

## Section 4 – Adaptive Management Plan Summary

Permittees participating in a WMP should include the findings and recommendations, including any requests for modification of milestones and/or schedules, from their adaptive management process. The scope of adaptive management is outlined in Part VI.C.8.a of the LA County MS4 Permit. As part of the 2017 AMP, the following summary is presented.

As stated in the WMP, the City will utilize soft and hard measures to document the progress of the program. These will include:

#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.

*There have been zero septic failures in five years. Septic information has been sent out to all residents via the newsletter. City is going to post links to the State OTWS (AB 885) website.*

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

1. On-going visual observation concerning bacteria based pollutants (pet waste and trash).
2. On-going large animal inventory and housing tracking.
3. On-going tracking and research concerning use of zinc coated chain link fencing.
4. Numbers of people targeted and reached through educational and marketing efforts.

*The City will be assigning staff to manage these tasks. With staff loss, the progress slowed down. This goal will be emphasized in the restructuring of the program implementation.*

#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.

*The City is always cognizant of the problem slopes and banks within the jurisdiction. Funding has not been available to move forward on this set of tasks.*

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

1. Municipal Development of an Local Implementation Plan (LIP)
2. Number of participants participating in the voluntary audit program

*Although a written document has not been completed, the City Hall campus has been cleaned up and is maintained to not have outdoor storage. The possible pollutants have been considerably reduced from the site. The written document will be made a priority. The residents have not been open to a voluntary audit program.*

## Section 5 – Watershed Management Plan

Permittees participating in a WMP should include the findings and recommendations, including any requests for modification of milestones and/or schedules, from their adaptive management

Permittees should identify any proposed changes or improvements to their stormwater management programs (including WMPs) and monitoring activities for the upcoming five-year term of the permit, if those proposed changes have not already been submitted as part of the Permittee(s) fourth year Annual Report pursuant to 40 CFR section 122.42(c).4 If a Permittee(s) relies upon data, information, and proposed changes identified in the fourth year Annual Report, clear references to sections and pages and data files must be included in the ROWD.

The City proposes the following changes to the WMP:

- 1) Quantify a total of two dry seasons and two wet seasons of photo sets as the total data set.
- 2) Inclusion of the Local Area Management Plan (AB 885 – Septic Program) references into the WMP document

**APPENDIX A**  
**ADAPTIVE MANAGEMENT PLAN**

**Adaptive Management Plan 2017**  
**City of La Habra Heights**  
**Order No. 01-182**

The City of La Habra Heights (City) is submitting, under this cover, the City-specific Adaptive Management Plan for 2017. This report will be included into the Report of Waste Discharge which is due on July 3, 2017.

The City has an approved WMP and they have been moving forward internally to complete required elements. As is required in the Permit Section Part VI.C.8.a, Permittees in each WMA shall implement an adaptive management process, every two years from the date of program approval, adapting the Watershed Management Program or EWMP to become more effective, based on, but not limited to a consideration of the following:

- (1) Progress toward achieving interim and/or final water quality-based effluent limitations and/or receiving water limitations in Part VI.E and Attachments L through R, according to established compliance schedules;
- (2) Progress toward achieving improved water quality in MS4 discharges and achieving receiving water limitations through implementation of the watershed control measures based on an evaluation of outfall-based monitoring data and receiving water monitoring data;
- (3) Achievement of interim milestones;
- (4) Re-evaluation of the water quality priorities identified for the WMA based on more recent water quality data for discharges from the MS4 and the receiving water(s) and a reassessment of sources of pollutants in MS4 discharges;
- (5) Availability of new information and data from sources other than the Permittees' monitoring program(s) within the WMA that informs the effectiveness of the actions implemented by the Permittees;
- (6) Regional Water Board recommendations; and
- (7) Recommendations for modifications to the Watershed Management Program solicited through a public participation process.

ii. Based on the results of the adaptive management process, Permittees shall report any modifications, including where appropriate new compliance deadlines and interim milestones, with the exception of those compliance deadlines established in a TMDL, necessary to improve the effectiveness of the Watershed Management Program or EWMP in the Annual Report, as required pursuant to Part XVIII.A.6 of the MRP (Attachment E), and as part of the Report of Waste Discharge (ROWD) required pursuant to Part II.B of Attachment D – Standard Provisions.

- (1) The adaptive management process fulfills the requirements in Part V.A.4 to address exceedances of receiving water limitations.

iii. Permittees shall implement any modifications to the Watershed Management Program or EWMP upon approval by the Regional Water Board Executive Officer or within 60 days of submittal if the Regional Water Board Executive Officer expresses no objections.

## **La Habra Heights Adaptive Review**

The following tasks and elements are from the WMP. A follow up on each task or element follows the description. Italicized text indicates the summary of the findings.

### **City of La Habra Height MCM Programs**

Per the MS4 Permit, the City is required to have the following MCM Programs:

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

### **Public Information and Participation Program**

Each permittee is required to implement a Public Information and Participation Program (PIPP) under the MS4 Permit. The City will have focused efforts on the following pollutant sources:

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

*The City has been actively providing public education information to the residents through flyers, email, newsletters and City postings. The specifics are explained in other sections of this document, however, septic system use, residential runoff and pet waste have all been addressed city-wide. A local equestrian group has also been proactive in sharing the information. These pollutant/activity specific outreach efforts are described further in sections below.*

### **Public Reporting**

The City currently contracts with Los Angeles County for maintenance of catch basins, storm drain and sanitary sewer networks. County hotline and City contact information for the Public Works Department is made available on the City's Website for all spills, SSOs or other drainage issue. *The City maintains and will continue to maintain current contact information as updates are made necessary.*

### **Public Outreach**

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

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

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

*Public outreach continues through these resources.*

### **Industrial/Commercial Facilities Program**

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

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

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

As part of the Watershed Management Program (WMP), the City is proposed to prepare a Resource Production Plan (RPP). The City stopped progress on this document due to changes in property ownership. The RPP will describe the City's implementation steps for inventorying and tracking existing and proposed resource wells and also notification to and enforcement on property owners. Now that there is a new owner, this document and task will move forward again in 2017. Focus will be on housekeeping BMPs.

### **Planning and Land Development Program**

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

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

*For the few projects which have required CEQA analysis (single family hillside homes) LID requirements were required.*

### **Low Impact Development Ordinance**

On December 17, 2013, the City Planning Commission adopted a Low Impact Development (LID) Resolution with full City Council adoption date on April 13, 2014. This ordinance is in compliance with the requirements VI.C.4.c.ii. and section VI.D.7 of the MS4 permit.

*As part of the City Code, LID features have been encouraged on the ten single-family home projects, 2014 to 2016, which have been processed through the City and met threshold requirements. Interior remodels do not require exterior LID features.*

### **New Development/Redevelopment Project Performance Criteria**

Qualifying development projects will be subject to storm water pollution control requirements including retention of all storm water resulting from a specified rain event as outlined in more detail in the City's LID ordinance. The City Planning department will work with property owners to ensure that all requirements set forth in the LID ordinance are met. SUSMPs are required to be submitted for projects which meet the thresholds. There are only a couple of projects within the jurisdiction over four years which actually triggered the SUSMP requirement.

### **Development Construction Program**

The MS4 Permit requires that the City implement a Development Construction Program. The general nature of construction activities has a high potential for discharges of pollutants and/or sediment from a site. Most of the projects within the City are less than one-acre and typically homeowner managed.

### **Construction Sites of Less Than One Acre**

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

The City will conduct inspections at these sites on an as-needed basis. The City will also utilize a progressive enforcement policy to ensure that construction sites found to be out of compliance are brought back into compliance with the requirements of the MS4 Permit.

*In the past few years, there were zero to 5 residential improvement projects in process at any time within the jurisdiction. As there is only one inspector for multiple construction aspects, the building inspector completes frequent inspections at the projects. For example, in 2015-2016, there were 183 documented site visits/inspections for 5 active sites.*

*The City has included the EPA created Erosion Control BMP flyer as a handout to the public and on the City website.*

### **Construction Site Inventory**

The City will revise and maintain permit tracking data base for all grading, encroachment, demolition, building and construction permits issued by the City. *The database was completed in 2013 and is maintained.*



### **Construction Plan Review and Approval Procedures**

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

*The City has been proactive in requiring minimum erosion control measures and, for those projects requiring a SWPPP, confirming the SWPPP is active. In the past 4 years that have been no projects which require a CGP SWPPP within the jurisdiction.*

### **BMP Implementation Requirements**

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

*This Minimum Measure addresses City municipal projects. During this time frame the City has not constructed any projects.*

### **Construction Site Inspection**

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

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

*In the past few years, there were zero to 5 residential improvement projects in process at any time within the jurisdiction. As there is only one inspector for multiple construction aspects, the building inspector completes frequents inspections at the projects. For example, in 2015-2016, there were 183 documented site visits/inspections for 5 active sites.*

*In-house training on Construction BMPs was held in 2014 as part of an overall NPDES program training for staff. The City Engineer from 2015 to 2016 had additional training from her previous employer.*

### **Public Agency Activities**

The City is required to develop and implement a Public Agency Activities Program. Requirements for Public Facilities and Activities Program shall include the following:

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

### **Public Construction Activities Management**

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

*During this time frame the City has not constructed any projects.*

### **Public Facility Inventory**

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

- Public Parking Lots - none
- Equipment Storage and Maintenance Facilities – storage areas behind City Hall
- Public Parks – one public park
- Storm Water Management Facilities - none
- Fire Stations – one Fire station adjacent City Hall
- All Other City Owned Facilities - none
- Public Restrooms – only at the Park

### **Inventory of Existing Retrofitting Opportunities**

The MS4 Permit requires that permittees develop an inventory of retrofitting opportunities with in the public right of way.

*There is little to no public right-of-way within the City jurisdiction. It is noted that Hacienda Boulevard is a City- maintained roadway only within the City limits. There are 82 public streets and 26 private streets within the jurisdiction. As per the general plan, the streets do not have curb and gutter.*

### **Public Agency Facility and Activity Management**

Permittees are required to obtain coverage under the Industrial General Permit for all permittee owned or operated facilities that require coverage based on activities that take place at the sites.

*The City does not currently have any public facilities that require separate coverage under the Industrial General Permit.*

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

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

### **Landscape, Park, and Recreational Facilities Management**

All landscape, park and recreational facilities that are City owned or maintained will conform to the requirements of the MS4 Permit.

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

### **Storm Drain Operation and Maintenance**

The City will implement and maintain applicable BMPs identified in this document. *The City has an effective trash management program in place for public events. If required, additional trash receptacles are placed throughout the area that an event is to take place. Following the conclusion of the event trash receptacles are emptied within one business day after the event.*

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

### **Streets, Roads and Parking Facilities Maintenance**

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

### **Emergency Procedures**

The City is primarily a contract city and depends on outside agencies or contractors to provide maintenance services. *In the event of an NPDES emergency, the City will contact the applicable*

*agency or contractor that the City contracts with for maintenance services that are related to the emergency. Contact information is distributed to City staff, residents and emergency dispatch.*

### **Employee and Contractor Training**

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

*With frequent change in staff this has been difficult to maintain.*

### **Illicit Connection and Illicit Discharge Elimination Program**

The City is required to develop and implement an illicit connection and illicit discharge elimination program.

### **Illicit Discharge Source Investigation and Elimination**

The City will make a reasonable effort to initiate an illicit discharge source investigation as soon as staff receives notification of an event. All reports of illicit discharges will be investigated. As required by the MS4 Permit, the City will initiate an illicit discharge source investigation within 72 hours of becoming aware to the illicit discharge. Investigations will be conducted by available qualified City or County Staff in the applicable department based on the initial details reported.

*The City actively follows up on residents' calls and complaints. Incidents have ranged from homeless camps, pet waste disposal, and irrigation overspray.*

### **Public Reporting of Non-Storm Water Discharges and Spills**

The City has also implemented and will continue to maintain signage adjacent to open channels or creeks that display information regarding dumping prohibitions. The City investigates all complaints in a timely manner and will include the results and follow up actions if needed on the tracking system selected by the City to document complaints.

*See reply above.*

### **Spill Response Plan**

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

### **Existing City Ordinances - Large Animal Management**

The existing City Pet Waste and Large Animal Management ordinances are fully implemented. *Residents have knowledge of the ordinance and issues have been brought to staff attention over the years by residents.*

## **GOALS & SOLUTIONS**

In addition to the Minimum Measures, City staff had reviewed the findings of the WMP and, remaining cognizant of the City's General Plan, developed long term goals and identified potential solutions. The following summary of goals reflect the City's direction with respect to the four priority water quality issues identified in this document.

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

### **Septic Systems**

At the time of writing of the WMP, the requirement for the Local Agency Management Program (LAMP) was not required. Since that time, a LAMP has been written for the City. A LAMP is the culmination of the actions required by Assembly Bill 885 (AB 885). AB 885 was introduced to the California State Assembly on February 25, 1999 and approved on September 27, 2000. This legislation directed the State Water Resources Control Board (SWRCB) to develop regulations or standards for onsite wastewater treatment systems (OWTS) to be implemented by qualified local agencies. The SWRCB adopted the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems on June 19, 2012 (OWTS Policy). The policy was subsequently approved by the Office of Administrative Law on November 13, 2012 and became effective on May 13, 2013. The OWTS Policy allows local agencies to approve OWTS, based on a local ordinance, after approval of a LAMP by the Regional Water Quality Control Board (RWQCB).

The purpose of the LAMP is to allow the continued use of onsite wastewater treatment systems (OWTS) within the jurisdiction of the City as well as to incorporate the County of Los Angeles LAMP (the septic permitting agency) which will expand the local program to permit and regulate alternative OWTS while protecting water quality and public health.

The LAMP is designed to protect groundwater sources and surface water bodies from contamination through the proper design, placement, installation, maintenance, and assessment of individual OWTS. This plan develops minimum standards for the treatment and ultimate disposal of sewage through the use of OWTS in the City. The LAMP does not include the following which require individual waste discharge requirements or a waiver of individual waste discharge requirements issued by the RWQCB.

- Any OWTS with a projected wastewater flow of over 10,000 gallons per day.
- Any OWTS that receives high strength wastewater, unless the waste stream is from a commercial food service facility.
- Any OWTS that receives high strength wastewater from a commercial food service facility with a BOD higher than 900 mg/l or that does not have a properly sized and functioning oil/grease interceptor.

It is noted that all OWTS systems within the City of La Habra Heights are residential based. There are no industrial or commercial based OWTS within the City.

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

**GOAL: Identify and prioritize failing septic systems**

*It is noted that in five years, there has been one septic failure within the jurisdiction.*

- An inventory has been identified concerning the residential homes with septic system.
- Based on AB885, develop required plans and standards. The LAMP document was completed and submitted.

Remaining Proposed Work Plan:

1. Explore the State funded opportunities for these areas. The City does not qualify for a Disadvantage Community Assistance.
2. 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. *City decided to not approach residents with the GPS program due to too many residents citing privacy concerns. It is noted that at time of installation of new systems both the County and the City perform inspections.*

Action Item: Determine the best available on-site technology suitable for correcting the failed systems. Develop information package for residents. Target Date: December 2015; Technical Assistance: June 2015. Estimated Cost: \$5,000. *Not completed at this time due to costs.*

Action Item: Investigate the creation of a DAC to subsidize the replacement of the failed systems with the most suitable technology. *City does not meet the DAC requirements.*

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

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.

Technical Assistance: In-house Staff, private consultants and/or marketing firms. Target Date: December 2014 and on-going. Potential Funding Sources: General Fund. Estimated Cost: \$4,500. *After the development of the LAMP, the City has waited for the County to develop public education materials. There has been information included on the website and in a newsletter.*

### **Resource Production Sites**

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

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

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

*This plan was put on hold as the locations had been shut down. In late 2016, the locations were sold to new ownership, and have been activated. With this change in ownership, the City will move forward with a Resource Production Land Use Plan as described in the WMP. The City can have this document completed by the end of 2017. Focus will be on housekeeping BMPs.*

### **Residential Runoff**

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

Goal - Establish filter strips and buffers throughout the City

*The City is now encouraging adding filter strips and buffers through the LID ordinance. They are considering a demonstration location at the Park.*

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

*The City has implemented public outreach and education concerning household hazardous waste.*

Goal - Encourage minimization of all residential runoff

*During the past three years the implementation of landscape irrigation drought management, has shown that most residents have significantly reduced their outdoor water usage. Many of*

*the homes have been landscaped with drought tolerant landscaping. Public outreach about runoff has also been published in the local newsletter.*

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

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

*Still in process*

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

*BMP “tool box” has been made a priority for 2017-2018.*

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

*Using County of Los Angeles Household hazardous waste information.*

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

*During the drought mandate the local water company encouraged drought tolerant management. The City Hall landscape was updated for drought tolerant also.*

### **Pet Waste Runoff**

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

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

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

*Public education and outreach was targeted to specific groups. The Highland Riders group was notified by City Council members about the topic and the Riders group, on their own, made their own procedures for equine waste clean-up.*

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

*Still on-going. In general the City knows who has large animals, through a permit process, however legal authorities for inventories have not been granted. However, the City does have nuisance based codes which allow for neighbor complaints concerning animal housing. In some*



*years, the City has had a dozen enforcement cases which included removal of animals and/or re-locating animal keeping locations away from drainage areas.*

### **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. This is a longer term goal as local funding has not been found.

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

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

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

*All three recommendations work together in one overall project. To date, budget has not be allocated or grant money found for this project.*

### **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 are 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.

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

*A city-specific plan should still be written to provide standard procedures for each department. The goal of the plan would be to building upon existing activities and tasks so that new activities are not required of the limited staff. The LIP will be developed in the next year.*

### **MEASURING PROGRESS**

As stated in the WMP, the City will utilize soft and hard measures to document the progress of the program. These will include:

#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.

*There have been zero septic failures in five years. Septic information has been sent out to all residents via the newsletter. City is going to post links to the State OTWS (AB 885) website.*

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

1. On-going visual observation concerning bacteria based pollutants (pet waste and trash).
2. On-going large animal inventory and housing tracking.
3. On-going tracking and research concerning use of zinc coated chain link fencing.
4. Numbers of people targeted and reached through educational and marketing efforts.

*The City will be to assigning staff to manage these tasks. With staff loss, the progress slowed down.*

#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.

*The City is always cognizant of the problem slopes and banks within the jurisdiction. Funding has not been available to move forward on this set of tasks.*

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

1. Municipal Development of an Local Implementation Plan (LIP)
2. Number of participants participating in the voluntary audit program

*Although a written document has not been completed, the City Hall campus has been cleaned up and is maintained to not have outdoor storage. The possible pollutants have been considerably reduced from the site. The residents have not been open to a voluntary audit program.*

### **Questions and Comments**

If there are additional questions or if the Water Board would like to discuss the tasks that have been presented, please do contact us so a conference call or meeting can be scheduled. Please contact Rafferty Wooldridge ([rwooldridge@lhcity.org](mailto:rwooldridge@lhcity.org)) at 562.694.6302 or Cynthia Gabaldon ([Cynthia.gabaldon@cgrme.com](mailto:Cynthia.gabaldon@cgrme.com)) at 909-455-8520.