

Attachment 1

Adaptive Management Process

Plastic Pellet Spill Response Plan

City of El Monte
Watershed Management Program
Adaptive Management Process

July 3, 2017

The City of El Monte has prepared this Adaptive Management Process to evaluate and implement modifications to its Watershed Management Program (WMP) and Integrated Monitoring Program (IMP) in order to make both programs more effective. The evaluation and any modifications to the programs are based on the findings and conclusions presented in the following elements.

Progress toward achieving applicable WQBELs and WLAs

For this first Adaptive Management process, the Receiving Water Monitoring data in the Los Angeles River (Rio Hondo) and San Gabriel River is too limited (the data set is too small) at this point to access any type of trend or make a determination regarding if the water quality is improving or degrading. Once more Receiving Water Monitoring data is collected, a reasonable assessment will be conducted.

Below are tables that show the Outfall Monitoring results as compared to pollutant limits. The tables also include comments for the suggested adaptive management strategy. Since the City's IMP and adjoining CIMPs are in their two years of implementation, monitoring data is limited and complete adaptive management strategies may be premature at this point.

San Gabriel River Discharge

Pollutants as listed in WMP

Outfall #7(SG)

2015-2016

Outfall Monitoring Date	Pollutant	Lab Results	Pollutant Limits	Adaptive Management Required
1/31/2016	Lead	4.2 ug/L	N/A: No flow in SGR*	None at this time
1/31/2016	Cyanide	ND	8.5 ug/L	None at this time
1/31/2016	E.coli	2,200 MPN/100 ml	235 MPN/100 ml	Add more infiltration BMPs
1/31/2016	Toxicity	Pass	P/F	None
2/17/2016	Lead	5.4 ug/L	N/A: No flow in SGR*	None at this time
2/17/2016	Cyanide	ND	8.5 ug/L	None at this time
2/17/2016	E.coli	3,000 MPN/100ml	235 MPN/100 ml	Add more infiltration BMPs
2/17/2016	Toxicity	Pass	P/F	None
3/6/2016	Lead	4.4 ug/L	N/A: No flow in SGR*	None at this time
3/6/2016	Cyanide	2.9 ug/L	8.5 ug/L	None at this time; continue to analyze
3/6/2016	E.coli	9,000 MPN/100 ml	235 MPN/100 ml	Add more infiltration BMPs

*In the San Gabriel River Reach 2 and all upstream reaches and tributaries, wet weather TMDLs apply when the maximum daily flow of the river is equal to or greater than 260 cfs as measured at USGS station 11085000. Attachment P, R4-2012-0175-A01

San Gabriel River Discharge
Pollutants as listed in WMP
Outfall #7(SG)
2016-2017

Outfall Monitoring Date	Pollutant	Lab Results	Pollutant Limits	Adaptive Management Required
11/21/2016	Lead	7.9 ug/L	N/A: No flow in SGR*	None at this time
11/21/2016	Cyanide	ND	8.5 ug/L	None at this time
11/21/2016	E.coli	26,000 MPN/100 ml	235 MPN/100 ml	Add more infiltration BMPs
12/16/2016	Lead	1.9 ug/L	N/A: No flow in SGR*	None at this time
12/16/2016	Cyanide	ND	8.5 ug/L	None at this time
12/16/2016	E.coli	13,000 MPN/100 ml	235 MPN/100 ml	Add more infiltration BMPs
1/20/2017	Lead	4.5 ug/L	N/A: No flow in SGR*	None at this time
1/20/2017	Cyanide	ND	8.5 ug/L	None at this time
1/20/2017	E.coli	3,000 MPN/100ml	235 MPN/100 ml	Add more infiltration BMPs

*In the San Gabriel River Reach 2 and all upstream reaches and tributaries, wet weather TMDLs apply when the maximum daily flow of the river is equal to or greater than 260 cfs as measured at USGS station 11085000. Attachment P, R4-2012-0175-A01

Legg Lake Discharge
Pollutants as listed in WMP
Outfall #6(LL)
2015-2016

Outfall Monitoring Date	Pollutant	Lab Results	Pollutant Limits	Adaptive Management Required
1/31/2016	Nitrogen	574 lbs-N/yr (4.4 mg/L @ 48 ac-ft/yr)	590.3 lbs-N/yr	Infiltrate more runoff or treat runoff to remove/reduce N
1/31/2016	Phosphorous	51 lbs-P/yr (0.39 mg/L @ 48 ac-ft/yr)	226.6 lbs-P/yr	Infiltrate more runoff or treat runoff to remove/reduce P
1/31/2016	Copper	24 ug/L	71 ug/L	Infiltrate runoff to remove/reduce Cu
1/31/2016	Toxicity	Pass	P/F	None at this time
3/6/2016	Nitrogen	655 lbs-N/yr (4.3 mg/L @ 56 ac-ft/yr)	590.3 lbs-N/yr	Infiltrate more runoff or treat runoff to remove/reduce N
3/6/2016	Phosphorous	55 lbs-P/yr (0.36 mg/L @ 56 ac-ft/yr)	226.6 lbs-P/yr	Infiltrate more runoff or treat runoff to remove/reduce P

3/6/2016	Copper	34 ug/L	71 ug/L	Infiltrate more runoff to remove/reduce Cu
3/6/2016	Toxicity	Fail	P/F	Ran TIE on 11/21/16 sample
3/11/2016	Nitrogen	365 lbs-N/yr (2.1 mg/L @ 64 ac-ft/yr)	590.3 lbs-N/yr	Infiltrate more runoff or treat runoff to remove/reduce N
3/11/2016	Phosphorous	40 lbs-P/yr (0.23 mg/L @ 64 ac-ft/yr)	226.6 lbs-P/yr	Infiltrate more runoff or treat runoff to remove/reduce P
3/11/2016	Copper	26 ug/L	71 ug/L	Infiltrate more runoff to remove/reduce Cu
N/A	Trash	N/A	0 trash by 3/6/2016	None; CPS/ARS installed on City owned basins

**Legg Lake Discharge
Pollutants as listed in WMP
Outfall #6(LL)
2016-2017**

Outfall Monitoring Date	Pollutant	Lab Results	Pollutant Limits	Adaptive Management Required
11/21/2016	Nitrogen	435 lbs-N/yr (4.0 mg/L @ 40 ac-ft/yr)	590.3 lbs-N/yr	Infiltrate more runoff or treat runoff to remove/reduce N
11/21/2016	Phosphorous	50 lbs-P/yr (0.46 mg/L @ 40 ac-ft/yr)	226.6 lbs-P/yr	Infiltrate more runoff or treat runoff to remove/reduce P
11/21/2016	Copper	41 ug/L	71 ug/L	Infiltrate runoff to remove/reduce Cu
11/21/2016	Toxicity	TIE indicated that Cu and Zn were causing toxicity	P/F	Infiltrate more runoff to remove/reduce Cu and Zn
12/16/2016	Nitrogen	700 lbs-N/yr (4.6 mg/L @ 56 ac-ft/yr)	590.3 lbs-N/yr	Infiltrate more runoff or treat runoff to remove/reduce N
12/16/2016	Phosphorous	78 lbs-P/yr (0.51 mg/L @ 56 ac-ft/yr)	226.6 lbs-P/yr	Infiltrate more runoff or treat runoff to remove/reduce P
12/16/2016	Copper	25 ug/L	71 ug/L	Infiltrate runoff to remove/reduce Cu
1/20/2017	Nitrogen	223 lbs-N/yr (1.01 mg/L @ 81 ac-ft/yr)	590.3 lbs-N/yr	Infiltrate more runoff or treat runoff to remove/reduce N

1/20/2017	Phosphorous	29 lbs-P/yr (0.13 mg/L @ 81 ac-ft/yr)	226.6 lbs-P/yr	Infiltrate more runoff or treat runoff to remove/reduce P
1/20/17	Copper	8.5 ug/L	71 ug/L	Infiltrate runoff to remove/reduce Cu
N/A	Trash	N/A	0 trash by 3/6/2016	None; CPS/ARS installed on City owned basins

Los Angeles River Discharge (via Rio Hondo)

Los Angeles River Metals TMDL

Outfall #5(RH)

2015-2016

Outfall Monitoring Date	Pollutant	Lab Results	Discharge Flow	Pollutant Discharge	LA River Flow at Wardlow	Pollut ant Limits*	Adaptive Management Required
1/31/2016	Copper	30 ug/L	5 cfs	0.37 kg/day	2,430 cfs	0.96 kg/day	None at this time
1/31/2016	Lead	9.7 ug/L	5 cfs	0.12 kg/day	2,430 cfs	3.95 kg/day	None at this time
1/31/2016	Zinc	110 ug/L	5 cfs	1.34 kg/day	2,430 cfs	9.0 kg/day	None at this time
1/31/2016	Cadmium	0.18 ug/L	5 cfs	0.0022 kg/day	2,430 cfs	0.18 kg/day	None at this time
2/18/2016	Copper	18 ug/L	6 cfs	0.26 kg/day	2,550 cfs	1.01 kg/day	None at this time
2/18/2016	Lead	5.4 ug/L	6 cfs	0.08 kg/day	2,550 cfs	4.15 kg/day	None at this time
2/18/2016	Zinc	70 ug/L	6 cfs	0.82 kg/day	2,550 cfs	9.49 kg/day	None at this time
2/18/2016	Cadmium	ND	6 cfs	-	2,550 cfs	0.19 kg/day	None at this time
3/6/2016	Copper	26 ug/L	21 cfs	1.34 kg/day	4,210 cfs	1.74 kg/day	None at this time
3/6/2016	Lead	12 ug/L	21 cfs	0.62 kg/day	4,210 cfs	6.88 kg/day	None at this time
3/6/2016	Zinc	150 ug/L	21 cfs	7.71 kg/day	4,210 cfs	16.31 kg/day	None at this time
3/6/2016	Cadmium	0.18 ug/L	21 cfs	0.000925 kg/day	4,210 cfs	0.32 kg/day	None at this time

*Wet weather is defined as any day when the maximum daily flow in the LA River is equal to or greater than 500 cfs measured at the Wardlow gauge station. Metals Pollutant Limits are calculated based on grouped wet weather WQBEL equations in Attachment O of Order R4-2012-0175-A01 and on the percentage of El Monte draining to LA River (1.2%).

Los Angeles River Discharge (via Rio Hondo)
Other Pollutants as listed in WMP
Outfall #5(RH)
2015-2016

Outfall Monitoring Date	Pollutant	Lab Results	Pollutant Limits	Adaptive Management Required
1/31/2016	NH3-N	0.47 mg/L	10.1 mg/L	None at this time
1/31/2016	NO3-N+NO2-N	0.54 mg/L	8.0 mg/L	None at this time
1/31/2016	Cyanide	ND	8.5 ug/L	None at this time
1/31/2016	E.coli	1,300 MPN/100 ml	235 MPN/100 ml	Add more infiltration BMPs
2/18/2016	NH3-N	0.36 mg/L	10.1 mg/L	None at this time
2/18/2016	NO3-N+NO2-N	0.52 mg/L	8.0 mg/L	
2/18/2016	Cyanide	ND	8.5 ug/L	None at this time
2/18/2016	E.coli	2,400 MPN/100 ml	235 MPN/100 ml	Add more infiltration BMPs
3/6/2016	NH3-N	0.36 mg/L	10.1 mg/L	None at this time
3/6/2016	NO3-N+NO2-N	0.34 mg/L	8.0 mg/L	None at this time
3/6/2016	Cyanide	ND	8.5 ug/L	None at this time
3/6/2016	E.coli	1,700 MPN/100 ml	235 MPN/100 ml	Add more infiltration BMPs
N/A	Trash	N/A	0 trash by 9/30/2016	None; CPS/ARS installed on City owned basins

Los Angeles River Discharge (via Rio Hondo)
Los Angeles River Metals TMDL
Outfall #5(RH)
2016-2017

Outfall Monitoring Date	Pollutant	Lab Results	Discharge Flow	Pollutant Discharge	LA River Flow at Wardlow	Pollutant Limits*	Adaptive Management Required
11/21/2016	Copper	36 ug/L	10 cfs	0.89 kg/day	3,890 cfs	1.6 kg/day	None at this time
11/21/2016	Lead	1.3 ug/L	10 cfs	0.03 kg/day	3,890 cfs	6.35 kg/day	None at this time
11/21/2016	Zinc	190 ug/L	10 cfs	4.69 kg/day	3,890 cfs	15.0 kg/day	None at this time
11/21/2016	Cadmium	0.19 ug/L	10 cfs	0.00469 kg/day	3,890 cfs	0.30 kg/day	None at this time
12/16/2016	Copper	25 ug/L	43 cfs	2.6 kg/day	6,360 cfs	2.7 kg/day	None at this time
12/16/2016	Lead	7.5 ug/L	43 cfs	0.79 kg/day	6,360 cfs	10.4 kg/day	None at this time
12/16/2016	Zinc	120 ug/L	43 cfs	12.6 kg/day	6,360 cfs	25.2 kg/day	None at this time

12/16/2016	Cadmium	0.10 ug/L	43 cfs	0.00105 kg/day	6,360 cfs	0.5 kg/day	None at this time
1/20/2017	Copper	19 ug/L	80 cfs	3.7 kg/day	10,400 cfs	4.5 kg/day	None at this time
1/20/2017	Lead	12 ug/L	80 cfs	2.35 kg/day	10,400 cfs	17.3 kg/day	None at this time
1/20/2017	Zinc	93 ug/L	80 cfs	8.23 kg/day	10,400 cfs	41.7 kg/day	None at this time
1/20/2017	Cadmium	0.13 ug/L	80 cfs	0.03 kg/day	10,400 cfs	0.83 kg/day	None at this time

*Wet weather is defined as any day when the maximum daily flow in the LA River is equal to or greater than 500 cfs measured at the Wardlow gauge station. Metals Pollutant Limits are calculated based on grouped wet weather WQBEL equations in Attachment O of Order R4-2012-0175-A01 and on the percentage of El Monte draining to LA River (1.2%).

Los Angeles River Discharge (via Rio Hondo)

Other Pollutants as listed in WMP

Outfall #5(RH)

2016-2017

Outfall Monitoring Date	Pollutant	Lab Results	Pollutant Limits	Adaptive Management Required
11/21/2016	NH3-N	0.76 mg/L	10.1 mg/L	None at this time
11/21/2016	NO3-N+NO2-N	1.4 mg/L	8.0 mg/L	None at this time
11/21/2016	Cyanide	ND	8.5 ug/L	None at this time
11/21/2016	E.coli	16,000 MPN/100 ml	235 MPN/100 ml	Add more infiltration BMPs
12/16/2016	NH3-N	0.45 mg/L	10.1 mg/L	None at this time
12/16/2016	NO3-N+NO2-N	0.560 mg/L	8.0 mg/L	None at this time
12/16/2016	Cyanide	ND	8.5 ug/L	None at this time
12/16/2016	E.coli	13,000 MPN/100 ml	235 MPN/100 ml	Add more infiltration BMPs
1/20/2017	NH3-N	0.12 mg/L	10.1 mg/L	None at this time
1/20/2017	NO3-N+NO2-N	0.250 mg/L	8 mg/L	None at this time
1/20/2017	Cyanide	ND	8.5 ug/L	None at this time
1/20/2017	E.coli	5,000 MPN/100 ml	235 MPN/100 ml	Add more infiltration BMPs

N/A	Trash	N/A	0 trash by 9/30/2016	None; CPS/ARS installed on City owned basins
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Progress toward achieving improved water quality in MS4 discharges

Only two years of Outfall Monitoring has been completed since approval of the Integrated Monitoring Program. As more years of monitoring are conducted and more data is obtained, the City will be better able to determine if the discharge at the outfalls is improving, remaining the same, or degrading. The City will continue to implement its monitoring program and work with neighboring jurisdictions to assess receiving water quality. With only limited Outfall Monitoring data at this time, the overall assessment of the effectiveness of stormwater control measures appears to be satisfactory for most pollutants. Efforts to address exceedances is on-going and adjustments to control measures will be taken in subsequent years as more data is obtained and additional Adaptive Management Processes are conducted.

Progress toward TMDL compliance

LA River Bacteria TMDL:

Progress toward the Dry Weather portion the LA River Bacteria TMDL includes preparing and submitting a Load Reduction Strategy report to the Regional Board in March 2016. The City is working independently through its IC/ID Elimination Program (City’s NPDES Consultant and City’s Neighborhood Services staff) to control sources of dry weather runoff. The City is also working collectively with surrounding cities to implement both institutional and structural BMPs to eliminate dry weather discharges to the MS4 for shared Receiving Waters and/or areas near jurisdictional boundaries. Other actions being used to eliminate illicit discharges include the Outfall Screening and Monitoring Program re-assessment, periodic observations of outfalls, observations of “wet gutters” during dry weather, and observations during the inspections conducted as part of the Industrial/Commercial Inspection Program. Training of City Public Works staff to observe, identify, and report “wet gutters” and/or illicit discharges to supervisors and Public Works NPDES staff.

Los Angeles River Trash TMDL, Legg Lake Trash TMDL, and Statewide Trash Amendments:

In order to comply with the Los Angeles River Trash Total Maximum Daily Load (Trash TMDL) for the Rio Hondo Channel, the City retrofitted all existing City catch basins with full capture connector pipe screens (CPS). CPS units are utilized to satisfy the Regional Board requirement for use of certified full capture devices. For catch basins where CPS units could not be utilized due to the configuration of the basin, automatic retractable screens (ARS) were used to capture trash. There are 313 City-owned catch basins within El Monte’s city limits.

As part of the same contract to retrofit the 580 Los Angeles County Flood Control District (LACFCD) owned catch basins, the City coordinated with LACFCD permits division to obtain the right of entry permit. The City inventoried all of the LACFCD owned basins and submitted the permit application for approval to retrofit the LACFCD catch basins. The LACFCD approved the list that contained the installation of CPS and ARS units, pending one item that included a Resolution by the City of El Monte’s City Council approving the execution of an agreement with LACFCD. Upon the installation of the CPS or ARS units, the City becomes responsible for future maintenance and operation of the catch basin trash excluders located with the LACFCD owned basins. Installing CPS or ARS units where applicable significantly reduces the amount of trash entering storm drains and improves water quality.

The City has also installed CPS in all City owned catch basins subject to the Legg Lake Trash TMDL. In anticipation of the Statewide Trash Amendments, the City has installed CPS in its catch basins city-wide (including the San Gabriel River Watershed drainage). These CPS devices prevent trash and debris from entering the storm drain system and the ARS devices keep the trash and debris in the gutter for street sweepers to collect. The City patrols the locations where ARS units are installed and clears any trash lodged on the screen to allow storm flows to enter the catch basins. Source controls at businesses and institutional controls such as enhanced street sweeping, educational outreach and the use of ARS has resulted in a moderate reduction in trash in the catch basins.

Los Angeles River Nitrogen Compounds and Legg Lake Nutrient TMDLs:

The City prepared and released an RFP to vendors to provide/offer media filter inserts to be installed in conjunction with the full capture trash devices. The LACFCD would not approve the installation of the nutrient removal media filters in the catch basins. The City is working with the LACFCD to find an acceptable nutrient removal BMP for installation in select catch basins.

The City implemented a Rain Barrel Program in the community within the Legg Lake drainage portion of the city. Through the Rain Barrel Program the City is attempting to capture a portion of the runoff from properties, thus reducing the amount of runoff available to pick up and transport nutrients and other pollutants into the MS4 and ultimately Legg Lake. As part of the Rain Barrel Program, the City prepared and distributed flyers to the public to educate and draw attention to the Legg Lake nutrient problem and get the public involved in combating/eliminating the amount of nutrient discharges to the MS4. This awareness of source control promotes less runoff to the MS4, less fertilizers transported by runoff, and improved water quality. Schools in the area have also been approached and asked to reduce and/or actively control the application of fertilizers to their properties, being especially cognizant of water use, (efficient irrigation and no over irrigation) and the amount of water use following fertilizer applications (again, the City is promoting efficient irrigation).

Other small scale residential stormwater control measures that the City has encouraged its citizens to consider for their properties include: permeable pavements, planter boxes, rain gardens, small dry wells/tree wells. Each of these "infiltration devices" provide an ascetic way to improve the appeal of the residential property while infiltrating runoff and thus removing pollutants from the MS4.

The City recently adopted MWELO, a Landscape Ordinance. The ordinance will promote sustainable landscaping and efficient irrigation while stabilizing soils and providing areas to capture storm water runoff for infiltration. Substantial water conservation is a benefit gained by proper landscape design, installation and maintenance as well. Water efficiency standards for new and retrofitted landscapes have been updated to utilize more efficient irrigation systems, take advantages of potential greywater usage, onsite storm water capture and by limiting the portion of landscapes that can be covered in turf. Requiring specific landscaping and irrigation practices also reduces the amount of pollutants, such as fertilizers and pesticides, which can affect water quality. Requiring efficient irrigation also decreases the overall volume of runoff thus reducing or eliminating urban runoff to the MS4.

Los Angeles River and Tributaries Metals TMDL:

The Outfall Monitoring data indicates that the City is in compliance with the Los Angeles River Metals TMDL. The City plans to continue implementing infiltration features where possible to further reduce metals in the Rio Hondo and Los Angeles River.

San Gabriel River and Impaired Tributaries Metals and Selenium TMDL:

Although the flow in the San Gabriel River was below the level for the wet weather TMDLs to apply, the Lead levels in the discharge for the outfall to the San Gabriel River appeared to be below the Waste Load Allocation daily maximum for Lead. The City plans to continue implementing infiltration features where possible to further reduce metals in the San Gabriel River.

San Gabriel River Bacteria TMDL:

The City plans to continue implementing infiltration features where possible to further reduce bacteria in the San Gabriel River.

Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL:

The City is participating in the DC/Harbor Toxics Monitoring for both the San Gabriel River and the Los Angeles River Watersheds. As more outfall data is obtained and it can be determined that the City is not contributing to the pollutants in the estuary, the City may consider discontinuing participating in the DC/Harbor Toxics TMDL Monitoring.

Progress toward achieving Milestones and Multi-year efforts

The City has the following on-going projects. These projects are in progress and are part of the City's pollutant load reduction plan to achieve future interim and final milestones.

- Downtown Improvements Phase II Parking Lot – CIP No. 818 - The aim of the project is to provide public accessible dual electric vehicle charging units to be placed at the Downtown Public Parking Lot located at 10606 Valley Boulevard in the City of El Monte. In conjunction with the aforementioned project, the City is implementing a smart parking detection system and shared parking program which would ensure a more efficient utilization of the existing parking capacity. The associated infrastructure improvements within the parking lot entail the removal of existing pavement, raised islands, curb and gutter, parkway drains, trees and lighting, ADA ramps, lighting fixtures, landscape and irrigation system, trees, Electrical Vehicle Charging (EVC) stations and SMART parking devices. The LID component includes storm water treatment through capturing and infiltration of surface water based on a 50 Year Storm Event for sump conditions.
- Currently under design, is the Ramona Boulevard Street Reconstruction Project – CIP No. 857. The project plans include the addition of dry wells on the north side of the street. This segment of Ramona Boulevard is approximately 1.25 miles in length, between Peck Road and the east City limits. Dry wells will be strategically placed adjacent to the gutter on the north side of the roadway to capture and infiltrate surface runoff.
- Currently under design is the Federal Legislated Safe Routes to School, which includes dry wells to capture and infiltrate surface runoff. A similar Safe Routes to School Project was built in 2016 that also captures surface runoff using bio-swales, porous P.C.C. gutters that capture and infiltrate surface runoff.
- Currently under consideration is the Mountain View Road Street Reconstruction Project. The project plans would include the addition of porous pavers and tree wells within the parking portion on both sides of the street. The porous pavers would be installed for the entire length of the street and the tree wells will be strategically placed to capture and infiltrate surface runoff.

The City's Capital Improvement Project (CIP) delivery plan includes an investment of \$2M per year for the next five years for rehabilitating City streets which will include Complete Street and Green Street improvement projects that include water quality features.

Re-evaluation of water quality priorities based on more/most recent water quality data

Only two years of Outfall Monitoring has been completed since approval of the Integrated Monitoring Program. With only limited data at this time, a re-evaluation of water quality priorities and a re-assessment of the sources of pollutants is premature. As more years of monitoring is conducted and more data is obtained, the City will be better able to determine if a re-evaluation of water quality priorities is warranted.

Availability of new information and data from other sources within the Watershed Management Area

The City collaborates and corresponds with adjoining jurisdictions and EWMP/CIMP groups on new information and available data within the Watershed Management Area. The City is also active in the Los Angeles Permit Group and attends Regional Board Workshops and Technical Advisory Committee (TAC) Meetings in order to stay current on the latest watershed and MS4 Permit developments. The City uses these sources and the information from them to better implement its programs and gauge the effectiveness of control measures.

Reasonable Assurance Analysis (RAA) Refinement

The initial assessment of model predicted "current/baseline" pollutant loadings was conducted during development of the WMP and indicated that pollutant load reductions, by means of infiltration opportunities, would be necessary for Copper, Zinc, Nutrients, and Bacteria. The Outfall monitoring data collected to date appears to indicate that the model may have over predicted (overestimated) the metals concentrations. Bacteria levels detected during Outfall monitoring also suggest that the model may have over predicted bacteria concentrations as well. Nutrient concentrations within the Legg Lake drainage, specifically Nitrogen, may also be less than initially predicted. As indicated earlier, as more monitoring data is obtained, an additional and further refinement of the RAA can be conducted during the next Adaptive Management Process.

Most effective control measures

The most effective control measures are:

- Trash Full Capture Devices in catch basins
- Street sweeping
- Infiltration areas including porous gutter, dry wells, porous pavers, and tree wells.

These control measures remove the most amount of pollutants by either the physical removal of pollutants or by removing runoff to the MS4 system by infiltration.

Least effective control measures

The least effective control measure may be the inspections associated with Industrial Facilities. The facilities are inspected by the City and by the Regional Board. Most inspections result in few deficiencies. The resources spent on these inspections could possibly be better spent on other control measures. The Industrial Facilities are already subject to the Industrial General Permit (IGP) and the City believes that compliance with discharges from these facilities should lie with these facilities under their IGP, not under the City's MS4 Permit.

Modifications to WMP/IMP

The City submitted a request to the Regional Board to modify the analytical constituent list (Table 2, Attachment E of the Order) to remove from Outfall Monitoring the analysis of those constituents that have consistently had non-detect results (ND). In addition to removing constituents with ND results, the City will continue to evaluate future monitoring data and submit future requests to remove constituents with ND results as well as the removal of those constituents that consistently show insignificant results (very low analytical values). Those constituents that consistently had ND results were: Beryllium, Beryllium Dissolved, Acid and Base Neutral Extractables, Chlorinated Pesticides and/or PCBs, Semivolatile Organic Compounds, Gasoline Range Organics, Oil and Grease, Perchlorate, Selenium, Selenium Dissolved, Silver, Silver Dissolved, Thallium, Thallium Dissolved, PCB Congener Screen (56 Congeners), Fluoride, Glyphosate, Volatile Organics, and Toxicity (for Outfalls #5 and #7).

As more outfall data is obtained and it can be determined that the City is not contributing to the pollutants in the estuary, the City may consider discontinuing participating in the DC/Harbor Toxics TMDL Monitoring.

Anticipated changes to control measures in coming years and rational for changes

With only limited data at this time, significant changes to control measures are premature. However, early indications from Outfall Monitoring data appear to show that anticipated (model driven) changes to control measures to remove metals may not need to be as stringent as the model predicted and those efforts/resources may be able to be redirected toward bacteria exceedances.

Trash Monitoring and Reporting Plan (per Amendment R4-2012-0175-A01)

The City is collaborating on Receiving Water Monitoring in the Los Angeles River Watershed Management Area with the Rio Hondo/San Gabriel Water Quality Group. The group has been contacted and it has been confirmed that they have submitted documentation to the Regional Board to modify their existing monitoring program to include a Trash Monitoring and Reporting Plan (TMRP).

Plastic Pellet Monitoring and Reporting Plan (per Amendment R4-2012-0175-A01)

A thorough search of SMARTS for facilities with SIC codes for plastic pellet manufacturing and use within the City of El Monte did not result in any industrial facilities or activities related to the manufacturing, handling, or transportation of plastic pellets within the City's jurisdiction. Therefore, the City will not need to monitor MS4 outfalls for plastic pellets.

As stated above, a Plastic Pellet Spill Response Plan has been developed and will become part of the City's existing Spill Response Plan. A copy of the Plastic Pellet Spill Response Plan is attached.