INFORMATION MEMO

This summary is intended to provide the Manhattan Beach City Council background information and an update on the status of the City's NPDES stormwater program, and includes key activities undertaken during the FY 2016/17 reporting year (July 1, 2016-June 30, 2017), and related regulatory and legal developments. It also includes an overview of our future plans to ensure compliance with the NPDES permit.

1. Background

In 1990, the California Regional Water Quality Control Board (Regional Board) adopted Order No. 90-079, which set in motion requirements for municipalities located in Los Angeles County to comply with provisions of the Clean Water Act for contaminated discharges (commonly called storm water and urban runoff discharges) in Municipal Separate Storm Sewer Systems (MS4).¹ This action was followed in 1992 by a provision requiring all Phase I cities,² those with regional populations greater than 100,000, to begin implementing best available technologies to reduce or eliminate contaminated discharges. The Regional Board adopted new storm water permits in 1996 and 2001, and approved four amendments between 2006³ and 2010 to the 2001 permit. On November 8, 2012, the Regional Board adopted a new storm water permit, Order No. R4-2012-0175, which includes and expands upon the provisions called for in earlier permits. See Attachment 1 for new NPDES Permit Highlights. That permit became effective on December 28, 2012 and replaces the previous permit which had been in place since 2001. The City of Manhattan Beach, along with some 80 cities and the County of Los Angeles, are permittees responsible for complying with the MS4 Permit. This Permit expires in December 2017, although it will continue to remain in force until a new permit is adopted.

Previous storm water permits focused on implementation of pollution control measures,⁴ while the new permit focuses on whether Permittees are actually achieving adopted water quality standards (referred to as total maximum daily loads, or TMDLs) for receiving waters. The primary TMDLs (for pollutants) that Manhattan Beach must control are:

- Bacteria, trash, DDT and PCBs discharged to Santa Monica Bay
- Metals (copper, zinc and lead) and Toxicity discharged to Dominguez Channel.

¹ The authority to regulate storm water and urban runoff falls under the National Pollutant Discharge Elimination System (NPDES) program, which is administered by the California Regional Water Quality Control Board.

² Manhattan Beach is considered a Phase I city because it is part of Los Angeles County, which has a continuous, regional population greater than 100,000.

³ The 2006 amendment was set-aside by the Court due to procedural deficiencies, but reincorporated into the new 2012 Permit.

⁴Pollution control measures include any device or program intended to reduce or eliminate sources of storm water pollution. Examples of pollution control measures include retention basins, berms and swales, oil/water separators at parking lot entrances, trash capture devices, education and outreach, dry weather diversions to the sewer system, street sweeping, storm drain stenciling, etc.

TMDLs set forth a "waste load allocation," which identifies the amount of a particular pollutant that each discharger may discharge into the affected water bodies. These waste load allocations are converted into effluent limits for particular pollutants. The TMDLs have been incorporated directly into the MS4 Permit, and are therefore enforceable against the permittees. Thus, permittees are required to comply with the effluent limits set forth in the TMDLs.

Permittees are required to comply with the permit's water quality standards and can choose three different approaches to achieve compliance. These options include: 1) implementing and monitoring baseline control measures individually, 2) developing and implementing a customized and approved Watershed Management Program (WMP) or 3) developing and implementing an Enhanced Watershed Management Program (EWMP). The customized WMP or EWMP provides Permittees greater flexibility to implement control measures on a larger, watershed scale. It also provides Permittees additional time to establish those coordinated efforts with other jurisdictions (see table below). Manhattan Beach chose Option 3, electing to participate in an enhanced watershed management plan.

Implementation	Description	Deadline to	Comments
Options		Comply	
Option 1	Implement baseline	By June 28, 2013	This option requires that individual
	Minimum Control		cities comply with strict numeric
	Measures (MCM).		limits for water quality, shown by
			comprehensive monitoring of outfall
			locations. MCM is further described
			below.
Option 2	Participate in a	By June 28, 2014	Permittees were required to file a
	Watershed	submit draft plan	Notice of Intent to participate in a
	Management Program		WMP by June 28, 2013. WMP is
	(WMP)		further described below.
Option 3	Participate in an	By June 28, 2014	Permittees were required to file a
	Enhanced Watershed	submit final work	Notice of Intent to participate in a
	Management Program	plan for EWMP	EWMP by June 28, 2013. EWMP is
	(EWMP)	development	further described below.
		By June 28, 2015	
		submit draft plan	

See Attachment 2 for expanded descriptions of the MCM and WMP options.

2. Enhanced Watershed Management Program – an Overview

Under the Enhanced Watershed Management Program (EWMP), Permittees can evaluate opportunities for collaboration on large, multi-benefit projects which retain, through infiltration or capture and reuse, the 85th percentile of a 24-hour storm event and **all** non-storm water runoff.

Alternatively, Permittees can demonstrate via reasonable assurance analysis (e.g., targeted monitoring) that the water quality objectives (pollutant load limits) of the receiving waters are being met. The difference between the WMP and EWMP is in the type(s) and scale of regional control measures implemented. Conceptually, under an EWMP, Permittees can investigate and plan for storm water diversion to either a storm water treatment plant or detention/retention basin, which is then captured and either infiltrated or reused (much like recycled water) such that the contaminated discharge never reaches Santa Monica Bay or Dominguez Channel. Like the WMP requirements, under the EWMP Permittees were required to implement minimum control measures required in the previous permit until the EWMP was approved by the Regional Board. The same WMP deadlines and conditions for a timeline extension also apply to the EWMP. These are also the compliance deadlines for TMDLs. With respect to the Santa Monica Bay Debris TMDL, the City of Manhattan Beach was provided an additional three years to comply with the TMDL's "zero" trash limit because it adopted Styrofoam, smoking and plastic bag ban bans, all of which have a direct impact on reducing trash.

A permittee that timely prepares and implements a WMP or EWMP, as the case may be, is deemed in compliance with certain numeric effluent limits, which would otherwise be required to achieve, particular in the near term. The difference between a WMP and EWMP is that an EWMP allows a permittee to be deemed in compliance with certain interim and final TMDLs addressed by the EWMP (except trash), where as a WMP only provides coverage for interim TMDLs. Thus, a permittee's participation in a WMP or EWMP provides an important benefit to permittees willing to invest the significant expense in development and implementation of such a program.

Collaboration: Beach Cities Watershed Management Group EWMP

The City of Manhattan Beach participates in the Beach Cities Watershed Management Group (Beach Cities WMG) to jointly develop and implement the Enhanced Watershed Management Program and Coordinated Integrated Monitoring Program (CIMP). The EWMP was chosen as the preferred method by the overwhelming majority of cities, including Manhattan Beach, for meeting storm water compliance objectives because it allowed a regional approach and provided the maximum liability coverage under the permit. It also provided more time for cities to develop regional solutions to address storm water pollution. The Beach Cities WMG includes the cities of Manhattan Beach, Hermosa Beach, Redondo Beach and Torrance, along with the Los Angeles County Flood Control District (LACFCD).

The Beach Cities draft EWMP was submitted to the Regional Board in June 2015 and was approved in April 2016 following two rounds of review and comment by Regional Board staff and revisions by the Beach Cities WMG. The approved EWMP outlines the individual and joint measures that will be taken by the agencies of the Beach Cities WMG to meet water quality limits set forth in the MS4 Permit. These measures include both structural and non-structural approaches to be implemented over the next 15 years under three phases, Funding, Design and Construction/Installation (see Attachments 3: Implementation Schedule and 4: Estimated Cost Summary).

The EWMP describes how the City (and EWMP members) will:

- Identify water quality priorities
- Select appropriate Best Management Practices (BMPS) for target pollutants
- Evaluate the effectiveness of those BMPs (e.g. pollutant load reductions)
- Quantify the benefits
- Identify an implementation schedule
- Conduct a financial analysis of BMPs
- Develop a strategy for identifying potential funding sources
- Develop any necessary legal authorities

Some actions the City has already and/or is beginning to implement include:

- The Hermosa Beach Greenbelt Project
- Continuous Deflection Separation (CDS) devices
- Green street projects such as drywells and bio filters
- Storm drain inserts and screens, along with quarterly cleaning of inlets
- Storm water capture system adjacent to Sand Dune Park
- Pervious pavement installations
- Several dry weather diversions to the sanitary system
- Weekly (or more) street sweeping
- Adoption of Low Impact Development (LID) standards for large development projects
- Enforcement of storm water controls for all construction projects, including right-of-way and private property locations
- Reducing runoff through energy conservation
- Adoption of the No Smoking, Plastic Bag and Styrofoam bands

Implementation of the EWMP officially began in May 2016, although many of the actions listed above were implemented years (or decades) ago.

As part of the EWMP, the Beach Cities WMG was recently awarded a grant under the Water Quality, Supply and Infrastructure Improvement Act of 2014 Storm Water Grant Program Round 1 Implementation funding (PROP 1 Stormwater Implementation Grant) to fund a top priority EWMP regional project - the design and construction of the Hermosa Greenbelt Subsurface Infiltration System, which will address stormwater runoff from areas in all four cities that comprise the Beach Cities WMG. An MOU outlining the cost share for the matching funds required by the grant has been finalized by the Beach Cities WMG, reviewed and approved by city attorneys, and is currently being brought to the four City Councils for approval. This item was approved by Manhattan Beach at the July 5, 2017 City Council meeting. The City of Hermosa Beach, as the lead agency for the project, will be issuing a contract for design and executing the grant agreement with the State Board Department of Financial Assistance.

3. Coordinated Integrated Monitoring Program (CIMP)

Cities and/or Watershed Management Groups are required to monitor receiving waters to ensure that their pollution control measures are effective. The Beach Cities draft CIMP, defining the group's joint monitoring program, was submitted to the Regional Board on June 28, 2014 and was conditionally approved on August 25, 2015. Following submittal of a final CIMP satisfying Regional Board conditions on September 24, 2015, the Beach Cities WMG began taking steps to implement the CIMP, including drafting a CIMP Implementation MOU, which was fully executed on April 12, 2016.

The City of Manhattan Beach serves as the lead agency for CIMP implementation and is responsible for administering the CIMP Implementation contracts and invoicing the other members for their share of the costs. The first year of monitoring under the CIMP was completed during fiscal year 2016-17. Data from stormwater outfall and paired receiving water monitoring will be validated, compiled and discussed in the 2016-17 Watershed Annual Report to be submitted to the Regional Board by December 15, 2017. These data will include:

- Samples collected from storm drain discharges and from ocean waters analyzed for all required parameters during three (3) monitoring events that occurred over three storms in the winter of 2016-17.
- Data from LACFCD receiving water monitoring in the Dominguez Channel conducted on behalf of several watershed management groups.
- Results from recreational beach water quality monitoring conducted ankle-deep in the wave wash for indicator bacteria either weekly or 5 days per week depending on the site (in Manhattan Beach, the 28th Street storm drain site is monitored 5 days per week, while the other two sites at 40th Street and at Manhattan Pier are monitored once per week).

During the fiscal year, the Beach Cities WMG evaluated recreational water quality exceedance rates for indicator bacteria during the current permit term (2012-2016) compared to exceedance rates during the six-year period (2004-2010) immediately following adoption of the Santa Monica Bay Beaches Bacteria TMDL (SMBBB TMDL). Beach water quality appears to have improved or remained unchanged at all sites during dry weather, and at two sites (including the 28th Street outfall in Manhattan Beach) there is evidence of significant improvement in water quality attributed to the construction of additional low flow diversions to eliminate dry weather MS4 discharges. However, results of shoreline monitoring data during wet weather continue to indicate the need for additional control measures to meet wet weather beach water quality objectives in the SMBBB TMDL, i.e., control measures such as the regional projects identified in the EWMP.

4. Education: Joint Outreach Program

As part of the EWMP implementation, the Beach Cities WMG is also developing and implementing a suite of joint outreach measures aimed at increasing awareness of stormwater pollution prevention and effecting positive changes in businesses practices and residential behavior. Joint efforts during the fiscal year 2016-17 included:

- The Beach Cities, in cooperation with the Santa Monica Bay Restoration Foundation (Bay Foundation), continued to implement the Clean Bay Certified (CBC) restaurant program by conducting annual inspections of food service establishments and certifying those that pass a rigorous inspection checklist. Benefits of this certification include promotion of the establishment on The Bay Foundation's website (http://www.santamonicabay.org/explore/our-communities/clean-bay-restaurants/) and through social media.
- The Beach Cities WMG, in partnership with the Peninsula WMG (Cities of Palos Verdes Estates, Rolling Hills Estates, Rancho Palos Verdes, unincorporated County of Los Angeles and the LACFCD), has funded the development and hosting of Environmentally Friendly Landscaping, Gardening and Pest Control webpages on the South Bay Council of Governments (SBCOG) website. The information on these pages meets the dual permit requirements to provide educational outreach to residents to reduce the use of pesticides through integrated pest management, as well as outreach on landscape water use efficiency. The web pages are still undergoing revision and refinement and should be complete in August 2017.
- Another joint project undertaken with the Peninsula WMG is the development of a brochure to provide outreach to construction contractors to describe and illustrate the required 13 minimum Best Management Practices required by the 2012 LA MS4 Permit on construction sites less than one acre in size. The brochure will be available in final form in English and Spanish by the end of September 2017.

5. City of Manhattan Beach Individual Activities

The City is individually implementing required minimum control measures in each of six program categories described in Attachment 1, as well as implementing specific enhanced control measures targeted at pollutants of concern as described in the Beach Cities EWMP. These measures include:

• The City utilizes its website and quarterly e-newsletter, as well as utility bill inserts and informational booths at public events, to disseminate environmental information to its residents and businesses. During the fiscal year, an evaluation of the City's existing Stormwater Pollution Prevention and Going Green webpages was conducted to determine recommended changes to meet the City's individual outreach responsibilities under the LA MS4 Permit. The City will be providing links from its webpages to the SBCOG

Environmentally Friendly Landscaping, Gardening and Pest Control webpages, and also continues to promote sustainable landscaping principles in its Green Code planning requirements for new projects or significant remodels.

- The City continued to implement its trash and waste reduction programs created as a result of AB939 and AB341. These programs provide effective source control for trash which is a targeted pollutant for the Santa Monica Bay Debris Total Maximum Daily Load (Debris TMDL).
- The City continued to implement its water conservation programs, which have been effective in reducing non-stormwater discharges during dry weather and protect recreational beach water quality consistent with the Santa Monica Bay Beaches Bacteria TMDL (SMBBB TMDL).
- The City held training for its Public Works management and field staff to initiate implementation of the updated control measures in the 2012 LA MS4 Permit, including the Public Agency Activity and Illicit Discharge Elimination requirements. Similar training was held with Community Development staff following EWMP approval and focusing on construction and development planning requirements. Training is held annually for staff.
- Field visits were conducted to each of the City's public facilities/properties to prepare the inventory of public facilities and to identify opportunities for stormwater retrofits as required by the 2012 LA MS4 Permit.
- Renovations completed at the City's bulk storage area at the Public Works yard resulted in significant improvements to stormwater quality source control measures at the facility.

Trash full Capture Device Retrofits

The City is systematically installing certified full capture systems for trash in priority areas of the City within the Santa Monica Bay watershed between now and March 2023 to address the Debris TMDL. As mentioned above, the City received an extra 3 years for final compliance with the Debris TMDL as a result of passing three key bans: plastic bag ban, polystyrene ban and smoking ban.

Prior to the development of the Debris TMDL, eight (8) continuous deflection systems for trash and other gross pollutants had already been installed and were operational on major storm drains or catchments with significant potential to generate trash within the City. These units can be certified as full capture systems and will obviate the need to retrofit upstream catch basins with full capture devices for trash. In addition to the existing continuous deflection systems, the City has installed approximately one hundred and eighty (180) debris screens/inserts on catch basin openings that have historically required frequent cleaning (Priority A). Installation of additional full capture systems is planned to complete the retrofitting of 100% of the catch basins in Santa Monica Bay as required by the Debris TMDL. Attachments 3 and 4 include a summary other planned Santa Monica Bay and Dominguez Channel Watershed projects along with their proposed implementation schedule and estimated cost ranges.

6. Regional Project Funding

Stormwater project grant funding typically requires at least a 50% match and awards are usually capped at values significantly less than the total capital costs of such projects, often requiring in a local match significantly more than 50% for regional stormwater projects. Competition for these funds is strong and is statewide. Such grant funds are available only for capital expenditures, not for long-term operation and maintenance costs, which can be significant. Thus a long-term continuous source of funds to support water quality protection is needed for programmatic and ongoing operation and maintenance costs as well as to provide capital for construction.

The next priority regional project under the EWMP is located in Manhattan Beach on the 28th Street storm drain system. This proposed project would receive runoff only from Manhattan Beach and thus would be implemented individually by the City with possible cooperation from Caltrans. Potential external funding for this project is being tracked and pursued based on opportunity/solicitation cycles including:

- Caltrans Cooperative Implementation Agreement
- Prop 1 Stormwater Implementation Round 2
- Prop 1 IRWMP Implementation
- Prop 1 SMBRC
- Coastal Conservancy Prop 1
- Clean Water State Revolving Fund Green Reserve

LA County Stormwater Funding

In 2013, LACFCD attempted to establish a fee for stormwater quality improvements through the Clean Water Clean Beaches Measure, which would have raised funds to implement and maintain regional storm water quality improvement projects through a parcel fee. However, due to significant community and agency concerns and public testimony at two public hearings, the Los Angeles County Board of Supervisors voted not to proceed with the measure. The timing of that initiative was difficult because the EWMPs had not yet been developed and full financial impact of the regional projects in the EWMPs was not yet available.

With the completion of the EWMPs and clear need for funding region-wide, a new initiative is now underway by LA County. On May 30, 2017, the LA County Board of Supervisors passed a motion which, among other actions, directed LA County Public Works staff to pursue amendments to the Los Angeles County Flood Control Act to expand the LACFCD's authority to impose a parcel tax within their geographic boundary and allocate revenues to municipalities and regional entities to develop stormwater projects and programs. The motion also directed their staff to conduct broad-based outreach and engagement with stakeholders to solicit input and to develop an Expenditure Plan. This will help determine an appropriate parcel tax to implement stormwater projects and programs with emphasis on projects providing multiple benefits that increase water supply, improve water quality, and provide community enhancements.

Legislation currently pending before the Governor, SB 231, would make it easier for cities to adopt stormwater-specific parcel taxes without voter approval. Instead, such taxes would only be subject to a majority protest procedure in the same manner as the City adopts sewer and water rates.

7. Future Permit, Report of Waste Discharge and Other Reviews

On June 28, 2017, the Beach Cities WMG submitted its Report of Waste Discharge (ROWD), which is a permit reapplication due to the Regional Board six months prior to permit expiration. The ROWD summarized the EWMP and CIMP development and implementation activities undertaken by the Beach Cities WMG since adoption of the 2012 LA MS4 Permit. The ROWD also made recommendations for improvements to the 2012 LA MS4 Permit for consideration by the Regional Board in issuing the next permit.

Proposed Changes to List of Impaired Waters (303d List)

On February 8, 2017, the Regional Board issued a notice and opportunity to comment on proposed updates to the Clean Water Act Section 303(d) List for the Los Angeles Region, known as the 303(d) list, which identifies specific water bodies and pollutants causing water quality impairment in those waterbodies. A number of changes were proposed to listings for the Santa Monica Bay and the Dominguez Channel to which stormwater runoff from the City is discharged. The City's concerns with some of the proposed changes were expressed through a comment letter and oral comments at the Regional Board Workshop held on this matter. As a result of the City's comments along with others submitted by various agencies, some improvements were made in the final 303(d) List that was forwarded to the State Board for final adoption. Significant changes to the 303(d) List relevant to the City of Manhattan Beach include:

- Delisting of the City's beaches for indicator bacteria based on year-round water quality, though Regional Board staff also made clear that the SMBBB TMDL limitations would remain in effect for the delisted beaches. Nevertheless, this change could open the door for a revision to the SMBBB TMDL.
- New listings of Santa Monica Bay for mercury and arsenic as a result of levels found in fish tissue. The immediate effect of this new listing will be a requirement to add mercury and arsenic to the list of pollutants being monitored in the Beach Cities CIMP, though this will not be a significant additional cost. In the long term these listings are likely to result in the promulgation of TMDLs for mercury and arsenic and potential limitations on

these pollutants in the City's stormwater discharges and, if necessary, modification of the EWMP to address these pollutants.

8. Ongoing Challenges to the 2012 LA MS4 Permit

Several challenges to the 2012 LA MS4 Permit were initiated shortly after its adoption. At least two of these challenges, summarized below, have yet to be decided and make it likely that adoption of the next LA MS4 Permit will be delayed until they are resolved.

2012 LA MS4 Permit Unfunded Mandate Test Case

On August 29, 2016, the California Supreme Court upheld a determination by the California Commission on State Mandates (Commission) that some provisions of the previous 2001 LA MS4 Permit were not required under the federal Clean Water Act and consequently were reimbursable state-mandated programs. The California Constitution provides that whenever the Legislature or any State agency mandates a new program or higher level of service on any local government, the State shall provide funds to reimburse that local government for the costs of the program or increased level of service. The Supreme Court found that if federal law gives the State discretion whether to impose a particular implementing [permit] requirement, and the State exercises its discretion to impose a particular permit requirement, the requirement is not federally mandated. The Supreme Court also clarified that the Commission has the sole authority to determine whether a permit requirement is federally mandated. That case has now been remanded to the court of appeal for further consideration, including a determination of whether the permittees have the authority to impose fees to recover their stormwater costs. Under the State Constitution, if a local agency can charge fees in connection with a program or activity, then it is not an unfunded mandate.

Based on the Supreme Court's decision, there are now a number of test cases pending before the Commission related to MS4 Permit provisions in permits throughout the State. A favorable finding would not necessarily relieve permittees from complying with MS4 Permit requirements, rather it would provide reimbursement of the costs if the permittee demonstrates that there is no source of funds other than taxes to pay for the requirements, i.e., no user-specific fees such as building permits. Under certain circumstances, if the State Legislature fails to provide a subvention of funds for the unfunded mandate, then local agencies may seek a judicial determination that the mandate is not enforceable.

The City of Manhattan Beach is one of 23 Permittees participating in such a test case being led by the law firm of Burhenn & Gest (lead counsel in the Supreme Court case) with respect to new requirements imposed on Permittees by the 2012 LA MS4 Permit. City staff have provided information to Burhenn & Gest to support the test claim, including the most recent request from the Commission on the cost of complying with the 2012 LA MS4 Permit. The hearing on this test claim is tentatively scheduled for July 2018, although it is possible that this date could be pushed.

Duarte and Gardena Lawsuits

Two separate cases filed by the cities of Duarte and Gardena allege that the 2012 LA MS4 Permit exceeds the requirements of the Clean Water Act and imposes economic hardships and compliance costs that were not fully evaluated by the Regional Board in issuing the permit. In addition to other items, the cases both seek to remove the Permit's requirements that cities comply with numeric pollutant limits, including achieving compliance through a WMP and EWMP. The City of Manhattan Beach is named as a real party in interest in the Gardena case. The trial date in both cases is scheduled to begin on November 13, 2017.

NRDC/LA Waterkeeper Lawsuit

The NRDC and LA Waterkeeper filed a lawsuit that argues the LA MS4 Permit is weaker than the prior iteration of the Permit (issued in 2001) and will degrade water quality. That case attempted to remove the protections afforded by the Permit's WMP and EWMP compliance option. On January 23, 2017, Judge Amy Hogue issued a final order denying the NRDC/LA Waterkeeper's writ and upholding the Permit's terms that deem cities in compliance with numeric water quality standards when implementing a WMP or EWMP. The NRDC and LA Waterkeeper have appealed the decision.

The Council has been provided confidential litigation updates directly from the City Attorney's office regarding these lawsuits.

Attachments:

- 1. 2012 Storm Water NPDES Permit Highlights
- 2. MCM and WMP
- 3. Implementation Schedule
- 4. Estimated Cost Summary

Attachment 1

2012 NPDES Permit Highlights

The Permit Allows Essential and Conditionally Exempt Discharges:

- Essential discharges are allowed under certain conditions, such as emergency fire fighting activities, natural flows including streams, uncontaminated groundwater infiltration, rising groundwater.
- Conditionally exempt non-storm water discharges include fire training-related discharges, small drinking water discharges, landscape irrigation, de-chlorinated swimming pool water, non-commercial car washes by residents and non-profits, street/sidewalk wash water.

The 2012 Permit Requires and/or Incorporates:

- Enhanced monitoring efforts and specific records management/record keeping (see below).
- Progressive action/implementation to comply with Water Quality Objectives (TMDLs).
- New TMDLs with specific numeric discharge limits:
 - Santa Monica Bay: Dry weather and wet weather effluent limits for bacteria; effluent limits for trash, DDT and PCBs. The trash limit is "0" by 2020 (see below).
 - Dominguez Channel: Effluent limits for metals (copper, lead, zinc) legacy pesticides, and poly nuclear aromatic hydrocarbons.
- New "area" thresholds for development and re-development activities; storm water requirements apply to sites greater than one acre and/or development projects of 10,000 ft² or greater (down from the previous 100,000 ft² threshold).
- Mandates for additional staff training for development impacts to storm water.
- Increased site inspection and monitoring during active construction for all sites, including those less than one acre.
- Annual Report requirements. Submittals must include a statement from legal council with specific language identified in the permit (certification) and an annual fiscal analysis of expenditures for permit compliance for past year and upcoming year.
- Any documents submitted to the Regional Board must be made available to the public for at least 30 days for comment.

The 2012 Permit Allows For:

- Integrated approaches to monitoring water quality
- Integrated (regional) approaches to control contaminated runoff
- Permittees to choose a permit implementation option:
 - o Minimum control measures
 - o Watershed management program
 - Enhanced watershed management program

Reporting and Monitoring Program

- Allows flexibility to allow Permittees to develop an integrated/regional monitoring program on a watershed/sub-watershed basis to address requirements and leverage resources
- Requires dry and wet-weather monitoring for a list of 140 pollutants (dry weather monitoring minimum 2x per year; minimum wet weather monitoring 3x per year)
- Must perform receiving water monitoring at mass emissions stations (predetermined locations)
- Must monitor at storm water outfalls (minimum 3x per year during wet-weather)
- Must monitor non-storm water outfalls to identify those with frequent, non-storm water flows
- TMDLs have more frequent monitoring requirements
- Must identify sources of non-storm water discharges and pollutants
- Track and document effectiveness of BMPs installed for new and redevelopment projects
- Must maintain comprehensive monitoring records and file monitoring reports annually (format specified in Permit) that include monitoring results, storm water and non-storm water control measures, effectiveness in controlling pollutants, rainfall data, compliance summary
- The Santa Monica Bay trash TMDL requires installation of full capture devices in all 350 catch basins by 2020. However, if the City adopts three (3) ordinances in 2013, then the permit provides and additional three (3) years to comply with the zero trash discharge (until 2023). The proposed ordinances would ban plastic bags, smoking and polystyrene. The permit also calls for interim reductions in the amount of trash reaching Santa Monica Bay starting in 2016, with a 20% reduction over the baseline that year, and 20% additional reduction each of the next four years such that the amount of trash reaching Santa Monica Bay in 2020 is zero (0).
- The Dominguez Channel TMDLs much achieve full compliance by 2032, with interim limits set during the current permit period.

Penalties for Non-Compliance:

Violations of the permit are subject to fines and penalties as follows:

- 1. Civil penalties of up to \$5,000.00, \$10,000 or \$25,000 per day of violation, or up to \$10 or \$25 per gallon per day or some combination thereof.
- 2. Mandatory penalties of \$3,000 for
 - a. Each serious violation (i.e., exceedance of limits by +20% for group II pollutants, or +40% for group I pollutants or failure to submit a discharge monitoring report within 30 days of the deadline to submit)
 - b. Violation of waste discharge requirement effluent limit in any period of six consecutives months (not applicable to first three violations).
- 3. Trash Limits (group I pollutant). One violation per year is allowed for storms that exceed .025" rainfall. Addition violations are counted only when rainfall exceeds a 0.25" storm event during the same storm year.

Attachment 2

MCM and WMP

Option 1: Minimum Control Measures

Under this option, Permittees must implement a baseline set of storm water actions and demonstrate compliance with water quality standards through monitoring data collected from the Permittees' outfalls. MCMs are not typically coordinated with other jurisdictions, but rather are implemented individually by each permittee. The baseline requirements include best management practices (BMPs) considered necessary to reduce pollutants in storm water to the maximum extent practicable. The MCM baseline categories include:

- 1. Public Information and Participation Program
- 2. Industrial/Commercial Facilities Program
- 3. Development Construction Program
- 4. Planning and Land Development Program
- 5. Public Agency Activities Program
- 6. Illicit Connections/Illicit Discharge (IC/ID) Program

For additional summary information on these six (6) categories, please below. Comprehensive information, including the required timeline for implementation, can be found in the 2012 Storm Water NPDES Permit, Attachment F, pages 47-83,¹ (not part of this document).

- 1. **Education program:** Measurably increase knowledge, change disposal habits and engage various groups. Provide a way to report clogged drains and get misc. storm water information. May participate in 888-CLEAN LA, post on website. Must organize events to promote storm water pollution prevention.
- 2. **Industrial/Commercial facilities program**: Track, educate, inspect, ensure compliance. This includes database of lat/long of all industrial/commercial facilities that are critical source of SW pollution [e.g., restaurants, automotive, gas stations, nurseries]. Update annually. Implementation of a Business Assistance Program.
- 3. **Development Construction Planning:** Control sediment runoff from construction sites one acre or greater. Control polluted discharges from all sites, regardless of size.
- 4. **Planning and Land Development** activities for new and redevelopment projects that meet certain thresholds: Track development and redevelopment projects for follow up inspection and reporting annually to the RB. Implement construction inspection and enforcement program. Adopt ordinances where necessary. Creation of a construction site inventory that is continuously updated.

¹ The complete 2012 Storm Water NPDES Permit, with attachments, can be found on line at: <u>http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/index.shtml</u>.

- 5. **Public Agency Activities:** Minimize pollution from city facilities and projects. Conduct an inventory (updated once w/in five years), identify retrofitting opportunities, and implementing appropriate BMPs (listed in Table 18 of the permit), stenciling, storm drain maintenance, street sweeping, employee training programs.
- Illicit Connections/ Illicit Discharge (IC/ID) program: Ensure legal authority to enforce IC/ID. Investigation of storm drains for illegal connections or discharge. Development of a spill response plan. Promotion of a reporting hotline and documenting calls received. Appropriate signage. Staff training.

Option 2: Watershed Management Program (WMP)

The Watershed Management Programs option provides a "framework for Permittees to implement the requirements of this Order in an integrated and collaborative fashion to address water quality priorities on a watershed scale...." [Order R4-2012-0175]. The approach is believed by the US Environmental Protection Agency (US EPA) to be more cost-effective and successful in achieving water quality objectives than the Minimum Control Measures approach. Permittees can still retain successful elements of their individual jurisdictional BMPs and simply identify these individual roles and responsibilities in their WMP Plans. While WMP Plans are customizable on both the jurisdictional and watershed levels, the permit still specifies the framework that each WMP must include. Permittees must also continue to implement Minimum Control Measures required in the previous permit until the new WMP is approved by the Regional Board. Permittees who participate in the development of a WMP must submit a draft plan by December 28, 2013, but will be granted an additional six (6) months to comply if specific early actions are implemented by June 28, 2013, including drafting a Low Impact Development Ordinance and a green streets strategy for transportation corridors. These conditions must be met in greater than 50% of the land area covered in the WMP.

Proposed Implementation Schedule

COLOR KEY		Fund	Funding Phase Design Phase Construction/Installation Phase									ise									
BMP Location/Name		Timeline																			
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
	Catch basin retrofits for trash																				
ershed	Manhattan Beach Infiltration Trench ¹																				
Santa Monica Bay Watershed	Manhattan Beach Green streets application in SMB-5-02																				
	Hermosa Beach Greenbelt Infiltration ¹																				
	Hermosa Beach Infiltration Trench																				
inta	Redondo Beach Park #3																				
Se	Green streets application in SMB- 6-01 for All Cities																				
	Catch basin inlet filters in DC- Torrance																				
Dominguez Channel Watershed	Green Streets (Redondo Beach and Manhattan Beach)	Treatment of Land Uses	of3% of																		
		Treatment of Additional Land Uses	4% of																		
		Treatment of Additional Land Uses																			
	Redondo Beach Powerline Easement Filtration ^{1,2}																				
	Artesia Boulevard and Hawthorne Boulevard Filtration ² in Redondo Beach																				

¹Alternative project locations have also been identified

²Current regional BMP project sequencing in Dominguez Channel helps achieve dry weather bacteria TMDL compliance. If compliance is met through other means, regional BMP scheduling in Dominguez Channel may be pushed back so that regional projects are instead complete by March 2032.

Estimated Cost Summary

Watershed		BMP	Construc	ction Cost	Annua	l O&M	Total 20-Yea	Manhattan Beach Portion*			
	Analysis Region		Low Cost	High Cost	Low Cost	High Cost	Low Cost	High Cost	Percentage		Year-Life- ycle Avg.
Santa Monica Bay	SMB-5-02	Manhattan Beach Infiltration Trench (Shoreline)	\$3,700,000	\$6,800,000	\$140,000	\$190,000	\$6,500,000	\$11,000,000	100%	\$	8,750,000
		Distributed Green Streets	\$2,500,000	\$6,500,000	\$110,000	\$220,000	\$4,600,000	\$11,000,000	100%	\$	7,800,000
	SMB-6-01	Hermosa Beach Infiltration Trench	\$500,000	\$1,100,000	\$18,000	\$32,000	\$860,000	\$1,700,000	3%	\$	38,400
		Hermosa Beach Greenbelt Infiltration	\$5,500,000	\$8,000,000	\$81,000	\$90,000	\$7,100,000	\$9,800,000	3%	\$	253,500
		Redondo Beach Park #3	\$1,900,000	\$3,000,000	\$28,000	\$33,000	\$2,500,000	\$3,700,000	3%	\$	93,000
	Manhattan Beach	Trash exclusion devices	\$590,000	\$1,700,000	\$210,000	\$270,000	\$4,800,000	\$7,100,000	100%	\$	5,950,000
Dominguez Channel	Dominguez Channel	Powerline Easement Infiltration	\$11,000,000	\$16,000,000	\$160,000	\$180,000	\$14,000,000	\$20,000,000	25%	\$	4,250,000
		Artesia Blvd Infiltration	\$2,000,000	\$3,100,000	\$30,000	\$35,000	\$2,600,000	\$3,800,000	25%	\$	800,000
		Distributed Green Streets	\$7,400,000	\$20,000,000	\$330,000	\$670,000	\$14,000,000	\$33,000,000	25%	\$	5,875,000

*Portions are based on the capture area and location of the projects per the EWMP.