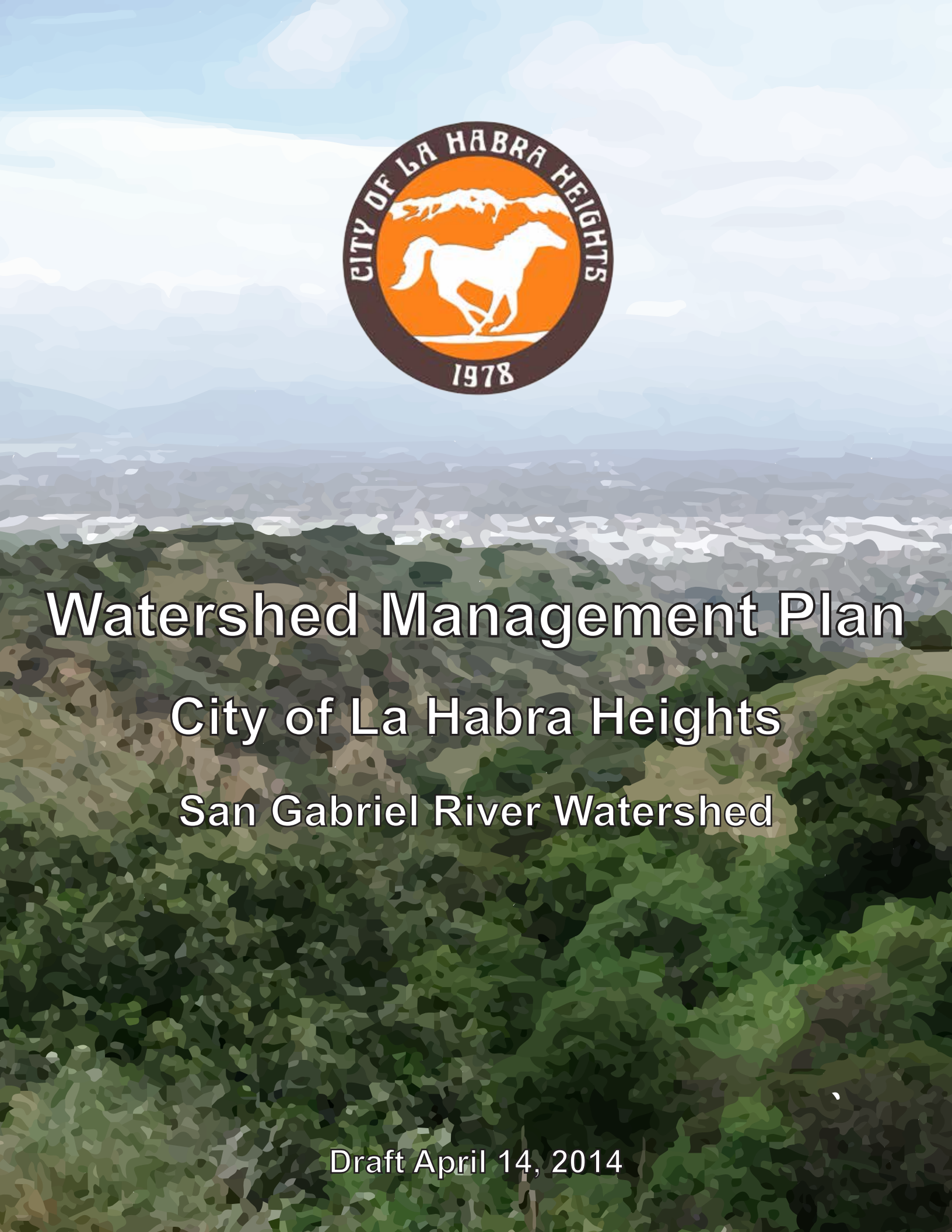

Watershed Management Plan

City of La Habra Heights

San Gabriel River Watershed

Draft April 14, 2014

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EXECUTIVE SUMMARY

The City of La Habra Heights (City) as Co-Permittee to Order R4-2012-0175 has prepared this 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 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.

The City of La Habra Heights has been found to have little to no impact on the two watersheds 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, as posted December 10, 2012 (MS4 Permit). This task is specifically required in Part 6, 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 Plan 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.

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.
- 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.

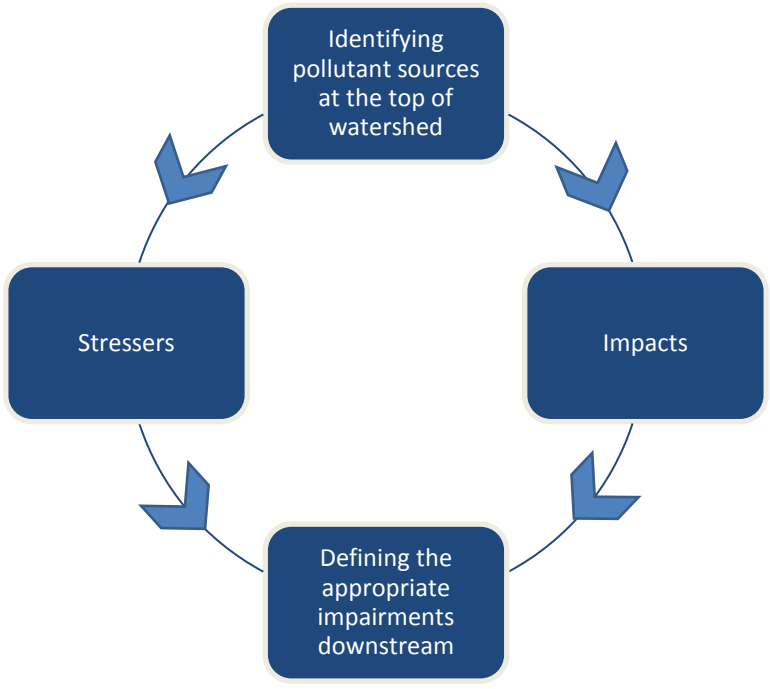


Figure 1 – Baseline Watershed Relationships

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.
- Implement plan; develop projects that address goals/solutions identified above.

1.3 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 Policy Schedule

Implementation of the Goal and policies presented in Section 1.3 are ongoing. The most recent implementation occurred in 2013 when the City developed the 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 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 SUSMP requirements. The City, however, extended those requires 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. In response to the 2012 Permit, specifically to the WMP requirements, the City adopted a Low Impact Development (LID) and Green Street Ordinance. The adoption schedule is 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

At time of WMP, the Ordinance was approaching the effective date. 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 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 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 – 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 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 2 shows the local subwatersheds.

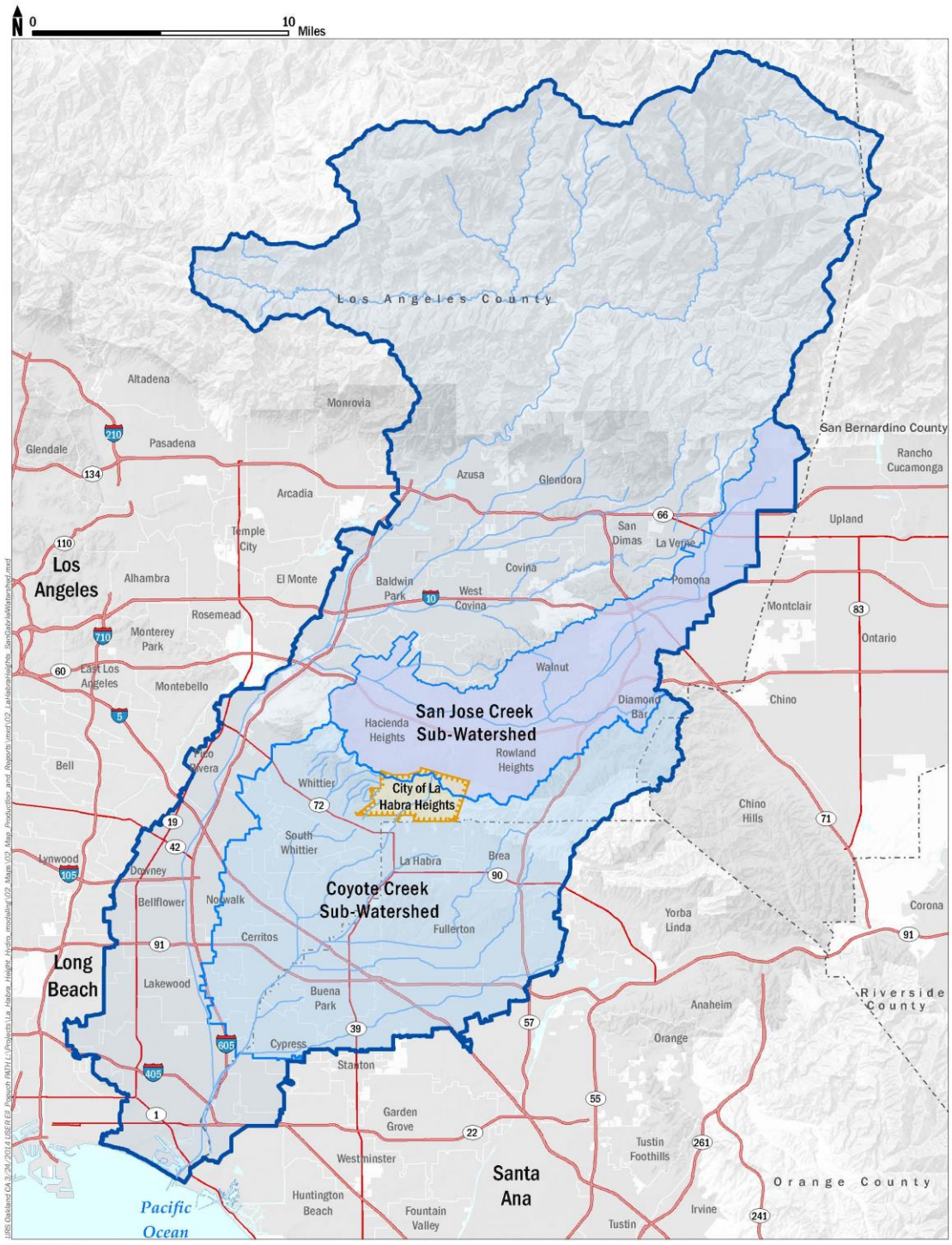
La Mirada Creek and Coyote Creek are the two major southern drainage channels that collect and convey surface water from the City. These facilities' locations and directional flows are described below:

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.

Coyote Creek
Coyote Creek (OCFCD Facility No. A01) has three forks—north, central, and southern—with only the north fork channel impacted by the City. 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
Creek Structure
Coyote Creek–North Fork drains south through the City of Whittier and into Coyote Creek in the City of Cerritos. Coyote Creek–North Fork 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.

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 SJC Reach 1 which consists of the portion of the waterbody from the San Gabriel River confluence to Temple Boulevard in Pomona. San Jose Creek drains a large urbanized watershed and includes waterwater treatment plant discharges, all of which are downstream of La Habra Heights.



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.

San Gabriel River Drainage Area

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

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, 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.

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 five categories of land uses: residential, open space, public facilities, resource protection 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 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
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				

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

Table 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
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 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.

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 GIS based maps 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.

SECTION 3 WATERSHED CHARCTERISTICS

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 characteristics.

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 in the 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*
- Resource Open Space/Golf Club*: sediment, nutrients*

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 CWA Section 303(d) Listings and TMDLs

As previously presented, the City is at the headwaters for the Coyote Creek and San Jose Creek subwatersheds. City discharges enter La Mirada Creek which is tributary to Coyote Creek; hence the linkage to this receiving water. As presented in the 2010 303(d) list the following pollutants are to be addressed:

Table 3 303(d) Listings

Waterbody	Pollutants	Listing Decision	Potential Sources	Schedule	Waste Load Allocations
Coyote Creek	Copper	Do Not List on 303(d) List	n/a	n/a	
Coyote Creek	Indicator Bacteria	List on 303(d) list	Source Unknown	Est TMDL Completion 2021	
San Jose	Selenium	List of 303(d) List	Source Unknown	Water Quality Standards Being Met (SWRCB 2011)	
Coyote Creek	Zinc	Do Not List on 303(d) List	n/a	Water Quality Standards Being Met (SWRCB 2011)	

The TMDLs which are addressed through this WMP and the RAA are presented in the following Table 4. The table includes the waste load allocations and typical sources.

Table 4 TMDLs in San Gabriel River Watershed Management Area

Name	Pollutant	Waste Load Allocations[1]		Source
		Wet	Dry	
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	0.232 kg/day 5 µg/L[2]	Soil erosion

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 (LARWQCB 2006).

[2] Dry weather total maximum daily loads apply in San Jose Creek when flow at Los Angeles County Department of Public Works flow gage station F312B is below or equal to the median flow of 19 cubic feet per second (LARWQCB 2006).

Acronyms:
µg/L = micrograms per liter
kg/day = kilograms per day
L = liters
N/A = not applicable

3.4 Results of Regional Bioassessment Monitoring

In 2012, the annual regional Bioassessment Monitoring program, managed by the Los Angeles County Flood Control District (LACFCD), was completed. In this document, two San Gabriel River headwater locations and one Arroyo Seco drainage location were identified as part of the annual monitoring. The two San Gabriel River locations are similar to the headwaters located within City of La Habra Heights. The Arroyo Seco location is similar to the City's residential drainages. All three locations have been part of the historical bioassessment monitoring and have been rated fair to good. Table 5 presents these location descriptions and the appropriate IDI rating.

Table 5 Los Angeles County Flood Control District
Stream Bioassessment Monitoring Stations, 2012

Location ID	Channel Type	Location	Location Sample Type	IDI Rating
SGUT-501	San Gabriel River Unlined Channel	San Gabriel River upstream of the confluence with Bear Creek	Upstream reference site, targeted/fixed site for SGRRMP	Good
SGUT-504	San Gabriel River Unlined Channel	Upper San Gabriel River near East Fork Road	Upstream reference site, targeted/fixed site for SGRRMP	Fair
6	Arroyo Seco Unlined Channel	Upstream of Arroyo Seco Spreading Grounds	Upstream reference site with minimal impact from residential land use	Fair

It is expected that, based on similar land use and geography, assessments within the City would be comparable. No bioassessment monitoring is planned within the City jurisdiction.

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 86% 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 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 City is completely within the jurisdictional boundary of the Authority although only the upslope portions of the City have been mapped for natural resources.

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 4 .

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 obtained results, wet weather exceedances of daily waste load allocations in the City's subwatersheds that drain to Coyote Creek were found less than three percent of the time for copper and less than one percent of the time for zinc. There were no exceedances of lead during the time period modeled. Dry weather exceedances of copper occurred approximately one percent of the time during dry critical conditions. Waste load allocations for selenium in San Jose Creek were exceeded less than one percent of the time during daily dry critical conditions. It is also noted that the Los Angeles Regional Water Quality Control Board has determined that both Zinc and Selenium are meeting water quality standards in Coyote Creek and San Jose Creek.

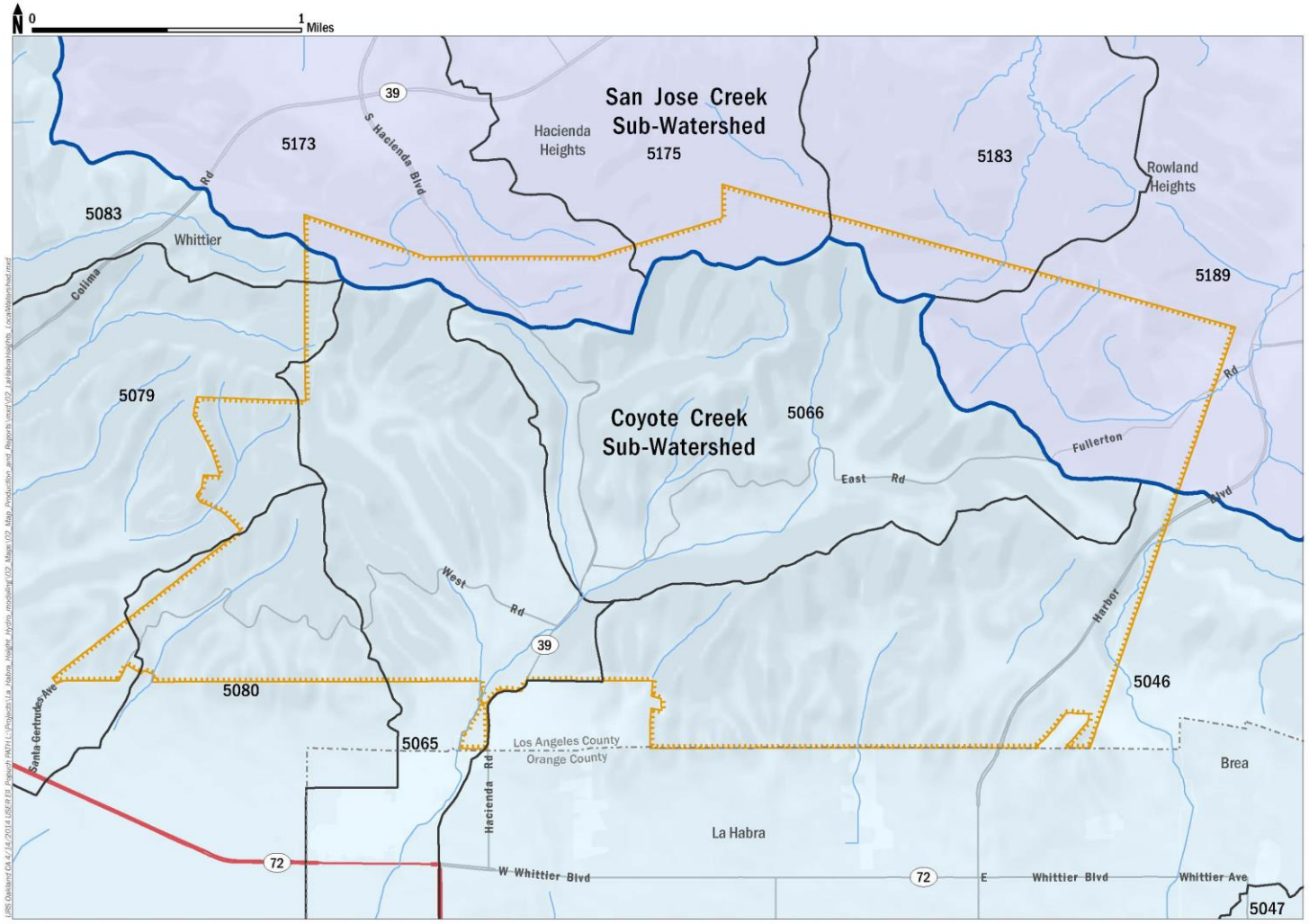
Using the State Water Resources Control Board (SWRCB) method of determining impairment for toxicants in water, modeled pollutant loading during critical conditions to Coyote Creek and San Jose Creek from the City's land use is not a major cause of impairment within the waterbodies.

Based on the results of the RAA, additional control measures will not be necessary in order for the City to obtain compliance with waste load allocations.

The RAA and the WMP are concurrently being 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).



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

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

Table 6 Subwatershed Acreage and Land Use Type

Subwatershed	Agriculture Moderate	Institutional	LD SF Res Steep	Secondary Roads	Urban Grass Irrigated	Urban Grass Non-Irrigated	Vacant Steep C	Vacant Steep D	Grand Total
5046	16.77	5.13	176.10	12.78	58.70	16.90	614.90	0	901.30
5065	12.63	10.78	132.64	10.48	44.21	15.50	525.20	0	751.46
5066	14.67	9.13	154.12	12.54	227.22	17.61	734.72	0	1170.09
5079	0.882	1.15	9.26	0.44	3.08	0.83	0	124.74	140.41
5080	5.188	0.79	54.45	4.02	18.16	5.11	182.55	0	270.31
5083	0.147	0	1.55	0	0.51	0	6.28	0	8.50
5173	2.238	0.96	23.50	3.06	7.83	3.98	115.29	0	156.88
5175	0.339	0.48	3.56	0	1.18	0.12	75.42	0	81.12
5183	0	0.009	0	0	0	0.002	78.13	0	78.14
5189	1.421	0.06	14.92	1.95	4.97	2.410	357.89	0	383.64
Total	**54.30**	**28.52**	**570.16**	**45.29**	**365.90**	**62.49**	**2690.41**	**124.74**	**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 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.

5.1 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. 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.
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.

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. Target Date: June 2015; Technical Assistance: June 2015. Estimated Cost: $5,000

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. Target Date: June 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: December 2014

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. 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.

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

5.2 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.

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.

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

Action Item: Conduct an inventory of existing filter strips and buffers present 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 2015. Estimated Cost: $15,000.

Action Item: Develop a public awareness program to educate the residents on the benefits of buffers. 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. Potential Funding Sources: TBD, General Fund. Estimated Cost: $15,000.

Action Item: Establish filter strips or buffers along perennial streams. 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 #2: 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: June 2015. Potential Funding Sources: TBD Estimated Cost: $10,000.

5.3 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 serious. In the City, this task includes large animals. Focused education on pet waste and trash will also be included. The group recommended targeting these efforts to seniors and youth through the parks program.

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 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.
- Organized luncheons or breakfasts.
- Phone calls and/or personal visits to candidates.
- Informational flyer

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

5.4 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: 2016. 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.

5.4 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.

Action Item: Encourage the development City specific stormwater and hazardous materials program with focus on spill prevention. Target Date: December 2014. 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: December 2014

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 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 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 plan. 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. Isaac Willhim
1245 N. Hacienda Rd.
La Habra Heights, CA 90631
T: 562.694.6302 x 300 | F: 562.690.5010
iwilhelm@lhhcity.org

City Manager
Ms. Shauna Clark
1245 N. Hacienda Rd.
La Habra Heights, CA 90631
562.694.6302
ShaunaC@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, as well as the GIS information, of this watershed management plan will be available at the Public Works offices.

SECTION 9 REFERENCES

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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

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

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.

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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

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APPENDIX A

LID AND GREEN STREETS ORDINANCE

ORDINANCE NO. 2014 - 01

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.

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 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 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 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;

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;

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.

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

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.

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) 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 lessee 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:

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.

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 13th day of March, 2014.

Roy Francis, Mayor

ATTEST:

I, Shauna Clark, 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 13th day of February, 2014, and was finally passed at a regular meeting of the City Council of the City of La Habra Heights held on the 13th day of March, 2014, by the following vote:

AYES:	Bergman, Francis, Higgins, Miller, and Williams
NOES:	None
ABSENT:	None
ABSTAINED:	None

Shauna Clark, 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

Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems (OWTS Policy)

General OWTS Policy Information

What are we regulating?

- Onsite wastewater treatment systems (OWTS) commonly known as septic systems that primarily treat domestic wastewater and employ subsurface disposal.
- There are an estimated 1.2 million OWTS in California

When does it take effect?

- The effective date of the Policy was May 13, 2013.
- Except for Tier 3, local agencies may continue to implement their existing OWTS permitting programs for 60 months after the effective date of the Policy.
- Owners of OWTS with projected flow over 10,000 gallons per day (gpd) or receives high-strength wastewater shall notify the Regional Water Boards. These OWTS may be required to submit a Report of Waste Discharge for coverage of Waste Discharge Requirements (WDR) or a Waiver of WDR.

Why was the Policy adopted?

- To allow continued use of OWTS, while protecting water quality and public health
- 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.

Who is impacted?

- OWTS owners
- Local agencies that permit OWTS (county environmental health dept., etc.)
- Regional Water Boards
- State Water Board

OWTS Policy Tiers

The OWTS Policy establishes a statewide, risk-based, tiered approach for regulation and management of OWTS installations and replacements, and recognizes the effectiveness of local permitting agencies. Tiers are briefly summarized below, refer to the OWTS Policy for a complete discussion of the requirements.

Tier 0: Existing OWTS (OWTS Policy Section 6)

- Applies to properly functioning systems that do not need corrective action and are not near an impaired water body subject to TMDL, local agency's special provisions, or located within 600 feet of a water body listed on OWTS Policy Attachment 2.
- Maximum flow rate is 10,000 gpd.

Tier 1: Low Risk New or Replacement OWTS (OWTS Policy Sections 7 & 8)

- Applies to new or replacement OWTS that comply with conservative siting and design standards described in the OWTS Policy.
- Tier 1 applies when a Local Agency Management Program (LAMP) has not been approved by the Regional Water Board.
- Maximum flow rate is 3,500 gpd.

Tier 2: Local Agency Management Program (LAMP) for New or Replacement OWTS (OWTS Policy Section 9)

- Applies to new or replacement OWTS that comply with the siting and design standards in an approved LAMP. LAMPs are developed by Local Agencies based on local conditions; siting and design standards may differ from Tier 1 standards.
- Maximum flow rate is 10,000 gpd.

Tier 3: Advanced Protection Management Program (OWTS Policy Section 10)

- Applies to OWTS located near impaired surface water bodies that are subject to a Total Maximum Daily Load (TMDL) implementation plan, a special provision contained in a LAMP, or is located within 600 feet of a water body listed on OWTS Attachment 2.
- Supplemental treatment requirements may apply to a Tier 3 system.
- Maximum flow rate is 10,000 gpd.

Tier 4: OWTS Requiring Corrective Action (OWTS Policy Section 11)

- Applies to systems that are not properly functioning (failing).
- Failure may be indicated by surfacing effluent, wastewater backing up in plumbing fixtures, OWTS component/piping structural failure, or significant groundwater or surface water degradation

The Policy and Substitute Environmental Document are available on the Internet at:
http://www.waterboards.ca.gov/water_issues/programs/owts/index.shtml

For more information please contact: Sherly Rosilela, P.E., Water Resource Control Engineer
Sherly.Rosilela@waterboards.ca.gov or (916)341-5578

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
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