

# Gateway Integrated Multi-Benefit Regional Water Management Project

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## Work Plan

Los Angeles Gateway Water Management Authority

## Overview

### Introduction

The Los Angeles Gateway Region (Gateway Region) is located in Southeast Los Angeles County, in an area that includes a large expanse of flat land located around the lower reaches of the Los Angeles and San Gabriel River. The Gateway Region generally exhibits a Mediterranean climate, characterized by mild temperatures that incorporate wet winters with dry summers.

The cities of the Gateway Region, water agencies, and interested parties are currently in the process of developing an Integrated Regional Water Management Plan (IRWMP) through the direction of the Gateway Water Management Authority (GWMA). The proposed Gateway Integrated Multi-Benefit Regional Water Management Project (Project) integrates six projects identified within the IRWMP to be implemented under one regional project. The Project involves fifteen cities within the Gateway Region. The cities all share water resources; therefore, they have common water quality, water supply, and stormwater runoff concerns. The cities are also demographically and geographically similar meaning they will share the same economical benefits from projects within the region. The commonalities of the incorporated cities provide a unique opportunity to develop integrated and coordinated solutions for the Gateway Region's water-related issues.

### Goals and Objectives

The goals and objectives of this Project are consistent with those outlined in the IRWMP. Specifically, the goals and objectives of the Project are as follows:

- Identify and address the water dependent natural resources needs of the Gateway Region Watersheds.
- Protect and enhance water quality.  
*Objective:* Attain required TMDL levels in accordance with their individual schedules.  
*Objective:* Effectively reduce major sources of pollutants and environmental stressors in the region.
- Optimize and ensure water supply reliability.  
*Objective:* Continue and enhance water use efficiency measures to meet 20X2020 per capita water use targets.  
*Objective:* Expand regional water recycling facilities and recycled water distribution to help provide reliable water sources.
- Coordinate and integrate water resource management.
- Provide stewardship of the Region's water dependent natural resources through enhancement of amenities and infrastructure.  
*Objective:* Create habitat, open space, and water-based recreational opportunities in the Region.

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### **Purpose and Need**

Water-related issues of concern for the Gateway Region include municipal water supply, groundwater quality and supply, stormwater quality, recreational and public water access, and declining ecosystems. Stormwater and urban runoff carrying oil, metals, pesticides, and other toxic chemicals and disease-causing pathogens are major contributors to pollution in creeks, rivers, and channels that will eventually lead to the ocean. Such conditions raise concerns over increased health risks and the potential impacts on affected ecosystems. The Gateway Region is susceptible to droughts due to the low annual rainfall and relatively high evapotranspiration rate. Additionally, a large portion of the Gateway Region share a common groundwater basin. Therefore, groundwater and municipal water of sufficient quality and supply is a large concern for the GWMA. This Project incorporates plans to address each of the above concerns within the Gateway Region.

All of the cities incorporated within this grant contain disadvantaged community (DAC) areas either in whole or in part. These communities would not otherwise be financially capable of following through with the proposed Project. Refer to Figure 1 for a Regional Map including DAC areas within the cities incorporated in this Project.

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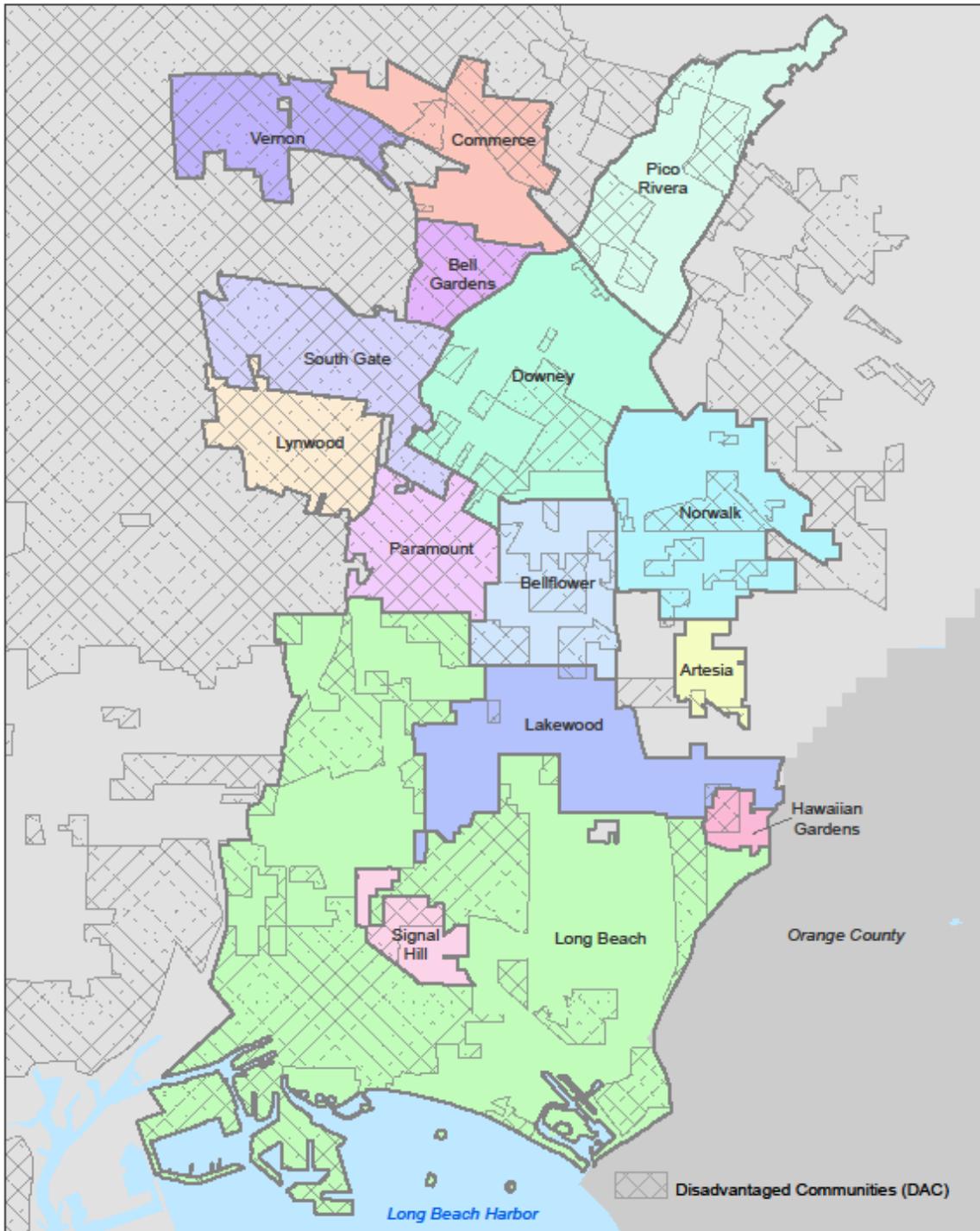


Figure 1: Regional Map.

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### Project List

Six individual projects are incorporated in the proposed Gateway Integrated Multi-Benefit Regional Water Management Project. Each individual project is described in detail in the following sections herein. A brief synopsis of each project is as follows:

1. *Pico Rivera Emergency Intertie*

This project will construct interties between the City of Pico Rivera, Central Basin MWD, and Pico Water District to transfer water among agencies when there is a need. Once completed, the project will improve reliability of the City water system by adding storage capacity and provide assistance to neighboring agencies in emergency demand needs.

2. *Advance Groundwater Wellhead Treatment Facility*

The Newport-Inglewood Fault runs directly through the City of Signal Hill. This unique geology essentially divides the City on a northwest axis, as well as provides a natural southern boundary for the Central Basin Groundwater Aquifer, preventing seawater intrusion from the south. However, the portion of the Central Basin Groundwater Aquifer that lies underneath the city limits, directly north of the earthquake fault has a high concentration of “organic color” within the groundwater. This project will construct an advanced water treatment wellhead facility that will remove the organic color and treat this useful water source for use as potable water supplies within the City.

3. *Catch Basin Trash Inserts and Face Plate Screens*

This project will install Automatic Retractable Screen (ARS) units and/or Connector Pipe Screen (CPS) units, recognized by the Regional Water Control Board as full capture devices<sup>1</sup>, on City and County owned catch basins located throughout thirteen cities. The installation of these devices will allow for TMDL and Permit compliance for the participating cities in addition to providing water quality and DAC community benefits.

4. *Disadvantaged Communities Schools Retrofit Program*

This program will be comprised of two components: a retrofit program and an educational program. The retrofit program will install water and energy saving devices in schools located within disadvantaged community (DAC) areas. This program will retrofit schools K-12 with high-efficiency toilets, zero consumption or high-efficiency urinals, custom glow control valves, waterbrooms, irrigation management systems, water saving irrigation heads, artificial turf and California friendly plants where applicable. The educational program will be implemented to increase student, faculty and staff’s knowledge of water and energy conservation and runoff reduction.

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<sup>1</sup> Los Angeles Regional Water Quality Control Board, *Los Angeles River Trash TMDL*, p. 3, 2007.

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5. *Fernwood Water Improvement Park*

This project will convert a vacant lot in the City of Lynwood into a regional water quality site. The park will feature stormwater improvement elements such as infiltration areas and bioswales as well as native shrubs and trees that will increase habitat for birds, butterfly species and mammals. Additionally, the park will provide recreational opportunities for disadvantaged communities in Lynwood.

6. *Long Beach Graywater Program*

This project will implement graywater “laundry to landscape” systems throughout the City of Long Beach. The project will expand the City's current pilot program to an additional 108 homes located in disadvantaged communities including 9 demonstration projects to study graywater solutions scaled for larger, multi-unit residences, residences with less open space, other uses for water from the Laundry to Landscape Program and other graywater sources (sinks/showers). Additionally, the project will include an outreach program to secure participants in qualifying DAC census tracts and block groups.

**Integrated Elements of Projects**

Six proposed projects are incorporated in this Gateway Integrated Multi-Benefit Regional Water Management Project, all within the Gateway Region. The GWMA is an established group willing to coordinate this multi-benefit project with a regional approach. The six projects are connected with similar goals and objectives to improve the water-related issues of the Gateway Region. This Project will benefit multiple jurisdictions and communities by implementing water conservation, water use efficiency, water reliability, ecosystem improvement, flood control, and water quality improvement.

## **Pico Rivera Emergency Intertie**

### **Goals and Objectives**

Currently, the supply of water to the northern part of the City of Pico Rivera is limited. The Central Basin Municipal Water District is in the process of decommissioning its Water Quality Protection Plan (WQPP) primarily due to lack of funding. The City plans on modifying the existing wells, piping, and pumping facilities to integrate them into the City water system. The majority of the City's production wells are over 50 years old and have lost their well yield. This project will integrate an existing well of the Central Basin Municipal Water District that was constructed less than 10 years ago to the City of Pico Rivera water system. This project will construct an intertie between the City of Pico Rivera, Central Basin Municipal Water District and Pico Water District. The intertie will include extending the existing 12" main water line on Paramount Boulevard that currently stretches from Loch Lomond Drive to Beverly Road to transfer water among agencies when there is a need, such as an emergency. Once completed, the project will significantly improve reliability of the City water system by adding storage capacity and providing assistance to neighboring agencies in emergency demand needs through the intertie connection.

The goals and objectives of this project are:

- To extend the existing 12" main water line and construct an intertie to transfer water among agencies in an emergency
- Ensure reliability of the City's water supply source

### **Purpose and Need**

The City of Pico Rivera provides water service to over 65,000 residents through two separate water purveyors: Pico Rivera Water Authority (PRWA) and Pico Water District (PWD). Each purveyor maintains an independent water distribution system and operates several water supply wells to extract the water from the Central Groundwater Basin. These two water systems are contiguous, but not physically connected, and they can support each other during major emergencies if appropriate facilities are in place. Operating pressures in both distribution systems are similar allowing them to transfer water between the two systems without impacting pressure at the delivery to the customer.

An emergency situation can occur within the service areas of City or the District caused by fire, main breaks, flood, storm, earthquake, extended electrical power outage, or other condition, including contamination of groundwater, which can adversely impact the two water systems and limit their ability to meet the production obligations. At present, there are no backup water sources available within the District's service area to continue to provide water services under emergency conditions, although PRWA maintains existing inter-ties between other agencies.

A backup water source can be made available by constructing a water system inter-tie; a physical connection between two independent water systems used to transfer water during emergency events. The project will help to ensure water supply reliability of the City water system by systematically incorporating a newer well system to act as an intertie between the City of Pico Rivera, the Central Basin Municipal Water District, and the Pico Water District. The project will regionalize facilities to work as an

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integrated source, provide operational flexibility by allowing water transfer between the three entities, and provide assistance to neighboring agencies in emergency demand needs.

### **Completed Work**

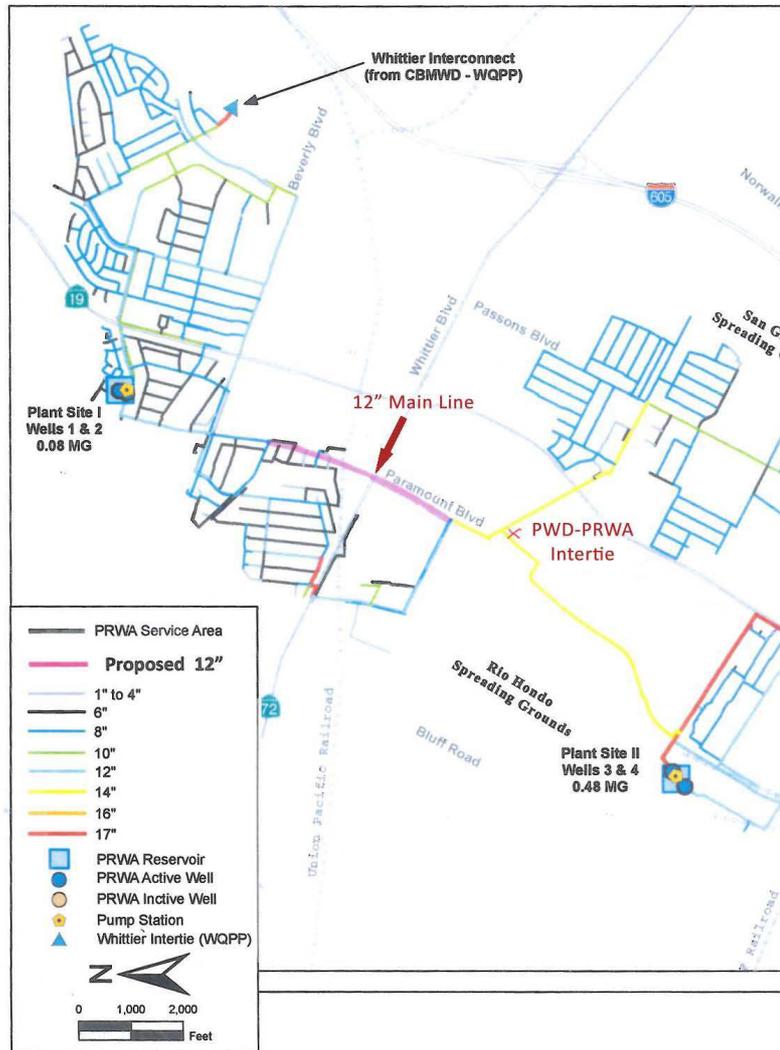
A preliminary design report was prepared for the project and includes a 80% design level of the project facilities. In addition interconnection analysis study was prepared for this project. The design report and interconnection analysis study examined:

- Recommendations from the PRWA and PWD Water Master Plans.
- Location and magnitude of fire flow deficiencies within PWD or PRWA water systems.
- PRWA does not maintain active permitted emergency generators to run wells during a power outage.
- Impacts of either Plant I, II, or III being out of service for an extended period of time.
- Some wells on the south side of the City continue to be inactive, with impacts from an additional well taken out of service.
- Review existing PRWA inter-ties with other agencies.
- Review the three inter-tie locations already designed by the City and determine if they satisfy the need and are in an optimal location based on the hydraulics/service area vulnerability.

### **Project Map**

Figure 2 below is a site map of the proposed Pico Water District and Pico Rivera Water Authority intertie connection and extension of the 12" main water line.

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**Figure 2: Site Map.**

**Project Timing and Phasing**

This project is intended to be constructed using the design/build delivery approach. It is estimated that the project could begin construction as early as January 2014, with an estimated completion date of June 2014.

**Proposed Work**

**A. Direct Project Administration**

Task 1: Administration

City staff will administer the project with consultants and construction management. City administrative staff will prepare invoices and other deliverables as required.

Deliverables: Preparation of invoices and other deliverables as required.

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Task 2: Labor Compliance Program

The City or its authorized agent will perform labor compliance services including labor compliance program administration, meetings with contractors and subcontractors, review and monitoring of certified payroll records for payment of the proper prevailing wage rate, conduct regular random audits of the certified payroll reports and conduct field inspections to confirm proper jobsite postings, interview workers to confirm water rate classification.

Deliverables: Submission of Labor Compliance Program

Task 3: Reporting

The City shall prepare and submit quarterly, annual and final reports as specified in the Grant Agreement.

Deliverables: Submission of quarterly, annual and final reports as specified in the Grant Agreement.

**B. Land Purchase / Easement**

The proposed treatment facilities will be constructed within the City's property limits. No additional land and easements will not be required for this project.

**C. Planning, Design, Engineering, Environmental Documentation**

Task 4: Assessment and Evaluation

The City has given extensive consideration to the details involved in construction of the main waterline extension and intertie connection, to include examining other locations and alternatives. The preliminary engineering analysis was conducted shows the proposed design is the most efficient to feed the central and southern areas of the City during emergency demands.

Task 5: Final Design

Preliminary design plans have been prepared at the 80% design level for the proposed intertie connection. The City proposes to construct the project using the design/build approach. The City will contract with a design/build firm in November 2013 and award commence construction in January 2014. The City of Pico Rivera will provide general administration over the final design and weekly meetings. The final design will include such tasks as:

- Preparation and review of final design drawings for all project components
- Preparation and review of technical specifications
- Receive 100 percent final construction contract documents
- Prepare and review final contract documents

Deliverables: Completion of project plans and specifications.

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Task 6: Environmental Documentation

The Project is subject to the environmental review process established in CEQA. The City proposes to comply with CEQA and NEPA requirements.

Deliverables: Approved and adopted CEQA/NEPA documentation

Task 7: Permitting

This is a facility for emergency use that will be used as a standby source. Therefore, only plan review by the State of California Department of Public Health (CDPH) is required prior to construction. No changes to Pico Rivera Water Authority System is required at this time. Once the contract is awarded, a City of Pico Rivera excavation permit will be required for the contractor to perform work.

Deliverables: obtain necessary plan reviews and permits.

**D. Construction/Implementation**

Task 8: Construction Contracting

The City could award a design/build contract as early as November 2013 for the treatment plant. During this phase, services will include:

- Attend pre-bid conference
- Interpret contract documents as needed
- Receive and review design/build bids
- Prepare construction contracts for award

Deliverables: Advertisement for bids; pre-bid contractors meeting; evaluation of bids; award contract

Task 9: Construction

The construction task items will include:

- Construction of main waterline extension
- Construction of intertie connection

*a. Subtask 9.1 - Mobilization and Site Preparation*

Construction crews will mobilize and prepare site for construction activities.

*b. Subtask 9.2 - Project Construction*

A 12" main water line will be extended and an intertie connection established.

*c. Subtask 9.3 - Performance Testing and Demobilization*

Start-up testing tasks will include the following facilities:

- Interconnection testing

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**E. Environmental Compliance, Mitigation, Enhancement**

*Task 10: Environmental Compliance, Mitigation, Enhancement*

Prior to construction, a CEQA document will be prepared for the project. It is expected that compliance with the CEQA in the form of an Initial Study and Mitigated Negative Declaration will be required for the project. To the extent possible, the project will be designed to minimize impacts to the adjacent area. With incorporation of adopted mitigation measures, the temporary impacts associated with construction would be reduced to less than significant levels and would not adversely affect the environment.

**F. Construction Administration**

*Task 11: Construction Administration*

Construction management tasks will include the following:

1. Contractor contract administration
2. Review contractor shop drawing submittals
3. Respond to requests for information
4. Attend progress meetings and review pay requests
5. Inspect construction
6. Perform materials testing
7. Prepare record drawings
8. Contract administration and close out
9. Coordinate with project auditors

## **Advance Groundwater Wellhead Treatment Facility**

### **Goals and Objectives**

The Newport-Inglewood Fault runs directly through the City of Signal Hill. This unique geology essentially divides the City on a northwest axis, as well as provides a natural southern boundary for the Central Basin Groundwater Aquifer, preventing seawater intrusion from the south. However, the portion of the Central Basin Groundwater Aquifer that is located directly underneath the city limits, directly north of the earthquake fault has a high concentration of “organic color” within the groundwater. The goals and objectives of this project are:

- To construct an advanced water treatment wellhead facility that will remove the color and organics and meet Federal and State Drinking Water Requirements
- Provide a capacity treatment plant rated for 1,200 gallons per minute (gpm) or approximately 1,700 acre-feet per year (AFY)
- Treat this “new water source” for use as potable water supplies within the City
- Ensure reliability of the City’s water supply source
- Relieve demand on regional imported domestic water supplies

### **Purpose and Need**

The City of Signal Hill operates its own municipal water system. The water supply consists of groundwater produced from the Central Basin and the purchase of treated surface water from the Metropolitan Water District (MWD). Approximately 90% of the city’s water supply comes from its groundwater production wells, which are located in north Long Beach, and the remaining water supply is purchased from the MWD. The City pays a replenishment assessment to the Water Replenishment District (WRD) for each acre-foot of water that is pumped out of the Central Basin. The WRD is responsible for managing the water levels in the Central Basin.

The local groundwater supply originates from the San Gabriel Mountains to the north, traveling down the San Gabriel River watershed and slowly making its way underground into the Central Basin, where it is pumped by groundwater production wells. The City’s two groundwater production wells are drilled to depths of approximately 1,000 feet and are capable of producing a combined flow of approximately 2,300 gallons per minute. The MWD supply comes from the Colorado River through the District's aqueduct system and from the Sacramento River / San Joaquin Delta via the State Water Project.

In 2008, the City drilled a new well located in their Public Works Yard. Relatively high concentrations of colored groundwater were detected in groundwater samples collected during the original construction and testing of Well No. 9. The detected colored water concentrations in the new well ranged from 50 to 60 color units (CU) and exceeded the California Department of Public Health (CDPH) Maximum Contaminant Level (MCL) of 15 CU. As a result of these high colored water concentrations, the City has not placed the well into service since its construction in 2008 and began a study in an effort to resolve treatment issues associated with such excessive concentrations of color in the groundwater.

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A preliminary design report was prepared by Tetra Tech in September 2010 that identified technologies to treat water with high color from Well No. 9. A membrane treatment system rated at 1,200 gpm is proposed to remove color and organics from the groundwater. The membrane system would be designed to treat well water containing low salinity (less than 400 ppm TDS) and high level of color (over 50 color units). The objective of the treatment is to produce permeate with color below 5 color units without significant reduction of concentration of dissolved ions. The reduction in organics will also benefit in reducing the potential for formation of disinfection byproducts (DBP's) and trihalomethanes (THM's) during disinfection.

The treatment facilities would be equipped with nanofiltration (NF) membranes, Hydranautics HYDRACOR 5 or equivalent, that are providing satisfactory performance in treating similar low salinity, high color water at other locations in California.

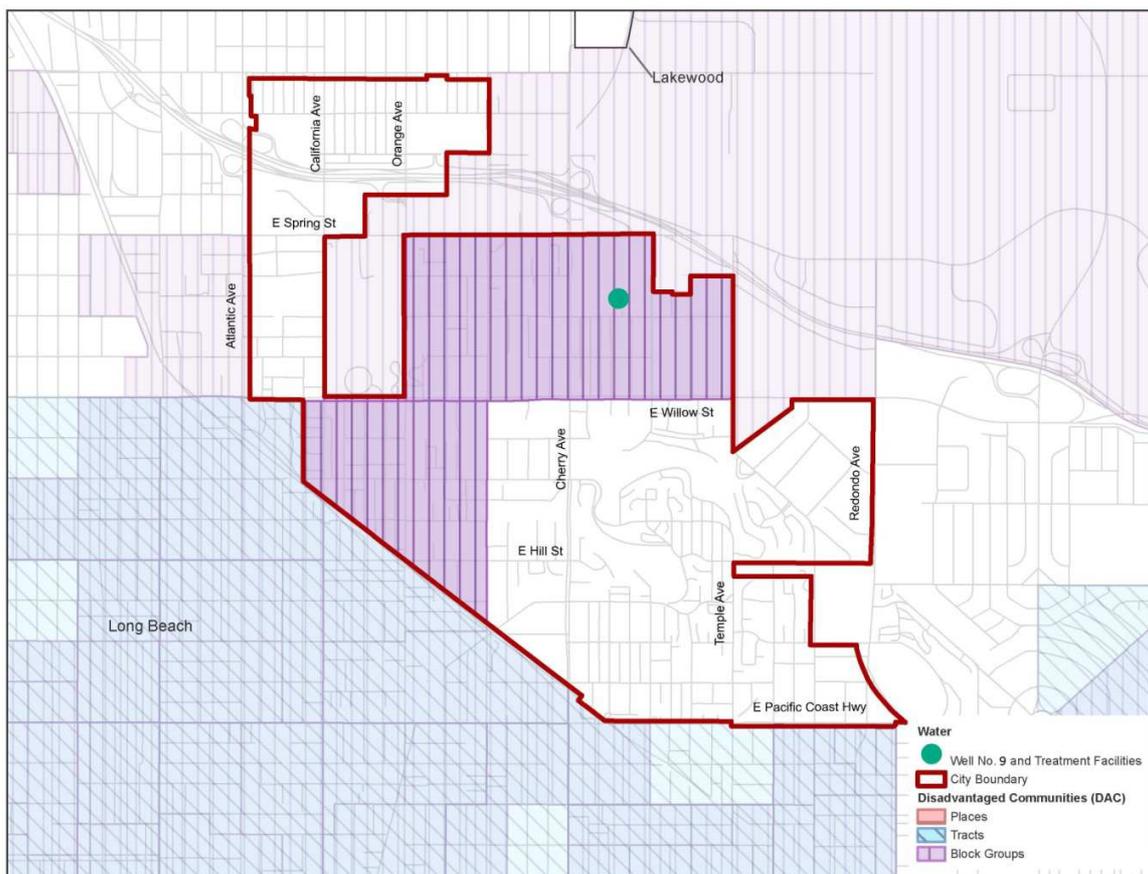
The NF membrane system is designed for operation at a recovery rate of 98%. Based on operation of similar units at other locations and consultations with the membrane manufacturer, operation at this level of high recovery rate will be possible using a two-stage configuration.

It is anticipated that this project will utilize the design/build delivery approach for construction of the treatment facilities.

This project will allow the City to obtain a new potable water source with treatment from an otherwise unusable groundwater source. The project will create an opportunity to enhance local water supplies and reliability, as well as improve groundwater quality, that will benefit the community. In addition, the project reduces the City's reliance on purchasing imported water from Metropolitan Water District.

Figure 3 below is a map showing the location of the proposed Groundwater Wellhead Treatment Facility.

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**Figure 3: Proposed Wellhead Treatment Facility Location.**

### Completed Work

A number of studies and reports have been completed for the proposed treatment facilities. A preliminary design report was prepared by Tetra Tech in September 2010, which evaluated several different treatment technologies including conventional filtration and sedimentation, membrane filtration, nanofiltration and ozonation with granular activated carbon (GAC) adsorption. The results of the evaluation indicated that nanofiltration would provide the best value for the project objectives and goals to meet the Title 22 Drinking Water Requirements. The Preliminary Design Report also includes a 30% design level (approximate) of the project facilities.

Additional hydrogeologic studies have been performed by Richard Slade and Associates to quantify the color and organics issues at Well No. 9 and pumping capacities as referenced in Section G.

### Existing Data and Studies

The following studies have been prepared for this project:

1. Preliminary Design of Membrane Treatment Plant at Well No. 9; report prepared by Tetra Tech, September 2010
2. Analysis of Alternative Treatment Methods for Well No. 9; memorandum prepared by Tetra Tech, July 2012

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3. Analysis of Construction Membrane Plant at Various Alternative Well Flows; memorandum prepared by Tetra Tech, July 2012
4. Evaluation of Colored Groundwater Conditions City of Signal Hill Well No. 9; memorandum prepared by Richard C Slade & Associates, February 2013

*Influent Water Quality*

Raw water quality from Well No. 9 was obtained from the Well Completion Report provided by the City. Water samples were collected and analyzed in August 2008 during the final well testing. According to the report, all constituents of the Well No. 9 composite sample are below primary and secondary MCL, except of color that was in the 50 to 60 color unit range. The groundwater was not sampled for methane during this period. Similar groundwater basins in California have been found to contain high levels of methane when colored water is present. Additional methane testing is recommended prior to the final design state.

*Product Water Quality*

The proposed NF system will provide product water and concentration of constituents that will meet the potable water limits specified by California Department of Public Health (DPH) and within the range of potable water composition supplied by the City of Signal Hill.

*Pretreatment System*

The pretreatment system will include two process steps: addition of scale inhibitor and cartridge filtration. Scale inhibitor dosing system and cartridge filtration units will be common to all three trains. The configuration of the pretreatment system is similar to the configuration of the pretreatment system at the Irvine Ranch Water District Deep Aquifer Treatment System (DATS) plant, which has demonstrated long term stability of required feed water quality at that system.

*Treatment System*

The NF system consists of two identical primary NF trains, each arranged with two stages of treatment with vessels in a 14:4 array, seven elements per vessel. The trains are supplied as individual skids. Each train also includes a feed pump, instrumentation, valves, flow meters, piping and sample tray.

The two-stage primary units will operate at recovery rate of 90%. The concentrate streams from the primary membrane trains are combined together and flow to suction of a booster pump. The booster pump provides additional pressure increase prior to a single secondary train. The membrane train configuration is of a single stage of six pressure vessels, connected in parallel, seven elements per vessel. The secondary train will operate at recovery rate of 80%. To provide sufficient flow rate of the concentrate flow, part of the concentrate is recirculated back to the suction of the booster pump. The combined system recovery rate will be 98%.

*Post Treatment System*

Membrane treated water would be post-treated using forced air degasifiers to remove methane (if present) from the water. The water would then flow to a 36,000 gallon concrete clearwell. A new product pump station will be constructed on the roof deck of the clearwell. Disinfection of the product

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water will be with sodium hypochlorite generated on-site along with aqueous ammonia. Product pumps on top of the clearwell would be used to pump the water into the City's distribution system.

### *Clean-in-Place (CIP)*

The Clean-In-Place (CIP) system is used to circulate chemicals through the NF membranes when they have become scaled or fouled. The major components of a system are a tank with a heater, a pump, and a cartridge filter.

Chemical solutions selected to effectively remove the observed fouling are mixed in the CIP tank. The CIP solution is heated with the heater to increase the effectiveness of the cleaning. The CIP pump is used to circulate the cleaning fluid through the NF membranes. One train is cleaned at a time while the other trains remain in operation. The cartridge filter removes particles that are entrained in the solution during cleaning.

Piping in the CIP system allows the solution to be re-circulated within the system while it is being heated and mixed. Disposal of the used solution is through a line to the sanitary sewer. Cleaning is typically performed every 6 to 12 months.

### **Project Map**

Site photos of Well No. 9 and the proposed treatment facilities are provided below. A Project Location Map shows that the subject well is situated within the Signal Hill Public Works Yard at 1275 28th St.



**Figure 4: Well No. 9 Site Photos.**

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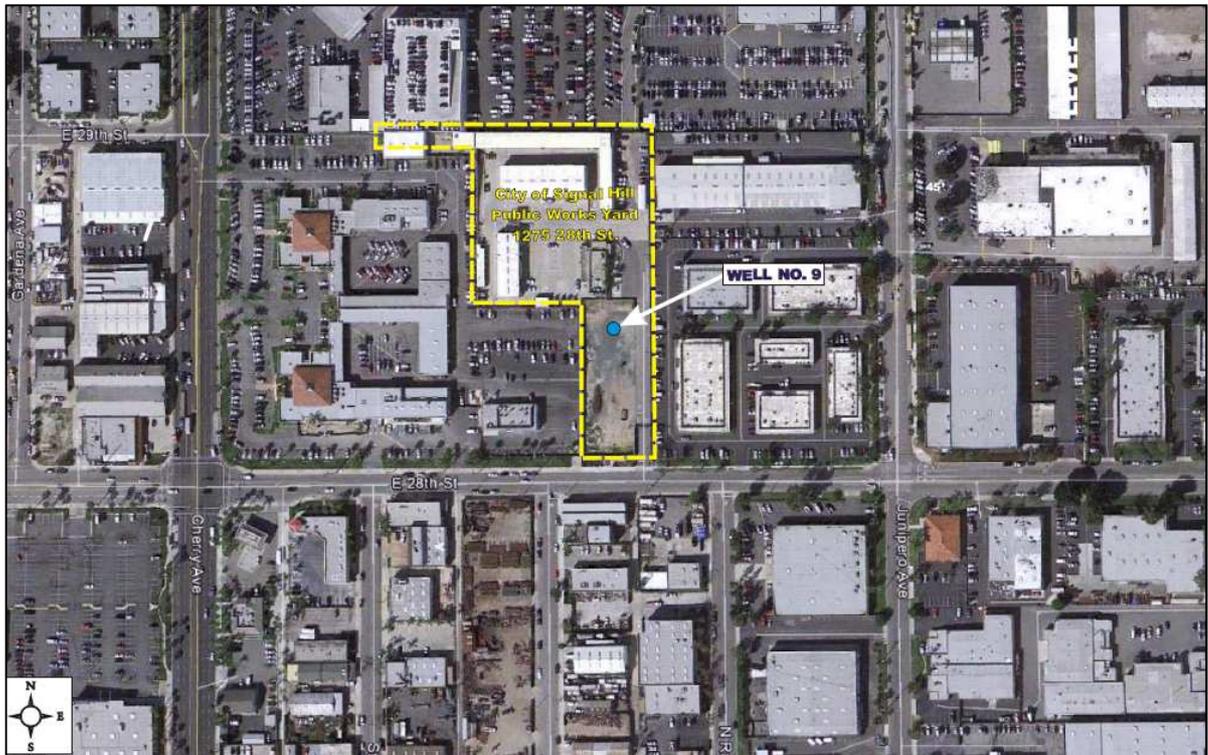


Figure 5: Project Location Map (Well No. 9 and Treatment Facilities).

### Project Timing and Phasing

This project is intended to be constructed using the design/build delivery approach. It is estimated that the project could begin construction as early as December 2013, with an estimated completion date of April 2015.

### Proposed Work

#### A. Direct Project Administration

##### Task 1: Administration

City staff will administer the project with consultants and construction management. City administrative staff will prepare invoices and other deliverables as required.

Deliverables: Preparation of invoices and other deliverables as required.

##### Task 2: Labor Compliance Program

The City or its authorized agent will perform labor compliance services including labor compliance program administration, meetings with contractors and subcontractors, review and monitoring of certified payroll records for payment of the proper prevailing wage rate, conduct regular random audits of the certified payroll reports and conduct field inspections to confirm proper jobsite postings, interview workers to confirm water rate classification.

Deliverables: Submission of Labor Compliance Program

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Task 3: Reporting

The City shall prepare and submit quarterly, annual and final reports as specified in the Grant Agreement.

Deliverables: Submission of quarterly, annual and final reports as specified in the Grant Agreement.

**B. Land Purchase / Easement**

The City of Signal Hill owns the parcel at 1275 28<sup>th</sup> Street for Well No. 9. The proposed treatment facilities will be constructed within the City's property limits. Therefore, additional land and easements will not be required.

**C. Planning, Design, Engineering, Environmental Documentation**

Task 4: Assessment and Evaluation

The City has given extensive consideration to the details involved in construction of a wellhead treatment facility in the proposed project area and has examined other treatment alternatives. The preliminary engineering analysis was conducted in 2010 and 2012. The PDR evaluated viable treatment technologies, various pumping capacities and detailed cost evaluation. The PDR recommends construction of a nanofiltration treatment plant to address the color and organics at Well No. 9.

Deliverables: Technical studies

Task 5: Final Design

As part of the September 2010 report, preliminary design plans have been prepared at the 30% design level for the proposed treatment facilities. The City proposes to construct the project using the design/build approach. The City will contract with a design/build firm in 2013 and award construction as early as December 2013. The City of Signal Hill will provide general administration over the final design and weekly meetings. The final design will include such tasks as:

- Surveying, site topography, contours, horizontal and vertical controls, and existing utilities, property lines and rights-of-way
- A preliminary geotechnical investigation will be performed prior to preparation of the final design documents to identify impediments to the planned alignment of the pipeline
- Review of geotechnical report
- Preparation and review of design drawings, including civil, hydraulic, process, architectural, structural, mechanical and instrumentation design for all project components
- Preparation and review of technical specifications
- Preparation and review of construction cost estimates at each stage of design completion
- Obtain permits, rights-of-ways and easements necessary for the project
- Review design drawings and technical specifications for review at the 60 percent, and 90 percent completion stages
- Receive 100 percent final construction contract documents

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- Prepare and review final contract documents

Deliverables: Completion of project plans and specifications at the 90 percent and final level.

Task 6: Environmental Documentation

The Project is subject to the environmental review process established in CEQA. The City proposes to comply with CEQA and NEPA requirements by preparing an Initial Study and adopting a Mitigated Negative Declaration.

Deliverables: Approved and adopted CEQA/NEPA documentation

Task 7: Permitting

For construction of the treatment facilities, a water supply permit will be required from the California Department of Health Services (CDPH). Additionally, a Technical Report will also need to be submitted to CDPH. Once the draft final design plans have been prepared, they will be submitted to CDPH along with the Technical Report for review.

Regulatory requirements for the project include the following:

- State of California Department of Public Health, Office of Drinking Water, water supply permit
- South Coast Air Quality Management District, permits to construct and operate
- Regional Water Quality Control Board, stormwater discharge during construction, and De Minimus permit for well water dewatering and plant air gap discharges
- Los Angeles County Sanitation District for brine disposal and sewer connection

The treatment plant site is owned by the City of Signal Hill. Pipelines for distribution system connection are primarily located within public street rights-of-way.

Deliverables: Copies of applicable permits

**D. Construction/Implementation**

Task 8: Construction Contracting

The City could award a design/build contract as early as December 2013 for the treatment plant. During this phase, services will include:

- Attend pre-bid conference
- Interpret contract documents as needed
- Receive and review design/build bids
- Prepare construction contracts for award

Deliverables: Advertisement for bids; pre-bid contractors meeting; evaluation of bids; award contract

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Task 9: Construction

The construction task items will include:

- Installation of well pump and motor
- Construction of pipelines
- Construction of treatment facilities
- Construction of finished water pipeline
- Connection to sewer

*a. Subtask 9.1 - Mobilization and Site Preparation*

Construction crews will mobilize and prepare site for construction activities.

*b. Subtask 9.2 - Project Construction*

Well Pump Construction:

A well pump and motor will be constructed for existing Well No. 9. The design criteria and hydraulic design parameter are utilized to determine the size, type, and candidate manufacturers for the mechanical equipment associated with the Project. Mechanical equipment includes: pumps/motors, control/isolation valves, flow meters, piping, backflow prevention, miscellaneous appurtenances, and provisions for surge control. Electrical and instrumentation control panels will also be included.

Treatment facilities:

The proposed treatment facility will be sized and constructed to treat approximately 1,200 gom of groundwater supplies from Well No. 9 using nanofiltration membrane technology to treat the impaired groundwater. Primary components of the treatment plant construction include:

- Cartridge filters to remove residual sand and other particulates
- Threshold inhibitor addition for scale control
- NF membrane feed pumps for boosting RO feed pressure
- Clean in Place System
- Decarbonator for post treatment pH adjustment and stabilization
- Post treatment chemical conditioning, on-site sodium hypochlorite generation, and ammonia for disinfection.
- Product water pumps to transfer finished water to the distribution system
- Clearwell
- Electrical, instrumentation and controls
- Building

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*c. Subtask 9.3 - Performance Testing and Demobilization*

Start-up Testing tasks will include the following facilities:

- Supply facilities (wellhead) testing
- Groundwater transmission pipeline testing
- Treatment facilities testing
- Finished product water transmission pipeline testing

After operation of the project begins, the project yield, water quality, volume and concentration of influent and waste streams will be measured to determine effectiveness. Flow rates will be monitored and the water production of the treatment plant will be recorded for the potable system. The success of the project components will be indicated by the annual production of potable water.

**E. Environmental Compliance, Mitigation, Enhancement**

*Task 10: Environmental Compliance, Mitigation, Enhancement*

During the initial construction of Well No.9, a CEQA document was prepared for the project. It is expected that compliance with the CEQA in the form of an Initial Study and Mitigated Negative Declaration will be required for the project. To the extent possible, the project will be designed to minimize impacts to the adjacent area. The project site is located in a commercial and industrial area of the City. The City will adopt mitigation measures to be performed during and after construction of the project facilities. With incorporation of adopted mitigation measures, the temporary impacts associated with construction would be reduced to less than significant levels and would not adversely affect the environment.

**F. Construction Administration**

*Task 11: Construction Administration*

Construction management tasks will include the following:

1. Contractor contract administration
2. Review contractor shop drawing submittals
3. Respond to requests for information
4. Attend progress meetings and review pay requests
5. Inspect construction
6. Perform materials testing
7. Prepare record drawings
8. Contract administration and close out
9. Coordinate with project auditors

## Catch Basin Trash Inserts and Face Plate Screens

### Goals and Objectives

The Gateway Water Management Authority (GWMA) proposes to administer a project that will significantly reduce the trash present in multiple waterbodies of Los Angeles County and will meet the Los Angeles Regional Water Quality Control Board's (Regional Board) Trash Total Maximum Daily Load (TMDL) for the Los Angeles River. This comprehensive, regional approach to stormwater pollution prevention involves retrofitting catch basins within thirteen cities in the Gateway Region, six of which are tributary to the Los Angeles River. This project will achieve specific water quality objectives set by the Regional Board and valued by the GWMA, including the elimination of trash in Los Angeles County waterways, protection of water quality, preservation of the aquatic environment, and reduction of greenhouse gas and carbon dioxide emissions.

The waterbodies immediately affected by this project include the Los Angeles River, the San Gabriel River, the Los Cerritos Channel, Coyote Creek, and multiple downstream tributaries.

In 2007, the Regional Board determined that trash in the Los Angeles River was an additional threat to water quality. The new Trash Total Maximum Daily Load (TMDL), effective since September 23, 2008, requires permit holders within the Los Angeles River watershed to reduce trash flows into the Los Angeles River by 10% per year, reaching zero trash by the year 2016<sup>2</sup> (see Table 1 below).

**Table 1: Los Angeles River Watershed Trash Effluent Limitations<sup>3</sup> per Storm Year<sup>4</sup> in gallons of uncompressed trash.<sup>5</sup>**

<i>Permittees</i>	<i>Baseline</i>	<i>2012 (30%)</i>	<i>2013 (20%)</i>	<i>2014 (10%)</i>	<i>2015 (3.3%)</i>	<i>2016<sup>6</sup> (0%)</i>
<b>Bell Gardens</b>	13500	4050	2700	1350	446	0
<b>Commerce</b>	58733	17620	11747	5873	1938	0
<b>Downey</b>	39063	11719	7813	3906	1289	0
<b>Pico Rivera</b>	13953	4186	2791	1395	460	0
<b>South Gate</b>	43904	13171	8781	4390	1449	0
<b>Vernon</b>	47203	14161	9441	4720	1558	0

For areas not subject to a Trash TMDL, the Municipal Separate Storm Sewer System (MS4) Permit, effective on December 28, 2012, requires for cities to install trash excluders, or equivalent devices, on or in catch basins or outfalls to prevent the discharge of trash to the MS4 or receiving water no later than four years after the effective date of the Order<sup>7</sup>. Therefore, by implementing this project participating cities will be complying with the requirements set forth by the MS4 Permit.

<sup>2</sup> Los Angeles Regional Water Quality Control Board, Los Angeles River Trash TMDL, p. 26, 2007.

<sup>3</sup> Effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table 7-2.2 of the Basin Plan.

<sup>4</sup> Storm year is defined as October 1st to September 30th herein.

<sup>5</sup> California Regional Water Quality Control Board, ORDER NO. R4-2012-0175, Attachment O, 2012.

<sup>6</sup> Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

<sup>7</sup> California Regional Water Quality Control Board, ORDER NO. R4-2012-0175, p. 132, 2012.

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### Purpose and Need

The Storm Drain Catch Basin Retrofit Project addresses water quality issues in a geographic area encompassing 13 cities and nearly 0.7 million residents. The project area is in a high-minority and economically disadvantaged region. Of the thirteen cities participating in the project, all contain DAC areas either in whole or in part (see Attachment 10 herewith).

Six of the participating cities are subject to the Los Angeles River Trash TMDL. Because the Regional Water Control Board certifies the CPS units as full capture devices<sup>8</sup>, this project will help bring those cities into 100% compliance with the Los Angeles River Trash TMDL. The remainder of the participating cities are subject to the Los Angeles MS4 Permit which requires the installation of trash capture devices for compliance. Without the work of the GWMA, these cities would have to find revenues in the tens of thousands of dollars to do this work or face strict, expensive, daily fines.

Not only are certain trash items contributing to sediment contamination, harming wildlife, and inhibiting aquatic vegetation; some trash items are also potential sources of bacteria and toxic substances. Not only does the Los Angeles River have a TMDL for trash, but also the Los Cerritos Channel and the San Gabriel River are both listed on the 2010 303(d) list as impaired for trash<sup>9</sup>. This project will fix the water quality of these waterbodies and prevent surrounding areas from reaching the same level of pollution.

Removing trash from waterbodies and preventing trash from contaminating waterbodies in the future will improve water quality, protect the aquatic habitat, and help maintain the beneficial uses of the affected waterbodies. Preventing trash contamination will enhance public interest water quality and may promote participation in river restoration activities. Additionally, removal of trash will help promote public recreation, particularly in beach areas that are consistently polluted with trash at the outfalls of these rivers (see Figure 6).



**Figure 6: Trash in Rainbow Harbor, Long Beach, CA.**

By promoting public recreation in local areas, the project will reduce greenhouse gas and carbon dioxide emissions by reducing vehicle miles traveled. Long Beach and its tributary rivers are recreational assets located in the densely developed Los Angeles area. The recreational value of these waterbodies is currently limited because of the various water quality issues, including trash pollution. Many residents may seek other venues for picnics, water-related activities and outdoor recreation because of the water

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<sup>8</sup> Los Angeles Regional Water Quality Control Board, *Los Angeles River Trash TMDL*, p. 3, 2007.

<sup>9</sup> United States Environmental Protection Agency (USEPA), *303(d) List*, 2010.

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quality of these waterbodies. Trash compromises the visual appearance and makes the waterbodies of the Gateway Region less inviting. Los Angeles residents may be driving further away for an outdoor park experience rather than utilizing local waterbodies. More usable, inviting waterbodies will reduce vehicle miles traveled necessary to find a suitable outdoor recreation venue for local residents.

Removing trash from these waterbodies will also create a potential of creating additional potable water sources for the Gateway Region. Los Angeles River, San Gabriel River, Los Cerritos Channel, and Coyote Creek have each been identified for the potential beneficial use for municipal and domestic supply (MUN)<sup>10</sup>. Once water quality is improved, these waterbodies may be suitable for potable water use.

Furthermore, the Gateway Region will garner multiple economic benefits from the implementation of this project. First, the elimination of trash from the Los Angeles County waterbodies will also eliminate waste deposition on the beaches of Southern California, thereby preventing the loss of tourism dollars when visitors are discouraged from enjoying the beach due to large trash deposits. Second, this project is a construction project that will generate local jobs immediately, subsequently strengthening the economy. Third, this “shovel-ready” project will bring money to the local economy, much of which will be spent in DAC areas.

The Gateway Region’s compliance with the Trash TMDL and MS4 Permit will eliminate potential fines and penalties that would otherwise be imposed for violation. All thirteen cities benefitting from this project contain DAC areas. Without financial assistance from the State Water Board’s Clean Water Program, these cities would be unable to implement this essential environmental project.

### **Completed Work**

The GWMA applied for and was granted a \$10 million, principle-forgiveness loan from the Clean Water State Revolving Fund through the 2009 American Recovery and Reinvestment Act to eliminate trash from the lower reaches of the Los Angeles River. The project involved the fabrication and installation of full capture inserts in catch basins, which are the street-level curb openings into which stormwater flows to prevent flooding. The sixteen (16) participating cities included Bell, Bell Gardens, Commerce, Compton, Cudahy, Downey, Huntington Park, Long Beach, Lynwood, Maywood, Montebello, Paramount, Pico Rivera, Signal Hill, South Gate, and Vernon. The goal of the project was to reduce the amount of trash that ends up in the Los Angeles River by installing Connector Pipe Screen (CPS) units and Automatic Retractable Screen (ARS) units and meet the requirements of the Los Angeles River Trash TMDL. The project was designed, approved, bid and then Noticed-to-Proceed in the fall of 2009. Construction of this project was completed October 28, 2011.

Although the awarded funds were helpful in the GWMA’s goal, additional work is still required to meet the Los Angeles River Trash TMDL requirements of zero trash by 2016. Furthermore, the GWMA recognizes the importance of keeping trash out of the waterbodies of Los Angeles County and introduces additional cities into the advancement of trash elimination for adjacent waterbodies not yet subject to a Trash TMDL.

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<sup>10</sup> Los Angeles Region Water Quality Control Board, *Water Quality Control Plan Los Angeles Region, Beneficial Uses*, October 28, 2011.

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**Proposed Work**

The project will be implemented over a two-year period. The contractor will perform work one city at a time. The project will involve no significant construction, but rather the installation of an automatic retractable screen and/or a connector pipe screen to prevent trash and debris larger than 5 mm in size from entering the storm drain system.

In each city there is a combination of county-owned and city-owned catch basins. Each city will issue an encroachment permit and Caltrans will need to issue access permits for some of the storm drains. In addition, some of the installations will require a Flood Control District permit from Los Angeles County. These costs have been included in the total project costs (see Attachment 4). As a part of the permit process cities can limit work in arterial streets as needed. The county permit process is more complicated and requires each city to enter into either a county service request or a separate agreement for the long-term maintenance of the catch basins affected by the installations.

The screens are low maintenance. Automatic Retractable Screen (ARS) units and/or Connector Pipe Screen (CPS) units will be installed in catch basins to ensure that trash and debris do not enter the storm drains. Trash will be removed during regular street sweeping. During storms, the ARS units open to allow rainwater to flow through, preventing street-level flooding (see Figure 7). The CPS systems are expected to have a useful life of at least 25 years (OCTA.net). Various vendors state that the life expectancy of the ARS systems is 20-25 years. The GWMA and participating cities are well aware that keeping trash out of storm drain systems is a long-term investment. All of the applicant cities will be accounting for this necessary expense in future operations and maintenance budgets. The applicants understand that debris removal and catch basin insert maintenance is key to the project's effectiveness.



**Figure 7: Automatic Retractable Screen (ARS) as installed.**



**Figure 8: Connector Pipe Screen as installed.**

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## Tasks

Below is a summary of anticipated tasks for the Catch Basin Trash Inserts and Face Plate Screens project.

### **A. Direct Project Administration**

#### Task 1: Administration

The GWMA will execute a contract with CWSRF for grant and prepare invoicing, advertisement(s), agendas and meeting notes throughout the implementation of the project.

Deliverables: Preparation of invoices and other deliverables as required.

#### Task 2: Labor Compliance Program

The City or its authorized agent will perform labor compliance services including labor compliance program administration, meetings with contractors and subcontractors, review and monitoring of certified payroll records for payment of the proper prevailing wage rate, conduct regular random audits of the certified payroll reports and conduct field inspections to confirm proper jobsite postings, interview workers to confirm water rate classification.

Deliverables: Submission of Labor Compliance Program

#### Task 3: Reporting

The GWMA will perform labor compliance services including labor compliance program administration, meetings with contractors, review and monitoring of certified payroll records for payment of the proper prevailing wage rate.

Deliverables: Submission of Labor Compliance Program

### **B. Land Purchase / Easement**

The proposed treatment facilities will be constructed within the City's property limits. No additional land and easements will not be required for this project.

### **C. Planning, Design, Engineering, Environmental Documentation**

#### Task 4: Assessment and Evaluation

A Project Assessment and Evaluation Plan (PAEP) will be prepared and submitted by the GWMA during the project construction phase.

Deliverables: Project Assessment Evaluation Plan.

#### Task 5: Final Design

The project specifications and final stormwater catch basin insert device design will be completed prior to device installation.

Deliverables: Completion of project plans and specifications.

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Task 6: Environmental Documentation

All CEQA, NEPA, and additional environmental documentation will be prepared and completed prior to construction.

Deliverables: Approved and adopted CEQA/NEPA documentation

Task 7: Permitting

Permits for all County-owned catch basins, landowner agreements, and all other applicable permits will be acquired prior to construction

Deliverables: obtain necessary permits.

**D. Construction/Implementation**

Task 8: Construction Contracting

Once the project has been awarded, the GWMA will advertise for bids. After a wait period of two weeks, the GWMA will review the bids and reward a contractor.

Deliverables: Advertisement for bids; pre-bid contractors meeting; evaluation of bids; award contract

Task 9: Construction

Once the contractor is awarded, construction will begin and move from city to city until 100% of storm drain retrofits are complete.

**E. Environmental Compliance, Mitigation, Enhancement**

Not applicable for this project.

Deliverables: Provide copy of Categorical Exemption and file.

**F. Construction Administration**

Task 10: Construction Administration

Construction management tasks will include the following:

1. Contractor contract administration
2. Review contractor shop drawing submittals
3. Respond to requests for information
4. Attend progress meetings and review pay requests
5. Inspect construction
6. Perform materials testing
7. Prepare record drawings
8. Contract administration and close out

## **Disadvantaged Communities Schools Retrofit Program**

### **Goals and Objectives**

The Central Basin Municipal Water District proposes to undertake the Disadvantaged Communities School Retrofit Project to increase water efficiency and reduce water dependency by retrofitting schools and educating communities about the importance and methods of conserving water. The District wants school staff, students, and parents to become familiar with water conservation recommendations and to share information with other family members and friends. In addition, one of the District's goals is to foster more sustainable water practices and to have community members make sustainable changes in their homes by implementing similar retrofits.

This project addresses the Administrative Draft of the IRWM Plan by addressing the plan objective to continue and enhance water use efficiency measures to meet 20x2020 per capita water use targets which will help to achieve the goal to optimize and ensure water supply reliability.

### **Background**

Development of this proposal evolved from efforts by the Metropolitan Water District to promote long-term conservation and development of water use efficiency in the 2010 Integrated Water Resources Plan (IRP). MWD has adopted a long-term plan to protect the Region from future supply shortages with an emphasis on water-use efficiency. Then, in November 2011, the Central Basin Board of Directors adopted a five-year Water Use Efficiency Master Plan.

MWD's IRP has an aggressive target of a 20% regional reduction in per capita water use. Central Basin saw an opportunity to work with school districts to perform complete makeovers of school facilities that would save water and save money for the schools. This project evolved as an opportunity plan to work with selected schools using research conducted by MWD and others on high-efficiency water saving devices. The District had previous experience with a complete makeover when it worked with the City of Bell Gardens to retrofit city facilities. The City of Bell Gardens became the first California Friendly City, a model for regional conservation efforts statewide. Water conservation devices located throughout public facilities included high-efficiency toilets, urinals, synthetic turf, water-brooms, native plants, and a weather-based irrigation system.

The District has been in touch with multiple school districts in multiple cities regarding opportunities for makeovers that would save both money and water. The current project is targeting schools in five member cities: Huntington Park, Lynwood, Paramount, Santa Fe Springs, and Whittier. See the District Service Area map below for the location of these cities.



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**Proposed Work**

The anticipated tasks necessary to implement this project are:

**A. Direct Project Administration**

Task 1: Administration

The CBMWD will coordinate the entire project, enter into contracts with vendors to retrofit interior sanitary features and exterior irrigation controllers and sprinkler heads, and prepare and submit invoices.

Deliverables: Invoices and other deliverables, as required

Task 2: Labor Compliance Program

Deliverables: Submission of Labor Compliance Documentation

Task 3: Reporting

Quarterly progress reports will be submitted to the GWMA by the 20<sup>th</sup> day following the end of a calendar quarter (March, June, September, and December); a draft final and a final report will be prepared and submitted to the GWMA after completion of the project and before the end of the contract agreement term.

Deliverables: Quarterly Reports, Draft Final Report, Final Report, Post-Completion Report as specified in grant agreement

**B. Land Purchase / Easement**

Not applicable for this project.

**C. Planning, Design, Engineering, Environmental Documentation**

The CBMWD will coordinate with school administrators on planning and scheduling the retrofitting of interior and exterior facilities and award contracts for preparation of plans and specifications for the interior and exterior facility retrofits.

Deliverables: Plans and Specifications

**D. Construction/Implementation**

Task 4: Construction Contracting

After plans and specifications have been completed, CBMWD will advertise for bids and award contracts for physical retrofitting of interior and exterior facilities.

Deliverables: Advertisement for bids, evaluation of bids, contracts awarded

Task 5: Outreach

Support phased implementation of the Conservation Connection Curriculum in the five (5) middle schools participating in the project.

Deliverables: Curriculum

Provide conservation and rebate literature to parents of school children, draft press releases, blog post(s) and social media posts; produce a public service announcement and create a website.

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Deliverables: Materials provided to parents, press release, blog post(s), social media posts, public service announcement, website.

Plan and conduct gardening classes for residents in the attendance area of the middle school.

Deliverables: Class signup sheets, photos

**Task 6: Construction**

Retrofitting interior sanitary fixtures and exterior weather-based irrigation controllers and rotating sprinkler heads.

Deliverables: Post-Construction Inspection Reports

**E. Environmental Compliance, Mitigation, Enhancement**

Not applicable for this project.

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## **Fernwood Water Improvement Park**

### **Goals and Objectives**

The City of Lynwood proposes the Fernwood Water Improvement project along a strip of land adjacent to the I-105 Freeway between Atlantic Avenue and Long Beach Boulevard. The focus is to address stormwater quality, stormwater run-off and local flooding. The project includes the construction of infiltration basins and bioswales to address these concerns.

With the construction of the I-105 freeway, the City's drainage patterns and hydrology were forever altered and changed. The freeway reduced the permeable area and increased the volume of stormwater run-off draining onto the City's streets. The freeway alignment resulted in the closure and re-alignment of several city streets. These re-alignments and closures changed the original drainage design and resulted in flooding of streets and areas that did not experience flooding in the past. Caltrans installed interceptors on the embankments and removed the existing vegetation. The concentrated flows from these interceptors have resulted in increased erosion and area flooding (see Figure 9 and Figure 10).



**Figure 9: Flooding from interceptor.**



**Figure 10: Flooding on streets.**

The City will participate in the Los Angeles County Flood Control Districts Coordinated Management Monitoring Plan. The City will also submit a letter of intent to the Los Angeles Regional Water Control Board (Board) to advise the Board that the City will be preparing a Watershed Management Plan to address TMDLS under the permit. This project will assist the City with stormwater TMDL compliance and address neighborhood flooding.

### **Purpose and Need**

The project site drains primarily to the Los Angeles River, which serves as a major flood control channel for the Region. Since the project will increase storage and infiltration capacity at the site, it is expected to reduce flows to the Los Angeles River and therefore enhance the capacity of this water body to provide flood protection. The project site will capture runoff and stormwater that primarily drains to the Los Angeles River from the I-105 freeway and will improve stormwater quality to help the region meet requirements under the Municipal Separate Storm Sewer System Permit. The project is expected to improve water quality originating from approximately 100 acres to 280 acres of primarily Single Family Residential land use area and water that drains from the I-105 Freeway. Stormwater runoff from these areas typically contains metals, nutrients and bacteria, all of which are constituents that may be

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mitigated by the treatment features that will be included in the project design (i.e. biofiltration and infiltration).

Community members selected this site out of five sites that were evaluated by our project hydrologist, Geosyntec, for potential water-related benefits. Based on Geosyntec's modeling, this project site meets Gateway IRWMP goals and objectives for water supply, water quality, habitat, and recreation. The project is consistent with the Los Angeles County Los Angeles River Master Plan, and the Common Ground Watershed and Open Space Plan of the Rivers and Mountains Conservancy, adhering to the use and promotion of native vegetation, watershed conservation and sustainable building practices that will protect and enhance California's ecological and environmental integrity. In addition, the project is consistent with watershed protection and open space goals in the Integrated Regional Water Management Plan (IRWMP) for the region.

A project specific technical memorandum outlining the relative benefits of the project has been drafted by Geosyntec Consultants. In addition, several regional documents are relevant to the project including the Los Angeles Region Basin Plan, relevant Total Maximum Daily Load (TMDL) allocations and related Implementation Plans where available (see LARWQCB TMDL website for further detail), the 2008-2010 303d list, and the draft Central and West Coast Basins Stormwater Capture Feasibility Study (WRD, expected 2012). Finally, as part of the related efforts of the Greater Los Angeles County IRWMP, Geosyntec conducted a subwatershed stormwater quality prioritization analysis and a technical memorandum that placed this particular area within the City of Lynwood as a high priority area.

### **Completed Work**

Fernwood Water Improvement Project provides targeted benefits to disadvantaged communities in the city. The park was designed by Lynwood residents this past spring through a community planning process led by Alcanza and funded by the Rivers and Mountains Conservancy to specifically identify an IRWMP disadvantaged community project. The City completed the environmental review process and determined that the project is categorically exempt.

Additionally, the City received a grant from the Rivers and Mountains Conservancy to construct four stormwater improvement projects. Two of the projects are located in the same area as the proposed Fernwood Water Improvement Project but south of the I-105. These smaller projects are referred to as pocket parks and provide sitting areas and walking trail with the added benefit of infiltration basins to treat stormwater run-off and reduce stormwater from entering the local storm drain system. Camphor Park is located at Gertrude Drive and Louise Street (Figure 11 and Figure 12) and Wilson Park is located at Lynwood Road and Fir Street (Figure 13 and Figure 14). These parks are approximately 12,000 square feet in area and both locations are easily accessible to the proposed Fernwood Water Improvement Project site and provide continuity of theme for the proposed Fernwood Water Improvement Project. These projects demonstrate that the City has a proven record of accomplishment for project delivery.

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**Figure 11: Camphor Park.**



**Figure 12: Camphor Park.**



**Figure 13: Wilson Park.**



**Figure 14: Wilson Park.**

**Project Map**

Figure 15 is a map showing the project location.

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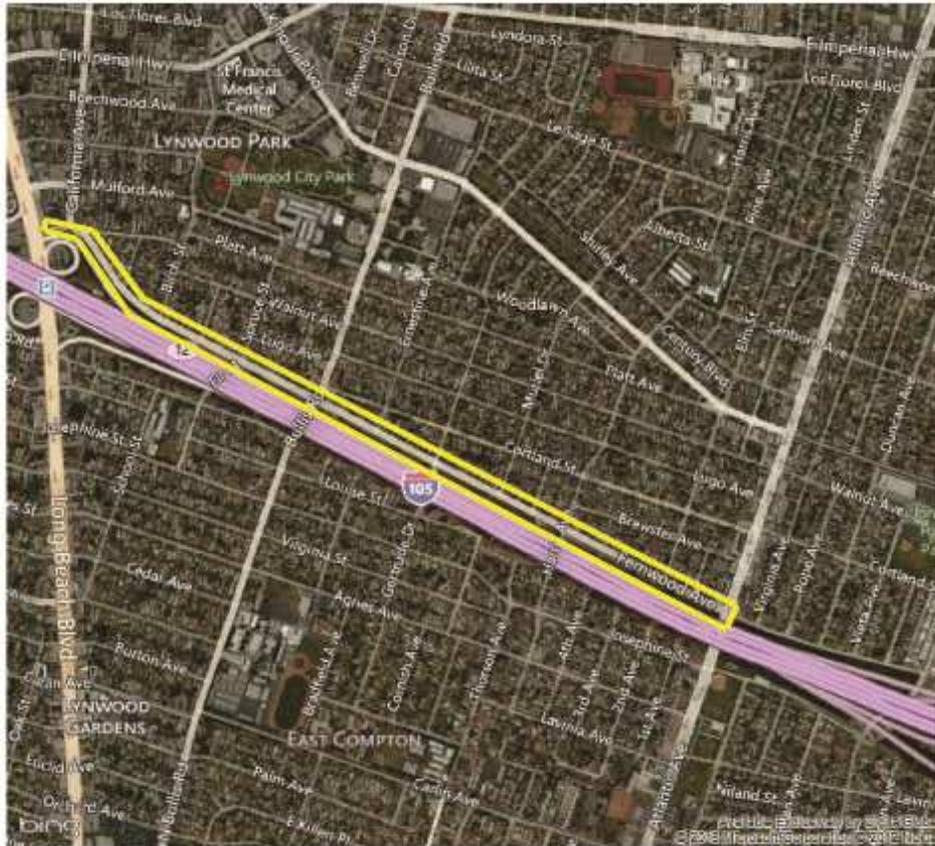


Figure 15: Project Map.

### Project Timing and Phasing

Fernwood Water Improvement Project is a multi-benefit project that serves disadvantaged communities in the City of Lynwood while meeting IRWMP water management objectives. The project site is currently an empty 5.25-acre lot owned by the City of Lynwood located on a long stretch along Fernwood Ave., between Atlantic Ave. and Long Beach Blvd. The project will feature stormwater improvement elements such as infiltration areas and bioswales. The project also includes landscape that will increase habitat for birds, butterfly species and mammals. Upon grant award, the City can immediately start the consultant design selection process and move forward with the design and construction. This project is a standalone project and can be fully functional without implementation of any other project.

### Proposed Work

The project will be implemented over a 21 month period, which includes preliminary engineering, design, construction, construction administration, grant administration, report submittals and project close out and final report. The project will feature stormwater improvement elements such as infiltration areas and bioswales, landscape that will increase habitat for birds, butterfly species and mammals and address the concentrated flows from the interceptors that cause area flooding. Below is a summary of tasks for the proposed project.

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**A. Direct Project Administration**

Task 1: Administration

- Prepare list of deliverables to submit to DWR. Deliverables to include quarterly reports, final reports, invoices, copies of RFP, plans, specifications, cost estimates, advertisements, staff reports, executed contracts and agreements, inspection reports, weekly statement of working days, City Resolutions, finance reports progress reports and notice of completion.

Deliverables: List of Deliverables to DWR. Submit as required by DWR.

- Prepare monitor project progress for compliance with grant requirements for each phase of project work. Review all charges to project account to confirm eligibility. Continually monitor project budget to ascertain project is on schedule and on budget by reviewing the weekly statement of working days, inspection reports and invoices reviewing finance reports.

Deliverables: Project Administration Log, prepare invoices with required back-up for reimbursement, accounting reports, weekly statement of working days, inspection reports and other deliverables as required.

- Prepare and record Notice of Completion at County Recorder's Office. Notify prime contractor of any stop notices and require release. Send out notice to contractor and all sub-contractors of project acceptance and intent to file a Notice of Completion. After 35 days from acceptance verify there are no Stop Notices on file. If there is a Stop Notice on file final retention payment to prime contractors may not be released until a contractor's obligation is addressed and City receive a Release from Lien Holder. If no Stop Notice is on file final retention payment may be released. Prepare final Project Closure Report and close project file. Retain all project records per grant requirements or City retention policy, whichever is stricter.

Deliverables: Record Notice of Completion, final contractor payment, and final Project Completion report.

Task 2: Labor Compliance Program

- Monitor design progress and plan check at 30%, 60% and 90% plan completion. Review cost estimate and specification package. Consultant to prepare Labor Compliance Program.

Deliverables: Copy of Labor Compliance Program to be incorporated into specifications.

Task 3: Reporting

- Prepare report requirement log and continually review and monitor project status, project expenditures and project progress through review of the weekly statement of working days, paid invoices, inspection reports and schedules.

Deliverables: Report Requirement Log. Submittal of quarterly progress reports, invoices, final reports and post completion reports or as required by grant agreement.

- Prepare performance measure which include design consultant and contractors submittal of a work schedule to the City. City will gauge design progress based on deliverables such 30%, 60% and 90%

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plan submittals for design. For contractor schedule shall identify key milestone completion dates. Progress will be gauged on timeliness based on weekly statement of working days.

Deliverables: Performance measures, schedule of deliverables and Performance Measure Reports.

**B. Land Purchase / Easement**

Not applicable for this project.

**C. Planning, Design, Engineering, Environmental Documentation**

Not applicable for this project.

**D. Construction/Implementation**

Task 9: Construction Contracting

- City Council to adopt plans, specifications and cost estimated and authorize staff to go out to bid for construction.

Deliverables: Authorizing Resolution and adopted plans, specifications and cost estimate.

- Follow Department guidelines for selection criteria. Based on criteria review, RFPs, and short list consultants, conduct consultant interviews with outside expert panel of the top 5-7 consultants. Rate consultants and prepare staff report to award contract.

Deliverables: Staff report awarding consultant design contract and draft copy of consultant agreement.

- City Council to award contract. Prepare consultant service agreement and have agreement executed.

Deliverables: Copy of authorizing Resolution and copy of fully executed agreement.

- Advertise project in local publications (LA Times and Long Beach Press Telegram) and Green Sheet. Hold pre-job walk at minimum 2 weeks prior to bid opening date. Provide list of grant requirement such as labor compliance program and standards.

Deliverables: Copy of advertisements, Pre-job walk sign-in sheet and notes.

- Hold bid opening in City Clerk's office as scheduled and read bids aloud. Staff to conduct bid analysis, check contractor's license, and review bid bond and references to determine lowest responsible bidder. Prepare staff report for City Council to award contract to lowest responsible bidder. After award, prepare contract documents and have contract executed and performance and labor bonds checked and verified before City executes contracts.

Deliverables: Bidder's list, City Council Authorizing Resolution and executed contract.

Task 9: Construction

- Phase includes rough grading, construction of retention/infiltration basins, installation of irrigation and underground utilities, and fine grading. Phase II is the construction of walkways, community garden, view points, tot lot, parking facilities, native landscape and bioswales.

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*a. Subtask 9.1 - Mobilization and Site Preparation*

Contractor secures permits and job site; delivers construction equipment and proceeds with grubbing and rough grading.

*b. Subtask 9.2 - Construction Excavation & Rough Grading*

Excavation of infiltration basins and installation of fabric and aggregate, import soil and rough grading

*c. Subtask 9.3 Construction Grading*

Installation of irrigation system, any need underground utilities, construct retention basin and complete fine grading

*d. Subtask 9.4 - Final Phase Construction*

Installation of landscape materials, irrigation testing and final site clean-up

*e. Subtask 9.5 - Final Construction Inspection*

Project Inspector and Project Engineer to conduct a job walk with contractor's site Superintendent and prepare a punch list. Contractor to complete punch list items.

*f. Subtask 9.6 - Final Inspection and Sign-off*

Project Inspector and Project Engineer to conduct a final job walk with contractor's site Superintendent to ascertain all punch list and construction items are completed satisfactorily and to standard specifications. Project Engineer to sign off on final inspection and accept project as complete.

**E. Environmental Compliance, Mitigation, Enhancement**

*Task 10: Environmental Compliance, Mitigation, Enhancement*

- Environmental process and documents have been completed for this project. Document filed is Categorical Exemption.

Deliverables: Provide copy of Categorical Exemption and file.

**F. Construction Administration**

*Task 11: Construction Administration*

- Throughout construction phase review weekly statement of working days, inspection reports and labor compliance reports to monitor project's progress. Review and approve progress payments and monitor project expenditures. Review project Preliminary Notices and watch for ant Stop Notice. When project construction is complete and accepted by Project Engineer as complete, determine final project construction cost and prepare staff report for City Council to formally accepted project as complete.

Deliverables: Staff report for City Council to accepting project as complete and authorizing staff to file a Notice of Completion, copy of executed Resolution accepting project as complete.

**Gateway Integrated Multi-Benefit Regional Water Management Project**  
**Work Plan**

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- Preparation of scope of work for the request for proposals (RFP), obtain authorization from City Council to issue RFP, advertise RFP, review proposals, select design consultant and award design contract.
- Hold kick-off meeting with consultant's team to review the scope of work, grant requirements and identification of applicable standards and necessary permits. Issue Notice to Proceed. Consultant to submit list of applicable standards and necessary permits before design starts.

Deliverables: Submit RFP and copy of executed contract between City and consultant. Signed copy of Notice to Proceed and copy of list of applicable standards and list of necessary permits, if any. Signed and stamped plans on mylar. Signed specification package and project cost estimate.

- Hold pre-construction meeting to review project requirements, standards, invoicing procedures, reporting requirements, labor requirements grant requirements and inspection protocols.

Deliverables: List of pre-construction meeting attendance, meeting minutes and copy of agenda.

## **Long Beach Graywater Program**

### **Goals and Objectives**

The City of Long Beach has developed a pilot program that implements a graywater "Laundry to Landscape" program taking graywater from laundry systems and creating a usable source of non-potable water for irrigation in 36 homes. The program was initiated at the request of the disadvantaged community (DAC), with the interest of engaging the DAC areas in water conservation practices and education. The pilot program has been well received by the community.

The proposed project will improve water management and result in water savings and reductions in energy consumption through water conservation by evaluating residential landscape efficiency and retrofitting approximately 108 landscapes. This project will expand the City of Long Beach's graywater "Laundry to Landscape" program into 99 additional single-unit residential homes and nine (9) demonstration projects. The demonstration projects will be used to study graywater solutions scaled for larger, multi-unit residences with less open space.

Other uses for water from other graywater sources, such as sinks and showers, will be explored. Devices identified for retrofits include weather based irrigation controllers and high efficiency sprinkler nozzles. The 108 properties will target DAC areas throughout Long Beach. Installations will be conducted by a team that includes a professional plumber, college students pursuing environmental degrees and disadvantaged youth from the local communities, creating new knowledge-based skills in the community.

The proposed program saves water through retrofits of laundry machines diverted to landscape areas instead of being directed to the sanitary sewer. Implementing this "laundry to landscape" program will provide a more reliable water supply, promote sustainable water solutions through reducing the need to import additional water supplies, maximize water use efficiency, leverage existing funding opportunities, and build partnerships with the local disadvantaged community. The program is estimated to have an average annual water savings of approximately 2.1 acre-feet (AF), with an estimated lifespan of 10 years.

This program will also educate consumers on water conservation and usage. Reaching those participants through education and retrofits will result in increased landscape efficiency and water use reductions, regardless of their economic stability.

The goals and objectives of this project include, but are not limited to, the following:

- Provide and annual savings of 2.1 acre-feet of potable water
- Comply with water use targets
- Ensure reliability of the City's water supply source
- Relieve demand on regional imported domestic water supplies
- Incorporate direct engagement with the disadvantaged community
- Promote water conservation and irrigation efficiency

## Gateway Integrated Multi-Benefit Regional Water Management Project

### Work Plan

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### Purpose and Need

Los Angeles County is the fastest growing area in the United States. The projected population growth directly affects Long Beach's water supply and delivery. The increase in population has historically signaled an increase in development and outdoor water use. Conserving water for this region is vital. Without efforts to reduce water use, the need for water would exceed availability of imported supplies and local supply would not meet the full demand. By implementing conservation programs, such as the one proposed, the steady demand can be offset and better managed. During times of drought, emergencies or supply restrictions, the region can pull from imported supplies, if necessary. However, without conservation, the local demand would continue to out-weigh the availability, thus increasing the need for additional imported water supplies to the region.

Over the last drought that ended in 2011, and environmental restrictions on the State Water Project supplies, local demand remained constant due to a diversification of water supplies. However, as agencies were very successful in managing local sources, the results have left much of our local supplies depleted. Water use reduction efforts that address long-term changes, especially through outdoor water use management and education, will make those emergency efforts to conserve more effective and allow us to manage the limited supplies more efficiently.

More than 65% of residential water use occurs outdoors; this is due, in part, to large lot sizes and the ubiquitous planting of cool weather turf grass. However, many residents are under the false belief that their highest water use occurs indoors. There is a great need for public education on water use habits and this may begin with assistance in demonstrating ways to achieve reduction. With many residential customers lacking the knowledge required to make more efficient landscape modifications and upgrades, this program would make available and provide the education and resources needed to achieve reductions in outdoor water use, while also serving as a demonstration to friends, relatives and neighbors on efficient landscape options.

This project proposes a recycling and outreach program located in DAC areas throughout Long Beach. Community members in DAC areas of Long Beach have expressed an interest in recycling water. The residences of these areas are currently forced to use crude techniques to recycle their graywater such as saving the water in buckets to be used for hand watering their landscape. Making properly designed systems available to these communities would increase technical knowledge and reduce health risks. The graywater systems will provide a system to the DAC community to continue cultural traditions while reducing potable water demand and promoting water conservation.

This project will help Los Angeles County with meeting multiple goals and objectives required by California agencies. Compliance benefits of implementing this project include the following:

- Assists in meeting compliance with the California Department of Water Resources 20 x 2020 Water Conservation Plan targets
- Assists in meeting compliance with the California Water Conservation Act of 2009 (Senate Bill X7-7)
- Assists in meeting compliance with Assembly Bill 1420 – Mandatory Demand Management Measures
- Assists in meeting compliance with the California Urban Water Management Planning Act

## Gateway Integrated Multi-Benefit Regional Water Management Project Work Plan

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The 20x2020 Water Conservation Plan aims to achieve a 20 percent per capita reduction in urban water demand by 2020.<sup>11</sup> In order to meet the goals outlined in the 20x2020 Plan, projects such as the Long Beach Graywater Program must be implemented. This project will conserve approximately 2.1 acre-feet of water per year. The Project will improve water management and result in quantifiable water savings and reductions in energy consumption through water conservation. Currently, the City relies heavily on imported water from the Metropolitan Water District of Southern California (MWD). This Project will reduce the need to import water supplies by maximizing water use efficiency. The implementation of this program also assists Long Beach agencies in meeting regional water use efficiency goals and targets for water supply reliability and comply with the Water Conservation Act of 2009 (SBX 7-7), the Assembly Bill 1420, and the California Urban Water Management Planning Act.

Additionally, this project will allow the City to relieve demand on regional imported domestic water supplies by providing and savings of 2.1 acre-feet per year. By providing these communities with water conservation methods, the project will subsequently provide associated cost savings. These savings will allow residences to spend money not spent on water elsewhere consequently improving the economy of these DAC areas.

### Completed Work

There are no completed studies or reports for the proposed project. The work associated with the Laundry to Landscape Program does not require any environmental compliance documents. The project began as a pilot program, which launched the "Laundry to Landscape" system in 36 homes. The pilot program will be expanded to an additional 108 homes. The design phase of the project has been complete; therefore, upon grant contract execution, this program can begin the implementation phase immediately. The following figures show the installation process for the pilot program.



Figure 16: Washer Connections.

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<sup>11</sup> California Department of Water Resources, *20x2020 Water Conservation Plan*, February 2010.

**Gateway Integrated Multi-Benefit Regional Water Management Project**  
**Work Plan**

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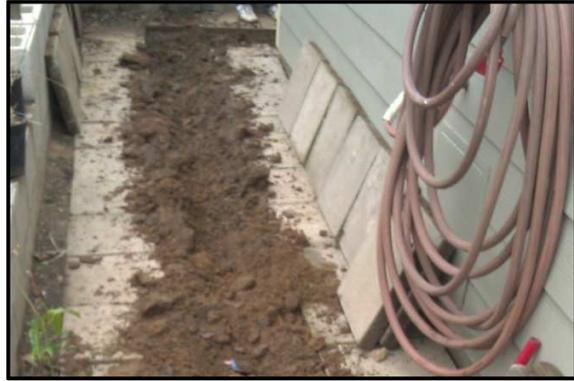


Figure 17: "Laundry to Landscape" Line Installation.



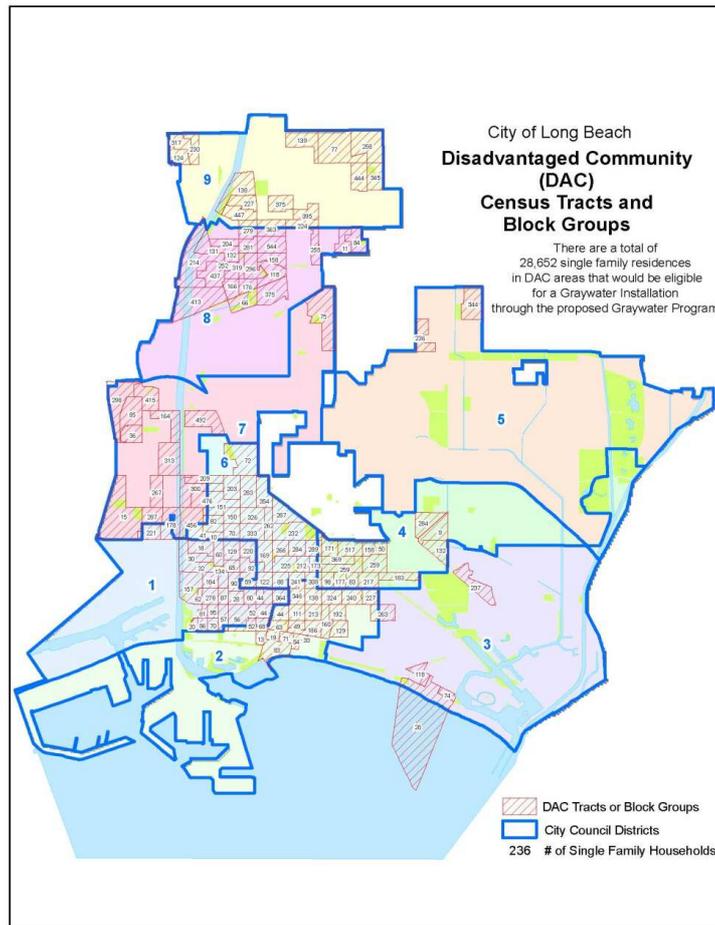
Figure 18: Landscaping Irrigation Lines.

### Project Map

The project map (Figure 19 below) shows the Long Beach DAC areas. This program is exclusively for DACs and therefore only residents living in these areas would be eligible to participate in the "Laundry to Landscape" Program. Program outreach would be targeted to these areas, in order to develop a potential participant list. There are 108 proposed graywater systems and 28,652 single family residences in DACs that would be eligible to receive a graywater system.

**Gateway Integrated Multi-Benefit Regional Water Management Project**  
**Work Plan**

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**Figure 19: Project Map.**

### **Project Timing and Phasing**

This project is expanding on an existing pilot program that is currently being implemented in 36 homes; therefore, the design phase has already been completed. Construction is expected to take 2.5 years, with approximately 43 units being installed yearly. Each unit operates on a standalone basis and is fully functional once the installation is complete. It is expected that the project could begin construction on April 2014, with an estimated completion date of October 2016.

### **Proposed Work**

#### **A. Direct Project Administration**

##### Task 1: Administration

The City's Sustainability Coordinator will administer the project with homeowners, community volunteer organizations and construction staff. The Sustainability Coordinator will prepare all deliverables, such as agreements and public notices as required.

Retail water agencies will identify top residential water users in order to choose the best locations for implementation. The top users will be contacted and educated on the program.

Deliverables: Preparation of deliverables as required.

**Gateway Integrated Multi-Benefit Regional Water Management Project**  
**Work Plan**

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Task 2: Labor Compliance Program

The City's Sustainability Coordinator will perform labor compliance services including labor compliance, program administration, meetings with contractors, review and monitoring of certified payroll records for payment of the proper prevailing wage rate. Some of the work being performed will be done on a volunteer basis by college students pursuing environmental degrees and disadvantaged youth from the local community.

Deliverables: Submission of Labor Compliance Program

Task 3: Reporting

The City's Sustainability Coordinator shall prepare and submit quarterly, annual and final reports as specified in the Grant Agreement.

Deliverables: Submission of quarterly, annual and final reports as specified in the Grant Agreement.

**B. Land Purchase / Easement**

The project will install the systems at residential homes with the permission of the homeowner. Therefore, additional land and easements will not be required.

**C. Planning, Design, Engineering, Environmental Documentation**

Task 4: Assessment and Evaluation

Meetings are scheduled prior to installation with participants and the educated volunteers. During this meeting an evaluation of the site is conducted which includes an examination of the washer type, size of landscape area, types of plants and trees that will be irrigated and that the 12 conditions of the graywater code will be met. A completed evaluation report will be provided to the participants with the new irrigation schedule. Once the evaluation is complete and the participants are approved for eligibility, the participants will approve the irrigation equipment upgrades.

Task 5: Final Design

Once participants have been successfully selected, the system design and specifications can be finalized. The owner will sign an agreement with the City.

Deliverables: System design specifications for specific site layout and function

Task 6: Environmental Documentation

The Project is exempt to the environmental review process established in CEQA as this is a ministerial project.

Deliverables: Document CEQA/NEPA exemption

Task 7: Permitting

Landowner agreements will be obtained once participants are selected and have signed up to be part of the program. There are no regulatory permit requirements or city permits (e.g. plumbing or building permits) required for this project.

Deliverables: Copies of applicable permits

**Gateway Integrated Multi-Benefit Regional Water Management Project**  
**Work Plan**

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**D. Construction/Implementation**

Task 8: Construction Contracting

The City is building upon the existing pilot program; therefore, the same plumber will be contracted. All other services related to installation are provided on a volunteer basis by college students pursuing environmental degrees and disadvantaged youth from the local community.

Deliverables: Contract with plumber for installations. Coordinate with college students and youth for volunteering.

Task 9: Construction

The construction task items will include:

- Installation of above ground and below ground tubing
- Installation of diversion pump (from laundry machine to landscape area)
- Installation of discharge points and mulch shield

*a. Subtask 9.1 - Mobilization and Site Preparation*

Plumbing contractor and volunteers will assess each site and prepare it for construction/ installation.

*b. Subtask 9.2 - Project Construction/Installation*

The installation typically takes one day to complete.

*c. Subtask 9.3 - Education*

The educated volunteers will provide participants with education and training on the new equipment along with educational materials.

*d. Subtask 9.4 - Performance Testing and Demobilization*

After installation is complete, follow up inspections to monitor the performance of the systems to include will be conducted at select sites.

**E. Environmental Compliance, Mitigation, Enhancement**

Task 10: Environmental Compliance, Mitigation, Enhancement

The Project is exempt to the environmental review process established in CEQA as this is a ministerial project. The project does not have any negative impacts to the adjacent area. The temporary impacts associated with construction are less than significant levels and would not adversely affect the environment.

Deliverables: Provide copy of Categorical Exemption and file.

**F. Construction Administration**

Task 11: Construction Administration

Construction management tasks will include the following:

1. Respond to requests for information
2. Attend progress meetings and provide documentation as requested
3. Inspect sites during construction/installation
4. Inspect sites post-construction/installation for monitoring
5. Perform analysis and final report

**Appendix A**  
**Letters of Commitment**

# The City of Bellflower

*Families. Businesses. Futures.*

16600 Civic Center Drive, Bellflower, CA 90706

Tel 562.804.1424 Fax 562.925.8660 www.bellflower.org



March 27, 2013

California Department of Water Resources  
Division of Integrated Regional Water Management  
Financial Assistance Branch  
Post Office Box 942836  
Sacramento, CA 94236-0001

Re: **Commitment to Install Catch Basin Trash Face Plate Screens  
Gateway Integrated Multi-Benefit Regional Water Management Project**

Dear DWR:

The City of Bellflower (City) is one of several municipalities participating in the Proposition 84 Integrated Regional Water Management (IRWM) grant program. The contributions from this grant will provide the funding for the installation of trash inserts and face plate screens which will assist to attain water quality standards. The City is subject trash limitations in stormwater and urban runoff that are now enforceable under the Municipal Separate Storm Sewer Systems (MS4) permit. Bellflower's portion of this grant is to install Face Plate Screens on the 174 City-owned catch basins throughout the city.

With this letter, the City wishes to affirm a commitment to the installation of these face plate screens and will follow the requirements, roles and responsibilities including ongoing maintenance as outlined in the grant application. The City has the capacity to devote the necessary time and effort to complete the installation within the timeline attached to the application.

The City is fully conscious of the costs and requirements that will result from these retrofits. The face plate screens will be installed on City-owned catch basins which already have annual Operations & Maintenance (O&M) costs included in the City's budget.

14 percent of the City is a Disadvantaged Community (DAC). These funds will help the City provide an improved quality of life. Thank you in advance for your considerations.

If you have any questions, you may contact me at 562-804-1424, ext. 2207.

Sincerely,

  
Jeffrey L. Stewart  
City Manager

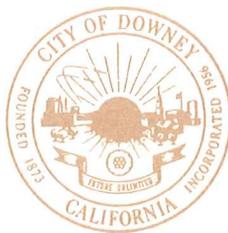
> Dan Koops  
*Mayor*

Raymond Dunton  
*Mayor Pro Tem*

Randy Bomgaars  
*Council Member*

Scott A. Larsen  
*Council Member*

Doc 276137  
Sonny Santa Ines  
*Council Member*



# City of Downey

FUTURE UNLIMITED

March 26, 2013

## CITY COUNCIL

### MAYOR

Dn. Mario A. Guerra

### MAYOR PRO TEM

Fernando Vasquez

### COUNCIL MEMBERS

Roger C. Brossmer

Luis H. Marquez

Alex Saab

### CITY MANAGER

Gilbert A. Livas

### CITY CLERK

Adria M. Jimenez, CMC

### CITY ATTORNEY

Yvette M. Abich Garcia

California Department of Water Resources  
Division of Integrated Regional Water Management  
Financial Assistance Branch  
Post Office Box 942836  
Sacramento, CA 94236-0001

**Subject: Commitment to Install Catch Basin Trash Inserts and Face Plate Screens  
Gateway Integrated Multi-Benefit Regional Water Management Project**

Dear DWR:

The City of Downey is one of several municipalities participating in the Proposition 84 Integrated Regional Water Management (IRWM) grant program. A portion of the City is designated as a Disadvantaged Community (DAC) and this grant will provide the necessary funding for the installation of trash inserts and face plate screens in order to attain water quality standards. The City is subject to a Trash discharge limitations under the Total Maximum Daily Load (TMDL) and Municipal Separate Storm Sewer Systems (MS4) permit issued by the California Regional Water Quality Control Board.

With this letter, the City of Downey affirms a commitment to the installation of the trash inserts and face plates and understands and will follow the requirements, roles and responsibilities as outlined in the grant application. The City will devote the necessary time and effort to complete the installation of the trash capture systems for the remaining of the catch basins within the timeline attached to the application.

As the City has previously installed and been responsible for maintaining inserts, the City is fully conscious of the costs and requirements that will result from the additional 654 inserts and 139 face plates. From current experience, the City's existing annual catch basin Operations & Maintenance (O&M) budget will be increased by approximately \$100,000 and the City is committed to allocating these funds.

Thank you in advance for your considerations. Please contact me if you have any questions,

Sincerely,

Mario A. Guerra

Mayor



March 25, 2013

California Department of Water Resources  
Division of Integrated Regional Water Management  
Financial Assistance Branch  
Post Office Box 942836  
Sacramento, CA 94236-0001

**Subject: Commitment to Install Catch Basin Trash Insert and Faceplate Screens**  
Gateway Integrated Multi-Benefit Regional Water Management Project

Dear DWR:

The City of Lakewood is one of several municipalities participating in the Proposition 84 Integrated Regional Water Management (IRWM) grant program. The contributions from this grant will provide the funding for the installation of trash inserts and will assist to attain water quality standards. The City is subject trash limitations in stormwater and urban runoff that are now enforceable under the Municipal Separate Storm Sewer Systems (MS4) permit. Lakewood has identified catch basins throughout the city that are proposed to be retrofitted with Automatic Retractable Screens (ARS) and full capture inserts

With this letter, the City of Lakewood wishes to affirm a commitment to the installation of these trash capture systems and understands and will follow the requirements, roles and responsibilities including ongoing maintenance as outlined in the grant application. The City has the capacity to devote the necessary time and effort to complete the installation of the trash capture systems for the remaining of the catch basins within the timeline attached to the application.

The city is fully conscious of the costs and requirements that will result from these retrofits. The annual Operations & Maintenance (O&M) costs (including catch basin cleaning) will be on the order of \$175,000 and the city has made the decision to continue to commit the necessary funds .

Thank you in advance for your considerations. Please contact me if you have any questions,

Sincerely,

A handwritten signature in cursive script that reads "Lisa Ann Rapp".

Lisa Ann Rapp,  
Director of Public Works



12700 NORWALK BLVD., P.O. BOX 1030, NORWALK, CA 90651-1030 • PHONE: 562/929-5700 • FACSIMILE: 562/929-5773

March 25, 2013

California Department of Water Resources  
Division of Integrated Regional Water Management  
Financial Assistance Branch  
Post Office Box 942836  
Sacramento, CA 94236-0001

**Subject: Regional Catch Basin Trash Insert and Face Plate Screens Program**  
Gateway Integrated Multi-Benefit Regional Water Management Project

Dear DWR:

The City of Norwalk is one of several municipalities participating in the Proposition 84 Integrated Regional Water Management (IRWM) grant program. Twenty-two percent (22%) of the City is designated as a Disadvantaged Community and this grant will provide the funding for the installation of trash inserts and will assist to attain water quality standards and meet its California Regional Board and federal Clean Water Act requirements. The City is subject to trash limitations in stormwater and urban runoff that are now enforceable under the Municipal Separate Storm Sewer Systems (MS4) permit.

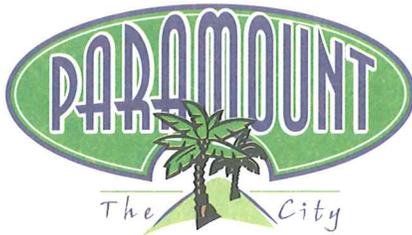
With this letter, the City of Norwalk wishes to affirm a commitment to the installation of these inserts and will follow the requirements, roles and responsibilities including ongoing maintenance as outlined in the grant application. The City has the capacity to devote the necessary time and effort to complete the installation within the timeline attached to the grant application.

As the City is fully aware of the costs and requirements that will result from the requested 46 catch basin inserts. These catch basins are city-owned and any increased Operations & Maintenance (O&M) costs can be integrated into an already existing O&M budget item for storm water compliance.

Thank you in advance for your consideration. Please contact me if you have any questions,

Sincerely,

  
Michael J. Egan  
City Manager



GENE DANIELS  
Mayor

DIANE J. MARTINEZ  
Vice Mayor

TOM HANSEN  
Councilmember

DARYL HOFMEYER  
Councilmember

PEGGY LEMONS  
Councilmember

March 26, 2013

California Department of Water Resources  
Division of Integrated Regional Water Management  
Financial Assistance Branch  
Post Office Box 942836  
Sacramento, CA 94236-0001

**Subject: Regional Catch Basin Trash Insert and Face Place Screens Program**  
Gateway Integrated Multi-Benefit Regional Water Management Project

Dear DWR:

The City of Paramount is one of several municipalities participating in the Proposition 84 Integrated Regional Water Management (IRWM) grant program. Paramount is 100 percent within a Disadvantaged Community as shown on the detail maps within the application. The contributions from this grant will help to provide the funding for the installation of trash inserts and will assist to attain water quality standards. The City is subject to trash limitations in stormwater and urban runoff that are now enforceable under the Municipal Separate Storm Sewer Systems (MS4) permit. Paramount intends to install inserts and face plate screens on the 222 city and county owned catch basins.

With this letter, the City of Paramount wishes to affirm a commitment to the installation of these inserts and will follow the requirements, roles and responsibilities including ongoing maintenance as outlined in the grant application. The City has the capacity to devote the necessary time and effort to complete the installation within the timeline attached to the application.

As the City has previously installed and been responsible for maintaining inserts, the city is fully conscious of the costs and requirements that will result from the additional installation.

Thank you in advance for your consideration. Please contact me if you have any questions,

Sincerely,

Christopher S. Cash  
Public Works Director



City of Pico Rivera  
**PUBLIC WORKS DEPARTMENT**

6615 Passons Boulevard · Pico Rivera, California 90660  
(562) 801-4421

Web: [www.pico-rivera.org](http://www.pico-rivera.org) · e-mail: [lgaray@pico-rivera.org](mailto:lgaray@pico-rivera.org)

**City Council**

Gustavo V. Camacho  
Mayor

Brent A. Tercero  
Mayor Pro Tem

Bob J. Archuleta  
Councilmember

David W. Armenta  
Councilmember

Gregory Salcido  
Councilmember

Arturo Cervantes, P.E.  
Director of Public Works/City Engineer

March 26, 2013

California Department of Water Resources  
Division of Integrated Regional Water Management  
Financial Assistance Branch  
Post Office Box 942836  
Sacramento, CA 94236-0001

**Subject: Commitment to Install Trash Inserts and  
Construction of Emergency Intertie Connection  
Gateway Integrated Multi-Benefit Regional Water Management Project**

Dear DWR:

The City of Pico Rivera is one of several municipalities participating in the Proposition 84 Integrated Regional Water Management (IRWM) grant program.

Thirty-five (35) percent of the city is designated as a Disadvantaged Community (DAC), as shown on the detail maps included in the submittal. With this letter, the City of Pico Rivera wishes to affirm its commitment to:

- (1) the installation of the trash inserts and understands and will follow the requirements, roles and responsibilities as outlined in the grant application. The City will devote the necessary time and effort to complete the installation of the trash capture systems for the remaining of the catch basins within the timeline attached to the application and with this, demonstrate full compliance with the Trash TMDL requirements. And
- (2) To the construction of the Emergency Intertie Connection project to provide emergency water services to citizens in the event of a major catastrophe.

As the City has previously installed and been responsible for maintaining inserts, the city is fully conscious of the costs and requirements that will result from the retrofits. The future Operations & Maintenance (O&M) costs represent only a 15 percent increase and can easily be integrated into the already existing budget item. The City has already budgeted matching funds for the Emergency Intertie Connection.

Thank you in advance for your consideration. Please contact me if you have any questions,

Sincerely,

A handwritten signature in blue ink, appearing to read "Arturo Cervantes", is written over a white background.

Arturo Cervantes, P.E.  
Director of Public Works/City Engineer

AC:GD:lg



## CITY OF SIGNAL HILL

---

2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

March 25, 2013

California Department of Water Resources  
Division of Integrated Regional Water Management  
Financial Assistance Branch  
Post Office Box 942836  
Sacramento, CA 94236-0001

**Subject:** Commitment to Install Catch Basin Trash Insert and Faceplate Screens, and Construction of Advanced Groundwater Wellhead Treatment Facility Gateway Integrated Multi-Benefit Regional Water Management Project

Dear DWR:

The City of Signal Hill is one of several municipalities participating in the Proposition 84 Integrated Regional Water Management (IRWM) grant program.

Thirty-four (34) percent of the city is designated as a Disadvantaged Community (DAC), as shown on the detail maps included in the submittal. With this letter, the City of Signal Hill wishes to affirm its commitment to:

- (1) The installation of the **Catch Basin Trash Insert and Faceplate Screens** and understands and will follow the requirements, roles and responsibilities as outlined in the grant application. The City will devote the necessary time and effort to complete the installation of the trash capture systems for the remaining of the catch basins within the timeline attached to the application and with this, demonstrate full compliance with the Trash TMDL requirements. As the City has previously installed and been responsible for maintaining inserts, the city is fully conscious of the costs and requirements that will result from the additional inserts.
- (2) The construction of the **Advanced Groundwater Wellhead Treatment Facility** to provide water services to citizens for a previously untapped aquifer, providing

Dept. of Water Resources  
Prop 84 IRWM Grant Program  
March 25, 2013  
Page 2

- (2) The construction of the **Advanced Groundwater Wellhead Treatment Facility** to provide water services to citizens for a previously untapped aquifer, providing reliable local supply while reducing reliance on Delta Water. The City has already budgeted Matching funds for the Well Head Treatment System have already been budgeted.

Thank you in advance for your consideration. Please contact me if you have any questions,

Sincerely,



Steve Myrter, P.E.  
Director of Public Works



# City of South Gate

8650 CALIFORNIA AVENUE • SOUTH GATE, CA 90280-3075 • (323) 563-9503  
FAX (323) 569-2678 • [mflad@sogate.org](mailto:mflad@sogate.org)

MICHAEL S. FLAD  
CITY MANAGER

March 21, 2013

California Department of Water Resources  
Division of Integrated Regional Water Management  
Financial Assistance Branch  
Post Office Box 942836  
Sacramento, CA 94236-0001

Subject: Commitment to Install Trash Inserts  
Gateway Integrated Multi-Benefit Regional Water Management Project  
Catch Basin Trash Inserts and Face Plate Screens

Dear DWR:

The City of South Gate is one of several municipalities participating in the Proposition 84 Integrated Regional Water Management (IRWM) grant program. The contributions from this grant will provide the City of South Gate funding for the installation of trash inserts in order to attain water quality standards. The City is subject to a Trash Totals Maximum Daily Load (TMDL) that is now enforceable under the Municipal Separate Storm Sewer Systems (MS4) permit. The primary requirement of this TMDL is compliance with a final effluent limitation of zero trash discharge by 2016. As a result, fines and penalties could be as high as \$10,000 per day for not meeting the compliance deadlines. There are a total of 797 catch basins throughout the City and out of these; approximately 684 have already been retrofitted with full capture systems. The remaining 113 catch basins need to be retrofitted with full capture inserts by the 2015-2016 raining season.

The entire City is designated as an Economically Disadvantaged Community (EDC), as shown on the detail maps included in the submittal, and portions of the City qualify as Severely EDC. With this letter, the City of South Gate wishes to affirm a commitment to the installation of the trash inserts and understands and will follow the requirements, roles and responsibilities as outlined in the grant application. The City will devote the necessary time and effort to complete the installation of the trash capture systems for the remaining of the catch basins within the timeline attached to the application and with this, demonstrate full compliance with the Trash TMDL requirements.

As the City has previously installed and been responsible for maintaining inserts, the City is fully conscious of the costs and requirements that will result from the additional 113 retrofits. The future Operations & Maintenance (O&M) costs represent only a 15 percent increase and can easily be integrated into the already existing budget item.

Thank you in advance for your considerations. Please contact me if you have any questions.

Sincerely,

Michael Flad  
City Manager



March 21, 2013

South Gate  
Chamber of Commerce  
Board of Directors

President  
Everette Hayes  
HayDay, Inc.

Vice President  
Rishi Gil  
7Eleven

Treasurer  
Bill Baum Jr.  
B & B Automatics

Secretary  
Sandra Garcia  
Citibank

Immediate Past President  
Jerry Brown  
Mr. C's Towing

Brenda Victoria Castillo  
BP America – ARCO

Sandra Puig  
VIP Transportation

Damien Orozco  
Iron Dog Fitness

Angel Sotelo  
Trimming Land, Inc.

Sara Rodriguez  
State Farm Insurance

Jose Solache  
Oldtimers Foundation

Luis Cetina  
Metropolitan Water District

Jerry Feldman  
L.A. Central Ford

Buzz Hagen  
Direct Chassis

Jaime Garcia  
Goal Soccer

California Department of Water Resources  
1416 9th Street, Room 338  
Sacramento, CA 95814

Subject: Letter of Support for Proposition 84 Grant Application, Catch Basin Screens and Inserts

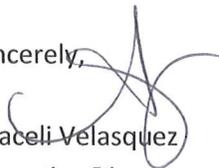
To Whom It May Concern:

I am writing this letter in support of the Gateway Watershed Management Authority (GWMA) grant application for the installation of catch basin screens and inserts in catch basins throughout cities in the Gateway region, to include the City of South Gate. The GWMA is dedicated to environmental sustainability, water conservation, and habitat enhancement with a proven track record of implementing projects with community collaboration within disadvantaged communities.

South Gate Chamber of Commerce is pleased to support the GWMA in their effort to install catch basin screens and inserts in catch basins, many of which will be located in Disadvantage Community (DAC) neighborhoods. Trash pollution is a concern for this area and this project will significantly decrease the amount of trash observed. Preventing trash from contaminating the waterbodies will improve water quality and protect aquatic habitat. In addition to protecting the environment, preventing trash contamination will enhance public interest in the rivers and beaches and help promote participation in education and restoration activities. We believe that this project will greatly benefit the disadvantage community and improve the state of our community as a whole.

The South Gate Chamber of Commerce is a membership organization dedicated to advocating for and representing business' interests. It is especially helpful to newcomers, business leaders and visitors interested in relocating to the area. Its mission is to increase employment opportunities throughout the community and enhance economic stability. South Gate Chamber of Commerce is a direct social service agency in existence in THE GATEWAY REGION/CITY OF SOUTH GATE for 67 years. Our mission is to bridge the cultural, language and generational gaps between the ethnic Community and mainstream. Our goal is to assist the community members to learn the important information that affect the needs of their families and environment. We look forward to working with the GWMA in this effort. Please feel free to contact us with any questions.

Sincerely,

  
Araceli Velasquez  
Executive Director

STATE CAPITOL  
State Capitol, Room 5064  
Sacramento, CA 95814  
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# California State Senate

## SENATOR RICARDO LARA

THIRTY THIRD DISTRICT



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March 25, 2013

Los Angeles Gateway Region Integrated  
Regional Water Management Authority  
16401 Paramount Blvd.  
Paramount, CA 90723

### **“FERNWOOD WATER IMPROVEMENT PROJECT GRANT APPLICATION” Gateway Integrated Multi-Benefit Regional water Management Project**

To Whom It May Concern:

It gives me great pleasure to write in support the City of Lynwood’s “Fernwood Water Improvement Park” grant application. The park was designed by Lynwood residents this past spring through a community planning process led by Alcanza and funded by the Rivers and Mountains Conservancy to specifically identify an IRWMP disadvantaged community project. The community proceeded to design the park with elements that address the concerns they identified at the beginning of the process. Fernwood Water Improvement Park provides multiple benefits by improving water quality, increasing open space, recreational access and habitat.

The Fernwood Water Improvement Park is a multi-benefit project that serves disadvantaged communities in the City of Lynwood while meeting IRWMP water management objectives. The park will feature stormwater improvement elements such as infiltration areas and bioswales. The project also includes native shrubs and trees that will increase habitat for birds, butterfly species and mammals. Moreover, the park will rectify the environmental justice issues created by flooding, due to inefficient mitigations measures caused by the 710/105 freeways, it will also provide recreational opportunities for disadvantaged communities in Lynwood.

Once completed this project will be a model for other cities to implement in their communities and I enthusiastically support the City of Lynwood. If my office could be of any assistance to you with this matter or any other, please feel free to call me or Julia Juarez in my office at (562) 495-4766.

Sincerely,

A handwritten signature in blue ink that reads "Ricardo Lara".

**RICARDO LARA**  
Senator, 33rd District