



Dominguez Channel Watershed Management Area Committee Annual Assessment 2011-2012

The Dominguez Channel Watershed Management Area Committee (DCWMAC) includes the following MS4 permittees: City of Carson, City of Gardena, City of Hawthorne, City Inglewood, City of Lawndale, City of Lomita, City of Los Angeles, and County of Los Angeles (the Principal Permittee) and the City of Torrance. Redondo Beach and the Palos Verdes Peninsula cities also submitted assessment information. Although Redondo Beach is assigned to the Dominguez Channel Watershed, it occupies a small portion of the watershed. Because Redondo Beach and the Palos Verdes Peninsula cities are subject to the trash and nutrients TMDLs for Machado Lake – which falls within the Dominguez Channel Watershed – they have attended and participated in DCWMAC meetings.

The annual assessment includes a summary of Stormwater Quality Management Program (SQMP) implementation efforts and Permittee highlights. In general, DCWMAC Permittees continue to fully meet Municipal Separate Storm Sewer System (MS4) Permit requirements and have even exceeded them. It also discusses efforts made by affected Permittees to comply with various total maximum daily loads.

- *Continued Implementation of Stormwater Quality Management Programs*

As mentioned in last year's watershed assessment, Dominguez Channel MS4 Permittees continue to implement their respective SQMPs including: development planning; development construction; illicit connection and discharge detection and elimination, and public information and participation; public agency activities; and industrial/commercial inspections.

City of Carson

During the 2011-2012 permit year, Carson continued to implement Best Management Practices (BMPs) contained in its stormwater quality management program in a complete and timely manner, in accordance with the current MS4 Permit for Los Angeles County. In addition, Carson performed tasks associated with the several TMDLs to which it is subject. Carson is situated in three sub-watersheds: (1) Reach 2 of the Los Angeles

River and its tributary, Compton Creek; (2) the Dominguez Channel; and (3) Machado Lake. Reach 1 of the Los Angeles River and Compton Creek are subject to the bacteria, metals, nutrients, and trash TMDL. Dominguez Channel is subject to a toxics TMDL. Machado Lake is also subject to multiple TMDLs: nutrients, toxics, and trash.

Carson, along with other permittees, is a participant in the Los Angeles River Coordinated Monitoring Program (CMP). The CMP samples the receiving water for metals (copper, lead, and zinc) during wet and dry weather. CMP dry weather in-stream monitoring revealed no exceedances for adjusted TMDL dry weather metals (copper, lead, and zinc) waste load allocations (WLAs). If the metals TMDL were based on ambient conditions Carson would be in compliance with the metals TMDL based on in-stream monitoring. Carson is participating in the Reach 1 implementation plan for the metals TMDL. However, because the implementation plan is based on compliance determined in the river, which is contrary to federal stormwater regulations, and does not use "ambient" standards as numeric targets, Carson does not intend on implementing any programs or BMPs to meet wet weather waste load allocations. Instead, it will use the dry weather data, which it considers "ambient," as the numeric target for evaluating stormwater discharges monitored at the outfall. Further, Carson looks forward to performing outfall monitoring to determine to what extent its stormwater discharges are causing or contributing to an exceedance of the metals, as well as other TMDL constituents such as bacteria and nutrients. The discharges from the outfall will be sampled and analyzed to determine if metals contained in them are exceeding the ambient standard in the receiving water. If an exceedance persists, Carson intends to identify the source of the exceedance upstream of its outfall. If the source is identified, appropriate actions will be taken. If the source cannot be identified, Carson would then intensify existing BMPs or add new ones.

With regard to the Los Angeles River bacteria and nutrients TMDLs, Carson intends to conduct outfall monitoring to determine if its discharges are causing exceedances of WLAs for these pollutants. If persistent exceedances are detected from Carson's outfall(s), it will amend its SQMP to include bacteria and/or nutrient-specific BMPs.

Carson is included in the Dominguez Channel/Harbors Toxics TMDL. Carson intends to conduct toxicity testing in accordance with the requirements in the re-issued MS4. This TMDL allows for outfall monitoring. Federal stormwater regulations require the demonstration of compliance at the outfall, not the receiving water. Carson is anxious to begin stormwater monitoring at the outfall to determine to what extent, if any, it

is exceeding the WLA for this TMDL. Whatever the result, Carson shall implement toxics-specific BMPs to attain the WLA and will rely on outfall monitoring to evaluate the effectiveness of the BMPs.

Carson is also subject to the Machado Lake toxics and nutrients TMDLs. Carson has begun outfall monitoring for compliance with dry weather WLAs in accordance with an approved monitoring program. Three consecutive sample attempts resulted in no discharges detected. Carson intends to conduct stormwater sampling from its chosen outfall monitoring location in accordance with requirements specified in the re-issued MS4 permit.

Beyond this, Carson is subject to the Machado Lake and Los Angeles River trash TMDLs. With respect to the former, there are 224 catch basins within Carson's city boundary limits that drain into Machado Lake (via Wilmington Drain). Initially, 38 catch basins were fitted with "Trident" non-full capture plastic curb screens based on two consecutive years of inspections. Although these screens are performing well, the County has not approved these devices and they will be replaced with approved devices in accordance with the schedule in the TMDL. In the mean time, the cities of Carson, Torrance, Lomita, Rancho Palos Verdes, Palos Verdes Estates and Rolling Hills Estates jointly applied for a Proposition 84 grant to install automatic retractable screens (ARS) and connector pipe screens (CPS) in all of the catch basins within their city's limits that are hydrologically connected to Machado Lake. If they are successful in obtaining the grant, this will put the cities ahead of the TMDL schedule requirements.

With regard to the Los Angeles River trash TMDL, Carson is nearly complete with a treatment train for all 12 of the catch basins that drain into the LA River via Compton Creek. Two years ago, "Trident" debris screens were installed in all 12 of the affected catch basins. Combined with street sweeping weekly, these screens performed well but did not hold up to continued impact from truck tires and were replaced with 11 West Coast Stormwater full capture CPS and 1 ARS. (The catch basin fitted with an ARS is too shallow for any other device). In addition, the 11 catch basins were recently fitted with Revel Environmental Manufacturing, Inc. Triton Curb Inlet Filters and Storm Web. In Fiscal Year 2012-13, West Coast Storm will install County approved unique Keep Carson Beautiful (KCB) retractable curb screens to complete the treatment train.

Carson, it should be noted, continues to implement its KCB program as an affiliate of Keep America Beautiful. One of last year's grants resulted in a demonstration rain garden and an on-going rain barrel give away

program. This year's grant will fund a new adopt a median program designed to demonstrate low water use plants and runoff reduction.

This permit year, KCB also continued to team up with Adopt a Storm Drain and Goodyear for the Great American Cleanup and Heal the Bay's Coastal Cleanup Day. These cleanup events in the Dominguez Channel not only reduce the amount of trash in the channel but also serve as a public education program designed to demonstrate to Carson residents and businesses the aesthetic and environmental benefits of a debris-free community. The cleanup efforts will be even easier in the future since Carson strategically placed four floating debris booms in the Dominguez channel on August 31, 2012.

City of Gardena

Please see the City's assessment and highlights referenced in its annual report.

City of Hawthorne

The City continues to implement programs to improve the quality of stormwater runoff. These include events that will educate the community on how to prevent storm water pollution. By implementing such programs, the City has successfully reached residents and the general public. This year's highlights include the following:

- The annual Earth Day Festival was held on June 2nd, stormwater information booth was set up and educational materials provided to the public. Local schools and businesses were also invited to participate.
- The still image PSAs (dog waste/cigarette butt) have been continuing to air in the city channel. The city channel reaches 90,000 residents and 20-30,000 households.
- An article focusing on home improvement and its impact on stormwater pollution has been published in the city's "One Person's Trash" newspaper that publishes four times a year. The newspaper reaches 90,000 residents and 20-30,000 households.



- In addition to the County's effort, Hawthorne continues to implement its restaurant outreach program on an annual basis. The program consists of annual outreach to all restaurant owners/operators through a mailer that targets all restaurants with an emphasis on sidewalk, patio and parking lot cleaning and maintenance.
- Local animal hospitals and pet related businesses are part of the pollutant specific outreach venues for material distribution. At the Rabies Clinic Event held in June stormwater educational material was also distributed to pet owners.
- The City continues to implement its Point-of-Purchase program through a partnership with local businesses, where materials such as brochures have been made available to residents. The City also works within the business licensing unit to distribute materials to new businesses and those that are renewing their business licenses.
- The City continues to implement a variety of BMPs to improve quality of runoff into ocean. City crew members are trained to implement proper BMPs while cleaning the streets and removing graffiti.

City of Lawndale

Please see the City's assessment and highlights referenced in its annual report

City of Los Angeles

The City of Los Angeles continues to play a leading role in stormwater management in the watershed. Los Angeles follows a multifaceted approach to comply with the provisions of the Stormwater NPDES Permit with increased emphasis placed on complying with newly established as well as anticipated TMDL standards.

- Beginning in 2004, the City has committed \$139.6 million from the City's Proposition O – Clean Water Bond Program for five projects in the watershed designated to improve water quality as well as provide

additional benefits. For the FY 2011-12 reporting period, the Peck Park Canyon Enhancement project was in the last stages of post-construction, the Rosecrans Recreation Center Stormwater Enhancements project was in construction, and the Machado Lake Ecosystem Rehabilitation and Machado Lake Phase I (Wilmington Drain) projects were in planning/design.

- The City installed about 502 catch basin opening covers within the watershed.
- The City continues to pursue grant opportunities and partnerships with non-City agencies to implement “green” infrastructure projects. The Vinegar Hill Parkway Restoration project was awarded \$75,000 in grant funding from the California Strategic Growth Council in May 2012. This demonstration project will use urban greening techniques to increase green space, capture stormwater, and decrease water pollution in a disadvantaged neighborhood in downtown San Pedro.

City of Lomita

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City of Redondo Beach

Santa Monica Beaches Bacterial TMDL

- The City is the lead agency for Jurisdictions 5&6 of the SMBBB TMDL, a group effort that developed the joint monitoring and the Implementation Plan to comply with the TMDL's. The Implementation Plan includes programmatic and structural programs' BMPs. These tasks have been individually distinguished and separately assigned with specific deliverables for proper implementations.
- Programmatic tasks such as outreach to schools, graphic art contest, conducting a survey, design of inspection manual, inspectors round table, Parks and Recs activities evaluation and checklist, website design, compiling a list of available stormwater educational videos and DVDs, identifying appropriate speakers, designating targeted audience, developing restaurant and pet waste BMP brochures, website design, installation and monitoring it have been the main accomplishments of the Implementation phase of the Plan.

- The City has also started implementing the structural BMP tasks of the Plan by conducting initial studies and obtaining samples to determine the most adequate catchments for such BMPs. The study included samples of dry weather at various locations of the storm drain system within the Jurisdictions as well as samples near the sanitary sewers to determine any possible leakages. The J5/6 agencies have already completed Phase I of the Site-Specific Structural BMP management approach of the IP utilizing available grant funding to pilot various structural BMPs. Consistent with Phase II of the Site-Specific Structural BMP management approach of the IP, evaluation of the performance of these pilot projects were completed. Based on experience with the BMP pilot projects, the agencies decided to move forward with Phase III of the Structural BMP management approach utilizing infiltration-based structural BMPs in the two high priority drainage areas if funds are available. A structural BMP siting study is underway and the study was completed in FY 11/12. The structural BMPs for the IP are a major component in achieving compliance with the SMBBB TMDL. However, it is anticipated that the Programmatic Solutions and Source Identification and Control components will also help achieve compliance through less intrusive, less expensive routes and therefore it should not be necessary that 100% compliance be achieved with the Structural BMPs alone. A full report of findings is available at the City.
- The City has obtained a permit from the Los Angeles County Beaches and Harbors Department and installed a Dry-Weather diversion facility to stop all discharges from the Sapphire Street storm drain during dry weather year around. This facility was made operational in July 2010.
- Rain Water Harvesting is an important means of helping meet the water needs of Southern California. The City operates a facility that captures rain since May 2011. This facility can divert and capture up to six million gallons of rain water a year for irrigation use or infiltration into the underground soils. Diversions from the storm drain system will reduce the amount of rain water, along with the bacteria and other pollutants it carries, from being discharged into the Santa Monica Bay – thus improving water quality and reducing the number of days bacteria concentrations in the water exceed healthful standards. Since December 2011, when diversion recorder keeping began, the facility has diverted 1.6 million gallons of rain water and urban runoff.
- The City worked with the Sanitation District and the Los Angeles Conservation Corps to conduct a study of ocean water quality around

the pier in order to identify the source or sources of bacteria. The study was completed in February 2010.

- The City has installed thirty eight (38) smart manhole covers that monitor the sewer level and alarm the City when the level rises.

The "Restaurant Certification Program"

- This program was launched and developed. The city jointly with the Santa Monica Bay Restoration Commission and the neighboring agencies implemented the "Clean Bay Restaurant Certification Program". This program has been designed to target restaurants and modify the operator's behaviors by providing incentives to encourage the implementation of appropriate BMPs.
- The City has inspected the restaurants regularly with the goal of visiting each establishment at least twice per year. This is far above and beyond the NPDES permit requirement of once every thirty months. The critical sources have also been the target establishments to be inspected by the City at a minimum of once every 30 months.
- Clean Bay Restaurant Certification Student Participation program- Participants on this field trip included 26 students from a Redondo Union High School AP Environmental Science class and 8 students from Perras Middle School's Club Earth. Each student group was taught storm water quality management in the form of Best Management Practices for a restaurant's indoor and out door areas. Fats, oils and grease handling included use of grease removal devices and proper storage and recycling of used fry oil. Runoff pollution control included maintaining trash bins, storage areas and parking lots. This field trip helped the students understand, appreciate and remember the importance of pollution prevention. The restaurants were representative of corporate owned establishments (McDonald's, Panda Express, Subway) as well as small family owned (The Standing Room, Ham Supreme Shops). The students were given posters and brochures for further class room discussion and reinforcement of practices.



Trash Reduction BMPs

- The City has received a state grant for \$600,000 to install structural BMPs designed to reduce the accumulation of trash. The construction of the first BMP continuous deflection system (CDS) was completed in November of 2002. A second CDS unit was installed in Oct. 2003. A Third CDS unit was installed in April 2005 and a fourth was installed in May 2005.
- The \$350,000 State Grant was received for improving water quality around the City's Municipal Pier. Improvements funded by the grant include replacing sewer mains under the pier, installation of a fish cleaning station, constructing covered trash enclosures and replace trash receptacles on the pier. Installation of a low flow diversion on a storm drain that discharges under the pier was completed in April 2005.
- The City completed the installation of two pilot projects in the harbor area. These projects include the installation of trash filters in the drain inlets and re-routing roof gutters on the pier diverting runoff from direct discharge in to the ocean. Construction was completed in February 2010.

Public Education BMPs

- The City has continued the pet waste awareness program in conjunction with the animal control and pet related businesses (i.e. veterinarians, pet stores). The City's website provides helpful tips for the pet owners. The City has an on-going program to hand out free pet waste collection bags at the City Engineering Counter.

- The City's Quarterly Newsletter ads published information regarding the City's storm water program as well as promoting the various related events and helpful tips.
- The Mayor and City Council formed a Water Quality Task Force in August 2005 made up of a diverse cross section of the community include individuals from teachers, youth, boaters, non-profit, general public, chamber of commerce, and harbor businesses. The Task Force is to provide the City Council with recommendations that will address water quality in the harbor and other waterfront areas of the City.
- The Green Task Force was established in January 2007, for the purpose of improving community knowledge of environmental topics and encouraging practices which protect the environment. This task force has been served as a model in the region which considers the tremendous growth of interest in green issues and environmental concerns.
- The City council approved an increase in the wastewater sewer user fee. This fee increase will help fund new State sewer system operational mandates to reduce sewer overflows.
- The City adopted the Non-Smoking Beach Ordinance

City of Torrance

Please see the City's assessment and highlights referenced in its annual report.

Palos Verdes Peninsula Cities

The incorporated cities on the Palos Verdes Peninsula this year conducted the first eleven months of monthly monitoring under the Palos Verdes Peninsula Coordinated Monitoring Plan consistent with the Machado Lake Nutrient TMDL. The Palos Verdes Peninsula Cities' Implementation Plan for the Machado Lake Nutrient TMDL also includes joint coordination of public outreach programs, e.g., the Peninsula cities ran a quarterly full-color add in the Palos Verdes Peninsula News on stormwater pollution prevention targeting source control of nutrient pollution.