing to fully implement program). • City will hire an Environment Compliance Inspector for implementation of Commercial Business inspections for 2007-08 permit term. The activity by another regulatory agency is noted below specifically to identify an active regulatory presence in the business community addressing environment concerns that included a stormwater and pollution prevention component. • Regulatory presence at Commercial facility by Monterey County Health Department Hazardous Materials and Environmental Health Divisions. • Informal inclusion of stormwater issues for the following inspections during 2006-07 Permit term. • 405 inspections performed at gas stations, auto repair and body shops, agricultural chemical suppliers and other businesses inspected for handling hazardous materials, generating hazardous waste, and/or having underground storage tanks. 356 inspections of restaurants of other food handling service facilities performed within the City of Salinas (total includes some re-inspections for compliance, where needed).

SWMP	Permit	Commercial / Industrial Activities	Status[1]	Date[2]	Accomplished (Quantifiable Measure)
7.4.A	A4.IV.e	Inspect Industrial facilities and activities	√		Implemented • Inspections are complete for 71 Industries from the industrial inventory list. • Inspections for the expanded inventory of Industries to be completed in the 2005-06 and 2006-07 permit years. Expanded list includes 71 Industries. Site visits and assessments for 157 sites noted as potential for industrial inspections in the SWMP were reduced to 71 following determination for appropriateness for inclusion in the Industrial Inspection Program. • Inspections by MRWPCA personnel • BMP's disseminated at 70% of inspected facilities
7.4.B	A4.IV.g_1	Facilities with no exposure to storm water runoff	√		Per Permit Guidelines • Facility removed from Industrial List due to business closure • Facility removed from Industrial List due to business change. No exposure to stormwater runoff.

SWMP	Permit	Commercial / Industrial Activities	Status[1]	Date[2]	Accomplished (Quantifiable Measure)
7.4.B	A4.IV.g_2	Enforcement	√		Established • Four facilities were issued Notice of Violation (NOV) and Compliance Orders. With the exception of one industry these NOV's were issued prior to the Annual Inspection process. Threat to storm water has been abated. Compliance Order to establish BMP's is in progress. The NOVs were for illicit discharges discovered as a result of site sourcing discharges to the storm system during the dry weather monitoring program and while sourcing discharges under the Toxicity Reduction Evaluation program discussed in the Illicit Discharge and Illegal Connection Chapter of this annual report. One NOV issued for an illicit discharge sampled from a site storm drain at the time of the annual Industrial Inspection. • One NOV is pending following an illicit discharge of process water to the storm system following a facility power outage. • Two additional NOVs will be issued: one from an observed discharge of water dripping from a vegetable trailer to the storm system; noted during the annual industrial site inspection the other from a failed sump pump while washing down facility equipment causing discharge to the City street.

SWMP	Permit	Commercial / Industrial Activities	Status[1]	Date[2]	Accomplished (Quantifiable Measure)
7.4.B	A4.IV.h	Process to refer non-filers to Regional Board	√		Implemented • Verbal notification within five (5) business days followed by written notification. • Refer non-filers by written notification to the Regional Board within ten (10) business days of discovery.

SWMP	Permit	Commercial / Industrial Activities	Status[1]	Date[2]	Accomplished (Quantifiable Measure)
7.5	A4.IV.i	Training of inspection and education staff	√		Implemented City Industrial Facility Inspector: See detail noted in Annual Report above. • 7th Annual Environmental Compliance Workshop 2007, with focus on Session 1, Environmental Compliance for Management Level Personnel, Mastering Environmental Organization & Compliance Inspections • NPDES training at a City of Monterey sponsored training event. • 6th Annual Environmental Compliance Workshop 2006, Hazardous Materials and Emergency Response. Additional Activity • Guest Speaker Annual Ammonia Safety Day workshop, May 2007, Power Point presentation on Stormwater Program. Over 100 BMP handouts distributed to participants. • Awarded California Water Environment Association Northern California Pretreatment Pollution Prevention and Stormwater Person of the Year 2007 for the Monterey Bay Section, Third Place Award for State of California.

Public Education and Outreach

2006-2007 Annual Report

Introduction and Goal

Salinas's goal for its Public Education and Outreach Element is to promote behavioral changes through increased knowledge that leads to greater responsibility and protection of its water resources. To address this ~~goalSalinas~~ goal Salinas undertook three principal strategies. First, the City continued its move towards an integrated and collaborative municipal approach. Successful program implementation requires City staff in various disciplines to work together to address overlapping issues. Second, the City educated the public about local hydrology including natural water systems, the City's storm drain system and how their actions affect their quality of life. Third, the City partnered with outside stakeholders to maximize efficiency and effectiveness in protecting watershed health. The desired result of ongoing implementation of these three strategies is to reduce pollutant discharges into stormwater runoff to the MEP.

Salinas's public outreach education program focused on critical audiences within the City, and on reinforcing its message with them. To establish a common base of knowledge in the first two years of the permit term, the education program was purposely broad. As the program moved into its third year, its message has become more focused.

Salinas has implemented a four-pronged multi-media outreach campaign. Targeted audiences included (1) the general public, (2) public agencies/quasi-governmental organizations, (3) select community sectors, and (4) primary schools. Salinas's primary message was shared across target audiences, and activities overlapped to achieve the desired repetition. To leverage the message and limited municipal resources, the City has partnered extensively.

Reporting Year (RY) 06-07 Public Education and Outreach Program Accomplishments

Salinas's Public Education program is summarized below for the annual reporting year that runs from October 1, 2006 through September 30, 2007 (RY 06-07). The reporting year does not overlap with the NPDES Permit years, which run from February to January, or with the City's fiscal year, which begins July 1 and ends June 30. During RY 06-07 the City completed all tasks for education and outreach under its NPDES Permit.

Long-term Planning

One of the main tasks of RY 06-07 was refinement and expansion of the City's public education program. During this reporting year a principal effort toward revising the City's long-term education plan was preparation of the City's in-school education program. Overall, the long-range plan meets the requirements of the NPDES Permit and provides a framework for implementing the City's Public Education and Outreach effort. In completing this task, the City developed cost projections and developed partnerships to ensure program success. The City's long-term Education and Outreach Program is contained within the City's revised Stormwater Management Plan.

The City conducted five meetings with the Monterey Regional Water Pollution Control Agency and several meetings with the Central Coast Media Coalition and Monterey County Environmental Health Division to refine its long-term plan. Salinas staff members developed programs and cost projections for a shared program. The City also conducted meetings and held several phone conversations with Monterey County Water Resources Agency staff to discuss independent partnerships. In addition, one of the big efforts in 06-07 was preparation of an in-school education program for the next three years. To that end, Salinas hired an educational consultant and a City staff member met with the Director of Education, as well as the Coordinator for Curriculum and Instruction from Monterey County Office of Education to develop an in-school education program. Further, City staff held several meetings with the Curriculum Coordinators for each of the three school districts within the City to refine its school program. This program will be discussed in more detail in a subsequent section.

Research during the year has led to program adjustments and integrating new efforts on select programs. Salinas collaborated with the following organizations and groups in the past year regarding Public Education and Outreach: (1) Central Coast Media Coalition, (2) inter-departmental stakeholders, (3) Stormwater Education Alliance (SEA), (4) County of Monterey Water Resources Agency, (5) Salinas Chamber of Commerce, (6) Ecology Action, (7) County of Monterey Environmental Health Department, (8) Save the Whales, (9) Salinas Valley Solid Waste Authority, (10) Monterey Regional Water Pollution Control Agency, (11) the Watershed Institute of CSU Monterey Bay, (12) Monterey County Office of Education, and (13) Curriculum Coordinators for the Alisal, Salinas Union and Santa Rita School Districts.

Lastly, in 2006-2007 the City hired a consulting firm to prepare an entirely new redesign to its home web page. A new web design will feature expanded public outreach regarding urban water runoff and greater user-friendly features to access information.

Work Program RY 07-08-Planning

Salinas will continue its partnerships with SEA, Monterey County and others. Before the third year of the permit term is up (2/08), Salinas will conduct coordinating meetings with internal and external stakeholders. In October of 2007, the City will conduct an Annual Report public meeting on its NPDES Program, including its RY 07-08 Proposed Work Program. In late 2007, the City will complete development of an entirely redesigned home webpage. The redesigned home page will afford greater convenience and increased accessibility to urban water runoff information for the general public and for specific interest groups.

Media Relations / Advertising

During 2006-2007, the City continued its media partnerships to maximize program efficiency. Salinas attended several meetings with media partners to refine its campaign. For Reporting Year 06-07, media advertising continued its focus on meeting the Regional Water Quality Control Board's concerns regarding reducing plastic and trash into receiving waters.

Along with its media coalition, Salinas continued its TV and radio public education campaign during RY 06-07. Themes and topics focused on residential home and gardening tips to reduce use of pesticides and trash/plastics that might otherwise pollute downstream receiving waters. Other tips focused on reducing the waste stream by recycling. Television ads ran on several local television stations including KION, KCBA, KSBW and Univision, a Spanish language station. Media buys included 433 television paid spots with another 424 free spots/public service announcements, 739 paid radio spots with 264 free ads/public service announcements. Radio buys included 8 stations, 4 of which broadcast in Spanish. The popular how-to series entitled: "What's In/What's Out" radio spots were run in English and Spanish. Total number of gross impressions for English and Spanish radio spots combined was well over 600,000. Impressions from the television campaign exceeded 500,000 for one television station alone (KSMS). Together radio and television advertising surpassed 1,000,000 gross impressions. Therefore, program totals exceeded the required number of impressions.

Evaluation of Effectiveness

The Media Relations Program continued to exceed task goals. The radio and television ads increased residents' and the business community's awareness of their behavior and their affect upon the environment, and identified alternatives. The "how to" approach was effective in providing the public with solutions. Partnerships were also strengthened during this reporting year. During this reporting year, Salinas continued to improve and expand its relationships with many stakeholders in the water quality field (see list above in long-term planning). This bodes well for future program success. Successful collaborations increased the level of efficiency and effectiveness over past year's programs. Partnerships with the Monterey Peninsula Stormwater Education Alliance (SEA) were further explored; however, due to differing demographics, no formal partnership with the Monterey Peninsula communities was established. Rather, partnerships were formed where and when goals were shared.

During this reporting year, Salinas also expanded its commercial business outreach. A twelve-week multi-media campaign employing radio and television were created and produced during 2006-2007 Reduction of Food waste, oil and grease was the theme. The program aired on the following radio and television stations: KCDU, KDON, and KPRC. In all, over 256 spots were aired with a total of over 1,000 impressions.

Media relations complemented other outreach efforts to the residential and business community. Additional information about the program's reach and effectiveness would be useful. As media advertisements can easily become background white noise, future efforts will focus on direct engagement with the community. The focus will be on in-school education.

Work Program RY 07-08 – Media Relations

The City proposes to continue its involvement in the Central Coast Media Coalition and with other media campaigns. This includes conducting joint activities with the MRWPCA, Our Water

Our World Campaign (OWOW), and with the County of Monterey Environmental Health division. Salinas will also continue to explore media opportunities with SEA. As planned, in the third through fifth years of its NPDES Permit term, Salinas will continue its trend towards more specific outreach and educational programming. While general education is still necessary, messages with a more focused "how to" approach will be featured. Salinas will also continue its emphasis on direct engagement with the public through its in-school education outreach programs, direct retail marketing (OWOW), and professional business campaign--BMPs for businesses and industry. In 2007-08, the City will conduct another more expansive survey to determine the best methods to reach the community, and which messages resonate. Survey results will be used to tailor the City efforts.

Salinas' Residential and Business Integrated Pest Management Program

Residential Activities/ Business Partnerships

In RY 06-07, Salinas expanded its bi-lingual residential outreach and IPM Store Partnership program. The program focused on reducing residential use of pesticides and chemicals as a means to protect downstream water resources. The program included the following tasks:

- IPM store partnership program
- Media advertising
- IPM education and training
- Training for landscape professionals in green business practices

The Residential IPM Store Partnership Program, also known as Our Water Our World (OWOW) program was in its second year during RY 2006-07. The goal for the Salinas OWOW program is to reduce toxicity caused by pesticides in stormwater, creeks, the Salinas River and the Monterey Bay. Goals were achieved through four principal strategies. First, Salinas developed expanded partnership programs with commercial retailers and others with its point of sale campaigns. Second, through these retail partnerships, the City educated the public about less toxic pest control strategies, the value of the IPM approach to home pest control, and the safe use and disposal of pesticides. Third, Salinas developed partnerships with other agencies and non-profit groups and trained its staff to maximize program effectiveness and efficiency.

Working with its partners, Salinas also produced and delivered fact sheets, promotional materials, alternative products lists,

and display materials for stores. Program staff members recruited stores and arranged training for store employees. During RY 06-07, program staff maintained the involvement and support of the ten stores that began their participation with the City the previous year. Stores were

checked at regular intervals and updates made to the display racks as needed. Stores include ones that are locally independent operations, as well as large chains. The following stores were part of the RY 06-07 program: Bokay Nursery, Home Depot, Orchard Supply Hardware, Longs Drugs and Rite Aid stores. In addition to these stores, new sites were added in 06-07 including McShane's Nursery, the City's Development Permit Center and its three libraries.

Outreach materials purchased for the Residential IMP Store partnership Program include IPM fact sheets and literature rack material. Fact sheets provided are listed below. Continuation of this program extended the City's partnership with public and non-profit organizations, Ecology Action and the Salinas Valley Solid Waste Authority. Participation has included training and the provision of colorful bi-lingual IPM fact sheets on the following topics:

Safe use and disposal of Pesticides
Ants
Aphids
Fleas
Healthy Lawns
Managing a Healthy Garden
Problem Pesticides
Products Toxicity Comparisons
Roaches
Roses
Slugs and Snails
Spiders
Yellow Jackets
Weeds

In addition to the above programs regarding IPM and sustainable maintenance practices, during RY 06-07, the City partnered in establishing a Model School Program. One school in the Salinas area was selected to exemplify environmentally sustainable site management practices, including IPM. Site managers and procurement staff are being given instructions on how best to manage their site sustainably. This program is still in its early stages, so reportable results are not yet available.

Evaluation of Effectiveness

The 06-07 IPM Store Partnership (OWOW) program has been a success. Store managers and employees were enthusiastic about the program and extremely receptive to having the OWOW display in stores. Spring planting season was the peak demand time period for information fact sheets. Potential to expand this program is significant and will be explored again next year (see RY 07-08 Work Program). With regards to the Model School Program, the City will report on program results in next year's annual report.

RY 07-08 Work Program

Expansion of the OWOW program will include shelf talkers, outreach speakers and expansion of City's web page on Urban Watershed Management to include OWOW fact sheets and related BMPs, and begin commercial business urban water management program (education and inspection). Twenty-percent of high-risk commercial businesses will be provided information on BMPs tailored for their type of operation. Restaurants and automobile repair establishments will receive first priority. Expansion of the City's urban water runoff web page will be completed during 07-08 with greater information regarding urban water runoff and more readily accessible information. Salinas will expand the role of Park's and Urban Forestry division staff to be available to speak at neighborhood meetings and landscape sessions on an as time permits basis. Park division participation in this latter role will be dependent upon their getting City parks and landscape areas back to desired levels after years of neglect due to budget cutbacks.

Green Gardener Program

In concert with its non-profit partner, Ecology Action, Salinas helped produce a 10-week bi-lingual training program entitled “Green Gardener”. Designed for the landscape professional, attendees were taught several aspects of landscape management with environmental sustainability as its theme. Weekly classes included (1) IPM, (2) Soil Health, (3) Plant Selection, (4) Irrigation I, (5) Irrigation II, (6) Irritation III, (7) Pruning, (8) Mulches and Compost, (9) Fertilizers and (10) Air Quality.

During 2006-2007 approximately 30 professional landscapers completed the10 week program; five City Park personnel participated in on one or more classes.

Evaluation of Effectiveness

Programs were well attended and enthusiastically received. Presentations were concise, and the successful partnership between the City and its non-governmental organization collaborator speaks well for future efforts. This program is an example of a direct media/business relationship that Salinas intends to continue.

Work Program RY 07-08—Green Gardener Program

The City proposes to continue and expand the successful Green Gardener program in RY 07-08. With the City’s Parks division getting back to near full staff levels, the Parks division and its new employees would benefit from refresher courses on landscape maintenance. Staff will be encouraged to complete selected Green Gardener courses.

Grease Reduction Program—Residents and Restaurants

With its regional partners, Salinas co-produced a Residential and Business (restaurant) Grease Reduction Program. This is the City’s fifth year in the program. Prevention of sanitary sewer backups prevent spills into the storm drain and, therefore, protects downstream receiving waters. Program staff provided residents and businesses with literature and promotional materials to protect downstream receiving waters from grease. Restaurants and other businesses that generate grease were inspected to ensure that they had grease traps, or grease interceptors. Inspection for traps and/or interceptors is a cooperative program with the Monterey Regional Water Pollution Control Agency.

During the 2006-2007 reporting year, Salinas continued to partner with the Southern Monterey Discharges Group. The group, also know as “Clog Busters” is a consortium of wastewater collection system owners and wastewater treatment jurisdictions located in northern Monterey County. The group is responsible for maintaining sewer lines and preventing overflows to protect public and environmental health. Public education is one component of the group’s comprehensive programs. Media advertising included radio spots and print media ads. The media program and a sample of one of our print media advertisements are shown below.

Media Type	Budget Detail Summary
Print	All ads: 2 columns x 4 inches
Monterey County Herald, Wed & Sat	20 ads (2 col. x 2 inches)
Californian, Mon	9 ads
El Sol (Spanish language), Sat.	9 ads
Monterey County Weekly, Thu	6 ads (1/8 page)
Internet Website	
Development, hosting, 2 updates	6 months www.clogbusters.org
Internet Ads	
Salinas Californian	6 months
Monterey County Herald	5 months
Monterey County Weekly	3 months
Radio	
	(30 sec. commercial, 8 ads/wk)
KDON	80 ads (10 weeks)
KPRC (Spanish language)	80 ads (10 weeks)
KCDU	96 ads (12 weeks)

Sample print advertisement:

Evaluation of Effectiveness

The Grease Reduction Program has proven to be a successful program. Education for this effort fits in well with the City's Commercial and Industrial Facilities inspection program. Partnering has also proven cost effective—it has enabled Salinas to conduct a program that it would not be able to afford otherwise. Salinas will continue to participate in this program during RY '07-08.

Additional Residential / Business Outreach

America Recycles Day—This program intends to reduce contaminants in the environment by reducing the amount of consumables that are discarded. In RY 05-06, the City and its partners promoted and conducted a one day event that encouraged all residents to rededicate themselves to using resources more wisely by reusing and recycling the materials they purchase. America Recycles Day is part of a national campaign www.americarecyclesday.org.

Chamber of Commerce and Other Entity Programs—City staff presented information to the Chamber of Commerce regarding requirements for business and industry. Parks Division crew supervisors staffed an informational booth on water quality at the Chamber of Commerce's Annual Exposition. This same booth was employed at the Annual Environmental Compliance Workshop (see below) and at California State University Monterey Bay's "War on Weeds" Symposium. This latter project is part of the University's Return of the Natives program.

Environmental Compliance Workshop—In concert with the County of Monterey Environmental Health, Salinas co-produced the 2007 Environmental Compliance Workshop. Note, the workshop was held in September (after the preparation of this Annual Report) so results could not be summarized. This is the fourth year for the City's involvement with this highly successful program. The 2007 Workshop was entitled, *Insight to Environmental Sustainability and Practical Solutions to Going Green.* Salinas's Mayor Dennis Donohue gave the keynote speech. Salinas also conducted an information booth at this event on stormwater BMPs. Attendees learned about environmental issues facing their business, such as contaminated water, and the BMPs that they can employ. Last year's workshop had over 300 attendees; a similar size audience was projected for this year.

Earth Day—The City of Salinas and its partner, CSUMB Watershed Institute, promoted Earth Day through a citywide celebration. This is the fifth-year that Salinas conducted programs that taught school children about ecological principals through a hands-on approach. Presentations were made in a fun, up-beat approach regarding environmental sustainability—global warming, the growth of trees, flowers, food crops, as well as identifying the causes/cures of water and land pollution. Programs celebrated the planet with exhibits and speakers with live music and entertainment.

Ammonia Safety Day—Over 600 professionals, including Salinas Maintenance Department staff members attended a full day training on proper handling of ammonia and other toxic materials.

Please refer to the Development Standards/Construction Site Management section for information regarding outreach to the design and construction trades.

Measure of Effectiveness

Environmental Compliance Workshop: the program has been well attended in the past (375 attendees in 2006) and attendees have reported that their time was well spent. This year's workshop promises to be even more successful with over 400 attendees anticipated. The topic for this year's Workshop is *Environmental Sustainability and Practical Solutions to Gong Green*. See Appendix for workshop announcement and agenda. The message of environmental stewardship will include presentations on water quality protection. This workshop is another direct business community involvement program that the City engages in as both its public outreach and its commercial and industrial compliance efforts.

Work Program RY 07-08 Additional Outreach

Salinas will continue to co-produce the successful Environmental Compliance Workshop and present BMP and other water quality information to the Business Community. Programs will be integrated with the City's Commercial and Industrial Facilities Program.

Other outreach efforts are generally ad-hoc programs that surface during the year. Those that prove successful are added to future annual planning; others are discontinued or modified. Salinas will continue to maximize opportunities as they surface. For example, Monterey County Fair attendance tends to be much higher from residents from the Monterey Peninsula. Salinas has therefore discontinued its involvement with this effort.

Classroom education

Salinas conducted four main in-school programs during RY 06-07. These included (1) Classroom presentations, (2) Creeks of Salinas field trips, (3) Recyle-Rama, and (4) Closing the Loop.

During the 2006-2007 reporting year Salinas sponsored and conducted presentations to over 1,400 students. One-half of that total attended an entertaining series of culturally rich, diverse watershed performances. Students learned about watershed health, water quality and water conservation through engaging stories, lively rhythms and international music. The locally well-respected educational troupe, Zun Zun, lead assemblies of twenty-three classrooms filled with school children to the sites and sounds of their watershed. In addition, two fourth-grade classes were given instruction on where water comes from and where it goes. Along that journey, students were taught about the difference between stormwater and sanitary sewage and what they can do to protect receiving waters. The video game Eco-Master was used as a teaching tool to show students how they affect downstream water quality and what they can do to protect resources. Children were engaged with a question and answer format. Those providing correct answers won prizes. By the sessions end, all students were winners and each left with a prize.

Also in 2007, the City hired an educational consultant to develop an expanded in-school education program. The statewide known consultant has previously prepared respected teaching materials for use by the California Coastal Zone Conservation Commission and the Pajaro Water Management District. Among other documents, Salinas's consultant prepared *Waves, Wetlands and Watershed* for use by the State of California, and the locally used *Watershed Cruizin'.* Programs prepared in 2007 were to begin to be used in the fall of 2007 when school began. Salinas produced three teacher workshops in September 2007 and has plans to conduct up to 100 classroom visits in late 2007, early 2008. As these workshops were

conducted after the time that this report was being prepared, a summary could not be included. Please see the next section for more information regarding this program.

To help make the connection from classroom theory to the physical world, students will be able to attend one of three field trips. Students may attend a field visit to a creek near their school as part of the City's joint Creeks of Salinas program with its partner (summarized in the paragraph below), stencil storm drains at their school, or visit the Monterey Bay Aquarium to see where water that begins near their house winds-up and who live in it.

Creeks of Salinas is a joint partnership funded under a BWET grant between the City and its partner, California State University, Monterey Bay. "Creeks" is an outdoor classroom that teaches children grades kindergarten through 12th grade as well as members of the public about riparian ecology including water quality using a hands-on approach. Faculty and university students from CSUMB's Watershed Institute served as teachers. The outdoor classroom is held near Natividad Creek and Upper Carr Lake. In 2006-2007, thirty-five class/assembly sessions were held with over 2400 students of all ages participating in programs. Many participated in field events to restore creek health.

Measure of Effectiveness

Past programs have all been successful with teacher comments reflecting general pleasure with the program. In late 2007, the City created a new program that had yet to be conducted; therefore, program effectiveness could not be measured this year, but plans have been made for the 2007-2008 reporting year.

Work Program 2007-2008--Classroom presentations

Materials prepared by the City will be unveiled at three teacher workshops scheduled for late September 2007 (past the writing of this report). Teachers will be trained to provide instruction on watershed issues such as the water cycle, interruptions to the water cycle, including polluting receiving water bodies and the environmental effects of such actions and what steps they can take to protect receiving water bodies. Teachers that want additional assistance will be able to have a City of Salinas instructor come into their classroom and offer a classroom lesson. In addition, Salinas will make field trips available to students. Students will be able to experience first-hand the lessons taught in the classroom. Three field trip options will be made available. First, students may visit a nearby creek as part of the Creeks of Salinas effort where they will learn more about water's movement through the watershed and humankind's affect upon it. At this field trip students will also learn about wetlands ecology and perform hands-on restoration activities. Second, students may attend the Monterey Bay Aquarium as part of a partnership between the City and the Monterey Bay Aquarium. Here students will learn about where water that leaves their house winds up and what animals live it. Aquarium staff may also assist in these field visits. Third, for classes unable to get away to an off-site fieldtrip, students will still be able to experience their watershed right outside their window by exploring water runoff at their school. Learn by doing exercises will be conducted at this field trip as well. Students will map school drainage and stencil their school's storm drains. No matter which trip they take, all students will gain a better appreciation of their watershed through direct exploration.

During this next reporting period Salinas will conduct up to 50-classroom presentations tailor made for Salinas students.

The City and its partner CSUMB applied for a grant for this program in 2006-2007. The grant application was not funded, leaving expansion of the program in doubt.

Measure of Effectiveness

Creeks of Salinas is a solid program that receives enthusiastic support from most everyone evolved. "Creeks" directly engages the community in restoring watershed health through creek clean-ups, planting and outdoor education regarding riparian ecology and ecosystems management. Over 2,000 students and volunteers participated in this program in RY 2006-2007. The program serves as a model for how Salinas plans to engage the broad community in relating to their environment and foster environmental stewardship.

Work Program RY 07-08—Creeks of Salinas

Salinas will continue the Creeks of Salinas program as long as funding remains, and merge it with its new classroom presentations beginning in 2007. The City and its partner will continue to apply for grant funding. Creeks of Salinas will partner with the City's 2007-2008 4th and 5th grade program. Field visits will complement classroom presentations.

Recycle Rama—Now it is fourth year, Salinas co-produced this interactive environmental play with its partner the Salinas Valley Solid Waste Authority. Young children grades K-6 learned about environmental stewardship. During RY 2006-2007, fifteen Salinas schools, 36 classrooms and 7 assemblies of multiple classes participated in the program.

Measure of Effectiveness

Recycle Rama is a popular program with students and teachers. During 2006-2007, several teachers signed-up for repeat sessions. The popularity of this program attests to its effectiveness.

Work Program RY 06-07 Recycle Rama

Salinas will continue to produce Recycle Rama's interactive plays with its partners during 2007-2008.

"Closing the Loop" is a state approved curriculum training on waste reduction and recycling for teachers. The Closing the Loop (CTL) curriculum was designed to introduce students to environmental stewardship through awareness, understanding, and action, and to encourage students to think environmentally by not polluting and proper disposal of waste. Lessons focus on awareness of natural resources and conservation of natural resources.

By using CTL, teachers followed recommendations from California's newly adopted content standards and curricular frameworks in a conceptual, interdisciplinary, and hands-on manner. Through specific projects, students applied what they have learned in the classroom and learned to follow certain practices in resource conservation and integrated waste management. Some project-based lessons were service learning oriented, and in these lessons students participated in improving the environment in their school and community and have opportunities to educate others about what they have learned.

Evaluation of Effectiveness

Closing the Loop and other educational partnerships, such as the one Salinas conducted in conjunction with Save the Whales organization have proven effective in introducing young children to their environment through indoor and outdoor classroom lessons.

Work Program RY 2007-2008 CTL

Salinas plans to continue to partner to conduct the CTL program in 2007-2008

Curb-side Pick Up and Disposal of Household Waste

Salinas contracts out its residential/commercial waste hauling with a private company (BFI). Through BFI, Salinas provides both curbside and drop-off collection methods. Proper disposal of pesticides and other household hazardous wastes were promoted through a free community workshop in RY 2006-2007. Materials can be dropped-off at the Household Hazardous Waste facility on Sun Street Center in Salinas. The City and its franchise waste hauler, BFI sponsored two free trash turn-in days at three locations in Salinas. Hazardous waste, including tires, e-waste, and now universal waste products are sorted and disposed of in such a way as to eliminate their potential for pollution of storm water. In 2006-07, the focus was on vigorously addressing illegal dumping and the safe disposal of universal waste. This has included public outreach events to inform tri-county residents how to safely dispose of batteries. Staff has received training and disposal containers to facilitate the safe disposal of batteries in the workplace.

Stenciling and Signage

In conjunction with its partners, Salinas stenciled 145 storm drains in high visibility pedestrian traffic areas. Areas included the central downtown business district, three shopping districts, redevelopment areas and a nature / recreation area. This program included active schoolchildren participation. Under the supervision of the program leader, students stenciled drains inlets and learned where urban water winds up and what they can do to reduce polluting downstream receiving waters. Storm drains were stenciled on in the City's downtown civic center and several redevelopment areas.

Measure of Effectiveness

This partnership effort has been a success. Inlets have been stenciled and school children have learned about their environment using a hands-on technique. Increased documentation of inlets stenciled is needed for future stenciling activities. The City plans to provide its consultant with its new inlet maps and request that inlets stenciled be marked on the map for archival storage.

Work Program RY 07-08—Stenciling and Signage

As this is a required program by the RWQCB, it will be continued in RY 07-08. Methods are being discussed with our partners and the Chamber of Commerce. As part of its preparation of new LID Development Design Standards, the City will adopt a design standard requiring a two-color stainless steel button be placed in the center of all drain inlets by the developer.

Annual Meeting on Annual Report and RY 2007-2008 Work Program

Salinas conducted one of its two public meetings on its Urban Watershed Management Program in 2007. In June 2007, City staff members presented the NPDES Program to the City Council at a public hearing. In November, Salinas will conduct its second annual meeting. At this meeting, this Annual Report, including the proposed Reporting Year 2007-2008 Work Program will be presented and discussed. Public participation at these meetings will be encouraged.

In addition, in August of 2007, the Salinas City Council authorized formation of an NPDES Permit Stakeholders Committee to participate in the City's development of NPDES related documents. Committee composition was divided among land developers from the City's future growth area (4), environmental advocates (2), regional park interest (1), and agricultural interest (1). The first meeting of the Stakeholders Committee is scheduled for October 1, 2007.

SWMP	Permit	Public Education and Outreach Activity	Status [1]	Date	Accomplished (Quantifiable Measure)
Entire	4.VII	Develop and Implement a Public Outreach Program	√		Conducted 13 planning sessions with stakeholders and partners to develop programs, including preparation of cost projections, secured funding from City Council, and expanded partnerships.
Entire	4.VII	Implement Public Participation Program	√	10/23 /07	Annual Program presentation scheduled for October 23rd. Conducted three hearings on the SWMP; two teacher workshops; 10 sessions with landscape professionals; and two workshops on development standards (see development standards chapter for details); and several outreach workshops, such as the Environmental Compliance Workshop on 9/26, on a variety of topics. Public comments will help shape SWMP and annual programs; on-going public participation is built into most program activities--media relations, classroom education, education/ inspection programs
6.3 A	4.VII	Conduct advertising and Media Relations program; distribute literature to targeted groups listed below:	√		Conducted multi-media education/outreach campaign; generated over 1,00,000 gross impressions through television and radio spots. Information regarding specific target groups is provided below.
6.3	4.Vii.a.i.	Municipal personnel	√		Outreach is decentralized within the City; each department conducts its own programs. In 2007, all Maintenance Services new staff were given an orientation to watershed management and urban water runoff issues as it relates to their position. See other sections of this Annual Report for specific training/education activities. For example, LID training is covered under the Development Standards section of this report.
	4.Vii.a.ii	Construction Site Contractors			See Development Standards and Construction Site Management sections of this report.
	4.VII.a.iii and 4.Vii.a.v	Industrial owners/operators	√		See Commercial and Industrial Facilities chapter of this annual report for details. As part of Salinas' industrial facilities inspection program, staff members presented industry with stormwater requirements and guided them through the compliance process. Salinas also presented

[1] A checkmark in the status column indicates that the task was accomplished. Where no check mark is provided, either the task is recurring, in which case a date is provided in the date column, or the work was not completed.

SWMP	Permit	Public Education and Outreach Activity	Status [1]	Date	Accomplished (Quantifiable Measure)
					stormwater information to industry representative at two events: 1) Environmental Compliance Workshop, and 2) the Salinas chamber of commerce 2006-07 Expo. Co-produced Salinas Valley Ammonia Safety Day/ Lessons learned from Chemical Accidents.
6.3 D	4.V.II.a.vi	Non-English speakers	√		Provided Spanish language IPM (OWOW) literature and media advertising in Spanish on radio and television—see text for numbers.
6.3 B	4.V.ii.a.vii	Quasi-governmental (educational institutions, water districts, sanitation etc.)	√		Conducted several programs with SVSWA, MRWPCA, BFI Waste Haulers and several non-governmental entities such as Watershed Institute (Creeks of Salinas), Ecology Action (OWOW), and Save the Whales (partnered B-Wet Grant) See school children below for more information. Continued joint educational outreach with SVSWA; expand collaborative efforts with BFI, such as establishing a bill-stuffer program to include educational materials.
6.3 C	4.V.II.b.i 4.V.II.b.ii 4.V.II.b.ii 4.V.II.b.iii 4.V.II.b.iv 4.V.II.b.v 4.V.II.b.vi	Conduct Residential, business programs	√		Co-produced Environmental Compliance Workshop for residents and businesses in September 2007. Continued co-production of Green Gardener training program with Ecology Action. Program was a 10-week training session for landscape professionals. Approximately 200 people attended total. Co-produced IPM displays and literature at 10 Salinas businesses. Salinas, through its waste hauler (BFI) sponsors a regular curbside program for hauling green waste. Conducted stormwater outreach at Salinas Chamber of Commerce Expo. Secured city council authorization and funding for new environmental compliance inspector position. Recruitment process is projected to end, and the position filled during 2007.
6.3 E	4.V.II.c	Stencil storm drain inlets/ Signage @ selected high use public access points	√		Continued stenciling program began in Fall, 2006. Stenciled 145 storm drains and 100% of downtown area and major portions of stenciled. Program is a hands-on program for school children (3-12th grades) that also included them

SWMP	Permit	Public Education and Outreach Activity	Status [1]	Date	Accomplished (Quantifiable Measure)
					taking water quality samples at Natividad Creek.
6.3 D	4.V.II.e	Classroom education	√		Conducted Creeks of Salinas educational school program for over 2,000 students; conducted watershed awareness through a multi-cultural musical program, Zun Zun, for over 350 students. Recycle Rama interactive play with 7 schools, 36 classrooms, and 7 assemblies. A 25 minute, highly interactive and informative school assembly program with tons of great audience participation, multimedia, and easily accessible learning tools.
6.3 C	4.V.II.g	Small Construction Outreach			See Construction Site Management chapter of this annual report for
6.3 F	4.v.II.h	Public Awareness Surveys		2007-08	Will conduct second survey of permit term during 2007-2008. Plans call for survey to be conducted prior to summer of 2008.
6.3 B	4.v.II.i	Annual Meetings	√	10/17/06	For the first 7 months of the year, conducted monthly inter-departmental NDES meetings to ensure NPDES permit requirements were being met. Conducted quarterly meetings thereafter. Salinas conducted two public meetings in 2006-2007. Two pubic meetings were held on the City's SWMP. Staff summarized program activities and accomplishments at each meeting. In the fall, the City will hold its annual public presentation of its Annual Report, including its RY 2007-2008 Proposed Work Program.

Illicit Discharge and Illegal Connections

2006-2007

Annual Report

Program Implementation

The City continues to implement a prudent and ongoing illicit discharge/illegal connection identification program.

Illicit discharges and illegal connections may be discovered as part of the annual monitoring or dry weather screening activities, during routine City maintenance activities, or as part of the industrial inspection program. If non-storm water discharges are discovered, the City follows up to determine if the discharges are exempt, and if not, to identify the source if possible. Illicit discharges are eliminated through investigation, education and, if necessary, enforcement if specific source(s) can be identified.

The City supports and complies with Monterey County Environment Health Department's requirements for hazardous materials controls. County requirements for hazardous materials handlers are well developed, and are administered and inspected by the County. The City requires that hazardous material registration forms be filed with the Health Officer of Monterey County by any establishment that contains hazardous materials at any time.

The City's Wastewater Division, which includes Sanitary Sewer, Storm Sewer, Street Sweeping and Industrial Waste Facility personnel, also continued to participate in plan reviews for new construction and improvement projects to ensure compliance with the City's storm water requirements and when appropriate confirm system facilities for correct connectivity to the various drainage systems to avoid illicit connection.

Prevention of Illicit Discharges from the Sanitary Sewer System

The City continued an extensive program of sewer inspection, cleaning, repair and replacement to reduce sanitary sewer overflows and leakage from sanitary sewer lines.

The City maintains 270 miles of sanitary sewer collection system pipeline and 11 Sanitary Sewer Lift Stations. The City's Wastewater Division, under the direction of the Maintenance Services Department Director, is responsible for operation and maintenance of the City's

sanitary sewer collection system. The City's Wastewater Division Manager is the lead person to plan and implement these responsibilities. Current City staffing for operation and maintenance of the sanitary sewer system includes 9.25 full time equivalent (FTE) employees. Employees also perform other functions for the storm sewer and industrial waste systems.

Seventeen Wastewater employees are trained annually in spill response procedures, Confined Space, Lockout Tagout, N.P.D.E.S. (BMP's), environmental compliance, CPR and First Aid and Pesticide Training. Two staff members have certificates in hazwopper training and have completed the required refresher training. Hazwopper training is for employees who are exposed or potentially exposed to hazardous substances—including hazardous waste. One crewmember is certificated in a correspondence training course through the University of California, Sacramento in Small Wastewater System Operations and Maintenance and one has completed a certified course in Operation of Wastewater Treatment Plants. All members have been trained in basic field math for calculating area, size and volume to aid in determining spill quantities.

The City provides 52% of support funds for the Southern Monterey Bay Dischargers Group, a multi-agency cooperative that contracts with contracts with the Monterey Regional Water Pollution Control Agency (MRWPCA) to assist with a comprehensive public education program for grease control through print ads, radio advertising, internet ads and development and hosting of an internet website, www.clogbusters.org.

Due to the potential for sanitary sewer overflows, pollutants of concern include raw sewage, bacteria and other chemical waste illegally placed in the waste stream. The sanitary sewer collection system is given a priority status because of concerns for public health and potential environmental impacts. The City maintains a regular maintenance schedule for collection system pipes and for sanitary sewer lifts stations. The City developed a written spill response plan, (attach as appendix to this Annual Report), a required set of actions for sanitary sewer and other hazardous spills. Spill responses vary depending on severity, and notification procedures are a collaborative effort that may involve the Maintenance Services Department in conjunction with the Salinas Fire Department and the Monterey County Environmental Health.
Prioritization of maintenance activities is based on maintenance history and potential to result in a sanitary sewer overflow. Hot Spot lists were developed to service these high priority areas. Hot Spot lists indicate street and area of past problems. The Wastewater division has three sewer trucks, two are assigned daily to perform hot spot maintenance and the other sewer truck is assigned to routine sewer maintenance. All sewer pipe mains are scoured by high-pressure water to remove grease and debris that cause overflows.
The effectiveness of the maintenance program is reflected in the number of sanitary sewer overflows. Reporting is based on the calendar year and a comprehensive report is submitted to the RWQCB by January 30, of each year. During 2006 reporting period the following overflow numbers were reported.

Sanitary Sewer Overflows from City Sewer Mains:

A 54% reduction over 2005 and 59% reduction over 2004

Year	SSO's	
2006	**7**	**Six contained & recovered. One partial recovery of less than 15 gallon spill.**
2005	**15**	
2004	**17**	

Sanitary Sewer Overflows from Private Laterals:

Staff responds to all reported private later spills for containment and recovery.

Year	SSO's
2006	**8**
2005	**6**
2004	**10**

During the 2006- 2007 time period 1,150,565 linear feet of sewer main lines were serviced. The City maintains sanitary sewer overflow records in accordance with Regional Water Quality Control Board requirement under WDR R3-2002-0078.To ensure continued system operation regarding the City's 11 sanitary sewer lift stations, the City maintains 5 portable towable diesel powered generators to provide emergency power to lift stations not equipped with permanent on-site electrical generators. Five of the highest flow stations are equipped with permanent backup generators with two more currently scheduled to begin installation in late 2007. This gives effective coverage of all sanitary lift stations and reduces the potential for overflows during power outages. The pump stations are typically inspected daily. The City has a pump maintenance mechanic logbook to log maintenance activity at the sewer pump stations.
As part of the City's routine scheduled maintenance, all sanitary sewer high flow stations are checked daily; the remaining stations are typically checked daily or every other day. On a daily basis staff checks overall operations of station motor performance, electrical panels, valves, piping, scheduling wet well cleaning, logging and checking flows. And on a monthly basis staff lubes moving parts and exercises valves. All work performed by the pump mechanic is documented in lift station daily check list along with daily input into lift station log.
In order to quickly repair breakdowns and malfunctions and to avoid potential overflow situations, the City keeps an inventory of key replacement parts for the sewer lift stations which include a spare motor controller, air compressor, alarm dialer, air lines and miscellaneous minor parts. A lift station maintenance truck with an overhead lift boom and power winch is used to carry a full complement of tools and minor repair parts. The City has purchased emergency backup pump motors appropriate to each of 11 lift stations. Spare manhole risers and covers are kept in inventory for street repairs. Emergency contact numbers for local parts vendors and contractors are kept for emergency response to pipeline and other system repairs.
The City owns the necessary equipment to respond to most overflow situations which includes vacuum trucks, hydroflushers, pumps, temporary bypass hoses, and portable generators. The City also maintains files, agreements, 24-hour contacts, and informal agreements with many contractors and businesses that can be called in response to a major event.
The City keeps key materials on-site at the City Yard to quickly respond to overflows. Sandbags and sandbagging material, absorbents, absorbent booms and pads are kept for containment and cleanup. Pipeline plugs for pipe sizes of 6 inches to 24 inches are kept on site for containment and repairs. A 6-inch pump and flexible hosing are kept in inventory for local bypass operations or pumping of overflows back into the sanitary sewer.

Training and Education

On January 26, 2006 the City of Salinas and other municipalities partnered with the Monterey Regional Water Pollution Control Agency (MRWPCA), to conduct a plumbers' workshop for the Monterey Bay National Marine Sanctuary Foundation through a grant provided by the California Coastal Conservancy. The workshop was designed to partner with local plumbers to help prevent sanitary sewer overflows by notifying appropriate response staff (such as public works

crews) when emergencies arise, by educating their customers, and by updating plumbers with changes in City ordinances relating to sanitary sewer issues such as restaurant grease trap installation and maintenance requirements and future lateral line inspection/replacement requirements. Professional plumbers that serve all northern Monterey County were invited.

Plumbing supply businesses from the Monterey/Salinas area attended a workshop regarding prevention of sanitary sewer spills.

1. Contact local authorities when they see an overflow occurring or accidentally release a root plug. A wallet card prepared by the MBSF was provided with contact phone number for each city and Monterey County.

2. Educate customers on best management practices - handouts were available.

3. How to clean a grease trap - a new restaurant poster was available. It was developed in 2005 by the City of Pacific Grove, with printing funded by the MBNMS. Putting in grease traps is not enough, Facility staff need to know how to clean them. The poster was an idea presented by plumbers at a previous workshop held in Pacific Grove.

4. Update plumbers on WDR requirements and local issues related to grease and sanitary sewer.

This workshop has not been repeated in 2007, however the workshop has yielded a favorable result as four incidents of sanitary sewer overflows from private laterals were reported by a local plumbing company allowing for an immediate response by City personnel who completely contained and recovered these spills.

In 2006-07, the City continued as a participating member of the Southern Monterey Bay Dischargers Group. The membership is under contract with the Monterey Regional Water Pollution Control Agency to assist with a regional comprehensive public education program. The 2005-06 grease education and outreach program included theater ads, radio advertising and printed ads. Grease awareness has increased since the dischargers group began the grease outreach programs in 2003. The program customer surveys indicate in 2002 about 30% of the population was unaware of proper grease disposal methods. However the most recent surveys now show only 18% are unaware that grease is the leading cause of sewer spills and only 5% are unsure or think it is okay to pour cooking oil and grease down the drain. This is an improvement and will result in fewer sanitary sewer system overflows. In 2007 the program changed to include a potentially wider audience with a total of 72 print ads in 5 Monterey County newspapers, internet ads on 3 local newspaper web sites, 264 radio ads on three area radio station broadcasts and the development and hosting of a website clogbusters.com with grease education information and links to member agencies.

Emergency Response System

The City's Maintenance Services Department has developed an emergency spill response plan. The plan is included as an attachment with this document. The Plan contains procedures for appropriate agency or department notification and lists priority actions to be taken and procedures for containment in the event of a spill. The City uses the Incident Command System (ICS) for emergency responses. All City personnel who are potential first responders will have

completed federally mandated NIMS training. NIMS refers to the National Response Plan Training which includes four levels of training (including ICS), specifically for all personnel with a direct role in emergency preparedness, incident management or response. General staff, first line supervisors, middle management and command personnel are included in the training. NIMS training was completed by October 1, 2006 and is not repeated annually. Incident Command System training was updated for employees within the context of the NIMS training.

The ICS is a network through which selected City staff coordinates emergency response actions (whether related to storm water, spills or other matters). If a spill occurs, the City responds using the ICS network to coordinate the efforts of local fire, police and City departments in order to successfully contain and recover a spill to prevent/minimize potential water quality impacts.

The ICS system is an effective mechanism for spill response and pollution prevention. The ICS system is implemented at various levels depending on the level and complexity of the emergency. Although the following examples are from 2002 and 2004 they continue to be good examples of the system at work in coordinating a multi department or multi agency response to a major spill. An example of how the ICS works is following a diesel fuel spill following a tanker truck rollover near the Quinn Caterpillar Company: approximately 7,500 gallons of diesel fuel were spilled on September 2002. The City responded by using the ICS network and successfully coordinated the efforts of City fire, police, and maintenance services. The final outcome was a full recovery of the spilled diesel fuel. Again in 2004 the ICS system was used for an affective containment and recovery of a private property spill of several hundred gallons of diesel fuel from the Pilot Truck Stop when a semi truck backed into a fuel tanker splitting the side wall of the tanker trailer. This required a multi department and multi agency response from the City's Fire Department and Maintenance Services Department that included the Monterey County Health Department, Monterey County Water Resources Agency, Dept. of Fish and Game and the City of Salinas. City of Salinas personnel were first responders to the spill. Staff quickly blocked the reclamation ditch and began cleanup procedures while coordinating with other involved agencies. The spill was quickly contained in the flowing waterway a relative short distance from the spill site thus reducing the environmental impacts.

A specific example for this reporting period is the response to a spill of 24 gallons of gasoline to the storm system that occurred at a local gas station. A Wastewater Division employee traveling home at the end of the day witnessed gasoline spilling from under a service truck and into a nearby property storm drain. He immediately called the Maintenance Services dispatch office who in turn notified Wastewater response staff. Crews responded within minutes to the location and blocked the path of the spill in a storm system manhole approximately two city blocks from the spill site. Command personnel requested a response from the Salinas Fire Department and Salinas Police Department to stand by due to gasoline vapors in the storm system. Monterey County Health Department, Environmental Division personnel were called to the site to assist with addressing the incident response requirements. The service station owners responded and contracted with a hazardous material response company out of the San Francisco bay area to respond to the location to begin cleanup and recovery procedures. The incident commander coordinated the efforts of City staff and Cal Trans personnel called to the site as the incident occurred on a state highway within the City of Salinas. The combined staff blocked streets and maintained traffic control for the 11 hour incident. The effectiveness of the ICS system is reflected in the immediate response to the incident, the scaling up and coordination of response personnel and multi-agency efforts to contain and affect a successful recovery and conclusion to a hazardous spill with both public and environmental implications.

Illicit Discharge Responses 2006-07: During this reporting period the Salinas Fire Department has responded to 63 Potential Hazardous Material spills. This included 44 vehicle accidents and 23 calls (some associated with vehicle accidents), that involved/required gasoline or diesel cleanup. All spills were contained and cleanup material recovered for proper disposal.

Maintenance Services Department staff responded to 115 reports of illicit discharges for investigation. The responses are noted in the table below. All spills and illicit discharges were successfully contained and recovered with the exception of three partially recovered private sewer lateral overflows and one partial recovery of a sewer main overflow of less than 15 gallons.

Callouts	Type
39	Diesel/Oil
15	Concrete/Tile Wash-off
9	Paint
15	Sewer – 2006 CY – includes private laterals
5	Glass
3	Water Co.
4	Grey Water
20	Debris/Trash
2	Chemical
1	Rock Salt
1	Floor Wax
1	Food Product

Illicit Discharges discovered as a Result of Dry Weather Screening:

City staff was present during the dry weather monitoring events with Pacific EcoRisk, the City's monitoring program consultant, for source identification of discharges.

The City coordinated with Code Enforcement staff for resolution of illegal dumping issues and homeless encampment pollution concerns. Response to homeless encampments included Natividad Park, Cesar Chavez Park, Constitution Soccer Fields, Natividad Basin, Natividad Creek, Gabilan Creek and on Bridge Street, Soledad Street, Market and Front Streets, Davis Road and Work Street. Some sites have become repeat locations for homeless activities.

The City has incorporated a standard provision in its Conditional Use Permits requiring the implementation and maintenance of BMPs and Low Impact Development (LID) features in all development projects requiring a CUP.

The Wastewater Division of the City's Maintenance Services Department has responded to 115 reports of illicit discharges since October 2006. Of the 115 responses 65 % was reported by Wastewater staff. The remaining 34% of callouts were generated by residents or other City departments. Typically, responses have been cleanups to concrete wash-downs, paint spill, grease, oil, fuel, grass clippings, glass, tile cutting, dirt, rock salt, garbage, and grey water discharges. To date, all responses have resulted in complete recovery of the spills or discharges with the exception of three partial recoveries from private sewer lateral overflows.

Most significantly, an off duty Wastewater staff member witnessed a fuel spill while driving by a local card lock gas station. Fuel was spilling out across the station's surface from under a commercial delivery panel truck. The filler hose to the gas tank was vandalized and the driver was un-attentive to the vehicle being fueled. The employee pulled into the station, shut the fuel off, got the driver's attention, would not allow the vehicle to be moved and alerted the Fire Department and Wastewater staff to respond to block the path of the spill and begin cleanup. Approximately 24 gallons of fuel entered the City storm system. The alertness of the employee allowed a quick response to block the flow approximately one block from the station. Arrangements were made to have NRC Environmental Emergency Response Team to respond from the Bay Area to accomplish the recovery and cleanup of the spill from the storm system. City staff and Cal Trans employees closed portions of John Street and adjoining streets and provided support for the eleven hour-long response and cleanup overseen by Monterey County Environmental Health. A successful response is due to employee training and awareness.

This is the third year of the City's permit term. This is the second year implementation of the monitoring program. Sampling results will be reviewed for needed actions to address pollutants of concern and for compliance with Permit requirements.

2006-2007 CCAMP Monitoring
Toxicity Reduction Evaluation (TRE) Reporting

Illicit Discharges Discovered as a Result of CCAMP Monitoring:

The Central Coast Regional Board through the CCAMP has been collecting monthly conventional water quality data throughout the Salinas River watershed since January 2006. The Salinas Reclamation Ditch 1665 is currently monitored by CCAMP staff at two locations: Airport Blvd. (309ALU) and Boronda Road (309ALD). As a result of water quality issues observed at the Airport Blvd site, samples are also collected from the storm drain pipe upstream of this site (309AXX). Recent monitoring has demonstrated that discharges from the storm drain at Airport Blvd exhibit potential toxicity. Specifically, samples collected June 15, 2006 from the end of the pipe showed 100% toxicity mortality of *Ceriodaphnia dubia* within 48 hours. This result was reported to Roger Briggs, Executive Director of the Central Coast Regional Water Quality Control Board, on September 15, 2006. The letter referred to Attachment B, Monitoring and Reporting Program, section B.3.b.iii of the NPDES Stormwater Permit for City of Salinas Municipal Storm Water Discharges (No. CA0049981), which requires the permittee (City of Salinas) to conduct Toxicity Reduction Evaluations (TREs) if water quality monitoring results indicate toxicity. Specifically, if receiving water site sediment or water samples are found to be toxic during toxicity testing, the Permittee shall conduct a Toxicity Reduction Evaluation (TRE) described as follows:

a. The Permittee shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs to eliminate the causes of toxicity. Once the source of toxicity and appropriate BMPs are identified, the Permittee shall submit the TRE to the Executive Officer for approval.

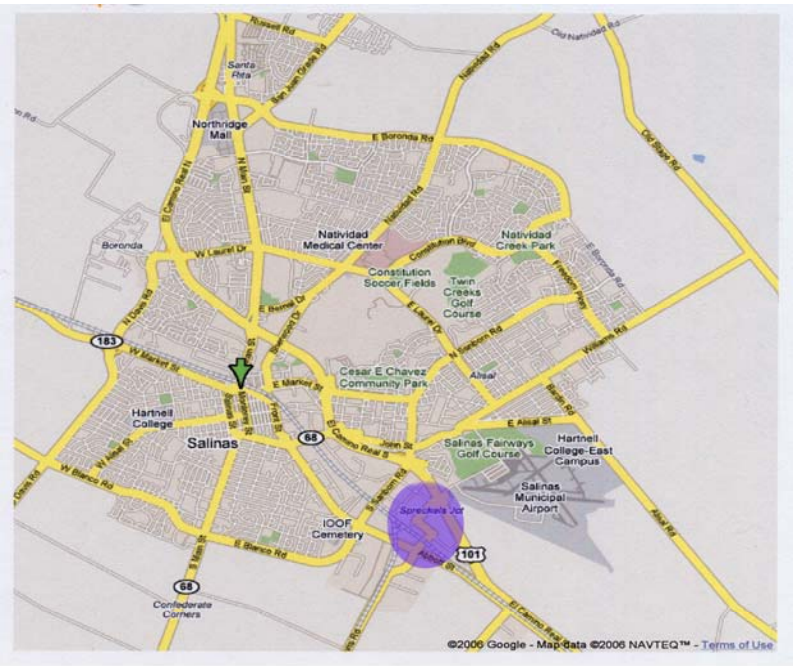
b. At a minimum, the TRE shall include a discussion of the following items:

1. Geographical description of the problem area;
2. The potential sources of pollutant(s) causing toxicity;
3. Permittee's jurisdiction over the pollutant sources;

4. Recommended BMPs to reduce the pollutant(s) causing toxicity;
5. Proposed changes to the SWMP to reduce the pollutant(s) causing toxicity; and
6. Suggested follow-up monitoring to demonstrate that toxicity has been removed.

Geographic Description
The CCAMP 309AXX Airport Blvd storm drain and drainage area are located in south Salinas in an industrial area southwest of the Salinas Municipal Airport. The area is bounded by Highway 101 to the northeast and Abbott Street to the south as shown in Figure 1 below.

Figure 1. City of Salinas and Location of CCAMP Drain 309AXX Drainage Area



CCAMP 309AXX TRE Drainage Area

The TRE report (attached with this document) addresses the above requirements. For the purpose of this Annual Report Table I below is a chronological table of activities to date in response to the notice regarding pollutants of concern at the CCAMP 309AXX Airport Boulevard stormwater outfall. The table does not reflect the full scope of response activities but is intended to reflect the major actions taken to investigate, locate and abate illicit discharges to the 309AXX site. Activities are noted in Table 1 beginning on the following page.

Table 1. Response to discharges within the CCAMP 309AXX drainage area

Location	Date	Issue	Resolved	Follow-Up Needed
Mann Packing Co. Facility 1250 Hansen St. Site is within TRE drainage area.	6/2006	City staff identified potential source for discharge. Issued a correction notice for discharge of process water including broccoli stems to storm system.	√	
Mann Packing was required to enroll in the CCRWQCB General Stormwater Permit Program	7/7/2006	Mann Packing was issued Notice of Violation with direction to submit NOI for enrollment into Industrial General Stormwater Program. Was also issued a correction notice for discharges from chillers and broccoli in waste stream.	√	
	7/20/2006	Annual Industrial Stormwater Inspection. Additional flow noted from 6 rooftop hydro-vac units	√	
	8/2006	Mann Packing granted permission to re-pipe hydro-vac discharge to City's industrial waste system. Complied prior to notice date of 9/25/2006.	√	
	10/24/2006	City conducted joint inspection with CCRWQCB. Discharge of chlorinated water from box washer to facility storm drain noted. Mann was instructed to abate discharge. Correction made the same day; discharge redirected to City's industrial waste facility.	√	
	11/28/2006	Mann Packing submitted plans for permanent diversion structure to industrial waste drains to City's Permit Center.	√	
	1/10/2007	Verbal notifications to Mann Packing regarding		

Location	Date	Issue	Resolved	Follow-Up Needed
		the need for correction of discharges from icing, vacuum tubes and condensers following discussion with CCRWQCB for types of discharge while in winter slowdown season.	√	
	3/2/2007	Permanent diversion sump to industrial waste facility completed. Total cost by Mann packing estimated at approx. $70,000. Nearby storm drains and discharges noted above permanently plugged and diverted by sump or direct piping to nearby industrial waste drain. Mann Packing estimates additional diversions cost approx. $17,000. Mann Packing achieved compliance abating non-storm water discharges from facility.	√	
	3/21/2007	Conducted joint inspection with CCRWQCB to review compliance.	√	

Location	Date	Issue	Resolved	Follow-Up Needed
309 AXX CCAMP General drainage area activities	6/2006	City staff followed up a RWQCB notification of pollutants found at 309 AXX CCAMP Airport Blvd monitoring site.	√	
		Continued presence of broccoli at 309 AXX site. Outside chillers noted draining to drains through to be industrial drains. Dye test of flow confirmed discharge to storm drains.	√	
	7/11/2006	Water quality samples taken at 309AXX outfall.		Ongoing assessment
	9/7/2006	Water quality sampling taken at 309 AXX outfall.		Ongoing assessment.
	10/24/2006	Water quality samples taken at 309 AXX outfall	√	Ongoing assessment
	11/1/2006	Contracted Greenline Pipeline Services to televise approx. 3,600 ft (50%) of storm system pipeline in 309 AXX drainage areas to gain better understanding of potential discharges to industrial waste facility.	√	
	11/30/2006	Ongoing water quality sampling at 5 locations within TRE site. Site # 1 (309 AXX outfall) shows acceptable levels (110) for Fecal Coliform, (50) for E-coli.		Ongoing Assessment
	12/21/2006	City mailed an area wide notice to all businesses within 309 AXX site with notifications of pollutants of concern for this drainage area, potential sources, City's ongoing investigation, allowable discharge information and request for implementation of BMPs.	√	
	1/10/2007	Conducted smoke testing of drainage area to	√	

Location	Date	Issue	Resolved	Follow-Up Needed
		identify various facility connections to storm system.		
	1/11/2007	Conducted 2nd full day of smoke testing	√	
	1/30/2007 1/31/2007	Conducted site inspections of 41 businesses in TRE drainage area for potential storage or use of pesticides or fertilizers or unauthorized storm water discharges. No breakthrough in investigation but earlier notices, pipeline videoing, smoke testing and inspection presence has raised level of awareness of the problem. Businesses highly aware of activities to locate pollutant sources	√	
	2/28/2007	Received results of 1/31 sampling event. Sites 2, 3, 4 and 5 show Non Detect for Diazinon and Chlorpyrifos. Site # 1 (309 AXX outfall to Reclamation Ditch 1665) results show Non-Detect for Chlorpyrifos but indicates elevated Diazinon pesticide.	√	Findings eliminated upstream sites and lead City's investigation to nearest potential source for pesticides to 309 AXX outfall: Western Farm Service, Inc., at 1143 Terven Avenue.
	3/1/2007	Issued informational notice to 5 landscape and structural pest control businesses identified as servicing the TRE area regarding pollutants of concern and recommended BMPs	√	
	5/21/2007	Conducted water quality sampling at 309 AXX stormwater outfall.		Ongoing Assessment
Western Farm Service , Inc. **1143 Terven Ave.**	3/7/2007	Conducted unannounced site visit to acquire a grab sample from front parking lot storm drain. Western Farms closed	√	

Location	Date	Issue	Resolved	Follow-Up Needed
Site is within TRE drainage area. Western Farm Service has been required to enroll in the CCRWQCB General Stormwater Permit Program		storm drain valves in facility drains to abate potential discharge to storm system. Valves remain closed.		
	3/16/2007	Received verbal notification from BSK laboratory regarding high result for Diazinon at 25 μg/l from Western Farm Service Facility. Notified Western Farm Service following week.	√	
	3/21/2007	Conducted joint inspection with CCRWQCB. Site is primary within TRE drainage area.	√	
	4/4/2007	Sample results show high levels of Chlorpyrifos (3.8μg/l) and Dimethoate (25μg/l) from drain. Both pesticides.	√	
	8/1/2007	City Issued Notice of Violation and Compliance Order.	√	Compliance Schedule in Progress
	8/13/2007	California Regional Water Quality Control Board Central Coast Region issues Notice of Violation following 3/21/2007 site visit	√	Compliance Schedule in Progress

Location	Date	Issue	Resolved	Follow-Up Needed
Cool Pacific Produce and Cooling Co. **750 Airport Blvd.** Site is within TRE drainage area.	3/21/2007

Location	Date	Issue	Resolved	Follow-Up Needed
water to the 309 AXX storm system.		a faulty high voltage power transformer. Rising Water from the industrial waste discharge pit threaten the safety of nearby electrical repair workers.		
	7/30/2007	Drive-by inspection of 309 drainage area discovers a limited discharge of water at Growers Express from a washdown of facility grounds around outside vacuum tubes. The outside sump pump had clogged causing a backup and limited discharge to the street.	√	Growers Express staff corrected and implemented new maintenance procedures.
	8/09/2007	Water Quality Samples taken from standing water in storm manhole at back of Taylor Facility. Results return elevated nitrates, positive for oils and grease	√	
	8/20/2007	City staff places tracing dye in ice melt discharge from Growers Express Facility. Take grab sample. Sample returns elevated Nitrate and presence of sodium.	√ √	
	8/21/2007	Confirm tracing dye discharge at 309 AXX outfall	√	
	8/23/2007	Taylor places temporary inflatable line plug in discharge site of manhole to abate flows to storm system. Sump pumps used to collect ice melt water and discharge to		

Location	Date	Issue	Resolved	Follow-Up Needed
		nearby Industrial Waste sump.		
Taylor Farms Hansen Facility 1275 Hansen St. (Former Smuckers Plant)	8/31/07

as yet. As local landscape irrigation appears to be on multiple watering schedules, the discharge may appear as an immediate strong discharge of irrigation water followed by a small flow that can be consistent for long periods of time as the water slowly subsides and makes it's way through the pipeline to the outfall. Video investigation of the Airport Boulevard storm pipeline shows that it is cast-in-place concrete pipe. This pipe has sags that hold ponded water for long distances within the pipe. The water continues slowly out as it displaces ponded water in the pipeline. Although significant progress has been made in reducing flow from this pipeline, additional sampling will identify progress in reducing pollutants of concern from the remaining discharge.

309AXX Outfall 2006

309AXX Outfall September 16, 2007

The following table shows the results of the most recent sampling at the CCAMP 309AXX.site. Samples were taken prior to recent discoveries and reductions in flow. City staff will resample to reflect new changes in flow conditions.

Table 2. Results of Grab Samples Taken by the City

Analyte	Unit	PQL	309AXX Outfall 3/7/07	309 AXX Outfall 5/21/07	309 AXX Outfall 8/23/07
Ammonia (Unionized)[1]	mg NH3-N/L	0.01		.03	.03
Ammonia (N)	mg/l	0.05		1.02	.51
NO_3 as N	mg/l	0.2		6.8	10.8
NO_3 as Nitrate	mg/L	1		30	48
pH	std units	N/A		8.0	8.2
Temp	celcius	N/A		15.2	18.2
Chlorpyrifos	ug/l	100		.094	.053
Diazinon	ug/l	60	.17	0.26	0.23

Illicit discharges, once identified, have been met with immediate cooperation from the responsible parties to contain and correct the identified deficiencies.

City's staff remains committed to locating sources of illicit discharges and addressing them with appropriate actions

To date, Mann Packing Company has reported expenditures for diversions to the industrial waste facility drains at approximately $87,000. Cool Pacific reported expenditures at approximately $40,000. Numerous man-hours have been spent by officials from Taylor Farms and Growers Express in a cooperative effort to inspect, investigate and take corrective action to correct site deficiencies. The City has expended in excess of $9,000 for water quality sampling for the TRE site and with only partial billing available the City has expended approximately $15,000 for TRE development not inclusive of employee time.

Other Specific Illicit Discharge Sites

Table 3.

Location	Date	Issue	Resolved	Follow up
Monterey Gourmet Foods, Inc. 1528 Airport Blvd. (not in TRE area) Monterey Gourmet Foods required to enroll in CCRWQCB General Stormwater Permit Program	**6/27/07**	**Illicit discharge of process water. Discovered while sourcing discharges during dry weather sampling program, Urban Discharge Site 309U07** **Site staff plugged site storm drain and pumping discharges to sanitary sewer. Implemented annual NPDES industrial site inspection. BMP correction made and site improvements being implemented.**	√	**Notice of Violation and Compliance Order issued**
Fresh Network 495 Brunken St.	**7/25/07**	**Evidence of illicit discharge during site inspection. City staff cleaned illicit discharge from facility drains.**	√	**Notice of Violation and Compliance Order issued** **Compliance Schedule in Progress.**

Regulations

Regulation regarding management of the stormwater system including illicit discharge and illegal connections is imbedded in Chapter 29 of the Stormwater Management and Discharge Control of the City Code. This ordinance was updated in 2007 in accordance with the NPDES permit.

Division 1., Sec. 29.9 provides that "Non-stormwater discharges to the city storm drain system are prohibited. No person shall contribute or cause to be contributed, directly or indirectly, to the city's storm drainage system any pollutant, wastewater or any substance or material which will interfere with the operation or performance of the storm drainage system, violate the city's NPDES permit or violate other applicable law or regulations." (Ord. No. 2473 (NCS), § 1.)

Division 2. Sec. 29-13. connections provides that "It is unlawful for any person to establish, use, maintain or continue illicit discharges or illicit drainage connections to the city storm drainage system. This prohibition shall apply to connections in existence at the time of the adoption of the ordinance codified in this chapter, irrespective of whether such connection was made under a permit or other authorization or whether permissible under the law or practices applicable or prevailing at the time the connection was made." (Ord. No. 2473 (NCS), § 1.)

Mapping of inlets and High Risk Areas

Mapping of inlets was upgraded in 2007. All storm drain inlets and outfalls were digitally mapped over city aerial photographs. This inventory replaced the drawn maps completed in 2006. Inventory is used as a maintenance and emergency response tool. See *Storm Drain System* inventory document submitted with this report.

Areas of high risk for spills and contamination of downstream receiving water bodies are shown on the City's General Plan land use map. The City has determined that all industrial and manufacturing areas carry a high risk.

The City also maintains maps of the storm drain and sanitary sewer infrastructure systems for the purpose of maintenance, identification and illicit discharge screening and response. Land use maps are maintained to identify concentrated areas of industrial and commercial facilities.

The City identified 62 industries in the first permit term. This list has been expanded to 71 industries during 2006 and 2007 that were identified through business licenses and Monterey County Environmental Health Department records. This list has been reduced from the 157 locations initially identified from these records in the City's Storm Water Management Plan (SWMP). Staff members conducted site visits to each location to determine its appropriateness for the industrial NPDES Inspection Program. The site eliminated included office facilities brokers, closed facilities and facilities found to be outside the City limits. A site map with these industry locations in proximity to the City storm system is a goal as the City plans to move forward with creating electronic mapping of City's storm and sanitary sewer systems as monetary and personnel resources become available. However, City Wastewater crews have map books showing City the storm and sanitary sewer system that are accessible in work vehicles to identify system properties if investigating or responding to an illicit discharge. This is a dynamic list that will change as business changes, or industries are identified as exempt with no potential stormwater influence. A map of the industrial areas in relation to the industrial

waste pipeline is available at the industrial waste facility. A land use map depicting zoning for industrial and light industry land use is also available.

Emergency Response Telephone Number

The City has a telephone emergency response line to address stormwater and spill issues. Calls to this number are directed to the responsible City staff as well as to the City's fire department, police department, and state and county agencies as needed. The emergency response line is active all week, including weekends, ensuring that appropriate staff is notified immediately. The City Maintenance Services Department has two central dispatchers who were trained on specific stormwater spill response and are equipped with an easy-to-use contact roster. The City also has two other backup dispatchers to handle hotline calls with similar training during this reporting period. An emergency on call roster is maintained for after-hours response. This roster is distributed to key personnel in all City Departments, including the Fire and Police Departments. The roster is distributed to County Communications (911) with pager assignments and alternate contact phone numbers. A list of contact numbers is kept for access to support personnel. The hotline is available through the local phone book and is advertised on the City's web page.

Train Phone Operators (emergency/non-emergency procedures)

Phone and Radio Operators received annual radio protocol training for 06/07 that includes radio and phone etiquette and procedures as required by the FCC and emergency dispatch procedures. Operators have also received federally mandated National Incident Management Systems (NIMS) training for emergency responders. Operators also receive wet weather preparedness training.

Maintain Log Of Illicit Discharges And Spill Calls

Records of illicit discharges and spills were maintained in databases and in paper files by the appropriate responders (typically the Fire Department, Police Department and the Maintenance Services Department). Maintenance Services records for illicit discharges are recorded to paper files and are maintained in the Wastewater Supervisors office.

Conduct Drive-by Inspections Quarterly (Maintain Records)

Salinas utilizes street sweeper operators to accomplish its drive-by inspections. This has proven to be an effective program to increase the awareness of potential illicit discharges beyond the permit requirements of quarterly inspections. All residential areas are swept every two weeks while industrial/commercial are swept weekly. Some extended thoroughfares are swept quarterly. Sweepers drive at a slow speed and cover every foot of street curbs so they provide terrific "eyes on the street".

Of the 115 illicit discharge calls received for investigation by Maintenance Services staff, 75 calls were reported by City employees of which 22 were reported by the sweeper operators. Records are maintained of the follow-up responses. The remaining illicit discharges were reported from other City Departments or from resident calls. The program is reviewed annually and appears to be affective for illicit discharge detection. An annual review of the program indicates the program is effective and working well. Outcome has been good. Records are kept on a response form to document callouts. All records are maintained in the Wastewater division office.

Dry Weather Screening Program

Requirements of the Dry Weather Screening Program was met in accordance with Attachment 5, Monitoring and Reporting guidelines required by the permit and are consistent with the submitted QAPP.

Sewage Response and Clean Up (Notification procedures)

The City maintains a comprehensive Sanitary System maintenance program. Program development and activities are performed under Waste Discharge Permit WDR R3-2002-0078 with the State of California Regional Water Quality Control Board Central Coast Region. Program activities are documented in an annual report due January 30 of each year. The City also has developed an Emergency Overflow Response Plan (attached with this document) that contains at a minimum the following:

1. Ensure proper notification procedures so that the primary responders are informed of all overflows in a timely manner (to the greatest extent possible).
2. Ensure that all overflows are appropriately responded to, including ensuring that reports of overflows are immediately dispatched to appropriate personnel for investigation and appropriate response.
3. Ensure immediate notification of health agencies and other impacted entities (e.g., water suppliers) of all overflows. Report all overflows to the Regional Board and the Monterey County Health Department, Monterey Regional Water Pollution Control Agency, and report to the State OES, if the overflow is 1,000 gallons or larger. The Plan should identify the public health agency and other officials who will receive immediate notification.
4. Ensure that appropriate staff and contractor personnel are aware of and follow the plan and are appropriately trained.
5. Provide emergency operations, such as traffic and crowd control and other necessary emergency response.
6. Take all reasonable steps to contain sewage and prevent sewage discharges to surface waters and minimize or correct any adverse impact on the environment resulting from the overflows; including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.
7. Develop and implement a plan for the use of portable aerators where complete recovery of the sanitary sewer overflows is not practicable and where severe oxygen depletion in existing surface waters is expected.
8. Develop and implement a plan to respond in a timely manner to spills and other emergencies. Collection system staff should be able to respond to a sewage spill in less than an hour from the first call.

City crews continue to respond in a responsible manner and have been highly successful in responding quickly to notifications, containing spills and affecting successful recoveries.

Progressive Enforcement Policy

The City maintains legal authority to issue progressive enforcement actions and use appropriate sanctions including, but not limited to, issuance of monetary and non-monetary administrative and civil remedies, in addition to criminal sanctions intended to ensure compliance.

Disposal Of Used Oil And Toxic Materials

The Maintenance Services Director represents the City as a member of the Integrated Waste Task Force whose mission is to reduce solid waste, promote recycling and provide pollution prevent strategies (reduce, reuse and recycle). The City partners with the Salinas Valley Solid Waste Authority for disposal of antifreeze, batteries, oil and paint. Household and business solid waste, appliances, non-rimmed tires, agricultural waste, yard waste, concrete rubble, clean fill dirt, lumber, chipped wood and demolition debris are also accepted.

Educational Activities

Wastewater Division Personnel: 21

- Annual Environmental Compliance Work Shop (all personnel)
- Haz Wopper (2 - 24hr Certified Employees)
- National Incident Management Systems (All personnel)
  A comprehensive multilevel training program for first responders and support personnel. Training includes Incident Command System Training
- Spill Response Training (16 response personnel)
- Pesticide Application Safety Series (14 response personnel)
- MSDS - Material Safety Data Sheet (14 response personnel)
- Hazardous Communication (14 response personnel)
- Confined Space Training
  (OSHA required training) (14 response personnel)
- Lock Out, Tag Out (OSHA required training)(14 response personnel)
- NPDES Best Management Practices Training
- Operation and Maintenance of Sewer Systems (lift station operations, camera inspections, pipeline cleaning)
- Backup Generator Training (Proper methods for connecting backup generators to storm and sewer lift stations in event of power failure. 14 response personnel)
- Ammonia Safety Day, Monterey County Health Department 06/07 (8 personnel)
- Tanker Truck and Railroad Car Emergency Response and Preparedness Monterey County Health Department 06/07 (7 personnel)
- Pipeline Safety Emergency Response 07 (3 personnel)
- Public Works Conference (Sewer system maintenance and lift stations) (3 personnel)

Effectiveness of Program

As the public becomes more informed about environmental issues and the awareness to protect habitats and water environments they appear more willing to address suspected inappropriate use of water and suspected illicit discharges. A system of spill or illicit discharge reporting that is both quick and efficient allows the City to provide responses generally within 5 minutes of the call. The City's preventative maintenance activities, system repairs, and a professionally skilled

team of spill and illicit discharge response personnel have ensured a very high success rate for spill containment and recovery allowing for success in reducing pollution and complying with the NPDES Permit.
The City's illicit discharge/illegal connection program remains an effective response and deterrent to environmental impacts and response to illicit discharges. Of approximately 178 combined (Fire Department and Maintenance Services) responses to potential hazardous materials or illicit discharges 178 were successfully resolved before reaching a water body. Private lateral sewer spills accounted for 2 partial recoveries of minor spills and one resulted in a partial recover during a significant storm event with high water flows in the receiving water. Reported activities were responded to expeditiously with adequate equipment to address the problems and knowledgeable staff. New technology in cleaning equipment for pipeline maintenance has resulted in a 54% reduction in sanitary sewer overflows compared with the same time period in 2005. Sourcing of illicit discharges through the City's ongoing water quality monitoring and Toxicity Reduction Evaluation program has resulted in significant reductions in illicit water discharges.

Although staff did not participate in acquiring water quality samples for the City's monitoring program some training is needed for employees who might collect samples. Training will help such employees to identify illicit discharges in accordance with the Quality Assurance Project Plan (QAPP). Additional staff training will be needed in illicit discharge detection and elimination in the coming permit year. Two crew members have had sampling training through Bridgett Hoover with the Monterey Bay Marine Sanctuary, however, staff has not had recent training. Arrangements have been made with Pacific EcoRisk, the City's and Ag Waiver Programs monitoring contractor, to accomplish this training in the last quarter of 2007.

Work Plan for 2007-08

The City will continue to implement the terms of the permit. The City's Monitoring and Reporting requirements will be conducted in accordance with Attachment 5, Monitoring and Reporting guidelines required by the permit and are consistent with the submitted QAPP. Results of this third year of the monitoring program sampling and screening activities will be a guide for future activities and adjustment of BMPs needed to address pollutants of concern. This program will continue with increased awareness as ongoing training prepares all maintenance staff for this important pollution prevention measure. Wastewater staff training included training on NPDES and Best Management Practices. Illicit discharge and storm system protection was included as an element in the City's annual storm preparedness training. Additional staff training specific to this activity is scheduled for the last quarter of 2007. A prudent sanitary sewer maintenance program will continue with staff responding to contain and recover spills from all sources both public sewer system or private property discharges.

On April 3, 2007 the City entered into an agreement with the Monterey Regional Water Pollution Control Agency for contract services to develop and implement a food services facility grease trap inspection program as a preventative maintenance activity to prevent sanitary sewer overflows. Program development will continue through RY2007-2008.

The City recognizes this important activity in prevention of water and environmental pollution and reviews its ongoing response efforts to ensure that response remains effective.

The City is committed to meeting the terms of the NPDES permit by maintaining an aggressive posture in response to illicit discharges to abate impacts to receiving waters. Wastewater staff will immediately respond to all reports of illicit discharges. As an additional measure to provide

an effective response staff has stocked a Wastewater Division vehicle with spill response material such as absorbent pads, containment booms, waste drums, absorbent materials, sand bags, shovels and brooms. Although this vehicle is used for other purposes it has been prepared to assist in an initial response to an illicit discharge. This vehicle will continue to be maintained in the next permit term.

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Illicit Discharge and Illegal Connection

Section	Permit Section	ID/IC Permit Requirements Summary	Status	Date	Accomplishments (Quantifiable) Measure of Implementation
8.2	VI	Implement ongoing ID/IC program	√		Implemented and Ongoing
8.2	VI	Prohibit non-storm water discharges to the MS4	√		Implemented • Per Chapter 29. Stormwater Management and Discharge Control of the City Code
8.3 A	VI a.	Develop map	√		Implemented and Ongoing • Stormwater maps updated for 2006_07 with Major pipelines, inlets and outfalls depicted on aerial maps • Zoning Land Use Maps complete • Industrial site map completed
8.3 A	VI a.	Identify and map industrial facilities	√		To be Implemented 2nd permit year • Expanded 2nd year inventory list to be inspected by end of permit year. Completed • Industrial Inspections completed 2006_07 • Industrial facility site map completed.
8.3 B	VI b.	Continue to operate emergency telephone number	√		Implemented • All calls live during business hours • Emergency calls redirected to 911 after hours for emergency on call distribution
8.3 B	VI b.	Advertise hotline	√		• Phone Book • City Web Page
8.3 B	VI b.	Maintain log of IDs and spill calls	√		Implemented • Illicit discharge response records maintained • Spill records maintained
8.3 B	VI b.	Train phone operators (emergency/ non-emergency procedures)	√		Implemented • National Incident Management Systems for first responders. Completed by Oct. 1, 2007 • Radio protocol training completed October 2006 • Emergency dispatch procedures training completed

					October 2006 • Wet weather preparedness training completed prior to 2006_07 wet weather season
8.3 C 8.3 C	VI c. VI c.	Conduct drive-by inspections	√		Implemented • Accomplished by street sweeper operators (Of 115 illicit discharges reported approximately 20% were reported by sweeper operators for 2006_07) (45% reported by other City Employees) • Residential areas every other week • Industrial commercial areas weekly • Extended thoroughfares quarterly • Program is effective and meets the requirements of the Permit
8.3 C	VI c.	Maintain records of drive-by inspections	√		Implemented • Records of sweeping routes maintained • Records of reported illicit discharges maintained
8.3 C	VI c.	Review and determine areas that shall have increased inspections	√		Ongoing • On going review of reports received to determine patterns of activity or need for additional inspections
8.3 D	VI d.	Develop program for dry weather screening	√		Implemented • Consistent with Attachment 5 and QAPP
8.3 D	VI d.	Develop procedures for dry weather screening	√		Implemented • Consistent with Attachment 5 and QAPP
8.3 D	VI d. i	Collect samples for Analysis in accordance with MPR, Attachment 5, Order R3-2004-0135	√		Implemented • Consistent with Attachment 5 and QAPP
8.3 D	VI d. ii	Conduct dry-weather screening at identified stations four times a year	√		Implemented • Remaining two events scheduled for September/October 07
8.3 D	VI d. iii	Record general information if flow or ponded runoff is observed	√		Implemented • Consistent with Attachment 5 and QAPP

8.3 D	VI d. vi	Record all applicable observations if no flowing or ponded runoff	√		Implemented Consistent with Attachment 5 and QAPP
8.3 D	VI d. v	Develop threshold levels for monitoring results	√		Implemented - • Consistent with Attachment 5 and QAPP

8.3 E	VI e.	Respond to, contain, and clean up sewage and other spills	√		Implemented
					SSO's documented in Calendar Year Sanitary Sewer Annual Report 2006
					• 7 SSO's from City Sewer Main (contained and recovered 6, Partial recovery of minor (less that 15 gallons) 2006)
					• 53% decrease in SSO's from City sewer mains from 2005
					  • Staff responds to all reported sewer spills from private laterals
					  • Staff responds and cleanup of all reported spills.

8.3 E	VI e.	Develop mechanism whereby notification of sewage spills from private laterals and failing sewage systems can be reported	√		Implemented
					• Emergency number published in phone book
					• Emergency number published on City web page
					• 911 after hours for on call emergency response personnel
					Plumbers Workshop hosted by MRWPCA 05/06
					  a. Help prevent sanitary sewer overflows by notifying appropriate response staff (such as public works crews) when emergencies arise
					  b. ***Wallet Card distributed with agency and municipal contact numbers.***
					  1. ***Training has resulted in 4 reports from local plumber regarding private lateral overflows.***

8.3 F	VI g.	Implement progressive enforcement policy	√		Implemented • Legal Authority established • Administrative Citations / City Code • 2006/07 - Notice of Violations and Compliance Orders for 3 Industrial Facilities issued. Two NOV's pending for illicit discharges.

8.3 F	VI g.	Use appropriate sanctions to ensure compliance	√		Implemented • Code Enforcement • City Attorney
8.3 G	VI f.	Facilitate disposal of used oil and toxic materials	√		Implemented • Maintenance Services Director represents City as member of the Integrated Waste Task Force • IWTF promotes recycling, reduction of solid waste and provide pollution prevention strategies. • Partner with Salinas Valley Solid Waste Authority 1. ***Disposal of oil, antifreeze, batteries, paint, household and business waste, appliances, non-rimmed tires, agricultural waste, yard waste, concrete rubble, clean fill dirt, lumber, chipped wood and demolition debris***
8.3 G	VI f.	Include additional educational activities	√		Training Implemented and Ongoing • Annual Environmental Compliance Work Shop (all personnel September 26, 2007 • NPDES Best Management Practices Training • Operation and Maintenance of Sewer Systems (lift station operation, camera inspections, pipeline cleaning) (06/07) • Haz Wopper (2 - 24hr Certified Employees). Updated refresher training 06/07 National Incident Management Systems (all personnel by Oct. 06) A comprehensive multilevel training program for first responders and support personnel. Training includes Incident Command System Training • Spill Response Training (14 response personnel) Updated 06/07 • Pesticide Application Safety Series (14 response personnel) Updated 06/07 • MSDS - Material Safety Data Sheet (14 response personnel) Updated 06/07

					• Hazardous Communication (14 response personnel) Updated 06/07 • Confined Space Training (14 response personnel) Updated 06/07 • Lock Out, Tag Out (14 response personnel) Updated 06/07 • Backup Generator Training (ensure connectivity to lift stations in event of power failure. (13 response personnel) Updated 06/07 • Ammonia Safety Day, Monterey County Health Department. May 07 • Tanker Truck and Railroad Car Emergency Response and Preparedness Monterey County Health Department 06/07 (7 personnel) • Pipeline Safety Emergency Response 07 (3 personnel) • Public Works Conference (Sewer system maintenance and lift stations) (3 personnel)

2006-2007

Annual Report

Monitoring and Water Quality Testing

Introduction

For the purposes of the Salinas Stormwater Program Permit (Order No. R3-2004-0135), the City of Salinas is required to conduct water quality monitoring of urban discharge sites, receiving water (downstream) sites, and background (upstream) sites. The overall goal of the monitoring is to characterize the water quality conditions for compliance monitoring purposes at these sites, to understand long-term water quality trends in urban drainage areas, and to meet the requirements specified in the Monitoring and Reporting Program. A copy of the Monitoring and Reporting Program, Attachment 5, can be obtained from the Central Coast Regional Water Quality Control Board or on the City's Web site at:
http://www.ci.salinas.ca.us/MtcSvc/StormWater-NPDES/StormWaterRegulations.html

Project Description; Study Area

The City of Salinas, the county seat and largest city in Monterey County, is located in the northwest part of the Salinas Valley about 60 miles south of San Jose and 10 miles inland from Monterey Bay. The City of Salinas owns and operates a municipal storm drainage system for the residents and businesses within its service area, and has a Stormwater Master Plan for the storm drainage system (CDM, 2004). The incorporated area in the City of Salinas is about 18 square miles, and the existing incorporated area will be essentially built out within the next few years.

The topography within the study area is gently sloping, generally in a westerly to southwesterly direction. Most of the stormwater runoff from the City is conveyed westerly by the Reclamation Ditch system and Santa Rita Creek to Tembladero Slough and the Old Salinas River at Monterey Bay. Runoff from part of the southwestern portion of the City drains south to the Salinas River.

The climate of the Salinas Valley is typical of central coastal valleys in California, characterized by ocean-moderated temperatures that only occasionally exceed 85 degrees or drop below 35 degrees Fahrenheit. About 80 percent of the average annual rainfall occurs during the five-month period of November through March, and 55 percent typically falls during December through January.

Project Objectives and Approach

The primary objectives of the Salinas SMP include:

- Providing data necessary to assess compliance with the Order;
- Measuring and providing feedback to improve the effectiveness of the Storm Water
- Management Program (SWMP) and implemented Best Management Practices (BMPs);
- Assessing the physical, chemical, and biological impacts of urban runoff on receiving waters;
- Characterizing urban runoff discharges;
- Identifying sources of pollutants; and
- Assessing the overall health and evaluating long-term trends in receiving water quality.

Two elements of the Monitoring program are still in progress and are not included with this report. The MRP requires 4 dry weather screening events for urban discharge sites. Two events for the Dry weather screening have been completed with one event scheduled the last week of September ‘07 and the final event scheduled for October 07. The City is also required to screen 20% of its major outfalls annually. This screening is also scheduled in October 06. Results of both events will be incorporated in the 07 Annual Report.

Implementation

The City has contracted with Pacific Ecorisk, an environmental consulting firm conducting research and testing in the fields of environmental toxicology, aquatic biology, and environmental chemistry, to conduct the monitoring requirements of the Order. Pacific Ecorisk is also the consultant for the Ag Waiver Program. Pacific Ecorisk was chosen not only for their professional credentials, but as the consultant for the Ag Waiver program, it afforded an opportunity to have a level consistency between the two monitoring programs.

Ultimately, the results of the MRP should be used to refine the SWMP to reduce pollutant loadings and protect and enhance the beneficial uses of the receiving waters in the urbanized areas of the City of Salinas.

The Salinas monitoring program is designed to be complementary with the following:

- The Monitoring and Reporting Program requirements for all dischargers enrolled under Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands, Order No. R3-2004-0117 (Agriculture Waiver Program);
- The Monterey Bay Marine Sanctuary’s “Urban Watch”, “First Flush”, and “Snapshot Day” sampling programs; and
- Sampling for EPA Storm Water Phase II pollutants of concern.

The City has continued informal talks with the Ag Waiver representative regarding the cooperative sharing of data from the two programs to meet the City's requirement to address pollutants of concern. Available data from the Ag Waiver program is included with this monitoring report. The City participated with the Clean Streams monitoring program conducted by the Monterey Bay Sanctuary, in training three City employees in proper sampling protocols, preparing sites for availability for monitoring personnel and participation in initial monitoring activities. The Clean Steams project sampling data is included in this document.

The monitoring program is on track to meet requirements of Attachment 5 of the Order. The monitoring data summary included within this Annual Report and provided immediately below is intended to demonstrate compliance with the order.

The City began its monitoring requirements in permit year 2006. The water quality for the CMP (Ag Waiver monitoring, CCAMP (Central Coast Ambient Monitoring Program), and the CBWQMP (Citizen Based Water Quality Monitoring Program) was made available to the City at the time of the submittal of this report. An electronic copy and hard copies of the SSMP data is submitted with this report. Some monitoring information was unavailable at the time of this report and will be submitted as a supplement when available. Regional Board staff have been informed of the supplemental data submittal.

Monitoring data report from City's consultant Pacific Ecorisk

Salinas Stormwater Program 2006 Monitoring Data Analysis

1. INTRODUCTION

The City of Salinas has contracted Pacific EcoRisk (PER) to manage the Salinas Stormwater Monitoring Program (SSMP). PER field scientists collected ambient water samples for the SSMP during eight events. The monitoring events included:

- Event 3: bioassessment and sediment toxicity (September 6, 2006);
- Event 4: urban discharge monitoring (September 26, 2006);
- Event 5: urban discharge monitoring (October 18, 2006), including 20% of all major discharges;
- Event 6: wet season first flush urban discharge and background/receiving water monitoring (November 26, 2006);
- Event 6 resample: wet season urban discharge and background/receiving water monitoring (December 9, 2006);
- Event 7: wet season background/receiving water monitoring (February 10, 2007);
- Event 8: bioassessment and sediment toxicity (April 22, 2007);
- Event 9: urban discharge monitoring (June 27, 2007); and
- Event 10: urban discharge monitoring (July 24, 2007).

Locations of the sampling sites are provided in Table 1a and 1b, and in Figure 1.

Table 1a. Sample site locations & site codes for the Salinas Stormwater Monitoring Program.				
Site Classification	Site Name	Site Code	Latitude	Longitude
City Background	Salinas River near Davis Road u/s of City Outfall	309SUD	36.64251	-121.69868
	Salinas Reclamation Canal u/s City Outfall	309UCO	36.65877	-121.61395
Agriculture Background	Gabilan Creek at Boronda Road	309GAB	36.71548	-121.61641
	Natividad Creek u/s Salinas Reclamation Canal	309NAD	36.70254	-121.60197
Receiving Water	Salinas River near Davis Road d/s of City Outfall	309SDD	36.64325	-121.69900
	Salinas Reclamation Canal at Boronda Road d/s City	309ALD	36.69025	-121.67952

Table 1b. Urban Discharge site locations & site codes for the Salinas Stormwater Monitoring Program.				
Site Classification	Site Name	Site Code	Latitude	Longitude
Urban Discharge	Urban Discharge Site #7	309U07	36.65947	-121.61612
	Urban Discharge Site #8[a]	309U08	36.65981	-121.61691
	Urban Discharge Site #10[a]	309U10	36.66129	-121.62044
	Urban Discharge Site #12[a]	309U12	36.66150	-121.62086
	Urban Discharge Site #13	309U13	*	*
	Urban Discharge Site #14	309U14	*	*
	Urban Discharge Site #15	309U15	*	*
	Urban Discharge Site #17[a]	309U17	36.66853	-121.62206
	Urban Discharge Site #18[a]	309U18	36.66856	-121.62214
	Urban Discharge Site #19	309U19	36.66053	-121.68369
	Urban Discharge Site #32	309U32	36.67168	-121.64087
	Urban Discharge Site #43[a]	309U43	36.68556	-121.65192
	Urban Discharge Site #44[a]	309U44	36.68383	-121.65255
	Urban Discharge Site #45[a]	309U45	36.68375	-121.65266
	Urban Discharge Site #46[a]	309U46	36.68216	-121.65705
	Urban Discharge Site #47[a]	309U47	36.68134	-121.65795
	Urban Discharge Site #49[a]	309U49	36.68137	-121.65820
	Urban Discharge Site #50[a]	309U50	36.68278	-121.66231
	Urban Discharge Site #52	309U52	36.68267	-121.66224
	Urban Discharge Site #54[a]	309U54	36.68287	-121.66433

a – urban discharge sites visited as the annual requirement to monitor at 20% of the major discharges; 11 of the 17 urban discharge sites were dry during the characterization of 20% of the major discharge sites.

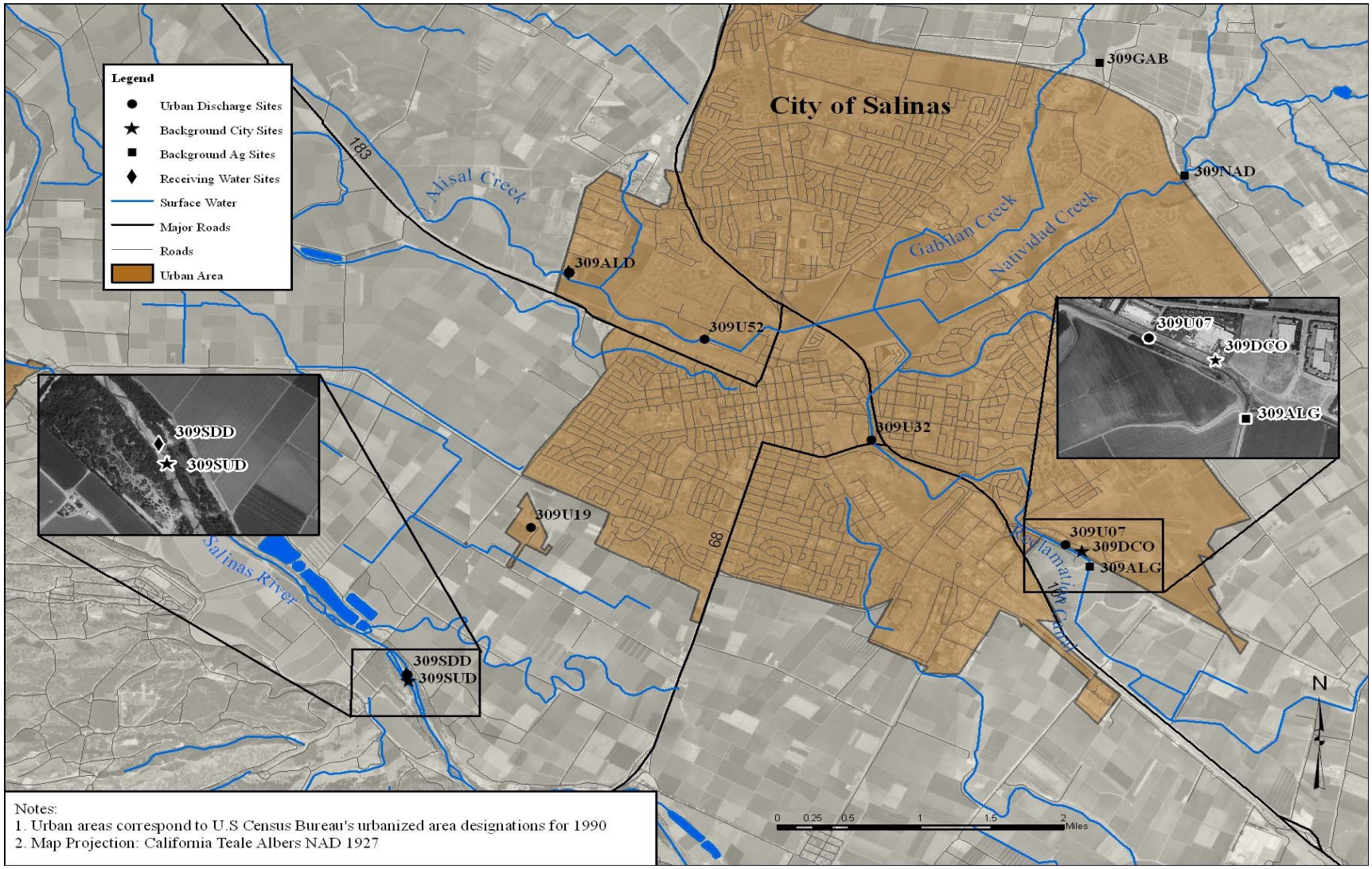

Figure 1. Salinas Stormwater Monitoring Program Sampling Sites

SSMP data are provided in a tabular format in Appendix A. Data from other monitoring programs [e.g., 8 monitoring events for the Central Coast Ambient Monitoring Program (CCAMP), Cooperative Monitoring Program (CMP – "Ag Waiver monitoring"), and 7 monitoring events for the Monterey Bay Sanctuary Citizen Based Water Quality Monitoring Program (CBWQMP)] are also presented in this report as they relate to the City of Salinas drainage area. Data collected by these programs from September 2006 – July 2007 are included in this report since the timing of collection overlaps the temporal window of SSMP sampling. The CCAMP program data includes up to 6 sampling locations in the SSMP drainage area (i.e., 309DAV, 309SDR, 309ALD, 309ALU, 309AXX, and 309GAB). The CBWQMP includes 8 sampling locations in the Santa Rita Creek watershed and 8 sites in the Reclamation Ditch; all of the CBWQMP sampling locations are in the SSMP drainage area. Data from the CCAMP and CMP were obtained from electronic files from the Surface Water Ambient Monitoring Program (SWAMP) database. Data collected by the CBWQMP can be reviewed in more detail in the MBS report entitled "Citizen Based Water Quality Monitoring Program Monitoring Report (June 2007)". CCAMP, CMP, and CBWQMP data are provided in a tabular format in Appendices B, C, and D, respectively.

The Salinas Stormwater Program Monitoring and Reporting Program (MRP, Order No. R3-2004-0135) requires the collection of samples for analyses and evaluation of conventional water quality constituents (Water quality parameters monitored at the SSMP sites are identified in Table 2), aquatic toxicity, sediment toxicity, and benthic invertebrates. The MRP doesn't require the collection of benthic invertebrate data for Background sites (see MRP Attachment 5). However, as the MRP indicates that "the purpose of the downstream (Receiving Water) sites is to characterize the impacts of the Permittee's discharge on each of the receiving water bodies", the City of Salinas has decided to have benthic community data collected from Background sites so as to allow for a comparison to the Receiving Water sites. This additional monitoring will allow for a more complete assessment of benthic community impacts from City of Salinas stormwater.

As per the SSMP MRP, the City of Salinas is required to use the water quality monitoring data to:

- assess concentrations of MRP-listed analytes,
- instantaneous loads of MRP-listed analytes,
- tributary inputs of urban pollutants,
- evaluate the pollutants' impacts on beneficial uses,
- identify pollutant sources, and
- assess and improve Best Management Practices.

When applicable, the monitoring data are to be compared to existing Basin Plan numeric and narrative water quality objectives (WQOs) or CCAMP Action Levels. Part of the overall data assessment also includes a comparison of data from Background (incoming upstream water) sites to data from Receiving Water (downstream) sites that receive discharge from the City of Salinas.

Table 2. Monitoring parameters collected for the Salinas Stormwater Program.			
Monitoring Type	Season	Sample Locations	Parameter
In situ water quality sampling	Dry weather	Urban Discharge sites	Ammonia, as N
			Orthophosphate, as P
			Detergents
			Total residual chlorine
			Turbidity
			Conductivity
			pH
			Temperature
			Flow
			Odor[1]
			Oil sheen[1]
			Color[1]
			Trash[1]
Aquatic Toxicity	Dry and Wet Weather	Background and Receiving Water sites	Aquatic toxicity[2]
Sediment Toxicity and Bioassessment	During the Spring	Background and Receiving Water sites	Sediment toxicity[3]
			Benthic invertebrate assessment
In situ water quality sampling and lab samples	Wet weather	Background, Receiving Water, and Urban Discharge Sites	*E. coli*
			Total coliform
			Fecal coliform
			NH3 total
			Nitrate as N
			Orthophosphate, as P
			TDS
			Total copper
			Total zinc
			TOC
			Turbidity
			pH
			Conductivity
			Temperature
			Flow

1 – recorded as field observations
2 – U.S. EPA chronic aquatic toxicity tests were *Selenastrum capricornutum* (96-hour growth test), *Ceriodaphnia dubia* (7-day survival and reproduction test), and *Pimephales promelas* (7-day survival and growth test).
3 – U.S. EPA acute aquatic sediment toxicity test was *Hyalella azteca* (10-day survival and growth test).

2. MONITORING DATA

Although water quality objectives are typically established to protect receiving waters, the study design required in the MRP does not allow for an assessment of receiving water impacts from the Urban Discharge monitoring sites since many events do not include (or require) receiving water sampling. As a result, interpretation of the “in-the-pipe” analyte concentrations detected for urban discharge sites should be assessed judiciously.

As only specific discharges from uncontaminated sources are permitted for discharge to the Salinas storm system City staff worked to identify sources of discharges during each sampling event see Section 2.6 below for specific site sourcing.

2.1 Conventional Water Quality Analyses

2.1.1 Un-ionized Ammonia

SSMP un-ionized ammonia data are presented in Figure 2. During seven different monitoring events, only one water sample collected from 309U07 during September 2006 exceeded the Basin Plan WQO for un-ionized ammonia.

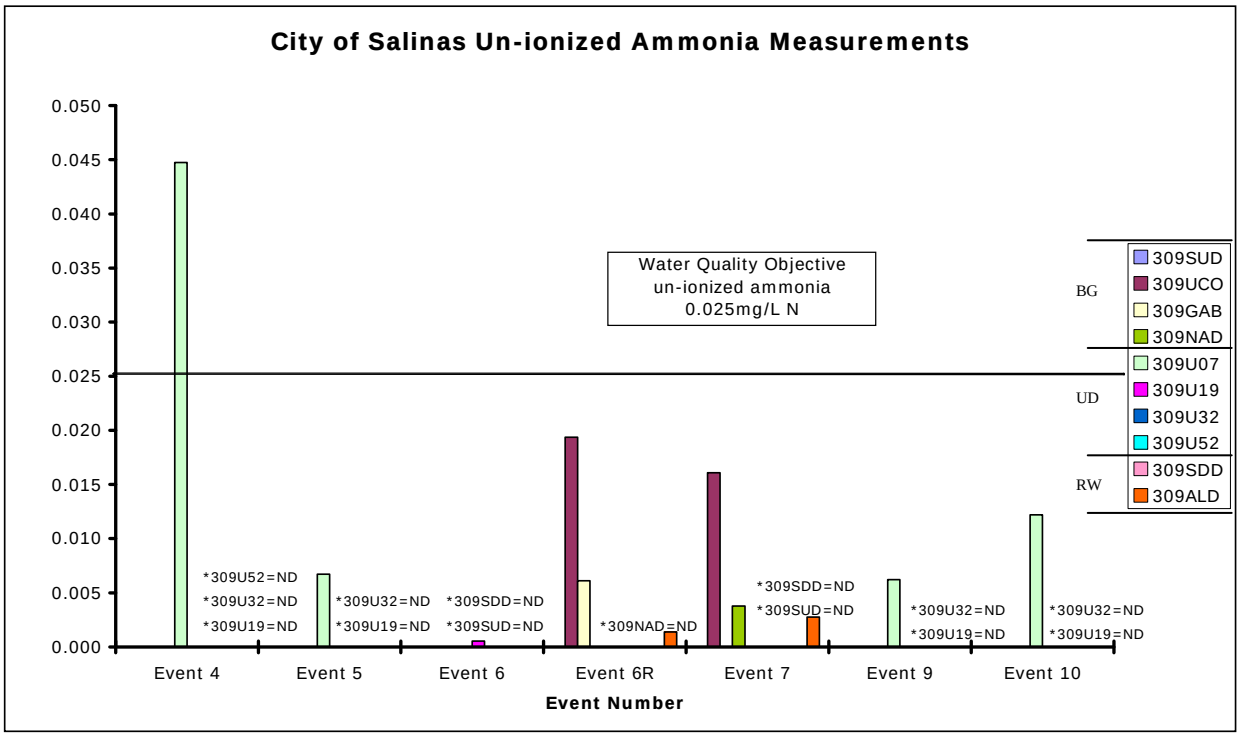

Figure 2. Un-ionized ammonia concentrations in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

<u>Other Programs</u> – Ammonia samples are not collected for the CBWQMP. Only total ammonia is reported in the CCAMP program database. Therefore, no additional exceedance data is available for this monitoring constituent. Of the 17 CMP samples collected, five exceeded the “Action Level”.

2.1.2 Orthophosphate

SSMP orthophosphate data are presented in Figure 3. There is no Basin Plan WQO for orthophosphate, but there is a CCAMP “Action Level” of 0.12 mg/L. It is important to note that the CCAMP “Action Level” is not a water quality objective, but rather is useful for identifying which sites may have sources of elevated orthophosphate concentrations. The CCAMP “Action Level” was exceeded at a minimum of at least one site during each Urban Discharge monitoring event. During the Event 6 and 6R background/receiving water sampling, orthophosphate was above the CCAMP action level at the 309UCO and 309GAB background sites, and at the 309SDD receiving water site. During the Event 7 background/receiving water sampling, orthophosphate was above the CCAMP action level at the 309UCO and 309NAD background sites, and at the 309ALD receiving water site. The presence of elevated orthophosphate levels in background site waters limits the interpretation of the impact of Salinas stormwater on the receiving water sites, as it is unclear if the orthophosphate in the receiving waters is due to background (i.e., upstream) conditions or stormwater inputs.

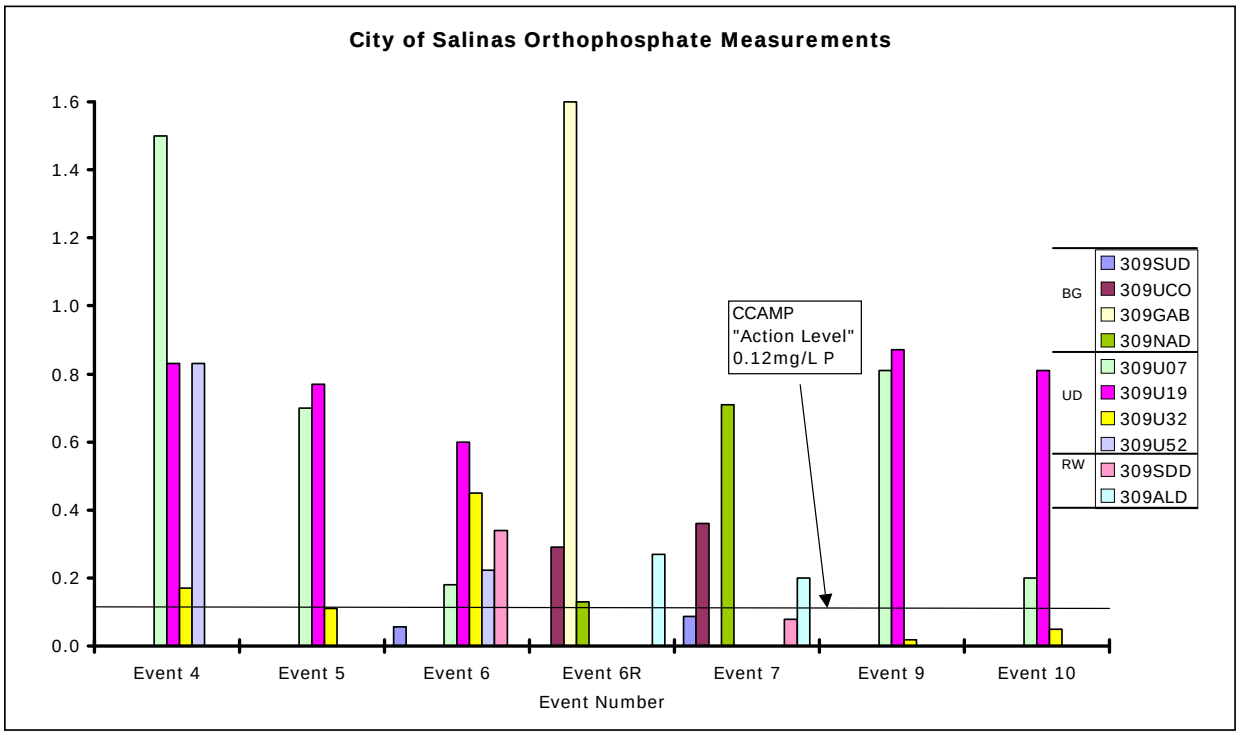

Figure 3: Orthophosphate concentrations in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

Other Programs – Of 29 CCAMP samples collected, 25 exceeded the “Action Level”; only the Salinas River at Davis Road (309DAV) was below the “Action Level”. Of 22 CBWQMP samples collected from the Reclamation Ditch and 26 samples collected from the Santa Rita Creek watershed, the “Action Level” was exceed for 19 samples and 16 samples, respectively. Of the 16 CMP samples collected, only one exceeded the “Action Level”.

2.1.3 Nitrate

SSMP nitrate data are presented in Figure 4. There is no Basin Plan WQO for nitrate, but there is a CCAMP “Action Level” of 2.25 mg/L N. It is important to note that the CCAMP “Action Level” is not a water quality objective, but rather is useful for identifying which sites may have elevated nitrate concentrations. The CCAMP “Action Level” was exceeded at background sites, urban discharge sites, and receiving water sites, suggesting both upstream sources as well as input from Salinas stormwater. The presence of elevated nitrate levels in background site waters limits the interpretation of the impact of Salinas stormwater on the receiving water sites, as it is unclear if the nitrate in the receiving waters is due to background (i.e., upstream) conditions, stormwater inputs, or both.

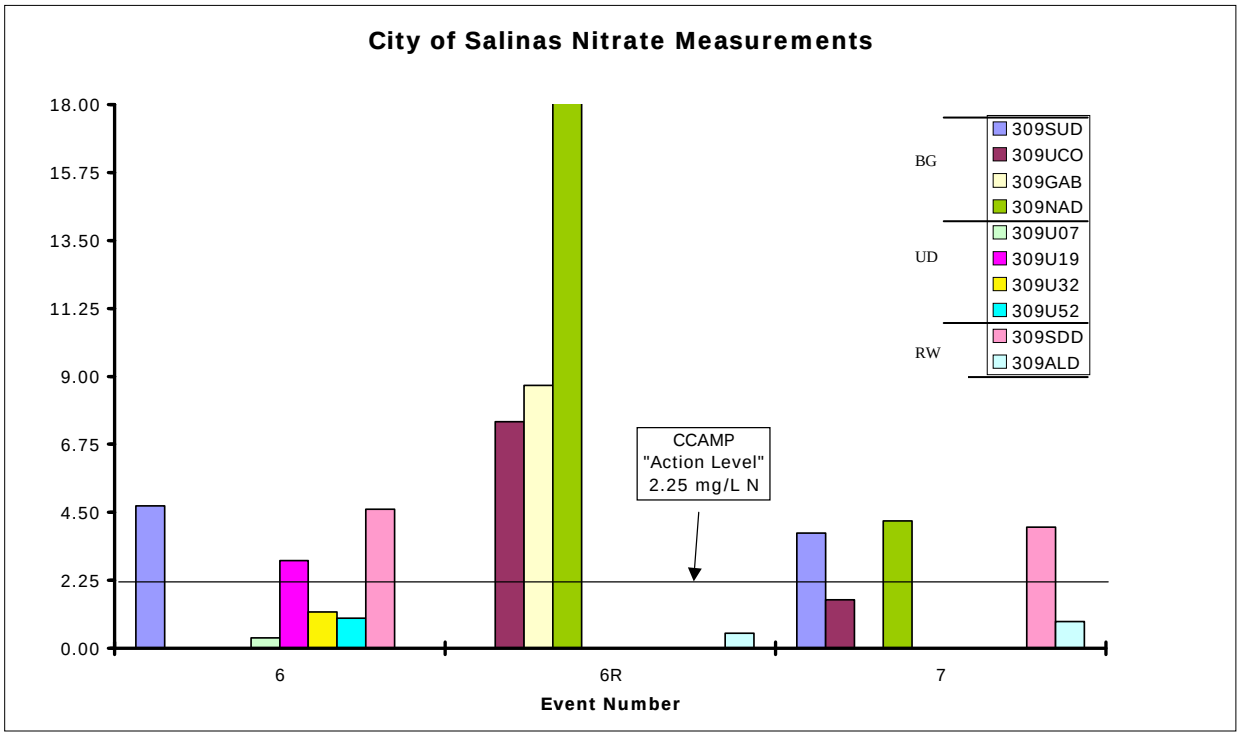

Figure 4: Nitrate concentrations in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

<u>Other Programs</u> – Of 29 CCAMP samples collected, 26 exceeded the “Action Level”. Of 22 CBWQMP samples collected from the Reclamation Ditch and 26 samples collected from the Santa Rita Creek watershed, the “Action Level” was exceed for 20 samples and 5 samples, respectively. All 16 of the CMP samples collected exceeded the “Action Level”.

2.1.4 Detergents

SSMP detergent data are presented in Figure 5. There is no Basin Plan WQO or CCAMP Action Level for detergents. Nevertheless, the evaluation of detergents in urban discharge sites is useful for determining the source of the water (and detergent), when possible. Detergents were detected in 4 of 17 urban discharge sites during the characterization of 20% of the major urban

discharges. Detergents were also detected in 8 urban discharge samples during additional sampling events.

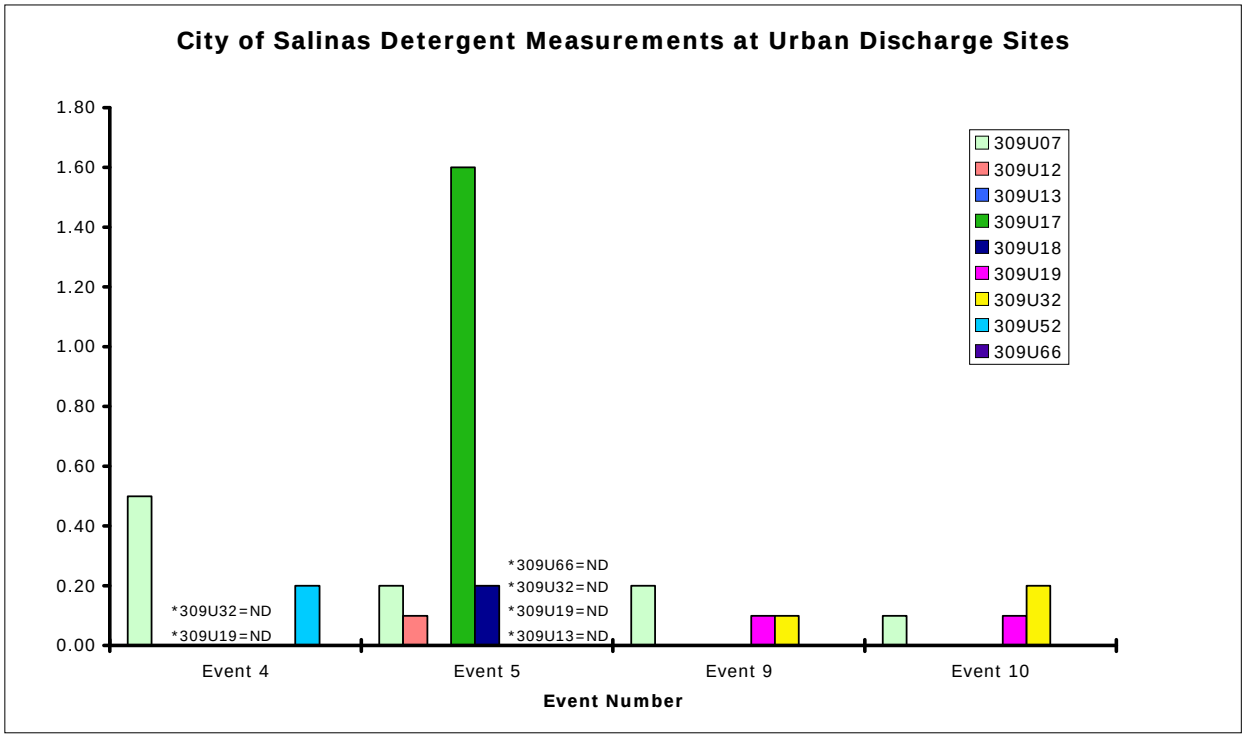

Figure 5: Detergent concentrations in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

Other Programs – No detergent data was reported for other programs performing water quality monitoring in the SSMP drainage area.

2.1.5 Total Residual Chlorine

SSMP total residual chlorine data are presented in Figure 6. There is no Basin Plan objective or CCAMP Action Level for total residual chlorine. Nevertheless, the detection of chlorine in urban discharge sites is useful for determining the source of the water, when possible. Chlorine was detected in 1 of 17 urban discharge sites during the characterization of 20% of the major urban discharges. Chlorine was also detected in 3 urban discharge samples during additional sampling events.

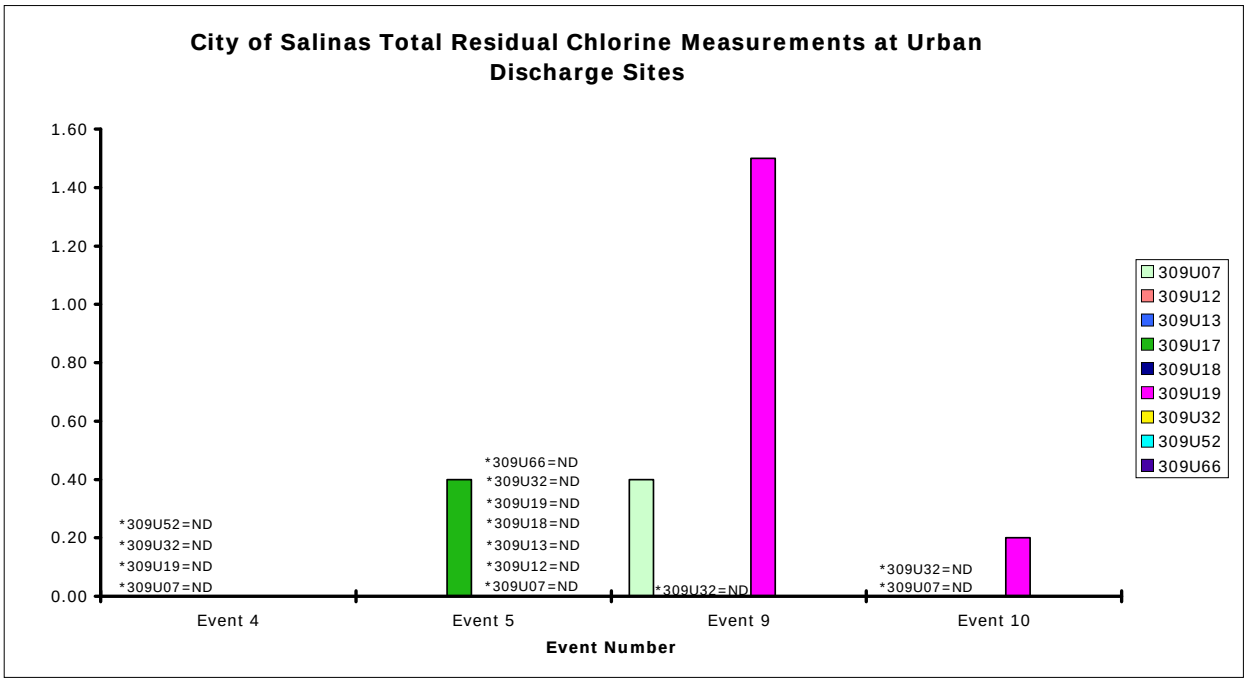

Figure 6: Total chlorine concentrations in SSMP samples.

<u>Other Programs</u> – No detergent data was reported for other programs performing water quality monitoring in the SSMP drainage area.

2.1.6 Turbidity

SSMP turbidity data are presented in Figure 7. The Basin Plan WQO for turbidity requires a comparison to “natural turbidity” in the drainage. However, it is not stated and is unclear as to how ‘natural turbidity’ is to be determined.

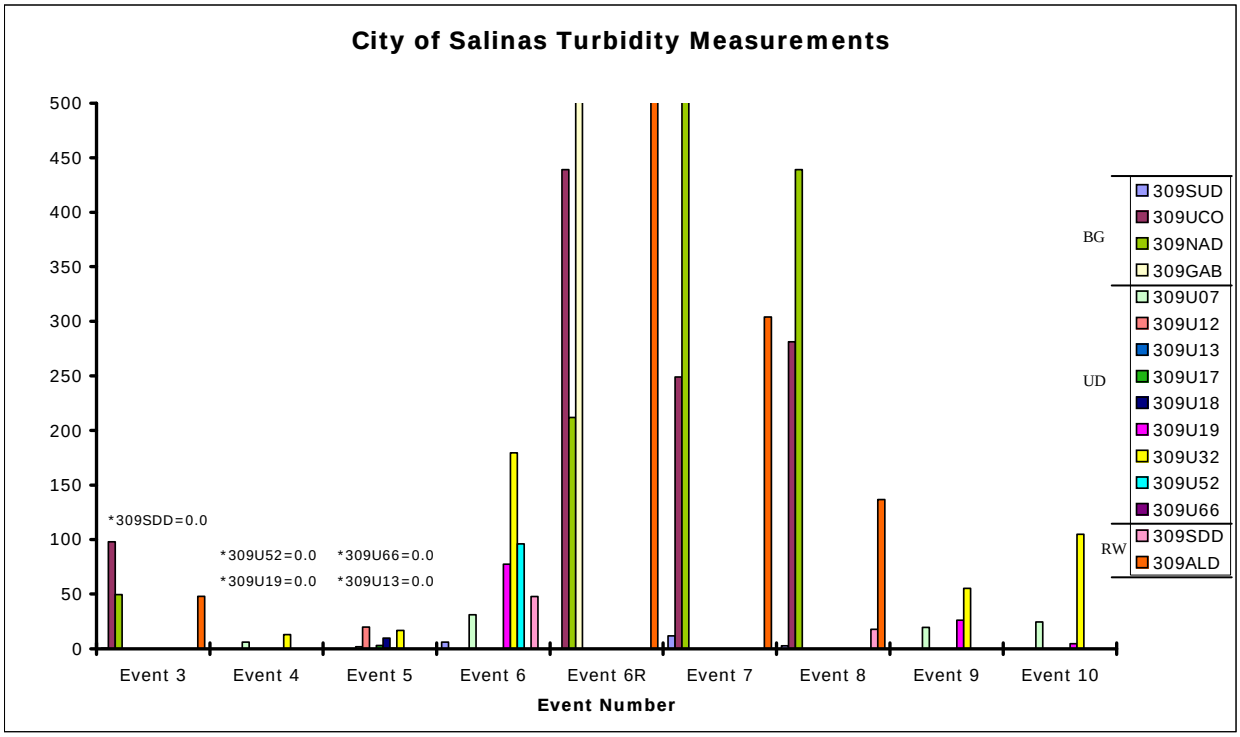

Figure 7: Turbidity concentrations in SSMP water samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

Other Programs – Due to the lack of clear guidelines as to how to interpret the “natural turbidity” aspect of the Basin Plan WQO, turbidity data from other programs are not interpreted here, but are presented in the Appendix B of this report.

2.1.7 Total Dissolved Solids (TDS)

SSMP TDS data are presented in Figure 8. There is no Basin Plan WQO nor CCAMP "Action Level" for TDS. There was no consistent pattern as to which type of monitoring site (e.g., background, receiving water, or urban discharge) exhibited the greatest TOC concentration.

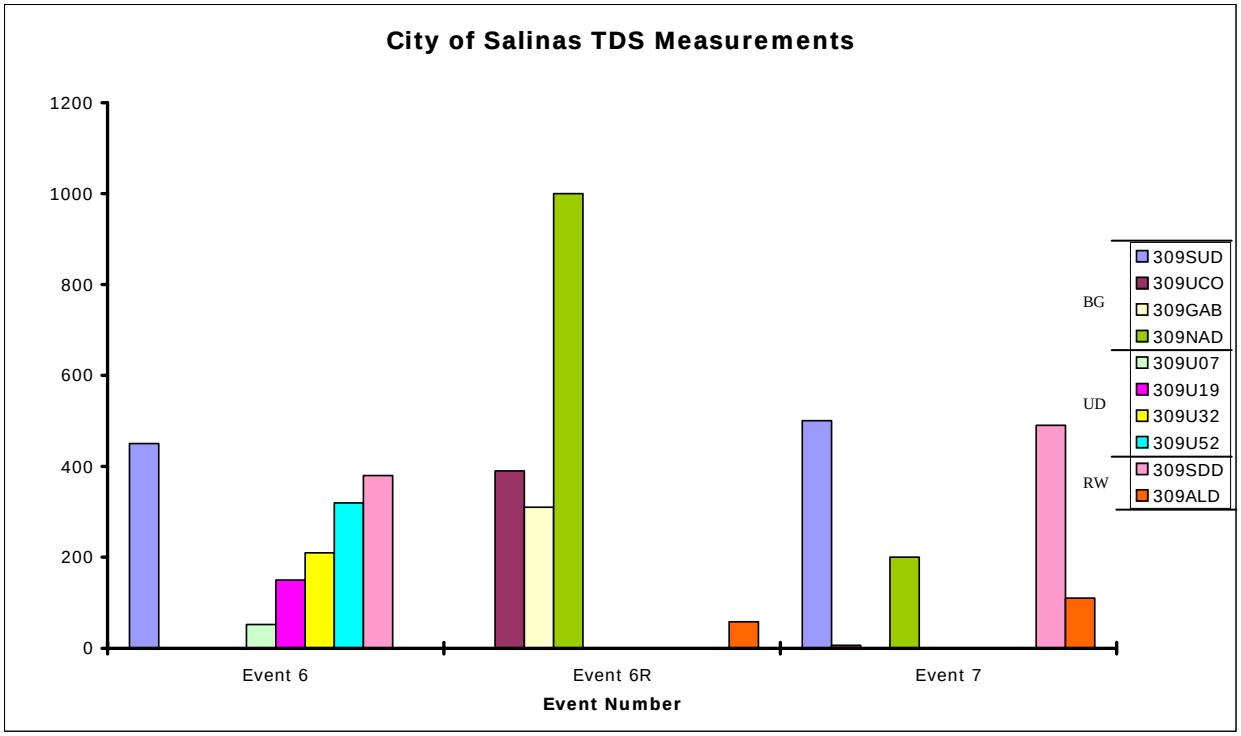

Figure 8: TDS concentrations in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

<u>Other Programs</u> – Due to the lack a Basin Plan WQO or CCAMP "Action Level" for TDS, TDS data from other programs are not interpreted here, but are presented in the Appendix B of this report.

2.1.8 Conductivity

SSMP conductivity data are presented in Figure 9. There is no Basin Plan WQO nor CCAMP Action Level for conductivity. The detection of conductivity in urban discharge sites is useful for determining the source of the water, when possible.

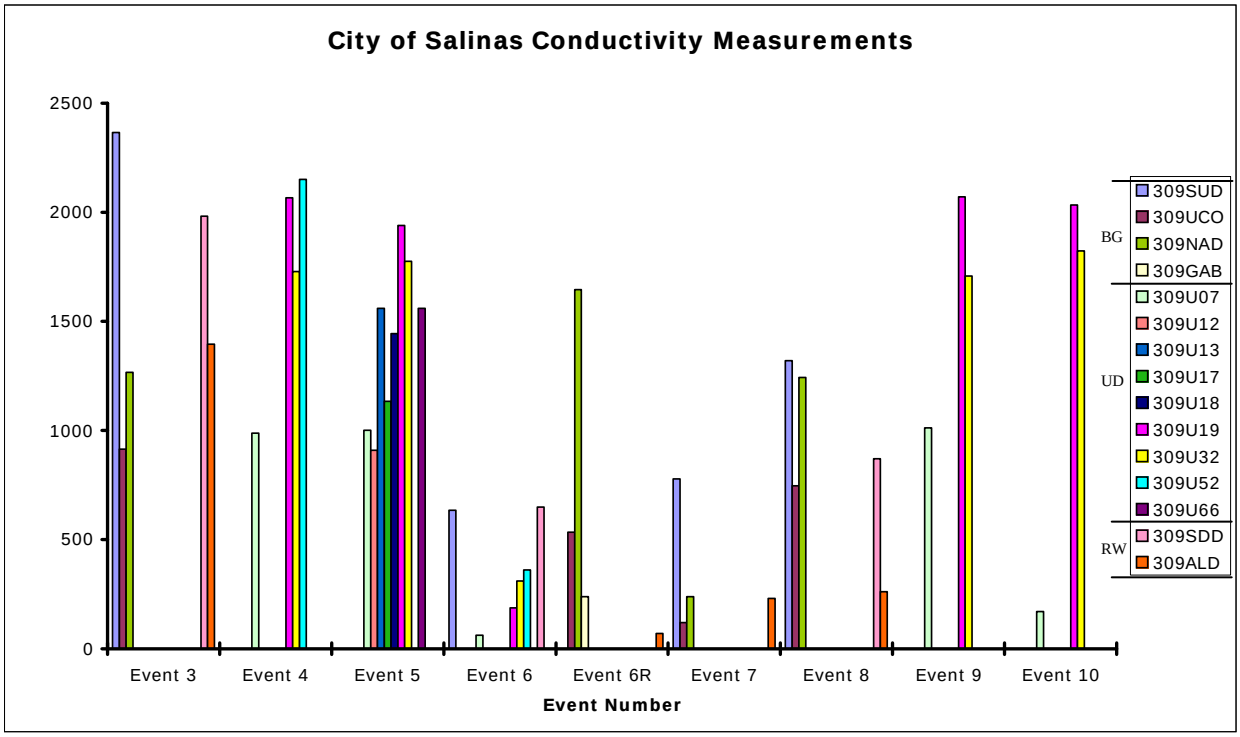

Figure 9: Conductivity concentrations in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

Other Programs – Due to the lack a Basin Plan WQO or CCAMP "Action Level" for conductivity, conductivity data from other programs are not interpreted here, but are presented in the Appendix B-D of this report.

2.1.9 pH

SSMP pH data are presented in Figure 10. The Basin Plan WQO for pH requires the water to be: 6.5>pH<8.5. A pH of 5.52 was recorded for 309U32 during Event 6 (a wet weather event), and a pH of 8.54 was recorded for 309SUD during Event 7 (also a wet weather event). There were no other exceedances of the pH objectives at any other site during any other event.

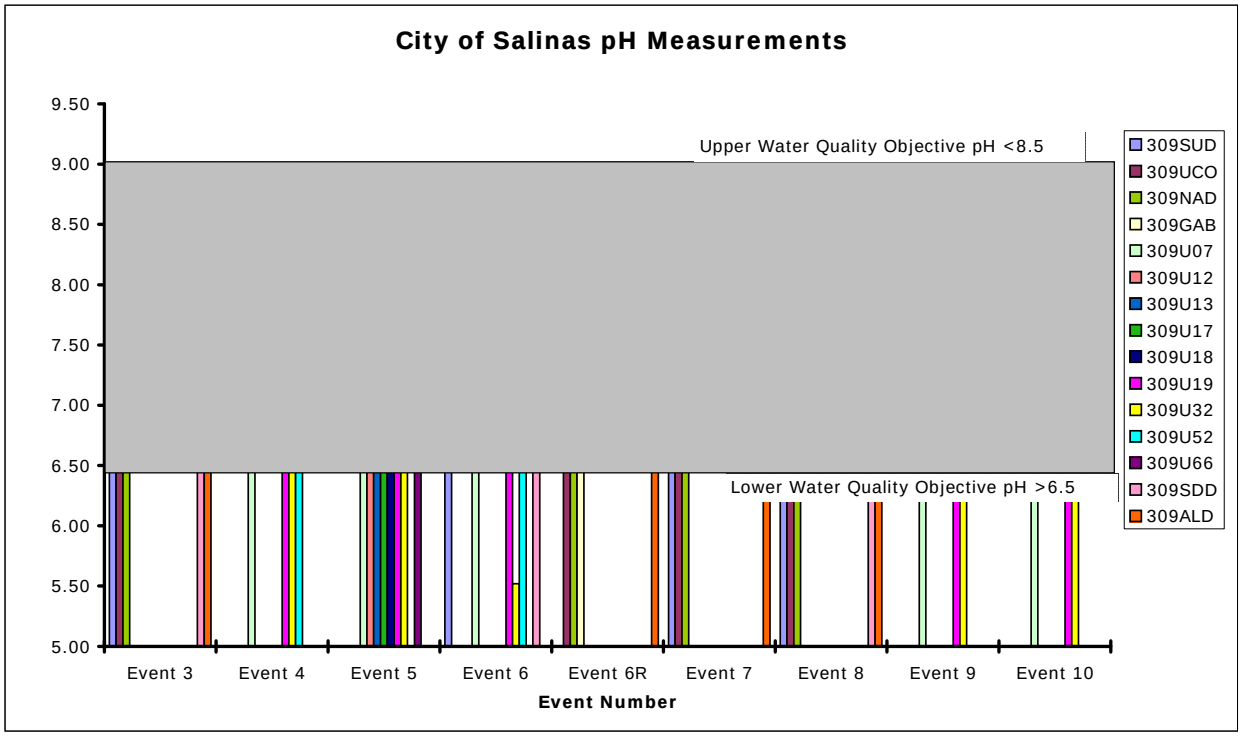

Figure 10: pH concentrations in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

Other Programs – Of 35 CCAMP samples collected, 2 exceeded the Basin Plan WQO for pH. Of 22 CBWQMP samples collected from the Reclamation Ditch and 27 samples collected from the Santa Rita Creek watershed, the Basin Plan WQO for pH was never exceed in either drainage. Of the 17 CMP samples collected, only one exceeded the Basin Plan WQO for pH.

2.1.10 Temperature

SSMP temperature data are presented in Figure 11. The Basin Plan WQO requires that the temperature not exceed 5ºF above the “natural temperature” (WARM beneficial use). The CCRWQCB is using any temperature above 28ºC for 303(d) listing since this value has been cited in the literature as an upper tolerance limit for rainbow trout. The temperature of SSMP samples never exceeded 28ºC.

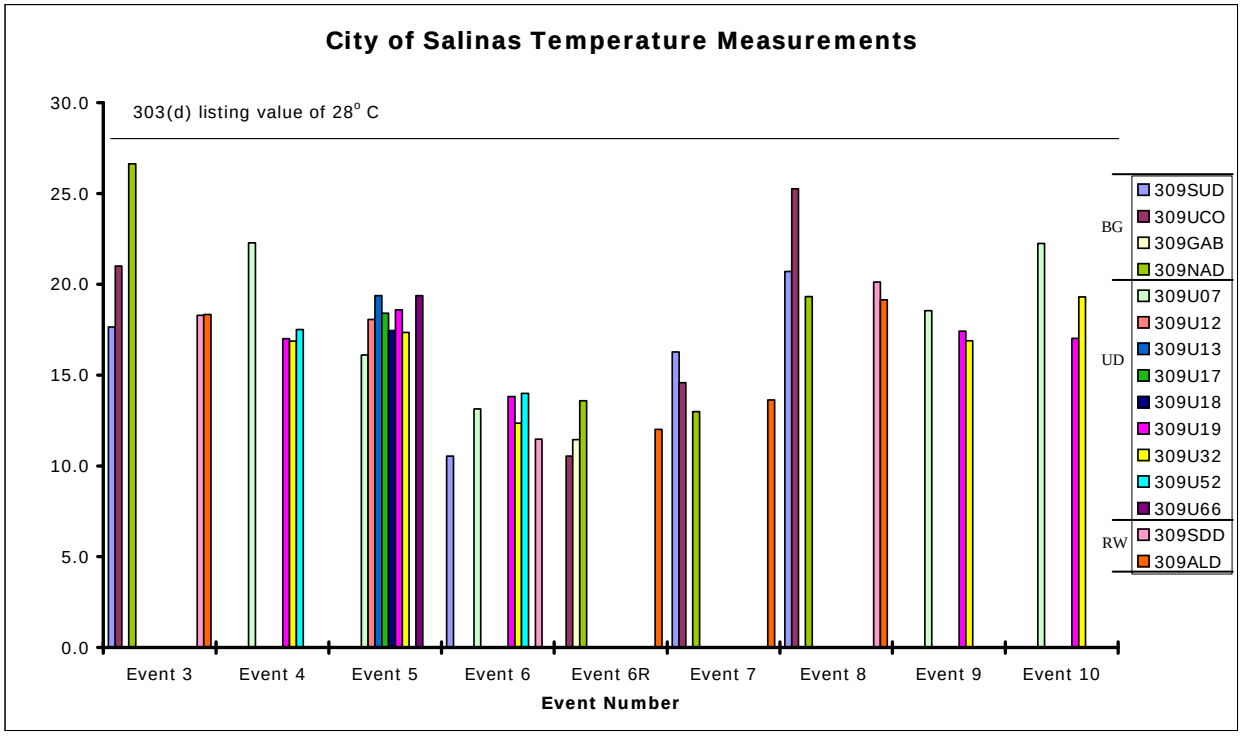

Figure 11. Temperature of SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

Other Programs – Of 35 CCAMP samples collected, none exceeded the Basin Plan WQO for temperature. Of 22 CBWQMP samples collected from the Reclamation Ditch and 27 samples collected from the Santa Rita Creek watershed, the Basin Plan WQO for temperature was never exceeded in either drainage. None of the CMP samples exceeded the Basin Plan WQO.

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2.1.11 Total Zinc

SSMP total zinc data are presented in Figure 12. The Basin Plan WQO requires that the total zinc not exceed 0.2 mg/L when hardness is >100 mg/L $CaCO_3$. This water quality objective was exceeded in three background site waters during Events 6R and 7; none of the receiving waters exceeded the water quality objective.

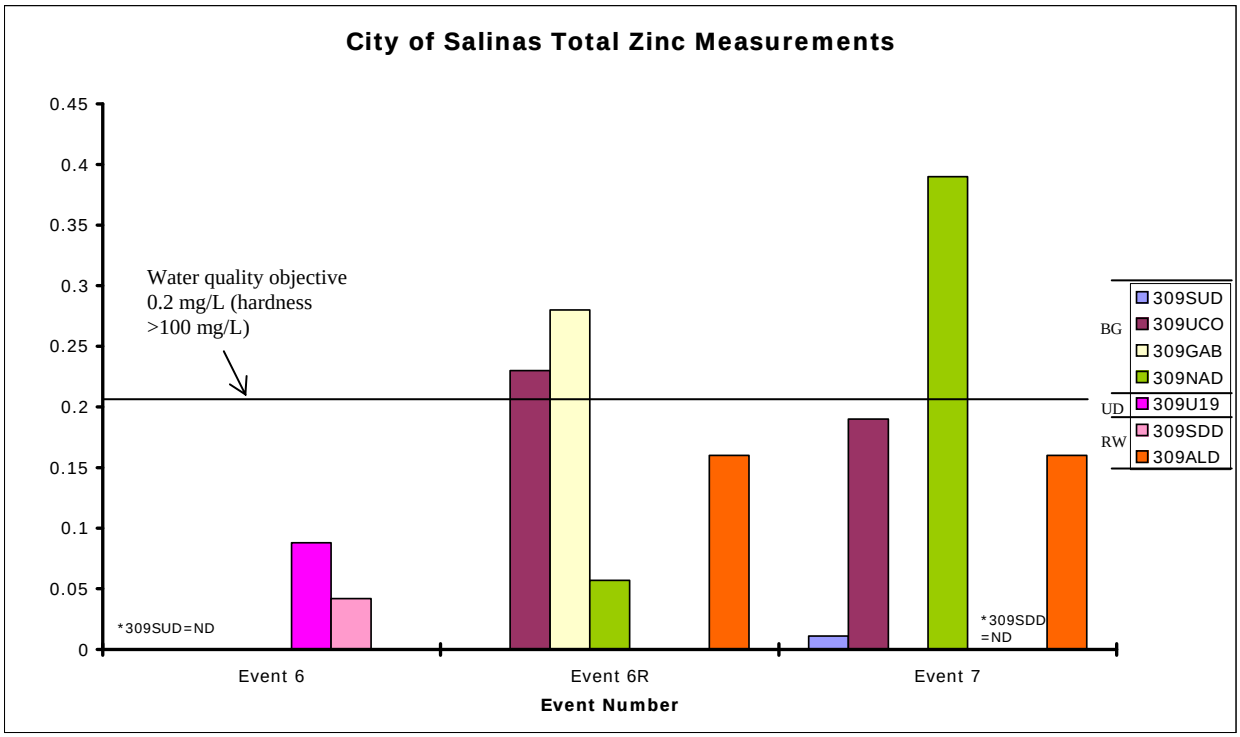

Figure 12: Total zinc concentrations in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

<u>Other Programs</u> – No zinc data was reported in the CCAMP database. Although zinc data was not provided in the database submitted to the SSMP by the Monterey Bay Sanctuary, the associated report indicates that all CBWQMP samples were below the Basin Plan WQO.

2.1.12 Total Copper

SSMP total copper data are presented in Figure 13. The Basin Plan WQO requires that the total copper not exceed 0.03 mg/L when hardness is >100 mg/L $CaCO_3$. This water quality objective was exceeded in three background site waters during Events 6R and 7 (note that these were the same sites that exhibited exceedances of the zinc WQO); none of the receiving waters exceeded the WQO.

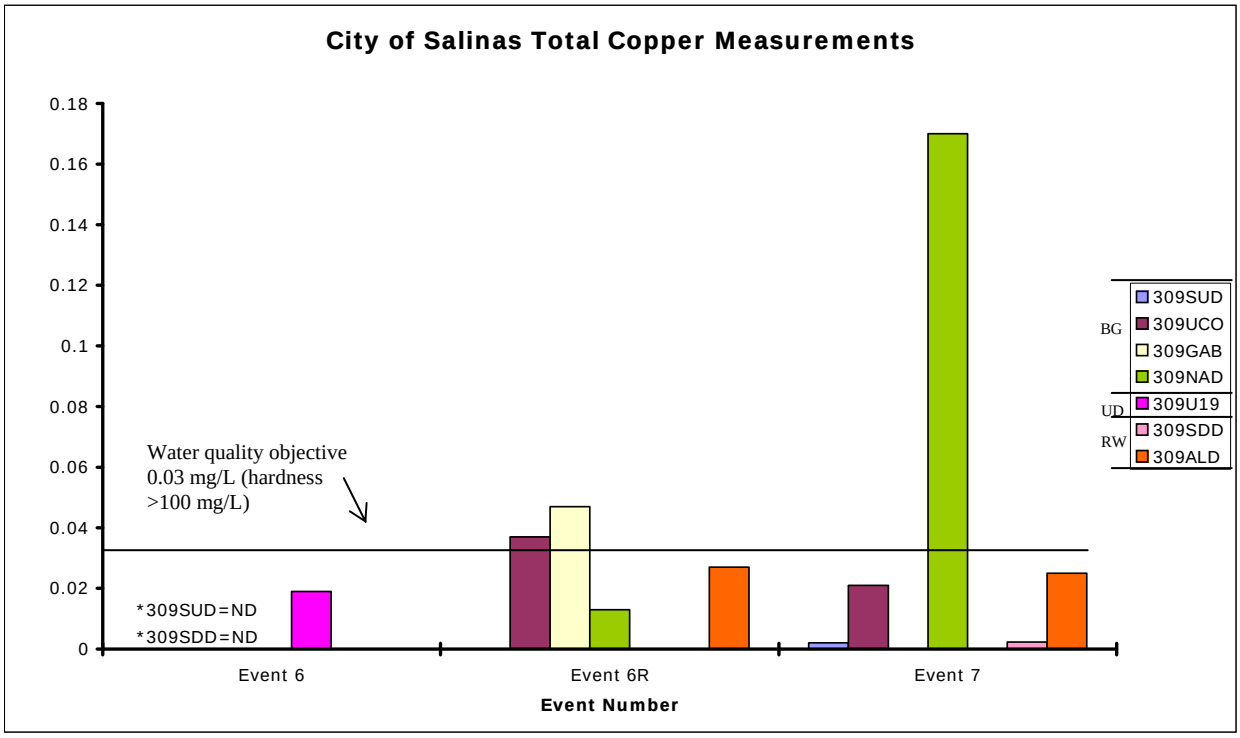

Figure 13: Total copper concentrations in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

<u>Other Programs</u> – No copper data was reported in the CCAMP database. Although copper data was not provided in the database submitted to the SSMP by the Monterey Bay Sanctuary, the associated report indicates that all CBWQMP samples were below the Basin Plan WQO.

2.1.13 E. Coli

SSMP *E. coli* data are presented in Figure 14. The CCRWQCB regulates *E. coli* at 235 MPN/100 mL based on the EPA guidelines for designated beach areas (as a binomial distribution for a minimum of 5 exceedances for up to 30 samples). This water quality benchmark was exceeded in background sites, receiving water sites, and urban discharge sites suggesting that both background conditions and Salinas stormwater contribute to exceedances for this parameter.

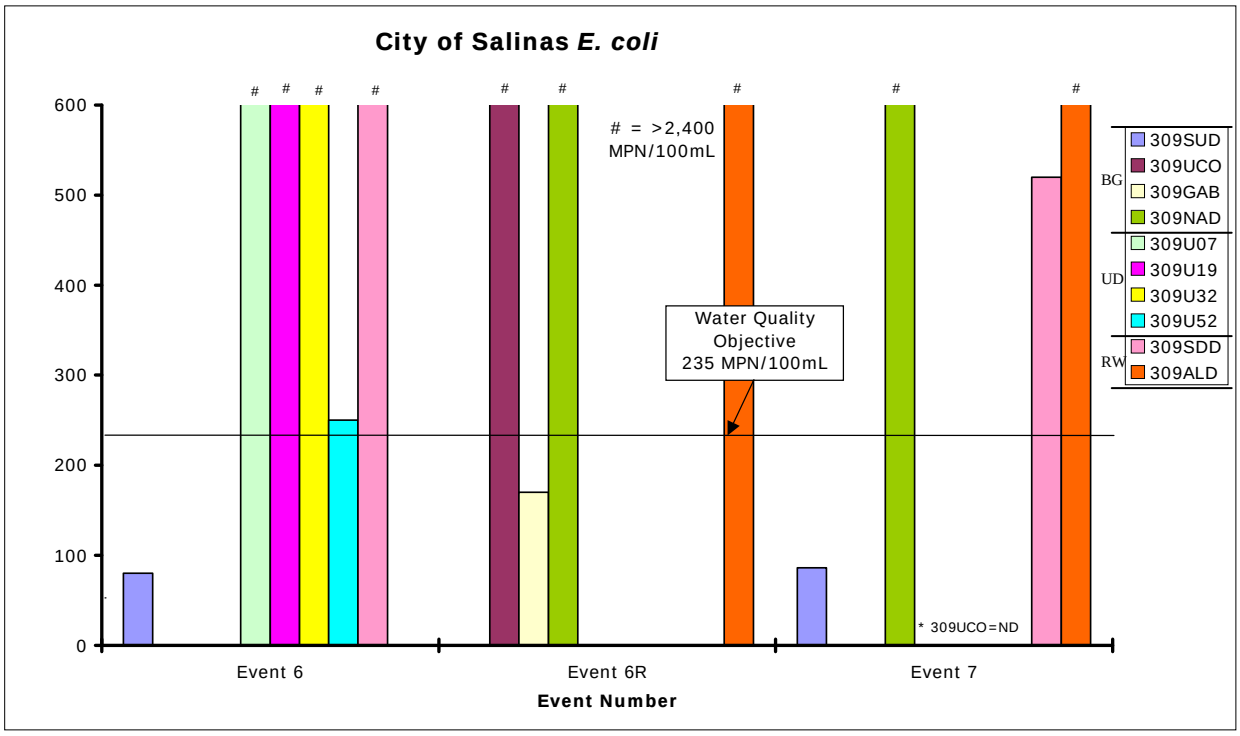

Figure 14: *E. coli* levels in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

<u>Other Programs</u> – Of 10 CCAMP samples collected, 4 exceeded 235 MPN/100 mL; all of the exceedances occurred at Reclamation Canal sampling stations. Of 22 CBWQMP samples collected from the Reclamation Ditch and 27 samples collected from the Santa Rita Creek watershed, 20 samples and 10 samples, respectively, exceeded 235 MPN/100 mL.

2.1.14 Total coliform

SSMP total coliform data are presented in Figure 15. The Basin Plan (REC 1 beneficial use) regulates total coliform at 400 MPN/100 mL (as a binomial distribution for a minimum of 5 exceedances for up to 30 samples). This WQO was exceeded in background sites, receiving water sites, and urban discharge sites suggesting that both background conditions and Salinas stormwater contribute to exceedances for this parameter.

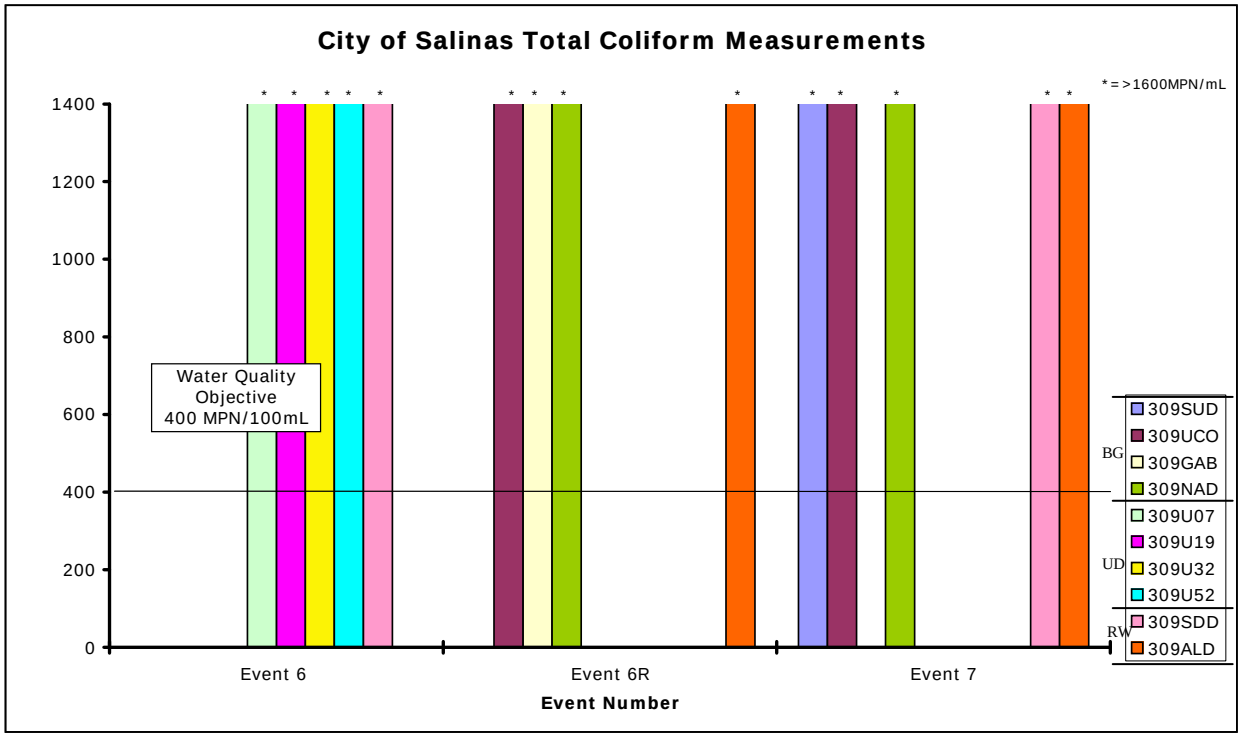

Figure 15: Total coliform levels in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

Other Programs – Of 20 CCAMP samples collected, all samples exceeded 400 MPN/100 mL, including those upstream of the influence of Salinas stormwater runoff. Of 22 CBWQMP samples collected from the Reclamation Ditch and 27 samples collected from the Santa Rita Creek watershed, all exceeded 400 MPN/100 mL in both drainages.

2.1.15 Fecal coliform

SSMP fecal coliform data are presented in Figure 16. The Basin Plan (REC 1 beneficial use) regulates fecal coliform at 400 MPN/100 mL (as a binomial distribution for a minimum of 5 exceedances for up to 30 samples). This WQO was exceeded in background sites, receiving water sites, and urban discharge sites suggesting that both background conditions and Salinas stormwater contribute to exceedances for this parameter.

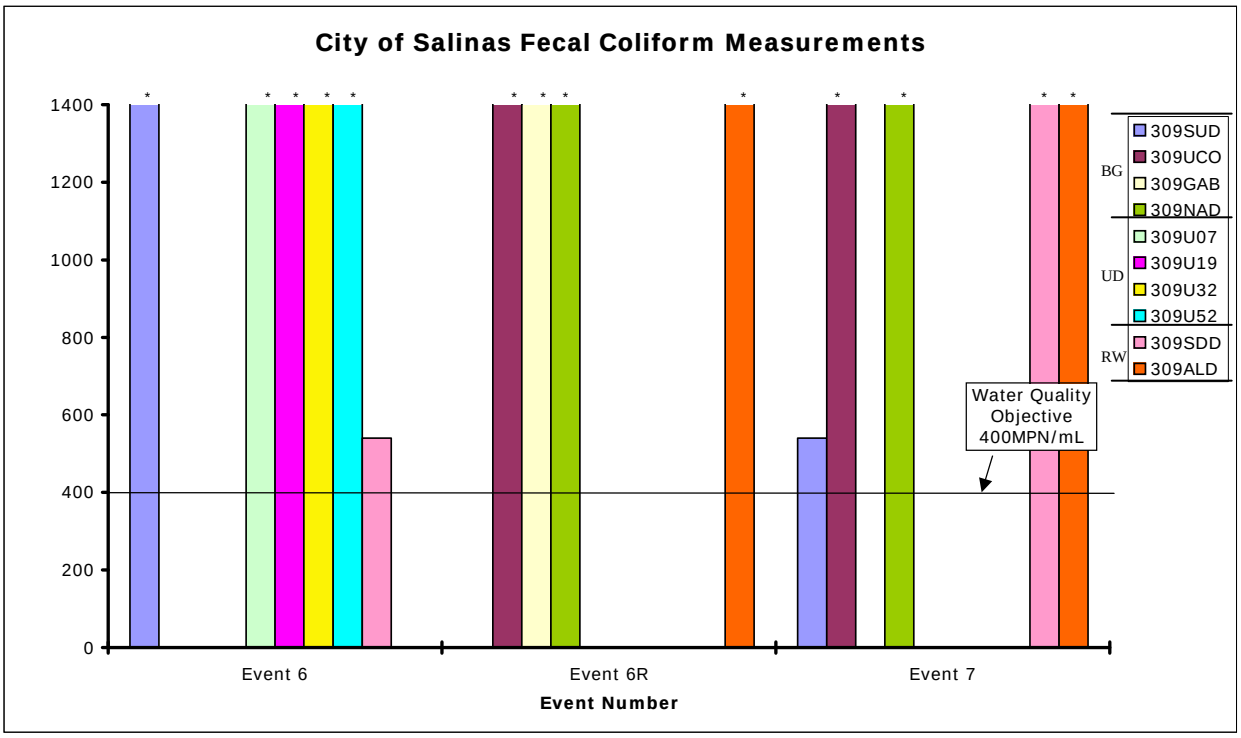

Figure 16: Fecal coliform levels in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

Other Programs – Of 10 CCAMP samples collected, 5 exceeded 235 MPN/100 mL; all of the exceedances occurred at Reclamation Canal sampling stations.

2.1.16 Total Organic Carbon (TOC)

SSMP TOC data are presented in Figure 17. There is no Basin Plan WQO or CCAMP Action Level for TOC. There was no consistent pattern as to which type of monitoring site (e.g., background, receiving water, or urban discharge) exhibited the greatest TOC concentration.

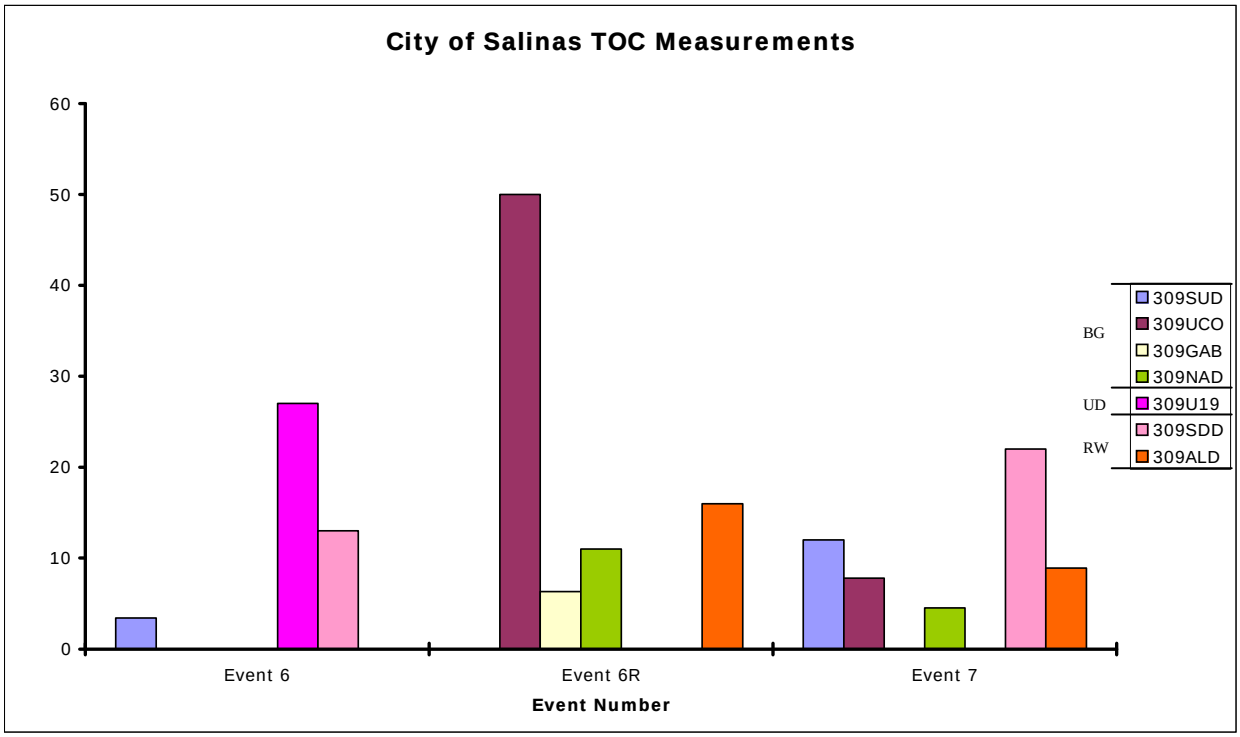

Figure 17: TOC concentrations in SSMP samples; BG = background site, UD = urban discharge site, and RW = receiving water site.

2.2 Aquatic Toxicity

Three species were tested to evaluate the toxicity of the SSMP ambient waters:

- a green algae (*Selenastrum capricornutum*);
- an invertebrate (*Ceriodaphnia dubia*); and
- a fish (the fathead minnow).

SSMP aquatic toxicity data are presented in Figures 18a – 18e. The Basin Plan narrative objective requires that there be no toxicity (i.e., defined as a statistically significant reduction in organism response compared to the Control).

Selenastrum – There was a significant reduction in algal growth in the Event 6R receiving water sample collected from 309ALD. None of the associated background sites were toxic to algal growth, suggesting that the observed algae toxicity was due to Salinas stormwater runoff.

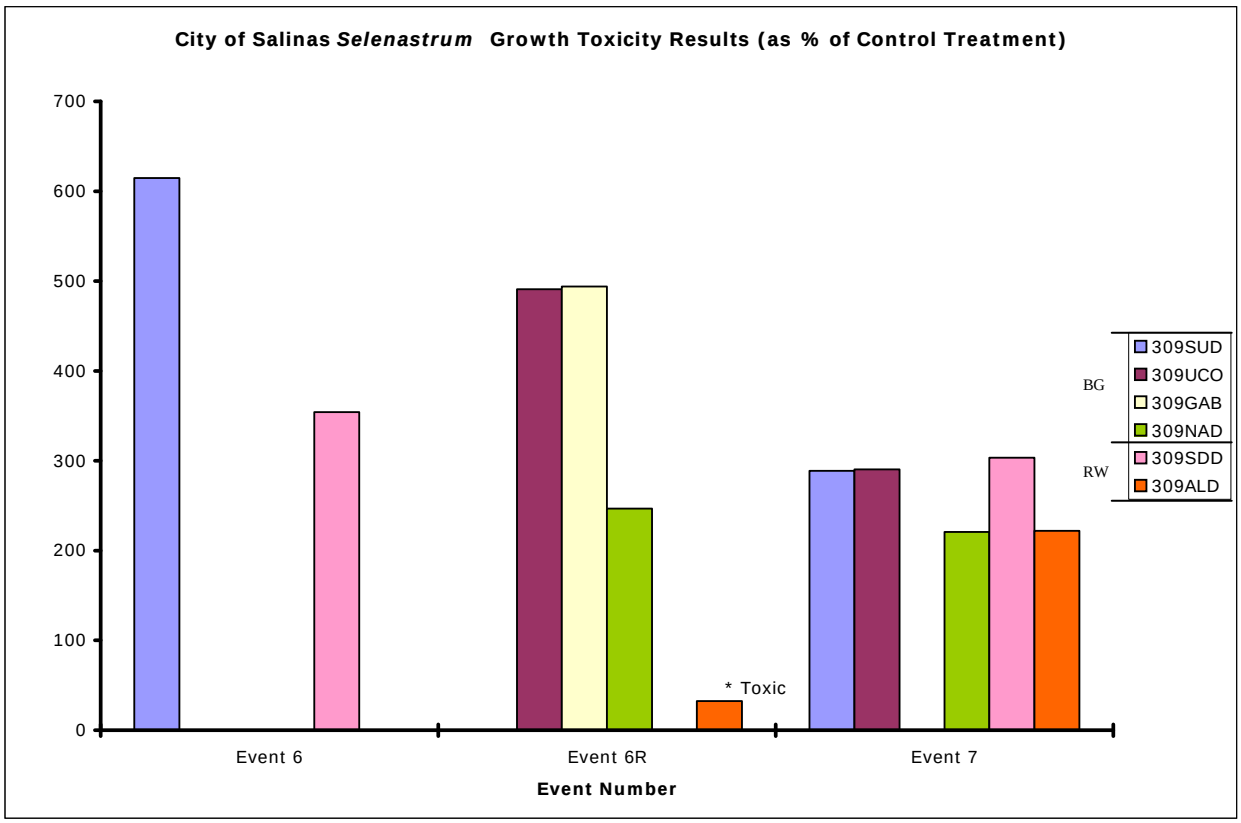

Figure 18a: *Selenastrum* toxicity test results for SSMP samples; BG = background site and RW = receiving water site.

Other Programs – None of the 5 CCAMP samples was toxic to *Selenastrum* growth. Similarly, none of the 7 CMP samples was toxic to *Selenastrum.*

Ceriodaphnia survival – There were significant reductions in *Ceriodaphnia* survival in the wet weather Events 6R and 7 309ALD receiving water samples. As there were also significant reductions in survival in the background sites (Event 6 – 309GAB and 309UCO; Event 7 – 309NAD and 309UCO) during both of these events, it is unclear if the reductions in

Ceriodaphnia survival observed for the 309ALD samples is due to background conditions or Salinas stormwater. There were no significant reductions in survival in any other SSMP ambient water samples.

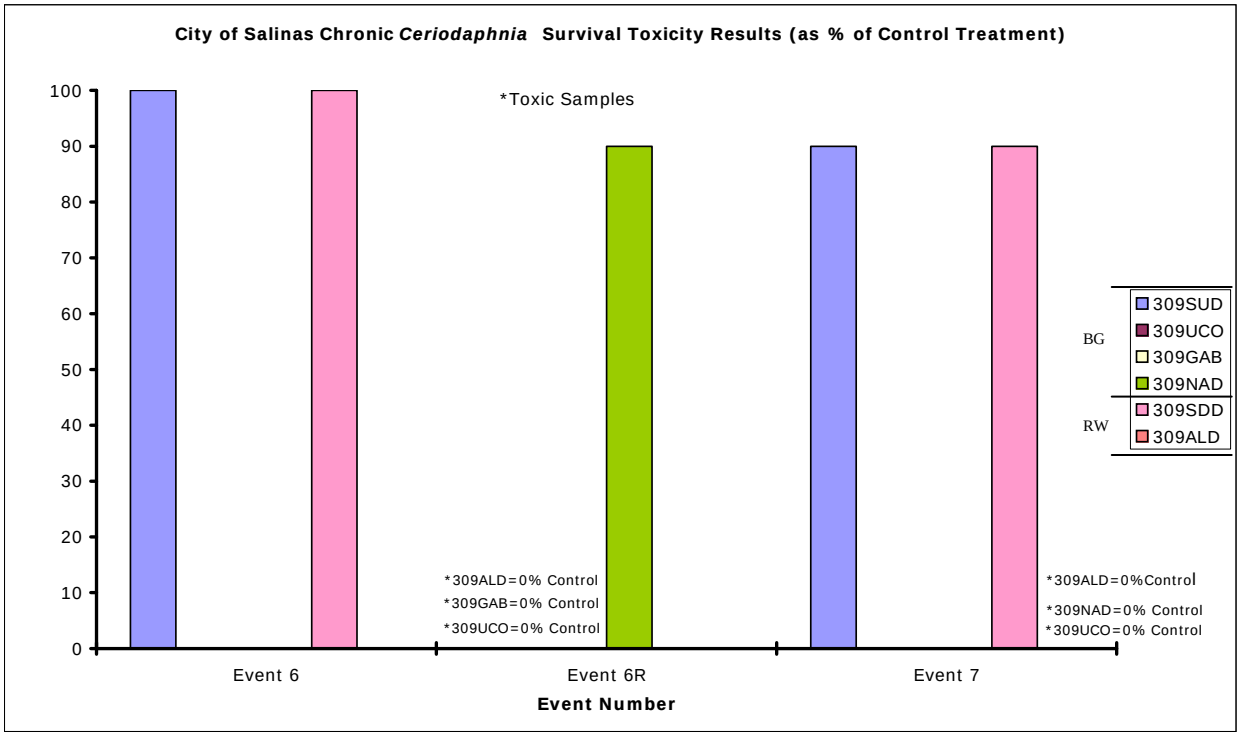

Figure 18b: *Ceriodaphnia* toxicity test survival results for SSMP samples; BG = background site and RW = receiving water site.

<u>Other Programs</u> – Three of the 5 CCAMP samples (309ALD, 309ALU, and 309AXX – all are Reclamation Ditch sites) were toxic to *Ceriodaphnia* survival. Five of the 7 CMP samples was toxic to *Ceriodaphnia* survival.

<u>*Ceriodaphnia* reproduction</u> – None of the SSMP ambient water samples were toxic to *Ceriodaphnia* reproduction; as per EPA guidelines, statistical analyses for reproduction toxicity are not performed on samples that exhibit significant reductions in survival.

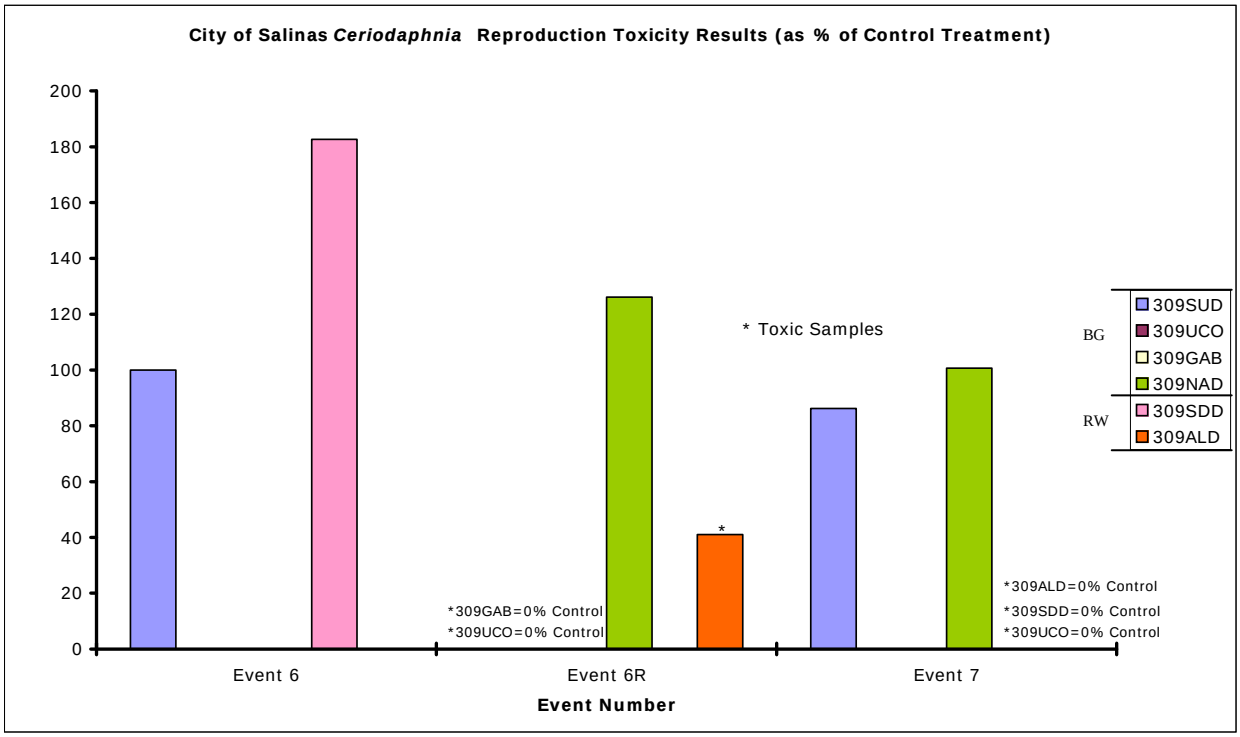

Figure 18c: *Ceriodaphnia* toxicity test reproduction results for SSMP samples; BG = background site and RW = receiving water site.

<u>Other Programs</u> – None of the CCAMP were toxic to *Ceriodaphnia* survival. Three of the 7 CMP samples were toxic to *Ceriodaphnia* reproduction. As per EPA guidelines, statistical analyses for reproduction toxicity are not performed on samples that exhibit significant reductions in survival.

<u>Fathead minnow survival</u> – There were no significant reductions in fish survival in any of the SSMP ambient water samples.

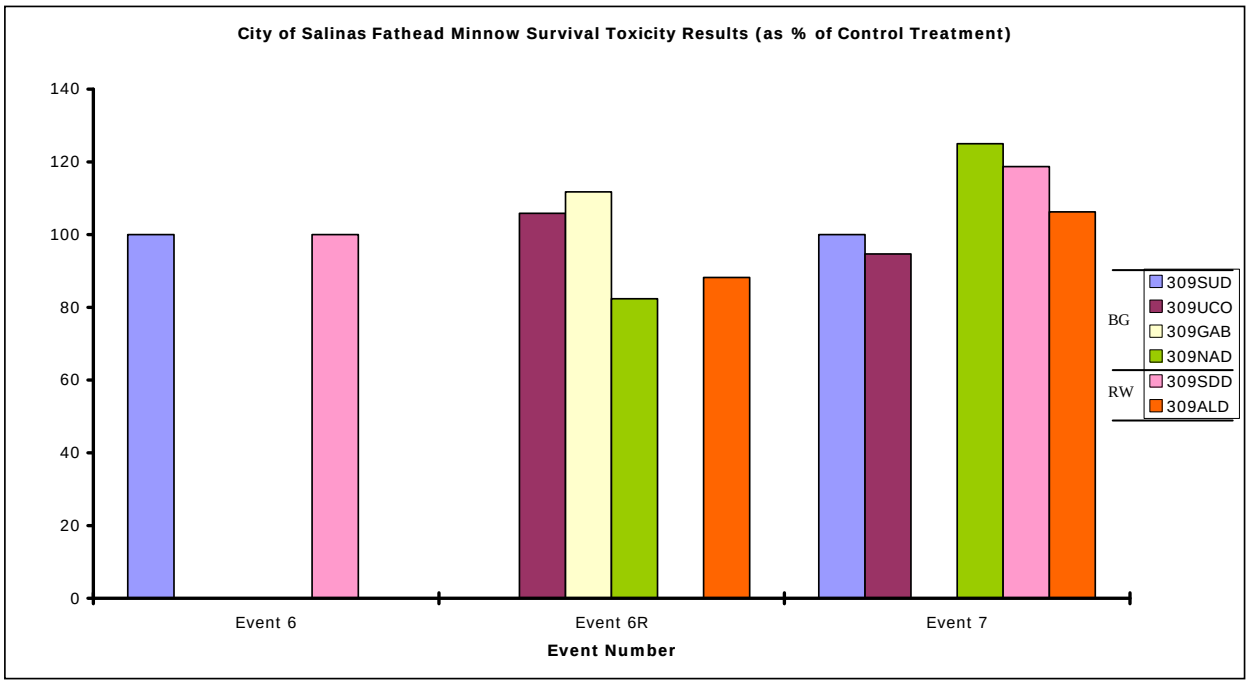

Figure 18d: Fathead minnow toxicity test survival results for SSMP samples; BG = background site and RW = receiving water site.

Other Programs – None of the 5 CCAMP or 7 CMP samples was toxic to fathead minnow survival.

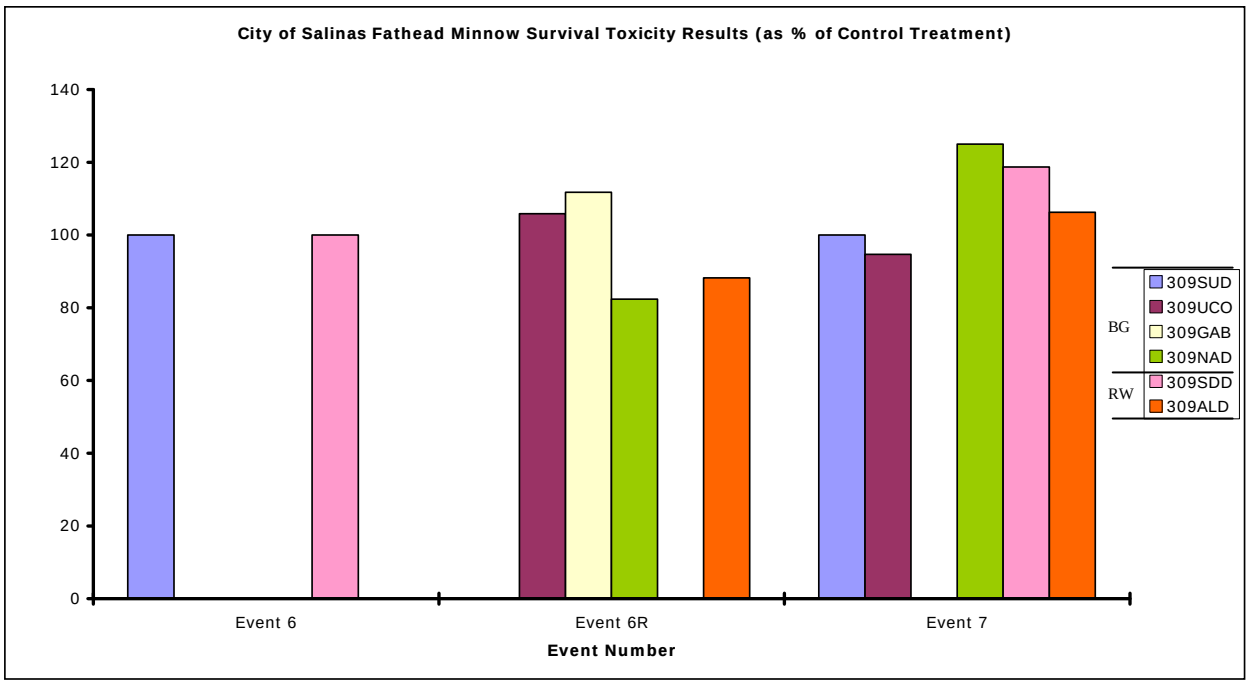

Figure 18e: Fathead minnow toxicity test growth results for SSMP samples; BG = background site and RW = receiving water site.

Other Programs – None of the 5 CCAMP or 7 CMP samples was toxic to fathead minnow growth.

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2.3 Sediment Toxicity

The 10-day *Hyalella azteca* sediment toxicity test is required for the SSMP. SSMP sediment toxicity data are presented in Figures 19a-19b. The Basin Plan narrative objective requires that there be no toxicity (i.e., defined as a statistically significant reduction in organism response compared to the Control).

Hyalella survival

There were significant reductions in *Hyalella* survival in the 309ALD sediment sample during Events 3 and in both the 309SDD and 309ALD sediment samples during Event 8. As there were also significant reductions in survival in the background sites (Event 3 – 309NAD and 309UCO; Event 8 – 309SDD, 309NAD, and 309UCO), it is unclear if the reductions in *Hyalella* survival observed for the receiving water sites is due to background conditions or Salinas stormwater. There were no significant reductions in survival in any other SSMP ambient water samples.

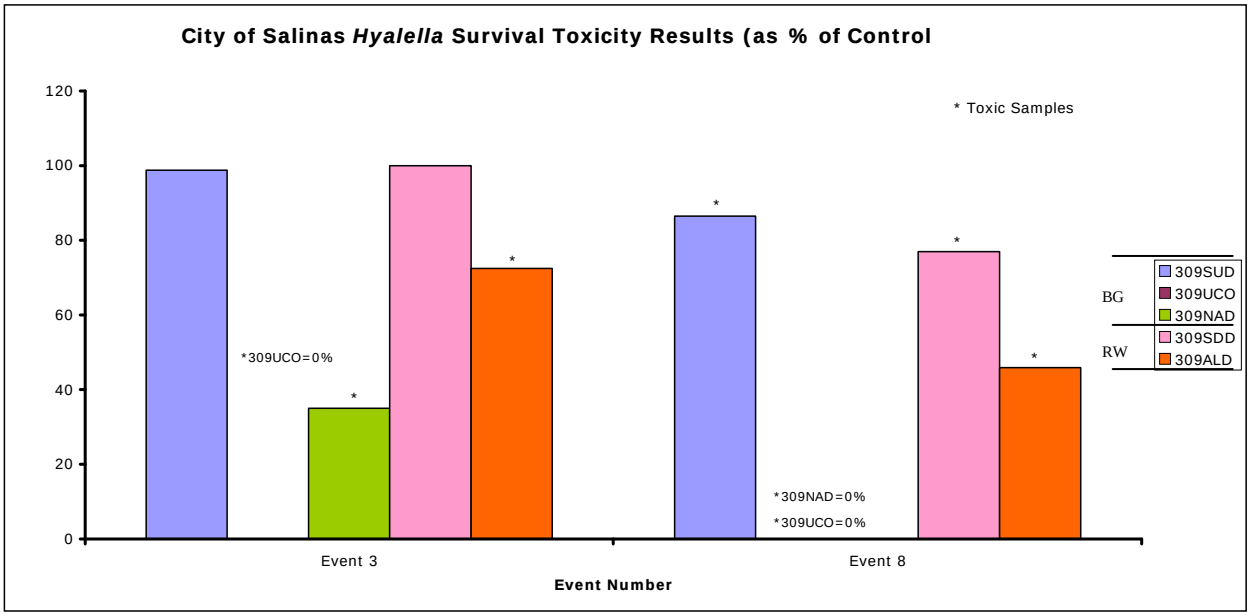

Figure 19a: *Hyalella* toxicity test survival results for SSMP sediment samples; BG = background site and RW = receiving water site.

Hyalella growth

None of the samples were toxic to *Hyalella* growth; as per EPA guidelines, statistical analyses for growth toxicity are not performed on samples that exhibit significant reductions in survival.

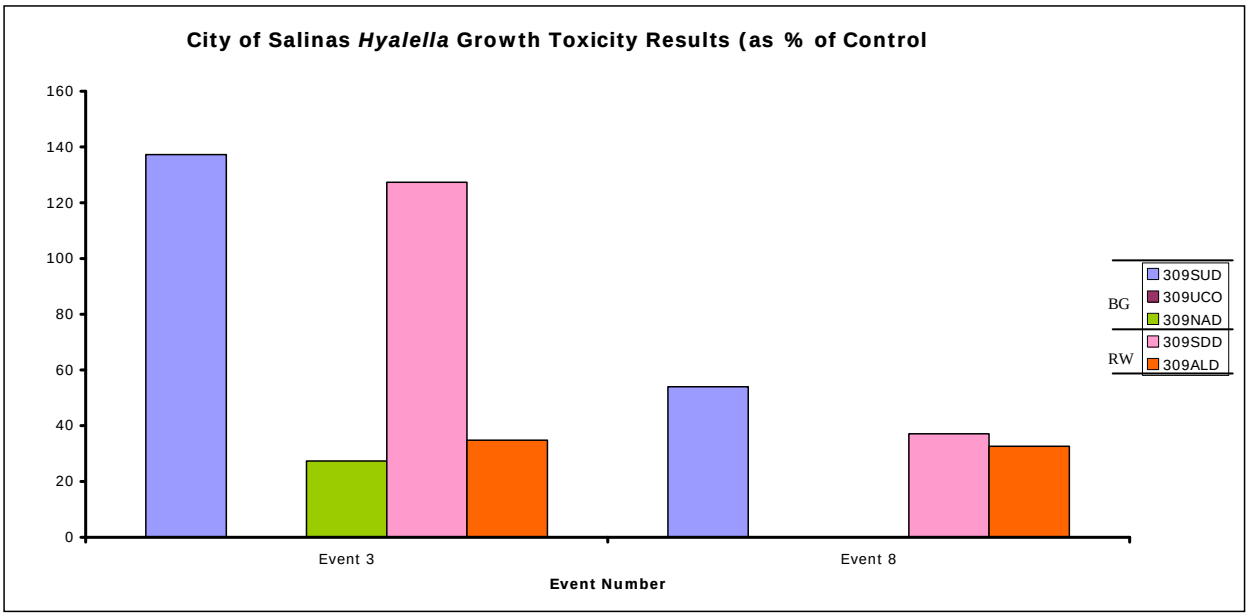

Figure 19b: *Hyalella* toxicity test growth results for SSMP sediment samples; BG = background site and RW = receiving water site.

2.4 Bioassessment Data

The SSMP performs bioassessment monitoring at background and receiving water sites. There was no water present at the 309GAB site during the September 2006 and April 2007 monitoring.

Bioassessment: Physical Habitat

As per guidance provided by RWQCB staff, biological assessment samples were collected during Fall 2006 since samples could not be collected during Spring 2006. Bioassessment samples were collected during Spring 2007, as required in the MRP. It is important to note the benthic community should not be compared between seasons since seasonal differences alone could account for changes in organism metrics. However, the data can be used to compare SSMP sites sampled *within* the same season. There was no water present in the channel at the Gabilan Creek site during both monitoring events, therefore there is no bioassessment data available for this monitoring site.

During Fall 2006, the Background sites ranked as poor (309NAD and 309UCO) or marginal (309SUD) for physical habitat quality, primarily due to little water in the channel, the presence of predominately fine sediment materials, low percentage of vegetation on the banks, and little or no riparian corridor (Table 3a). There were only minor differences in physical habitat quality at the 309SDD Receiving Water site, which ranked as poor, when compared to the 309SUD Background site. The 309ALD Receiving Water site ranked as suboptimal for physical habitat quality, which was the best habitat ranking of all SSMP monitoring sites.

Table 3a. CSBP physical habitat characteristics for SSMP stations during Fall 2006.

Physical Habitat Parameters	Background Sites			Receiving Water sites	
	309NAD	309UCO	309SUD	309SDD	309ALD
Epifaunal Substrate/Available Cover	1	10	2	2	13
Embeddedness	1	1	0	0	17
Velocity/Depth Regimes	1	2	0	0	4
Sediment Deposition	0	2	4	2	6
Channel Flow Status	1	6	5	2	9
Channel Alteration	3	1	15	12	15
Frequency of Riffles	1	1	0	0	15
Bank Stability	6	6	2	2	16
Vegetative Protection	5	6	12	12	17
Riparian Vegetative Zone	2	0	18	8	11
Total Habitat Score	**21**	**35**	**58**	**40**	**123**

Note – 309GAB site was dry (no water in channel), therefore bioassessment monitoring not performed.

During Spring 2007, the Background sites again ranked as poor (309NAD and 309UCO) or marginal (309SUD) for physical habitat quality, primarily due to little water in the channel, the presence of predominately fine sediment materials, low percentage of vegetation on the banks, and little or no riparian corridor (Table 3b). The 309SDD Receiving Water site had a similar physical habitat quality ranking as the 309SUD Receiving Water site. The 309ALD Receiving Water site ranked as poor for

physical habitat quality, for reasons similar to the poor ranking noted for the 309NAD and 309UCO Background sites.

Table 3b. CSBP physical habitat characteristics for SSMP stations during Spring 2007.					
Physical Habitat Parameters	Background Sites			Receiving Water sites	
	309NAD	309UCO	309SUD	309SDD	309ALD
Epifaunal Substrate/Available Cover	1	0	2	5	3
Embeddedness	0	0	2	0	1
Velocity/Depth Regimes	3	0	7	7	1
Sediment Deposition	1	0	2	2	1
Channel Flow Status	2	0	6	5	6
Channel Alteration	6	2	9	9	3
Frequency of Riffles	16	0	9	12	4
Bank Stability	8	1	10	9	2
Vegetative Protection	7	2	8	3	4
Riparian Vegetative Zone	1	0	17	12	1
Total Habitat Score	**45**	**5**	**72**	**64**	**26**

Note – 309GAB site was dry (no water in channel), therefore bioassessment monitoring not performed.

There were negligible differences in other habitat quality measurements (e.g., embeddedness, substrate consolidation) and the percentage of different habitat types during Fall 2006, since most sites were most dominated by the presence of fine sediment materials (Table 4a). The 309ALD Receiving Water site had the most diverse benthic particle size of all sites (Table 5a).

Table 4a. Additional physical habitat characteristics for SSMP stations during Fall 2006.					
Physical Habitat Parameters	Background Sites			Receiving Water Sites	
	309NAD	309UCO	309SUD	309SDD	309ALD
Width (m)[1]	1.0	4.2	15.7	5	5.0
Depth (m)[1]	0.03	0.54	0.21	0.10	0.9
Velocity (m/s)[1]	<0.1	<0.1	<0.1	<0.1	<0.1
% Stream Gradient[1]	0	0	0	0	0
Substrate Consolidation[1, 2]	M	M	M	M	M
Mean % Embeddedness[1]	100	100	100	100	100
% Canopy[1]	52	5	1	3	10
Habitat Category Percentage					
Submerged vegetation	0	5	0	0	10
Hard substrate	0	1	0	0	0

Soft substrate (mud or sand)	70	90	95	99	75
Stream bank vegetation	29	3	5	1	10
Woody debris	1	1	0	0	5

1 – As averaged for the reach based on sampling 3 transects for the reach.
2 – Qualitatively assessed as loose (L), moderate (M), and firm (F).

There were again negligible differences in other habitat quality measurements (e.g., embeddedness, substrate consolidation) during Spring 2007 (Table 4b). There were differences in the habitat types that occurred at each site, with an increase in soft bottom (*i.e.,* mud) at the 309SDD Receiving Water site when compared to the upstream 309SUD Background site. Data from future monitoring events will help establish if this is a short-term or long-term trend. The 309ALD Receiving Water site had the most diverse habitat types of all sites, while the 309SUD background site had the most diverse benthic particle size of all sites (Table 5b).

Table 4b. Additional physical habitat characteristics for SSMP stations during Spring 2007.

Physical Habitat Parameters	Background Sites			Receiving Water Sites	
	309NAD	309UCO	309SUD	309SDD	309ALD
Width (m)[1]	1.0	3.4	2.3	5.3	5.7
Depth (m)[1]	0.07	0.12	0.08	1.0	0.1
Velocity (m/s)[1]	0.15	0.03	0.32	0.15	0.27
% Stream Gradient[1]	1.0	0	0	0	0
Substrate Consolidation[1, 2]	M	L	M	M	M
Mean % Embeddedness[1]	100	100	51	99	100
% Canopy[1]	51	0	4	4	4
Habitat Category Percentage					
Submerged vegetation	0	15	40	15	15
Hard substrate	0	0	0	10	0
Soft substrate (mud or sand)	90	55	30	60	45
Stream bank vegetation	10	30	0	5	30
Woody debris	0	0	30	10	10

1 – As averaged for the reach based on sampling 3 transects for the reach.
2 – Qualitatively assessed as loose (L), moderate (M), and firm (F).

Table 5a. Modified EMAP particle size assessment for SSMP stations during Fall 2006.					
Benthic Particle Size Composition	Background Sites			Receiving Water Sites	
	309NAD	309UCO	309SUD	309SDD	309ALD
% Bedrock (smooth)	0	0	0	0	0
% Bedrock (rough)	0	0	0	0	0
% Large Boulder (1000 - 4000 mm)	0	0	0	0	0
% Small Boulder (250 – 1000 mm)	0	0	0	0	0
% Cobble (64 – 250 mm)	0	0	0	0	7
% Coarse Gravel (16 – 64 mm)	0	0	0	0	27
% Fine Gravel (2 – 16 mm)	0	0	0	0	33
% Sand (0.06 – 2 mm)	50	0	100	100	0
% Fines (silt, clay, muck, not gritty)	50	100	0	0	28
% Hardpan (firm, consolidated fine	0	0	0	0	0
% Wood	0	0	0	0	5
% Concrete/asphalt	0	0	0	0	0
% Other	0	0	0	0	0

Table 5b. Modified EMAP particle size assessment for SSMP stations during Spring 2007.					
Benthic Particle Size Composition	Background Sites			Receiving Water Sites	
	309NAD	309UCO	309SUD	309SDD	309ALD
% Bedrock (smooth)	0	0	0	0	0
% Bedrock (rough)	0	0	0	0	0
% Large Boulder (1000 - 4000 mm)	0	0	0	0	0
% Small Boulder (250 – 1000 mm)	0	0	0	0	0
% Cobble (64 – 250 mm)	0	0	0	0	0
% Coarse Gravel (16 – 64 mm)	0	0	0	0	0
% Fine Gravel (2 – 16 mm)	0	0	41	0	0
% Sand (0.06 – 2 mm)	100	0	45	93	0
% Fines (silt, clay, muck, not gritty)	0	100	4	1	87
% Hardpan (firm, consolidated fine	0	0	3	0	0
% Wood	0	0	7	6	7
% Concrete/asphalt	0	0	0	0	6
% Other	0	0	0	0	0

Bioassessment: Benthic Community Metrics

Biological metrics for the SSMP samples are presented in Tables 6a and 6b for samples collected during Fall 2006 and Spring 2007, respectively. As only one SSMP sampling area (i.e., Salinas River) allows for a direct assessment of benthic community metrics upstream and downstream of a City discharge, the following narrative is focused on the 309SUD and 309SDD sites.

Richness Measures
During Fall 2006, there were more taxa (i.e., richness) present at the 309SUD Background site than at the 309SDD Receiving Water site (i.e., 29 compared to 21, respectively). Both sites had a similar number of EPT taxa. There were only minor differences in the richness measures during Spring 2007 monitoring.

Composition Measures
There were very few (i.e., <4%) Baetidae and no Hydropsychidae at both the 309SUD Background site and 309SDD Receiving Water site during Fall 2006; here were few EPT taxa present at either site. Similar data was obtained during Spring 2007.

Tolerance/Intolerance Measures
During Fall 2006, there were moderate tolerance values at both the 309SUD Background site and 309SDD Receiving Water site. The percentage of tolerant organisms was greater at the 309SDD site than at the 309 SUD site, and the dominant taxa accounted for between 42% at the 309SDD site and 28% at the 309SUD site. The tolerance measures were similar at both sites during Spring 2007.

Trophic Measures
The benthic organism composition was similar for the 309SUD Background site and 309SDD Receiving Water site during both Fall 2006 and Spring 2007.

Abundance
During Fall 2006, there were 1672 organisms per square foot at the 309SUD Background site and 3602 organisms per square foot 309SDD Receiving Water site. During Spring 2007, there were 2579 organisms per square foot at the 309SUD Background site and 2075 organisms per square foot 309SDD Receiving Water site.

Typically, select biological metrics are combined (or integrated) to develop a benchmark for determining if the benthic community is in relatively good or poor shape. The City of Salinas and their consultant will work with the RWQCB staff to determine if specific Indices of Biological Integrity (IBIs) have been developed for low gradient streams within the Central Coast Region as has been done for Southern California. Without such IBIs, only general comparisons of individual metrics can be done during each monitoring event (as was done above) and long-term trends can be addressed only with additional (i.e., future) monitoring data. The data collected to date is insufficient for determining if SSMP urban discharges are affecting the benthic community at the Receiving Water sites.

Table 6a. Biological metrics for BMIs collected from SSMP stations during Fall 2006.

Metric	Background Sites									Receiving Water Sites					
	309NAD			309UCO			309SUD			309SDD			309ALD		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
Richness Measures															
Taxa Richness	12	9	11	9	2	18	29	4	12	21	6	29	13	3	19
EPT Taxa	0	0	0	0	0	0	3	1	17	3	3	94	0	0	0
Composition Measures															
EPT Index	0	0	0	0	0	0	2	1	33	4	6	138	0	0	0
Sensitive EPT Index	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent Hydropsychidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent Baetidae	0	0	0	0	0	0	2	1	45	4	5	154	0	0	0
Tolerance/Intolerance															
Tolerance Value	7.0	7.6	6.9	6.5	0.8	12.	7.2	0.3	4.3	7.8	0.2	2.6	7.9	0.1	1.0
Percent Intolerant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent Tolerant Organisms	38	28	30	5	4	80	11	7	60	19	23	120	17	7	39
Percent Dominant Taxa	34	43	61	65	8	12	28	8	30	42	12	28	70	11	15
Trophic Measures															
Percent Collectors (CG)	14	0.7	1	28	13	46	51	3	6	43	12	28	84	5	6
Percent Filterers (FC)	0	0	0	5	5	101	16	18	110	7	6	87	1	1	68
Percent Scrapers (SC)	34	26	62	1	1	55	18	11	61	14	8	53	1	1	111
Percent Predators (P)	29	67	28	65	8	12	8	5	65	1	1	101	9	5	60
Percent Shredders (SH)	23	0	1	0	0	0	1	1	69	0	0	0	1	1	68
Percent Piercer-Herbivores	0	0	0	0	0	0	5	4	84	33	27	82	4	7	173
Unclassified	0	0	0	0	0	0	1	1	59	0	0	0	0	0	0
Abundance Measures															
Abundance (per square foot)	452	257	57	3020	973	32	1672	876	52	3602	2755	76	144	72	50

Note – CV (coefficient of variation) is presented as %.

Table 6b. Biological metrics for BMIs collected from SSMP stations during Spring 2007.

Metric	Background Sites									Receiving Water Sites					
	309NAD			309UCO			309SUD			309SDD			309ALD		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
Richness Measures															
Taxa Richness	11	2	20	8	2	28	25	3	12	23	3	14	25	7	27
EPT Taxa	0	0	0	0	0	0	1	1	43	1	1	100	0	0	0
Composition Measures															
EPT Index	0	0	0	0	0	0	1	2	123	0.3	0.3	97	0	0	0
Sensitive EPT Index	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent Hydropsychidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent Baetidae	0	0	0	0	0	0	1	2	123	0.3	0.3	97	0	0	0
Tolerance/Intolerance															
Tolerance Value	9.1	0.3	3.5	6.8	0.4	6.5	6.8	0.5	6.9	7.0	0.3	4.9	8.6	0.3	3.6
Percent Intolerant	0	0	0	0	0	0	1	1	99	0	0	0	0	0	0
Percent Tolerant Organisms	81	5	6	16	10	64	2	2	71	6	6	100	62	5	8
Percent Dominant Taxa	62	13	21	61	8	13	51	11	21	50	10	21	42	11	27
Trophic Measures															
Percent Collectors (CG)	79	9	11	36	9	26	26	21	80	32	8	26	72	5	7
Percent Filterers (FC)	0	0	0	0	0	0	46	19	42	51	9	19	2	2	81
Percent Scrapers (SC)	5	3	70	0	0	0	18	10	56	13	6	49	4	1	17
Percent Predators (P)	6	4	65	63	9	15	1	0	40	0	0	0	10	5	54
Percent Shredders (SH)	10	2	23	0	0	0	4	3	65	2	1	70	12	4	34
Percent Piercer-Herbivores	0	0	0	0	0	0	4	8	168	0	0	0	1	0	49
Unclassified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Abundance Measures															
Abundance (per square foot)	169	58	34	931	750	81	3706	2579	70	2461	2075	84	292	73	25

Note – CV (coefficient of variation) is presented as %.

2.5 Summary

Given the occurrence of exceedances of water quality objectives at background sites that confound the interpretation of impacts from Salinas stormwater at receiving water sites, the City of Salinas will be seeking assistance from the Regional Board to develop collaborative monitoring efforts with the CCAMP and CMP. These programs, as well as the SSMP, would mutually benefit from a study design that was established to better understand the impacts of Salinas stormwater on receiving waters.

Attachment 4 of the SSMP permit indicates that “the Permittee shall develop threshold levels for monitoring results whereby exceedances of the threshold will require follow-up investigations to be conducted to identify the source of the exceedance”. The City of Salinas will work with their consultant team and the Regional Board to address the requirement to develop “threshold levels” for the constituents monitored at the Urban Discharge sites. This may include the collection of additional samples immediately downstream of the Urban Discharge pipe to determine if receiving waters are affected by the discharge, as well as samples upstream of the discharge to determine if the receiving water already exceeds a water quality objective.

2.6 Sampling site source water identification.

As only specific discharges from uncontaminated sources are permitted for discharge to the Salinas storm system City staff worked with the monitoring program consultant, Pacific Ecorisk, to identify sources of discharges during each sampling event.

Urban discharge site 309UO7

Figure 1

This urban discharge site receives drainage from the Moffett Business Park immediately upstream of the discharge site. This site also accepts drainage from specific sections of the Salinas Airport runway and taxiway system grounds and from agricultural lands northeast of the airport. Agricultural lands, northeast of the airport, drain through an open drainage ditch that cuts across and under airport runways and enters the storm drain system on the airport property near the Airport Control Tower then to the storm system on the Moffett Street business park.

Dry weather watering and wet weather runoff of these agricultural lands discharge to this City urban discharge site. Although a specific assessment of landscape irrigation practices within the business park has not been assessed it appears that the common areas and specific individual businesses within the complex are on uncoordinated schedules and at various times the area may be in various states of drainage through the storm system. Sags in the storm pipeline retain standing water between active discharges. This condition can allow the mixing of landscape irrigation runoff and standing water from periodic agricultural uses to mix and influence water present at the discharge site.

Typical sources of water identified at the time of the sampling events at this location have been from urban landscape irrigation practices from the upstream Moffett Street Business Park. During most dry weather conditions staff oberservations have not identified an active source of a discharge but rather water from previous upstream landscape irrigation practices in various states of discharge.

However during dry weather Event 4, September 2006, staff noted a sample that detected the presence of detergent. A sourcing of water in the system noted a small discharge from the Monterey Gourmet Foods site at 1528 Moffett Street. A joint inspection with the site manager found a leaking valve from a water softener leaking into the storm drain at the rear of the facility. The site staff made immediate repairs to abate the flow.

Following the dry weather monitoring Event 9, on June 25, 2007, a sample again indicating the presence of detergent led City staff to source a discharge once again to the Monterey Gourmet Foods site at 1528 Moffett Street. Staff identified two canister disinfectant spray containers at the rear of the facility set to mist the forklift ramp area entering the cold room to disinfect the wheels of the forklifts before entering the building. The overhead water pipe leak was misting water into the disinfectant spray causing it to runoff into the rear facility storm drain. Minor leaks under the containment wall of the DAF skimmer were also noted leaking to the storm drain. Monterey Gourmet Foods was contacted and drain inserts were placed to block discharges from the facility storm drains to the City storm system. The facility's annual Industrial NPDES inspection was advanced to the following day on June 26, 2007. A Notice of Violation and Compliance Order was subsequently issued to Monterey Gourmet Foods for the illicit discharges and corrective actions needed for specific site BMPs. Monterey Gourmet Food was referred for enrollment into the General Industrial Activities Storm Water Permit program with the Regional Water Quality Control Board. Monterey Gourmet Food has complied and in process of making the required site improvements and is in compliance with the City's stormwater program.

Following dry weather sampling Event 10, on July 24, 2007, a steady trickle discharge was noted at the 30907 site. Follow-up sourcing located a steady water discharge from the McGraw-Hill facility parking lot storm drain located just 100 feet from the 309UO7 urban discharge site. The McGraw-Hill facility is closed for business but officials from the Monterey facility contacted the landscape contractor and located a leaking water valve within the facility compound. A repair was made and the flow was stopped.

A recent dry weather monitoring event at this found no discharge at this urban discharge site.

Urban Discharge Site 19:

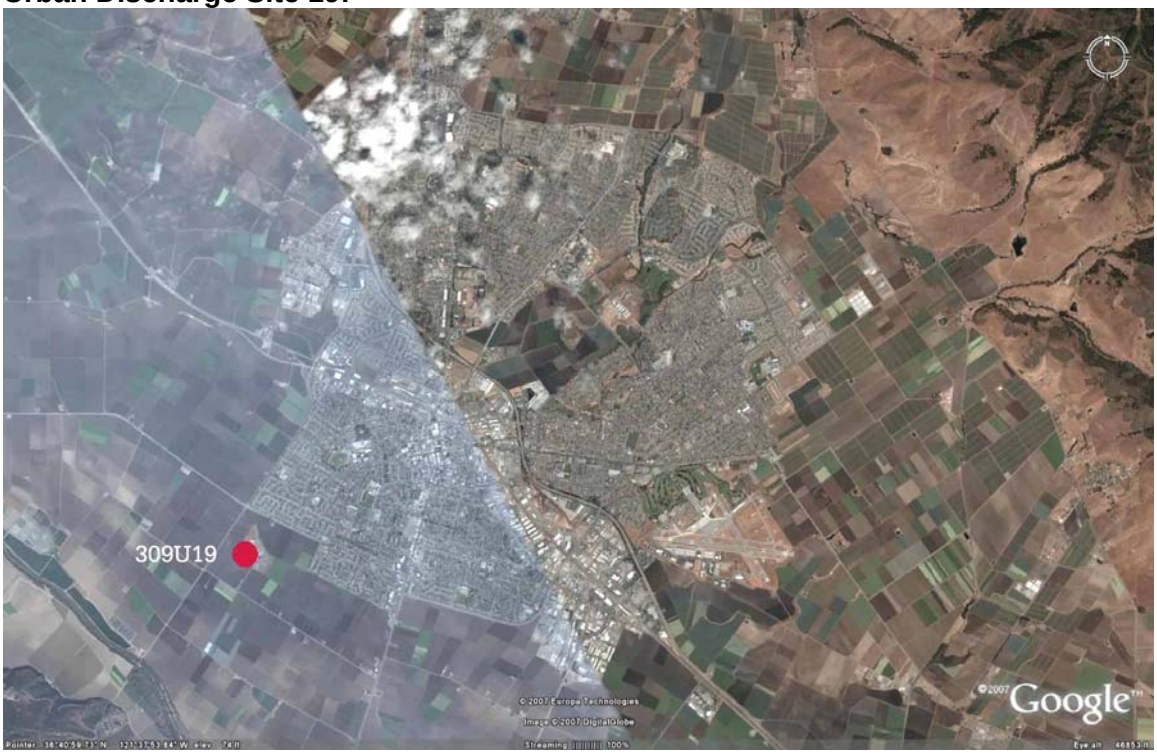

Figure 2

This urban discharge site serves a significant area of south Salinas and is typically influenced by Urban landscape watering, other residential uses such as incidental car washing and also ground water pumped from the City's storm water detention basin. This site is the City's storm water pump stations open air pit where water from the southern area of the City passes through on its way to the Salinas River outfall. During dry weather any active water discharges will gravity flow through the pump station. The pumps in the station are only active during significant storm events where flows are significant enough to trigger the high water floats to assist in discharging rain water away from the City. The pumps are also used to assist with discharging storm flows when the Salinas River rises above the outfall pipe flapper gate. This assists storm water flows away from the City by overcoming the head pressure of the Salinas River flows against the outfall pipe.

This urban discharge site, by the nature of its construction and purpose, will always have water at the site. Typically during dry weather the water in the stormwater pit appears to be standing as water use from within the City accumulates at the site. During the dry weather sampling events a ride through local neighborhoods confirmed water use from local overwater of

landscapes with water standing in local gutters. A significant overwatering of landscape was in progress at a distant condominium complex on
Byron Drive following dry weather Event 9. No other discharges were observed.

This site also receives discharges from a ground water pump that pumps ground water from under the City's nearby storm water overflow basin. This basin serves to detain overflow storm water during significant storm events that exceed the storm systems ability to readily discharge the flows. Flow is detained and feeds water back into the system as stormwater flows subside. During dry weather the pumps are active to remove ground water so it does not surface at the mouth of the basin to cause a vector, weed and water nuisance near adjacent farm fields. The pumps are active at varying times and pumping rates but were heard discharging up the pipeline during Event #9. This ground water has not been sampled. Staff will sample the ground water to determine its potential influence on the urban discharge site. This site is also separated from the outfall to the Salinas River by approximately one mile of agricultural land. There is potential for infiltration from agricultural crop watering or ground water intrusion. Staff will assess the need for an additional sampling of the outfall discharge to assess the potential agricultural and other influences between the 309U19 site and the outfall discharge to the Salinas River.

Urban Discharge Site 309U32:

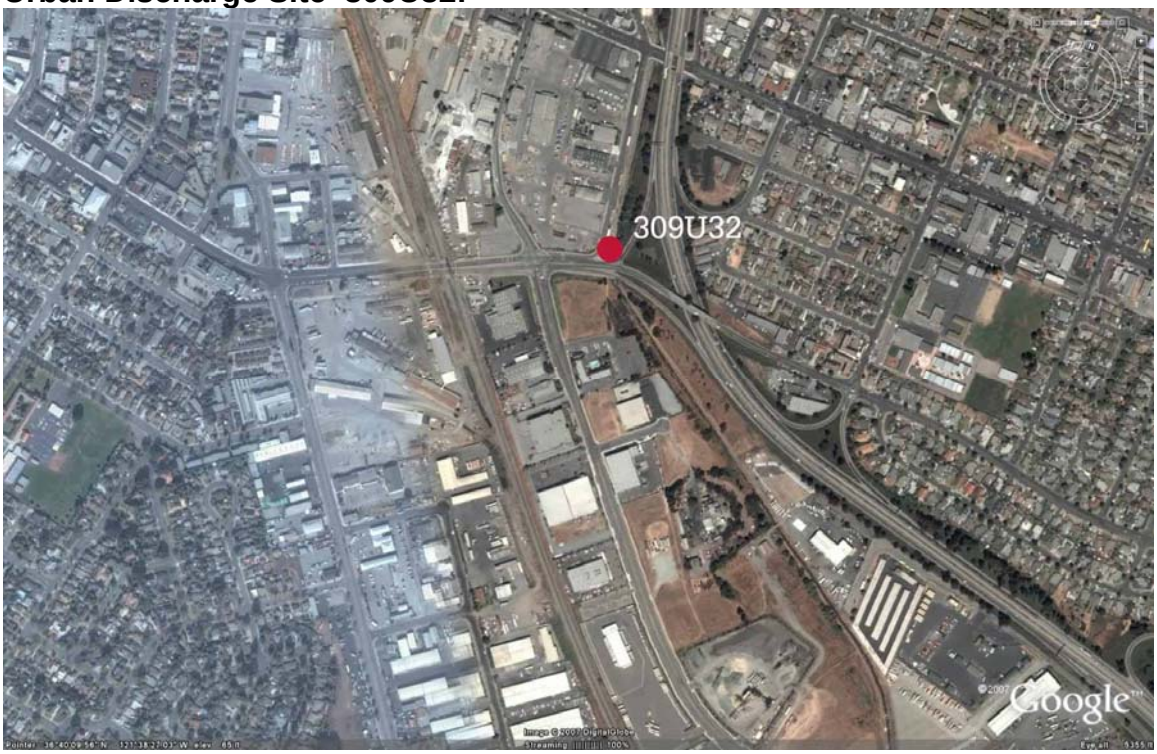

Figure 3

This urban discharge site serves a smaller area consisting of light industry and commercial businesses. The consistent primary discharger to this location during dry weather is a Regional Water Quality Control Board permitted discharge of agricultural process water from the Unicool Company at 320 Abbott Street. The Unicool facility maintains a series of small aeration ponds between the rear of the facility and the Union Pacific railroad tracks. This process water continually discharges a significant flow to the city storm system during the dry weather process season and was sourced during each of the dry weather events. The 309U32 site is also heavily influenced by the flows at the point of discharge into Reclamation Ditch 1665. The

outfall pipe discharges below the water flow line in the Reclamation Ditch. During higher flows in the Reclamation Ditch any discharge flow can be masked with water surcharged into the outfall pipe or mixing at the mouth of the pipe. Any discharge at this site typically cannot be separated from the influence of flows from the Reclamation Ditch. To more accurately identify pollutant sources from annual site sampling City staff may recommend the monitoring site either be moved to the nearest upstream manhole for sampling or the additional upstream site be added to the monitoring program to remove the influence of waters mixing from the Reclamation Ditch. The City may consider insitu sampling of the Unicool discharge and may request the monitoring data submitted by the Unicool Company for its permitted discharge.

Urban Discharge Site 309U52:

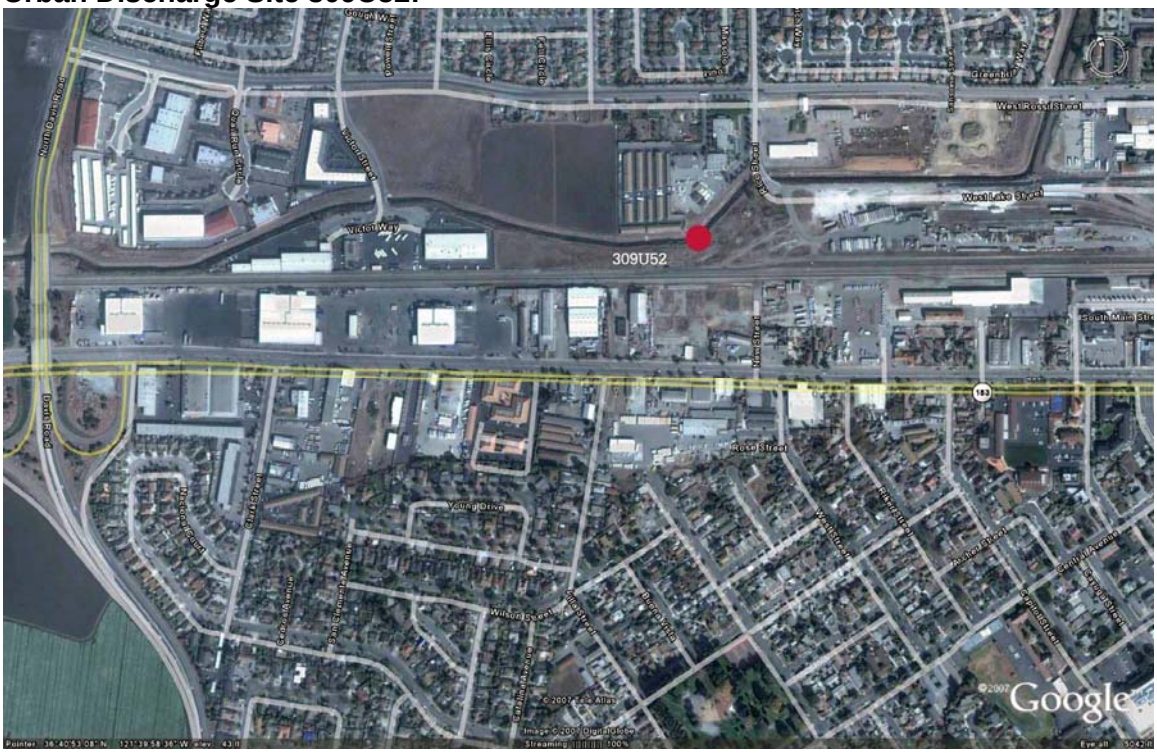

Figure 4:

This urban discharge site generally receives discharges from the West Market Street area consisting of a mix of light industry, commercial businesses and residential housing. Water present during dry weather conditions has been sourced to a pumped ground water discharge near W. Market Street on Riker Street. During a 2006 dry weather sampling event an insitu sample indicated the presence of detergent. City staff sourced this discharge to the pumped ground water mixing with the water from a car being washed in the driveway of a local auto body shop and along with a Monterey Country Health Department official, addressed the issue with the staff person involved. Subsequent sourcing at this location was attributed to discharge from the pumped ground water into the City storm system.

On March 8, 2007, the city was copied by the Monterey County Health Department with a document from the California Regional Water Quality Control Board indicating the discharges associated with the pumped ground water are from a Regional Board permitted discharge from highly treated ground water. The scope and intent of the ground water mitigation is still unclear. The applicant was enrolled in a Waiver of Wastewater Discharge Requirements in 1996. The applicant was directed to enroll in the General Stormwater Permit program if the intent is to

continue the discharge. Monitoring records from the applicants consultant indicate that in the last quarter of 2006 approximately 361,301 gallons were discharged to the storm drain. These discharges may not be distinguish from wet weather flows during storm events. City staff may request sampling data from this permitted discharge to determine its influence on the discharge site.

Receiving Water Site 309 ALD:

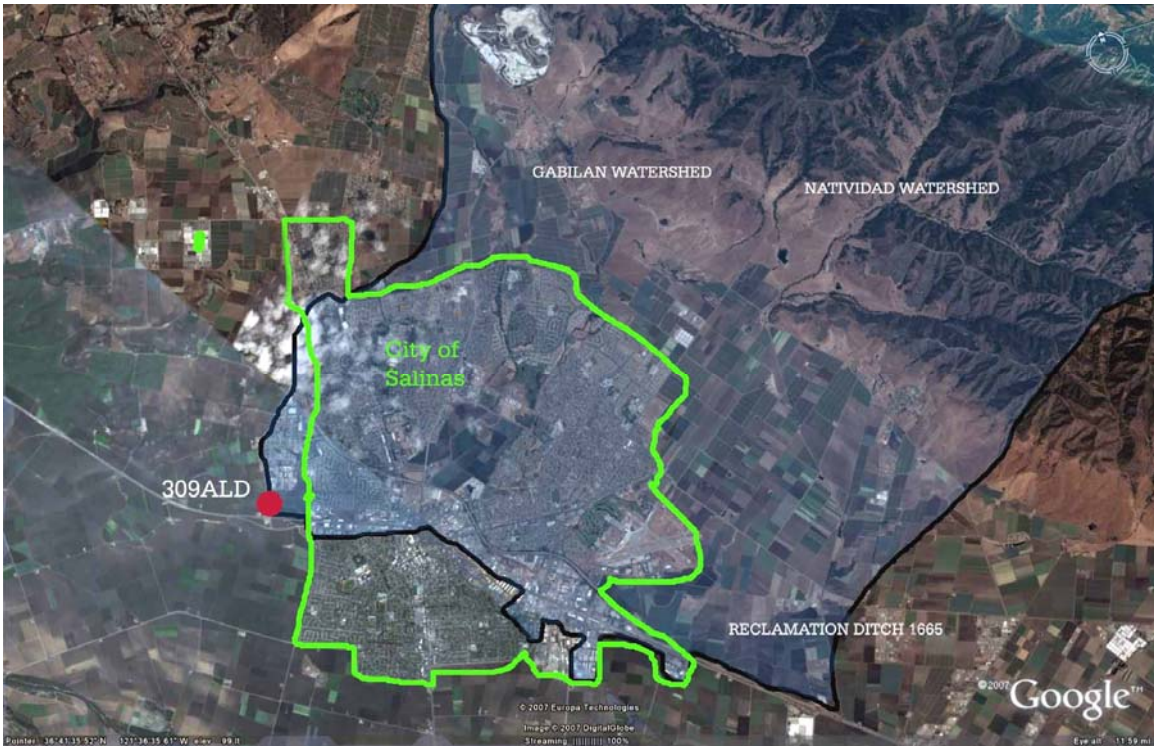

Figure 5: Blue shading indicates general background drainage area to CCAMP receiving water site 309ALD. The Green outline represents a general rendering of the City of Salinas. This is not intended as a precise depiction of either the City of Salinas of the surrounding watersheds. The intent of this picture is to convey a sense of the potential scope of activities, land uses that influence this receiving water site. The full extent of the influence and origins of the Reclamation Ditch to the south of Salinas has not been fully investigated.

This sample site is to the west of the City and is sampled in the Reclamation Ditch 1665. This receiving water site is substantially influenced by urban, agricultural and rural uses from the City of Salinas, the Gabilan and Natividad Watersheds and Reclamation Ditch 1665 from south of the City. The reclamation ditch is the major receiving water body for watersheds north, east and south of the City. The majority of water passing through this channel is from watershed sources outside the City. City influences are from urban discharges from storm pipes and other drainage from within the City proper. During this reporting period the 309ALD site received water from four Regional Board permitted discharges as noted below.

- A low threat discharge permit for a produce cooling and shipping company that until recently discharged process water to CCAMP site 309AXX. A notice of violation was issued by the Regional Board on March 8, 2007 for excessive discharge of Total Dissolved Solids. The City cooperated in an effort to remove this sites discharges from

the 309AXX site and allowed a diversion of flows to the City's Industrial Waste Treatment Facility. CCAMP 309AXX is part of an ongoing investigation by the City to identify and remove flows and pollutant discharges from this location. As part of this investigation it was prudent to remove a known discharge to aid in identifying remaining discharges to the storm system.

- A Regional Board permitted discharge from a produce cooling a processing facility at the 309U32 noted in Figure 3 above is ongoing throughout the dry weather season.
- A Regional Board permitted discharge of ground water to Reclamation Ditch 1665 at the 309U52 site as noted above.
- A Regional Board permitted discharge of process water to Reclamation Ditch 1665 from a produce cooling and shipping company approximately ½ mile upstream of the 309 ALD site. This site received a Notice of Violation from the Regional Water Board for excessive discharge of Chlorine in early 2007.

Additional discussion will be needed with Regional Board Staff to assist the City in addressing the findings of the current monitoring effort. By example, the summary discussion noted in Section 2.2 of the monitoring report points to issues involving the toxicity assessment at receiving water site 309ALD and its relationship to the presence of toxicity impacts noted from background sites 309NAD and 309UCO.

This is the second year implementation of the monitoring program. The City will work with it's consultant, Pacific Ecorisk, with consultation with Regional Board staff to assess the actions needed as a result of these findings for compliance with the Permit requirements. City staff has requested direction from the Regional Board regarding implementation of the monitoring program in regards to assessment and required follow-up of toxicity issues specific to background and receiving waters. Assistance and guidance from the Regional Board was requested in a phone conference on April 1, 2007 and again formally at the general meeting of the Regional Board on June 7, 2007.

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The monitoring effort raises questions of concern regarding interpretation of findings and actions needed to address those findings. The City looks forward to meeting with Regional Board staff, Ag Waiver representatives and other monitoring interests to address the effectiveness of the current program and to assess its ability to sufficiently address pollutants of concern.

WORK PROGRAM RY 2007-2008

The City's Monitoring and Water Quality Testing Work Program for RY 2007-2008 is contained within its Quality Assurance Project Plan (QAPP). In August 2006, the City submitted its QAPP to the Central Coast Regional Water Quality Control Board. The QAPP identifies the sampling requirements that the City will meet and contains a Quality Assurance Plan that will be used to implement the City's monitoring program consistent with the requirements of Attachment 5 of Order R3-2004-0135. The QAPP contains the following program elements:

Project Management

- Project Organization and Responsibility
- Problem Definition
- Project Description
- Quality Objectives and Criteria for Data Measurement
- Training and Certification
- Documentation and Records

Data Validation and Usability

- Sampling Process Design
- Sample Collection Methods
- Sample Handling and Custody
- Analytical Methods
- Quality Control
- Instrument/Equipment Testing, Inspection, and Maintenance
- Instrument/Equipment Calibration and Frequency
- Inspection/Acceptance Requirements for Supplies and Consumables
- Non-direct Measurements
- Data Management

Assessment and Oversight

- Assessments and Res
- ponse Actions
- Reports to Management
- Corrective Actions
- Analytical Data and Quality Assurance Report
- Site Management

Data Validation and Usability

- Data Review, Validation, and Verification
- Verification and Validation, Methods
- Reconciliation with User Requirements

Program

- Stormwater Monitoring Program Monitoring Sites
- Constituents to be Monitored
- Frequency, General Class of Parameters and Permit Requirements
- Analytical Methods and Quality Control Requirements.

The annual monitoring results for 2007 and subsequent monitoring years may be used to refine the SWMP to reduce pollutant loadings and protect and enhance the beneficial uses of the receiving waters in the urbanized areas of the City.

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Appendix A – SSMP Data

*** Highlighted results denote a water quality exceedence**

Site Code	Event	Constituent	Value	Units	Date Collected
309SUD	3	pH	7.67	pH	9/6/06
309SUD	3	Hyalella Growth	137.27	% Control	9/6/06
309SUD	3	Hyalella Survival	98.80	% Control	9/6/06
309SUD	3	Temperature	17.65	Degrees C	9/6/06
309SUD	3	Turbidity	0.60	NTU	9/6/06
309SUD	3	Conductivity	2366.00	uS/cm	9/6/06
309UCO	3	Hyalella Growth	0.00	% Control	9/6/06
309UCO	3	Hyalella Survival	0.00	% Control	9/6/06
309UCO	3	pH	7.95	pH	9/6/06
309NAD	3	Hyalella Growth	27.33	% Control	9/6/06
309NAD	3	Hyalella Survival	35.00	% Control	9/6/06
309SDD	3	Hyalella Growth	127.33	% Control	9/6/06
309SDD	3	Hyalella Survival	100.00	% Control	9/6/06
309ALD	3	Hyalella Growth	34.78	% Control	9/6/06
309ALD	3	Hyalella Survival	72.50	% Control	9/6/06
309UCO	3	Temperature	21.01	Degrees C	9/6/06
309NAD	3	pH	8.03	pH	9/6/06
309UCO	3	Turbidity	98.00	NTU	9/6/06
309UCO	3	Conductivity	913.20	uS/cm	9/6/06
309NAD	3	Temperature	26.63	Degrees C	9/6/06
309NAD	3	Turbidity	49.40	NTU	9/6/06
309NAD	3	Conductivity	1266.00	uS/cm	9/6/06
309SDD	3	pH	7.70	pH	9/6/06
309SDD	3	Temperature	18.29	Degrees C	9/6/06
309ALD	3	Temperature	18.34	Degrees C	9/6/06
309SDD	3	Turbidity	0	NTU	9/6/06
309SDD	3	Conductivity	1981	uS/cm	9/6/06
309ALD	3	pH	8.15	pH	9/6/06
309ALD	3	Turbidity	47.9	NTU	9/6/06
309ALD	3	Conductivity	1396.0	uS/cm	9/6/06
309U07	4	Unionized Ammonia (as N)	0.04	mg/L	9/26/06
309U07	4	Orthophosphate	1.50	mg/L	9/26/06
309U07	4	pH	8.16	pH	9/26/06
309U19	4	Unionized Ammonia (as N)	ND	mg/L	9/26/06
309U19	4	Orthophosphate	0.83	mg/L	9/26/06
309U07	4	Temperature	22.28	Degrees C	9/26/06
309U07	4	Chlorine	<0.2	ppm	9/26/06
309U07	4	Detergent	0.50	ppm	9/26/06
Site Code	Event	Constituent	Value	Units	Date Collected

309U07	4	Turbidity	6.00	NTU	9/26/06
309U07	4	Conductivity	987.30	uS/cm	9/26/06
309U19	4	pH	8.02	pH	9/26/06
309U19	4	Temperature	17.00	Degrees C	9/26/06
309U19	4	Detergent	<0.1	ppm	9/26/06
309U19	4	Chlorine	<0.2	ppm	9/26/06
309U32	4	Unionized Ammonia (as N)	ND	mg/L	9/26/06
309U32	4	Orthophosphate	0.17	mg/L	9/26/06
309U32	4	pH	8.12	pH	9/26/06
309U19	4	Turbidity	0.0	NTU	9/26/06
309U19	4	Conductivity	2066.0	uS/cm	9/26/06
309U32	4	Temperature	16.88	Degrees C	9/26/06
309U52	4	pH	8.40	pH	9/26/06
309U32	4	Turbidity	12.90	NTU	9/26/06
309U32	4	Conductivity	1727.00	uS/cm	9/26/06
309U52	4	Temperature	17.51	Degrees C	9/26/06
309U32	4	Detergent	<0.1	ppm	9/26/06
309U32	4	Chlorine	<0.2	ppm	9/26/06
309U52	4	Unionized Ammonia (as N)	ND	mg/L	9/26/06
309U52	4	Orthophosphate	0.83	mg/L	9/26/06
309U52	4	Turbidity	0.0	NTU	9/26/06
309U52	4	Conductivity	2150.0	uS/cm	9/26/06
309U52	4	Detergent	0.2	ppm	9/26/06
309U52	4	Chlorine	<0.2	ppm	9/26/06
309U07	5	Unionized Ammonia (as N)	0.01	mg/L	10/18/06
309U07	5	Orthophosphate	0.70	mg/L	10/18/06
309U07	5	pH	7.64	pH	10/18/06
309U07	5	Temperature	16.10	Degrees C	10/18/06
309U07	5	Detergent	0.2	ppm	10/18/06
309U12	5	pH	8.21	pH	10/18/06
309U13	5	pH	7.54	pH	10/18/06
309U07	5	Chlorine	<0.2	ppm	10/18/06
309U17	5	pH	8.32	pH	10/18/06
309U18	5	pH	8.06	pH	10/18/06
309U12	5	Temperature	18.06	Degrees C	10/18/06
309U07	5	Turbidity	1.7	NTU	10/18/06
309U07	5	Conductivity	1001.0	uS/cm	10/18/06
309U19	5	Unionized Ammonia (as N)	ND	mg/L	10/18/06
Site Code	Event	Constituent	Value	Units	Date Collected
309U19	5	Orthophosphate	0.77	mg/L	10/18/06

309U12	5	Detergent	0.10	ppm	10/18/06
309U13	5	Temperature	19.37	Degrees C	10/18/06
309U17	5	Temperature	18.40	Degrees C	10/18/06
309U19	5	pH	8.00	pH	10/18/06
309U12	5	Chlorine	<0.2	ppm	10/18/06
309U13	5	Detergent	<0.1	ppm	10/18/06
309U13	5	Chlorine	<0.2	ppm	10/18/06
309U18	5	Temperature	17.45	Degrees C	10/18/06
309U17	5	Detergent	1.60	ppm	10/18/06
309U17	5	Chlorine	0.40	ppm	10/18/06
309U12	5	Turbidity	19.80	NTU	10/18/06
309U12	5	Conductivity	908.70	uS/cm	10/18/06
309U18	5	Detergent	0.20	ppm	10/18/06
309U18	5	Chlorine	<0.2	ppm	10/18/06
309U13	5	Turbidity	0.00	NTU	10/18/06
309U13	5	Conductivity	1560.00	uS/cm	10/18/06
309U17	5	Turbidity	2.80	NTU	10/18/06
309U17	5	Conductivity	1133.00	uS/cm	10/18/06
309U19	5	Temperature	18.59	Degrees C	10/18/06
309U18	5	Turbidity	9.50	NTU	10/18/06
309U18	5	Conductivity	1444.00	uS/cm	10/18/06
309U19	5	Detergent	<0.1	ppm	10/18/06
309U19	5	Chlorine	<0.2	ppm	10/18/06
309U32	5	Unionized Ammonia (as N)	ND	mg/L	10/18/06
309U32	5	pH	8.10	pH	10/18/06
309U19	5	Turbidity	0.3	NTU	10/18/06
309U19	5	Conductivity	1939.0	uS/cm	10/18/06
309U32	5	Orthophosphate	0.11	mg/L	10/18/06
309U32	5	Temperature	17.35	Degrees C	10/18/06
309U32	5	Turbidity	16.7	NTU	10/18/06
309U32	5	Conductivity	1774.0	uS/cm	10/18/06
309U52	5	pH	NR	pH	10/18/06
309U52	5	Temperature	NR	Degrees C	10/18/06
309U32	5	Detergent	<0.1	ppm	10/18/06
309U32	5	Chlorine	<0.2	ppm	10/18/06
309U66	5	Temperature	19.37	Degrees C	10/18/06
309U52	5	Unionized Ammonia (as N)	NR	mg/L	10/18/06
Site Code	Event	Constituent	Value	Units	Date Collected
309U52	5	Orthophosphate	NR	mg/L	10/18/06
309U66	5	pH	7.54	pH	10/18/06

309U66	5	Turbidity	0.0	NTU	10/18/06
309U66	5	Conductivity	1560.0	uS/cm	10/18/06
309U66	5	Chlorine	<0.2	ppm	10/18/06
309U66	5	Detergent	<0.1	ppm	10/18/06
309SUD	6	pH	7.93	pH	11/26/06
309SUD	6	Temperature	10.54	Degrees C	11/26/06
309SUD	6	Turbidity	6.00	NTU	11/26/06
309SUD	6	Conductivity	635.00	uS/cm	11/26/06
309SUD	6	Unionized Ammonia (as N)	ND	mg/L	11/26/06
309SUD	6	Orthophosphate	0.06	mg/L	11/26/06
309SUD	6	Algal Growth	614.64	% Control	11/26/06
309SUD	6	Algal Growth	470.59	% Control	11/26/06
309SUD	6	Ceriodaphnia Reproduction	100.00	% Control	11/26/06
309SUD	6	Ceriodaphnia Survival	100.00	% Control	11/26/06
309SUD	6	Fathead Minnow Growth	112.04	% Control	11/26/06
309SUD	6	Fathead Minnow Survival	100.00	% Control	11/26/06
309SUD	6	Nitrate as N	4.7	mg/L	11/26/06
309SUD	6	TDS	450	mg/L	11/26/06
309SUD	6	TOC	3.4	mg/L	11/26/06
309SUD	6	Total Coliform	>=1600	MPN/100	11/26/06
309SUD	6	Total Copper	ND	mg/L	11/26/06
309SUD	6	Total Zinc	ND	mg/L	11/26/06
309SUD	6	Fecal Coliform	>=1600	MPN/100	11/26/06
309SUD	6	E. coli	80	MPN/100	11/26/06
309U07	6	E. coli	>2400	MPN/100	11/26/06
309SUD	6	Detergent	NA	ppm	11/26/06
309SUD	6	Chlorine	NA	ppm	11/26/06
309U07	6	Unionized Ammonia (as N)	NR	mg/L	11/26/06
309U07	6	Orthophosphate	0.18	mg/L	11/26/06
309U19	6	E. coli	>2400	MPN/100	11/26/06
309U32	6	E. coli	>2400	MPN/100	11/26/06
309U07	6	pH	7.05	pH	11/26/06
309U52	6	E. coli	250	MPN/100	11/26/06
309U07	6	Nitrate as N	0.4	mg/L	11/26/06
309U07	6	TDS	52	mg/L	11/26/06
309U07	6	TOC	NR	mg/L	11/26/06
Site Code	Event	Constituent	Value	Units	Date Collected
309U07	6	Total Coliform	>=1600	MPN/100	11/26/06
309SDD	6	E. coli	>2400	MPN/100	11/26/06
309U07	6	Temperature	13.14	Degrees C	11/26/06

309U07	6	Detergent	NA	ppm	11/26/06
309U07	6	Chlorine	NA	ppm	11/26/06
309U07	6	Total Copper	NR	mg/L	11/26/06
309U07	6	Total Zinc	NR	mg/L	11/26/06
309U07	6	Fecal Coliform	>=1600	MPN/100	11/26/06
309U07	6	Turbidity	31.10	NTU	11/26/06
309U07	6	Conductivity	61.50	uS/cm	11/26/06
309U19	6	Unionized Ammonia (as N)	0.00	mg/L	11/26/06
309U19	6	Orthophosphate	0.60	mg/L	11/26/06
309U19	6	pH	7.06	pH	11/26/06
309U19	6	Nitrate as N	2.9	mg/L	11/26/06
309U19	6	TDS	150	mg/L	11/26/06
309U19	6	TOC	27.0	mg/L	11/26/06
309U19	6	Total Coliform	>=1600	MPN/100	11/26/06
309U19	6	Total Copper	0.019	mg/L	11/26/06
309U19	6	Total Zinc	0.088	mg/L	11/26/06
309U19	6	Fecal Coliform	>=1600	MPN/100	11/26/06
309U32	6	Nitrate as N	1.2	mg/L	11/26/06
309U19	6	Temperature	13.81	Degrees C	11/26/06
309U32	6	TDS	210	mg/L	11/26/06
309U32	6	TOC	NR	mg/L	11/26/06
309U32	6	Total Coliform	>=1600	MPN/100	11/26/06
309U32	6	Total Copper	NR	mg/L	11/26/06
309U32	6	Total Zinc	NR	mg/L	11/26/06
309U32	6	Fecal Coliform	>=1600	MPN/100	11/26/06
309U32	6	pH	5.52	pH	11/26/06
309U32	6	Unionized Ammonia (as N)	NR	mg/L	11/26/06
309U32	6	Orthophosphate	0.45	mg/L	11/26/06
309U19	6	Detergent	NA	ppm	11/26/06
309U19	6	Chlorine	NA	ppm	11/26/06
309U52	6	Nitrate as N	1.0	mg/L	11/26/06
309U52	6	TDS	320	mg/L	11/26/06
309U52	6	TOC	NR	mg/L	11/26/06
309U52	6	Total Coliform	>=1600	MPN/100	11/26/06
309U52	6	Total Copper	NR	mg/L	11/26/06
Site Code	Event	Constituent	Value	Units	Date Collected
309U19	6	Turbidity	77.50	NTU	11/26/06
309U19	6	Conductivity	186.50	uS/cm	11/26/06
309U52	6	Total Zinc	NR	mg/L	11/26/06
309U32	6	Temperature	12.35	Degrees C	11/26/06

309U52	6	pH	7.11	pH	11/26/06
309U32	6	Turbidity	179.40	NTU	11/26/06
309U32	6	Conductivity	309.30	uS/cm	11/26/06
309U52	6	Temperature	13.99	Degrees C	11/26/06
309U52	6	Unionized Ammonia (as N)	NR	mg/L	11/26/06
309U52	6	Orthophosphate	0.22	mg/L	11/26/06
309U32	6	Detergent	NA	ppm	11/26/06
309U32	6	Chlorine	NA	ppm	11/26/06
309SDD	6	Temperature	11.47	Degrees C	11/26/06
309U52	6	Fecal Coliform	>=1600	MPN/100	11/26/06
309U52	6	Turbidity	96.00	NTU	11/26/06
309U52	6	Conductivity	360.00	uS/cm	11/26/06
309SDD	6	Algal Growth	354.14	% Control	11/26/06
309SDD	6	pH	7.28	pH	11/26/06
309SDD	6	Algal Growth	362.09	% Control	11/26/06
309SDD	6	Ceriodaphnia Reproduction	182.66	% Control	11/26/06
309SDD	6	Ceriodaphnia Survival	100.00	% Control	11/26/06
309SDD	6	Fathead Minnow Growth	106.16	% Control	11/26/06
309SDD	6	Fathead Minnow Survival	100.00	% Control	11/26/06
309SDD	6	Unionized Ammonia (as N)	ND	mg/L	11/26/06
309SDD	6	Nitrate as N	4.6	mg/L	11/26/06
309SDD	6	Orthophosphate	0.34	mg/L	11/26/06
309SDD	6	TDS	380	mg/L	11/26/06
309SDD	6	TOC	13.0	mg/L	11/26/06
309SDD	6	Total Coliform	>=1600	MPN/100	11/26/06
309SDD	6	Total Copper	ND	mg/L	11/26/06
309SDD	6	Total Zinc	0.042	mg/L	11/26/06
309SDD	6	Fecal Coliform	540	MPN/100	11/26/06
309SDD	6	Turbidity	47.70	NTU	11/26/06
309SDD	6	Conductivity	649.20	uS/cm	11/26/06
309U52	6	Detergent	NA	ppm	11/26/06
309U52	6	Chlorine	NA	ppm	11/26/06
309SDD	6	Detergent	NA	ppm	11/26/06
309SDD	6	Chlorine	NA	ppm	11/26/06
Site Code	Event	Constituent	Value	Units	Date Collected
309SUD	7	pH	8.54	pH	2/10/07
309SUD	7	Unionized Ammonia (as N)	ND	mg/L	2/10/07
309SUD	7	Temperature	16.28	Degrees C	2/10/07
309SUD	7	Orthophosphate	0.087	mg/L	2/10/07
309SUD	7	Turbidity	12	NTU	2/10/07

309SUD	7	Algal Growth	288.98	% Control	2/10/07
309SUD	7	Ceriodaphnia Reproduction	86.16	% Control	2/10/07
309SUD	7	Ceriodaphnia Survival	90.00	% Control	2/10/07
309SUD	7	Conductivity	779	uS/cm	2/10/07
309SUD	7	Fathead Minnow Growth	117.31	% Control	2/10/07
309SUD	7	Fathead Minnow Survival	100.00	% Control	2/10/07
309SUD	7	Nitrate as N	3.8	mg/L	2/10/07
309SUD	7	TDS	500	mg/L	2/10/07
309SUD	7	TOC	12	mg/L	2/10/07
309SUD	7	Total Coliform	>=1600	MPN/100	2/10/07
309UCO	7	pH	7.53	pH	2/10/07
309SUD	7	Total Copper	0.002	mg/L	2/10/07
309SUD	7	Total Zinc	0.011	mg/L	2/10/07
309SUD	7	Fecal Coliform	540	MPN/100	2/10/07
309UCO	7	Temperature	14.59	Degrees C	2/10/07
309GAB	7	pH	NR	pH	2/10/07
309UCO	7	Unionized Ammonia (as N)	0.02	mg/L	2/10/07
309UCO	7	Orthophosphate	0.36	mg/L	2/10/07
309UCO	7	Algal Growth	290.49	% Control	2/10/07
309UCO	7	Nitrate as N	1.6	mg/L	2/10/07
309UCO	7	TDS	6	mg/L	2/10/07
309UCO	7	TOC	7.8	mg/L	2/10/07
309UCO	7	Turbidity	249.10	NTU	2/10/07
309UCO	7	Conductivity	118.60	uS/cm	2/10/07
309UCO	7	Total Coliform	>=1600	MPN/100	2/10/07
309UCO	7	Total Copper	0.021	mg/L	2/10/07
309UCO	7	Total Zinc	0.190	mg/L	2/10/07
309UCO	7	Fecal Coliform	>=1600	MPN/100	2/10/07
309UCO	7	Ceriodaphnia Reproduction	0.00	% Control	2/10/07
309UCO	7	Ceriodaphnia Survival	0.00	% Control	2/10/07
309UCO	7	Fathead Minnow Growth	73.30	% Control	2/10/07
309UCO	7	Fathead Minnow Survival	94.74	% Control	2/10/07
309GAB	7	Temperature	NR	Degrees C	2/10/07
Site Code	Event	Constituent	Value	Units	Date Collected
309NAD	7	pH	7.64	pH	2/10/07
309GAB	7	Unionized Ammonia (as N)	NR	mg/L	2/10/07
309GAB	7	Orthophosphate	NR	mg/L	2/10/07
309GAB	7	Nitrate as N	NR	mg/L	2/10/07
309GAB	7	TDS	NR	mg/L	2/10/07
309GAB	7	TOC	NR	mg/L	2/10/07

309GAB	7	Total Coliform	NR	MPN/100	2/10/07
309GAB	7	Total Copper	NR	mg/L	2/10/07
309NAD	7	Temperature	12.99	Degrees C	2/10/07
309GAB	7	Total Zinc	NR	mg/L	2/10/07
309GAB	7	Fecal Coliform	NR	MPN/100	2/10/07
309GAB	7	Algal Growth	NR	% Control	2/10/07
309GAB	7	Ceriodaphnia Reproduction	NR	% Control	2/10/07
309GAB	7	Ceriodaphnia Survival	NR	% Control	2/10/07
309GAB	7	Fathead Minnow Growth	NR	% Control	2/10/07
309GAB	7	Fathead Minnow Survival	NR	% Control	2/10/07
309NAD	7	Unionized Ammonia (as N)	0.00	mg/L	2/10/07
309NAD	7	Orthophosphate	0.71	mg/L	2/10/07
309NAD	7	Turbidity	2650.00	NTU	2/10/07
309NAD	7	Conductivity	237.60	uS/cm	2/10/07
309SUD	7	E. coli	86	MPN/100	2/10/07
309NAD	7	Nitrate as N	4.2	mg/L	2/10/07
309NAD	7	TDS	200	mg/L	2/10/07
309NAD	7	TOC	4.5	mg/L	2/10/07
309NAD	7	Total Coliform	>=1600	MPN/100	2/10/07
309NAD	7	Total Copper	0.170	mg/L	2/10/07
309UCO	7	E. coli	ND	MPN/100	2/10/07
309NAD	7	Total Zinc	0.390	mg/L	2/10/07
309NAD	7	Fecal Coliform	>=1600	MPN/100	2/10/07
309NAD	7	Algal Growth	220.80	% Control	2/10/07
309NAD	7	Ceriodaphnia Reproduction	100.63	% Control	2/10/07
309GAB	7	E. coli	NR	MPN/100	2/10/07
309NAD	7	Ceriodaphnia Survival	0.00	% Control	2/10/07
309NAD	7	E. coli	>2400	MPN/100	2/10/07
309NAD	7	Fathead Minnow Growth	119.23	% Control	2/10/07
309NAD	7	Fathead Minnow Survival	125.00	% Control	2/10/07
309SDD	7	E. coli	520	MPN/100	2/10/07
309ALD	7	E. coli	>2400	MPN/100	2/10/07
Site Code	Event	Constituent	Value	Units	Date Collected
309SDD	7	pH	NR	pH	2/10/07
309SDD	7	Temperature	NR	Degrees C	2/10/07
309SDD	7	Algal Growth	303.36	% Control	2/10/07
309ALD	7	Temperature	13.63	Degrees C	2/10/07
309SDD	7	Ceriodaphnia Reproduction	0.00	% Control	2/10/07
309SDD	7	Ceriodaphnia Survival	90.00	% Control	2/10/07
309SDD	7	Fathead Minnow Growth	111.54	% Control	2/10/07

309SDD	7	Fathead Minnow Survival	118.75	% Control	2/10/07
309SDD	7	Unionized Ammonia (as N)	ND	mg/L	2/10/07
309SDD	7	Nitrate as N	4.0	mg/L	2/10/07
309SDD	7	Orthophosphate	0.078	mg/L	2/10/07
309SDD	7	TDS	490	mg/L	2/10/07
309SDD	7	TOC	22	mg/L	2/10/07
309SDD	7	Total Coliform	>=1600	MPN/100	2/10/07
309SDD	7	Total Copper	0.0023	mg/L	2/10/07
309SDD	7	Total Zinc	ND	mg/L	2/10/07
309SDD	7	Fecal Coliform	>=1600	MPN/100	2/10/07
309ALD	7	Algal Growth	222.15	% Control	2/10/07
309ALD	7	Ceriodaphnia Reproduction	0.00	% Control	2/10/07
309ALD	7	Ceriodaphnia Survival	0.00	% Control	2/10/07
309ALD	7	Fathead Minnow Growth	94.95	% Control	2/10/07
309ALD	7	Fathead Minnow Survival	106.25	% Control	2/10/07
309ALD	7	Unionized Ammonia (as N)	0.00	mg/L	2/10/07
309ALD	7	Nitrate as N	0.89	mg/L	2/10/07
309ALD	7	Orthophosphate	0.20	mg/L	2/10/07
309ALD	7	TDS	110	mg/L	2/10/07
309ALD	7	pH	7.48	pH	2/10/07
309ALD	7	TOC	8.9	mg/L	2/10/07
309ALD	7	Total Coliform	>=1600	MPN/100	2/10/07
309ALD	7	Total Copper	0.025	mg/L	2/10/07
309ALD	7	Total Zinc	0.160	mg/L	2/10/07
309ALD	7	Fecal Coliform	>=1600	MPN/100	2/10/07
309SDD	7	Turbidity	NR	NTU	2/10/07
309SDD	7	Conductivity	NR	uS/cm	2/10/07
309ALD	7	Turbidity	304.1	NTU	2/10/07
309ALD	7	Conductivity	230.1	uS/cm	2/10/07
309SUD	8	pH	8.15	pH	4/22/07
309SUD	8	Temperature	20.70	Degrees C	4/22/07
Site Code	Event	Constituent	Value	Units	Date Collected
309UCO	8	pH	8.41	pH	4/22/07
309SUD	8	Turbidity	2.50	NTU	4/22/07
309SUD	8	Conductivity	1320.00	uS/cm	4/22/07
309SUD	8	Hyalella Growth	54.00	% Control	4/22/07
309UCO	8	Temperature	25.26	Degrees C	4/22/07
309UCO	8	Turbidity	281.20	NTU	4/22/07
309UCO	8	Conductivity	747.00	uS/cm	4/22/07
309NAD	8	pH	7.60	pH	4/22/07

309NAD	8	Temperature	19.33	Degrees C	4/22/07
309SUD	8	Hyalella Survival	86.50	% Control	4/22/07
309NAD	8	Turbidity	439.00	NTU	4/22/07
309NAD	8	Conductivity	1242.00	uS/cm	4/22/07
309UCO	8	Hyalella Growth	0.00	% Control	4/22/07
309UCO	8	Hyalella Survival	0.00	% Control	4/22/07
309NAD	8	Hyalella Growth	0.00	% Control	4/22/07
309NAD	8	Hyalella Survival	0.00	% Control	4/22/07
309SDD	8	pH	8.14	pH	4/22/07
309SDD	8	Hyalella Growth	37.10	% Control	4/22/07
309SDD	8	Temperature	20.12	Degrees C	4/22/07
309ALD	8	Hyalella Growth	32.60	% Control	4/22/07
309SDD	8	Hyalella Survival	77.00	% Control	4/22/07
309ALD	8	Temperature	19.14	Degrees C	4/22/07
309ALD	8	Hyalella Survival	45.90	% Control	4/22/07
309ALD	8	pH	7.41	pH	4/22/07
309SDD	8	Turbidity	17.70	NTU	4/22/07
309SDD	8	Conductivity	869.10	uS/cm	4/22/07
309ALD	8	Turbidity	136.70	NTU	4/22/07
309ALD	8	Conductivity	260.70	uS/cm	4/22/07
309U07	9	Unionized Ammonia (as N)	0.01	mg/L	6/27/07
309U07	9	Orthophosphate	0.81	mg/L	6/27/07
309U07	9	pH	7.74	pH	6/27/07
309U07	9	Temperature	18.54	Degrees C	6/27/07
309U07	9	Detergent	0	ppm	6/27/07
309U07	9	Chlorine	0	ppm	6/27/07
309U07	9	Turbidity	19	NTU	6/27/07
309U07	9	Conductivity	1011	uS/cm	6/27/07
309U19	9	Unionized Ammonia (as N)	ND	mg/L	6/27/07
309U19	9	Orthophosphate	0.87	mg/L	6/27/07
Site Code	Event	Constituent	Value	Units	Date Collected
309U19	9	pH	8.01	pH	6/27/07
309U19	9	Temperature	17.42	Degrees C	6/27/07
309U32	9	pH	8.21	pH	6/27/07
309U19	9	Turbidity	26	NTU	6/27/07
309U19	9	Conductivity	2071	uS/cm	6/27/07
309U19	9	Detergent	0	ppm	6/27/07
309U19	9	Chlorine	2	ppm	6/27/07
309U32	9	Temperature	16.89	Degrees C	6/27/07
309U52	9	pH	NR	pH	6/27/07

309U32	9	Turbidity	55	NTU	6/27/07
309U32	9	Conductivity	1707	uS/cm	6/27/07
309U32	9	Unionized Ammonia (as N)	ND	mg/L	6/27/07
309U32	9	Orthophosphate	0.019	mg/L	6/27/07
309U52	9	Temperature	NR	Degrees C	6/27/07
309U32	9	Detergent	0	ppm	6/27/07
309U32	9	Chlorine	<0.2	ppm	6/27/07
309U52	9	Unionized Ammonia (as N)	NR	mg/L	6/27/07
309U52	9	Orthophosphate	NR	mg/L	6/27/07
309U07	10	Unionized Ammonia (as N)	0.01	mg/L	7/24/07
309U07	10	Orthophosphate	0.20	mg/L	7/24/07
309U07	10	pH	8.41	pH	7/24/07
309U07	10	Temperature	22.25	Degrees C	7/24/07
309U07	10	Detergent	0.100	ppm	7/24/07
309U07	10	Chlorine	<0.2	ppm	7/24/07
309U07	10	Turbidity	24.400	NTU	7/24/07
309U07	10	Conductivity	170.000	uS/cm	7/24/07
309U19	10	Unionized Ammonia (as N)	ND	mg/L	7/24/07
309U19	10	Orthophosphate	0.81	mg/L	7/24/07
309U19	10	pH	8.13	pH	7/24/07
309U19	10	Temperature	17.02	Degrees C	7/24/07
309U32	10	pH	8.38	pH	7/24/07
309U19	10	Turbidity	4.500	NTU	7/24/07
309U19	10	Conductivity	2033.000	uS/cm	7/24/07
309U32	10	Temperature	19.30	Degrees C	7/24/07
309U19	10	Detergent	0.100	ppm	7/24/07
309U19	10	Chlorine	0.200	ppm	7/24/07
309U52	10	pH	NR	pH	7/24/07
309U52	10	Temperature	NR	Degrees C	7/24/07
Site Code	Event	Constituent	Value	Units	Date Collected
309U32	10	Unionized Ammonia (as N)	ND	mg/L	7/24/07
309U32	10	Orthophosphate	0.049	mg/L	7/24/07
309U32	10	Turbidity	104.900	NTU	7/24/07
309U32	10	Conductivity	1822.000	uS/cm	7/24/07
309U32	10	Detergent	0.200	ppm	7/24/07
309U32	10	Chlorine	<0.2	ppm	7/24/07
309U52	10	Unionized Ammonia (as N)	NR	mg/L	7/24/07
309U52	10	Orthophosphate	NR	mg/L	7/24/07
309UCO	6R	pH	7.93	pH	12/9/06
309UCO	6R	Unionized Ammonia (as N)	0.02	mg/L	12/9/06

309UCO	6R	Orthophosphate	0.29	mg/L	12/9/06
309UCO	6R	Nitrate as N	7.5	mg/L	12/9/06
309UCO	6R	TDS	390	mg/L	12/9/06
309UCO	6R	TOC	50.0	mg/L	12/9/06
309UCO	6R	Total Coliform	>=1600	MPN/100	12/9/06
309UCO	6R	Total Copper	0.037	mg/L	12/9/06
309UCO	6R	Total Zinc	0.230	mg/L	12/9/06
309UCO	6R	Fecal Coliform	>=1600	MPN/100	12/9/06
309UCO	6R	Algal Growth	490.93	% Control	12/9/06
309UCO	6R	Ceriodaphnia Reproduction	0.00	% Control	12/9/06
309GAB	6R	pH	7.50	pH	12/9/06
309UCO	6R	Temperature	10.54	Degrees C	12/9/06
309UCO	6R	Turbidity	439	NTU	12/9/06
309UCO	6R	Conductivity	534	uS/cm	12/9/06
309UCO	6R	Ceriodaphnia Survival	0.00	% Control	12/9/06
309UCO	6R	Fathead Minnow Growth	76.22	% Control	12/9/06
309UCO	6R	Fathead Minnow Survival	105.88	% Control	12/9/06
309UCO	6R	Detergent	NA	ppm	12/9/06
309UCO	6R	Chlorine	NA	ppm	12/9/06
309GAB	6R	Temperature	11.44	Degrees C	12/9/06
309NAD	6R	pH	7.41	pH	12/9/06
309GAB	6R	Unionized Ammonia (as N)	0.01	mg/L	12/9/06
309GAB	6R	Detergent	NA	ppm	12/9/06
309GAB	6R	Chlorine	NA	ppm	12/9/06
309GAB	6R	Orthophosphate	1.60	mg/L	12/9/06
309GAB	6R	Nitrate as N	8.7	mg/L	12/9/06
309GAB	6R	TDS	310	mg/L	12/9/06
309GAB	6R	TOC	6.3	mg/L	12/9/06
Site Code	Event	Constituent	Value	Units	Date Collected
309GAB	6R	Total Coliform	>=1600	MPN/100	12/9/06
309NAD	6R	Temperature	13.59	Degrees C	12/9/06
309GAB	6R	Total Copper	0.047	mg/L	12/9/06
309GAB	6R	Total Zinc	0.280	mg/L	12/9/06
309NAD	6R	Detergent	NA	ppm	12/9/06
309NAD	6R	Chlorine	NA	ppm	12/9/06
309GAB	6R	Turbidity	3000	NTU	12/9/06
309GAB	6R	Conductivity	238	uS/cm	12/9/06
309NAD	6R	Turbidity	212	NTU	12/9/06
309NAD	6R	Conductivity	1646	uS/cm	12/9/06
309GAB	6R	Fecal Coliform	>=1600	MPN/100	12/9/06

309GAB	6R	Algal Growth	493.95	% Control	12/9/06
309GAB	6R	Ceriodaphnia Reproduction	0.00	% Control	12/9/06
309GAB	6R	Ceriodaphnia Survival	0.00	% Control	12/9/06
309GAB	6R	Fathead Minnow Growth	99.65	% Control	12/9/06
309GAB	6R	Fathead Minnow Survival	111.76	% Control	12/9/06
309NAD	6R	Unionized Ammonia (as N)	ND	mg/L	12/9/06
309NAD	6R	Orthophosphate	0.13	mg/L	12/9/06
309NAD	6R	Nitrate as N	37.0	mg/L	12/9/06
309NAD	6R	TDS	1000	mg/L	12/9/06
309NAD	6R	TOC	11.0	mg/L	12/9/06
309NAD	6R	Total Coliform	>=1600	MPN/100	12/9/06
309NAD	6R	Total Copper	0.013	mg/L	12/9/06
309NAD	6R	Total Zinc	0.057	mg/L	12/9/06
309NAD	6R	Fecal Coliform	>=1600	MPN/100	12/9/06
309NAD	6R	Algal Growth	246.86	% Control	12/9/06
309NAD	6R	Ceriodaphnia Reproduction	126.13	% Control	12/9/06
309NAD	6R	Ceriodaphnia Survival	90.00	% Control	12/9/06
309UCO	6R	E. coli	>2400	MPN/100	12/9/06
309NAD	6R	Fathead Minnow Growth	82.52	% Control	12/9/06
309NAD	6R	Fathead Minnow Survival	82.35	% Control	12/9/06
309GAB	6R	E. coli	170	MPN/100	12/9/06
309NAD	6R	E. coli	>2400	MPN/100	12/9/06
309ALD	6R	E. coli	>2400	MPN/100	12/9/06
309ALD	6R	Algal Growth	32.44	% Control	12/9/06
309ALD	6R	Ceriodaphnia Reproduction	40.99	% Control	12/9/06
309ALD	6R	Ceriodaphnia Survival	0.00	% Control	12/9/06
309ALD	6R	Fathead Minnow Growth	78.32	% Control	12/9/06
Site Code	Event	Constituent	Value	Units	Date Collected
309GAB	6R	Total Coliform	>=1600	MPN/100	12/9/06
309NAD	6R	Temperature	13.59	Degrees C	12/9/06
309GAB	6R	Total Copper	0.047	mg/L	12/9/06
309GAB	6R	Total Zinc	0.280	mg/L	12/9/06
309NAD	6R	Detergent	NA	ppm	12/9/06
309NAD	6R	Chlorine	NA	ppm	12/9/06
309GAB	6R	Turbidity	3000	NTU	12/9/06
309GAB	6R	Conductivity	238	uS/cm	12/9/06
309NAD	6R	Turbidity	212	NTU	12/9/06
309NAD	6R	Conductivity	1646	uS/cm	12/9/06
309GAB	6R	Fecal Coliform	>=1600	MPN/100	12/9/06
309GAB	6R	Algal Growth	493.95	% Control	12/9/06

309GAB	6R	Ceriodaphnia Reproduction	0.00	% Control	12/9/06
309GAB	6R	Ceriodaphnia Survival	0.00	% Control	12/9/06
309GAB	6R	Fathead Minnow Growth	99.65	% Control	12/9/06
309GAB	6R	Fathead Minnow Survival	111.76	% Control	12/9/06

Appendix B – CCAMP Data

*** Highlighted results denote a water quality exceedence.**

StationCode	SampleDate	AnalyteName	Unit	Result
309DAV	09/20/2006	Ammonia as N	mg/L	0.04
309DAV	09/20/2006	Coliform, Fecal	MPN/100ml	23
309DAV	09/20/2006	Coliform, Total	MPN/100ml	3000
309DAV	09/20/2006	Coliform, Total	MPN/100ml	16000
309DAV	09/20/2006	Dissolved Solids, Total	mg/L	1400
309DAV	09/20/2006	E. coli	MPN/100ml	-10
309DAV	09/20/2006	Nitrate as N	mg/L	36
309DAV	09/20/2006	OrthoPhosphate as P	mg/L	0.06
309DAV	09/20/2006	pH	pH Units	7.48
309DAV	09/20/2006	Specific Conductivity	uS/cm	1920
309DAV	09/20/2006	Temperature	C	12.7
309DAV	09/20/2006	Turbidity	NTU	1.7
309SDR	09/20/2006	Ammonia as N	mg/L	0.01
309SDR	09/20/2006	Coliform, Fecal	MPN/100ml	70
309SDR	09/20/2006	Coliform, Total	MPN/100ml	2400
309SDR	09/20/2006	Coliform, Total	MPN/100ml	7300
309SDR	09/20/2006	Dissolved Solids, Total	mg/L	1500
309SDR	09/20/2006	E. coli	MPN/100ml	52
309SDR	09/20/2006	Nitrate as N	mg/L	57
309SDR	09/20/2006	OrthoPhosphate as P	mg/L	0.56
309SDR	09/20/2006	pH	pH Units	7.81
309SDR	09/20/2006	Specific Conductivity	uS/cm	2010
309SDR	09/20/2006	Temperature	C	16
309SDR	09/20/2006	Turbidity	NTU	0
309ALD	09/20/2006	Ammonia as N	mg/L	4.6
309ALD	09/20/2006	Coliform, Fecal	MPN/100ml	800
309ALD	09/20/2006	Coliform, Total	MPN/100ml	30000
309ALD	09/20/2006	Coliform, Total	MPN/100ml	120000
309ALD	09/20/2006	Dissolved Solids, Total	mg/L	430
309ALD	09/20/2006	E. coli	MPN/100ml	410
309ALD	09/20/2006	Nitrate as N	mg/L	17
309ALD	09/20/2006	OrthoPhosphate as P	mg/L	0.4
309ALD	09/20/2006	pH	pH Units	8.21
309ALD	09/20/2006	Specific Conductivity	uS/cm	1306
309ALD	09/20/2006	Temperature	C	17.7
309ALD	09/20/2006	Turbidity	NTU	37.3
309ALU	09/20/2006	Coliform, Fecal	MPN/100ml	2400
309ALU	09/20/2006	Coliform, Total	MPN/100ml	50000
309ALU	09/20/2006	Coliform, Total	MPN/100ml	100000
309ALU	09/20/2006	E. coli	MPN/100ml	2100
309ALU	09/20/2006	pH	pH Units	7.85
309ALU	09/20/2006	Specific Conductivity	uS/cm	1018
309ALU	09/20/2006	Temperature	C	17.7
309ALU	09/20/2006	Turbidity	NTU	29.4

StationCode	SampleDate	AnalyteName	Unit	Result
309ALU	09/20/2006	Ammonia as N	mg/L	14
309ALU	09/20/2006	Dissolved Solids, Total	mg/L	620
309ALU	09/20/2006	Nitrate as N	mg/L	8.1
309ALU	09/20/2006	OrthoPhosphate as P	mg/L	1
309AXX	09/20/2006	Ammonia as N	mg/L	0.97
309AXX	09/20/2006	Coliform, Fecal	MPN/100ml	3000
309AXX	09/20/2006	Coliform, Total	MPN/100ml	160000
309AXX	09/20/2006	Coliform, Total	MPN/100ml	240001
309AXX	09/20/2006	Dissolved Solids, Total	mg/L	1200
309AXX	09/20/2006	E. coli	MPN/100ml	5200
309AXX	09/20/2006	Nitrate as N	mg/L	24
309AXX	09/20/2006	OrthoPhosphate as P	mg/L	0.3
309AXX	09/20/2006	pH	pH Units	7.73
309AXX	09/20/2006	Specific Conductivity	uS/cm	1661
309AXX	09/20/2006	Temperature	C	17.4
309AXX	09/20/2006	Turbidity	NTU	0.9
309DAV	10/18/2006	Ammonia as N	mg/L	0.05
309DAV	10/18/2006	Coliform, Fecal	MPN/100ml	300
309DAV	10/18/2006	Coliform, Total	MPN/100ml	30000
309DAV	10/18/2006	Coliform, Total	MPN/100ml	16000
309DAV	10/18/2006	Dissolved Solids, Total	mg/L	1400
309DAV	10/18/2006	E. coli	MPN/100ml	41
309DAV	10/18/2006	Nitrate as N	mg/L	35
309DAV	10/18/2006	OrthoPhosphate as P	mg/L	0.04
309DAV	10/18/2006	pH	pH Units	7.38
309DAV	10/18/2006	Specific Conductivity	uS/cm	1999
309DAV	10/18/2006	Temperature	C	11.3
309DAV	10/18/2006	Turbidity	NTU	1.7
309SDR	10/18/2006	Ammonia as N	mg/L	0.02
309SDR	10/18/2006	Coliform, Fecal	MPN/100ml	300
309SDR	10/18/2006	Coliform, Total	MPN/100ml	30000
309SDR	10/18/2006	Coliform, Total	MPN/100ml	20000
309SDR	10/18/2006	Dissolved Solids, Total	mg/L	1500
309SDR	10/18/2006	E. coli	MPN/100ml	85
309SDR	10/18/2006	Nitrate as N	mg/L	53
309SDR	10/18/2006	OrthoPhosphate as P	mg/L	0.56
309SDR	10/18/2006	pH	pH Units	7.68
309SDR	10/18/2006	Specific Conductivity	uS/cm	1943
309SDR	10/18/2006	Temperature	C	14.8
309SDR	10/18/2006	Turbidity	NTU	53.3
309ALD	10/18/2006	Ammonia as N	mg/L	1.6
309ALD	10/18/2006	Coliform, Fecal	MPN/100ml	1100
309ALD	10/18/2006	Coliform, Total	MPN/100ml	90000
309ALD	10/18/2006	Coliform, Total	MPN/100ml	24000

	SampleDate	AnalyteName	Unit	Result
309ALD	10/18/2006	Dissolved Solids, Total	mg/L	960
309ALD	10/18/2006	E. coli	MPN/100ml	2000
309ALD	10/18/2006	Nitrate as N	mg/L	11
309ALD	10/18/2006	OrthoPhosphate as P	mg/L	0.47
309ALD	10/18/2006	pH	pH Units	7.07
309ALD	10/18/2006	Specific Conductivity	uS/cm	1494
309ALD	10/18/2006	Temperature	C	13.4
309ALD	10/18/2006	Turbidity	NTU	16.9
309AXX	10/18/2006	Ammonia as N	mg/L	0.5
309AXX	10/18/2006	Coliform, Fecal	MPN/100ml	240
309AXX	10/18/2006	Coliform, Total	MPN/100ml	160000
309AXX	10/18/2006	Coliform, Total	MPN/100ml	240001
309AXX	10/18/2006	Dissolved Solids, Total	mg/L	1000
309AXX	10/18/2006	E. coli	MPN/100ml	100
309AXX	10/18/2006	Nitrate as N	mg/L	6.1
309AXX	10/18/2006	OrthoPhosphate as P	mg/L	0.3
309AXX	10/18/2006	pH	pH Units	7.48
309AXX	10/18/2006	Specific Conductivity	uS/cm	1643
309AXX	10/18/2006	Temperature	C	17.4
309AXX	10/18/2006	Turbidity	NTU	12.5
309ALU	10/18/2006	Ammonia as N	mg/L	3.5
309ALU	10/18/2006	Coliform, Fecal	MPN/100ml	800
309ALU	10/18/2006	Coliform, Total	MPN/100ml	50000
309ALU	10/18/2006	Coliform, Total	MPN/100ml	130000
309ALU	10/18/2006	Dissolved Solids, Total	mg/L	920
309ALU	10/18/2006	E. coli	MPN/100ml	100
309ALU	10/18/2006	Nitrate as N	mg/L	2.7
309ALU	10/18/2006	OrthoPhosphate as P	mg/L	0.76
309ALU	10/18/2006	pH	pH Units	7.52
309ALU	10/18/2006	Specific Conductivity	uS/cm	1449
309ALU	10/18/2006	Temperature	C	15
309ALU	10/18/2006	Turbidity	NTU	27.1
309AXX	10/25/2006	Ammonia as N	mg/L	0.5
309AXX	10/25/2006	Dissolved Solids, Total	mg/L	1800
309AXX	10/25/2006	Nitrate as N	mg/L	9.2
309AXX	10/25/2006	OrthoPhosphate as P	mg/L	0.41
309AXX	10/25/2006	pH	pH Units	7.95
309AXX	10/25/2006	Specific Conductivity	uS/cm	2746
309AXX	10/25/2006	Temperature	C	15.1
309AXX	10/25/2006	Turbidity	NTU	10
309ALU	10/25/2006	Ammonia as N	mg/L	0.31
309ALU	10/25/2006	Dissolved Solids, Total	mg/L	540
309ALU	10/25/2006	Nitrate as N	mg/L	13
309ALU	10/25/2006	OrthoPhosphate as P	mg/L	0.56

	SampleDate	AnalyteName	Unit	Result
309ALU	10/25/2006	pH	pH Units	8.62
309ALU	10/25/2006	Specific Conductivity	uS/cm	1740
309ALU	10/25/2006	Temperature	C	14.9
309ALU	10/25/2006	Turbidity	NTU	28.7
309DAV	11/08/2006	Ammonia as N	mg/L	0.05
309DAV	11/08/2006	Dissolved Solids, Total	mg/L	1400
309DAV	11/08/2006	Nitrate as N	mg/L	35
309DAV	11/08/2006	OrthoPhosphate as P	mg/L	0.02
309DAV	11/08/2006	pH	pH Units	7.56
309DAV	11/08/2006	Specific Conductivity	uS/cm	1923
309DAV	11/08/2006	Temperature	C	15.3
309DAV	11/08/2006	Turbidity	NTU	0
309SDR	11/08/2006	Ammonia as N	mg/L	0.03
309SDR	11/08/2006	Dissolved Solids, Total	mg/L	1500
309SDR	11/08/2006	Nitrate as N	mg/L	54
309SDR	11/08/2006	OrthoPhosphate as P	mg/L	0.52
309SDR	11/08/2006	pH	pH Units	7.86
309SDR	11/08/2006	Specific Conductivity	uS/cm	1916
309SDR	11/08/2006	Temperature	C	16
309SDR	11/08/2006	Turbidity	NTU	0
309ALD	11/08/2006	Ammonia as N	mg/L	3.9
309ALD	11/08/2006	Dissolved Solids, Total	mg/L	940
309ALD	11/08/2006	Nitrate as N	mg/L	5.5
309ALD	11/08/2006	OrthoPhosphate as P	mg/L	0.58
309ALD	11/08/2006	pH	pH Units	8.32
309ALD	11/08/2006	Specific Conductivity	uS/cm	1404
309ALD	11/08/2006	Temperature	C	16.6
309ALD	11/08/2006	Turbidity	NTU	20.5
309ALU	11/08/2006	Ammonia as N	mg/L	0.59
309ALU	11/08/2006	Dissolved Solids, Total	mg/L	950
309ALU	11/08/2006	Nitrate as N	mg/L	6.5
309ALU	11/08/2006	OrthoPhosphate as P	mg/L	0.49
309ALU	11/08/2006	pH	pH Units	7.9
309ALU	11/08/2006	Specific Conductivity	uS/cm	1363
309ALU	11/08/2006	Temperature	C	16.2
309ALU	11/08/2006	Turbidity	NTU	21.4
309AXX	11/08/2006	Ammonia as N	mg/L	0.76
309AXX	11/08/2006	Dissolved Solids, Total	mg/L	1300
309AXX	11/08/2006	Nitrate as N	mg/L	9.1
309AXX	11/08/2006	OrthoPhosphate as P	mg/L	0.38
309AXX	11/08/2006	pH	pH Units	7.83
309AXX	11/08/2006	Specific Conductivity	uS/cm	1982
309AXX	11/08/2006	Temperature	C	16.1
309AXX	11/08/2006	Turbidity	NTU	3.7

	SampleDate	AnalyteName	Unit	Result
309DAV	12/12/2006	Ammonia as N	mg/L	0.13
309DAV	12/12/2006	Dissolved Solids, Total	mg/L	390
309DAV	12/12/2006	Nitrate as N	mg/L	5.4
309DAV	12/12/2006	OrthoPhosphate as P	mg/L	0.25
309DAV	12/12/2006	pH	pH Units	7.47
309DAV	12/12/2006	Specific Conductivity	uS/cm	427.3
309DAV	12/12/2006	Temperature	C	13
309DAV	12/12/2006	Turbidity	NTU	126.3
309SDR	12/12/2006	Ammonia as N	mg/L	0.17
309SDR	12/12/2006	Dissolved Solids, Total	mg/L	140
309SDR	12/12/2006	Nitrate as N	mg/L	1.1
309SDR	12/12/2006	OrthoPhosphate as P	mg/L	0.31
309SDR	12/12/2006	pH	pH Units	7.15
309SDR	12/12/2006	Specific Conductivity	uS/cm	131.8
309SDR	12/12/2006	Temperature	C	12.1
309SDR	12/12/2006	Turbidity	NTU	64.6
309GAB	12/12/2006	Ammonia as N	mg/L	0.46
309GAB	12/12/2006	Dissolved Solids, Total	mg/L	190
309GAB	12/12/2006	Nitrate as N	mg/L	2.7
309GAB	12/12/2006	OrthoPhosphate as P	mg/L	0.41
309GAB	12/12/2006	pH	pH Units	7.3
309GAB	12/12/2006	Specific Conductivity	uS/cm	168.9
309GAB	12/12/2006	Temperature	C	10.8
309GAB	12/12/2006	Turbidity	NTU	709
309ALD	12/12/2006	Ammonia as N	mg/L	0.32
309ALD	12/12/2006	Dissolved Solids, Total	mg/L	220
309ALD	12/12/2006	Nitrate as N	mg/L	2.7
309ALD	12/12/2006	OrthoPhosphate as P	mg/L	0.27
309ALD	12/12/2006	pH	pH Units	7.88
309ALD	12/12/2006	Specific Conductivity	uS/cm	261.7
309ALD	12/12/2006	Temperature	C	11.2
309ALD	12/12/2006	Turbidity	NTU	323.9
309ALU	12/12/2006	Ammonia as N	mg/L	0.64
309ALU	12/12/2006	Dissolved Solids, Total	mg/L	190
309ALU	12/12/2006	Nitrate as N	mg/L	3.6
309ALU	12/12/2006	OrthoPhosphate as P	mg/L	0.55
309ALU	12/12/2006	pH	pH Units	7.45
309ALU	12/12/2006	Specific Conductivity	uS/cm	183.2
309ALU	12/12/2006	Temperature	C	11.3
309ALU	12/12/2006	Turbidity	NTU	316.8
309AXX	12/12/2006	Ammonia as N	mg/L	0.26
309AXX	12/12/2006	Dissolved Solids, Total	mg/L	110
309AXX	12/12/2006	Nitrate as N	mg/L	0.61
309AXX	12/12/2006	OrthoPhosphate as P	mg/L	0.17

	SampleDate	AnalyteName	Unit	Result
309AXX	12/12/2006	pH	pH Units	7.88
309AXX	12/12/2006	Specific Conductivity	uS/cm	62.6
309AXX	12/12/2006	Temperature	C	12
309AXX	12/12/2006	Turbidity	NTU	322.3
309DAV	01/08/2007	Ammonia as N	mg/L	0.03
309DAV	01/08/2007	Dissolved Solids, Total	mg/L	270
309DAV	01/08/2007	Nitrate as N	mg/L	1
309DAV	01/08/2007	OrthoPhosphate as P	mg/L	0.05
309DAV	01/08/2007	pH	pH Units	8.14
309DAV	01/08/2007	Specific Conductivity	uS/cm	401.6
309DAV	01/08/2007	Temperature	C	5.5
309DAV	01/08/2007	Turbidity	NTU	32
309SDR	01/08/2007	Ammonia as N	mg/L	0.02
309SDR	01/08/2007	Dissolved Solids, Total	mg/L	1300
309SDR	01/08/2007	Nitrate as N	mg/L	60
309SDR	01/08/2007	OrthoPhosphate as P	mg/L	0.38
309SDR	01/08/2007	pH	pH Units	7.85
309SDR	01/08/2007	Specific Conductivity	uS/cm	1799
309SDR	01/08/2007	Temperature	C	14.3
309SDR	01/08/2007	Turbidity	NTU	0
309GAB	01/08/2007	Ammonia as N	mg/L	0.31
309GAB	01/08/2007	Dissolved Solids, Total	mg/L	720
309GAB	01/08/2007	Nitrate as N	mg/L	21
309GAB	01/08/2007	OrthoPhosphate as P	mg/L	2.3
309GAB	01/08/2007	pH	pH Units	8.02
309GAB	01/08/2007	Specific Conductivity	uS/cm	1173
309GAB	01/08/2007	Temperature	C	12.9
309GAB	01/08/2007	Turbidity	NTU	414
309ALD	01/08/2007	Ammonia as N	mg/L	0.36
309ALD	01/08/2007	Dissolved Solids, Total	mg/L	460
309ALD	01/08/2007	Nitrate as N	mg/L	8.6
309ALD	01/08/2007	OrthoPhosphate as P	mg/L	0.25
309ALD	01/08/2007	pH	pH Units	7.74
309ALD	01/08/2007	Specific Conductivity	uS/cm	723.7
309ALD	01/08/2007	Temperature	C	7.2
309ALD	01/08/2007	Turbidity	NTU	91.4
309ALU	01/08/2007	Ammonia as N	mg/L	4.5
309ALU	01/08/2007	Dissolved Solids, Total	mg/L	470
309ALU	01/08/2007	Nitrate as N	mg/L	15
309ALU	01/08/2007	OrthoPhosphate as P	mg/L	0.75
309ALU	01/08/2007	pH	pH Units	7.44
309ALU	01/08/2007	Specific Conductivity	uS/cm	766
309ALU	01/08/2007	Temperature	C	6.6
309ALU	01/08/2007	Turbidity	NTU	195

	SampleDate	AnalyteName	Unit	Result
309AXX	01/08/2007	Ammonia as N	mg/L	0.31
309AXX	01/08/2007	Dissolved Solids, Total	mg/L	740
309AXX	01/08/2007	Nitrate as N	mg/L	11
309AXX	01/08/2007	OrthoPhosphate as P	mg/L	0.6
309AXX	01/08/2007	pH	pH Units	8.01
309AXX	01/08/2007	Specific Conductivity	uS/cm	1073
309AXX	01/08/2007	Temperature	C	11.8
309AXX	01/08/2007	Turbidity	NTU	49
309DAV	02/14/2007	pH	pH Units	7.98
309DAV	02/14/2007	Specific Conductivity	uS/cm	523.9
309DAV	02/14/2007	Temperature	C	11.3
309DAV	02/14/2007	Turbidity	NTU	49.4
309SDR	02/14/2007	pH	pH Units	7.32
309SDR	02/14/2007	Specific Conductivity	uS/cm	1157
309SDR	02/14/2007	Temperature	C	14.6
309SDR	02/14/2007	Turbidity	NTU	3.4
309ALD	02/14/2007	pH	pH Units	8
309ALD	02/14/2007	Specific Conductivity	uS/cm	599.4
309ALD	02/14/2007	Temperature	C	14.8
309ALD	02/14/2007	Turbidity	NTU	156.6
309ALU	02/14/2007	pH	pH Units	7.21
309ALU	02/14/2007	Specific Conductivity	uS/cm	394
309ALU	02/14/2007	Temperature	C	12
309ALU	02/14/2007	Turbidity	NTU	1719
309AXX	02/14/2007	pH	pH Units	7.87
309AXX	02/14/2007	Specific Conductivity	uS/cm	764.5
309AXX	02/14/2007	Temperature	C	13.7
309AXX	02/14/2007	Turbidity	NTU	27
309DAV	03/20/2007	pH	pH Units	8.58
309DAV	03/20/2007	Specific Conductivity	uS/cm	1416
309DAV	03/20/2007	Temperature	C	16.4
309DAV	03/20/2007	Turbidity	NTU	36.9

Site Tag	SampleDate	ToxSpeciesName	ToxResultsUnit	Mean	StdDev
309ALD	02/14/07	Selenastrum	Cell Density	1550000	75500
309ALD	02/14/07	Ceriodaphnia	Survival (%)	0	0
309ALD	02/14/07	Ceriodaphnia	Reproduction	2.4	1.8974
309ALD	02/14/07	Pimephales	Survival (%)	100	0
309ALD	02/14/07	Pimephales	mg	0.578	0.05019
309ALU	02/14/07	Selenastrum	Cell Density	1590000	169000
309ALU	02/14/07	Ceriodaphnia	Survival (%)	0	0
309ALU	02/14/07	Ceriodaphnia	Reproduction	0	0
309ALU	02/14/07	Pimephales	Survival (%)	95	15.811
309ALU	02/14/07	Pimephales	mg	0.502	0.08699
309AXX	02/14/07	Selenastrum	Cell Density	3030000	167000
309AXX	02/14/07	Ceriodaphnia	Survival (%)	10	0.31623
309AXX	02/14/07	Ceriodaphnia	Reproduction	11	7.9722
309AXX	02/14/07	Pimephales	Survival (%)	90	21.082
309AXX	02/14/07	Pimephales	mg	0.506	0.05337
309DAV	02/14/07	Selenastrum	Cell Density	2440000	175000
309DAV	02/14/07	Ceriodaphnia	Survival (%)	100	0
309DAV	02/14/07	Ceriodaphnia	Reproduction	20.22	4.79
309DAV	02/14/07	Pimephales	Survival (%)	100	0
309DAV	02/14/07	Pimephales	mg	0.498	0.08417
309SDR	02/14/07	Selenastrum	Cell Density	2110000	112000
309SDR	02/14/07	Ceriodaphnia	Survival (%)	100	0
309SDR	02/14/07	Ceriodaphnia	Reproduction	24.333	3.5355
309SDR	02/14/07	Pimephales	Survival (%)	95	15.811
309SDR	02/14/07	Pimephales	mg	0.512	0.05214

Appendix C – CMP Data

*** Highlighted results denote a water quality exceedence.**

SITEID	Sample Year	Sample Month	Sample Day	AnalyteNameReport	Result	Unit
309GAB	2006	8	23	Conductivity		uS/cm
309GAB	2006	8	23	Dissolved Oxygen		mg/L
309GAB	2006	8	23	pH		-log[H+]
309GAB	2006	8	23	Turbidity		NTU
309GAB	2006	8	23	Water Temperature		Celsius
309NAD	2006	8	23	Algae Toxicity, Cell Growth	311.7	%Control Growth
309NAD	2006	8	23	Ammonia as N	ND	mg/L
309NAD	2006	8	23	Conductivity	1172	uS/cm
309NAD	2006	8	23	Dissolved Oxygen	5.39	mg/L
309NAD	2006	8	23	Fish Toxicity, Growth	105.3	%Control Growth
309NAD	2006	8	23	Fish Toxicity, Survival	100	%Control Survival
309NAD	2006	8	23	Invertebrate Toxicity, Reproduction	0	%Control Repro
309NAD	2006	8	23	Invertebrate Toxicity, Survival	0	%Control Survival
309NAD	2006	8	23	Nitrate as N	28	mg/L
309NAD	2006	8	23	Orthophosphate as P	0.455	mg/L
309NAD	2006	8	23	pH	7.62	-log[H+]
309NAD	2006	8	23	Solids, Total Dissolved (TDS)	700	mg/L
309NAD	2006	8	23	Turbidity	141.9	NTU
309NAD	2006	8	23	Unionized Ammonia as N	0	mg/L
309NAD	2006	8	23	Water Temperature	24.83	Celsius
309ALG	2006	8	24	Algae Toxicity, Cell Growth	1186	%Control Growth
309ALG	2006	8	24	Ammonia as N	ND	mg/L
309ALG	2006	8	24	Conductivity	1103	uS/cm
309ALG	2006	8	24	Dissolved Oxygen	2.22	mg/L
309ALG	2006	8	24	Fish Toxicity, Growth	183.8	%Control Growth
309ALG	2006	8	24	Fish Toxicity, Survival	133.3	%Control Survival
309ALG	2006	8	24	Invertebrate Toxicity, Reproduction	0	%Control Repro
309ALG	2006	8	24	Invertebrate Toxicity, Survival	0	%Control Survival
309ALG	2006	8	24	Nitrate as N	6.9	mg/L
309ALG	2006	8	24	Orthophosphate as P	ND	mg/L
309ALG	2006	8	24	pH	7.33	-log[H+]
309ALG	2006	8	24	Solids, Total Dissolved (TDS)	690	mg/L
309ALG	2006	8	24	Turbidity	14.4	NTU
309ALG	2006	8	24	Unionized Ammonia as N	0	mg/L
309ALG	2006	8	24	Water Temperature	19.12	Celsius

SITEID	Sample Year	Sample Month	Sample Day	AnalyteNameReport	Result	Unit
309ALG	2006	9	27	Algae Toxicity, Cell Growth	763.9	%Control Growth
309ALG	2006	9	27	Ammonia as N	1.4	mg/L
309ALG	2006	9	27	Conductivity	1058	uS/cm
309ALG	2006	9	27	Dissolved Oxygen	3.65	mg/L
309ALG	2006	9	27	Fish Toxicity, Growth	86.7	%Control Growth
309ALG	2006	9	27	Fish Toxicity, Survival	100	%Control Survival
309ALG	2006	9	27	Invertebrate Toxicity, Reproduction	43.7	%Control Repro
309ALG	2006	9	27	Invertebrate Toxicity, Survival	0	%Control Survival
309ALG	2006	9	27	Nitrate as N	23.8	mg/L
309ALG	2006	9	27	Orthophosphate as P	0.73	mg/L
309ALG	2006	9	27	pH	7.86	-log[H+]
309ALG	2006	9	27	Solids, Total Dissolved (TDS)	660	mg/L
309ALG	2006	9	27	Turbidity	76.6	NTU
309ALG	2006	9	27	Unionized Ammonia as N	0.0457	mg/L
309ALG	2006	9	27	Water Temperature	21.76	Celsius
309GAB	2006	9	27	Conductivity		uS/cm
309GAB	2006	9	27	Dissolved Oxygen		mg/L
309GAB	2006	9	27	pH		-log[H+]
309GAB	2006	9	27	Turbidity		NTU
309GAB	2006	9	27	Water Temperature		Celsius
309NAD	2006	9	27	Algae Toxicity, Cell Growth	61.5	%Control Growth
309NAD	2006	9	27	Ammonia as N	0.086	mg/L
309NAD	2006	9	27	Conductivity	1238	uS/cm
309NAD	2006	9	27	Dissolved Oxygen	8.02	mg/L
309NAD	2006	9	27	Fish Toxicity, Growth	89.6	%Control Growth
309NAD	2006	9	27	Fish Toxicity, Survival	100	%Control Survival
309NAD	2006	9	27	Invertebrate Toxicity, Reproduction	0	%Control Repro
309NAD	2006	9	27	Invertebrate Toxicity, Survival	0	%Control Survival
309NAD	2006	9	27	Nitrate as N	34	mg/L
309NAD	2006	9	27	Orthophosphate as P	0.64	mg/L
309NAD	2006	9	27	pH	8.25	-log[H+]
309NAD	2006	9	27	Solids, Total Dissolved (TDS)	829	mg/L
309NAD	2006	9	27	Turbidity	63.9	NTU
309NAD	2006	9	27	Unionized Ammonia as N	0.0063	mg/L
309NAD	2006	9	27	Water Temperature	21.56	Celsius

SITEID	Sample Year	Sample Month	Sample Day	AnalyteNameReport	Result	Unit
309ALG	2006	10	24	Ammonia as N	0.724	mg/L
309ALG	2006	10	24	Conductivity	1759	uS/cm
309ALG	2006	10	24	Dissolved Oxygen	11.16	mg/L
309ALG	2006	10	24	Nitrate as N	16.5	mg/L
309ALG	2006	10	24	Orthophosphate as P	0.509	mg/L
309ALG	2006	10	24	pH	8.87	-log[H+]
309ALG	2006	10	24	Solids, Total Dissolved (TDS)	1020	mg/L
309ALG	2006	10	24	Turbidity	24.9	NTU
309ALG	2006	10	24	Unionized Ammonia as N	0.1643	mg/L
309ALG	2006	10	24	Water Temperature	20.01	Celsius
309GAB	2006	10	24	Conductivity		uS/cm
309GAB	2006	10	24	Dissolved Oxygen		mg/L
309GAB	2006	10	24	pH		-log[H+]
309GAB	2006	10	24	Turbidity		NTU
309GAB	2006	10	24	Water Temperature		Celsius
309NAD	2006	10	24	Ammonia as N	0.064	mg/L
309NAD	2006	10	24	Conductivity	1175	uS/cm
309NAD	2006	10	24	Dissolved Oxygen	6.73	mg/L
309NAD	2006	10	24	Nitrate as N	28.1	mg/L
309NAD	2006	10	24	Orthophosphate as P	0.788	mg/L
309NAD	2006	10	24	pH	7.77	-log[H+]
309NAD	2006	10	24	Solids, Total Dissolved (TDS)	635	mg/L
309NAD	2006	10	24	Turbidity	30.1	NTU
309NAD	2006	10	24	Unionized Ammonia as N	0.001	mg/L
309NAD	2006	10	24	Water Temperature	14.98	Celsius
309ALG	2006	11	14	Ammonia as N	2.13	mg/L
309ALG	2006	11	14	Conductivity	610.1	uS/cm
309ALG	2006	11	14	Dissolved Oxygen	5.39	mg/L
309ALG	2006	11	14	Nitrate as N	12.9	mg/L
309ALG	2006	11	14	Orthophosphate as P	2.4374	mg/L
309ALG	2006	11	14	pH	7.43	-log[H+]
309ALG	2006	11	14	Solids, Total Dissolved (TDS)	348	mg/L
309ALG	2006	11	14	Turbidity	779	NTU
309ALG	2006	11	14	Unionized Ammonia as N	0.0184	mg/L
309ALG	2006	11	14	Water Temperature	17.27	Celsius
309GAB	2006	11	14	Conductivity		uS/cm
309GAB	2006	11	14	Dissolved Oxygen		mg/L
309GAB	2006	11	14	pH		-log[H+]
309GAB	2006	11	14	Turbidity		NTU
309GAB	2006	11	14	Water Temperature		Celsius
309NAD	2006	11	14	Ammonia as N	ND	mg/L
309NAD	2006	11	14	Conductivity	847.2	uS/cm
309NAD	2006	11	14	Dissolved Oxygen	5.84	mg/L

SITEID	Sample Year	Sample Month	Sample Day	AnalyteNameReport	Result	Unit
309NAD	2006	11	14	Nitrate as N	14.9	mg/L
309NAD	2006	11	14	Orthophosphate as P	0.6052	mg/L
309NAD	2006	11	14	pH	7.47	-log[H+]
309NAD	2006	11	14	Solids, Total Dissolved (TDS)	503	mg/L
309NAD	2006	11	14	Turbidity	630	NTU
309NAD	2006	11	14	Unionized Ammonia as N	0	mg/L
309NAD	2006	11	14	Water Temperature	16.73	Celsius
309ALG	2006	12	12	Ammonia as N	1.3	mg/L
309ALG	2006	12	12	Conductivity	390.1	uS/cm
309ALG	2006	12	12	Dissolved Oxygen	8.43	mg/L
309ALG	2006	12	12	Nitrate as N	11.6	mg/L
309ALG	2006	12	12	Orthophosphate as P	0.5726	mg/L
309ALG	2006	12	12	pH	7.25	-log[H+]
309ALG	2006	12	12	Solids, Total Dissolved (TDS)	240	mg/L
309ALG	2006	12	12	Turbidity	434	NTU
309ALG	2006	12	12	Unionized Ammonia as N	0.0051	mg/L
309ALG	2006	12	12	Water Temperature	12.34	Celsius
309GAB	2006	12	12	Ammonia as N	0.7	mg/L
309GAB	2006	12	12	Conductivity	374.6	uS/cm
309GAB	2006	12	12	Dissolved Oxygen	6.89	mg/L
309GAB	2006	12	12	Nitrate as N	29.6	mg/L
309GAB	2006	12	12	Orthophosphate as P	1.2471	mg/L
309GAB	2006	12	12	pH	7.84	-log[H+]
309GAB	2006	12	12	Solids, Total Dissolved (TDS)	240	mg/L
309GAB	2006	12	12	Turbidity	1500	NTU
309GAB	2006	12	12	Unionized Ammonia as N	0.0105	mg/L
309GAB	2006	12	12	Water Temperature	12.21	Celsius
309NAD	2006	12	12	Ammonia as N	ND	mg/L
309NAD	2006	12	12	Conductivity	276.2	uS/cm
309NAD	2006	12	12	Dissolved Oxygen	8.23	mg/L
309NAD	2006	12	12	Nitrate as N	7.3	mg/L
309NAD	2006	12	12	Orthophosphate as P	0.6362	mg/L
309NAD	2006	12	12	pH	7.58	-log[H+]
309NAD	2006	12	12	Solids, Total Dissolved (TDS)	220	mg/L
309NAD	2006	12	12	Turbidity	1208	NTU
309NAD	2006	12	12	Unionized Ammonia as N	0	mg/L
309NAD	2006	12	12	Water Temperature	12.01	Celsius
309ALG	2007	1	30	Ammonia as N	1.68	mg/L
309ALG	2007	1	30	Conductivity	900.2	uS/cm
309ALG	2007	1	30	Dissolved Oxygen	6.18	mg/L
309ALG	2007	1	30	Nitrate as N	18.2	mg/L
309ALG	2007	1	30	Orthophosphate as P	1.2085	mg/L
309ALG	2007	1	30	pH	8.36	-log[H+]

SITEID	Sample Year	Sample Month	Sample Day	AnalyteNameReport	Result	Unit
309ALG	2007	1	30	Solids, Total Dissolved (TDS)	540	mg/L
309ALG	2007	1	30	Turbidity	133.6	NTU
309ALG	2007	1	30	Unionized Ammonia as N	0.1263	mg/L
309ALG	2007	1	30	Water Temperature	18.51	Celsius
309GAB	2007	1	30	Conductivity		uS/cm
309GAB	2007	1	30	Dissolved Oxygen		mg/L
309GAB	2007	1	30	pH		-log[H+]
309GAB	2007	1	30	Turbidity		NTU
309GAB	2007	1	30	Water Temperature		Celsius
309NAD	2007	1	30	Ammonia as N	0.296	mg/L
309NAD	2007	1	30	Conductivity	1456	uS/cm
309NAD	2007	1	30	Dissolved Oxygen	5.35	mg/L
309NAD	2007	1	30	Nitrate as N	23.9	mg/L
309NAD	2007	1	30	Orthophosphate as P	0.6052	mg/L
309NAD	2007	1	30	pH	7.2	-log[H+]
309NAD	2007	1	30	Solids, Total Dissolved (TDS)	920	mg/L
309NAD	2007	1	30	Turbidity	26.3	NTU
309NAD	2007	1	30	Unionized Ammonia as N	0.0009	mg/L
309NAD	2007	1	30	Water Temperature	10.56	Celsius
309ALG	2007	2	15	Algae Toxicity, Cell Growth	171.6	%Control Growth
309ALG	2007	2	15	Ammonia as N	1.43	mg/L
309ALG	2007	2	15	Conductivity	717.8	uS/cm
309ALG	2007	2	15	Dissolved Oxygen	6.38	mg/L
309ALG	2007	2	15	Fish Toxicity, Growth	110.2	%Control Growth
309ALG	2007	2	15	Fish Toxicity, Survival	100	%Control Survival
309ALG	2007	2	15	Invertebrate Toxicity, Reproduction	0	%Control Repro
309ALG	2007	2	15	Invertebrate Toxicity, Survival	0	%Control Survival
309ALG	2007	2	15	Nitrate as N	8.52	mg/L
309ALG	2007	2	15	Orthophosphate as P	0.6323	mg/L
309ALG	2007	2	15	pH	8.25	-log[H+]
309ALG	2007	2	15	Solids, Total Dissolved (TDS)	384	mg/L
309ALG	2007	2	15	Turbidity	478	NTU
309ALG	2007	2	15	Unionized Ammonia as N	0.1162	mg/L
309ALG	2007	2	15	Water Temperature	23.16	Celsius
309GAB	2007	2	15	Conductivity		uS/cm
309GAB	2007	2	15	Dissolved Oxygen		mg/L
309GAB	2007	2	15	pH		-log[H+]
309GAB	2007	2	15	Turbidity		NTU

SITEID	Sample Year	Sample Month	Sample Day	AnalyteNameReport	Result	Unit
309GAB	2007	2	15	Water Temperature		Celsius
309NAD	2007	2	15	Algae Toxicity, Cell Growth	182.4	%Control Growth
309NAD	2007	2	15	Ammonia as N	0.191	mg/L
309NAD	2007	2	15	Conductivity	1548	uS/cm
309NAD	2007	2	15	Dissolved Oxygen	5.82	mg/L
309NAD	2007	2	15	Fish Toxicity, Growth	95.4	%Control Growth
309NAD	2007	2	15	Fish Toxicity, Survival	100	%Control Survival
309NAD	2007	2	15	Invertebrate Toxicity, Reproduction	125.4	%Control Repro
309NAD	2007	2	15	Invertebrate Toxicity, Survival	100	%Control Survival
309NAD	2007	2	15	Nitrate as N	26.5	mg/L
309NAD	2007	2	15	Orthophosphate as P	0.1059	mg/L
309NAD	2007	2	15	pH	7.24	-log[H+]
309NAD	2007	2	15	Solids, Total Dissolved (TDS)	809	mg/L
309NAD	2007	2	15	Turbidity	30.7	NTU
309NAD	2007	2	15	Unionized Ammonia as N	0.0008	mg/L
309NAD	2007	2	15	Water Temperature	14.11	Celsius
309ALG	2007	3	22	Algae Toxicity, Cell Growth	188.4	%Control Growth
309ALG	2007	3	22	Ammonia as N	0.626	mg/L
309ALG	2007	3	22	Conductivity	972	uS/cm
309ALG	2007	3	22	Dissolved Oxygen	8.95	mg/L
309ALG	2007	3	22	Fish Toxicity, Growth	104.1	%Control Growth
309ALG	2007	3	22	Fish Toxicity, Survival	100	%Control Survival
309ALG	2007	3	22	Invertebrate Toxicity, Reproduction	0	%Control Repro
309ALG	2007	3	22	Invertebrate Toxicity, Survival	0	%Control Survival
309ALG	2007	3	22	Nitrate as N	28.3	mg/L
309ALG	2007	3	22	Orthophosphate as P	0.7016	mg/L
309ALG	2007	3	22	pH	8.4	-log[H+]
309ALG	2007	3	22	Solids, Total Dissolved (TDS)	532	mg/L
309ALG	2007	3	22	Turbidity	238.5	NTU
309ALG	2007	3	22	Unionized Ammonia as N	0.0304	mg/L
309ALG	2007	3	22	Water Temperature	11.18	Celsius
309GAB	2007	3	22	Conductivity		uS/cm
309GAB	2007	3	22	Dissolved Oxygen		mg/L
309GAB	2007	3	22	pH		-log[H+]

SITEID	Sample Year	Sample Month	Sample Day	AnalyteNameReport	Result	Unit
309GAB	2007	3	22	Turbidity		NTU
309GAB	2007	3	22	Water Temperature		Celsius
309NAD	2007	3	22	Algae Toxicity, Cell Growth	215.1	%Control Growth
309NAD	2007	3	22	Ammonia as N	0.186	mg/L
309NAD	2007	3	22	Conductivity	1634	uS/cm
309NAD	2007	3	22	Dissolved Oxygen	6.7	mg/L
309NAD	2007	3	22	Fish Toxicity, Growth	104.3	%Control Growth
309NAD	2007	3	22	Fish Toxicity, Survival	95	%Control Survival
309NAD	2007	3	22	Invertebrate Toxicity, Reproduction	76.4	%Control Repro
309NAD	2007	3	22	Invertebrate Toxicity, Survival	100	%Control Survival
309NAD	2007	3	22	Nitrate as N	37.9	mg/L
309NAD	2007	3	22	Orthophosphate as P	0.2713	mg/L
309NAD	2007	3	22	pH	7.93	-log[H+]
309NAD	2007	3	22	Solids, Total Dissolved (TDS)	803	mg/L
309NAD	2007	3	22	Turbidity	12.5	NTU
309NAD	2007	3	22	Unionized Ammonia as N	0.0036	mg/L
309NAD	2007	3	22	Water Temperature	12.95	Celsius

Appendix D – CBWQMP Data – Santa Rita Creek

*** Highlighted results denote a water quality exceedence**

StationCode	SampleDate	AnalyteName	Unit	Result
309-BOLIV-31	9/16/06	Coliform, Total	MPN/100ml	120,979.00
309-BOLIV-31	9/16/06	E. coli	MPN/100ml	995.00
309-BOLIV-31	9/16/06	Nitrate as N	mg/L	6.32
309-BOLIV-31	9/16/06	Orthophosphate as P	mg/L	1.03
309-BOLIV-31	9/16/06	pH	pH	7.50
309-BOLIV-31	9/16/06	Specific Conductivity	µS/cm	970.00
309-BOLIV-31	9/16/06	Temperature	deg C	20.00
309-RUSSE-31	9/16/06	Coliform, Total	MPN/100ml	49,020.00
309-RUSSE-31	9/16/06	E. coli	MPN/100ml	50.00
309-RUSSE-31	9/16/06	Nitrate as N	mg/L	0.17
309-RUSSE-31	9/16/06	Orthophosphate as P	mg/L	0.08
309-RUSSE-31	9/16/06	pH	pH	7.00
309-RUSSE-31	9/16/06	Specific Conductivity	µS/cm	560.00
309-RUSSE-31	9/16/06	Temperature	deg C	15.00
309-SRITA-32	9/16/06	Coliform, Total	MPN/100ml	5,531.00
309-SRITA-32	9/16/06	E. coli	MPN/100ml	369.00
309-SRITA-32	9/16/06	Nitrate as N	mg/L	0.87
309-SRITA-32	9/16/06	Orthophosphate as P	mg/L	0.00
309-SRITA-32	9/16/06	pH	pH	7.00
309-SRITA-32	9/16/06	Specific Conductivity	µS/cm	580.00
309-SRITA-32	9/16/06	Temperature	deg C	14.40
309-SRITA-34	9/16/06	Coliform, Total	MPN/100ml	12,445.00
309-SRITA-34	9/16/06	E. coli	MPN/100ml	310.00
309-SRITA-34	9/16/06	Nitrate as N	mg/L	0.00
309-SRITA-34	9/16/06	Orthophosphate as P	mg/L	0.10
309-SRITA-34	9/16/06	pH	pH	7.00
309-SRITA-34	9/16/06	Specific Conductivity	µS/cm	590.00
309-SRITA-34	9/16/06	Temperature	deg C	14.00
309-SRITA-35	9/16/06	pH	pH	7.50
309-SRITA-35	9/16/06	Specific Conductivity	µS/cm	630.00
309-SRITA-35	9/16/06	Temperature	deg C	13.70
309-SRITA-36	9/16/06	Coliform, Total	MPN/100ml	64,983.00
309-SRITA-36	9/16/06	E. coli	MPN/100ml	925.00
309-SRITA-36	9/16/06	Nitrate as N	mg/L	1.27
309-SRITA-36	9/16/06	Orthophosphate as P	mg/L	0.00
309-SRITA-36	9/16/06	pH	pH	7.50
309-SRITA-36	9/16/06	Specific Conductivity	µS/cm	770.00
309-SRITA-36	9/16/06	Temperature	deg C	16.60
309-VANBU-31	9/16/06	Coliform, Total	MPN/100ml	36,350.00
309-VANBU-31	9/16/06	E. coli	MPN/100ml	153.00
309-VANBU-31	9/16/06	Nitrate as N	mg/L	3.14
309-VANBU-31	9/16/06	Orthophosphate as P	mg/L	0.36
309-VANBU-31	9/16/06	pH	pH	7.50
309-VANBU-31	9/16/06	Specific Conductivity	µS/cm	760.00

StationCode	SampleDate	AnalyteName	Unit	Result
309-VANBU-31	9/16/06	Temperature	deg C	17.00
309-RUSSE-31	10/14/06	Coliform, Total	MPN/100ml	120,980.00
309-RUSSE-31	10/14/06	E. coli	MPN/100ml	1,067.00
309-RUSSE-31	10/14/06	Nitrate as N	mg/L	1.15
309-RUSSE-31	10/14/06	Orthophosphate as P	mg/L	0.24
309-RUSSE-31	10/14/06	pH	pH	7.50
309-RUSSE-31	10/14/06	Specific Conductivity	µS/cm	660.00
309-RUSSE-31	10/14/06	Temperature	deg C	16.00
309-SRITA-32	10/14/06	Coliform, Total	MPN/100ml	16,277.00
309-SRITA-32	10/14/06	E. coli	MPN/100ml	790.00
309-SRITA-32	10/14/06	Nitrate as N	mg/L	0.27
309-SRITA-32	10/14/06	Orthophosphate as P	mg/L	0.00
309-SRITA-32	10/14/06	pH	pH	7.00
309-SRITA-32	10/14/06	Specific Conductivity	µS/cm	520.00
309-SRITA-32	10/14/06	Temperature	deg C	15.30
309-SRITA-34	10/14/06	Coliform, Total	MPN/100ml	14,933.00
309-SRITA-34	10/14/06	E. coli	MPN/100ml	856.00
309-SRITA-34	10/14/06	E. coli	MPN/100ml	973.00
309-SRITA-34	10/14/06	Nitrate as N	mg/L	0.11
309-SRITA-34	10/14/06	Orthophosphate as P	mg/L	0.00
309-SRITA-34	10/14/06	pH	pH	7.00
309-SRITA-34	10/14/06	Specific Conductivity	µS/cm	530.00
309-SRITA-34	10/14/06	Temperature	deg C	15.20
309-SRITA-35	10/14/06	Coliform, Total	MPN/100ml	77,010.00
309-SRITA-35	10/14/06	E. coli	MPN/100ml	6,968.00
309-SRITA-35	10/14/06	Nitrate as N	mg/L	0.00
309-SRITA-35	10/14/06	Orthophosphate as P	mg/L	0.00
309-SRITA-35	10/14/06	pH	pH	7.50
309-SRITA-35	10/14/06	Specific Conductivity	µS/cm	610.00
309-SRITA-35	10/14/06	Temperature	deg C	15.30
309-SRITA-36	10/14/06	Coliform, Total	MPN/100ml	32,441.00
309-SRITA-36	10/14/06	E. coli	MPN/100ml	606.00
309-SRITA-36	10/14/06	Nitrate as N	mg/L	0.00
309-SRITA-36	10/14/06	Orthophosphate as P	mg/L	0.00
309-SRITA-36	10/14/06	pH	pH	7.50
309-SRITA-36	10/14/06	Specific Conductivity	µS/cm	720.00
309-SRITA-36	10/14/06	Temperature	deg C	15.70
309-VANBU-31	10/14/06	Coliform, Total	MPN/100ml	4,663.00
309-VANBU-31	10/14/06	E. coli	MPN/100ml	50.00
309-VANBU-31	10/14/06	Nitrate as N	mg/L	3.14
309-VANBU-31	10/14/06	Orthophosphate as P	mg/L	0.17
309-VANBU-31	10/14/06	pH	pH	7.00
309-VANBU-31	10/14/06	Specific Conductivity	µS/cm	580.00
309-VANBU-31	10/14/06	Temperature	deg C	18.00

StationCode	SampleDate	AnalyteName	Unit	Result
309-BOLIV-31	11/4/06	Coliform, Total	MPN/100ml	54,750.00
309-BOLIV-31	11/4/06	E. coli	MPN/100ml	2,334.00
309-BOLIV-31	11/4/06	Nitrate as N	mg/L	4.64
309-BOLIV-31	11/4/06	Orthophosphate as P	mg/L	0.32
309-BOLIV-31	11/4/06	pH	pH	7.50
309-BOLIV-31	11/4/06	Specific Conductivity	µS/cm	740.00
309-BOLIV-31	11/4/06	Temperature	deg C	20.00
309-RUSSE-31	11/4/06	Coliform, Total	MPN/100ml	98,039.00
309-RUSSE-31	11/4/06	E. coli	MPN/100ml	413.00
309-RUSSE-31	11/4/06	Nitrate as N	mg/L	0.00
309-RUSSE-31	11/4/06	Orthophosphate as P	mg/L	0.32
309-RUSSE-31	11/4/06	pH	pH	7.50
309-RUSSE-31	11/4/06	Specific Conductivity	µS/cm	740.00
309-RUSSE-31	11/4/06	Temperature	deg C	19.00
309-SRITA-32	11/4/06	Coliform, Total	MPN/100ml	98,039.00
309-SRITA-32	11/4/06	E. coli	MPN/100ml	29,093.00
309-SRITA-32	11/4/06	Nitrate as N	mg/L	0.90
309-SRITA-32	11/4/06	Orthophosphate as P	mg/L	0.14
309-SRITA-32	11/4/06	pH	pH	7.00
309-SRITA-32	11/4/06	Specific Conductivity	µS/cm	900.00
309-SRITA-32	11/4/06	Temperature	deg C	16.75
309-SRITA-35	11/4/06	Coliform, Total	MPN/100ml	15,525.00
309-SRITA-35	11/4/06	E. coli	MPN/100ml	1,731.00
309-SRITA-35	11/4/06	Nitrate as N	mg/L	0.16
309-SRITA-35	11/4/06	Orthophosphate as P	mg/L	0.16
309-SRITA-35	11/4/06	pH	pH	7.00
309-SRITA-35	11/4/06	Specific Conductivity	µS/cm	720.00
309-SRITA-35	11/4/06	Temperature	deg C	16.00
309-SRITA-36	11/4/06	Coliform, Total	MPN/100ml	81,641.00
309-SRITA-36	11/4/06	E. coli	MPN/100ml	202.00
309-SRITA-36	11/4/06	Nitrate as N	mg/L	0.00
309-SRITA-36	11/4/06	Orthophosphate as P	mg/L	0.16
309-SRITA-36	11/4/06	pH	pH	7.50
309-SRITA-36	11/4/06	Specific Conductivity	µS/cm	800.00
309-SRITA-36	11/4/06	Temperature	deg C	14.20
309-VANBU-31	11/4/06	Coliform, Total	MPN/100ml	16,640.00
309-VANBU-31	11/4/06	E. coli	MPN/100ml	100.00
309-VANBU-31	11/4/06	Nitrate as N	mg/L	2.72
309-VANBU-31	11/4/06	Orthophosphate as P	mg/L	0.32
309-VANBU-31	11/4/06	pH	pH	7.00
309-VANBU-31	11/4/06	Specific Conductivity	µS/cm	590.00
309-VANBU-31	11/4/06	Temperature	deg C	17.00
309-BELLI-31	12/9/06	Coliform, Total	MPN/100ml	241,960.00
309-BELLI-31	12/9/06	E. coli	MPN/100ml	200.00

StationCode	SampleDate	AnalyteName	Unit	Result
309-BELLI-31	12/9/06	Nitrate as N	mg/L	1.03
309-BELLI-31	12/9/06	Orthophosphate as P	mg/L	0.77
309-BELLI-31	12/9/06	pH	pH	7.00
309-BELLI-31	12/9/06	Specific Conductivity	µS/cm	490.00
309-BELLI-31	12/9/06	Temperature	deg C	14.50
309-BOLIV-31	12/9/06	E. coli	MPN/100ml	4,640.00
309-BOLIV-31	12/9/06	Nitrate as N	mg/L	1.76
309-BOLIV-31	12/9/06	Orthophosphate as P	mg/L	0.40
309-BOLIV-31	12/9/06	pH	pH	7.00
309-BOLIV-31	12/9/06	Specific Conductivity	µS/cm	260.00
309-BOLIV-31	12/9/06	Temperature	deg C	15.00
309-RUSSE-31	12/9/06	Coliform, Total	MPN/100ml	241,960.00
309-RUSSE-31	12/9/06	E. coli	MPN/100ml	2,280.00
309-RUSSE-31	12/9/06	Nitrate as N	mg/L	0.91
309-RUSSE-31	12/9/06	Orthophosphate as P	mg/L	0.67
309-RUSSE-31	12/9/06	pH	pH	7.50
309-RUSSE-31	12/9/06	Specific Conductivity	µS/cm	230.00
309-RUSSE-31	12/9/06	Temperature	deg C	14.00
309-SRITA-32	12/9/06	Coliform, Total	MPN/100ml	111,990.00
309-SRITA-32	12/9/06	E. coli	MPN/100ml	1,990.00
309-SRITA-32	12/9/06	Nitrate as N	mg/L	0.36
309-SRITA-32	12/9/06	Orthophosphate as P	mg/L	0.10
309-SRITA-32	12/9/06	pH	pH	6.50
309-SRITA-32	12/9/06	Specific Conductivity	µS/cm	200.00
309-SRITA-32	12/9/06	Temperature	deg C	12.20
309-SRITA-34	12/9/06	Coliform, Total	MPN/100ml	241,960.00
309-SRITA-34	12/9/06	E. coli	MPN/100ml	11,060.00
309-SRITA-34	12/9/06	Nitrate as N	mg/L	0.39
309-SRITA-34	12/9/06	Orthophosphate as P	mg/L	0.00
309-SRITA-34	12/9/06	pH	pH	7.00
309-SRITA-34	12/9/06	Specific Conductivity	µS/cm	170.00
309-SRITA-34	12/9/06	Temperature	deg C	12.80
309-SRITA-35	12/9/06	Coliform, Total	MPN/100ml	241,960.00
309-SRITA-35	12/9/06	E. coli	MPN/100ml	4,260.00
309-SRITA-35	12/9/06	Nitrate as N	mg/L	0.47
309-SRITA-35	12/9/06	Orthophosphate as P	mg/L	0.31
309-SRITA-35	12/9/06	pH	pH	7.00
309-SRITA-35	12/9/06	Temperature	deg C	12.60
309-SRITA-36	12/9/06	Coliform, Total	MPN/100ml	241,960.00
309-SRITA-36	12/9/06	E. coli	MPN/100ml	4,650.00
309-SRITA-36	12/9/06	Nitrate as N	mg/L	1.12
309-SRITA-36	12/9/06	Orthophosphate as P	mg/L	0.50
309-SRITA-36	12/9/06	pH	pH	7.00
309-SRITA-36	12/9/06	Specific Conductivity	µS/cm	220.00

StationCode	SampleDate	AnalyteName	Unit	Result
309-SRITA-36	12/9/06	Temperature	deg C	12.90
309-VANBU-31	12/9/06	Coliform, Total	MPN/100ml	46,110.00
309-VANBU-31	12/9/06	E. coli	MPN/100ml	200.00
309-VANBU-31	12/9/06	Nitrate as N	mg/L	1.70
309-VANBU-31	12/9/06	Orthophosphate as P	mg/L	0.32
309-VANBU-31	12/9/06	pH	pH	7.00
309-VANBU-31	12/9/06	Specific Conductivity	µS/cm	350.00
309-VANBU-31	12/9/06	Temperature	deg C	16.00

Appendix D – CBWQMP Data – Reclamation Ditch

*** Highlighted results denote a water quality exceedence**

StationCode	SampleDate	AnalyteName	Unit	Result
309-BEVER-31	10/25/06	Coliform, Total	MPN/100ml	120,979.00
309-BEVER-31	10/25/06	E. coli	MPN/100ml	50.00
309-BEVER-31	10/25/06	Nitrate as N	mg/L	29.10
309-BEVER-31	10/25/06	Orthophosphate as P	mg/L	1.33
309-BEVER-31	10/25/06	pH	pH	7.50
309-BEVER-31	10/25/06	Specific Conductivity	µS/cm	920.00
309-BEVER-31	10/25/06	Temperature	deg C	16.00
309-BEVER-33	10/25/06	Coliform, Total	MPN/100ml	52,312.00
309-BEVER-33	10/25/06	E. coli	MPN/100ml	203.00
309-BEVER-33	10/25/06	Nitrate as N	mg/L	3.14
309-BEVER-33	10/25/06	Orthophosphate as P	mg/L	0.25
309-BEVER-33	10/25/06	pH	pH	7.50
309-BEVER-33	10/25/06	Specific Conductivity	µS/cm	1,110.00
309-BEVER-33	10/25/06	Temperature	deg C	15.00
309-MOFFE-31	10/25/06	Coliform, Total	MPN/100ml	120,980.00
309-MOFFE-31	10/25/06	E. coli	MPN/100ml	50.00
309-MOFFE-31	10/25/06	Nitrate as N	mg/L	5.11
309-MOFFE-31	10/25/06	Orthophosphate as P	mg/L	0.30
309-MOFFE-31	10/25/06	pH	pH	7.50
309-MOFFE-31	10/25/06	Specific Conductivity	µS/cm	750.00
309-MOFFE-31	10/25/06	Temperature	deg C	15.00
309-RECDI-31	10/25/06	Coliform, Total	MPN/100ml	12,445.00
309-RECDI-31	10/25/06	E. coli	MPN/100ml	151.00
309-RECDI-31	10/25/06	Nitrate as N	mg/L	6.50
309-RECDI-31	10/25/06	Orthophosphate as P	mg/L	0.19
309-RECDI-31	10/25/06	pH	pH	7.50
309-RECDI-31	10/25/06	Specific Conductivity	µS/cm	1,400.00
309-RECDI-31	10/25/06	Temperature	deg C	14.60
309-RECDI-33	10/25/06	Coliform, Total	MPN/100ml	1,796.00
309-RECDI-33	10/25/06	E. coli	MPN/100ml	50.00
309-RECDI-33	10/25/06	Nitrate as N	mg/L	12.20
309-RECDI-33	10/25/06	Orthophosphate as P	mg/L	0.24
309-RECDI-33	10/25/06	pH	pH	7.00
309-RECDI-33	10/25/06	Specific Conductivity	µS/cm	1,310.00
309-RECDI-33	10/25/06	Temperature	deg C	14.80
309-RECDI-34	10/25/06	Coliform, Total	MPN/100ml	120,980.00
309-RECDI-34	10/25/06	E. coli	MPN/100ml	50.00
309-RECDI-34	10/25/06	Nitrate as N	mg/L	7.39
309-RECDI-34	10/25/06	Orthophosphate as P	mg/L	0.17
309-RECDI-34	10/25/06	pH	pH	7.50
309-RECDI-34	10/25/06	Specific Conductivity	µS/cm	1,320.00
309-RECDI-34	10/25/06	Temperature	deg C	13.50
309-RECDI-35	10/25/06	Coliform, Total	MPN/100ml	995.00
309-RECDI-35	10/25/06	E. coli	MPN/100ml	50.00

StationCode	SampleDate	AnalyteName	Unit	Result
309-RECDI-35	10/25/06	Nitrate as N	mg/L	17.30
309-RECDI-35	10/25/06	Orthophosphate as P	mg/L	0.31
309-RECDI-35	10/25/06	pH	pH	7.50
309-RECDI-35	10/25/06	Specific Conductivity	µS/cm	1,000.00
309-RECDI-35	10/25/06	Temperature	deg C	13.00
309-SHERW-31	10/25/06	Coliform, Total	MPN/100ml	77,656.00
309-SHERW-31	10/25/06	E. coli	MPN/100ml	50.00
309-SHERW-31	10/25/06	Nitrate as N	mg/L	1.92
309-SHERW-31	10/25/06	Orthophosphate as P	mg/L	0.78
309-SHERW-31	10/25/06	pH	pH	7.50
309-SHERW-31	10/25/06	Specific Conductivity	µS/cm	880.00
309-SHERW-31	10/25/06	Temperature	deg C	18.00
309-BEVER-31	11/17/06	Coliform, Total	MPN/100ml	6,565.00
309-BEVER-31	11/17/06	E. coli	MPN/100ml	100.00
309-BEVER-31	11/17/06	Nitrate as N	mg/L	3.86
309-BEVER-31	11/17/06	Orthophosphate as P	mg/L	1.02
309-BEVER-31	11/17/06	pH	pH	7.00
309-BEVER-31	11/17/06	Specific Conductivity	µS/cm	730.00
309-BEVER-31	11/17/06	Temperature	deg C	16.00
309-MOFFE-31	11/17/06	Coliform, Total	MPN/100ml	241,960.00
309-MOFFE-31	11/17/06	E. coli	MPN/100ml	141,361.00
309-MOFFE-31	11/17/06	Nitrate as N	mg/L	4.06
309-MOFFE-31	11/17/06	Orthophosphate as P	mg/L	0.07
309-MOFFE-31	11/17/06	pH	pH	7.00
309-MOFFE-31	11/17/06	Specific Conductivity	µS/cm	700.00
309-MOFFE-31	11/17/06	Temperature	deg C	15.00
309-RECDI-31	11/17/06	Coliform, Total	MPN/100ml	241,960.00
309-RECDI-31	11/17/06	E. coli	MPN/100ml	1,136.00
309-RECDI-31	11/17/06	Nitrate as N	mg/L	5.35
309-RECDI-31	11/17/06	Orthophosphate as P	mg/L	0.29
309-RECDI-31	11/17/06	pH	pH	7.00
309-RECDI-31	11/17/06	Specific Conductivity	µS/cm	730.00
309-RECDI-31	11/17/06	Temperature	deg C	15.40
309-RECDI-33	11/17/06	Coliform, Total	MPN/100ml	111,987.00
309-RECDI-33	11/17/06	E. coli	MPN/100ml	100.00
309-RECDI-33	11/17/06	Nitrate as N	mg/L	20.70
309-RECDI-33	11/17/06	Orthophosphate as P	mg/L	1.01
309-RECDI-33	11/17/06	pH	pH	7.50
309-RECDI-33	11/17/06	Specific Conductivity	µS/cm	1,290.00
309-RECDI-33	11/17/06	Temperature	deg C	15.40
309-RECDI-34	11/17/06	Coliform, Total	MPN/100ml	241,960.00
309-RECDI-34	11/17/06	E. coli	MPN/100ml	155,312.00
309-RECDI-34	11/17/06	Nitrate as N	mg/L	5.57
309-RECDI-34	11/17/06	Orthophosphate as P	mg/L	0.31

StationCode	SampleDate	AnalyteName	Unit	Result
309-RECDI-34	11/17/06	pH	pH	7.50
309-RECDI-34	11/17/06	Specific Conductivity	µS/cm	800.00
309-RECDI-34	11/17/06	Temperature	deg C	15.20
309-RECDI-35	11/17/06	Coliform, Total	MPN/100ml	241,960.00
309-RECDI-35	11/17/06	E. coli	MPN/100ml	1,869.00
309-RECDI-35	11/17/06	Nitrate as N	mg/L	20.00
309-RECDI-35	11/17/06	Orthophosphate as P	mg/L	1.05
309-RECDI-35	11/17/06	pH	pH	7.50
309-RECDI-35	11/17/06	Specific Conductivity	µS/cm	1,070.00
309-RECDI-35	11/17/06	Temperature	deg C	14.10
309-SHERW-31	11/17/06	Coliform, Total	MPN/100ml	77,010.00
309-SHERW-31	11/17/06	E. coli	MPN/100ml	3,931.00
309-SHERW-31	11/17/06	Nitrate as N	mg/L	0.97
309-SHERW-31	11/17/06	Orthophosphate as P	mg/L	0.24
309-SHERW-31	11/17/06	pH	pH	7.50
309-SHERW-31	11/17/06	Specific Conductivity	µS/cm	360.00
309-SHERW-31	11/17/06	Temperature	deg C	16.50
309-BEVER-31	12/6/06	Coliform, Total	MPN/100ml	6,310.00
309-BEVER-31	12/6/06	E. coli	MPN/100ml	310.00
309-BEVER-31	12/6/06	Nitrate as N	mg/L	2.83
309-BEVER-31	12/6/06	Orthophosphate as P	mg/L	0.59
309-BEVER-31	12/6/06	pH	pH	7.50
309-BEVER-31	12/6/06	Specific Conductivity	µS/cm	810.00
309-BEVER-31	12/6/06	Temperature	deg C	12.00
309-MOFFE-31	12/6/06	Coliform, Total	MPN/100ml	241,960.00
309-MOFFE-31	12/6/06	E. coli	MPN/100ml	9,340.00
309-MOFFE-31	12/6/06	Nitrate as N	mg/L	3.74
309-MOFFE-31	12/6/06	Orthophosphate as P	mg/L	0.09
309-MOFFE-31	12/6/06	pH	pH	7.50
309-MOFFE-31	12/6/06	Specific Conductivity	µS/cm	780.00
309-MOFFE-31	12/6/06	Temperature	deg C	10.00
309-RECDI-31	12/6/06	Coliform, Total	MPN/100ml	98,040.00
309-RECDI-31	12/6/06	E. coli	MPN/100ml	100.00
309-RECDI-31	12/6/06	Nitrate as N	mg/L	11.00
309-RECDI-31	12/6/06	Orthophosphate as P	mg/L	0.17
309-RECDI-31	12/6/06	pH	pH	7.00
309-RECDI-31	12/6/06	Specific Conductivity	µS/cm	1,150.00
309-RECDI-31	12/6/06	Temperature	deg C	6.70
309-RECDI-33	12/6/06	Coliform, Total	MPN/100ml	3,090.00
309-RECDI-33	12/6/06	E. coli	MPN/100ml	100.00
309-RECDI-33	12/6/06	Nitrate as N	mg/L	6.64
309-RECDI-33	12/6/06	Orthophosphate as P	mg/L	0.57
309-RECDI-33	12/6/06	pH	pH	7.50
309-RECDI-33	12/6/06	Specific Conductivity	µS/cm	1,190.00

StationCode	SampleDate	AnalyteName	Unit	Result
309-RECDI-33	12/6/06	Temperature	deg C	6.70
309-RECDI-34	12/6/06	Coliform, Total	MPN/100ml	92,080.00
309-RECDI-34	12/6/06	E. coli	MPN/100ml	410.00
309-RECDI-34	12/6/06	Nitrate as N	mg/L	16.40
309-RECDI-34	12/6/06	Orthophosphate as P	mg/L	0.00
309-RECDI-34	12/6/06	pH	pH	7.50
309-RECDI-34	12/6/06	Specific Conductivity	µS/cm	1,170.00
309-RECDI-34	12/6/06	Temperature	deg C	5.00
309-RECDI-35	12/6/06	Coliform, Total	MPN/100ml	241,960.00
309-RECDI-35	12/6/06	E. coli	MPN/100ml	410.00
309-RECDI-35	12/6/06	Nitrate as N	mg/L	21.20
309-RECDI-35	12/6/06	Orthophosphate as P	mg/L	0.49
309-RECDI-35	12/6/06	pH	pH	7.00
309-RECDI-35	12/6/06	Specific Conductivity	µS/cm	1,180.00
309-RECDI-35	12/6/06	Temperature	deg C	4.80
309-SHERW-31	12/6/06	Coliform, Total	MPN/100ml	54,750.00
309-SHERW-31	12/6/06	E. coli	MPN/100ml	750.00
309-SHERW-31	12/6/06	Nitrate as N	mg/L	4.90
309-SHERW-31	12/6/06	Orthophosphate as P	mg/L	0.81
309-SHERW-31	12/6/06	pH	pH	7.50
309-SHERW-31	12/6/06	Specific Conductivity	µS/cm	880.00
309-SHERW-31	12/6/06	Temperature	deg C	13.50