APPENDIX C

RAA Supplemental Information

Los Angeles River

A 68% pollutant load reduction is required for Copper and a 70% pollutant load reduction is required for Zinc by January 11, 2028. To achieve these reductions, the City will implement a combination of non-structural BMPs and structural BMPs to reduce flow.

Based on the Los Angeles County WMMS hydrology model and the BMP Selection Tool for the Los Angeles River subwatersheds, Figures 1-13 and 1-14 were developed. Figures 1-13 and 1-14 show the relationship between flow reduction and pollutant load reduction. To achieve 68% and 70% load reduction for Copper and Zinc respectively, Figures 1-13 and 1-14 indicate that a flow reduction of approximately 45-46% is required.

The City intends to meet the target load reduction for Copper and Zinc by first implementing the following non-structural BMPs. Each of the non-structural BMPs is estimated to achieve a percentage of the target load reduction.

Non-Structural BMPs	Estimated target load reduction
Enhanced Street Sweeping	3%
Catch Basin Retrofit Program (Citywide full capture devices)	2%
Low Impact Development Ordinance and Green Streets Policy	1%
Implementation	
Total	6%

Subtracting the estimated 6% pollutant load reduction as a result of instituting non-structural BMPs, (68%-6%=62% for Copper and 70%-6%=64% for Zinc) the remaining target load reductions would be achieved through flow reduction by implementing structural infiltration BMPs.

Figure 1-14 illustrates that a 64% pollutant load reduction would require a 46% flow reduction. A 46% flow reduction associated with Zinc would also achieve the 62% pollutant reduction needed for Copper. Using the 46% flow reduction as a goal, the US EPA National Stormwater Calculator was utilized to determine the types and percentage of BMPs necessary to achieve the required flow reduction by way of infiltration.

Figure 1-15 illustrates the percentage of infiltration achieved when structural infiltration BMPs are implemented to achieve the required flow (runoff) reductions. The proposed structural infiltration BMPs are listed below:

- Installation of Porous Pavement (Porous Gutter/Porous sidewalk)
- Tree Well Filters, Biofilters, and Street Planter Infiltration areas (Permeable Landscaping)
- Dry Wells (installed upstream of major catch basins)

The City will focus constructing structural BMPs in those subwatersheds with the highest density of Industrial /Commercial areas in order to reduce the largest amount of potential metals pollutant loading. The City will evaluate if additional structural BMPs are needed based on the results of the monitoring conducted during implementation of the Integrated Monitoring Program (IMP).

Lead pollutant concentration is currently below the effluent limit therefore no target load reduction measures are needed however ongoing monitoring data from the IMP will be used to validate Lead concentrations going forward.

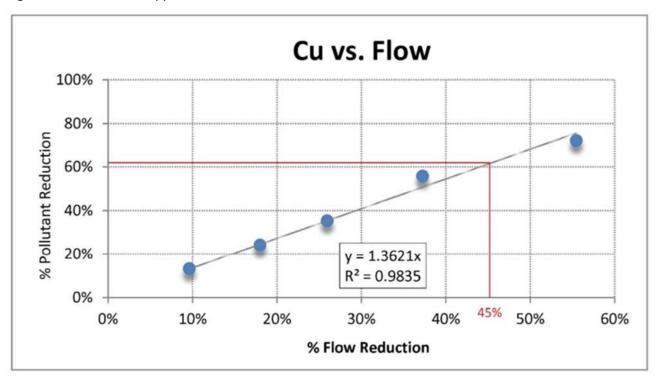


Figure 1 13: LA River - Copper Reduction versus Flow Reduction

(Source: LACDPW BMP Selection Tool)

Zn vs. Flow

100.0%

80.0%

100.0%

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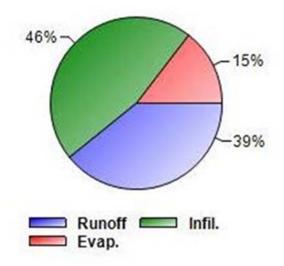
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Figure 1 14: LA River - Zinc Reduction versus Flow Reduction

(Source: LACDPW BMP Selection Tool)

Figure 1-15: Infiltration achieved by installation of structural infiltration BMPs (for Copper and Zinc – LA River)



(Source: US EPA National Stormwater Calculator)

Legg Lake

A 13% pollutant load reduction is required for Nitrogen and a 62% pollutant load reduction is required for Phosphorous. To achieve these reductions, the City will implement a combination of non-structural BMPs and structural BMPs to reduce flow.

Based on the Los Angeles County WMMS hydrology model and the BMP Selection Tool for the Legg Lake subwatershed, Figures 1-16 and 1-17 were developed. Figures 1-16 and 1-17 show the relationship between flow reduction and pollutant load reduction. To achieve 13% and 62% load reduction for Nitrogen and Phosphorous respectively, Figures 1-16 and 1-17 indicate that a flow reduction of approximately 7-44% is required.

The City intends to meet the target load reduction for Nitrogen and Phosphorous by first implementing the following non-structural BMPs. Each of the non-structural BMPs is estimated to achieve a percentage of the target load reduction.

Non-Structural BMPs	Estimated target load reduction
Enhanced Street Sweeping	3%
Catch Basin Retrofit Program (Citywide full capture devices)	2%
Low Impact Development Ordinance and Green Streets Policy	1%
Implementation	
Total	6%

Subtracting the estimated 6% pollutant load reduction as a result of instituting non-structural BMPs, (13%-6%=7% for Nitrogen and 62%-6%=56% for Phosphorous) the remaining target load reductions would be achieved through flow reduction by implementing structural infiltration Figure BMPs.

Figure 1-17 illustrates that a 56% pollutant load reduction would require a 44% flow reduction. A 56% flow reduction associated with Phosphorous would also achieve the 7% pollutant reduction needed for Nitrogen. Using the 44% flow reduction as a goal, the US EPA National Stormwater Calculator was utilized to determine the types and percentage of BMPs necessary to achieve the required flow reduction by way of infiltration.

Figure 1-18 illustrates the percentage of infiltration achieved when structural infiltration BMPs are implemented to achieve the required flow (runoff) reductions. The proposed structural infiltration BMPs are listed below:

- Installation of Porous Pavement (Porous Gutter/Porous sidewalk)
- Tree Well Filters, Biofilters, and Street Planter Infiltration areas (Permeable Landscaping)
- Dry Wells (installed upstream of major catch basins)
- Modular Wetland Systems (for removal of Nitrogen and Phosphorus specifically)

The City will focus BMP implementation on the subwatershed draining directly to Legg Lake. To provide additional runoff reduction, the City will also encourage residents and business owners to install rain harvesting and infiltration BMPs (rain gardens, rain barrels, porous pavers, etc.) on their properties.

The City will evaluate if additional structural BMPs are needed based on the results of the monitoring conducted during implementation of the Integrated Monitoring Program (IMP). Ongoing monitoring data from the IMP will be used to validate Nitrogen and Phosphorous concentrations going forward.

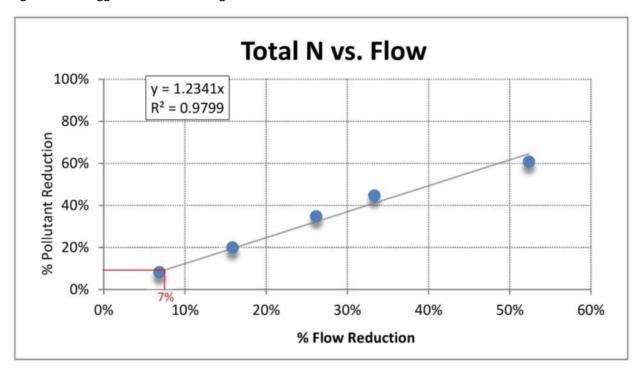


Figure 1 16: Legg Lake – Total Nitrogen Reduction versus Flow Reduction

(Source: LACDPW BMP Selection Tool)

Total P vs. Flow

100%

80%

y = 1.2891x

R² = 0.97

0%

10%

20%

30%

40%

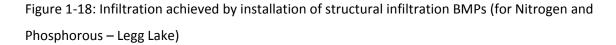
50%

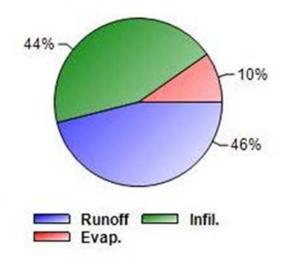
60%

Flow Reduction

Figure 1 17: Legg Lake – Total Phosphorus Reduction versus Flow Reduction

(Source: LACDPW BMP Selection Tool)





(Source: US EPA National Stormwater Calculator)

CITY OF EL MONTE

WATERSHED MANAGEMENT PROGRAM (WMP) SUPPLEMENTAL INFORMATION

The City of El Monte submitted a Watershed Management Program (WMP) to the Regional Water Quality Control Board (Regional Board) in June 2014. The WMP received a conditional approval in April 2015. The City responded to the Regional Board's review comments in June 2015. Subsequently, the City corresponded with the Regional Board staff on the WMP and additional clarification was needed. The City is providing this document to supplement the WMP and to better demonstrate to the Regional Board staff the City's strategy in making progress towards meeting pollutant load reduction requirements for the Bacteria TMDL in the Los Angeles River and the pending Bacteria TMDL in the San Gabriel River.

LOS ANGELES RIVER WATERSHED BACTERIA TMDL

Dry Weather

For dry weather conditions, per Attachment O of Order R4-2012-0175, the first phase of implementation, the City of El Monte is required to submit a Load Reduction Strategy (LRS) for Segment B tributaries (Rio Hondo and Arroyo Seco) by March 23, 2016. The second phase of implementation action required by the LA River Bacteria TMDL is for the City to complete implementation of LRS by March 23, 2028 and achieve final waste load allocations or demonstrate that non-compliance is due to upstream contributions and submit a report to the Regional Board by March 23, 2030.

As indicated in the WMP, the City is presently participating in the LRS group to fulfill phase I of the City's obligations to meet dry weather waste load allocations (WLA). The LRS group is comprised of one Enhanced Watershed Management Program (EWMP) group, two Watershed Management Program (WMP) groups and two individual agencies (El Monte and Irwindale). Currently the LRS is anticipated to be completed by March 2016.

Wet Weather

To demonstrate wet weather compliance, a Reasonable Assurance Analysis was conducted in which the following steps were taken:

- 1. Developed pollutant load reduction for 90th percentile year based on Permit requirements and Regional Board guidance (El Monte WMP June 2015, Table 1-13);
- 2. Assumed a pollutant load reduction for non-structural (or programmatic) BMPs;
- 3. Estimated pollutant load reductions for retrofits on private property (e.g., downspout disconnects, installation of rain barrels) and redevelopment (e.g., low impact development);

- 4. Estimated pollutant load reductions for programmed Green Street BMPs identified in the City CIP plan;
- 5. Assumed pollutant load reductions for new regional or outfall diversion projects;
- 6. Compared total estimated pollutant load reduction to be achieved from the implementing future non-structural and structural infiltration BMPs and the pollutant load reduction for 90th percentile year.

Target Pollutant Load Reduction

Table 1-13 of the WMP shows modeled bacteria levels in the Los Angeles River using the 2004-2005 rain year to represent the 90th percentile year. Model results showed 69 wet-weather days and out of those wet-weather days, 29 days showed the concentration of fecal coliform to exceed 400/100ml limit resulting in an exceedance rate of 42%. Of the times in which the Los Angeles River showed exceedances, the modeled fecal coliform concentration was exceedingly high. Twenty-one out of 29 exceedances showed concentration levels in the 12,000/100ml range resulting in a target pollutant load reduction percentage as high as 97%. Table 1 lists the range of percentage of pollutant load reduction required for the Bacteria TMDL in the Los Angeles River.

Table 1

	Percent Pollutant Reduction Required
1	96.8 (21*)
2	70.6
3	64.6
4	56.3
5	47.6
6	45.3
7	44.8
8	29.1
9	7.0

^{*21} out of 29 exceedances resulted in a required target pollutant reduction of approximately 97%.

Anticipated Pollutant Load Reduction from non-structural BMPs

Programmatic BMPs include enhanced pet waste controls (ordinance, signage, education/outreach, etc.), enhanced restaurant inspections, enhanced street sweeping, enhanced storm drain and catch basin cleaning and implementation of the City's Sanitary Sewer Management Plan (to address leaking sewers, source control human waste); these measures all contribute to reducing bacteria loading. The City is committed to instituting and promoting these programmatic BMPs. While the percentage of pollutant load reduction achieved through implementation of programmatic solutions is dependent upon many

factors unique to each agency, in Los Angeles County agencies have assumed an average of 5% pollutant load reduction to capture the benefits of the non-structural BMPs. For this analysis, the City of El Monte will also use the 5% pollutant load reduction to capture the anticipated non-structural BMPs.

Anticipated Pollutant Load Reduction on Private Property

The 2012 MS4 Permit established new criteria for redevelopment projects, requiring qualifying projects to capture, retain, or infiltrate the 85th percentile design storm or the 0.75-inch design storm, whichever is greater, via post construction BMPs. The City adopted a Low Impact Development Ordinance in 2014 to put in practice the redevelopment requirements of the Permit.

Since 2012, the City of El Monte has received numerous applications for constructing mixed use developments. This is the first time the City is experiencing growth in 40 years. Coupled with the timing of the LID Ordinance, the City is capitalizing on the current redevelopment trend – totaling approximately \$950M to address water quality on private properties. Redevelopment projects such as the Flair Spectrum (14 acres), Walmart (15.41 acres), Gateway (14 acres), Santa Fe Trails (9 acres), and Magellan Gateway (27 acres) all have proposed storm water storage system similar to the CUDO Water Storage System by Kristar eliminating flows to receiving waters. For the projects mentioned, their on-site LID design meets the 0.75-inch design storm, effectively meeting the Permit's definition of a regional project and the Reasonable Assurance Analysis.

Figure 1 (attached) illustrates geographically the large scale size redevelopment projects currently in progress in the City of El Monte.

Table 2 lists the large scale size redevelopment projects currently in progress in the Los Angeles River Watershed portion of the City.

Table 2

	Development Name	Site Footprint	Туре		
1	Flair Spectrum	14 acres	Mixed-use with 250 room hotel, retail		
			and 600 residential units		
2	Media Center	5.1 acres	Office building		
3	Gateway Magellan	26.8 acres	Industrial		
4	Hilton Garden Hotel Project	3.09 acres	Hotel		
5	Walmart Supercenter	15.49 acres	Retail anchor		
6	Hickson Industrial	Hickson Industrial 3.1 acres			
7	Gateway TOD	65 acres	Housing units/retail		
8	Santa Fe Trail	9.80 acres	Retail		
9	Ramona & Tyler	TBD	40 housing units		

10	Valley & Ramona	3 acres	58 townhomes/4 work-live units
11	Downtown Specific Plan	115 acres	TBD
12	Garvey & Tyler	TBD	Mixed-use 67 housing units/retail
13	Garvey & Peck	5 acres	Mixed-use 114 housing units/retail
14	Garvey & Meeker	31,000 s.f.	30 senior housing/retail
15	Garvey & La Madera	2.06 acres	116 senior housing/retail
16	East Valley	3.69 acres	70 housing units/retail
	Total	272 acres	

The City of El Monte provides water services to a portion of its residents. The water division serves approximately 3,400 service connections. Regulated by the State Water Resources Control Board, the water division is required to reduce overall potable urban water use by 8%. This mandate is a result of the Governor Jerry Brown's executive order to safeguard the State's remaining potable water supplies in preparation for a possible fifth year of drought. Combining two goals in one, the City is planning on conducting aggressive outreach to educate El Monte residents on the need to conserve potable water usage and at the same time promote capture and re-use. The conservation effort as outlined in the Governor's executive order is to curtail outdoor potable water usage which in many cases would result in residents not being able maintain the health of their lawns. Capture and re-use would allow residents to replenish their lawns with captured water. The City views the two mandates working in concert in that one mandate takes away the ability to use existing water source and the other mandate provides an alternative water source.

For the redevelopment projects such as residential retrofit that are smaller in scale, the City is promoting permeable pavers at the driveways and or where feasible, rain barrels to capture stormwater at the building downspouts. To account for smaller redevelopment projects and residential retrofits, the performance of these retrofits is estimated to achieve 2% pollutant load reduction. While the percentage of pollutant load reduction achieved through implementation of private property retrofit varies widely, the estimated 2% pollutant load reduction is conservative as the estimated figure includes the design storm retention at large scale development projects.

Anticipated Pollutant Load Reduction from Green Street BMPs

The City's five year Capital Improvement Program (CIP) was approved by the City Council on July 20, 2015. The program is intended to prioritize and allocate resources/funding to meet the City's infrastructure needs. The overall plan includes a variety of projects – transportation, sewer, water, storm drain, public facilities, parks and bridges. Project categories such as street rehabilitation, and sewer and water main replacement present opportunities to incorporate green street elements. With respect to the discussion on Green Street BMPs in this clarification, project types such as street rehabilitation, sewer and water main replacement will be referred to as the City's Green Street projects.

One significant progress to note in the City Council's approval of staff's Fiscal Year 2015-2016 CIP delivery plan is that as a part of the approval, the City is dedicating \$2M per year for the next five years on rehabilitating City streets.

Table 3 (attached) lists the City's 5 year CIP Plan.

For fiscal year 2015-2016, 12 projects were originally selected for delivery by June 30, 2015, however due to funding restrictions and approved guidance documents identifying City needs based on horizon years and/ or mandates, are now scheduled to be completed by June 2016. Of those 12 projects, six are Green Streets BMPs and they are located within the Los Angeles River Watershed.

Table 4 lists the Green Street BMP projects for Fiscal Year 2015-2016.

Table 4

	Green Street Project Name	Scope					
1	Johnson/Tyler Sewer	Sewer main rehab					
2	Downtown Parking Lot Improvements	Resurface parking lot					
3	Pavement Management Plan Phase I	Repair a cluster of residential streets					
4	Safe Routes to Schools Federal Program	Bulb outs, sidewalk replacement					
5	Gateway Development – Offsite	Roadway improvements					
	improvements						
6	Catch Basin Retrofit Project*	Install full capture devices					

^{*}The catch basin retrofit project is listed but no pollutant load reduction is taken. The project is only listed to demonstrate that the retrofit contributes water quality improvements.

The Ramona Resurfacing project is one of the Green Street projects committed to complete design at the end of the fiscal year 2015-2016. Since the Ramona Resurfacing project is anticipated to complete design at the end of the fiscal year 2015-2016, it is not listed in Table 4. Presently the Ramona Resurfacing project is 65% designed. The project footprint is approximately 11.26 acres. To meet the 0.75 inch design storm, the project would need to retain approximately 23,500 cubic feet of stormwater runoff. As a part of the scope, the project will be putting in 8 dry wells and one bioswale. The dry wells are off-the-shelf products by Jensen Precast and the size selected for the Ramona Resurfacing project is 48" wide and 9 feet deep with an open bottom. The proposed dry wells and bioswale would accept approximately 1,800 cubic feet of runoff. This effectively translates to retaining 7.6% of the 0.75 inch design storm. The water quality feature of the project is estimated to be \$205,000. The overall project is estimated to be \$1.8M. The water quality feature is approximately 11% of the project cost.

Using Ramona Resurfacing project as a case study in establishing performance measures for the City's future Green Street BMPs, each of the five CIPs scheduled to be delivered in Fiscal Year 2015-2016 will include water quality features to accept 7% of the runoff generated from a 0.75" design storm for each project. Comparing the volume of runoff eliminated by the water quality feature of the Ramona Resurfacing project to the volume of runoff based on the design storm for the entire Los Angeles River watershed within the City of El Monte, the volume of runoff eliminated by the Ramona Resurfacing project is approximately 1%. This calculation conservatively takes into consideration the runoff eliminated by large scale private developments current in progress but does not take into consideration other pervious surfaces such as park space or any other open space in the watershed.

At the time the WMP was being finalized, the City's CIP programming was in its infant stage. As such, the details to the proposed Green Streets BMPs were not available to characterize City's commitment in improving water quality. The performance measures of the proposed Green Streets BMPs could not be modeled. Because all Green Street BMPs going forward are expected to have the same performance measure—accept 7% of the runoff generated from a 0.75" design storm—regardless of its size, in averaging all the distributed projects it is assumed that each Green Street BMPs will have an average target pollutant load reduction of 1%. As projects are implemented, the assumed performance measure for each of the Green Street BMPs relative to the overall watershed will be evaluated and if necessary adjusted every two years.

Anticipated Pollutant Load Reduction from Potential Regional Projects

Outside of the City's CIP programming, the City will investigate opportunities to construct or to contribute to downstream regional projects or investigate outfall diversion projects. One potential project presently under consideration is reconstructing the Merced Drain (aka Merced Channel). The Merced Drain is approximately 1,500 linear feet accepting runoff from a residential pocket located on the southwest corner of the City. The drain is concrete lined and outlets to the Rio Hondo channel. The proposed project would be to reconstruct Merced drain to create a soft bottom to allow for infiltration along the length of the drain. The project would eliminate runoff into the Rio Hondo channel. The tributary area to the Merced Drain is approximately 665 acres. The performance measure of the proposed project is not available presently but the project is anticipated to be programmed in the City's capital improvement plan in 2020. Conservatively, 5% pollutant load reduction is assumed for the Merced Drain reconstruction.

Anticipated Pollutant Load Reduction

Summarizing all the components of the City's strategy and compliance approach in to meet the target pollutant load reduction of 97% by 2037, Table 5 lists the City's anticipated pollutant load reduction for five milestone years: 2016, 2017, 2019, 2021 and 2027. Per Order No. R4-2012-0175, Part VI, C5ci, permittees shall incorporate compliance schedules and develop interim milestones and dates in the watershed management plan to measure progress towards addressing water quality priorities. Progress must be measured once every two years. The proposed milestones in year 2017, 2019, and 2021 are

aimed at satisfying the two year frequency as outlined by the MS4 permit. The milestone year 2016 serves as the first year of the pollutant load reduction effort and the milestone year 2027 includes the projected performance of the potential regional/outfall project.

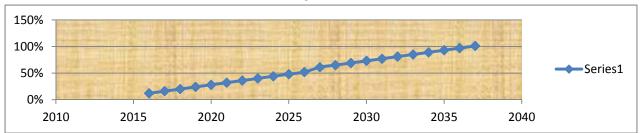
Table 5

Milestone Year	Non- Structural BMPs	Redevelopment + Private Property Retrofit	Distributed (Green Street) BMPs*	Potential Regional/Outfall Projects	Cumulative Sub-Total
2016	5%	2%	5%		12%
2017			4%		16%
2019			4%		24%
2021			4%		32%
2027			4%	5%	61%

^{*}There are five Green Street CIP projects to be delivered in FY 15-16. Using 1% pollutant load reduction to be achieved by each project, a total of 5% pollutant load reduction is assumed. For subsequent milestone years, a delivery of 4 Green Street CIPs is estimated per year for a total of 4% pollutant load reduction per year

Based on the anticipated performance of the City's plan, Figure 2 illustrates the anticipated pollutant load reduction trend projected out to year 2037.

Figure 2



SAN GABRIEL RIVER WATERSHED BACTERIA TMDL

Dry weather

Although there is currently no LRS being developed for the San Gabriel River Bacteria TMDL, the City plans to decrease dry weather bacteria impacts to the San Gabriel River watershed by programmatic BMPs such as non-stormwater prohibitions, the Outfall Screening Program coupled with a robust IC/ID Program, enhanced street sweeping, enhanced storm drain and catch basin cleaning, and increased enforcement of over-irrigation prohibitions for both businesses and residents. Structural infiltration BMPs implemented for wet weather bacteria reduction should also eliminate dry weather flows and greatly decrease the potential for bacteria growth or transport within the MS4.

Wet Weather

To demonstrate wet weather compliance for the San Gabriel River Watershed Bacteria TMDL, the same Reasonable Assurance Analysis approach was conducted as was previously described for the Los Angeles River Watershed.

Target Pollutant Load Reduction

Table 1-19 of the WMP shows modeled bacteria levels in the San Gabriel River Watershed using the 2004-2005 rain year to represent the 90th percentile year. Model results showed 15 wet-weather days and out of those wet-weather days, 14 days showed the concentration of fecal coliform to exceed 400/100ml. The present pollutant load reduction required for bacteria in the San Gabriel River Watershed ranges from 39% to 94%, (652 MPN/100ml to 6,800 MPN/100ml respectively).

Anticipated Pollutant Load Reduction from non-structural BMPs

As in the Los Angeles River Watershed, programmatic BMPs are also planned for the San Gabriel River Watershed and include enhanced pet waste controls (ordinance, signage, education/outreach, etc.), enhanced restaurant inspections, enhanced street sweeping, enhanced storm drain and catch basin cleaning and implementation of the City's Sanitary Sewer Management Plan (to address leaking sewers, source control human waste). All these measures contribute to reducing bacteria loading. The City is committed to instituting and promoting these programmatic BMPs. While the percentage of pollutant load reduction achieved through implementation of programmatic solutions is dependent upon many factors unique to each agency, the City has assumed an average of 5% pollutant load reduction for non-structural BMPs.

Anticipated Pollutant Load Reduction on Private Property

The 2012 MS4 Permit established new criteria for redevelopment projects, requiring qualifying projects to capture, retain, or infiltrate the 85th percentile design storm or the 0.75-inch design storm, whichever is greater, via post construction BMPs. The City adopted a Low Impact Development Ordinance in 2014 to put in practice the redevelopment requirements of the Permit.

Although the San Gabriel River Watershed portion of the City is more residential, the City has received numerous applications for constructing mixed use and general commercial developments. As in the Los Angeles River Watershed, the City is capitalizing on the current redevelopment trend to address water quality on private properties. On-site LID designs meet the 0.75-inch design storm, effectively meeting the Permit's definition for regional projects and the Reasonable Assurance Analysis.

Figure 1 (attached) illustrates geographically the large scale size redevelopment projects currently in progress in the City of El Monte.

Table 6 lists the redevelopment projects currently in progress in the San Gabriel River Watershed portion of the City.

Development NameSite FootprintType1El Monte Center10 acresGeneral commercial2Maxon Site3.3 acresGeneral commercial3Majestic Property4.5 acresGeneral commercial

Table 6

The City is planning on conducting aggressive outreach to educate El Monte residents on the need to conserve potable water usage and at the same time promote capture and re-use. The conservation effort as outlined in the Governor's executive order is to curtail outdoor potable water usage which in many cases would result in residents not being able maintain the health of their lawns. Capture and re-use would allow residents to replenish their lawns with captured water. The City views the two mandates working in concert in that one mandate takes away the ability to use existing water source and the other mandate provides an alternative water source.

For the redevelopment projects such as residential retrofit that are smaller in scale, the City is promoting permeable pavers at the driveways and or where feasible, rain barrels to capture stormwater at the building downspouts. To account for smaller redevelopment projects and residential retrofits, the performance of these retrofits is estimated to achieve 2% pollutant load reduction. While the percentage of pollutant load reduction achieved through implementation of private property retrofit varies widely, the estimated 2% pollutant load reduction is conservative as the estimated figure includes the design storm retention at large scale development projects.

Anticipated Pollutant Load Reduction from Green Street BMPs

The City's five year Capital Improvement Program (CIP) was approved by the City Council on July 20, 2015. The program is intended to prioritize and allocate resources/funding to meet the City's infrastructure needs. The overall plan includes a variety of projects – transportation, sewer, water, storm drain, public facilities, parks and bridges. Project categories such as street rehabilitation, sewer and water main replacement present opportunities to incorporate green street elements. With respect to the discussion on Green Street BMPs in this clarification, project types such as street rehabilitation, sewer and water main replacement will be referred to as the City's Green Street projects.

One significant progress to note in the City Council's approval of staff's Fiscal Year 2015-2016 CIP delivery plan is that as a part of the approval, the City is dedicating \$2M per year for the next five years on rehabilitating City streets.

Table 3 (attached) lists the City's 5 year CIP Plan.

For fiscal year 2015-2016, three projects are scheduled to be completed by June 2016. Of those three projects, two are Green Streets BMPs located within the San Gabriel Watershed.

Table 7 lists the Green Street BMP projects for Fiscal Year 2015-2016.

Table 7

	Green Street Project Name	Scope
1	Pavement Management Plan Phase II	Repair a cluster of residential streets
2	Safe Routes to Schools Federal Program	Bulb outs, sidewalk replacement
3	Catch Basin Retrofit Project*	Install full capture devices

^{*}The catch basin retrofit project is listed but no pollutant load reduction is taken. The project is only listed to demonstrate that the retrofit contributes water quality improvements.

Anticipated Pollutant Load Reduction from Potential Regional Projects

Outside of the City's CIP programming, the City will investigate opportunities to construct or to contribute to downstream regional projects or investigate outfall diversion projects to contribute an estimated 5% pollutant load reduction.

Anticipated Pollutant Load Reduction

Summarizing all the components of the City's strategy and compliance approach in to meet the target pollutant load reduction of 94%. Table 8 lists the City's anticipated pollutant load reduction for three milestone years: 2016, 2017, 2019, 2021 and 2027. Per Order No. R4-2012-0175, Part VI, C5ci, permittees shall incorporate compliance schedules and develop interim milestones and dates in the watershed management plan to measure progress towards addressing water quality priorities. Progress must be

measured once every two years. The proposed milestones in year 2017, 2019, and 2021 are aimed at satisfying the two year frequency as outlined by the MS4 permit. The milestone year 2016 serves as the first year of the pollutant load reduction effort and the milestone year 2027 includes the projected performance of the potential regional/outfall project.

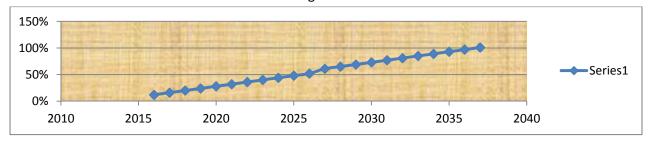
Table 8

Milestone Year	Non- Structural BMPs	Redevelopment + Private Property Retrofit	Distributed (Green Street) BMPs*	Potential Regional/Outfall Projects	Cumulative Sub-Total
2016	5%	2%	2%		10%
2017			4%		14%
2019			4%		22%
2021			4%		30%
2027			4%	5%	59%

^{*}There are two Green Street CIP projects to be delivered in FY 16-17. Using 1% pollutant load reduction to be achieved by each project, a total of 2% pollutant load reduction is assumed. For subsequent milestone years, a delivery of 4 Green Street CIPs is estimated per year for a total of 4% pollutant load reduction.

Based on the anticipated performance of the City's plan, Figure 3 illustrates the anticipated pollutant load reduction trend projected out to year 2037.

Figure 3



LOS ANGELES RIVER AND TRIBUTARIES METALS TMDL

As discussed previously, the controlling pollutant in the Los Angeles River Watershed is bacteria. Implementation of non-structural and structural infiltration BMPs to reduce bacteria loads will also archive the required pollutant load reductions (flow reduction via infiltration) for Copper and Zinc (45% and 46% flow reduction respectively). Using the milestones established for bacteria, the City anticipates meeting the dry weather and wet weather WQBELs by 2024 and 2028 respectively.

Based on the Site Specific Objectives (SSO) study (Los Angeles River Copper and Lead Special Study Report, Larry Walker Associates, 2013), the Los Angeles River Watershed Water Effects Ratio (WER) for Copper will be increased through proposed changes to the Basin Plan through Resolution Number R15-004 (TMDL previously revised by Resolution Numbers R07-014 and R10-003). Using a conservative WER of 3.97 there would be no pollutant load reduction necessary for Copper for the City of El Monte. The WER for Reach 2 of the Rio Hondo adjacent to El Monte could be as high as 9.69.

Also, as a result of Senate Bill 346, legislation enacted in 2010 to address brake pad materials, less Copper should be available to be carried into the MS4 system as this particular source of Copper is reduced (see TDC Environmental memo, February 14, 2013). Other sources of Copper will be addressed through the Industrial/Commercial Facilities Inspections Programs. These inspections and source controls for both Copper and Zinc should further reduce the discharge of metals. Dry weather flow reductions will be achieved through a combination of non-structural practices and structural infiltration BMPs. As wetweather BMPs are implemented, dry-weather flows are removed and compliance with dry-weather pollutant reductions will be met. Monitoring data together with the adaptive management program will be used to confirm metals concentrations.

Conveniently located 10 miles east of Downtown Los Angeles, the
City of El Monte offers abundant opportunities for new businesses.
The City has recently attracted many new commercial, industrial, residential
and mixed-use developments. There are also numerous potential sites for
new projects. Come and see the excitement underway at the City of El Monte!



PROJECTS & POTENTIAL SITES



Major Development Projects:

Flair Park

- 1. Flair Spectrum Mixed-use project with a 250-room hotel, 690,000 square foot retail outlet center and 600 residential units on a 14-acre site.
- 2. Media Center 5-story 60,000 sf office building.

Northwest Area

- 3. Gateway Magellan (Temple Palms) 500,000 sf industrial project on a 26.8 acre site.
- 4. Hilton Garden Hotel Project 133 room 4-story hotel.
- 5. Walmart Supercenter 186,000 sf retail anchor.
- 6. Hickson Industrial 60,000 sf of industrial project.

Downtown Area

- 7. Gateway TOD 485 housing units and 25,000 sf of retail next to a major transit center.
- 8. Santa Anita & Valley (Santa Fe Trail Project) 115,000 sf retail project.
- 9. Ramona & Tyler 40 housing units within walking distance of shops and transit.
- 10. Valley & Ramona 58 townhomes and 4 work-live units.
- 11. Downtown Specific Plan City initiated plan to create a blueprint for growth in the City's historic core.

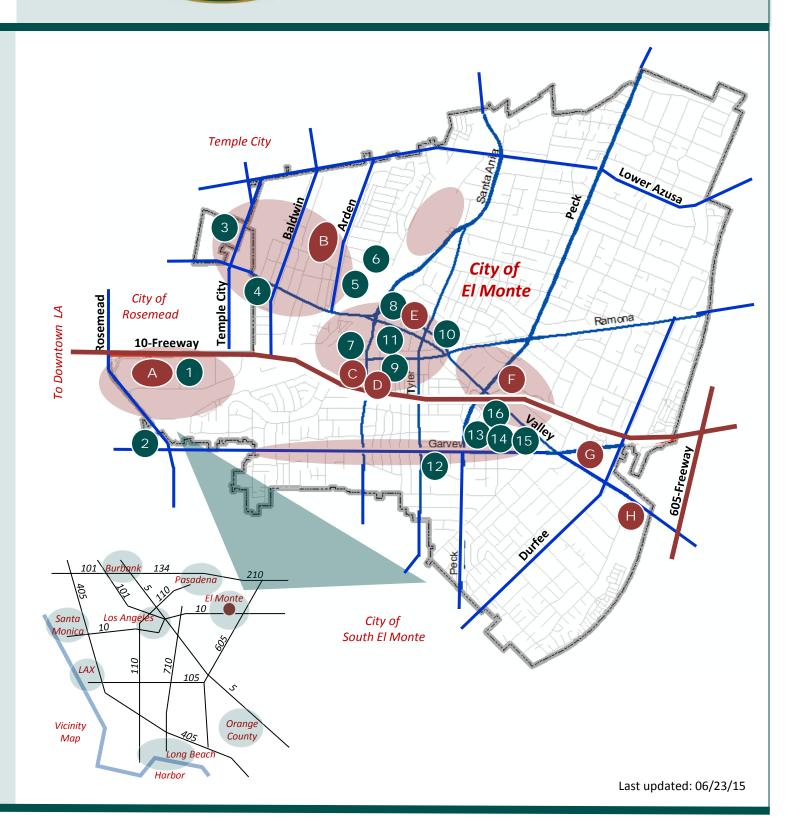
Garvey Mixed-Use Corridor

- 12. Garvey & Tyler 67 housing units, 3 work-live units and 3,000 sf of retail.
- 13. Garvey & Peck 114 housing units and 5,000 sf of retail.
- 14. Garvey & Meeker 30 senior housing units and 25,000 sf of retail.
- 15. Garvey & La Madera 116 senior and assisted living housing units and 6,000 sf of retail.
- 16. East Valley 70 housing units and 30,000 sf of retail.

Potential Development Sites:

- A. Flair Park Area Major development area with freeway visibility for businesses seeking a high-profile presence. Primarily zoned for mid-rise office buildings.
- B. Safeway Property 99 acre site in an industrial area.
- C. Gateway TOD, Phase 2 Second phase for new development next to a major transit center.
- D. Former Hyundai Property 1.9 acre commercial site adjacent to the freeway.
- E. Santa Fe Trail Project, Area Y Approximately 5 acres site adjacent to a new 115,000 sf retail project and near a rail station.
- F. El Monte Center Major commercial center located in the heart of El Monte's Auto District. Includes opportunities for new businesses.
- G. Maxson Site 3.3 acres site in a general commercial area.
- H. Majestic Property 4.5 acre site in a general commercial area.

For more information, call the Planning Division at (626) 258-8626 or visit us at www.elmonteca.gov.



City of El Monte - FY2015-2016 CIP Project List

Program: Cost and Funds by Project - Approved by City Council XX/XX/2015

EV 2015 16 CID									_			
	FY 2015-16 (UIP			COSTS							
			Final Cost	Total	Completed	Budget	Proposed	Droposed	Droposed	Droposed	Droposed	Droposed
Project #	Description	Project Status	(Completed	Estimated	thru	Carry-Over to	Approval for	Proposed	Proposed	Proposed	Proposed	Proposed
3	•		Project)	Project Cost	FY2014-15	FY 2015-16	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2019-20 +
807	Safe Routes to School Project 2 (State)	1. Closeout	110,000)	\$ 1,001,577	\$ 958,251	\$ 43,326		\$ -	\$ -			
	Rosemead/Telstar Intersection	1. Closeout		\$ 1,747,884	\$ 1,558,613	\$ 189,271			Ψ			
	CNG Buses	2 Procurement		\$ 3,874,100					\$ -	\$ -		
802	Five Traffic Signals (Installation)	2. Construction		\$ 635,998	\$ 499,707	\$ 136,291	\$ 136,291					
	Strategic Bicycle Plan	2. Construction		\$ 166,000	\$ 47,687	\$ 118,313	\$ 118,313	\$ -				
	GATEWAY (Other Infrastructure)	2. Construction		\$ 19,769,866	\$ 9,339,977	\$ 10,429,889	\$ 10,429,889		\$ -	\$ -		
849	Well No. 2 and 3A	2. Construction		\$ 1,500,000	\$ 1,362,302	\$ 137,698	\$ 137,698	\$ -	\$ -			
875	Replace (1) Sewer Lift Sta. & (2) Pumps (Fineview)	2. Construction		\$ 121,300	\$ -	\$ 121,300	\$ 121,300	\$ -				
882	Tree Planting - Downtown Valley Blvd	2. Construction		\$ 133,124	\$ -	\$ 133,124	\$ 133,124	\$ -				
883	Tree Planting - Parks & Fac.	2. Construction		\$ 123,992	\$ -	\$ 123,992	\$ 123,992	\$ -				
887	Valley Mall Tot Lot	2. Construction		\$ 150,000	\$ -	\$ 150,000	\$ 150,000	\$ -				
806	Safe Routes to School Project 1 (Federal)	3. Design/Construction		\$ 613,600	\$ 56,012	\$ 555,088	\$ 557,588	\$ -	\$ -			
818	Downtown Improvements Phase II (Parking Lot)	3. Design/Construction		\$ 940,879	\$ -	\$ 938,379	\$ 691,073	\$ 249,806	\$ -			
855	Operable Unit (Oversight)	3. Design/Construction		\$ 250,000	\$ -	\$ 250,000	\$ 250,000	\$ -				
857	Ramona Blvd Resurfacing Project	3. Design/Construction		\$ 2,323,500	\$ 53,966	\$ 2,267,034	\$ 1,295,388	\$ 974,146	\$ -	\$ -		
876	Johnnson to Tyler Sewer	3. Design/Construction		\$ 1,421,100	\$ -	\$ 1,421,100	\$ 1,084,411	\$ 336,689				
886	Pavement - Resurface/Reconst/Improve	3. Design/Construction		\$ 1,802,500	\$ -	\$ -	\$ 1,402,500	\$ 400,000				
	(2) Backflow Valves at Sewer Lateral (add to 876?)	4. Design		\$ 41,100	\$ -	\$ 41,100		\$ -				
878	Replace (10) Sewer Lift Sta. Pumps	4. Design		\$ 144,900	\$ -	\$ 144,900	\$ 144,900	\$ -				
	Ramona Blvd/Valley Blvd Intersection	5. Planning/Design		\$ 2,616,509	\$ -	\$ 2,614,009	\$ 207,884	\$ 2,027,505	\$ 381,120	\$ -	\$ -	
	Lambert Park Improvements	5. Planning/Design		\$ 1,202,250	\$ 210,923	\$ 988,827	\$ 811,920	\$ 179,407				
	Sewer Master Plan	5. Planning/Design		\$ 632,540	\$ -	\$ -	\$ 632,540	\$ -	\$ -	\$ -	\$ -	
	New Water Meters	6. Bid		\$ 1,500,000	\$ -	\$ 1,500,000	\$ 1,500,000	\$ -				
	Valley Drainage (West of Santa Anita)	6. Planning		\$ 1,752,500	\$ -	\$ -	\$ 168,000	\$ 968,500	\$ 616,000			
	Connect Septic to Sewer	6. Planning		\$ 581,600	\$ -	\$ 581,600	\$ 50,000	\$ 531,600				
	Garvey Avenue Storm Drain Reconstruction	6. Planning		\$ 5,000,000	\$ -	\$ -	\$ 250,000		\$ -	\$ 2,375,000	\$ 2,375,000	
	Open Streets Program	6. Planning		\$ 291,000		\$ -	\$ 291,000					
	Flair CIP - Flair/Baldwin/I-10	6. Planning		\$ 1,500,000	\$ -	\$ -	\$ 60,000			\$ -	\$ -	
	Flair CIP - Rosemead/Telstar Widening	6. Planning		\$ 625,000	\$ -	\$ -	\$ 25,000	\$ 50,000			\$ -	
	Flair CIP - Baldwin/Loftus	6. Planning		\$ 4,700,000		\$ -	\$ 28,000	\$ 56,000				
	Catch Basin Retrofit	6. Planning		\$ 540,000		<u>-</u>	\$ 210,000			\$ -	<u> </u>	
	Safe Routes to School Project 3 (Roundabout)	Planning		\$ 1,071,652		\$ -	\$ -	\$ 1,071,652		¢ 2.002.504		
	Bus Speed Improv. Proj. (BSIP) (Ramona/Badillo)	Planning		\$ 3,769,550	\$ -	\$ 2,898,836		\$ -	Ψ /00,0.0		¢ 5 200 909	¢
	Ramona Bus Tunnel	Planning		\$ 15,376,596	\$ 27,600	\$ 15,346,496	\$ 46,300	\$ 918,012		\$ 6,339,841	\$ 5,290,808	\$ -
	Flair Dr Connector	Planning		\$ 1,291,699	\$ -	\$ 1,289,199		\$ 200,100	\$ 531,587	\$ 760,112	5 -	
	Tyler Street (btw Bryant Rd & SPRR) 10" Water Main Replacement (WB) Peck Road/Peck Park Crosswalk	Planning Planning		\$ 366,100 \$ 416,500		\$ - \$	-	\$ 366,100 \$ 90,000		¢	¢	
	Tyler Avenue Bike Lane	Planning		\$ 238,500		\$ - \$ -	\$ - \$ -	\$ 238,500		\$ -	\$ -	
	Granada Ave (3500 Block) Water Main Replacement	Planning		\$ 238,500		\$ -	-	\$ 238,500		\$ - \$	ф -	
	Granada Ave (3000-3300 Block) Water Main Replacement (WB)	Planning		\$ 1,552,320			\$ -	\$ 459,487		\$ -	φ - ¢	
	Well 4 and 10 Blending Project (WB)	Planning		\$ 1,532,320 \$ 1,500,000	\$ - \$ -	\$ - \$ -	\$ - \$ -	\$ 439,487			ф <u>-</u>	
TBD14	1,000,000 Gallon Reservoir Seismic Upgrade/Replacement (WB)	Planning		\$ 1,000,000	\$ - \$ -	\$ - \$ -	\$ -	\$ 120,000			ф <u>-</u>	
		Planning		\$ 1,000,000	\$ - \$	-	_	\$ 238,800		φ - ¢	ψ <u>-</u>	
	Valley Blvd (Well 10 to Peck Road) 10" Water Main Replacement (WB) Valley Blvd (Santa Anita to Johnson) 10" Water Main Replacement (WB)	Planning		\$ 238,800	\$ - \$ -	\$ - \$ -	\$ -	\$ 238,800	φ - ¢	φ - ¢	φ - \$	
	Valley Blvd (Santa Anita to Johnson) 10 Water Main Replacement (WB) Valley Blvd (Santa Anita to Johnson) 12" Water Main Replacement	Planning		\$ 89,500	\$ - \$ -	\$ - \$ -	\$ - \$ -	\$ 89,500	\$ -	φ - ¢	ф <u>-</u>	
	Peck Road (Valley to Bryant Road) 12" Water Main Replacement (WB)	Planning		\$ 940,900	7			\$ 940,900		\$ -	ф <u>-</u>	
10019	reck Road (valies to bryant Road) 12 water Mani Replacement (WB)	1 Idillillig		y 940,900	\$ -	\$ -	\$ -	φ 940,900	5 -	\$ -	φ -	

City of El Monte - FY2015-2016 CIP Project List

Program: Cost and Funds by Project - Approved by City Council XX/XX/2015

	FY 2015-16 (AP .			COSTS							
Project #	Description	Project Status	Final Cost (Completed Project)	Total Estimated Project Cost	Completed thru FY2014-15	Budget Carry-Over to FY 2015-16	Proposed Approval for FY 2015-16	Proposed FY 2016-17	Proposed FY 2017-18	Proposed FY 2018-19	Proposed FY 2019-20	Proposed FY 2019-20 +
TBD20	Median Landscape Improvement	Planning	1 Toject)	\$ 1,799,237	1 1201 4 -13	\$ -	\$ -	\$ 249,619	\$ 1,549,618	\$ _	\$ -	
	Bryant Road (btw Tyler Ave & Peck Rd) 10" Water Main Replacement	Planning		\$ 591,500	\$ -	\$ -	\$ -	\$ 247,017	\$ 591,500	\$ -	\$ -	
	Bryant Road (btw Tyler Ave & Peck Rd) 12" Water Main Replacement	Planning		\$ 154,700	Ψ	\$ -	\$ -	\$ -	\$ 154,700	4	\$ -	
TBD23	Cypress Ave (btw Bryant Rd & SG Interconnect) 10" Water Main Replace	Planning		\$ 22,790		\$ -	\$ -	\$ -	\$ 22,790		\$ -	
TBD24	Elrovia Ave (btw Forest Gr & Bryant Rd) 8" Water Main Replacement	Planning		\$ 199,220	\$ -	\$ -	\$ -	\$ -	\$ 199,220		\$ -	
TBD25	Lee Lane (btw Johnson Ave & Peck Rd) 10" Water Main Replacement	Planning		\$ 131,570	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 131,570	\$ -	
TBD26	Maple Ave (btw Forest Gr & Bryant Rd) 8" Water Main Replacement	Planning		\$ 156,520	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 156,520	\$ -	
TBD27	Medina Ct (Pine Ave to Easterly) 8" Water Main Replacement	Planning		\$ 70,570	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,570	\$ -	
TBD28	Pine Ave (btw Orchard Ave & Medina Ct) 8" Water Main Replacement	Planning		\$ 148,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 148,400	\$ -	
TBD29	Asher St (btw Tyler Ave & Utah Ave) 10" Water Main Replacement	Planning		\$ 160,440	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 160,440	\$ -	
TBD30	Valley Mall (east of Granada Ave) 8" Water Main Replacement	Planning		\$ 14,140	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,140	\$ -	
TBD31	Haverly PL (btw Ranger Ave & Whitney Dr) 8" Water Main Replacement	Planning		\$ 47,290	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,290	\$ -	
TBD32	Tyler Ave (btw Brockway St & Ramona Blvd) 10" Water Main Replacement	Planning		\$ 280,280	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 280,280	\$ -	
TBD33	Traffic Signal at Lower Azussa and La Mera	Planning		\$ 400,300	\$ -	\$ -	\$ -	\$ 400,300	\$ -	\$ -	\$ -	
TBD34	I-10 Active Commute, Healthy Communities	Planning		\$ 462,500	\$ -	\$ -	\$ -	\$ 240,500	\$ 222,000	\$ -	\$ -	
TBD8	Pedestrian Master Plan	Planning		\$ 152,500	\$ -	\$ -	\$ 152,500	\$ -	\$ -	\$ -	\$ -	
TBD9	City Hall Improvements	Planning		\$ 502,675	\$ -	\$ -	\$ -	\$ 74,100	\$ 428,575	\$ -	\$ -	
	Master CIP Total			\$ 91,630,868	\$ 14,785,577	\$ 45,623,333	\$ 24,686,868	\$ 14,002,423	\$ 16,633,858	\$ 13,856,333	\$ 7,665,808	\$ -
	FY 2015-16 CIP			\$ 91,630,868								