Watershed Management Program

City of La Habra Heights

San Gabriel River Watershed

Final December 10, 2014

Original Submittal March 31, 2014
Draft Final September 15, 2014
Revised Pages September 20, 2017

Table of Contents

EXECUTIVE SUMMARY

The City of La Habra Heights (City) as Co-Permittee to Order R4-2012-0175 has prepared this Watershed Management Program to document and present the City's existing conditions and proposed approach towards the required watershed management implementation.

The existing condition analysis has shown that historically the City has managed development growth and land management in such that there is a significant amount of "low impact" type development. Note that there are no industrial uses with the exception of resource production and only one commercial use in the City. There is also a significant amount of natural land due to the local topography and established land conservation areas.

Based on these findings, and a review of the Permit requirements, the City-specific implementation of the Permit requirements presents itself through the following purposes and objectives for this WMP:

- Present the results and conclusions of the Reasonable Assurance Analysis;
- Assess existing potential sources;
    - Focus on improving residential dry and wet weather water quality flows
- Address Total Maximum Daily Loads (TMDLs) and Water Quality-Based Effluent Limits (WQBELs) based on RAA and source assessment;
- Promote adoption of voluntary conservation;
- Provide a forum to identify and discuss watershed resources and concerns; and
    - Present an integrated monitoring plan
- Identify and seek funding to address concerns.

Lastly, Goals, Solutions and Progress Measures have been presented for general guidance concerning fiscal, municipal tasks, and long term planning.

Based on the results of the RAA, the City of La Habra Heights has been found to have minimal impact on the two watersheds it discharges into. The goal of this Watershed Management Program is to maintain these low impacts and, where possible, improve upon them. The City of La Habra Heights is committed to environmental stewardship and will continue to promote low impact development.

SECTION 1 - INTRODUCTION

1.0 Permit Driven Purpose & Objectives

This document is a requirement of the "Final Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach MS4", Order No. R4-2012-0175, which became effective on December 28, 2012 (MS4 Permit). This task is specifically required in Part VI, Provisions, Section C, Watershed Management Programs.

The City of La Habra Heights (City) is listed as an individual Permittee (4B190182001) in the LA County MS4 Permit. In June 2013, the City determined that an individual Watershed Management Program was most applicable to the needs of the municipality. The development of the Watershed Management Program is providing the City flexibility to prioritize and customize control measures to address the water quality issues specific to the watershed management area (WMA) as is consistent with federal regulations (40 CFR §122.26(d)(2)(iv)).

As stated in the LA County MS4 Permit, the ultimate goal for the Watershed Management Programs is to ensure that discharges from the Permittee's MS4:

1) Achieve applicable water quality-based effluent limitations in MS4 Permit Part VI.E and Attachments L through R pursuant to the corresponding compliance schedules,
2) Do not cause or contribute to exceedances of receiving water limitations in MS4 Permit Parts V.A and VI.E and Attachments L through R, and
3) Do not include non-storm water discharges that are effectively prohibited pursuant to MS4 Permit Part III.A. The programs shall also ensure that controls are implemented to reduce the discharge of pollutants to the maximum extent practicable (MEP) pursuant to Part IV.A.1.

The LA County MS4 Permit also states each Watershed Management Program shall be consistent with Part VI.C.5-C.8 and shall:

1) Prioritize water quality issues resulting from storm water and non-storm water discharges to the MS4 and from the MS4 to receiving waters within each Watershed Management Area;
2) Identify and implement strategies, control measures, and BMPs to achieve applicable water quality based effluent limitations and/or receiving water limitations, consistent with applicable compliance schedules in this Order;
3) Execute an integrated monitoring and assessment program to determine progress towards achieving applicable limitations; and
4) Modify strategies, control measures, and BMPs as necessary based on analysis of quality-based effluent limitations and receiving water limitations and other milestones set forth in the Watershed Management Program will be achieved.

How these Permit requirements translate to implementation in the City is the focus of this document. Unlike other Los Angeles County jurisdictions, the land use types which are typically identified as urban pollutant sources are not allowed within the City. Since municipal incorporation, the City's approach to development has remained rurally emphasized; therefore there are no industrial and commercial sources within the jurisdiction with the exception of resource production.

1.2 Watershed Management Program Requirements

As developed by the LARWQCB, a Watershed Management Program (WMP) includes:

Watershed Assessment

- Identification of the water quality priorities within each Watershed Management Area that will be addressed by the Watershed Management Program consistent with 40 CFR section 122.26(d)(2)(iv). At a minimum, these priorities must include achieving applicable water quality based effluent limitations and/or receiving water limitations established pursuant to TMDLs and included in this Order.
- Evaluation of existing water quality conditions, including characterization of storm water and non-storm water discharges from the MS4 and receiving water quality, consistent with 40 CFR §§ 122.26(d)(1)(iv) and 122.26(d)(2)(iii), to support identification and prioritization/sequencing of management actions. Prioritize existing water quality conditions based on a High and Medium rating.
    - Conduct a Reasonable Assurance Analysis (RAA) for each TMDL (Category 1 highest priority pollutants), applicable 303(d) listed pollutants for which MS4 discharges may be causing or contributing to the impairment (Category 2 high priority pollutants), and pollutants for which there are insufficient data to indicate water quality impairment in the receiving water according to the State's Listing Policy but which exceed applicable water limitations contained in Order R4-2012-0175 and for which MS4 discharges may be causing or contributing to the exceedance (Category 3 medium priority pollutants) .
- Identify potential sources within the watershed that are known and suspected sources.
- Based on source assessment, prioritize and sequence the watershed impacts.

Management Strategies

Based on the watershed assessment, the Permittee shall identify strategies, control measures, and BMPs to implement through their jurisdictional implementation program. The WMP presents this program and fundamental management strategies include:

- Minimum Control Measures
    - Development Construction Program
    - Industrial/Commercial Program

  - Illicit Connection/Illicit Discharge Detection and Elimination Program
  - Public Agency Activities Program
  - Public Information and Participation Program
- Non-Storm Water Discharge Measures
- TMDL Control Measures
- Incorporate numeric milestones and compliance schedules
- Reassessment of WMP and continued measure of effectiveness

The City-specific implementation of these elements presents itself through the following purposes and objectives for this WMP:

- Present the results and conclusions of the RAA;
- Assess existing potential sources;
  - Focus on improving residential dry and wet weather water quality flows.
- Address Total Maximum Daily Loads (TMDLs) and Water Quality-Based Effluent Limits (WQBELs) based on RAA and source assessment;
- Promote adoption of voluntary conservation;
- Provide a forum to identify and discuss watershed resources and concerns; and
  - Present an integrated monitoring plan.
- Identify and seek funding to address concerns.

1.2.1 Watershed Management Plan Development Process

The baseline information necessary to develop a WMP begins with an understanding of the physical watershed. Graphically, the relationships among the baseline information is presented in Figure 1.

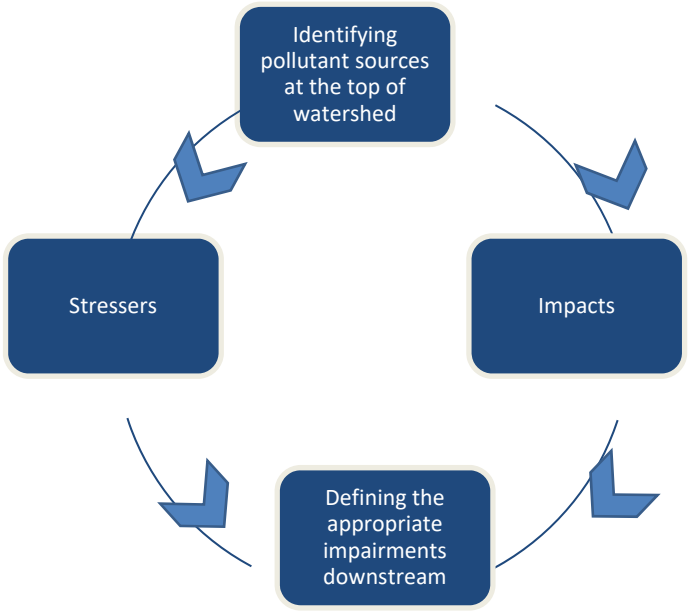


Figure 1 – Baseline Watershed Relationships

Once, these baseline relationships are understood, the Minimum Control Measures are developed as are long term implementation and assessment measures.

For the City, the actions necessary to develop the WMP are as follows:

- Discussion of the existing City land development regulations;
- Discussion of the existing City hydrology and storm flow management system;
- Identification of regional water quality concerns as applicable to the City ;
- Assessment of water quality conditions in context of concerns identified above, which provided reference points for next steps.
    - Explain RAA results;
- Presentation of results of assessment and discuss sources/causes as specific to the soils, land uses and existing City programs;
- Development of goals and solutions to concerns identified above;
- Draft plan that incorporates all steps above; and
- Implement plan; develop projects that address goals/solutions identified above.

1.3 City Vision & Mission Statement

As part of the 2004 General Plan revision, the City developed the following Goal statements which remain valid for this analysis and document:

“The effort to retain the natural conditions in La Habra Heights has been ongoing over more than the last 50 years and remains a cornerstone of the goals of the General Plan and the Environmental Resource Management Element (ERME)”.

In order to implement this goal, two primary policies, as presented in the 2004 General Plan, were developed and presented as follows:

“Environmental Resource Management Element Policy 2” Preserve and protect blue line streams from pollution, including contamination from liquid and solid waste disposal, and from streambed alterations such as change in course.”

“Environmental Resource Management Element Policy 3” Encourage practices that stress soil conservation as a means to retain native vegetation, maximize water infiltration, provide slope stabilization, allow scenic enjoyment, and reduce flood hazards.”

1.4 City Policy Schedule

Implementation of the Goals and policies presented in Section 1.3 are ongoing. The most recent implementation occurred in 2013 when the City developed the Low Impact Development (LID) and Green Streets Ordinance. This ordinance was a formalization of the development approach that has been nurtured in the City for 50 years. In the 1940’s, the Heights Association petitioned the Los Angeles County Planning Commission to revise the

local zoning. The result of this effort is evident today with the RA-1 zoning that limits residential development to one-acre lots. The City was incorporated in 1978 due to the city residents demanding restraint by the County concerning downzoning. The sole driving issue for incorporation was maintaining the Rural (RA-1) zoning throughout the City. That cityhood core purpose is maintained today.

As represented in the 2004 General Plan, the City has, for many years, implemented two key land use policies which minimize impervious areas and direct development to minimize environmental impacts. Generally, the City has implemented both Low Impact Development and Green Streets design type requirements through these development standards:

- Land Use Element #6: Future development should have minimal adverse impacts on the environment and natural topography, and should not affect natural surroundings, including ridgelines, more than necessary to allow an economically viable use of privately held land.

- Land Use Element Policy #7. Structures shall be appropriately scaled to the lot on which they are located by utilizing various proportional requirements such as setbacks, total average slopes, impervious coverage, and grading quantities.

Although these Land Use Elements and the related City ordinances did not specifically use the terms LID or Green Streets, the City has been developed under similar requirements since incorporation. Examples of the historically implemented existing development codes include:

- Most of the City is not curbed; run-off goes to the adjoining right-of-way;
- Maintaining existing trees and canopy is preferred by most property owners and has been required;
- Properties have been developed into the existing terrain; minimal slope re-grading has occurred;
- Most properties remain with older growth or native plants;
- There are little to no public parking areas. Only the municipal park, City Hall, Daycare Center and Golf Course have paved parking for more than 2 vehicles;
- Property owners are required to keep the courses of *blue line streams*, or other surface water bodies including intermittent streams, running clear and unimpeded through their properties;
- The City requires a large animal keeping permit; and,
- Runoff of water used for irrigation purposes shall be minimized to the maximum extent practicable. Runoff of water from the washing down of paved areas shall be minimized to the maximum extent practicable.

As required in 2000, the City adopted and implemented Standard Urban Stormwater Mitigation Plan (SUSMP) requirements. The City, however, extended those requirements to a more specific development action level based on the historical emphasis on rural development. In addition to the categories in the Municipal NPDES Permit, the City of La Habra Heights Municipal Code required the following:

- Chapters 7.14 (F)(2) and 7.17.40 (G)(2) require that all developments involving more than one thousand (1,000) square feet, but less than three thousand (3,000) square feet of new hardscape or other impervious surface shall be subject to SUSMP requirements.

- Chapters 7.14 (F)(3) and 7.17.40 (G)(3) require that both existing and new development areas be subject to SUSMP, if the net increase in impervious area is 3,000 square feet or greater.

Also, in 2002, the City included Environmentally Sensitive Areas (ESAs) to the SUSMP code.

In 2010, the City adopted an Efficient Landscaping Ordinance in compliance with AB 1881. Lastly, in response to the 2012 Permit, specifically to the WMP requirements, the City adopted a LID and Green Street Ordinance. The adoption schedule was as follows:

- LID and Green Streets Ordinance
    - Resolution Adopted by Planning Commission: December 17, 2013
    - 1st City Council Reading: February 13, 2014
    - 2nd City Council Reading: March 13, 2014
    - Effective by April 15, 2014

This Ordinance is affective and implemented. The adopted ordinance includes specific requirements concerning hydromodification, BMP selection and sizing calculations, operations and maintenance, and property transfer. The Green Streets portion of the ordinance is specific to the right-of-ways for both Harbor Boulevard and Hacienda Road as the remaining roads within the City are private. The ordinance is attached in Appendix A.

SECTION 2 WATERSHED DESCRIPTION

2.1 Regional Location

La Habra Heights is a unique community in the greater Southern California metropolitan area because of its rural community character. This community character is not an accident, but reflects the intentional efforts and commitment of residents over the past 75 years. La Habra Heights is bounded on the north by the unincorporated communities of Rowland Heights and Hacienda Heights, on the east by unincorporated Los Angeles County, on the south by the City of La Habra, and on the west by the City of Whittier.

2.2 Watershed Location

The City is located at the headwaters of the Coyote Creek Watershed (CCW) and also the San Jose Creek Watershed (SJC). CCW is also classified as the Lower San Gabriel River-Coyote Creek Watershed. This watershed comprises an area that drains approximately 165 square miles of densely populated urbanized areas of residential, commercial, and industrial development as well as some areas of open space and natural land (see Figure 2 Watershed Map). The open and natural lands of this watershed exist mostly in the Puente Hills, Chino Hills, Coyote Hills, and Los Cerritos Wetlands. The CCW is located primarily within Orange and Los Angeles counties, with a small portion in San Bernardino County. The City is 2.8 % of the entire CCW subwatershed.

View of La Habra Heights (circa 1920)

San Jose Creek drains approximately 83 square miles of urbanized residential, commercial, and industrial development and open space and natural lands. The Creek is concrete lined in its eastern portion (Reach 1) and soft bottomed just before it joins the San Gabriel River. The City, at only 1.3% of the entire SJC watershed, has very minimal impacts to this waterbody.

2.3 Waterways

Surface water features within the CCW and SJC include, respectively, Coyote Creek-North Fork, Coyote Creek and upper San Jose Creek as are presented in Figure 2 Watershed Map. Surface water bodies within the City are seasonal drainage channels and include La Mirada Creek (draining to Coyote Creek), Coyote Creek –North Fork and upper San Jose Creek. The general pattern of drainage flow in the City, located from the ridgeline south, is from the north to the south and towards the west and center of the City until it reaches the developed channels which collect and transport the surface water flows in westerly and southwesterly directions through the City of La Habra Heights to the Los Angeles County line. The portion of

the City located from the ridgeline north, discharges to the north via unnamed creeks, which are part of the headwaters for San Jose Creek (lower Reach 1) and then downslope into Hacienda Heights. As presented in the RAA (URS 2014), Figure 3 shows the local subwatersheds.

La Mirada Creek and Coyote Creek are the two major southern drainage channels that collect and convey surface water from the City. These facilities' locations and directional flows are described as follows.

La Mirada Creek
La Mirada Creek (OCFCD Facility No. A08) is an earthen channel and flows southwest from the City, just west of Hacienda Road to the City limits of La Habra and Whittier, just south of La Habra Boulevard and north of Stanton Avenue. La Mirada Creek, within the City limits, is a combination of both natural soft-bottom drainages and short culvert (under the roadways). Most of La Mirada Creek, as located in the City limits, is within private residential properties.

Coyote Creek
Coyote Creek (OCFCD Facility No. A01) has three forks—north, central, and southern—with only the north fork impacted by the City of La Habra Heights. This creek generally flows west and south through La Habra to the Los Angeles County line. Each fork of Coyote Creek combines sections of concrete lined channels, earthen channels, and underground pipelines. Coyote Creek's north fork leaves the City of La Habra Heights at Idaho Street as an earthen channel and generally flows south paralleling Idaho Street to the west. It then transitions into a concrete channel, then an underground pipeline, back to an earthen channel, and continues to transition between the three types of channels crossing under La Habra Boulevard and the Union Pacific Railroad until it converges north-easterly of Beach Boulevard and Imperial Highway with Coyote Creek's central and southern forks. Coyote Creek then flows as a pipeline under Beach Boulevard and continues as a concrete lined channel southwesterly adjacent to Beach Boulevard, exiting into the City of La Mirada.

Coyote Creek–North Fork

Coyote Creek–North Fork drains south through the City of Whittier and into Coyote Creek in the City of Cerritos. Coyote Creek–North Fork, also called "La Canada Verde Creek" is primarily a concrete-lined, trapezoidal channel. Several tributaries flow into Coyote Creek–North Fork. The dominant tributary is La Mirada Creek, which drains southwest from the west Puente Hills through parts of La Habra Heights, Whittier, and La Mirada before its confluence with Coyote Creek– North Fork in the City of Cerritos. Coyote Creek – North Fork is approximately 8.3 miles long, all of which is downstream from the City of La Habra Heights.

An existing monitoring site in the North Fork of Coyote Creek (NFC1) will be used to monitor trends in trace metals subject to the TMDL and responses to implementation of control measures. As has been documented, this monitoring site was installed in the North Fork of Coyote Creek as part of an early action measure designed to obtain initial data specifically to address the San Gabriel River Metals TMDL.

San Jose Creek

Draining the most undeveloped, smaller portion of the City, San Jose Creek is impacted by unnamed creeks along the northern portion of the jurisdiction. These creeks discharge to the north into San Jose Creek Reach 1, which consists of the portion of the waterbody from the San Gabriel River confluence to Temple Boulevard in Pomona. The entire San Jose Creek drains a large urbanized watershed, including wastewater treatment plant discharges, all of which are downstream of La Habra Heights.

It is noted that most of the City jurisdictional area draining to San Jose Creek is the land owned by the Puente Hills Landfill Native Habitat Preservation Authority (approximately 70%). The Authority's property in La Habra Heights is part of a wildlife corridor that extends from the San Gabriel River to the Cleveland National Forest. This corridor will persist if dedicated links of regional open space can continue to be acquired for natural conservation purposes. The balance of jurisdictional area (approximately 30%) draining to this waterbody is zoned residential.

2.4 Topography & Hydrology

The local topography is generally comprised of uplift areas in the northern portion of the City that transition to gentle slopes from the base of the hills to the south and west. The general topography of the City ranges up to approximately 1,000 feet. The primary topographic features of the City's area include the Puente Hills formation.

The Puente Hills make up the northern part of the California Peninsular Ranges geomorphic province. The Peninsular Range is characterized by a series of northwest- to southeast-oriented valleys, hills, and mountains separated by faults associated with and parallel to the San Andreas fault system. The Puente, and the adjacent Chino Hills, are an inland topographical feature separating the San Gabriel Valley to the north and the coastal plain to the south. The Puente and Chino Hills are crossed by Brea, Tonner, Carbon, and Telegraph Canyons. These major canyons and smaller intervening ones dissect the upland area and provide drainage to the southwest (Department of Conservation, 2001). The Puente Hills has several peaks above 1,000 feet in elevation.

Due to the topography, the City is naturally configured into many small sub-hydrologic subareas. All discharges are residential flows in the City except for those from the golf course, daycare center, a small real estate office, a small private nursery and the municipal locations. There are approximately four, small, sub-hydrologic areas that are not 100% residential.

2.5 Water Supply/Groundwater

Most of the City is primarily underlain by bedrock, with the southern City border located outside of the northern edge of the La Habra Groundwater Basin limits. There is no managed groundwater basin beneath the jurisdiction.

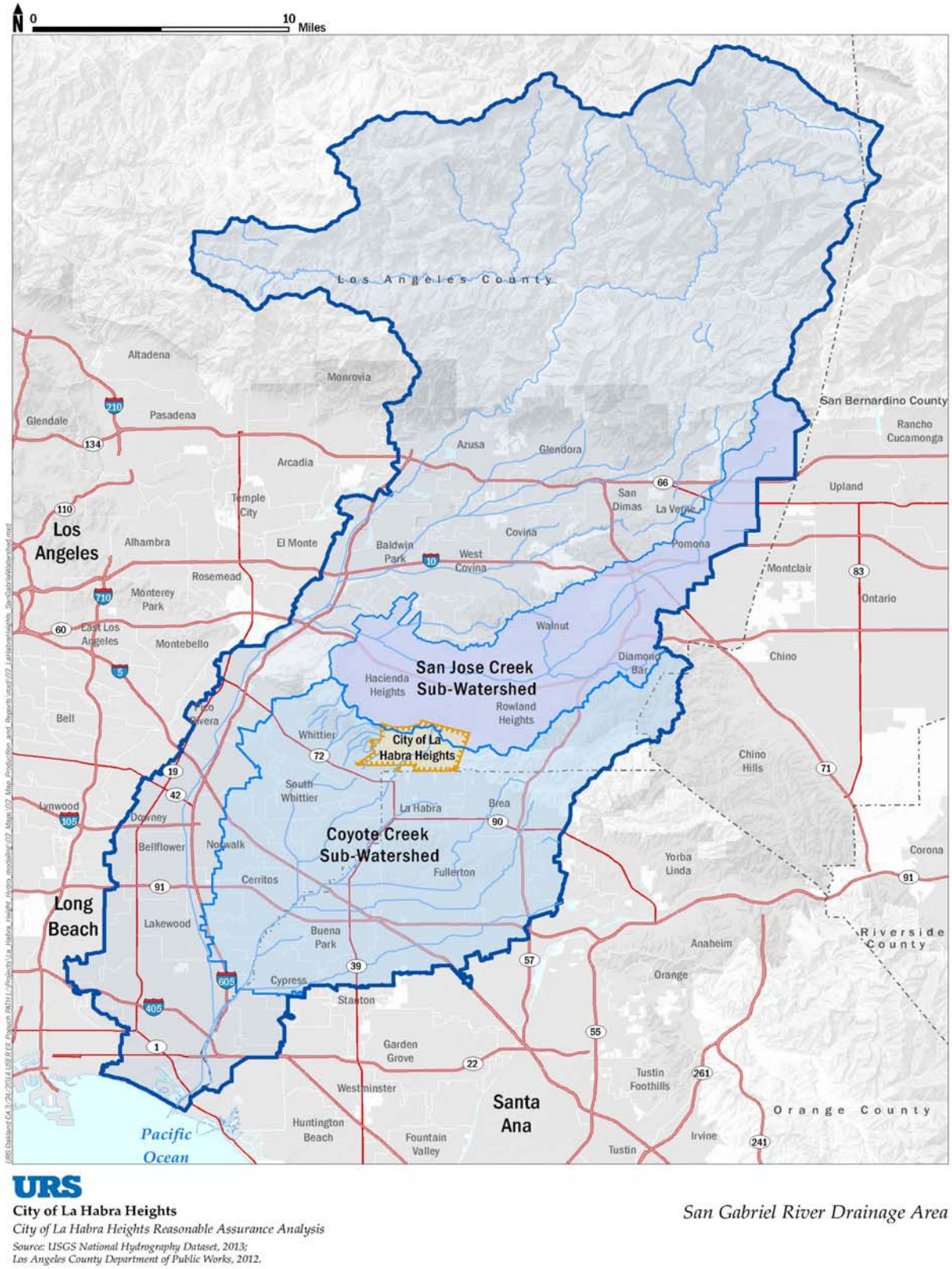
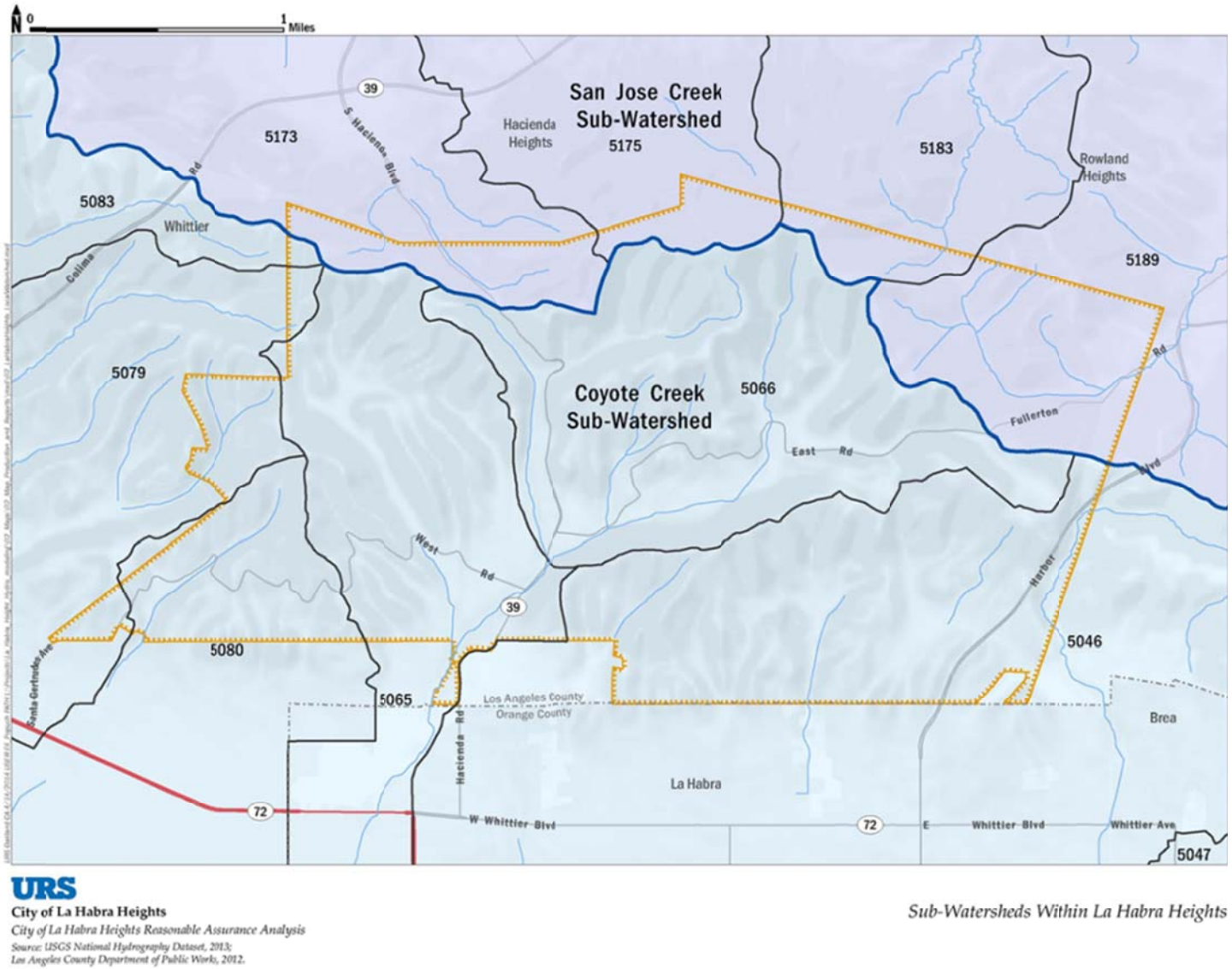


Figure 2 Regional Map: Coyote Creek and San Jose Creek Subwatershed Areas within the San Gabriel River Watershed



URS
City of La Habra Heights
City of La Habra Heights Reasonable Assurance Analysis
Source: USGS National Hydrography Dataset, 2013;
Los Angeles County Department of Public Works, 2012.

Sub-Watersheds Within La Habra Heights

Figure 3 Coyote Creek and San Jose Creek Subwatershed Areas within La Habra Heights Jurisdictional Area

2.6 Soils

The geology and soils of the Puente and Chino Hills consist of exposed rocks that are primarily sandstone, siltstone, and conglomerate of marine origin that belong to the Pliocene Fernando Formation and the late Miocene Puente Formation.

The Whittier Fault Zone is also a primary geologic feature within this portion of the Puente Hills.

2.7 Demographics

According to the 2012 U.S. Census, in the City of La Habra Heights the median resident's age is approximately 44.9, and the median household income is $119,605. Furthermore, there are an estimated 5,411 people, 1,805 households, and 1,491 families residing in the city. Currently, there are 1,880 housing units. The average household size is 3.12 persons. The population for the City has declined since 2000 by 400 residents and is also getting older. It is probable that as the population gets older, homeowners will drive less and significant home improvements will reduce. The City will likely remain status-quo versus significant decline or increase in population.

2.8 History

The area that was to become La Habra Heights was first developed by Edwin Hart in the 1920s. Early efforts towards preventing increased density resulted in Los Angeles County establishing one-acre zoning for the area in 1949. Through the years, residents defeated subsequent efforts to increase development density. Busloads of residents repeatedly journeyed to the Los Angeles County Hall of Administration to let the County supervisors know that the loss of rural character of "The Heights" was unacceptable.

In 1970, the residents were once again galvanized in opposition to a proposed widening and realignment of Hacienda Road that would have resulted in significant impacts on the community. The residents were ultimately successful in defeating the proposed roadway project.

The City of La Habra Heights was incorporated in 1978 so that the residents could control their destiny and preserve the minimum one-acre zoning, the rural character, the volunteer Fire Department, and to obtain improved law enforcement services. The City's history and development patterns have been shaped by resident activism, topography, location, and by the vigilant efforts of the residents who were determined to preserve the City's rural character. Through the adoption of the 2004 General Plan, the City of La Habra Heights strives to protect, preserve, and enhance the residential rural character and individualistic lifestyle of La Habra Heights.

2.9 Land Use

La Habra Heights is a small, 6.39 square-mile community with views of green hills and generous open spaces filled with trees, shrubs, grasslands, and thriving wildlife stand in sharp contrast to the dense suburban development within the neighboring cities. The City's General Plan Land Use element focuses on protecting the natural environment with which the City has been endowed.

According to the 2012 U.S. Census, there were 1,880 housing units in La Habra Heights. A maximum of 393 additional housing units may be added to the City's housing stock, based on the number of parcels without a permitted bathroom. With 1,886 parcels containing permitted structures and a total of 2,235 parcels in its limits, the City is 84.4% developed. In response to this developmental maturity, the Land Use Element establishes guiding policies for the maintenance, preservation, and improvement of the City as it now exists, with equal or greater emphasis than is given to policies designed to affect future development.

Unlike other local municipalities, La Habra Heights allows only six categories of land uses: residential, open space recreation, open space conservation, public facilities, resource production and institutional. This lack of land use complexity allows an in depth concentration on issues of concern to City residents. Wildlife, rural access and maintaining dark skies at night are issues which might be considered too detailed for other cities' General Plans, however they are appropriate for La Habra Heights' General Plan because they are issues of significance to local residents and rural lifestyle.

Several constraints impact future development in La Habra Heights. In addition to the high proportion of developed lots and large areas of dedicated open space, earthquake fault lines and very steep slopes in many areas of the City preclude new construction. Infrastructure capacity is also a significant and economically non-remediable constraint. Furthermore, wildfire vulnerability and expansive soils affect building materials and methods that can be approved for use in the City.

The following two tables present analysis of the existing land uses. According to City land use data, the following table depicts the current land use breakdown and the amount of designated acreage.

Table 2-1: Land Use Designations and Standards (Base Land Use Designations)

General Plan	Zoning Designation	Development Intensity Standard	Population Density Standard	Land Area
Residential Agricultural	RA - Residential Agricultural	1 or fewer units/gross acre	3 persons/acre	2,570 acres
Institutional	I – Institutional	1 or fewer units/5 gross acres	NA	21 acres

General Plan	Zoning Designation	Development Intensity Standard	Population Density Standard	Land Area
Public Facilities	PF - Public Facilities	1 or fewer units/gross acre	NA	15 acres
Resource Production	O-1 Resource	0	NA	208 acres*
Recreation	O-2 Recreation	0	NA	166 acres
Conservation	O-3 Conservation	0	NA	720 acres
Roads/Easements	NA	NA	NA	210 acres
Total				4,090 acres

Source: City of La Habra Heights. 2003

*Of the 208 acres designated as resource management, only 20.8 acres is usable. The remaining is either vacant steep or other non-active area. See the RAA (2014) for additional information.

The following Table 2-2 presents the impervious/pervious proportion for each land use type and the approximate total within the City.

Table 2-2: Land Use / Hydrologic Response Group Crosswalk

La Habra Heights Parcel Zoning	WMMS HRU[1]	Impervious / Pervious	Proportion of Land Use	% of City
RA - Residential Agricultural	Low Density Single Family Steep	Impervious	0.21	13.1
	Vacant Steep	Pervious	0.70	44.0
	Agriculture Moderate Slope	Pervious	0.02	1.2
	Urban Grass Irrigated	Pervious	0.07	4.4
PF - Public Facilities	Institutional	Impervious	0.80	0.29
	Urban Grass Non-Irrigated	Pervious	0.20	0.07
I – Institutions	Institutional	Impervious	0.8	0.40
	Urban Grass Non-Irrigated	Pervious	1.0	0.51

Table 2-2: Land Use / Hydrologic Response Group Crosswalk

La Habra Heights Parcel Zoning	WMMS HRU[1]	Impervious / Pervious	Proportion of Land Use	% of City
O-3 Open Space-Conservation	Vacant Steep	Pervious	1.0	17.6
O-2 Open Space-Recreation	Urban Grass Irrigated	Pervious	1.0	4.0
O-1 Open Space-Resource Production	Vacant Steep	Pervious	1.0	5.1
City Roads	Secondary Roads	Impervious	0.45	2.3
	Urban-Grass Non-Irrigated	Pervious	0.55	2.8

[1] Vacant Steep and Agricultural HRU assigned dependent on the Hydrologic Soil Group assigned in each subwatershed (Tetra Tech 2010a and 2010b).

Large areas of impervious surface can contribute to water quality problems including: heavy metals, nutrients, oil & grease, salts, and increased flow rates in receiving waters. As shown in Table 2, the total impervious areas within the City are minimal.

2.10 Sewer and Septic Systems

Approximately 112 properties, 6% of the properties within the City limits, have access to the municipal sewer system. The remaining housing units utilize a septic system. The topography and location of the vast majority of the households in the City make it economically unfeasible to utilize a municipal sewer system.

The City contracts with the County Department of Public Works, Sewer Maintenance Division to provide for sewer and septic system inspections. According to recent historical records there have been no Sanitary Sewer Overflows (SSOs) within the City.

For the on-site septic systems, the City tracks overflow and repairs. Since 2011 there have been 11 events documented in the City tracking system, up through March 2014. When an event is reported to the City, the event is logged into the tracking system and the City Building Inspector maintains correspondence with the homeowner. Failing septic systems are also reported to the Environmental Health Customer Call Center.

In May 2013, the SWRCB Policy for Local Agency Management Program (LAMP) for Onsite Wastewater Treatment Systems became effective. The City of La Habra Heights completed a city-specific LAMP document on May 1, 2016. The City's LAMP meets the requirements of AB 885.

2.11 Stormwater Drainage System

Due to both the General Plan's rural goal and the topography, the City's stormdrain system is not highly developed. The system consists of undeveloped channels, roadside underdrains and slope drains. There are 27 City-maintained catch basins and 17 County-maintained catch basins which are connected to stormdrain piping. Generally, the city-wide storm flows are either managed as sheet flow or concentrated flows through naturally existing drainage paths.

In 2010, the City completed a city-wide inventory of existing storm flow management structures and features. The field information was compiled into aerial photo figures for future reference. This information is being used for planning capital improvement projects.

It is noted that geologically, the City is underlain by a geologic formation that is historically highly susceptible to landslides. Currently, mudslides and significant landslides still occur during larger rain events within the City jurisdiction. Future capital improvement projects are expected to be focused on managing flows where flood property damage is most likely to occur.

2.12 Current Municipal Activities

Unlike most of the other MS4 Permittees, the City's functions concerning the development program and public agency activities are considerably downsized. A summary of the City's activities concerning these functions are as follows:

City Development

As previously stated, the City is approximately 84.4% developed. The remaining parcels within the City are primarily located in locations which are 1) within a mapped fault zone or 2) a very steep slope making development too costly. In response to this developmental maturity, the Land Use Element establishes guiding policies for the maintenance, preservation, and improvement of the City as it now exists, with equal or greater emphasis than is given to policies designed to affect future development.

In order to promote the existing rural characteristics, the City allows only five categories of land uses: residential, open space recreation, open space conservation, public facilities, resource production and institutional. Of these five categories only residential has any continued development change.

Based on a review of building permits from 2010 through 2014, there have only been 32 residential properties that have applied for a permit. Of these 32 properties, 12 are building additions on parcels smaller than one acre. Of the remaining 20 parcels, all greater than one acre, 8 projects were minor construction (permitting fees less than $1000.00) meaning minor improvements or building expansion. The 12 remaining projects would have been required to apply for planning department and commission review and approvals. These 12 projects did not constitute disturbance of greater than one acre and therefore did not require a construction permit.

When a project is approved within the City, it must meet many specific requirements concerning building characteristics. These requirements are presented as part of Section 5.3 as part of the Minimum Measure discussion.

City Construction Inspections

The City employs part-time, contractual inspection staff. The building inspector makes observations concerning construction debris management and erosional control run-off and these observations have historically been included onto the inspector's field notes and forms. As part of the WMP adaptive program, additional documentation and minimum measures will be implemented within the City. These proposed measures are included in Section 5.4.

Public Agency Activities

The City is very limited on the public agency activities it manages which would cause pollutant loading. The City does not have a municipal yard, however, the Fire Department does have two buildings behind the City Hall. It is noted that the Fire Department does not have fueling, wash, or training areas as there is no room to facilitate these activities. There is a small parking area for staff vehicles. Most other municipal activities are contracted to the County of Los Angeles including:

- Sewer System Maintenance
- Private Septic System Inspections
- County Road maintenance
- Flood Control maintenance

La Habra Heights County Water District

There is also the privately managed La Habra Heights County Water District, with its own Board of Directors located adjacent to City Hall. The Water District maintains their own tracking concerning potable water discharges. As stated in the Permit, permittees shall require that the following information is maintained by the drinking water supplier(s) for all discharges to the MS4 (planned and unplanned) greater than 100,000 gallons: name of discharger, date and time of notification (for planned discharges), method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type of dechlorination equipment used, type of dechlorination chemicals used, concentration of residual chlorine, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be retained for five years and made available upon request by the Permittee or Regional Water Board. These requirements will be discussed with the Water District and an implementation procedure will be prepared as described in Section 5.7.6.

The Water District has, as required statewide, adopted a water conservation ordinance found at: http://www.lhhcwd.com/sites/default/files/Ordinance%20No.%2014-01.pdf. Additional information on water conservation is included in Section 5.7.3.

SECTION 3 WATERSHED CHARACTERISTICS

In Section 2, the physical characteristics of the City were described including existing land uses, topography, and hydrology. Section 3 presents the relationships between the City's land uses, geography and the watershed water quality characteristics. This section also presents the timeline requirements for the TMDLs.

3.1 Citywide Water Quality Threats

As part of this process, the City has identified what are the expected, and some potential, threats to water quality within the jurisdictional watershed. The first step is to assess the existing conditions to delineate potential water quality threats, then to rank them in terms of highest priority. These threats are listed as follows with their primary pollutants of concern:

- Malfunctioning Septic Systems: *bacteria, nutrients*
- Residential Runoff : *trash, sediment, bacteria, nutrients*
- Natural Erosion : *sediment, nutrients*
- Institutional Discharges: *organic/inorganic chemicals, nutrients, bacteria*
- Open Space/Golf Club*: sediment, nutrients*
- Resource Production: sediment, organic/inorganic chemicals

3.2 Regional Water Quality Criteria

As required in the Permit, a WMP is required to describe the applicable TMDLs, WQBELs and receiving water limitations, implementation and reporting requirements, and compliance dates. The document must also present:

- Any CWA section 303(d) listings of impaired waters not addressed by TMDLs.
- Results of regional bioassessment monitoring
- A description of known hydromodifications to receiving waters and a description, including locations, of natural drainage systems
- Description of groundwater recharge areas including number and acres
- Maps and/or aerial photographs identifying the location of ESAs, ASBS, natural drainage systems, and groundwater recharge areas

3.3 Citywide Water Quality Priorities

Per section VI.C.5.a.ii of the MS4 Permit, permittees are required to identify and prioritize water body pollutants within each Watershed Management Area (WMA) that overlays their jurisdictional area. Per table K-6 of Attachment K in the MS4 Permit, the City is included in the SGRWMA. Using this information the following priorities table has been developed:

Table 3-1: City Specific Applicable Waterbodies, Associated Pollutants and Categories

City Specific Pollutants: Categorized Priority			
	Category 1	**Category 2**	**Category 3**
Water Body	**TMDL**	**303(d) List**	**Other Pollutants of Concern**
North Fork Coyote Creek	Metals -Lead (W) -Copper[1] (W,D) -Zinc (W,D)	Indicator Bacteria (W,D) Cyanide (W,D)[3] Selenium (W,D)[2]	Mercury (W,D)[3] pH (D)
Coyote Creek	Metals -Lead (W) -Copper[1] (W,D) -Zinc (W,D)	Indicator Bacteria (W, D) Diazinon (W,D)[4]	pH (W,D) MBAS (W) Nickel (D)[3]
San Jose Creek Reach 1	Selenium (D)[2]	Coliform Bacteria (W,D) pH (W,D) Total Dissolved Solids (D)	Lead (W) Zinc (W,D) Copper[1] (W,D) PAH (W,D)[3] Chloride (D) Cyanide (W)[3] Dissolved Oxygen (W)
San Gabriel River, Reach 2	Lead (W)		

1 - Dissolved Copper
2 - No typical source land uses within jurisdiction
3 - Likely source - vehicles on County-owned roads
4- Diazinon has been banned for use since 2004
W and D = Wet (W) and Dry (D) Weather Flows respectively

The constituents listed in categories 1 through 3 were modeled in the RAA, when data was available and for which MS4 discharges may be causing or contributing to the exceedance.

The City of La Habra Heights is subject to the following Category 1 (Highest Priority) pollutants as established in Part VI.E TMDL Provisions and Attachment P of the MS4 Permit. The San Gabriel River Metals TMDL was established by USEPA (March 26, 2007) that includes Waste Load Application (WLAs) for MS4 and other dischargers to the San Gabriel River and Coyote Creek. This TMDL includes a dry weather WLA for selenium in San Jose Creek. Attachment P lists Coyote Creek, San Jose Creek and Reach 2 of the San Gabriel River as impaired with waste load allocations for a combination of wet weather and dry weather critical conditions as outlined in Table 3-2 below.

Table 3-2: TMDLs in San Gabriel River Watershed Management Area

Name	Pollutant	Waste Load Allocations[1]		Source
		Wet	Dry[4]	
Coyote Creek	Copper	24.71 µg/L x daily storm volume (L)	0.941 kg/day	Vehicle brake pads, atmospheric deposition, soil erosion
	Lead	96.99 µg/L x daily storm volume (L)	N/A	Automobile operation, industry, legacy pollutant
	Zinc	144.57 µg/L x daily storm volume (L)	N/A	Vehicle tires, galvanized metal, atmospheric deposition
San Jose Creek (Reach 1 and 2)	Selenium	N/A	5 µg/L (0.232 kg/d)[2]	Soil erosion
San Gabriel River, Reach 2[3]	Lead	81.34 µg/L x daily storm volume (L)	N/A	Automobile operation, industry, legacy pollutant

Notes:

[1] In Coyote Creek, wet weather Total Maximum Daily Loads apply when the maximum daily flow in the creek is equal to or greater than 156 cubic feet per second (as measured at Los Angeles County Department of Public Works flow gage station F354-R; Dry weather waste load allocations apply when flow at F354-R are below 156 cfs (USEPA 2007, p. 37).

[2] The dry weather Total Maximum Daily Load for selenium in San Jose Creek is based on the median flow at Los Angeles County Department of Public Works flow gage station F312B of 19 cubic feet per second (USEPA 2007, p. 43).

3- As per the San Gabriel River and Impaired Tributaries Metals and Selenium TMDL, a wasteload allocation for lead is included to address the lead water quality impairment in Reach 2 of the San Gabriel River. Wet-weather allocations are assigned to all upstream reaches and tributaries of San Gabriel River Reach 2 and Coyote Creek because they potentially drain to these impaired reaches during wet weather. In San Gabriel River Reach 2, wet-weather TMDLs apply when the maximum daily flow in the river is equal to or greater than 260 cfs as measured at USGS station 11085000, located at the bottom of Reach 3 just above the Whittier Narrows Dam. (USEPA 2007, p. 37)

4- The mass-based dry-weather MS4 allocations are shared by all of the MS4 permittees and Caltrans within the drainage area. The City is 2.8% of the entire Coyote Creek subwatershed, thus its share of the dry weather copper MS4 allocation is approximately 0.026 kg/day.

As previously presented, the City is at the headwaters for the Coyote Creek and San Jose Creek subwatersheds. City discharges enter North Fork Coyote Creek, La Mirada Creek (Coyote Creek) and San Jose Creek receiving waters. As presented in the 2010 303(d) list the following pollutants are to be addressed:

Table 3-3: Category 2 – 303(d) Listing

Water Body	303(d) List	Basin Plan or Numerical Criteria
North Fork Coyote Creek	Indicator Bacteria (W,D)	235 E. coli/100ml[1]
	Cyanide (W,D)	CTR Freshwater (1 hr. avg.) = 22 ug/L
		CTR Freshwater (4 day avg.) = 5.2 ug/L
	Selenium (W,D)	CTR Freshwater (1 hr. avg.) = 20 ug/L
		CTR Freshwater (4 day avg.) = 5.0 ug/L
Coyote Creek	Diazinon (W,D)	California Dept. of Fish and Game Freshwater (4-day avg.) = 0.05 ug/L
		California Dept. of Fish and Game Freshwater (1-hr. avg.) = 0.08 ug/L
	Indicator Bacteria (W, D)	235 E. coli/100ml
San Jose Creek Reach 1	Coliform Bacteria (W,D)	Bacteria WQBEL: 235 E. coli/100ml
	pH (W,D)	6 to 8.5
	Total Dissolved Solids (D)	500 mg/L
	Toxicity (W,D)	See Section XIII of MS4 Permit Attachment E

1- WQBEL based on potential REC-1 beneficial use.

The action levels presented in the preceeding tables are those to be used during the monitoring and assessment phases of the overall citywide program.

As part of the analysis for the WMP plan, a Reasonable Assurance Analysis (RAA) was conducted for each waterbody pollutant combination. The RAA consists of an assessment, through quantitative analysis or modeling, to demonstrate that the activities and control measures (i.e. BMPs) identified in the Watershed Control Measures section of the WMP are performed to demonstrate that applicable water quality based effluent limitations and/or receiving water limitations (as presented above) with compliance deadlines during the permit

term will be achieved. The remainder of this section presents the existing water quality data collected regionally for the waterbodies which the preceeding tables represent. Section 4 presents a summary of the RAA results which characterizes, numerically, the likelihood of these pollutant constituents loading impacts from the City.

3.3.1 Bacteria Receiving Water Limitation Compliance

The City, through providing a quantitative demonstration as part of the WMP implementation, will present that the source control measures and BMPs will achieve dry and wet-weather Receiving Water Limitation compliance with the following schedule. The Integrated Monitoring Program (to be finalized in February 2015) will present the monitoring and procedures to be used to demonstrate attainment. Compliance dates for this compliance are projected as follows:

- Dry Weather - First Phase Implementation - December 2018
    - Full compliance – December 2022
- Wet Weather – Full compliance December 2037

“First Phase” includes implementation and reporting on source control focused management of bacteria sources. This would include strict implementation of AB 885 requirements, residential runoff management and pet/large animal waste management.

If, in 2018, it is found that these methods are not meeting compliance, then other management measures will be developed at that time to address the known needs. This approach applies to both dry and wet weather compliance. At that time the City may also request an extension of the dry-weather deadline after implementation of the “First Phase” measures and prior to the 2022 deadline.

The Integrated Monitoring Program will be developed and implemented to provide measureable data (inspections and monitoring data) in order to document the required reductions in bacteria. The approach, as presented in this WMP, to manage bacteria will be revised periodically through the adaptive management process based on the data.

Compliance dates may change based on future regulatory efforts or completion of a TMDL. Additional information concerning this compliance effort is included in Sections 5.7.1, 5.7.2 and 5.7.4.

3.3.2 Metals and Selenium TMDL Compliance

A MS4 Permittee may be deemed in compliance with the WQBELs if they demonstrate that:

1) There are no violations of the WQBEL at the Permittee’s applicable MS4 outfall(s);
2) There are no exceedences of the receiving water limitations in the receiving water, at or downstream of, the Permittee’s outfalls; or

3) There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the WQBEL.

The City, through providing a quantitative demonstration as part of the WMP implementation, must show that the control measures and BMPs will achieve wet-weather WQBELs consistent with the schedule presented below. If this schedule is attained, then compliance will be accepted once approved by the RWQCB Executive Officer. The Integrated Monitoring Program (to be finalized in February 2015) will present the monitoring and procedures to be used to prove attainment.

As is presented in the implementation plan for the San Gabriel River and Impaired Tributaries Metals and Selenium TMDL, adopted by Regional Water Board in June 2013 and effective on October 13, 2014, there are established interim milestones and corresponding deadlines for the WLAs. As found in Table 7-20.2 (Page 10) of the TMDL Implementation Plan the following deadlines are compliance requirements:

Table 3-4 Compliance Schedule: TMDL for Metals and Selenium – San Gabriel River and Impaired Tributaries

Interim or Final Compliance Date	Compliance Requirement
September 30, 2015	Submit a coordinated monitoring plan for the TMDLs. To be implemented within 6 months of approval
September 30, 2016	Written report, using monitoring data, to be submitted presenting TMDL specific BMPs to meet compliance based on the timeline.
September 30, 2017	1) Demonstrate that 30% of the total regional watershed drainage area is meeting dry weather WLAs. 10% of total watershed to meet wet weather WLAs; or, 2) Show reduction of 30% (dry weather) and 10% (wet weather) at outfalls.
September 30, 2020	1) Demonstrate that 70% of the total regional watershed drainage area is meeting dry weather WLAs. 35% of total watershed to meet

Interim or Final Compliance Date	Compliance Requirement
	wet weather WLAs; or, 2) Show reduction of 70% (dry weather) and 35% (wet weather) at outfalls.
September 30, 2023	1) Demonstrate that 100% of the total regional watershed drainage area is meeting dry weather WLAs. 65% of total watershed to meet wet weather WLAs; or, 2) Show reduction of 100% (dry weather) and 65% (wet weather) at outfalls.
September 30, 2026	100% compliance with both dry and wet weather WLAs and attaining water quality standards for copper, lead and zinc.

3.3.3 Harbor Waters Toxic Pollutants TMDL Compliance

MS4 Permittees that are subject to the San Gabriel River and Impaired Tributaries Metals and Selenium TMDL are also responsible for the conducting water and sediment monitoring at the mouth of the San Gabriel River to determine the River's contribution to the impairments in the Greater Harbor waters. The monitoring required at the mouth of the San Gabriel River includes:

- Water Column Monitoring
- Sediment Monitoring

The City identifies in the IMP the methods for stakeholder participation concerning this TMDL requirement.

3.3.4 Aquatic Toxicity Compliance

MS4 Permittees that are required to participate in aquatic toxicity monitoring in the receiving water two times per year during wet weather and once per year during dry weather conditions. The City identifies in the IMP (February 2015) the efforts the City will manage for this compliance effort.

3.4 Existing Regional Water Quality Data

In order to characterize existing water quality conditions in the City impacted waterbodies and to identify pollutants of concern for prioritization per section VI.C.5.a.ii of the MS4 Permit,

available monitoring data collected during the previous ten years were analyzed. The following sources were utilized during the water quality characterization:

- Los Angeles County Flood Control District (LACFCD) Mass Emission Monitoring Station
- LACFCD Tributary Monitoring Programs

A summary of each of these monitoring efforts and relevant findings is presented below. In addition to providing a characterization of the current conditions within the watershed, this information will be used to target watershed management efforts.

3.4.1 MASS EMISSIONS HISTORICAL DATA ANALYSIS

LACFCD has conducted stormwater monitoring in Los Angeles County since 1994. Operating seven mass emission monitoring stations, which collect runoff from the major watersheds in the county with the goal of estimating the mass emissions from the MS4, assessing mass emissions trends, and determining whether the MS4 is contributing to exceedances of water quality standards by comparing results to applicable objectives, similar to those as presented in Tables 3-2 and 3-3 which represent the TMDL and 303(d) Listings respectively. From a regional perspective, both the Water Quality Control Plan for the Los Angeles Region (Basin Plan), and the California Toxics Rule (CTR) are used for applicable numerical objectives.

The City is upstream of two LACFCD Monitoring Stations: S(13) and S(14). These two locations are described as follows and their locations are shown on Figure 4.

COYOTE CREEK MONITORING STATION S(13)

The Coyote Creek Monitoring station, S(13), is located at the existing Army Corps of Engineers stream gage station (i.e. Stream Gage F354-R) below Spring Street in the Lower SGR Watershed. The upstream tributary area is 150 square miles and extends into Orange County. The City is approximately 2.8 percent of the total Coyote Creek watershed area. Approximately 90% of the City discharges to Coyote Creek. Coyote Creek is a concrete-lined trapezoidal channel at this location.

SAN GABRIEL MONITORING STATION S(14)

The second applicable station is the San Gabriel River Monitoring Station, S(14), which is located at stream gage F263C-R, below San Gabriel River Parkway in Pico Rivera. The City discharges are approximately 1.3% of the total watershed area draining to San Jose Creek. This creek then discharges to the San Gabriel River Reach 2 upstream of the S(14) monitoring station.

Both stations, S(13) and S(14), are equipped with automated samplers with integral flow meters, and collect flow composite samples from a minimum of three storm events, including the first storm, and two dry weather events in accordance with the 1996 MS4 Permit. Monitoring data from stormwater collected at stations S(13) and S(14) were compared to the most stringent applicable WQOs to determine exceedances of receiving water limitations. WQOs were determined pursuant to TMDLs, the Basin Plan and the California Toxics Rule, 40

CFR Part 131.38 (CTR). Water quality objectives for chlorpyrifos and diazinon were determined using the freshwater final acute criteria set by the California Department of Fish and Game. Many of the WQOs were used as benchmarks for determining Water Quality Priorities, and should not be used for compliance purposes.

As part of this Permit requirement, many permittees have analyzed this data and made the required comparisons. The following four tables are a compilation of the regional data focused on the City's applicable watershed.

The City will continue to monitor regional water quality issues as the regional plans are implemented.

Table 3-5: S(13) Constituents Exceeding WQOs During Wet Weather

Constituent	No of Samples	% Samples Exceeding WQOs	Lowest Applicable WQO Value	WQO Source
Cyanide	40	10	0.022	CTR Freshwater Aquatic Life Protection - Acute
pH	42	5	6.5-8.5	LARWQCB Basin Plan
Dissolved Oxygen	39	3	5	LARWQCB Basin Plan
Total Coliform	40	93	10000	LARWQCB Basin Plan –Marine Waters
Total Copper	42	62	27	San Gabriel River Metals TMDL
Total Lead	42	2	106	San Gabriel River Metals TMDL
Total Selenium	42	2	5	San Gabriel River Metals TMDL
Dissolved Zinc	42	19	120	CTR- 100mg/L CMC
Total Zinc	42	62	106	San Gabriel River Metals TMDL
Diazinon	42	7	0.08	CADF&W

Table 3-6: S(13) Constituents Exceeding WQOs During Dry Weather

Constituent	No of Samples	% Samples Exceeding WQOs	Lowest Applicable WQO Value	WQO Source
Cyanide	23	96	0.022	CTR Freshwater Aquatic Life Protection - Acute
pH	23	22	6.5-8.5	LARWQCB Basin Plan
Total Coliform	23	43	10000	LARWQCB Basin Plan –Marine Waters
Total Copper	23	13	19.1	San Gabriel River Metals TMDL
Total Lead	23	39	0.92	San Gabriel River Metals TMDL
Total Selenium	23	61	5	San Gabriel River Metals TMDL
Total Zinc	23	4	95.6	San Gabriel River Metals TMDL
Diazinon	23	9	0.05	CADF&W

Table 3-7: S(14) Constituents Exceeding WQOs During Wet Weather

Constituent	No of Samples	% Samples Exceeding WQOs	Lowest Applicable WQO Value	WQO Source
Cyanide	38	11	0.0052	CTR Freshwater Aquatic Life Protection – Chronic
pH	38	5	6.5-8.5	LARWQCB Basin Plan
Total Coliform	38	87	10000	LARWQCB Basin Plan –Marine Waters
Total Copper	38	61	14	San Gabriel River Metals TMDL
Total Zinc	38	71	54	San Gabriel River Metals TMDL
Diazinon	38	10	0.08	CADF&W

Table 3-8: S(14) Constituents Exceeding WQOs During Dry Weather

Constituent	No of Samples	% Samples Exceeding WQOs	Lowest Applicable WQO Value	WQO Source
Cyanide	22	73	0.0052	CTR Freshwater Aquatic Life Protection - Chronic
pH	22	14	6.5-8.5	LARWQCB Basin Plan
Total Coliform	22	50	10000	LARWQCB Basin Plan –Marine Waters
Total Copper	22	14	9.3	CTR Aquatic Life Protection – Chronic

3.4.2 LACFCD TRIBUTARY MONITORING

LACFCD also conducted tributary monitoring during the 2006-07 and 2007-08 storm years. This monitoring occurred at multiple locations, however, two of these tributary stations are downstream of the City: TS15 (Upper San Jose Creek) and TS17 (North Fork Coyote Creek). TS15 and TS17 are in 303(d) listed as receiving waterbodies.

TS15: UPPER SAN JOSE CREEK

The upstream tributary watershed area of Upper San Jose Creek is approximately 72.60 square miles. The City discharges provide approximately 1% to this watershed.

TS17: NORTH FORK COYOTE CREEK

The North Fork Coyote Creek tributary monitoring site is located on North Fork Coyote Creek in the City of Cerritos, where Artesia Boulevard crosses North Fork Coyote Creek. The upstream tributary watershed area of North Fork Coyote Creek is approximately 34.89 square miles. The City discharges approximately 2.8% of the total flow to this tributary primarily through La Mirada Creek.

The data for these stations is presented in Los Angeles County Stormwater website specifically: http://dpw.lacounty.gov/wmd/NPDES/report_directory.cfm.

The 2006-07 and 2007-08 reporting year data is presented in the following hyperlinked document sites:

2006-2007:
http://dpw.lacounty.gov/wmd/NPDES/2006-07_report/Tables%20for%20Internet/Table%204-5.%20Tributary%20Exceed%20Sum_0607%20all.pdf

2007-2008:
http://dpw.lacounty.gov/wmd/NPDES/2007-08_report/Tables%20for%20Internet/Table%204-5_Summary%20of%20WQ%20Exceedances-TRIBs.pdf

The IMP will include integration of this data.

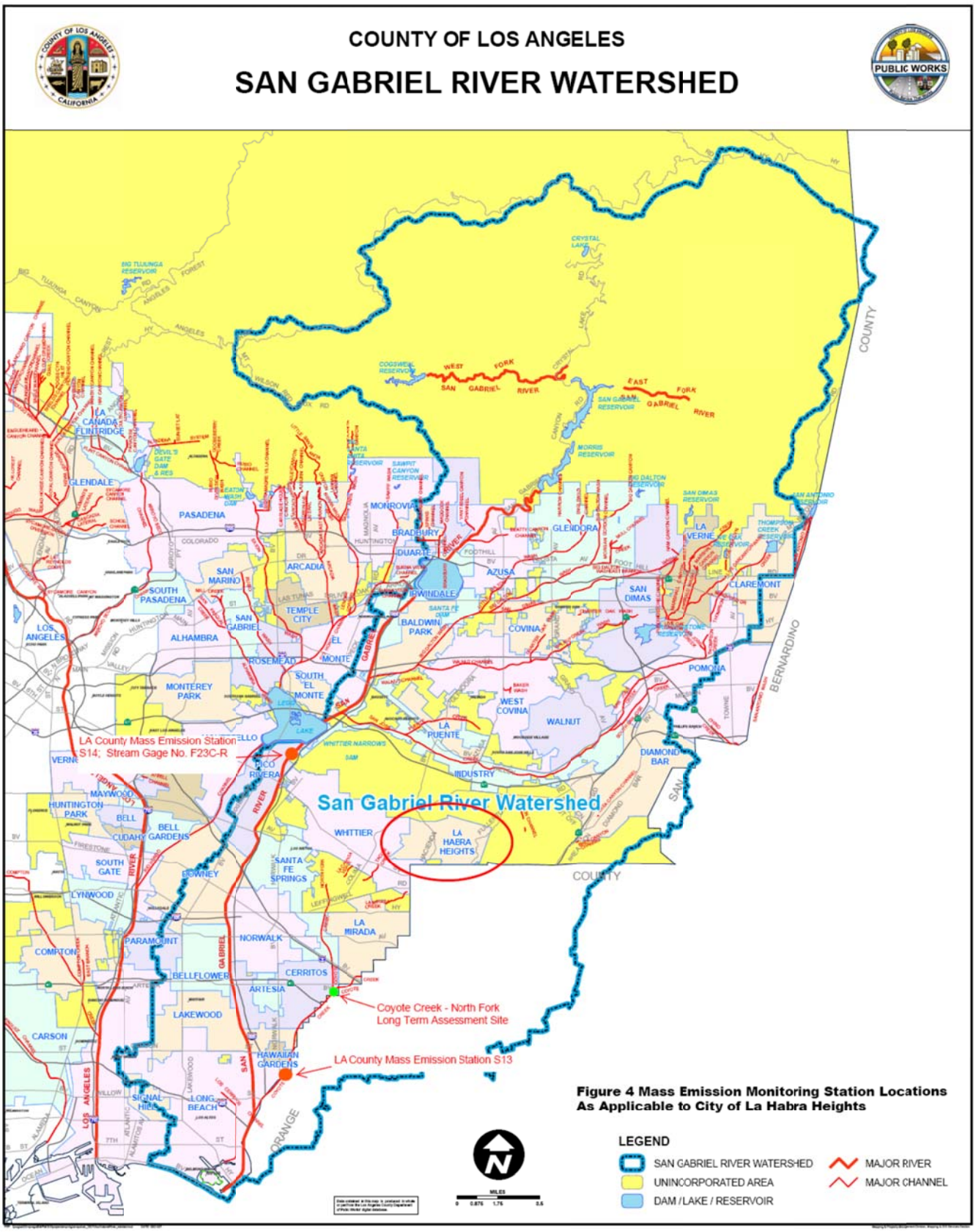


Figure 4 Mass Emission Monitoring Station Locations As Applicable to City of La Habra Heights

3.5 Known Hydromodification

Unlike most of the Los Angeles Basin, the City has purposely remained a rural residential area. Larger lots sizes, no commercial or industrial properties and being at 84% build out indicate that it is unlikely for additional hydromodifcation to occur within the City. The existing land uses, ordinances and building codes strictly manage building expansion restricting expansion on most current properties. The required open space, building set-backs, and other mandatory "rural" parameters provide little opportunity for significant property building expansion within the City.

Most of the drainages in the City remain in a natural state and many of the drainages are legal non-forming uses[1] but flow into private property. There is a limited stormdrain system that consists of roadway cross drains, v-ditches and some slope drainage modifications.

3.6 Groundwater Recharge

As stated previously, the City is located within a geologic area mapped as bedrock. Being located in the Puente Hills formation, the City is not underlain with a geologic structure responsive to infiltration. The Puente Hills formation is well documented to not be suited for infiltration. Furthermore, the bedrock structure retains water and can cause structural damage due to expansion and, when saturated, cause slope failure and landslides.

During the 2004 floods, four slopes and related culverts within the City were heavily damaged by landslides. Hacienda Boulevard was also significantly affected. Most of the current citywide stormdrain "improvements" were constructed to prevent additional significant private property damage as determined by CAL EMA and the FHWA.

3.7 Citywide Natural Resource Management

A significant portion of the City is part of the Puente-Chino Hills Wildlife Corridor (PCHWC). The corridor is an important ecological and scenic resource for the City. The PCHWC is identified as having worldwide importance because of its biodiversity. Based on the City's land use information, nearly 67% of the jurisdiction is vacant, undevelopable land. 18% of this open land is protected conservation area.

One of the significant locations is Powder Canyon. The Habitat Authority Wilderness Preserve manages the 517 acres. The canyon is a relatively undisturbed habitat and is part of the Puente Hills Significant Ecological Area. This location is a relatively undisturbed, self-contained watershed. One of the larger canyons in the hills, Powder Canyon boasts particularly large complexes of oak woodland and oak riparian forest.

According to Habitat Authority maps, the Canyon is completely within the jurisdictional boundary of the Authority although only the upslope portions of the Canyon have been mapped for natural resources.

[1] "Legal non-forming uses" means that the drainages are not part of a special district or other legal managing entity.

The Habitat Authority has documented its efforts to provide for internally managed Best Management Practices (BMPs). These efforts have included constructing a large bioswale, developing a Trail Plan, and restoration projects. As stated in the Authority's Management Plan the ongoing restoration of both upland and riparian habitats is expected to reduce pollutant load potential downstream.

SECTION 4 POLLUTANT LOADING

The nature of the existing land use allows for direct and smaller scale analysis of the existing and future pollutant loading. The City completed an RAA for Category 1 (Highest Priority) pollutants as established in Part VI.E TMDL Provisions and Attachment P of the MS4 Permit. Permit Attachment P lists both Coyote Creek and San Jose Creek as impaired with waste load allocations for a combination of wet weather and dry weather critical conditions as was presented in Table 3-2. The RAA also included an analysis for Category 2 and 3 pollutants where information existed and for which MS4 discharges may be causing or contributing to the exceedance.

4.1 Reasonable Assurance Analysis (RAA) Results

In 2014, as part of the Permit requirements, the City authorized an RAA to be completed. The modeling analysis and document, prepared by URS Corporation, utilized the Watershed Management Modeling System (WMMS) developed for Los Angeles County.

As stated in the RAA document, baseline conditions, critical wet conditions, and critical dry conditions were simulated using the WMMS for both Coyote and San Jose Creek for the time period ranging from January 1, 2000 through March 31, 2012. Based on the results of the RAA, additional Best Management Practices for bacteria management will be necessary in order for the City to obtain compliance with waste load allocations. Source control BMPs are proposed as the primary focus, specifically residential septic systems, residential runoff and pet/large animal waste discharges. Structural BMPs will be difficult to incorporate within this jurisdiction due to lack of public land. The RAA and the WMP were concurrently developed and, at the time of writing, the RAA is complete and will be submitted with the WMP.

4.2 Pollutant Loading

The RAA document presents the loading conditions based on hydrologic subwatershed. The locations of these subwatersheds are presented in Figure 3, as developed by URS for the RAA (URS 2014).

The following table presents the total acres of each watershed and the respective land use type.

Table 4-1: Subwatershed Acreage and Land Use Type

Subwatershed	Agriculture Moderate	Institutional	LD SF Res Steep	Industrial	Secondary Roads	Urban Grass Irrigated	Urban Grass Non-Irrigated	Vacant Steep C	Vacant Steep D	Grand Total
5046	16.77	5.13	176.10	0.02	12.78	58.70	16.90	614.88	0	901.30
5065	12.63	10.78	132.64	2.51	10.48	44.21	15.50	522.69	0	751.46
5066	14.67	9.13	154.12	2.33	12.54	227.22	17.61	732.39	0	1170.09
5079	0.882	1.15	9.26	6.56	0.44	3.08	0.83	0	118.18	140.41
5080	5.188	0.79	54.45	0	4.02	18.16	5.11	182.55	0	270.31
5083	0.147	0	1.55	0	0	0.51	0	6.28	0	8.50
5173	2.238	0.96	23.50	0	3.06	7.83	3.98	115.29	0	156.88
5175	0.339	0.48	3.56	0	0	1.18	0.12	75.42	0	81.12
5183	0	0.009	0	0	0	0	0.002	78.13	0	78.14
5189	1.421	0.06	14.92	0	1.95	4.97	2.410	357.89	0	383.64
Total	**54.30**	**28.52**	**570.16**	**11.40**	**45.29**	**365.90**	**62.49**	**2685.52**	**118.18**	**3941.85**

This data allows for the City to gain an understanding of potential sources and then assists in focusing implementation efforts. It also helps in understanding the lack of most pollutant sources within some of the subwatersheds.

SECTION 5 MINIMUM CONTROL MEASURES

The MS4 Permit requires permittees to implement policies and practices that will aid in the improvement of water quality in the City and WMA. These policies and practices are defined as Minimum Control Measures (MCMs) and are outlined in section VI.D.5 for Non-LACFCD permittees.

Many of the City's existing MCMs were implemented under the previous permit, but latest permit has expanded some of the requirements for the existing programs. Per the MS4 Permit, the City is required to have the following MCM Programs:

- Public Information and Participation Program
- Industrial/Commercial Facilities Program
- Planning and New Development/Re-Development Program
- Development Construction Program
- Public Agency Activities Program
- Illicit Connection and Illicit Discharge Elimination Program

5.1 Public Information and Participation Program

Each permittee is required to implement a Public Information and Participation Program (PIPP) under the MS4 Permit. The MS4 Permit identifies the primary goals of the PIPP as follows:

- The PIPP shall measurably increase the knowledge of the target audiences about the MS4, and the adverse impacts of storm water pollution on receiving waters and potential solution to mitigate the impacts.
- The PIPP shall also measurably change the waste disposal and storm water pollution generation behavior of target audiences by developing and encouraging the implementation of appropriate alternatives.
- The PIPP shall involve and engage a diversity of socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of storm water pollution.

The City currently maintains a PIPP program and is proceeding with an individual WMP. As much of the same requirements from the previous permit are included in the latest permit this document will describe the program moving into the current permit term.

Implementation of the PIPP by the City will include outreach both by the City only efforts and in collaboration with the Water District. Applicable public education materials that are developed by the County may be used by the City, however it is expected that City- specific materials will be developed. The City will have focused efforts on the following pollutant sources:

- Private Septic Systems – focus on AB 885 requirements
- Residential Runoff – focus on typical residential uses and activities
- Pet Waste – focus on both large and small animal waste management

These pollutant/activity specific outreach efforts are described further in sections 5.7.1, 5.7.2, and 5.7.3, below.

5.1.1 Public Reporting

The City currently contracts with Los Angeles County for maintenance of catch basins, storm drain and sanitary sewer networks. The City is a contract city and utilizes the 888-CLEAN-LA hotline for its general public reporting contact in coordination with the Los Angeles County Maintenance Crews. County hotline and City contact information for the Public Works Department is made available on the City's Website for all spills, SSOs or other drainage issue. The City maintains and will continue to maintain current contact information as updates are made necessary.

5.1.2 Public Outreach

The City provides environmental information and storm water education material at all major city events including: Music in the Park, The Avocado Festival, and Dog Days of Summer.

The City also uses the City Park marquee sign for messages concerning waste disposal, water conservation and general parcel maintenance.

It is noted that there are no schools within the City's jurisdiction.

5.2 Industrial/Commercial Facilities Program

The industrial Facilities Program is designed to prevent illicit discharges from industrial and commercial facilities into the MS4 and receiving waters. It will also reduce storm water discharges from industrial and commercial facilities and prevent industrial and commercial discharges from causing or contributing to a violation of receiving water limitations. The MS4 permit identifies the minimum components of this program to include tracking, education, inspection and enforcement.

One of the primary goals for the City is to maintain its rural character. As such there are no industrial or commercial sites located within the City except for the following:

- Single family home type structure used for a real estate office
- Resource production
- Golf Club
- Daycare Center

There are multiple locations where resource production parcels are located. A total of 208 acres is designated as resource production however a review of the current active sites presents that approximately only 20 acres may be in use at any time. Currently not all locations are active on a daily basis, however, these locations remain open for use by the landowner. Also, many of the parcels allocated for this land use are actually used for buffer zones from the residential parcels; these parcels are primarily steep hillsides that cannot be used for any development type. The active sites are required to maintain a Statewide Industrial Permit. All proposed improvements on these parcels must meet CEQA requirements, SUSMP and other applicable NPDES regulations.

As part of this Watershed Management Program (WMP), the City is proposing to prepare a Resource Production Plan (RPP). The RPP will describe the City's implementation steps for inventorying and tracking existing and proposed resource wells and also notification to and enforcement on property owners. Development of the RPP is included as one of the goals presented in Section 5.7.2 of this WMP.

5.3 Planning and Land Development Program

Permit section VI.D.7 requires the City to implement a Planning and Land Development Program for all new development and redevelopment projects. The goal of the Planning and Land Development Program is to lessen the potential water quality impact from new or redevelopment through implementation of water quality driven development practices.

The program will promote LID practices that minimize adverse impacts from storm water runoff on the biological integrity of Natural Drainage Systems, and the beneficial uses of water bodies in accordance with requirements under the California Environmental Quality Act (CEQA). Future developments will focus on minimizing the percentage of impervious surfaces and utilize Low Impact Development features and BMPs to maintain a site's predevelopment hydrology in accordance with the MS4 Permit requirements.

5.3.1 Low Impact Development Ordinance

On December 17, 2013, the City Planning Commission adopted a Low Impact Development (LID) Resolution with full City Council adoption date on April 13, 2014. This ordinance is in compliance with the requirements VI.C.4.c.ii. and section VI.D.7 of the MS4 permit. A copy of the adopted ordinance is included in Attachment B of this document. The LID Ordinance is an enforcement tool the City will utilize when reviewing and permitting development projects that qualify under the triggering requirements of the ordinance.

The list below outlines project parameters that qualify for implementation of LID design requirements under the City's LID Ordinance.

- All Development projects equal to 1 acre or greater of disturbed area that add more than 10,000 square feet of impervious surface area.
- Projects located in or directly next to, or discharging directly into an Environmentally Sensitive Area (ESA), where the development will:
    - Discharge storm water runoff that is likely to impact a sensitive biological species or habitat; and
    - Create 2,500 square feet or more of impervious surface area
- Single family hillside homes (see ordinance for definition)
- Land Disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site on Planning Priority Project categories.

- Where redevelopment would result in an alteration to more than 50% of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, only the alteration must be mitigated, and not the entire development.
- Where redevelopment results in an alteration of less than 50% of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, only the alteration must be mitigated, and not the entire development.
    - Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement, such as the reconstruction of parking lots and roadways which does not disturb additional area and maintains the original grade and alignment, is considered a routine maintenance activity. Redevelopment does not include the repaving of existing roads to maintain original line and grade.
    - Existing single-family dwelling and accessory structures area exempt from the redevelopment requirements unless such projects create, add, or replace 10,000 square feet of impervious surface area.

5.3.2 New Development/Redevelopment Project Performance Criteria

Qualifying development projects will be subject to storm water pollution control requirements including retention of all storm water resulting from a specified rain event as outlined in more detail in the City's LID ordinance. The City Planning department will work with property owners to ensure that all requirements set forth in the LID ordinance are met.

Should a project applicant find that technical infeasibilities prevent a new or re-development project from meeting the storm water pollution control requirements, they must demonstrate to the City that the project cannot retain 100% of the water resulting from the design storm volume on-site. The technical infeasibility demonstration must include the maximum application of City approved BMPs.

Such a demonstration would include a site-specific hydrologic and/or design analysis conducted and endorsed by a registered professional engineer, geologist, architect and/or landscape architect.

It is noted that for sites not retaining the stormwater quality design volume, alternative mitigation will be required. This would entail either mandatory off-site infiltration or on-site biofiltration at 1.5 times the stormwater quality design volume.

Projects located within the City are unlikely to trigger participation in a regional treatment BMP.

5.4 Development Construction Program

The MS4 Permit requires that the City implement a Development Construction Program. The general nature of construction activities has a high potential for discharges of pollutants and/or sediment from a site. Conditions on construction sites often include potential sources of pollution including but not limited to disturbed soils, stockpiled materials and construction vehicles.

General construction activities or storm water surface flow can often result in transport and discharge of these pollutants. It is the internet of the development construction program to prevent discharges.

The program shall prevent illicit construction-related discharges of pollutants into the MS4, require the implementation and maintenance of structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites, reduce construction site discharges of pollutants to the MS4 or to the maximum extent practicable, and prevent construction site discharges to the MS4 from causing or contributing to a violation of water quality standards. The Development Construction Program shall also include an enforceable erosion control and sediment control ordinance for all construction sites that disturb soil.

Most of the projects within the City are less than one-acre and typically homeowner managed.

5.4.1 Construction Sites of Less Than One Acre

Construction sites of less than one acre are required to comply with the provisions of this section and section VI.D.8.d of the MS4 Permit. Construction activities covered by this section include but are not limited to grading, vegetation clearing (for construction purposes), soil compaction, paving re-paving and linear underground/overhead projects (LUPs).

The City will require that all qualifying construction sites implement the BMPs identified in Table 5-1 in an effective manner to prevent erosion and the discharge of construction wastes. The City will maintain an inventory of construction sites with soil disturbing activities requiring a permit.

The City will conduct inspections at these sites on an as-needed basis. When determining the need for inspection the City will take into account factors that may result in the discharge of construction site pollutants. Factors in the construction site assessment may include soil erosion potential, site slope, project size and type, receiving water body sensitivities, past record of construction site compliance by the owner and/or operator of the construction site. The City will also utilize a progressive enforcement policy to ensure that construction sites found to be out of compliance are brought back into compliance with the requirements of the MS4 Permit.

Table 5-1: Applicable Set of BMPs for All Construction Sites

BMP Type	
Erosion Control Scheduling	Waste Management
Preservation of Existing Vegetation	Material Delivery and Storage
Sediment Controls	Stockpile Management
Silt Fence	Spill Prevention and Control
Sand Bag Barrier	Solid Waste Management
Stabilized Construction Site Entrance/Exit	Concrete Waste Management
Non-Storm Water Management Water Conservation Practices	Sanitary/Septic Waste Management
Dewatering Operations	

5.4.2 Construction Site Inventory

The City will revise and maintain permit tracking data base for all grading, encroachment, demolition, building and construction permits issued by the City. The database will be an electronic system that includes the following site specific information.

- Owner and Contractor Contact Information
- Site location, size, status and disturbed area
- Proximity of Water Bodies to the Construction Site
- Significant threat to water quality status (Appendix 1 of the Construction General Permit/ only if project is over 1 acre)
- Type of Construction – Grading? Masonry or Pool construction? Only interior work?
- Start and anticipated end date
- Is the project covered under the Construction General Permit
- Date of City approval of the Erosion and Sediment Control Plan (ESCP) or Local SWPPP
- Post Construction Structural BMPs subject to operation and maintenance requirements

5.4.3 Construction Plan Review and Approval Procedures

The City will review and approve relevant construction documents prior to issuing permits. Each operator of a construction activity within the City's jurisdiction will be required to prepare and submit to the City, for review and approval, a Local SWPPP. A LSWPPP shall include site specific BMPs that are appropriate for the activities that will take place on the site and elements of a Storm Water Pollution Prevention Plan (SWPPP). SWPPPs that conform to the requirements of the Construction General Permit may be accepted as a project's local SWPPP. A LSWPPP will be accepted for a Sediment and Erosion Control Plan. A LSWPPP shall include the following:

- Methods used to minimize the foot print of disturbed area and to prevent soil compaction of outside of the disturbed area
- Methods used to protect native vegetation and trees
- Sediment and Erosion Control
- Controls to prevent tracking on and off site
- Non-storm water controls
- Materials Management
- Spill Prevention and Control
- Waste Management
- Site Risk Level as classified by the Construction General Permit (if required)
- BMP Selection Rationale including expected soil loss
- ESCP Developed and certified by QSD
- BMPs are designed by a California licensed Engineer

The exact requirements are presented in the "CITY OF LA HABRA HEIGHTS BUILDING AND SAFETY & PLANNING LOCAL STORM WATER POLLUTION PREVENTION PLANS (LOCAL SWPPP) CORRECTION SHEET" as found in Appendix C.

Additionally the City will require that the landowner or the landowner's agent include and sign the following certification statement on the LSWPPP:

"As the project owner or authorized agent of the owner, I have read and understand the requirements to control storm water pollution from sediments, erosion, and construction materials, and I certify that I will comply with these requirements. I, or my representative, contractor, developer, or Engineer will make certain that all BMP shown on this plan will be fully implemented, and all erosion control devices will be kept clean and functioning. Periodic inspections of the BMPs will be conducted and a current log, specifying the exact nature of the inspection and any remedial measures will be kept at the construction site at all times and will be available for the review by the Building Official.

As the project owner or authorized agent of the owner, "I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/or inaccurate information, failing to update the Local SWPPP to reflect current conditions, or failing to properly and/or adequately implement the Local SWPPP may result in revocation of grading and/or other permits or other sanctions provided by law."

Prior to issuing a grading or building permit, The City will verify that the construction site operators have existing coverage under applicable permits, including, but not limited to the State Water Board's Construction General Permit, and State Water Board 401 Water Quality Certification.

5.4.4 BMP Implementation Requirements

The City will develop and implement a construction site BMP program that adequately addresses the potential for construction site pollutants reaching the City's MS4. The City will utilize the Los Angeles County Department of Public Works BMP Design Manual as a technical reference for construction site operators to select, design and maintain BMPs on their construction site.

All construction sites shall undergo a risk assessment during the LSWPPP/ESCP development process. The risk assessment shall identify a projects risk level on a low risk (Risk 1) to high risk (Risk 3) scale. The project risk assessment will be based on the potential for erosion from the site and the sensitivity of the receiving water. Receiving waters listed on the Clean Water Act (CWA) section 303(d) list for sediment or siltation are considered to be high risk. Receiving water bodies that have beneficial uses of SPWN, COLD and MIGR will also be categorized high risk. The risk assessment shall conform to the procedures defined in Appendix 1 of the California Construction General Permit. Minimum BMPs for all construction sites shall include BMPs identified in the CASQA Construction BMP Handbook and be determined by the Qualified SWPPP Developer (QSD).

The following list of Minimum BMPs for Paving Projects shall be utilized for all paving projects.

Paving Project Minimum BMPs

- Restrict paving and re-paving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions.
- Install gravel beds and filter fabric or to the equivalent inlet protection at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat.
- Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or receiving waters.
- Minimize non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt.
- Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly.
- Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly.
- Cover the "Cold-mix" asphalt (i.e. per-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm.
- Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
- Minimize airborne dust by using water spray or other approved dust suppressants during grinding.
- Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or receiving waters.
- Protect stockpiles with a cover or sediment barriers during rain.

All LSWPPP/ESCPs submitted to the City shall include BMP cut sheets, design guidelines and maintenance expectations that are approved by the City. BMPs design guidelines shall conform to the Los Angeles County Department of Public Works BMP Design Manual or a City approved equal.

5.4.5 Construction Site Inspection

The construction site inspection program is critical to the Development and Construction Program. Construction site inspections aid the City in verifying and enforcing the requirements of the LSWPPP/ESCP or standard practices focused on maintain water quality in the City.

The City will continue to implement a construction site inspection program and train inspectors on NPDES related concerns that may originate from construction sites.

Inspection frequencies will vary based on construction site size and activities. Sites of one acre or larger that discharge to a receiving water determined to pose a significant threat to water quality shall be inspected at minimum, prior to a rain event of two or more consecutive days with greater than 50% chance of rain fall forecasted by NOAA, within 48 hours of a ½-inch rain event and at least once every two weeks. All other construction sites of one acre or more shall be inspected at least monthly.

The City will inspect construction sites during all phases of construction. The first inspection will take place prior to disturbance of soil to ensure that all required BMPs are in place. Site inspections shall also take place during active construction activities to ensure that all applicable BMPs are in place and properly maintained. A final inspection shall take place as a condition of, and prior to issuing a Certificate of Occupancy. The final inspection will confirm that the site has reached final stabilization and that all temporary erosion and sediment BMPs are removed.

Construction site inspections shall include:

- Verification of active coverage under the Construction General Permit (sites >1 acre)
- Review of applicable LSWPPP/ESCP and verification of installation of all selected BMPs
- Assessment of appropriateness of the planned and installed BMPs
- Observation of record keeping of non-storm water discharges
- Development of a written or electronic inspection report
- Tracking of inspections

When a site inspection results in observed deficiencies in an ESCP implementation or other NPDES related requirements, the City will notify the construction site operator of the issues identified. The site owner/operator will be assigned a reasonable time period to fix the issue prior to the enforcement being escalated through the progressive enforcement policy.

5.5 Public Agency Activities

The City is required to develop and implement a Public Agency Activities Program. It is the intent of this program to minimize storm water pollution impacts from city owned or operated facilities and activities. The program will also identify opportunities to reduce storm water pollution impacts from areas of existing development. Requirements for Public Facilities and Activities Program shall include the following:

- Public Construction Activities Management
- Public Facilities Inventory
- Inventory of Existing Development for Retrofitting Opportunities
- Public Facility and Activity Management
- Vehicle and Equipment Wash Areas
- Landscape, Park, and Recreational Facilities Management
- Storm Drain Operational and Maintenance
- Emergency Procedures
- Municipal Employee and Contractor Training

5.5.1 Public Construction Activities Management

The City's public construction activities shall conform to the Planning and Development (Section 5.3) and Development Construction Programs (Section 5.4) included in this document. The City will require that all contractors and construction related activities that take place under a City contract will conform to the requirements of the MS4 Permit and the California Construction General Permit.

5.5.1 Public Facility Inventory

The City will develop an inventory of all City owned or operated facilities that are potential sources of storm water pollution within its jurisdiction. Facilities that are required to be tracked are as follows:

- Public Parking Lots
- Equipment Storage and Maintenance Facilities
- Public Parks
- Storm Water Management Facilities
- Fire Stations
- All Other City Owned Facilities
- Public Restrooms

Not all of the facilities listed in the MS4 Permit are included in the above list. City owned facilities excluded from the list are not found within the City's jurisdiction.

Of the facilities identified in this document, the following minimum information shall be tracked by the City:

- Name of the Facility
- Name of the Facility Manager
- Address of the facility (physical and mailing)
- Narrative of the activities performed at the site
- If the site has coverage under the Industrial General Permit

5.5.2 Inventory of Existing Retrofitting Opportunities

The MS4 Permit requires that permittees develop an inventory of retrofitting opportunities with in the public right of way. The inventory of retrofitting opportunities will be utilized by permittees when considering potential projects. All opportunities considered for retrofitting are required to undergo a screening process. Factors that may be considered when screening a project are outlined below:

- Feasibility
- Cost Effectiveness
- Pollution Removal Effectiveness
- Tributary Area Potentially Treated
- Maintenance Requirements
- Land Owner Cooperation
- Neighborhood Acceptance
- Aesthetic Qualities
- Potential Improvements to Public Health and Safety

Projects determined to have high levels of feasibility and effectiveness in water quality improvement shall be given the highest priority for implementation. High priority projects should be considered when off-site mitigation is required for a re-development or new development project. The City will work with residents and land owners to develop and implement an effective retrofitting program. The City will educate residents and landowners of the benefits for implementing BMPs through the education and outreach program. City staff will work with owners of development projects subject to the requirements of the LID Ordinance to ensure that feasible opportunities for water quality improvement are maximized. At the discretion of the City, retrofit projects may also be included in other public infrastructure projects.

5.5.3 Public Agency Facility and Activity Management

Permittees are required to obtain coverage under the Industrial General Permit for all permittee owned or operated facilities that require coverage based on activities that take place at the sites. The City does not currently have any public facilities that require separate coverage under the Industrial General Permit.

All other City owned or operated sites shall implement activity based BMPs identified as follows:

No vehicle or equipment maintenance or washing takes place at a City owned or operated facility. City staff are trained to address spills and prevent discharge of pollutants to the MS4. The City also works with Los Angeles County Fire and Public Works to provide spill response for spills that are beyond the City's ability to mitigate.

5.5.4 Landscape, Park, and Recreational Facilities Management

All landscape, park and recreational facilities that are City owned or maintained will conform to the requirements of the MS4 Permit. Per section VI.D.9.g of the MS4 Permit, the City will implement and maintain applicable BMPs identified in Table 3-5 of this document.

The MS4 Permit requires that the City implement an Integrated Pest Management (IPM) program. The intent of the IPM is to limit or prevent the impact on water quality from the use of pesticides. The IPM is required to have the following provisions:

- Pesticides are only used if monitoring indicates that they are needed, and pesticides are applied according to applicable permits and established guidelines.
- Treatments are made with the goal of removing only the target organism.
- Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial non-targeted organisms, and the environment.
- The use of pesticides, including Organophosphates and Pyrethroids, does not threaten water quality.
- Partner with other agencies and organizations to encourage the use of IPM.
- Adopt and verifiably implement policies, procedures, and/ or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) for Public Agency Facilities and Activities.
- Policies, procedures, and ordinances shall include commitments and a schedule to reduce the use of pesticides that cause impairment to surface waters by implementing the following procedures:
    - Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units.
    - Quantify pesticides use by staff and hired contractors.
    - Demonstrate implementation of IPM alternatives where feasible to reduce pesticide use.

As part of a normal landscaping maintenance program, the City does utilize fertilizers. The City does not use pesticides or herbicides on a regular basis. On an as needed basis, pesticides are used to eliminate some common pests and rodents. Pesticides are applied by qualified staff that have been trained on the proper application methods and potential impacts of the pesticides utilized. All use of pesticides is recorded and reported to the Los Angeles County Agriculture Commission.

5.5.6 Storm Drain Operation and Maintenance

The City is required to conform to the requirements of the section VI.D.9.h of the MS4 Permit. The City will implement and maintain applicable BMPs identified in this document. The City has an effective trash management program in place for public events. If required, additional trash receptacles are placed throughout the area that an event is to take place. Following the conclusion of the event trash receptacles are emptied with in one business day after the event.

The City utilizes staff and volunteers in an effort to minimize trash and litter generated at an event. Sites of public events are restored to their daily operation following the conclusion of an event. The City contracts to Los Angeles County Public Works for maintenance of the City's storm drain system and catch basins. City managed drainage structures are cleaned of any trash or debris present on an annual basis prior to the start of the rainy season.

The City is required to prevent infiltration from the sanitary sewer system into the MS4. The City utilizes the following program controls:

- Adequate plan checking for construction and new development
- Incident response training for its municipal employees that identify sanitary sewer spills
- MS4 maintenance and inspections
- Interagency coordination with sewer agencies
- Proper education of municipal staff and contractors conducting field operations on the sanitary sewer or MS4

5.5.7 Streets, Roads and Parking Facilities Maintenance

Streets, Roads and Parking Facilities play a major role in the generation and transportation of pollutants to the MS4. The City is predominately single family residential developments which generate low volumes of trash and debris and most of the streets are privately maintained.

If roadway reconstruction is necessary the pavement BMPs presented in Section 5.4.4 shall be implemented.

5.5.8 Emergency Procedures

The City is primarily a contract city and depends on outside agencies or contractors to provide maintenance services. In the event of an NPDES emergency, the City will contact the applicable agency or contractor that the City contracts with for maintenance services that are related to the emergency. Contact information is distributed to City staff, residents and emergency dispatch.

.

- Emergency Contacts for the City of La Habra Heights: (911-LASD)
- Los Angeles County Sewer Maintenance District: (800) 675-HELP
- Los Angeles County Department of Public Works: (888) CLEAN-LA

- Los Angeles County Fire Department: Non-Emergency (562 694 8384)
- Emergency 911

The MS4 Permit allows for permittees to conduct repairs essential to public service systems and infrastructure in emergency situations with a self-waiver of the provisions of the order as follows:

- The City shall abide by all other regulatory requirements, including notification to other agencies as appropriate.
- Where the self-waiver has been invoked, the City shall submit to the Regional Water Board Executive Officer a statement of the occurrence of the emergency, an explanation of the circumstances, and the measures that were implemented to reduce the threat to water quality, no later than 30 business days after the situation of emergency has passed.
- Minor repairs of essential public services systems and infrastructure in emergency situation (that can be completed in less than one week) are not subject to the notification provisions.
- Appropriate BMPs to reduce the threat to water quality shall be implemented.

5.5.9 Employee and Contractor Training

The City will implement an employee training program that targets job specific and general BMP training to City maintenance staff. Appropriate City staff will receive training on NPDES related topics and procedures at least once per year.

5.6 Illicit Connection and Illicit Discharge Elimination Program

The City is required to develop and implement an illicit connection and illicit discharge elimination program. The program will be utilized by City staff to identify and eliminate illicit connections and discharges to the MS4. MS4 discharges containing illicit connections and discharges have been known to contain pollutants which may cause or contribute to the impairment of a receiving water body. The program shall include the following components:

- Procedures for conducting source investigations for IC/IDs
- Procedures for eliminating the source of IC/IDs
- Procedures for public reporting of illicit discharges
- Spill response plan
- IC/IDs education and training for Permittee staff

5.6.1 Illicit Discharge Source Investigation and Elimination

The City will make a reasonable effort to initiate an illicit discharge source investigation as soon as staff receives notification of an event. All reports of illicit discharges will be

investigated. As required by the MS4 Permit, the City will initiate an illicit discharge source investigation within 72 hours of becoming aware to the illicit discharge. Investigations will be conducted by available qualified City or County Staff in the applicable department based on the initial details reported.

Illicit discharges suspected to contain sanitary sewage shall be the highest priority for investigation. The source of sanitary sewer discharges should be traced back to the point of origination and stopped immediately if possible. Discharges of sanitary sewage from the sanitary sewer system shall be differed to Los Angeles County Sewer Maintenance District.

The City will track all reports and investigations of illicit discharges that are determined to originate from or enter the jurisdictional area of the City. Minimum information included in the City's tracking program is as follows:

- Date and time of observed illicit discharge
- Location of observed illicit discharge
- Results of the investigation
- Date the investigation was closed

Illicit discharge inspection and response procedures shall conform to the following:

1. Following receipt of a reported illicit discharge qualified staff will be directed to investigate as soon as possible but no later than 72 hours after initial receipt of the report.

    a. Suspected discharge from construction site, private residents, or commercial site: Staff shall contact the on call building inspector to conduct an investigation.
    b. Suspected discharge from public works project site: Staff shall contact the City Engineer's office. The project manager will conduct an investigation or coordinate with the public works inspector to investigate.
    c. Suspected Hazmat discharge: Staff shall contact Fire Department. Emergency: 911
    d. All other suspected discharges: Staff shall contact Los Angeles Flood Control District at 1-888- CLEAN-LA.

2. Staff dispatched to the reported discharge site shall conduct an investigation and if possible identify the source of the discharge.

3. Dispatched staff shall notify the responsible party of the issue and require that corrective measures are taken to eliminate the illicit discharge. It shall be noted by staff if the illicit discharge has made it to the MS4 by catch basin or other route.

4. The City shall conduct a follow up investigation following the elimination of the illicit discharge to confirm that the illicit discharge is eliminated and that the site has been cleaned to the satisfaction of the City.

5. If the source is determined to be upstream from the City's jurisdiction, staff dispatched to the site shall report back to the City's Community Services Department staff. City staff will provide notice of the illicit discharge to the agency as soon as possible. City staff will notify in writing the upstream agency and the Regional Board of the illicit discharge no later than 30 days following the determination of the discharge origination.

6. If the source of an ongoing illicit discharge is unidentified the City shall proceed with the required actions identified in section VI.D.10.v of the MS4 Permit.

5.6.2 Public Reporting of Non-Storm Water Discharges and Spills

The City has also implemented and will continue to maintain signage adjacent to open channels or creeks that display information regarding dumping prohibitions. City staff will be trained to document all reports of complaint calls received by the City. Complaints will be documented and tracked. The City will investigate all complaints in a timely manner and will include the results and follow up actions if needed on the tracking system selected by the City to document complaints.

5.6.3 Spill Response Plan

Upon receipt of a complaint or notice of an illicit discharge during normal business hours the City will determine based on the details reported to either dispatch an inspector to investigate or forward the complaint to Los Angeles County. The County reporting hotline is available to residents and City Staff. Once reported to Los Angeles County through the reporting hotline. County hotline operators direct the call to the appropriate maintenance crew. The County crew will then be dispatched to the location reported to address the issue identified.

5.6.4 Existing City Ordinances - Large Animal Management

Copies of the existing City Pet Waste and Large Animal Management ordinances are included in Appendix D. Also included is the Large Animal Frequently Asked Questions and a City Council Staff report concerning the Large Animal ordinance.

5.7 GOALS & SOLUTIONS

City staff has reviewed the findings of this WMP and, remaining cognizant of the City's General Plan, has developed long term goals and identified potential solutions. The following results reflect the City's direction with respect to the four priority water quality issues identified in this document. Recommendations and Action Items are listed in order of priority.

Note that these Goals and Solutions will need to be brought to public hearing, likely a City Council meeting, for presentation to the residents before finalizing any plans and/or ordinances.

5.7.1 Septic Systems

As presented in Section 2.10, most of the residential homes are on septic systems. In response to the future bacteria TMDL, the City is moving towards a formalized internal program through integration of the County inspection program and internal procedures. It is noted that Assembly Bill 885 is also required of all septic owners in California. One of the key issues is funding assistance to those homeowners who may require financial assistance.

GOAL: Identify and prioritize failing septic systems

Rational: This goal supports information which indicates that residents are aware of significant potential of failed septic systems but not as aware of the associated bacterial and nutrient contamination of surface water due mostly to the age of existing systems and limiting factors of un-suitable soils and topography. However, due to the complexity of identifying true sources of pollution from failed septic systems, the goal reflects the consensus that more specific information must be obtained before mandating corrective measures.

Proposed Work Plan:

1. Conduct an inventory of septic systems. Locate and target areas of the greatest concentration of these homes. Funding: General Fund
2. Explore the State funded opportunities for these areas. Note it is unlikely that the City will qualify for a Disadvantage Community Assistance; however this funding source will be investigated.
3. Review and implement California Assembly Bill 885. Assembly Bill 885 amended California Water Code section 13290, which required the State Water Board to develop statewide standards or regulations for permitting and operation of OWTS. See Appendix B for AB885 information and a copy of the City Septic System ordinance.
4. Research the possibility of using package plant or cluster systems, to serve problem locations. Treat only effluent; use existing septic tanks to settle solids. Potential funding source: Unknown at this time; would likely need to be privately funded and maintained.

In May 2016, the City's LAMP document was completed. This document meets the AB 885 requirements.

Two recommendations were discussed:

Recommendation #1: Develop an incentive based demonstration of new technology that focuses on systems with problem soils and topographic issues.

Action Item: Locate all septic sites in the watershed. Working with the residents and, using an on-line GIS program, have residents generally locate their septic systems and submit to the City for integration into city mapping documents. City –specific Focus: Focus inventory and inspections on AB885 compliance for all locations. Phased inventory and Inspections to

start in the subwatersheds identified in the RAA as requiring bacteria reductions.

Target Date: December 2015; Technical Assistance: June 2015. Estimated Cost: $5,000 [Note: some residents may not participate citing privacy laws]

Must also work with Los Angeles County Health Department concerning data and reporting.

Action Item: Determine the best available on-site technology suitable for correcting the failed systems. Potential technology includes: re-circulating sand filters, mound systems, drip-irrigation systems, perimeter sub-surface drainage, constructed wetland systems, etc. Develop information package for residents. Target Date: December 2015; Technical Assistance: June 2015. Estimated Cost: $5,000.

Action Item: Investigate the creation of a DAC to subsidize the replacement of the failed systems with the most suitable technology. Potential Funding Sources: TBD. Target Date: June 2015

Action Item: Conduct post installation inspection and monitoring of the systems to determine effectiveness of the new technology. Utilize dye test and E. coli/nutrient monitoring. Technical Assistance: County inspectors, private consultants. Program is focused on new technically installations. Target dates to be prepared after a project is installed. No projects are planned at this time. Target Date: TBD. Estimated Cost: unknown

Recommendation #2: Develop an educational program on the effects of improper septic systems, diagnosing potentially failing systems, and how to repair or replace failing systems.

Action Item: Develop a multi-media marketing approach targeted toward the residents of the watershed and the county. Materials will focus on: highlighting the water quality and environmental effects of failed septic systems, threats to human health from failed septic systems, how to determine if your system is operating correctly, who to contact for assistance, and methods for correcting problems. Marketing materials include:

- Informational bulletins
- Newspaper/Newsletter/City website advertising
- Press releases and feature articles; case studies.
- Display for use at city events.
- Powerpoint or slide show presentation for use by local officials during presentations to civic clubs, public hearings, meetings, or events.

Specific public education requirements:

- Focus on subwatersheds with greatest impacts as presented in the RAA

Technical Assistance: In-house Staff, private consultants and/or marketing firms. Target Date: December 2014 and on-going. Potential Funding Sources: General Fund. Estimated Cost: $4,500.

5.7.2 Resource Production Sites

As presented in Section 5.2, a total of 208 acres is designated as resource production however a review of the current active sites presents that approximately only 20 acres may be in use at any time. The City is currently not required for any other compliance regulations to inventory, track or monitor these sites. The City does perform fire department inspections at these sites focusing on fire management criteria. This section presents a proposed new citywide plan to inventory, track and monitor the activity of these sites.

GOAL: Develop a Resource Production Land Use Plan focusing on stormwater management

Rationale: This goal will provide for baseline documentation concerning this landuse type. This goal reflects the consensus that more specific information must be obtained before mandating corrective measures.

Proposed Work Plan:

1. Develop a proposed plan for submittal and review to the Water Board. The proposed plan will present the work tasks to meet the goal. The work plan will at a minimum require:
    - Document ownership
    - Inventory of all well sites. Locate with longitude and latitude
    - Document well status – active, non-active, closed
    - Document existing well permits; well closure documents
    - Document well physical characteristics
    - Document any site specifics
    - Inspection requirements; program specific inspection form
        - Include inspecting the wells and surrounding areas twice per year for any evidence of discharges from resource production or other ancillary activities on-site.
    - Enforcement procedures
    - CEQA requirements; typical language
    - Reporting requirements

Funding: General Fund
Deadline: Work Plan to be submitted early September 2015 (Revised to end of 2017)

2. Once approved by Water Board, implement the Plan tasks:
    - Review existing City documentation
    - Data requests to owners
    - Site inspections

    Funding: General Fund
    Deadline: Plan implementation complete by December 2016 (note need to get funding and schedule approved by City Council)

3. Prepare reporting documents, per the approved plan.
    - Site specific recommendations
    - Annual inspection requirements
    - Example annual documentation

Additional recommendations will be provided through the Plan preparation process.

Action Item: Development and implementation of the plan. Plan development approval date: September 2015 (revised to December 2017); Plan implementation completion: December 2016 (Revised June 2018); Reporting complete: March 2016 (Revised October 2018). Estimated cost: dependent on City staffing and existing data.

5.7.3 Residential Runoff

For this topic, the City concluded that the most direct way to minimize residential runoff to waterways is to establish filter strips/buffers along waterways. Education on the proper use of chemicals, labeling requirements, and the hazards of improper use was also agreed upon. Proposed approach is targeting these efforts to seniors and youth through the parks program. It is noted that the City has no schools within its jurisdiction. Landscape runoff is also addressed.

Goal - Establish filter strips and buffers throughout the City

Rational: Historically there are known locations of banks which are currently impacted by erosional issues. The City's research has indicated that installation of filter strips will be the most practical measure to reduce this sediment load and reduce pressure on eroding banks. Note also Section 5.4 Natural Erosion.

Goal - Educate local residents on the proper use of chemicals, labeling requirements, and the hazards of improper use.

Rational: Although no direct evidence indicates significant water quality problems associated with improper use of pesticides or fertilizer application, the City believes that prevention of future problems begins with solid educational efforts.

Goal - Encourage minimization of all residential runoff

Rational: Residential runoff is the primary and greatest source of dry weather flows within the City. Management of residential runoff as a source control BMP is the first step to city-wide pollutant loading management.

Alternatives discussed:

1. On-land “proactive” assessment.
2. Education.
3. Personal contacts.
4. New or modified rules or laws
5. Compliance/enforcement activities.
6. Incentives.

Recommendation #1: Offer “proactive assessments” of residential properties focusing on drainage and pollutant loading. Documentation of assessments would include: address, Owner name, general summary of recommendations. It is noted that specific engineering recommendations cannot be provided by the City.

Action Item: Present this recommendation to City Council for public discussion. Can the City legally offer this function? Would need to decide who would do these assessments. Training for the staff who would be providing service. Technical Assistance: In-house staff, private consultants. Target Date: Program development and presentation to City Council - December 2015; Assessment Implementation – starting in early 2016. Estimated Cost: $10,000 to initiate; $25,000 per year to provide service.

Action Item: Develop a public awareness program to educate the residents on typical pollutant loading. Target all landowners. Possible outreach materials include:

- Informational bulletins and targeted mailings.
- Newspaper/Newsletter/Web Site advertising.

Recommendation #2: Establish filter strips and buffers along accessible stream-banks.

Action Item: Develop City-specific design parameters for filter strips and buffers. Include cross-sections and vegetation requirements. Include operations and maintenance requirements. Technical Assistance: In-house staff, private consultants. Target Date: December 2017. Estimated Cost: $15,000.

Recommendation #3: Develop a residential BMP “tool box”. Include criteria for filter strips and buffers along accessible stream-banks.

Action Item: Conduct an inventory of locations where existing landscape could be considered filter strips and buffers. Focus along banks, including accessible and private areas. Inventory includes length, width, and location of existing buffers. Map current buffers using GPS. Technical Assistance: In-house staff, private consultants. Target Date: December 2016 (Revised to 2017-2018). Estimated Cost: $15,000.

Action Item: Develop a public awareness program to educate the residents on the benefits of buffers. Include developing an incentive program for homeowners. Target landowners with no existing buffers. Possible outreach materials include:

- Informational bulletins and targeted mailings.
- Newspaper/Newsletter/Web Site advertising.
- Press releases and feature articles; case studies.
- Display for use at city events.
- Phone calls and/or personal visits to residences
- Informational flyer

Technical Assistance: Private stormwater BMP consultants; in-house staff. Target Date: December 2015. Incentive Program Development: Research complete December 2015. Potential Funding Sources: TBD, General Fund. Estimated Cost: $15,000.

Action Item: Establish filter strips or buffers along drainages. Technical Assistance: residents, private contractors. Target Date: dependent on residents and locational needs. Potential Funding Sources: private. Estimated Cost: dependent on locational needs.

Action Item: Consider the implementation of criteria concerning zinc coated chain link fencing. Research other private fence options. Provide public education on the subject. Possible inclusion into ordinance. Technical Assistance: residents, private contractors. Target Date: dependent on residents and locational needs. Potential Funding Sources: private. Estimated Cost: dependent on locational needs.

Recommendation #4: Develop an educational program on the proper use of chemicals, labeling requirements, and the hazards of improper use.

Action Item: Develop a multi-media marketing approach targeted toward the residents of the watershed. Materials will focus on: compliance with pesticide labeling requirements, storage & disposal of chemicals and containers, potential threats to human health and the environment, proper use. Marketing materials include:

- Informational bulletins.
- Press releases and feature articles; case studies.
- Display for use at city events.

- Powerpoint or slide show presentation for use by local officials during presentations to civic clubs, public hearings, meetings, or events.

Technical Assistance: In-house staff, County materials, private consultants. Target Date: December 2015. Potential Funding Sources: TBD Estimated Cost: $10,000.

Recommendation #5: Develop residential runoff public education program. Focusing on dry weather landscape runoff and wet weather. Develop an educational program on the proper use of chemicals, labeling requirements, and the hazards of improper use.

Action Item: Develop a multi-media marketing approach targeted toward the residents of the watershed. Materials will focus on: compliance with pesticide labeling requirements, storage & disposal of chemicals and containers, potential threats to human health and the environment, proper use. Marketing materials include:

- Informational bulletins.
- Press releases and feature articles; case studies.
- Display for use at city events.
- Powerpoint or slide show presentation for use by local officials during presentations to civic clubs, public hearings, meetings, or events.

Technical Assistance: In-house staff, County materials, private consultants. Target Date: First information bulletin released Fall Quarter 2014; Quarterly bulletins on-going. Public presentations are planned to start in 2015.

5.7.4 Pet Waste Runoff

For this topic, the City concluded that the most direct way to minimize pert waste runoff to waterways is to provide on-going public outreach and education. The City has historically taken the potential pollutant loading from pet waste seriously. In the City, this task includes large animals. Focused education on pet waste and trash will also be included. The City will target these efforts by working through the existing equestrian groups, parks program and the residential outreach presented in 5.7.3.

Goal - Educate local residents on the proper disposal methods for pet waste and residential trash and debris.

Rational: One of the regional TMDLS and water quality objectives is the reduction of bacteria. The City believes that prevention of future problems begins with solid educational efforts.

Alternatives discussed:

1. On-land assessment.
2. Education.
3. Personal contacts.
4. New or modified rules or laws
5. Compliance/enforcement activities.
6. Incentives.

Recommendation #1: Establish a focused large animal public education program

Action Item: Develop a public outreach program to educated watershed issues and benefits of proper waste management. Target all landowners/residents. Marketing materials include:

- Informational bulletins and targeted mailings.
- Newspaper/Newsletter/Web Site advertising.
- Press releases and feature articles; case studies.
- Display for use at city events.
- Teaming with equestrian groups on education.
- Organized luncheons or breakfasts.
- Informational flyer

Technical Assistance: In-house staff, private contractors. Target Date: December 2015. Potential Funding Sources: TBD. Estimated Cost: $5,000.

Recommendation #2: Establish methods for developing a large animal inventory program. This would include animal housing locations

Action Item: Develop legal authority to require large animal inventory and housing documentation.

Technical Assistance: In-house staff, private contractors. Target Date: December 2016 and on-going. Potential Funding Sources: TBD. Estimated Cost: $5,000.

5.7.5 Natural Erosion

The City has focused this analysis on the areas of localized bank and slope erosion. These locations are to be identified and ranked as part of comprehensive inventory, then take steps to repair the most severe sites. A common practice to manage this issue is to establish filter strips and buffers wherever possible. The City has also agreed that a demonstration of new or alternative methods for controlling bank erosion be established to promote education and awareness.

GOAL - Identify areas in the watershed most prone to severe bank and slope erosion and install appropriate conservation practices to the extent practicable for residential ownership.

Rational: This is a continuing task within the City. Most residents manage their slopes and runoff as private maintenance. Funding constraints warrant limitation of corrective measures to only the most severely eroding sites. Focus would be on public education and resources

GOAL - Develop a public education program to illustrate new or alternates methods of controlling bank and slope erosion to promote education and public awareness.

Rational: Traditional “hard armor” approaches to bank stabilization may be cost prohibitive in many situations. The City staff indicated it important to evaluate other alternatives that may be more cost effective and to show-case the benefits of bank and slope stabilization practices to the public to facilitate implementation of the first Goal.

Alternatives discussed:

1. Provide new ditch re-construction design criteria.
2. Identify and classify most severe areas of bank and slope erosion in the watershed.
3. Restore and/or rehabilitate critical areas.
4. Demonstration of new methods of erosion control.
5. Informational/educational program.
6. Establish filter strips & buffers.

Recommendation #1: Establish local priority areas for future funding.

Action Item: Research funding opportunities for privately held land improvements.

Recommendation #2: Conduct a comprehensive inventory of bank and slope erosion in the watershed and classify according to severity.

Action Item: Develop list of areas with potential bank and slope erosion. Develop method for classification of severity of erosion. Technical Assistance: in-house staff, private consultants. Target Date: June 2016. Estimated Cost: $7,500

Action Item: Conduct comprehensive inventory of the watershed using a “to be developed”, City-specific, classification method. Technical Assistance: private consultants Target Date: June 2017. Potential Funding: TBD [Will need access to private property.]

Recommendation #3: Prioritize the needs for repair, restoration, or rehabilitation of severely eroding banks and slopes, according to results of inventory.

Action Item: Provide education and resources to help with designing appropriate bank and slope erosion practices for the sites identified through the inventory process. Technical Assistance: private consultants and/or engineers. Target Date: December 2016. Estimated Cost: $30,000.

Action Item: Install erosion practices at priority sites. Technical Assistance: private consultants and/or engineers, private contractors, landscape architects. Target Date: TBD. Estimated Cost: site dependent. Potential Funding Sources: private funding.

5.7.6 Municipal Discharges

The City's analysis presents that discharges from municipal facilities in the watershed are most likely not posing a serious threat to water quality if they are in compliance with permit conditions, because there a so few located in the watershed. Consensus for this topic was to focus efforts on the identification of operations that have a high potential for spills or accidents.

Goal - Reduce or eliminate un-permitted discharges and potential for spills and/or accidents.

Rational: Although no direct evidence indicates significant water quality problems associated with municipal discharges, the City agrees that prevention of future problems begins with solid educational efforts.

Alternatives discussed:

- Inventory of accidental/illegal point sources or high risk areas.
- Education on compliance with existing regulations.

Recommendation #1: Establish a Local Implementation Plan focusing on operations with surface water discharges. LIP completion December 2017

Action Item: Encourage the development City specific stormwater and hazardous materials program with focus on spill prevention. Target Date: December 2015. Technical Assistance: in-house staff, private consultant

Action Item: For the municipal properties encourage the development of voluntary environmental audits and compliance assistance for operations that discharge to surface waters. Technical Assistance: in-house staff. Target Date: June 2015

Action Item: For the Water District – collaborate on Permit requirements and formalize necessary reporting procedures. Technical Assistance: in-house staff. Target Date: December 2015

SECTION 6 MEASURING PROGRESS

The City will utilize soft and hard measures to document the progress of the program. These will included:

#1: Septic Systems: Progress toward meeting the goals for failing septic systems will be measured against the following milestones, in order of importance:

1. Tracking of inventory and number of recently repaired/replaced septic systems.

2. Numbers of people targeted and reached through educational and marketing efforts.

#2 Residential Runoff: Progress toward meeting the goals for residential runoff will be measured against the following milestones, in order of importance:

1. On-going visual observation concerning bacteria based pollutants (pet waste and trash).
2. On-going large animal inventory and housing tracking.

3. On-going tracking and research concerning use of zinc coated chain link fencing.

3. Numbers of people targeted and reached through educational and marketing efforts.

#3 Natural Erosion: Progress toward meeting the goals for controlling natural erosion will be measured against the following milestones, in order of importance

1. Establishment of a successful number of people reached through educational component.

2. Establishment of filter strips/buffers adjacent to banks and slopes.

3. Completion of the inventory and targeting of critical areas for repair.

4. Tracking of installation of stabilization measures.

#4 Municipal Discharges: Progress toward meeting the goals for Municipal runoff will be measured against the following milestones, in order of importance:

1. Municipal Development of an Local Implementation Plan (LIP)

2. Number of participants participating in the voluntary audit program

SECTION 7 FUNDING SOURCES

The table below depicts potential funding sources and contact information for recommended projects.

SOURCE	CONTACT INFO.
Section 319	IDEM. (317) 232-0019 www.ai.org/idem/owm
Prop 84 – California	http://www.waterboards.ca.gov/water_issues/programs/grants_loans/prop84/
2013 California American Water Environmental Grant Program	http://www.amwater.com/corporate-responsibility/environmental-sustainability/environmental-stewardship-and-innovation/environmental-grant-program.html#California
Chemical Emergency Preparedness & Prevention Technical Assistance Grants	USEPA- (202) 260-0030 www.epa.gov/ceppo
Pesticide Environmental Stewardship Grants	USEPA. (703) 308-7035 www.pesp.org
Watershed Protection & Flood Prevention Program	USDA, NRCS (202) 720-3534 www.ftw.nrcs.usda.gov/programs.html
Watershed Assistance Grants	USEPA (202) 260-4538 www.epa.gov/owow/wag.html
Water Quality Cooperative Agreements	USEPA (202) 260-9545 www.epa.gov/owm/wm042000.htm

SECTION 8 ADMINISTRATIVE

8.1 Plan Evolution/Progress Reports

The City Public Works Department will be the primary record-keeper and responsible entity for the watershed management program. The document will be reviewed annually by the City to determine if established goals are being met according to the specified schedule and to make any adjustments or updates based on new information. The results of the annual evaluation will be made available to stakeholders in the watershed via the MS4 Annual Report.

8.2 Contact Information

If you have any questions regarding the intent or content of this plan, please contact:

Stormwater Coordinator
Mr. Rafferty Wooldridge
1245 N. Hacienda Rd.
La Habra Heights, CA 90631
T: 562.694.6302 x 235 | F: 562.690.5010
rwooldridge@lhhcity.org

City Manager
Mr. Jarad Hildenbrand
1245 N. Hacienda Rd.
La Habra Heights, CA 90631
562.694.6302
jhildenbrand@Lhhcity.org

WMP Preparer
CG Resource Management and Engineering, Inc
Cynthia Gabaldon
Cynthia.gabaldon@cgrme.com

RAA Preparer
Kevin Huniu
URS Corporation (Oakland)
Kevin.Huniu@urs.com

8.3 Distribution List

Hard copies and electronic versions, including the Drainage Facility figures, of this watershed management program will be available at the Public Works offices.

SECTION 9 REFERENCES

Ackerman, D. and K. Schiff. 2003. Modeling Storm Water Mass Emissions to the Southern California Bight. Journal of Environmental Engineering. April 2003.

Bicknell, B.R., J.C. Imhoff, J.L. Kittle Jr., T.H. Jobes, and A.S. Donigian, Jr. 2001. Hydrological Simulation Program - Fortran (HSPF). User's Manual for Release 12. United States EPA National Exposure Research Laboratory, Athens, GA, in cooperation with U.S. Geological Survey, Water Resources Division, Reston, VA.

California Environmental Protection Agency (CalEPA). 2010. User's Guide for the California Impervious Surface Coefficients. Ecotoxicology Program. Integrated Risk Assessment Branch. Office of Environmental Health Hazard Assessment

City of La Habra Heights. 2004. City of La Habra Heights General Plan.

City of La Habra Heights. 2013. City La Habra Heights General Plan Update Draft Environmental Impact Report.

GHD and City of La Habra Heights, 2012. Final Report, City of La Habra Heights Drainage Facility Mapping

Dibblee, T.W., and Ehrenspeck, H.E., 2001, Geologic map of the Whittier and La Habra quadrangles (western Puente Hills) Los Angeles and Orange Counties, California:

Habitat Authority (Website Access 2014): http://www.habitatauthority.org/resource-management-plan/

Los Angeles County Department of Public Works (Website Access 2014): http://ladpw.org/wmd/npdes/2011-12_Report/Appendicies/APPENDIX%20H%20%20%20LACFCD_2011Bioassessment_FINAL%20REPORT_Mar2012.pdf

Los Angeles Regional Water Quality Control Board (LARWQCB). 1994. Water Quality Control Plan Los Angeles Region.

Los Angeles Regional Water Quality Control Board (LARWQCB). 2000. State of the Watershed – Report on Surface Water Quality. The San Gabriel River Watershed. Los Angeles Regional Water Quality Control Board.

Los Angeles Regional Water Quality Control Board (LARWQCB). 2006. Resolution Number R06-014: Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Metals and Selenium in the San Gabriel River and Impaired Tributaries. July 13, 2006.

Los Angeles Regional Water Quality Control Board (LARWQCB). 2010. Resolution No. R10-007: Los Angeles River Watershed Bacteria Total Maximum Daily Load. July 15, 2010

Los Angeles Regional Water Quality Control Board (LARWQCB). 2014. Personal Communication with Renee Purdy and Ivar Ridgeway. September 8, November 14, and December 5, 2014

Orange County Watersheds (website Access 2014): http://ocwatersheds.com/civicax/filebank/blobdload.aspx?BlobID=10109

Southern California Coastal Water Research Project, January 2008, Technical Report 542, Fecal Indicator Bacteria (FIB) Levels During Dry Weather for Southern California Reference Streams

State Water Resources Control Board. 2004. Water Quality Control Policy for Developing California's Clean Water Act Section 303 (d) List. Adopted September 30, 2004.

State Water Resources Control Board. 2011. 2010 Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report) - Statewide

Trails.com (Website Access 2014): Powder Canyon: Powder Canyon Trail | La Habra Heights California Hikes | Trails.com http://www.trails.com/tcatalog_trail.aspx?trailId=XTR003-069#ixzz2xcJWvqoV

URS, 2014, City of La Habra Heights Reasonable Assurance Analysis, (draft final to RWQCB September 15, 2014; final to RWQCB December 9, 2014)

Wilhelm, I. 2014. Personal communication.

APPENDIX A

LID AND GREEN STREETS ORDINANCE

City of La Habra Heights
AGENDA REPORT

To: Mayor and City Council Meeting: February 13, 2014

From: Shauna Clark, City Manager

SUBJECT: ADOPTION OF A LOW IMPACT DEVELOPMENT ORDINANCE

BACKGROUND

On November 14, 2013, the City Council considered the MS4 Watershed Management Program which calls for the preparation of a Watershed Management Program and other measures to ensure the City of La Habra Heights does not pollute downstream waters (see Attachment 1, November 14, 2013 City Council Report). Measures are in conformance with the City's goal to preserve the existing rural character and call for conformance with state and federal regulations for maintaining the quality of surface water, ground water, water quality and sanitation and storm water runoff. The City has prepared a draft ordinance (Attachment 2) which incorporates Low Impact Development (LID) definitions and regulations into Article 4 and 7 of the Municipal Code and includes a Green Streets Policy for major public rights-of-way.

The City Council directed staff to schedule the proposed ordinance for Planning Commission review. At a Special Meeting on December 17, 2013, the Planning Commission considered the ordinance and voted 5-0 to approve the adoption of Resolution 2013-04 recommending City Council approval of the ordinance.

RECOMMENDATIONS

Introduce Ordinance No. 2014-____ by title only, waive the first reading, and schedule the ordinance for final passage.

ATTACHMENTS

1. November 14, 2013 City Council Report (MS4 NPDES Watershed Management Program)
2. Draft Ordinance No. 2014-XX

ITEM# 21

City of La Habra Heights
AGENDA REPORT

To: Mayor and City Council Meeting: November 14, 2013

From: Shauna Clark, City Manager

SUBJECT: MS4 NPDES WATERSHED MANAGEMENT PROGRAM

BACKGROUND

On November 8, 2012, the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) adopted the Municipal Separate Storm Sewer System (MS4) Permit (i.e. Order No. R-2012-0175)[1]. This 158 page order designates La Habra Heights and 83 other cities within Los Angeles County as permittees that must comply with MS4 final waste discharge requirements as they affect the watersheds of Los Angeles County. The order encourages each agency to adopt a Watershed Management Program (WMP). WMPs set forth measures to ensure that a City has met applicable water quality based effluent limitations (wet weather and dry weather runoff levels) that do not contribute to exceedances of receiving water limitations (RWLs). Simply, runoff from anywhere in La Habra Heights shall not be of such poor water quality or large enough quantities to pollute downstream waters.

RWQCB has adopted TMDLs (Total Maximum Daily Loads) and WQBELs (Water Quality Based Effluent Limits) which are numerical control levels for pollutants. Pollutants include metals, bacteria, trash, sediment, and nutrients. The WMP implements BMPs (best management practices) to address expected water quality threats to ensure that pollutants do not exceed TMDL, WQBEL limits. For this City water quality threats might include but are not limited to:

Water Quality Threat	Pollutants
Malfunctioning septic systems	Bacteria/pathogens, nutrients
Residential runoff	Sediment, bacteria/pathogens, nutrients, trash, green waste
Natural Erosion	Sediment, nutrients
Commercial, Industrial, Roads	Organic, inorganic chemicals, nutrients, bacteria/ pathogens
Agriculture	Chemicals, nutrients

In order to comply with Los Angeles County MS4 Permit mandates, the City, among other things must do the following:

1. Document existing stormwater drainage patterns.
2. Identify regional water quality concerns as applicable to the City.
3. Assess water quality conditions in context with above listed threats.
4. Present the results of the above assessment to the Los Angeles County Regional Water Quality Control Board (RWQCB).
5. Work with RWQCB to develop solutions to any concerns about regional water quality.
6. Develop a WMP that incorporates all the steps above.
7. Implement the WMP. The long-range objectives of WMP implementation are to:
   - Improve dry and wet weather water quality flows from the City of La Habra Heights

[1] View at http://www.swrcb.ca.gov/rwqcb4/water_issues/programs/stormwater/municipal/la_ms4/2012/Order%20R4-2012-0175%20-%20A%20Final%20Order%20revised.pdf

ATTACHMENT 1

ITEM# 21

- Address Total Maximum Daily Loads (TMDLs) and Water Quality Based Effluent Limits (WQBELS)
- Promote voluntary conservation
- Provide a means to identify and discuss watershed resources and concerns
- Identify and seek funding to address any concerns

Individual Watershed Management Program

La Habra Heights is one of about twelve cities in Los Angeles County that has decided to prepare an individual WMP rather than joining a permit group. However, the WMP must be approved by the Los Angeles RWQCB. In June 2013, the City Manager filed the required notice of intent to prepare a WMP as a single permittee. On September 16, 2013, Cynthia Gabaldon from URS, Deputy City Attorney Matt Summers, Catherine Leland, and Shauna Clark met with RWQCB executives Ivar Ridgeway and Renee Purdy to present evidence that this City could implement and enforce a WMP as a single permittee. Evidence included the zoning map, SUSMP provisions, the development code, and other measures listed below employed by the City to improve groundwater quality and deter runoff.

RWQCB representatives were receptive to the following accomplishments and characteristics of the City as justification for an individual permit:

- In 2012 the City completed a Stormwater Master Plan which mapped all drainage facilities in the City
- The City has implemented mandatory trash collection
- The City has taken an aggressive stance and expended considerable resources to address animal waste discharge onto city streets and into streambeds
- In 2010 the City adopted the Efficient Landscaping Ordinance
- The City is installing a more efficient irrigation system at The Park
- The zoning map demonstrated that the City is characterized by low density development and hardscape limits
- The City has no sidewalks, curbs or gutters
- About 22% of the City is within the Habitat Conversation district

RWQCB stressed that before they make a final decision, they would like assurances that City groundwater quality does not exceed TMDL/WQBEL limits. They asked the City to do the following:

- Perform an RAA (Reasonable Assurance Analysis)
- Adopt a Low Impact Development Ordinance (LID)
- Adopt a Green Streets Ordinance
- Become a member of the Los Angeles County TAC and attend monthly meetings
- Stay abreast of regional issues by attending meetings of the two permit groups that have a connection to our watersheds

The June 2013 Notice of Intent to file a draft WMP set a deadline of December 28, 2013. This deadline was applicable to cities like ours that had not adopted LID and Green Street ordinances. However, the RWQCB has since agreed to allow cities that show intent to adopt LID and Green Street ordinances to delay filing of the WMP by six months. If the Council agrees to move forward with the LID and green streets policies (send them to the Planning Commission), the Notice of Intent will be revised to extend the WMP deadline to June 2014.

ATTACHMENT 3

Pros and Cons of Permit Group Membership
If La Habra Heights does not get approval to file an individual WMP, the City may be required to join a consortium of other cities implementing a group permits. Because La Habra Heights is within two watersheds, there are two consortiums within our region: the Gateway Cities Watershed Management Authority (lower San Gabriel River Watershed) and the LA County Permit Group (upper San Gabriel River watershed).

Watershed permit groups are like COGs. COGS carve out regional transportation systems over multiple jurisdictions and Watershed Permit Groups plan multi-jurisdictional infrastructure such as sewers and storm drains to improve groundwater quality. The advantages of membership are that each group has acquired the expertise, for example hired an engineer as full-time executive director, to shepherd cities though the development of a watershed management program. Most groups are applying for an Enhanced Watershed Management Program (EMWP) rather than a WMP. An EMWP is a multi-jurisdictional infrastructure plan that projects infrastructure improvements needed over the next several years. EWMPs have an extended filing deadline and a greater chance of landing infrastructure grants. One of the groups obtained $10,000,000 in Proposition 84 bond funds from the State of California.

One disadvantage of permit group membership is cost. Dues are based on land area placing a low-density, low-revenue city like La Habra Heights at a disadvantage. The City would pay approximately $80,000 per year for membership. In addition, there will be assessments for plan development. According to Cynthia Gabaldon one group recently agreed to pay $1.2 million to a firm that will draft their EWMP. Filing separately means that the City must acquire the expertise to prepare and implement a WMP but it also means that the City will be under less pressure to develop urban infrastructure such as sewers.

Though the group approach results in some cost sharing, every city will pay for its own WMP testing, training, education, inspection and enforcement. That will add operating expenses as high as $100,000 per year to the annual budget as soon as Fiscal Year 2014-15.

Reasonable Assurance Analysis as condition of individual permit status
RWQCB has asked the City to perform an RAA (Reasonable Assurance Allowance). The objective of the RAA is to demonstrate the ability of La Habra Heights to ensure MS4 discharges achieve applicable water quality-based effluent imitations and do not cause or contribute to exceedances of RWLs. The RAA is not a permit mandate at this time but staff supports this approach as it brings a possibility of limiting the level and range of structural changes that might have to be incorporated within the WMP.

An RAA is a quantitative measure of each water body-pollutant combination and is performed using a peer-reviewed computer model that is in the public domain. The analysis involves the assembly of all available, relevant sub-watershed data collected within the past 10 years, including land use and pollutant loading data, establishment of estimates of performance and the confidence limits on estimates of performance, establishment of quality assurance/quality control (QA/QC) criteria and QA/QC checks of the data. The attached letter from URS provides an outline of the costs associated with the RAA. The cost of the modeling is $35,100.

WMP Consultant and Program Development
The City has been using Cynthia Gabaldon of URS to guide us through this process; however, Ms. Gabaldon recently left URS to start her own firm. We anticipate the cost of WMP development to be $8,000 and those funds will be incurred before the end of this fiscal year.

ATTACHMENT 3

FISCAL IMPACT

There has been talk within Congress of funding these Clean Water Act Programs since they were adopted in 1972 however, far more mandates than dollars have reached Sacramento. After losing a 2013 court decision Los Angeles County reported to the Los Angeles Times that they will spend $20 billion over the next twenty years just to meet the WMP requirements for its unincorporated areas. The Board of Supervisors has considered a County-wide parcel tax known as Clean Water Clean Beaches. The assessment included a parcel fee of $54 for a standard lot (in general 7,200 square feet) of which the City would receive a portion. This may have provided enough funding for La Habra Heights to cover annual WMP implementation but the measure was put on hold due to protests at the initial hearing.

On August 9, 2012 City property owners rejected Assessment District 5 which included a stormwater management budget that could have been used for MS4 implementation costs. The proposed district also provided maintenance programs that would have improved water quality. Without funding to maintain and improve drainage channels, the onus will fall on property owners via an inspection and enforcement program including possible installation of sewers, unless the City can assure the Regional Water Board that runoff from city streets and streams does not contain dangerous levels of pollutants (does not exceed TMDLs and WQBELs).

Proposition 84

In November 2006 California voters approved The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84) authorizing $5.388 billion in general obligation bonds to fund safe drinking water, water quality and supply, flood control, waterway and natural resource protection, water pollution and contamination control, state and local park improvements, public access to natural resources, and water conservation efforts. The minimum funding level is $250,000 and the maximum is $3,000,000.

At this time, La Habra Heights is not eligible for Prop 84 funding related to stormwater but might be eligible once the WMP is in place and if a third round of funding is made available. An example of an eligible project might include replacing the asphalt parking lots at The Park with porous concrete or permeable pavers that would allow water to seep through to the ground, or completing a large slope stabilization project to reduce the amount of sediment that reaches the roads. Unfortunately, these grants require a local match, rarely pay for operational expenses and it is likely the City would have to absorb the design and project management.

Immediate Fiscal Impact

The following table estimates expenditures that must be incurred before the end of this fiscal year and that this staff report seeks funding for:

Process/Tasks	Provider	FY 2013-14
Stormwater Flow Model	URS	$35,000
Develop WMP	Cynthia Gabaldon and staff	8,000
Develop and adopt LID Ord.	City Attorney, Advertising, etc.	4,000
Water Quality Testing	Cynthia Gabaldon and labs	20,000
		$67,000

Ongoing costs – an unfunded mandate

The FY 2014-15 Budget will set forth line items for the implementation of the WMP. Those will include training of inspectors (Code Enforcement Officers, Building Inspectors, or Fire personnel if they are willing to make the WMP-mandated inspections part of the weed abatement

ATTACHMENT 1

program), implementation of an inspection program, outreach, education, testing, reporting, enforcement, filing annual permits, attending meetings, etc.

Once adopted (July 2014) the WMP include an education program explaining that the City will be required to engage in proactive inspection programs resulting in stronger enforcement related to animal waste, disposal of hazardous liquids, slope maintenance, litter and mandatory cleaning of storm channels, even those that cross private property. The City will have to revise policies related to maintenance and in some cases force replacement of septic systems. The R-2012-0175 Order includes civil and criminal penalties. Failure to meet standards can result in fines of $3,000 per day up to $25,000 per day depending upon the violation.

The WMP is a long term unfunded mandate that may have the effect of forcing the City to eliminate other services. The City Council's fiscal management strategy has been to use ongoing sources of revenue to cover recurring costs. The City Attorney's office has provided legal advice as to which elements of the program can be paid for from gas taxes and Measure R funds. Given that these funds are required be spent within a few years of receipts, and that they have fund balances, it is recommended that unallocated Measure R and gas tax funds be drawn upon for as many elements of this program as legally permissive.

RECOMMENDATIONS

1. Authorize the City Manager to sign a purchase agreement with URS (Oakland) to perform computerized modeling of stormwater flows at a cost not to exceed $36,000.

2. Authorize a two-year extension of the current agreement with URS for TMDL testing at a cost not to exceed $25,000.

3. Authorize the City Manager to enter into an agreement with Cynthia Gabaldon for the development of the Watershed Management Plan and for other services related to MS4 discharge requirements in an amount not to exceed $15,000.

4. Authorize the Finance Department to draw funding from legal funding sources, especially Measure R, Gas Tax and other eligible transportation subventions, for the various components and professional services associated with WMP preparation and implementation.

5. Direct the Planning Manager to take the Low Impact Development and Green Streets ordinance(s) forward to the Planning Commission for their review and recommendation to the City Council.

ATTACHMENTS

Proposal from URS Oakland for RAA Analysis
Los Angeles Times article re: Clean Water Clean Beaches measure
Draft Low Impact Development and Green Streets Ordinance
Draft Agreement with Cynthia Gabaldon for MS4 consulting services

ATTACHMENT 1

Attachment 5: MS4 Acronyms, Abbreviations, & Definitions

ATTACHMENT 1

MS4 Acronyms, Abbreviations, & Definitions

AB—***Assembly Bill***—energy efficiency improvements, **Assembly Bill 811** (AB 811) is an environmental law in California signed into law by Governor of California Arnold Schwarzenegger on July 21, 2008. AB 811 authorized all California cities and counties to designate areas within which willing property owners could enter into contractual assessments to finance the installation of distributed renewable energy generation, as well as energy efficiency improvements, that are permanently fixed to the property owner's residential, commercial, industrial, or other real property. These financing arrangements would allow property owners to finance renewable generation and energy efficiency improvements through low-interest loans that would be repaid as an item on the property owner's property tax bill. The contractual assessments could not be used to finance the purchase or installation of appliances that are not permanently fixed to the real property.

ASCE—***American Society of Civil Engineers***—is a tax-exempt professional body founded in 1852 to represent members of the civil engineering profession worldwide. There are 8 full-service institutes created to serve working professionals within specialized fields of civil engineering, specifically note Coasts, Oceans, Ports and Rivers Institute (COPRI).

Basin Plan—***Water Quality Control Plan***—the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan has been adopted and approved by the State Water Resources Control Board, U.S. EPA, and the Office of Administrative Law where required.

BMP—***Best Management Practice***—is a term used to describe a type of water pollution control. Historically the term has referred to auxiliary pollution controls in the fields of industrial wastewater control and municipal sewage control, while in stormwater management (both urban and rural) and wetland management, BMPs may refer to a principal control or treatment technique as well.

CEPA—***California Environmental Protection Agency***—is a state cabinet-level agency within the government of California. Cal/EPA is composed of six departments, boards and offices responsible for environmental research, regulating and administering the state's environmental protection programs, and fulfilling hazardous waste cleanup. The following departments, boards and offices fall under Cal/EPA: California Air Resources Board, Department of Pesticide Regulation, Department of Toxic Substances Control, Office of Environmental Health Hazard Assessment, and State Water Resources Control Board.

CEQA—***California Environmental Quality Act***—is a California statute passed in 1970, shortly after the United States federal government passed the National Environmental Policy Act (NEPA), to institute a statewide policy of environmental protection. CEQA does not directly regulate land uses, but instead requires state and local agencies within California to follow a protocol of analysis and public disclosure of environmental impacts of proposed projects and adopt all feasible measures to mitigate those impacts. CEQA makes environmental protection a

ATTACHMENT A

mandatory part of every California state and local agency's decision making process. It has also become the basis for numerous lawsuits concerning public and private projects.

CIMP—***Coordinated Integrated Monitoring Plan***—is developed and implemented when multiple Permittes coordinate their monitoring programs. A CIMP may be developed to address one or more of the required monitoring elements (i.e., receiving water monitoring, outfall based monitoring, regional monitoring or special studies) and may be county-wide or limited to a single watershed, sub-watershed or defined jurisdictional boundary.

CLC—***California Labor Code***—more formally known as the Labor Code is a collection of civil law statutes for the State of California. The code is made up of statutes which govern the general obligations and rights of persons within the jurisdiction of the State of California.

COPRI—***Coasts, Oceans, Ports and Rivers Institute***—serves as a multidisciplinary and international leader in improving knowledge, education, development and the practice of civil engineering and other disciplines in the sustainable management of coastal, ocean, port, waterways, riverine and wetlands resources for the benefit of all society.

CWA—***Clean Water Act***— is the primary federal law in the United States governing water pollution. Passed in 1972, the act established the goals of eliminating releases of high amounts of toxic substances into water, eliminating additional water pollution by 1985, and ensuring that surface waters would meet standards necessary for human sports and recreation by 1983. The Clean Water Act does not directly address groundwater contamination. Groundwater protection provisions are included in the Safe Drinking Water Act, Resource Conservation and Recovery Act, and the Superfund Act.

DFA—***Division of Financial Assistance***—contains a number of programs designed to help local agencies and individuals prevent or clean up water pollution. The DFA provides loans and grants for constructing municipal sewage and water recycling facilities, remediation for underground storage tank releases, watershed protection projects, and for nonpoint source pollution control projects. (Nonpoint source pollution usually involves contaminants flowing into a body of water from diffuse sources such as runoff from storm water, which may contain road dirt or fertilizers and pesticides from lawns, as well as water that collects debris from construction sites and fecal matter from barnyards and flows into nearby rivers, streams and lakes.)

DOD—***Department of Defense***—is the Executive Department of the Government of the United States of America charged with coordinating and supervising all agencies and functions of the government concerned directly with national security and the United States Armed Forces.

DWR—***Department of Water Resources***—is part of the California Natural Resources Agency. The Department of Water Resources is responsible for the State of California's management and regulation of water usage. The department was created in 1956 by Governor Goodwin Knight following severe flooding across Northern California in 1955, combining the Division of Water Resources of the Department of Public Works with the State Engineer's Office, the Water

ATTACHMENT A

Project Authority, and the State Water Resources Board. It has its headquarters in Sacramento.

EAs—***Environmental Assessments***—means a concise public document for which a Federal agency is responsible that serves to: (1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact. (2) Aid an agency's compliance with the Act when no environmental impact statement is necessary. (3)Facilitate preparation of a statement when one is necessary.

EIR—***Environmental Impact Report***—serves to inform governmental agencies and the public of a project's environmental impacts. Further, an EIR proposes mitigations and alternatives which may reduce or avoid the environmental impacts; as the EIR is considered the heart of CEQA, mitigation and alternatives are considered the heart of the EIR.

EISs—***Environmental Impact Statements***—is a document required by the National Environmental Policy Act (NEPA) for certain actions "significantly affecting the quality of the human environment." It describes the positive and negative environmental effects of a proposed action, and it usually also lists one or more alternative actions that may be chosen instead of the action described in the EIS.

EPA—***Environmental Protection Agency***—is an agency of the U.S. federal government which was created for the purpose of protecting human health and the environment by writing and enforcing regulations based on laws passed by Congress.

ESA—***Environmentally Sensitive Areas***—is a type of designation for an agricultural area which needs special protection because of its landscape, wildlife or historical value.

EWMP—***Enhanced Watershed Management Program***—

FAAST—***Financial Assistance Application Submittal Tool***—the Financial Assistance Application Submittal Tool (FAAST) was developed to provide an efficient means for project proponents to apply for the loan and grant funding offered by the Division. A valid FAAST user account is needed to access FAAST.

FEMA—***Federal Emergency Management Agency***—is an agency of the United States Department of Homeland Security, initially created by Presidential Reorganization Plan No. 3 of 1978 and implemented by two Executive Orders on April 1, 1979. The agency's primary purpose is to coordinate the response to a disaster that has occurred in the United States and that overwhelms the resources of local and state authorities.

GAO—***Government Accountability Office***—a legislative branch agency established by Congress in 1921 to ensure the fiscal and managerial accountability of the federal government.

GIS—***Geographic Information System***—describes any information system that integrates, stores, edits, analyzes, shares, and displays geographic information for informing decision making. GIS applications are tools that allow users to create interactive queries (user-created

ATTACHMENT 1

searches), analyze spatial information, edit data in maps, and present the results of all these operations. A GIS developed for an application, jurisdiction, enterprise, or purpose may not be necessarily interoperable or compatible with a GIS that has been developed for some other application, jurisdiction, enterprise, or purpose.

HMP—*Hydro-modification Management Plan*—where receiving stream channels are already unstable, hydromodification management can be thought of as a method to avoid accelerating or exacerbating existing problems. Where receiving stream channels are in a state of dynamic equilibrium, hydromodification management may prevent the onset of erosion, sedimentation, lateral bank migration, or impacts to in-stream vegetation.

HUC-12—*Hydrologic Unit Code*—as of 2010 there are six levels in the hierarchy, represented by hydrologic unit codes from 2 to 12 digits long, called regions, subregions, basins, subbasins, watersheds, and subwatersheds.

Name	Level	Digits	Average size (square miles)	Number of HUs	Example name	Example code
Region	1	2	177,560	21	Pacific Northwest	17
Subregion	2	4	16,800	222	Lower Snake	1706
Basin	3	6	10,596	370	Lower Snake	170601
Subbasin	4	8	700	2,200	Imnaha River	17060102
Watershed	5	10	227 (40,000–250,000 acres)	22,000	Upper Imnaha River	1706010201
Subwatershed	6	12	40 (10,000–40,000 acres)	160,000	South Fork Imnaha River	170601020101

Hydromodification—refers to changes in the magnitude and frequency of stream flows due to urbanization and the resulting impacts on receiving channels, such as erosion, sedimentation, and potentially degradation of in-stream habitat. The degree to which a channel will erode or aggrade is a function of the increase or decrease in work (shear stress), the resistance of the channel bed and bank materials – including vegetation (critical shear stress), the change in sediment delivery, and the geomorphic condition (soil lithology) of the channel.

IMP—*Integrated Monitoring Program*—an ongoing and systematic process to determine, analyze and interpret environmental quality and environment-related health status. A good integrated monitoring needs to establish a mechanism for data sharing, improved data availability, accessibility, comparability, and enhanced exchange of information, between environment and health, across different environmental media, and within health. Integrated monitoring is scale dependent, both temporal and spatial.

ATTACHMENT 1

IRWM—***Integrated Regional Water Management Planning***—is the process that promotes bringing together and prioritizing water-related efforts in the region in a systematic way to ensure sustainable water uses, reliable water supplies, better water quality, environmental stewardship, efficient urban development, protection of agriculture, and a strong economy. Administered by the California Department of Water Resources and California State Water Resources Control Board through bond-funded Grant Programs, IRWM encourages the development of integrated regional strategies for management of water resources by providing funding, through competitive grants.

JPA—***Joint Powers Authority***—is an entity permitted under the laws of some states of the USA, whereby two or more public authorities (e.g. local governments, or utility or transport districts) can operate collectively. A joint powers authority is distinct from the member authorities; they have separate operating boards of directors. These boards can be given any of the powers inherent in all of the participating agencies. The authorizing agreement states the powers the new authority will be allowed to exercise. The term, membership, and standing orders of the board of the authority must also be specified. The joint authority may employ staff and establish policies independently of the constituent authorities.

LARWCB—***Regional Water Quality Control Board***—**Regional Water Board**—protects ground and surface water quality in the Los Angeles Region, including the coastal watersheds of Los Angeles and Ventura Counties, along with very small portions of Kern and Santa Barbara Counties.

LID—***Low-Impact Development***—describes a land planning and engineering design approach to managing stormwater runoff. LID emphasizes conservation and use of on-site natural features to protect water quality. This approach implements engineered small-scale hydrologic controls to replicate the pre-development hydrologic regime of watersheds through infiltrating, filtering, storing, evaporating, and detaining runoff close to its source.

MEP—***Maximum Extent Practicable***—requires that pollutants be reduced, not eliminated, from stormwater discharges. It is therefore in the hands of the state to determine if the requirement to install BMPs should be accompanied by a requirement to achieve a certain level of pollutant reduction.

MMRP—***Mitigation Monitoring and Reporting Plan***—describes the procedures for the implementation of the mitigation measures to be adopted for the proposed project as identified in the Draft and Final EIR.

MS4—***Municipal Separate Stormwater Sewer System***—"separate storm sewer system" includes ditches, curbs, gutters, storm sewers, and similar means of collecting or conveying runoff that do not connect with a wastewater collection system or treatment plant. And to be a "municipal separate storm sewer system" (MS4), the system must be owned or operated by a public agency.

ATTACHMENT 1

NAHC—***Native American Heritage Commission***—the Califomia State Government passed AB 4239, establishing the Native American Heritage Commission (NAHC) as the primary government agency responsible for identifying and cataloging Native American cultural resources.

NEPA—***National Environmental Policy Act***—is a United States environmental law that established a U.S. national policy promoting the enhancement of the environment and also established the President's Council on Environmental Quality. NEPA's most significant effect was to set up procedural requirements for all federal government agencies to prepare environmental assessments (EAs) and environmental impact statements (EISs).

NPDES—***National Pollutant Discharge Elimination System***—controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

NPS—***Nonpoint Source***—generally results from land runoff, precipitation, atmospheric deposition, drainage, seepage or hydrologic modification. The term "nonpoint source" is defined to mean any source of water pollution that does not meet the legal definition of "point source."

NRCS—***Natural Resources Conservation Service***—formerly known as the **Soil Conservation Service** (SCS), is an agency of the United States Department of Agriculture (USDA) that provides technical assistance to farmers and other private landowners and managers.

OPR—***Governor's Office of Planning and Research***—serves the Governor and his Cabinet as staff for long-range planning and research, and constitutes the comprehensive state planning agency.

PAEP—***Project Assessment and Evaluation Plan***— provides for better tracking of project problems, measurements to gauge if goals are being met, and easier reporting to the legislature, which in turn provides support for funding more projects. All grant recipients are required to prepare a Project Assessment and Evaluation Plan (PAEP) at the initiation of their project. The PAEP Includes general information about the project and the step-by-step process involved in creating the project's Assessment and Evaluation Framework.

PCB—***Polychlorinated Biphenyl***—were widely used as dielectric and coolant fluids, for example in transformers, capacitors, and electric motors. Due to PCBs' environmental toxicity and classification as a persistent organic pollutant, PCB production was banned by the United States Congress in 1979. PCBs have been shown to cause cancer in animals, and there is also evidence that they can cause cancer in humans. The maximum allowable contaminant level in drinking water in the United States is set at zero, but due to water treatment technologies a level of 0.5 parts per billion is the defacto level.

Point Source—any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants

ATTACHMENT 1

are or may be discharged. This term does not include agricultural storm water discharges and return flows from irrigated agriculture.

Prop 84—***Safe Drinking Water, Water Quality and Supply, Floor Control, River and Coastal Protection Bond Act of 2006***— authorizes $5.388 billion in general obligation bonds to fund safe drinking water, water quality and supply, flood control, waterway and natural resource protection, water pollution and contamination control, state and local park improvements, public access to natural resources, and water conservation efforts.

QAPP—***Quality Assurance Project Plan***—documents the planning, implementation, and assessment procedures for a particular project, as well as any specific quality assurance and quality control activities. It integrates all the technical and quality aspects of the project in order to provide a "blueprint" for obtaining the type and quality of environmental data and information needed for a specific decision or use.

RPU—***Regional Programs Unit***

SBPAT—***Structural BMP Prioritization and Analysis Tool***—public domain, "open source" GIS-based water quality analysis tool. Identified as a peer-reviewed, public domain, quantitative model suitable for Reasonable Assurance Analysis in support of a WMP.

SUSMP—***Standard Urban Storm Water Mitigation Plan***—developed as part of the municipal stormwater program to address stormwater pollution from new developments and redevelopment projects. Project applicants are required to prepare and implement a Standard Urban Stormwater Mitigation Plan when their projects fall into any of these categories: Single-family hillside residential developments; Housing developments of 10 or more dwelling units (including single family tract developments); Industrial /Commercial developments with one acre or more of impervious surface area; Automotive service facilities; Retail gasoline outlets; Restaurants; Parking lots of 5,000 square feet or more of surface area or with 25 or more parking spaces; Projects with 2,500 square feet or more of impervious area that are located in, adjacent to, or draining directly to designated Environmentally Sensitive Areas (ESA). Project applicants will be required to incorporate stormwater mitigation measures into their design plans and submit the plans to the City for review and approval. Any project that cannot comply with the Low Impact Development Ordinance requirements shall be required to comply with, at a minimum, all applicable SUSMP requirements in order to maximize onsite compliance.

SWAMP—***Surface Water Ambient Monitoring Program***—is tasked with assessing water quality in all of California's surface waters. The program conducts monitoring directly and through collaborative partnerships; and provides numerous information products, all designed to support water resource management in California. Its mission is to provide resource managers, decision makers, and the public with timely, high-quality information to evaluate the condition of all waters throughout California. SWAMP accomplishes this through carefully designed, externally reviewed monitoring programs, and by assisting other entities state-wide

ATTACHMENT 1

in the generation of comparable data that can be brought together in integrated assessments that provide answers to current management questions.

SWATF—***Storm Water Advisory Task Force***—provides advice to the State Water Board on its Storm Water Management Program that may include program priorities, funding criteria, project selection, and interagency coordination of State Programs that address storm water management. Members for the SWATF may be comprised of representatives with an expertise in water quality and storm water management from public agencies, the regulated community, and nonprofit organizations. The scope of this task force impacts the regulatory and funding duties of the State Water Board.

SWGP—***Storm Water Grant Program***—solicit applications, evaluate and select proposals, and award grants for the reduction and prevention of stormwater contamination of rivers, lakes, and streams through the Proposition 84 Stormwater Grant Program

SWRCB—***State Water Resources Control Board***—**State Water Board**—is one of five branches of the California Environmental Protection Agency. The State Water Board oversees the allocation of the state's water resources to various entities and for diverse uses, from agricultural irrigation to hydro electrical power generation to municipal water supplies, and for safeguarding the cleanliness and purity of Californians' water for everything from bubble baths to trout streams to ocean beaches.

TAC—***Watershed Management Technical Advisory Committee***—provide a forum for meaningful stakeholder input in the development and implementation of watershed management programs. The TAC representatives include staff from the Los Angeles Regional Water Board and US EPA Region IX, one LA County MS4 permittee representative from each watershed management group, and representatives from non-governmental organizations. The TAC meets monthly to discuss technical issues relating to the development and implementation of watershed management programs.

UWMP Act—***The Urban Water Management Planning Act***—**The Act**—requires all publicly or privately owned entities that serve water for municipal purposes to more than 3,000 service connections or serve more than 3,000 acre-feet of water per year to prepare an updated UWMP once every five years—either at the beginning or mid-point of each decade – to support long-term resource planning. The purpose of UWMPs is to ensure that urban water suppliers have adequate water supplies for existing and future demands. Plans must identify and discuss various factors affecting current and projected water supplies and demand, and must identify steps being taken to ensure the availability and reliability of future supplies.

TMDL—***Total Maximum Daily Load***—is a regulatory term in the U.S. Clean Water Act, describing a value of the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards.

ATTACHMENT 1

USDA—***United States Department of Agriculture***—also known as the **Agriculture Department**, is the U.S. federal executive department responsible for developing and executing federal government policy on farming, agriculture, forestry, and food. It aims to meet the needs of farmers and ranchers, promote agricultural trade and production, work to assure food safety, protect natural resources, foster rural communities and end hunger in the United States and abroad.

USEPA—***United States Environmental Protection Agency***—refer to **EPA**

USGS—***U.S. Geological Services***—is a scientific agency of the United States government. The scientists of the USGS study the landscape of the United States, its natural resources, and the natural hazards that threaten it. The organization has four major science disciplines, concerning biology, geography, geology, and hydrology. The USGS is a fact-finding research organization with no regulatory responsibility.

Water Boards—***State Water Resources Control Board and Regional Water Quality Control Boards***—the mission of the Water Board is to ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The joint authority of water allocation and water quality protection enables the Water Board to provide comprehensive protection for California's waters.

WMP—***Watershed Management Program***—helps a facility set water conservation goals and identify water conservation opportunities. The plan should include clear information about how a facility uses its water, from the time it is piped into the facility through disposal. Knowledge of current water consumption and its costs is essential for making the most appropriate water management decisions. A water management plan can be divided into three components: water accounting, BMPs achieved, and water management opportunities.

ATTACHMENT 1

ORDINANCE NO. 2014 - ___

AN ORDINANCE OF THE LA HABRA HEIGHTS CITY COUNCIL AMENDING SECTIONS 4.16.90, 7.14.40, AND 7.17.40 OF THE LA HABRA HEIGHTS MUNICIPAL CODE REGARDING STORM WATER MANAGEMENT AND POLLUTION CONTROL AND ADOPTING A GREEN STREETS POLICY

WHEREAS, on March 13, 2014, the City Council conducted a legally noticed public hearing on the proposed Code Amendments, and considered public testimony and materials in the staff report and accompanying plans, documents, and exhibits; and

WHEREAS, this ordinance is categorically exempt from review under the Provisions of the California Environmental Quality Act ("CEQA"), Public Resources Code sections 21000, et seq., as prescribed under Sections 15307 and 15308 of the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15307–15308) because the ordinance enacts regulations which protect, preserve, and enhance natural resources and the environment in the course of a regulatory process which includes procedures designed to protect the environment.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF LA HABRA HEIGHTS DOES ORDAIN AS FOLLOWS:

SECTION 1. Findings.

A. The Federal Clean Water Act (33 U.S.C. §§ 1251, et seq.) provides for the regulation and reduction of pollutants discharged into the waters of the United States by requiring jurisdictions operating storm drain systems to receive a permit for the discharge of storm water and dry weather runoff into storm drain systems.

B. On November 8, 2012, under the provisions of the Porter-Cologne Water Quality Control Act (Cal. Water Code §§ 13000, et seq.), the Los Angeles Regional Water Quality Control Board adopted the Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach MS4, Order NO. R4-2012-0175, NPDES Permit No. CAS004001 (the "MS4 NPDES Permit"). The City is a Co-Permittee under this permit and is required to maintain adequate legal authority within its jurisdiction to control pollutant discharges and to require the use of appropriate control measures to prevent or reduce the discharge of pollutants to waters of the United States via its storm drain system to achieve applicable water quality standards.

C. Storm water and dry weather runoff flow from the individual parcels in the City into natural drainage courses and, to a limited extent, into storm drains owned by the City and other agencies before eventually flowing to surface waters known as receiving waters.

Attachment 2

D. The City of La Habra Heights is a unique, low-density community where development largely consists of single-family homes situated on minimum one-acre lots and where there is very limited commercial and industrial development. The majority of the roadways in the City are one and two lane rural roads which do not have storm drains.

E. In order to control, in a cost-effective manner, the quality and quantity of storm water and dry weather runoff to the maximum extent practicable, the adoption of reasonable regulations, as set forth herein, is essential.

F. The purpose of this ordinance is to comply with the City's responsibilities under the Federal Clean Water Act, the Porter-Cologne Water Quality Control Act, and the MS4 NPDES Permit to adopt a Low-Impact Development Ordinance and a Green Streets Policy.

SECTION 2. Section 4.16.90(L) is hereby added to the La Habra Heights Municipal Code to read as follows:

L. Planning and Land Development Program Requirements for New Development and Redevelopment Projects.

1. Solely for purposes of this section 4.16.90(L), the terms set forth below shall have the following meanings:

"Area susceptible to runoff" means any surface directly exposed to precipitation or in the path of runoff caused by precipitation.

"Authorized Enforcement Officer" means the City Manager or his or her designee.

"Best Management Practices (BMPs)" means practices or physical devices or systems designed to prevent or reduce pollutant loading from storm water or non-storm water discharges to receiving waters, or designed to reduce the volume of storm water or non-storm water discharges to receiving waters.

"Construction" means any construction or demolition activity, clearing, grading, grubbing, excavation, or any other activities that result in soil disturbance. Construction includes structure teardown and demolition. It does not include routine maintenance activities required to maintain the integrity of structures by performing minor repair and restoration work, original line and grade, hydraulic capacity, or original purpose of a facility; emergency construction activities required to immediately protect public health and safety (including fire prevention); clearing and grubbing of vegetation for landscape maintenance and fire prevention which is not associated with a larger construction project; interior remodeling with no outside exposure of construction material or construction debris to storm water; mechanical permit work; or sign permit work.

"Construction General Permit" means the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order

Attachment 2

NO. 2009-0009-DWQ (NPDES Permit No. CAS000002), adopted September 2, 2009 and any successor permit to that permit.

"Development" means any construction, rehabilitation, redevelopment, or reconstruction of any public or private residential project or mass grading for future construction. It does not include routine maintenance activities required to maintain the integrity of structures by performing minor repair and restoration work, original line and grade, hydraulic capacity, or original purpose of a facility; emergency construction activities required to immediately protect public health and safety (including fire prevention).

"Directly Adjacent" means situated within two hundred feet of the contiguous zone required for the continued maintenance, function, and structural stability of the environmentally sensitive area.

"Director" means the City Manager or his or her designee.

"Discharge" means when used without qualification the "discharge of a pollutant."

"Discharging Directly" means outflow from a drainage conveyance system that is composed entirely or predominantly of flows from the subject project, development, subdivision, or facility and not commingled with the flows from adjacent lands.

"Discharge of a Pollutant" means: any addition of any pollutant or combination of pollutants to waters of the United States from any point source or any addition or any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. The term discharge includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by human activity; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

"Discretionary Project" is defined in the same manner as CEQA Guidelines Section 15357 (Cal. Code Regs., tit. 14, § 15357) as amended, and means a project which requires the exercise of judgment or deliberation when the City decides to approve or disapprove a particular activity, as distinguished from situations where the City merely has to determine whether a project conforms with applicable statutes, regulations, or ordinances.

"Disturbed Area" means an area that is altered as a result of clearing, grading, and/or excavation unless solely for the purpose of landscape maintenance or fire prevention.

"Environmentally Sensitive Area" means an area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would be easily disturbed or degraded by human

Attachment 2

activities and developments (Pub. Resources Code § 30107.5). Areas subject to storm water mitigation requirements are areas designated as Significant Ecological Areas by Los Angeles County; an area designated as a Significant Natural Area by the California Department of Fish and Game, provided that the area has been field verified by that department; and an area identified by the City as environmentally sensitive.

"Hillside" means property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope with a grade of twenty-five percent or greater and where grading contemplates cut or fill slopes.

"Infiltration" means the downward entry of water into the surface of the soil.

"Inspection" means entry and the conduct of an on-site review of structure and devices on a property, at reasonable times, to determine compliance with applicable legal requirements. The steps involved in performing an inspection include, but are not limited to:

1. Pre-inspection documentation research;

2. Request for entry;

3. Interview of property owner, resident, and/or occupant(s);

4. Property walk-through;

5. Visual observation of the condition of property;

6. Examination and copying of records as required;

7. Sample collection as required;

8. Exit discussion (to discuss preliminary evaluation) as appropriate; and

9. Report preparation, and if appropriate, recommendations for coming into compliance.

"Low Impact Development (LID)" means building or landscaping features designed to retain or filter storm water runoff.

"Material" means any substance including, but not limited to: garbage and debris; lawn clippings, leaves, and other vegetation; biological and fecal waste; sediment and sludge; oil and grease; gasoline; paints, solvents, cleaners, and fluid or solid containing chemicals.

"Municipal NPDES Permit" or "MS4 NPDES Permit" both mean the Los Angeles Regional Water Quality Control Board adopted the Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges within the Coastal Watersheds of

Attachment 2

Los Angeles County, Except Those Discharges Originating from the City of Long Beach MS4, Order NO. R4-2012-0175, NPDES Permit No. CAS004001.

"Municipal separate storm sewer system" or "MS4" both mean a conveyance system (consisting or roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, channels, or storm drains:

1. Owned or operated by a state, city, or other municipality having jurisdiction over disposal of sewage, storm water, or other wastes, including special districts organized under state law such as flood control districts, sewer districts, drainage districts, and similar entities that discharges to waters of the United States;

2. Designed or used for collecting or conveying storm water;

3. Which is not a combined sewer; and

4. Which is not part of a Publically Owned Treatment Works ("POTW") as defined by 40 C.F.R. section 122.2, as amended.

"Natural Drainage Systems" means all drainages that have not been improved (e.g. channelized or armored with shotcrete, concrete, or rip-rap) or drainage systems that are tributary to a natural drainage system.

"New Development" means land disturbing activities; structural development, including construction or installation of a building or structure; creation of impervious surfaces; and land subdivision. New Development does not include land disturbing activities solely involving landscaping or fuel modification.

"Non-Storm Water Discharge" means any discharge into the MS4 or from the MS4 into a receiving water that is not composed entirely of storm water.

"NPDES" or "National Pollutant Discharge Elimination System" means the national program for issuing, modifying, reissuing, revoking, terminating, monitoring, and enforcing permits and imposing and enforcing pre-treatment requirements under the Clean Water Act, sections 307, 402, 318, and 405.

"Pollutant" means those "pollutants" defined in Section 502(6) of the Clean Water Act (33 U.S.C. § 1362(6)) or incorporated into California Water Code section 13373. Examples of pollutants include, but are not limited to, the following:

1. Commercial and industrial waste (such as fuels, solvents, detergents, plastic pellets, hazardous substances, fertilizers, pesticides, slag, ash, and sludge);

2. Metals such as cadmium, lead, zinc, copper, silver, nickel, chromium; and non-metals such as phosphorus and arsenic;

3. Hydrocarbons such as fuels, lubricants, surfactants, waste oils, solvents, coolants, and grease;

Attachment 2

4. Excessive eroded soils, sediment, and particulate materials in amounts which may adversely affect the beneficial use of the receiving waters, flora, or fauna of the State;

5. Animal wastes (such as discharge from confinement facilities, kennels, pens, recreational facilities, stables, and show facilities);

6. Substances that have characteristics such as pH less than six or greater than nine, or unusual coloration or turbidity, or excessive levels of fecal coliform, or fecal streptococcus, or enterococcus.

"Project" means all development, redevelopment, and land disturbing activities excluding landscaping projects.

"Rain event" means a rainfall event that produces more than 0.1 inch of precipitation in twenty-four hours unless specifically stated otherwise.

"Redevelopment" means land disturbing activities that result in the creation, addition, or replacement of 10,000 square feet or more of impervious surface for existing single-family residential structures and accessory structures or the creation, addition, or replacement of 5,000 square feet or more of impervious surface area on a parcel containing an existing non-residential structure. Redevelopment includes, but is not limited to, the expansion of a building footprint, addition or replacement of a structure, replacement of impervious surface area that is not within the regular course of routine maintenance, and land disturbing activities related to structural or impervious surfaces which meet the area standards above. Redevelopment does not include routine maintenance to maintain original line and grade, hydraulic capacity, or the original purpose of a structure; land disturbing activities solely involving landscaping or fuel modification; or emergency construction activities required for the immediate protection of public health and safety.

"Regional Board" means the Los Angeles Regional Water Quality Control Board.

"Routine Maintenance" includes, but is not limited to, projects conducted to:

1. Maintain the original line and grade, hydraulic capacity, or original purpose of the facility;

2. Perform necessary restoration work to preserve the original design grade, integrity, and hydraulic capacity of flood control facilities;

3. Carry out road shoulder work, regarding dirt or gravel roadways and shoulders and performing ditch cleanouts;

4. Update existing lines and facilities, including the replacement of existing lines with new materials or pipes, to comply with applicable codes, standards, and regulations regardless if such projects result in increased capacity;

Attachment 2

5. Repair leaks;

6. Conduct landscaping activities without changing existing or natural grades; and

7. Conduct discing, grubbing, and other weed abatement activities for fire prevention.

Routine maintenance does not include construction of new lines or facilities resulting from compliance with applicable code, standards, and regulations. New lines are those that are not associated with existing facilities and are not part of a project to update or replace existing lines.

"Runoff" means any runoff including storm water and dry weather flow from a drainage area that reaches a receiving water body or subsurface. During dry weather it is typically comprised of base flow either contaminated with pollutants or uncontaminated, and nuisance flows.

"Simple LID BMP" means a BMP constructed above ground on a single-family residential home that can be readily inspected by a homeowner or inspector. Simple LID BMPS do not require an operation and maintenance plan under the MS4 NPDES Permit. Examples of such BMPs include, but are not limited to, vegetated swales, rain barrels and above ground cisterns, rain gardens, and pervious pavement.

"Site" means the land or water area where any structure or activity is physically located or conducted, including adjacent land used in connection with the structure or activity.

"Source Control BMP" means any schedule of activities, prohibition of practices, maintenance procedures, managerial practices or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.

"Storm Water" means storm water runoff and surface runoff and drainage related to precipitation events (pursuant to 40 C.F.R. § 122.26(b)(13).)

"Structural BMP" means any structural facility designed and constructed to mitigate the adverse impacts of storm water and dry weather runoff pollution. Structural BMPs may include both treatment control BMPs and source control BMPs.

"Treatment" means the application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media adsorption, biodegradation, biological uptake, chemical oxidation, and UV radiation.

"Treatment Control BMP" means any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption, or any other physical, biological, or chemical process.

Attachment 2

2. The following New Development and Redevelopment projects are required to comply with the Planning and Land Development Program requirements of the Municipal NPDES permit:

a. Development projects, including the construction of new single family residential homes, equal to 1 acre or greater of disturbed area and adding more than 10,000 square feet of impervious area;

b. Parking lots with 5,000 square feet or more of impervious surface or with twenty-five or more parking spaces;

c. Single family residential hillside residential development projects or redevelopment projects;

d. Redevelopment projects in subject categories that meet applicable redevelopment thresholds (pursuant to the Municipal NPDES permit), which include:

i. Land-disturbing activities which create, add, or replace 10,000 square feet or more of impervious surface area on lots developed with single family dwellings and/or necessary structures; and

ii. Land-disturbing activities which create, add, or replace 5,000 square feet or more of impervious surface area on an already developed site excluding lots developed with single family dwellings and accessory structures.

iii. Where Redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-development storm water quality control requirements, the entire project must be mitigated.

iv. Where Redevelopment results in an alteration to less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-development storm water quality control requirements, only the alteration must be mitigated, not the entire development.

e. Roadway construction with 10,000 square feet or more of impervious surface area shall follow either the USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets (December 2008 EPA-833-F-08-009) or the City of Los Angeles Green Streets and Green Alleys Design Guidelines Standards to the maximum extent practicable.

f. Any New Development or Redevelopment project located in or directly adjacent to or discharging directly into an Environmentally Sensitive Area, where the development will:

i. Discharge storm water that is likely to impact a sensitive biological species or habitat; and

Attachment 2

ii. Create 2,500 square feet or more of impervious surface area.

3. Incorporation of Planning and Land Development Program Requirements into Project Plans

a. New Development and Redevelopment projects are required to control pollutants and runoff volume from the project site by minimizing the impervious surface area and controlling runoff through infiltration, bioretention, and/or rainfall harvest and use, in accordance with the standards set forth in the Municipal NPDES permit.

b. An applicant for a New Development or Redevelopment Project as defined by Section 4.16.90(L)(1) of this Chapter shall incorporate into the applicant's project plans a Post Construction Storm Water Mitigation Plan which includes those Best Management Practices necessary to control storm water pollution from the completed project. Structural or Treatment Control BMPs (including, as applicable, post-construction Treatment Control BMPs) set forth in project plans shall meet the design standards set forth in the current Municipal NPDES Permit.

c. To the extent that the City may lawfully impose conditions, mitigation measures, or other requirements on the development or construction of a single-family home in a hillside area, a single-family hillside home New Development or Redevelopment Project shall implement mitigation measures to:

i. Conserve natural areas;

ii. Protect slopes and channels;

iii. Provide storm drain system stenciling and signage;

iv. Divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability.

v. Direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability.

d. New Development/Redevelopment Project Performance Criteria: Post-construction control BMPs to mitigate storm water pollution are required for all New Development and Redevelopment projects as defined by Section 4.16.90(L)(1) of this Chapter unless alternative measures are allowed as provided in the Municipal NPDES Permit. BMPs must be implemented to retain on-site the Storm Water Quality Design Volume (SWQDv), defined as runoff from either:

i. 0.75 inch, 24-hour rain event; or

ii. The 85th percentile, 24-hour event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map, whichever is greater.

Attachment 2

BMPs shall meet the design specifications and on-site retention potential outlined in the Municipal NPDES Permit.

For projects unable to retain 100% of the SWQDv on-site due to technical infeasibility as defined in the Municipal NPDES Permit, projects must implement alternative compliance measures in accordance with the Municipal NPDES Permit.

Single family hillside home development projects are exempt from the New Development/Redevelopment Project Performance Criteria of the Municipal NPDES Permit unless they create, add, or replace 10,000 square feet of impervious surface.

e. Hydromodification Control Criteria

i. All non-exempt New Development and Redevelopment projects located within natural drainage systems as defined in Section 4.16.90(L)(1) of this Chapter must implement hydrologic control measures to prevent accelerated downstream erosion and to protect stream habitat in natural drainage systems. Project exempt from hydromodification controls are listed in the Municipal NPDES Permit.

ii. The following New Development and Redevelopment Projects must include one, or a combination of, hydromodification control BMPs, Low Impact Development (LID) strategies, or stream and riparian buffer restoration measures:

1. Projects on single family lots that create, add, or replace 10,000 square feet or more of impervious surface area are required to implement LID BMPs. Single family homes implementing such BMPs will satisfy the hydromodification control requirements of the Municipal NPDES Permit.

2. Projects on non-single family lots disturbing an area greater than 1 acre but less than 50 acres within natural drainage systems must demonstrate one of the following:

a. The project has been designed to retain on-site, through infiltration, evapotranspiration, and/or harvest and use, the storm water volume from the run-off of the 95th percentile, 24-hour storm, or

b. The runoff flow rate, volume, velocity, and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour rainfall event, or

c. The erosion potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment J of the Municipal NPDES Permit, or other approved equations.

4. Issuance of Final Approval. As a condition for issuing final approval for New Development or Redevelopment projects identified in Section 4.16.90(L)(1), the Authorized Enforcement Officer shall require property owners or their representative(s)

Attachment 2

to build all the storm water pollution control Best Management Practices and structural or treatment control BMPs that are shown on the approved project plans and to submit a signed certification statement stating that the site and all structural or other applicable regulatory requirements including the following words:

"SHOULD THE ABOVE REPRESENTATION BE INCORRECT, WE UNDERSTAND AND ACKNOWLEDGE THAT WE ARE RESPONSIBLE FOR THE COST OF CORRECTING ANY DEFICIENCY IN THE PERFORMANCE OF THE ABOVE CONDITION AS WELL AS PAYMENT OF APPLICABLE ADMINISTRATIVE AND/OR CIVIL REMEDIES. WE UNDERSTAND THAT THE CITY WILL RELY ON THE REPRESENTATIONS CONTAINED IN THIS STATEMENT AS HAVING ACHIEVED OUR OBLIGATION FOR COMPLIANCE WITH STORM WATER REQUIREMENTS AND SIGN THIS CERTIFICATION VOLUNTARILY, WITHOUT PURPOSE OR EVASION AND OF OUR OWN FREE WILL AND WITH FULL KNOWLEDGE OF ITS SIGNIFICANCE."

With the exception of Simple LID BMPs (as defined in Section 4.16.90(L)(1)) on lots developed with single family residences, project owners shall provide an operation and maintenance plan, monitoring plan where required, and verification of ongoing maintenance provisions for LID practices, Treatment Control BMPs, and Hydromodification Control BMPs including by not limited to: final map conditions, legal agreements, covenants, conditions or restrictions, CEQA mitigation requirements, conditional use permits, and/or other legally binding maintenance agreements. These maintenance records must be kept on site for treatment BMPs implemented on single family residences.

5. Transfer of Properties Subject to Requirement for Maintenance of Structural and Treatment Control BMPs.

a. The transfer or lease of a property subject to a requirement for maintenance of structural and treatment control BMPs shall include conditions requiring the transferee and its successors and assigns to either (a) assume responsibility for maintenance of any existing structural or treatment control BMP; or (b) replace an existing structural or treatment control BMP with new control measures or BMPs meeting the then current standards of the City and the Municipal NPDES Permit. Such requirement shall be included in any sale or lease agreement or deed for such property. The condition of transfer shall include a provision that the successor property owner or leasee conduct maintenance inspections of all structural or treatment control BMPs at least once a year and retain proof of inspection.

b. If structural or treatment control BMPs are located within an area proposed for dedication to a public agency, they will be the responsibility of the developer until the dedication is accepted.

SECTION 3. Section 7.14.40.F.7 is added to the La Habra Heights Municipal Code to read as follows:

Attachment 2

7. All new development or redevelopment projects, as defined by Section 4.19.60.L(1), shall comply with the Low Impact Development requirements of the Municipal NPDES Permit, as required by Section 4.19.60.L(2).

SECTION 4. Section 7.17.40.G.6 is added to the La Habra Heights Municipal Code to read as follows:

6. All new development or redevelopment projects, as defined by Section 4.19.60.L(1), shall comply with the Low Impact Development requirements of the Municipal NPDES Permit, as required by Section 4.19.60.L(2).

SECTION 5. Green Streets Policy. The Department of Public Works is hereby directed to require new development and redevelopment of streets and roadway projects conducted within the right-of-way of Harbor Boulevard and Hacienda Road which add at least 10,000 square feet of impervious surface to incorporate green street BMPs. Routine maintenance or repair and linear utility projects are excluded from these requirements. Routine maintenance includes slurry seals, repaving, and reconstruction of the road or street where the original line and grade are maintained. The Department of Public Works shall use either the USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets (December 2008 EPA-833-F-08-009) or the City of Los Angeles Green Streets and Green Alleys Design Guidelines Standards to the maximum extent practicable in implementing these requirements.

SECTION 6. CEQA Exemption. This ordinance is a regulatory action, authorized by the Porter-Cologne Water Quality Control Act, which enacts additional protections for the environment and natural resources which do not have the potential to cause significant negative effects on the environment. The adoption of this ordinance is categorically exempt from review under CEQA Guidelines section 15307 as an action taken by a regulatory agency for the protection of natural resources to assume the maintenance, restoration, or enhancement of natural resources. The ordinance is also categorically exempt from review under CEQA Guidelines section 15308 as an action taken by a regulatory agency for the maintenance, restoration, enhancement, or protection of the environment. The City adopts this ordinance in the course of its compliance with the MS4 NPDES permit, which is a regulatory process that includes procedures designed to protect the environment. As such, this ordinance is categorically exempt from further review under CEQA.

Attachment 2

SECTION 7. Severability. Should any provision of this Ordinance or its application to any person or property be found by a court of competent jurisdiction to be invalid or unenforceable, the remaining provisions hereof shall be enforceable according to their terms and to that end the provisions of this ordinance are severable.

SECTION 8. Construction. To the extent the provisions of the La Habra Heights Municipal Code as amended by this ordinance are substantially the same as previous provisions of that Code; those provisions shall be construed as continuations of those previous provisions and not as new enactments.

SECTION 9. Publication. The City Clerk shall cause this Ordinance to be published or posted in accordance with California Government Code Section 36933, shall certify to the adoption of this Ordinance, and shall cause this Ordinance and his/her certification, together with proof of publication, to be entered in the Book of Ordinances of the City Council.

SECTION 10. Effective Date. This Ordinance shall take effect thirty days after its adoption pursuant to California Government Code section 36937.

PASSED, APPROVED and ADOPTED this day of _____of 2014.

_____
Roy Francis, Mayor

ATTEST:

I, Grace Andres, Deputy City Clerk of the City of La Habra Heights, California, do hereby certify that the foregoing Ordinance was introduced at a regular meeting of the City Council of the City of La Habra Heights held on the _____ day of _____, 2014, and was finally passed at a regular meeting of the City Council of the City of La Habra Heights held on the _____ day of _____, 2014, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

_____
Grace Andres, Deputy City Clerk

APPROVED AS TO FORM:

_____
Christi Hogin, City Attorney

APPENDIX B

ASSEMBLY BILL 885 INFORMATION

CALIFORNIA Water Boards

Fact Sheet

STATE WATER RESOURCES CONTROL BOARD | 1001 I Street, Sacramento, CA 95814 | Mailing Address: P. O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov

Septic Systems Focus of Proposed New Statewide Policy

Latest policy effort follows two rounds of public workshops, review and feedback to ensure that surface waters and groundwater used for drinking is safe for consumption.

Overview

The State Water Resources Control Board (State Water Board) is drafting a new policy to meet the legal mandate that requires the State Water Board to develop statewide regulations or standards for septic systems. This proposed policy was rewritten in response to public comments made regarding the prior proposed regulation. This overview is to explain what the proposed policy is expected to require of owners of small, domestic septic systems and other types of onsite wastewater treatment systems that fall under the proposed policy.

In this and all documents related to the State Water Board's proposed policy, the term ***Onsite Wastewater Treatment System(s) (OWTS)*** is used. (OWTS are commonly referred to as septic systems or septic tanks, however other types of onsite wastewater treatment systems are occasionally used and covered by this proposed Policy.)

How Does the New Proposed Policy Affect Septic Tank Owners?

More than 95 percent of current OWTS owners that are covered by the policy are expected to experience little or no change in the manner in which their systems are regulated. If an individual OWTS is currently in good operating condition, and it is not near a stream, river, or lake that the State has identified as polluted with bacteria and/or nitrogen-related compounds – then this proposed policy would have little or no effect on that property owner. It is estimated the proposed policy will affect less than five percent of existing OWTS.

Who Will Be Affected By the Proposed Policy?

Owners of existing septic systems adjacent to an impaired surface water body, someone installing a new or replacement OWTS, and owners of an existing system that has failed.

Each state is required by federal law to routinely assess the quality of its surface waters to determine if they support the beneficial uses designated for the waters. Common beneficial uses for surface water include drinking water, support of aquatic life, and recreational contact-sports such as swimming. Owners of OWTS that are located adjacent to a surface waterbody that exceeds water quality standards for bacteria or nitrogen compounds, such as nitrates, may have to retrofit the septic system with supplemental treatment. Maps of water bodies impaired by bacteria (pathogens) or nitrogen compounds (nutrients) can be viewed on the State Water Board's website at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml .
[Go to the tab marked "Map" and then select the type of pollutant to view.]

How is this Proposed Policy Different from the Draft Regulations Released in 2008?

This proposed policy takes a very different approach than the draft State Water Board regulations circulated for public review and comment in 2008. In 2008 and 2009, staff from the State Water Board conducted 14 stakeholder meetings around the state to gather comments on the draft regulations

released in 2008. Based on the extensive comments received at those meetings, the proposed policy takes a risk-based approach, addressing only those systems that threaten water sources serving the general public.

The new proposed policy approach now relies extensively on local county and city programs – as is currently the practice – to regulate OWTS. The proposed policy will reflect the comments of property owners, those who depend on septic tanks, and others concerned about the impact that improperly operating septic tanks pose to public health and water quality.

Why a Policy for Onsite Wastewater Treatment Systems (Septic Systems)?

In 2000, the California Legislature passed Assembly Bill 885 (Water Code § 13290) that requires the State Water Board to adopt regulations or standards for the permitting and operation of OWTS. A water quality control policy (Policy) adopted by the State Water Board contains standards, and is the equivalent of regulations.

Why is this Proposed Policy Needed?

In addition to the statutory requirement for the State Water Board to adopt regulations or standards, OWTS that do not function properly threaten both public health and the environment. The Water Code generally requires regulation of discharges of waste that affect or threaten to affect surface water or groundwater quality. OWTS not properly sited, built, or maintained can pollute groundwater and surface water, and pose a direct threat to public health due to the release of bacteria. OWTS can release soluble inorganic materials, such as nitrogen compounds, which are resistant to degradation that can pollute both groundwater and surface waters.

Public Process

The State Water Board follows a strict, legally mandated process when adopting any proposed regulation or policy. There will be multiple opportunities for public comment and discussion. Water Board members consider items for adoption at publicly-noticed (and open to the general public) hearings and meetings. A general schedule that outlines the public process for this proposed policy is located on the OWTS website listed below.

How to Stay Informed

The goal, for those who think they might be affected, is to both ***stay informed*** and ***participate***. The State Water Board has created a website where you can find the most current information regarding development of the new proposed policy:
http://www.waterboards.ca.gov/water_issues/programs/owts/

In addition, you can subscribe to our e-mail list by using the following link:
http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml
Navigate to Water Quality topics and then subscribe to it by putting a “check” in the box:

☑ Onsite Wastewater Treatment Systems (OWTS)-Septic Systems

All publicly-released documents, opportunities to comment, as well as meeting notices are distributed via this list by e-mail notifications.

APPENDIX C

DRAFT CONSTRTUCTION PROGRAM FORMS

CITY OF LA HABRA HEIGHTS
BUILDING AND SAFETY & PLANNING
LOCAL STORM WATER POLLUTION PREVENTION PLANS (LOCAL SWPPP)

CORRECTION SHEET

GRADING/PLAN CHECK NO.	DRAINAGE	TRACT/PM	WDID NO. (SITES 1 ACRE OR GREATER)

SITE ADDRESS	CITY/AREA

ENGINEER/ APPLICANT	TELEPHONE NO.

OWNER	TELEPHONE NO.

DISTURBED AREA (ACRES)	PLAN CHECKER	ENTRY DATE	STORM SEASON

In compliance with the City of La Habra Heights National Pollution Discharge Elimination System (NPDES) Ordinance 4.16.90, all construction sites are required to implement Best Management Practices (BMPs) to control erosion, debris, and construction-related pollutants.

The following Best Management Practices (BMPs) handbooks provide specific guidance on selecting BMP which must be implemented on all construction sites.

- "Los Angeles County Department of Public Works – Construction Site Best Management Practices (BMPs) Manual – August 2010"
  Handbook is available at:
  County of Los Angeles Department of Public Works
  Cashiers Office - Lobby
  900 South Fremont Avenue
  Alhambra, CA 91802 Phone No.: (626) 458-6959

- "2009 Construction BMP Handbook/Portal"
  Web-based portal is available at www.cabmphandbooks.com

Local Storm Water Pollution Prevention Plans (LSWPPP) are year-round BMPs measures that must be incorporated into the construction plans and activities for residential sites with any disturbed area one-acre or less, and for all non-residential sites. All BMPs must be detailed on the LSWPPP or reference standard details found in the "California Storm Water BMP Construction Handbook."

❑ The LSWPPP plan must include appropriate BMPs for: General Site Management, Construction Materials and Waste Management, and Erosion and Sediment Controls. Erosion and Sediment Control BMPs must be provided for wet and dry seasons.

❑ To control site erosion and sediments an Erosion Control Plan (ECP) must be submitted (or revised) every year to reflect site conditions at the start of the rainy season October 15. Grading and Building plans in for plan check, which will have construction work occurring during the rainy season, will not be permitted until ECP are submitted and approved. Details for ECP may be indicated on the LSWPPP or submitted as separate plans.

❑ For sites where the disturbed area is one acre or more, applicants must file a Notice of Intent (NOI) and a State SWPPP and obtain a Waste Discharge Identification number (WDID No.) with the State Water Resources Control Board, Division of Water Quality, https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp. Applicants must provide and label State WDID No. on the title sheet of Local SWPPP/ECP. Submitting a

State SWPPP does not exempt an applicant from submitting and obtaining approval for a Local Storm Water Pollution Prevention Plan. These applications will be reviewed and approved on a case-by-case basis.

Note no discharges into any of the local waterways are allowed.

1. Corrections are required for circled item numbers. All corrections and comments identified on the returned check print must be incorporated into the plans. Revised plans must be resubmitted for review.

2. Return this review sheet along with check print, revised plans, specifications, and all requested supporting information.

3. When responding to corrections or comments, a separate sheet of detailed explanation of corrections is encouraged.

4. **Your plans have been reviewed by_____. Plan checker is available for office hours and meetings _____ from _____ only. All other meetings must have a scheduled appointment. Please phone (_____)_____ for questions and to schedule an appointment.**

PLAN CHECK STATUS AND OUTSTANDING CORRECTIONS:

PLANS NOT APPROVED, resubmit _____three sets of revised LSWPPPs for review with information and corrections as circled. LSWPPPs for grading projects must have "wet" stamps and signatures of California registered Civil Engineer on each page.

Please return check print and supporting information with submittal. When updating a LSWPP/WWECP, a copy of previous approved plans must be provided.

SUBMITTAL DATE	REVIEW DATE
1	
2	
3	

COMMENTS:_____

REQUIREMENTS FOR LOCAL STORM WATER POLLUTION PREVENTION PLANS AND EROSION CONTROL PLANS (LSWPPP/ECP)

GENERAL PLAN REQUIREMENTS:

1. Submit three copies of Erosion Control (ECP) and/or Local Storm Water Pollution Prevention Plan (Local SWPPP). Local SWPPPs for projects which require a grading permit, must be signed and stamped by a Civil Engineer prior to approval.

2. The Local SWPPP/WWECP must include the following:

   2.1 Title Page
   2.2 Site Map
   2.3 General Site Management BMP
   2.4 Construction Materials and Waste Management BMPs
   2.5 Erosion and Sediment Control BMPs

3. Provide calculations for the sizing of all temporary drainage devices and sediment basins. All calculations must be signed and stamped by a Civil Engineer. Design flows must be based of an approved hydrology study or hydrology calculations provided.

TITLE PAGE REQUIREMENTS:

The following items must be included on the Local SWPPP/ECP Title Page:

4. Title Blocks - With project name, address, and grading or building plan check number. Engineering company name, address, and phone number. Developer/Owner name, address, and phone number. Provide contact information for contractor.

5. General Notes - See attached General Notes. All applicable notes must be included and signed as applicable. General Note No. 20 may be submitted as a separate document. See enclosed attachment.

6. Location Maps - Project location must be identified with a Vicinity Map and Site Index Map, which include north arrow and scale as applicable.

SITE PLAN REQUIREMENTS:

7. Provide detailed site plans showing the location of all proposed BMPs. Site plans should use approved grading plans or building site plans topography. Site plans must reflect the site conditions at the beginning of each rainy season and be updated annually if construction continues through the following rainy season.

8. Identify and label all existing and proposed drainage structures. Label drainage devices including storm drains and catch basins/inlet structures which are to be completed by November 1.

9. Label all existing and proposed streets. Identify all streets which are paved or will be paved by November 1.

10. Identify and label existing and proposed property lines.

11. Provide name, location, and description of any environmentally sensitive areas located in or adjacent to the project.

12. Identify graded slope surfaces that have been disturbed and are denuded of natural vegetation. All disturbed slopes must be stabilized so as to inhibit erosion by wind and water.

GENERAL SITE MANAGEMENT BMPs:

13. Show vehicle equipment areas for cleaning, fueling, and maintenance. Identify BMPs proposed for spill prevention and containment.

14. Show location of site entrances and identify BMPs proposed to control site entrance (Tracking Control).

CONSTRUCTION MATERIALS AND WASTE MANAGEMENT BMPs:

15. Show location of material delivery and storage area(s).

16. Identify the proposed methods of spill prevention and controls on plans.

17. Show location of designated waste collection area on plans.

18. Locate concrete truck washout area on plan. This area must be at least 50 feet from storm drains, open ditches, or water bodies. Runoff from this area must be controlled. Identify any berms or pits proposed for containment.

EROSION AND SEDIMENT CONTROL BMPs

19. Wet season erosion control plans must be revised and approved prior to each rainy season throughout the site grading operations.

20. Erosion control devices must be designed and incorporated in the plans to prevent debris flows onto adjacent properties, adjacent roadways, and into natural drainage courses.

21. Indicate on plans all applicable storm water erosion control devices, including but not limited to: Earth dike, temporary drains and swales, slope drain, outlet protection, and check dams.

22. Add to plans all applicable erosion and sediment control details. Refer to the "2009 Construction BMP Handbook/Portal". Standard BMPs indicated in the BMP Handbook/Portal do not have to be shown the plans; however, all information associated with these details, required for construction, must be identified on the plans, this includes dimensions, elevations, and types of materials.

23. On unpaved streets, Sandbag check dams should be provided in accordance with the following minimum spacing, unless calculations are submitted to justify increased spacing:

SLOPE	CHECK DAM INTERVAL
Less than 5%	100 feet on center
5% to 10%	50 feet on center
Greater than 10%	25 feet on center

24. For interim erosion control plans, desilting facilities will be required where drainage devices are not operational and slopes have not been established.

25. Provide appropriate devices where flows are concentrated, and specify measures to ensure the discharge is reasonably free of pollutants and sediments. Examples of recommended locations are: at property lines to protect adjacent properties, roadways, natural drainage courses, and at energy dissipaters.

26. Provide a dike to direct flow to sediment basin or sediment pits. Dike must be lined with concrete, sandbags, or other non-erodible materials.

27. On plans, indicate locations where irrigation systems are in operation and slope planting has been established.

28. Outline the limits of the drainage and graded area and indicate proposed devices to control sediment-laden runoff. A sediment trap or a sediment basin may be used. See references on page 1 for design criteria.

Submit calculation to demonstrate that minimum design requirements are met or exceeded. Plans must show required and provided storage rates. Flow rates must be based on an approved hydrology study.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) \ EROSION CONTROL (ECP GENERAL NOTES

1. In case of emergency, call ____(Responsible Person)_____ at _____(24-Hour telephone).
   Please fill in name and number

2. A stand-by crew for emergency work shall be available at all times during the rainy season (November 1 to April 15). Necessary materials shall be available on-site and stockpiled at convenient locations to facilitate rapid construction of emergency devices when rain is imminent.

3. Erosion control devices shown on this plan may be removed when approved by the Building Official if the grading operation has progressed to the point where they are no longer required.

4. Graded areas adjacent to fill slopes located at the site perimeter must drain away from the top of slope at the conclusion of each working day. All loose soils and debris that may create a potential hazard to off-site property shall be stabilized or removed from the site on a daily basis.

5. All silt and debris shall be removed from all devices within 24 hours after each rainstorm and be disposed of properly.

6. A guard shall be posted on the site whenever the depth of water in any device exceeds two feet. The device shall be drained or pumped dry within 24 hours after each rainstorm. Pumping and draining of all basins and drainage devices must comply must comply with the appropriate BMP for dewatering operations.

7. The placement of additional devices to reduce erosion damage and contain pollutants within the site is left to the discretion of the Field Engineer. Additional devices as needed shall be installed to retain sediments and other pollutants on site.

8. Desilting basins may not be removed or made inoperable between November 1 and April 15 of the following year without the approval of the Building Official.

9. Storm Water Pollution and Erosion Control devices are to be modified, as needed, as the project progresses, the design and placement of these devices is the responsibility of the field engineer. Plans representing changes must be submitted for approval if requested by the Building Official.

10. Every effort should be made to eliminate the discharge of non-storm water from the project sites at all times.

11. Eroded sediments and other pollutants must be retained on-site and may not be transported from the site via sheet flow, swales, area drains, natural drainage courses, or wind.

12. Stockpiles of earth and other construction-related materials must be protected from being transported from the site by the forces of wind or water.

13. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soils and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.

14. Excess or waste concrete may not be washed into the public way or any other drainage system. Provisions shall be made to retain concrete wastes on-site until they can be disposed of as solid waste.

15. Developers/contractors are responsible to inspect all Erosion Control Devices and BMPs are installed and functioning properly if there is a 50% or greater probability of predicted precipitation, and after actual precipitation. A construction site inspection checklist and inspection log shall be maintained at the project

site at all times and available for review by the Building Official (copies of the self-inspection check list and inspection logs are available upon request).

16. Trash and construction-related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.

17. Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.

18. Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.

19. As the architect/engineer of record, I have selected appropriate BMPs to effectively minimize the negative impacts of this project's construction activities on storm water quality. The project owner and contractor are aware that the selected BMPs must be installed, monitored, and maintained to ensure their effectiveness. The BMPs not selected for implementation are redundant or deemed not applicable to the proposed construction activity."

_____ _____
Civil Engineers/Architects Signature Date

20. The following notes must be on the plan (or submitted as a separate document - prior to plan approval).

    As the project owner or authorized agent of the owner, I have read and understand the requirements to control storm water pollution from sediments, erosion, and construction materials, and I certify that I will comply with these requirements. I, or my representative, contractor, developer, or Engineer will make certain that all BMP shown on this plan will be fully implemented, and all erosion control devices will be kept clean and functioning. Periodic inspections of the BMPs will be conducted and a current log, specifying the exact nature of the inspection and any remedial measures will be kept at the construction site at all times and will be available for the review by the Building Official.

    As the project owner or authorized agent of the owner, "I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/or inaccurate information, failing to update the Local SWPPP to reflect current conditions, or failing to properly and/or adequately implement the Local SWPPP may result in revocation of grading and/or other permits or other sanctions provided by law."

_____ _____
Owner or Authorized Representative (Permitee) Date

21. The following BMPs from the “2009 Construction BMP Handbook/Portal”, must be implemented for all construction activities as applicable. BMPs from the “California Storm Water BMP Construction Handbook – January 2003”may be used if detail is indicated. Additional measures may be required if deemed appropriate by City inspectors.

EROSION CONTROL
EC1 – SCHEDULING
EC2 – PRESERVATION OF EXISTING VEGETATION
EC3 – HYDRAULIC MULCH
EC4 – HYDROSEEDING
EC5 – SOIL BINDERS
EC6 – STRAW MULCH
EC7 – GEOTEXTILES & MATS
EC8 – WOOD MULCHING
EC9 – EARTH DIKES AND DRAINAGE SWALES
EC10 – VELOCITY DISSIPATION DEVICES
EC11 – SLOPE DRAINS
EC12 – STREAMBANK STABILIZATION
EC13 – *RESERVED*
EC14 – COMPOST BLANKETS
EC15 – SOIL PREPARATION\ROUGHENING
EC16 – NON-VEGETATED STABILIZATION

TEMPORARY SEDIMENT CONTROL
SE1 – SILT FENCE
SE2 – SEDIMENT BASIN
SE3 – SEDIMENT TRAP
SE4 – CHECK DAM
SE5 – FIBER ROLLS
SE6 – GRAVEL BAG BERM
SE7 – STREET SWEEPING AND VACUUMING
SE8 – SANDBAG BARRIER
SE9 – STRAW BALE BARRIER
SE10 – STORM DRAIN INLET PROTECTION
SE11 – ACTIVE TREATMENT SYSTEMS
SE12 – TEMPORARY SILT DIKE
SE13 – COMPOST SOCKS & BERMS
SE14 – BIOFILTER BAGS

WIND EROSION CONTROL
WE1 – WIND EROSION CONTROL

TEMPORARY TRACKING CONTROL
TC1 – STABILIZED CONSTRUCTION ENTRANCE EXIT
TC2 – STABILIZED CONSTRUCTION ROADWAY
TC3 – ENTRANCE/OUTLET TIRE WASH

NON-STORMWATER MANAGEMENT
NS1 – WATER CONSERVATION PRACTICES
NS2 – DEWATERING OPERATIONS
NS3 – PAVING AND GRINDING OPERATIONS
NS4 – TEMPORARY STREAM CROSSING
NS5 – CLEAR WATER DIVERSION
NS6 – ILLICIT CONNECTION/DISCHARGE
NS7 – POTABLE WATER/IRRIGATION
NS8 – VEHICLE AND EQUIPMENT CLEANING
NS9 – VEHICLE AND EQUIPMENT FUELING
NS10 – VEHICLE AND EQUIPMENT MAINTENANCE
NS11 – PILE DRIVING OPERATIONS
NS12 – CONCRETE CURING
NS13 – CONCRETE FINISHING
NS14 – MATERIAL AND EQUIPMENT USE
NS15 – DEMOLITION ADJACENT TO WATER
NS16 – TEMPORARY BATCH PLANTS

WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL
WM1 – MATERIAL DELIVERY AND STORAGE
WM2 – MATERIAL USE
WM3 – STOCKPILE MANAGEMENT
WM4 – SPILL PREVENTION AND CONTROL
WM5 – SOLID WASTE MANAGEMENT
WM6 – HAZARDOUS WASTE MANAGEMENT
WM7 – CONTAMINATION SOIL MANAGEMENT
WM8 – CONCRETE WASTE MANAGEMENT
WM9 – SANITARY/SEPTIC WASTE MANAGEMENT
WM10 – LIQUID WASTE MANAGEMENT

OWNERS STATEMENT OF UNDERSTANDING:

The following statement must be a note on the LSWPPP plans or submitted as a separate document prior to plan approval.

As the project owner or authorized agent of the owner, I have read and understand the requirements to control storm water pollution from sediments, erosion, and construction materials, and I certify that I will comply with these requirements. I, or my representative, contractor, developer, or Engineer will make certain that all BMPs shown on this plan will be fully implemented, and all erosion control devices will be kept clean and functioning. Periodic inspections of the BMPs will be conducted, and a current log, specifying the exact nature of the inspection and any remedial measures will be kept at the construction site at all times and will be available for the review by the City of La Habra Heights Building Official representative.

As the project owner or authorized agent of the owner, "I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/or inaccurate information, failing to update the Local SWPPP to reflect current conditions, or failing to properly and/or adequately implement the Local SWPPP may result in revocation of grading and/or other permits or other sanctions provided by law."

_____ _____

Owner or Authorized Representative (Permittee) Date

Developers/Contractors Self Inspection
Review sheet

Developers/contractors are responsible to inspect all Erosion Control Devices and **BMPs** are installed and functioning properly if there is a 50% or greater probability of predicted precipitation, (per NOAA – http://www.weather.gov) and after actual precipitation. A construction site inspection checklist and inspection log shall be maintained at the project site at all times and available for review by the Building Official.

DEVELOPERS/CONTRACTOR SELF-INSPECTION FORM

INSPECTION LOG

The site shall be inspected before storm events with a 50% or greater probability of predicted precipitation, and after actual precipitation, and documented on the Construction Site Inspection Checklist Form. Incidents of noncompliance must be reported to the Field Engineer. A log of all inspections, as shown below, should be kept current and maintained at the job sites at all times.

Date	Inspector	TYPE OF INSPECTION			**Observations** - if post-storm - inspection, note size of storm in inches
		Routine	**Pre-storm**	**Post-storm**	

CONSTRUCTION SITE INSPECTION CHECKLIST

Inspected By: _____

Project: _____

Contractor: _____

Date: _____

Check “Yes” or “No” or “N/A” if not applicable.

YES	NO	N/A	
❑	❑	❑	1. Has there been rain at the site since the last inspection?
❑	❑	❑	2. Are all sediment barriers (e.g., sandbags, straw bales, and silt fences) in place in accordance with the Plan and are they functioning prop
❑	❑	❑	3. If present, are all exposed slopes protected from erosion through the implementation of acceptable soil stabilization practices?
❑	❑	❑	4. If present, are all sediment traps/basins installed and functioning properly?
❑	❑	❑	5. Are all material handling and storage areas reasonably clean and free of spills, leaks, or other deleterious materials?
❑	❑	❑	6. Are all equipment storage and maintenance areas reasonably clean and free of spills, leaks, or any other deleterious materials?
❑	❑	❑	7. Are all materials and equipment properly covered?
❑	❑	❑	8. Are all external discharge points (i.e., outfalls) reasonably free of any noticeable pollutant discharges?
❑	❑	❑	9. Are all internal discharge points (i.e., storm drain inlets) provided with inlet protection?
❑	❑	❑	10. Are all external discharge points reasonably free of any significant erosion or sediment transport?
❑	❑	❑	11. Are all BMPs identified on the Plan installed in the proper locations and according to the specifications for the Plan?
❑	❑	❑	12. Are all structural control practices in good repair and maintained in functional order?

Check “Yes” or “No” or “N/A” if not applicable.

YES	NO	N/A	
❑	❑	❑	13. Are all on-site traffic routes, parking, and storage of equipment and supplies restricted to areas designated in the Plan for those uses?
❑	❑	❑	14. Are all locations of temporary soil stockpiles or construction materials in approved areas and properly contained?
❑	❑	❑	15. Are all seeded or landscaped areas properly maintained?
❑	❑	❑	16. Are sediment controls in place at discharge points from the site?
❑	❑	❑	17. Are slopes free of significant erosion?
❑	❑	❑	18. Are all points of ingress and egress from the site provided with stabilized construction entrances?
❑	❑	❑	19. Is sediment, debris, or mud being cleaned from public roads at intersections with site access roads?
❑	❑	❑	20. Does the Plan reflect current site conditions?

STORM WATER POLLUTION CONTROL REQUIREMENTS FOR CONSTRUCTION SITES

LESS THAN ONE ACRE

IMPLEMENTATION REPORT

Project Name/TR #_____

Site Address _____

Permit/Contract No. _____

CONSTRUCTION SITES ONE ACRE AND LESS – RELATED BMPs	**YES**	**NO**	**N/A**
1. Is the Owner's Certification of Compliance with Minimum Requirements on-site?	❒	❒	
2. Are eroded sediments and other pollutants retained on site and not transported from the site via sheetflow, swales, area drains, natural drainage, or wind? If No, Explain:	❒	❒	❒
3. Are stockpiles of earth and other construction related materials protected from being transported from the site by forces of wind or water? If No, Explain:	❒	❒	❒
4. Are fuels oils, solvents, and other toxic materials stored in accordance with their listings and not contaminating the soil and surface water? If No, Explain:	❒	❒	❒
5. Is excess or waste concrete washed into a contained area and not being washed in the public way or any other drainage system? If No, Explain:	❒	❒	❒
6. Is trash and other construction related solid waste being deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind? If No, Explain:	❒	❒	❒
7. Are sediments and other materials not being tracked from the site by vehicle traffic? Is the construction site's entrance stabilized to inhibit sediments from being deposited into the public way? Are accidental deposits swept up immediately and not washed down by rain and other means? If No, Explain:	❒	❒	❒
8. Are slopes with disturbed soils or denuded of vegetation stabilized to inhibit erosion by wind and water? If No, Explain:	❒	❒	❒

_____ _____ _____

Inspected by: Date Phone

Questionnaire to Determine Coverage under SUSMP, SWPPP and other NPDES Requirements

Notice to Applicants

This questionnaire will allow the City to determine if a Standard Urban Stormwater Mitigation Plan (SUSMP), Storm Water Pollution Prevention Plan (SWPPP), and/or other NPDES requirements will be necessary before receiving building and/or grading permits for the proposed project.

Name of Owner/Developer:	**Project Location:** **Lot / Tract No.**
Contact Person(s)	**Telephone No.:**

I. Projects Subject to SUSMP Requirements [please check appropriate box(es)].

- ☐ Single-family hillside development that contemplates grading on any natural slope that is 25 percent or greater and where grading contemplates cut or fill slopes [Subject to Numerical Design Criteria if development is one acre or more]
- ☐ Home subdivisions of ten or more housing units [Subject to Numerical Design Criteria]
- ☐ Industrial/commercial development that disturbs one acre or more surface area [Subject to Numerical Design Criteria]
- ☐ Automotive service facilities [Subject to Numerical Design Criteria if it creates 5,000 SF or more of surface area] (Not applicable)
- ☐ Retail gasoline outlets [Subject to Numerical Design Criteria if it creates 5,000 SF or more impervious surface area with projected Average Daily Traffic of 100 or more vehicles] (Not applicable)
- ☐ Restaurants (SIC 5812) [Subject to Numerical Design Criteria if it creates 5,000 SF or more of surface area] (Not applicable)
- ☐ Parking lot with 5,000 SF or more of surface area, or with 25 or more parking spaces [Subject to Numerical Design Criteria]
- ☐ Redevelopment projects in above subject categories that meet redevelopment threshold [Subject to Numerical Design Criteria]
- ☐ Projects located in Environmentally Sensitive Area (ESA) where the discharge is likely to impact a sensitive biological species or habitat and create 2,000 SF or more impervious surface area [Subject to Numerical Design Criteria]
- ☐ None of the above

II. Projects Features Subject to Site Specific Mitigation Requirements [Please check box(es) for project characteristics.]

These categories require implementation of a site-specific plan to mitigate post-development stormwater for new development and redevelopment not requiring a SUSMP but which may potentially have adverse impacts on post-development stormwater quality where one or more of the following exist:

- ☐ Vehicle or equipment fueling area
- ☐ Vehicle or equipment maintenance including washing and repair
- ☐ Commercial or industrial waste handling or storage
- ☐ Outdoor handling or storage of hazardous materials
- ☐ Outdoor manufacturing areas
- ☐ Outdoor food handling or processing
- ☐ Outdoor animal care, confinement, or slaughter
- ☐ Outdoor horticulture activities
- ☐ None of the above

III. SWPPP and Other NPDES Requirements

A. Please check box for project size to be disturbed due to construction.

- ☐ 1-acre or more - Statewide Construction General Permit SWPPP and WDID No. Required
- ☐ Less than one acre - local SWPPP required

For staff use only. Please do not fill out.

_____

☐ You are required to comply with the Minimum Requirements for construction sites. Refer to the Local SWPPP requirements.

☐ You are required to include SUSMP requirements in the design and construction plans for this project prior to receiving a Building Permit and/or Grading Permit.

☐ You are not required to include SUSMP requirements and design criteria for this project.

☐ You are required to submit a Site-Specific Mitigation Plan to mitigate post-development stormwater quality prior to receiving permit. You are required to certify that construction Best Management Practices (BMPs) will be implemented at the construction site.

☐ You are required to show proof that you have applied for a State General Permit for Stormwater Discharges associated with Construction Activities and have prepared a State SWPPP prior to receiving building and/or grading permits. For more information on the State's General Permit, please call (916) 341-5537.

☐ You may refer to the SUSMP provisions and design consideration of the Los Angeles County DPW Manual for SUSMP and/or the California Construction Best Management Practices (BMP) Handbook, 2003.

Comments: _____

_____

_____

_____ _____

Planning/Engineering Division **Date**

Please submit all required documents to the Building and Safety Division.

DEFINITIONS

"Numerical Design Criteria"

A. Mitigate (infiltrate or treat) stormwater runoff volume from either:

1) The 85th percentile 24-hour runoff event determined as the maximized capture stormwater volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or

2) The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/Commercial, (1993); or

3) The volume of runoff produced from a 0.75 inch storm event, prior to its discharge to a stormwater conveyance system; or

4) The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for "treatment" (0.75 inch average for the Los Angeles County area) that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event

OR

B. Mitigate (infiltrate or treat) stormwater runoff flows from either:

1) The flow of runoff produced from a rain event equal to at least 0.2 inches per hour intensity; or

2) The flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for Los Angeles County; or

3) The flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above

"Redevelopment" means (a) land-disturbing activity that results in the creation, addition, or replacement of 5,000 square feet or more of impervious surface area on an already developed site. Where Redevelopment results in an alteration to **more than 50%** of impervious surfaces of a previously existing development, and the existing development was not subject to post development stormwater quality control requirements, the entire project must be mitigated. Where Redevelopment results in an alteration to **less than 50%** of impervious surfaces of a previously existing development, and the existing development was not subject to post development stormwater quality control requirements, the alteration must be mitigated, but not the entire development (b) Redevelopment does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety (c) Existing single-family structures are exempt from Redevelopment requirements.

_____

Applicant Name Applicant Signature Date

APPENDIX D

IINTEGRATED MONITORING PLAN

(submitted under separate cover)