



AGENDA REPORT

Meeting Date: November 20, 2012
Item Number: E-1
To: Honorable Mayor & City Council
From: Christian Di Renzo, Senior Management Analyst
Subject: BACKGROUND ON THE NPDES PERMIT AND LA COUNTY FUNDING INITIATIVE
Attachments: 1. Los Angeles County Funding Initiative Brochure

Executive Summary

On November 8, 2012, the Los Angeles Regional Water Quality Control Board (Regional Board) approved the reissue of the Los Angeles County Municipal Separate Storm Sewer System permit (hereinafter, the LA County MS4 permit). The LA County MS4 permit is a federal National Pollutant Discharge Elimination System (NPDES) permit that regulates municipal separate storm sewer system (MS4)¹ discharges of stormwater and urban runoff. As with all NPDES permits, the LA County MS4 permit must comply with all applicable provisions of the federal Clean Water Act and implementing regulations. Discharges from the MS4 reach waterbodies in Los Angeles County including, but not limited to, Santa Monica Bay, Los Angeles and Long Beach Harbors, and the Los Angeles and San Gabriel Rivers and their tributaries.

The LA County MS4 permit was last reissued by the Regional Board in 2001, and has been amended three times in the past five years to incorporate provisions to implement total maximum daily loads (TMDLs) for bacteria and trash. However, since 2001, 33

¹ According to 40 CFR section 122.26(b)(8), "[a] municipal separate storm sewer system (MS4) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):
(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
(ii) Designed or used for collecting or conveying storm water;
(iii) Which is not a combined sewer; and
(iv) Which is not part of a Publicly Owned Treatment Works (POTW).

TMDLs have been developed by either the Regional Board or US EPA that will be implemented through the new MS4 permit.

This memorandum is structured in three sections. Section I provides background on the regulatory framework for stormwater and urban runoff management. Section II provides a brief description of the Los Angeles County MS4. Lastly, Section III briefly covers the LA County stormwater funding initiative.

I. REGULATORY FRAMEWORK FOR STORMWATER AND URBAN RUNOFF MANAGEMENT

The regulatory framework for NPDES permits is provided by the federal Clean Water Act and its implementing regulations contained in Title 40 of the Code of Federal Regulations (40 CFR). Under the NPDES program, all facilities that discharge pollutants from any point source² into waters of the United States are required to obtain an NPDES permit. The stated goals of the Clean Water Act are to restore and maintain the chemical, physical, and biological integrity of the nation's waters.

In 1987, Congress amended the Clean Water Act to bring discharges from MS4s under the NPDES program. USEPA has identified stormwater and urban runoff as one of the most significant sources of water pollution in the country and a serious threat to aquatic life and habitat as well as to human health. Stormwater is precipitation that flows over streets, parking lots, and other developed parcels, and through commercial, industrial and residential sites, and is then collected in MS4s and conveyed to surface waters. When stormwater flows over urban environs, it collects suspended metals, sediments, nutrients (nitrogen and phosphorus), trash and debris, petroleum products, untreated sewage, pesticides, and other toxic pollutants, which are then discharged to creeks, rivers, estuaries and the Pacific Ocean. In addition to stormwater, the MS4 collects non-stormwater runoff from urban activities such as street washing, potable water system testing, and discharges from groundwater treatment programs. These non-stormwater discharges can also contain pollutants that impair the beneficial uses (e.g. recreation, habitat protection, etc.) of the region's waters.

Section 402(p) of the Clean Water Act states that permits for discharges from MS4s: (1) may be issued on a system-wide or jurisdiction-wide basis; (2) include a requirement to prohibit non-stormwater discharges into the MS4; and (3) require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including management practices, control techniques and system, design, and engineering methods, and such other provisions as the Regional Board determines appropriate for the control of such pollutants. Congress established this flexible MEP standard, and gave permitting authorities discretion to include other provisions as necessary, so that administrative bodies would have the tools to meet the fundamental goals of the Clean Water Act in the context of stormwater pollution, especially as the field of stormwater management is constantly changing as new information and technologies become available.

MS4s are required to develop and implement a stormwater management program (SWMP). Historically, the SWMP has been the "bread and butter" of stormwater

² "The term 'point source' means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharged and return from irrigated agriculture."

management programs. Permit provisions to implement a SWMP have been grouped into the following six categories of so-called “minimum control measures”:

- (1) a program to monitor and control pollutants in stormwater discharges from commercial areas and industrial facilities;
- (2) a program to maintain structural and non-structural best management practices (BMPs) to reduce pollutants in stormwater runoff from construction sites;
- (3) a program to detect and remove illicit discharges and improper disposal into the MS4;
- (4) public agency activities to reduce the impact of MS4 discharges to receiving waters, including impacts from residential areas and flood management projects;
- (5) planning procedures to reduce pollutants from areas of new development and significant redevelopment; and
- (6) a public information and participation program (PIPP) related to the above five areas.

Implementing these minimum control measures typically requires the application of one or more structural or non-structural best management practices (BMPs). Pursuant to California Water Code section 13360, the Regional Board cannot specify the design, location, type of construction, or particular manner in which a permittee complies with its permit. As long as a permittee complies with the standard set (prohibition for non-stormwater discharges and MEP and other provisions as necessary for stormwater), then a permittee may comply in any lawful manner. On March 8, 2000, the development planning program requirements, including the *Standard Urban Stormwater Mitigation Plan*, were approved by the Regional Board as part of the Municipal Separate Storm Sewer System program to address stormwater pollution from new construction and redevelopment.

Over the last decade, the Regional Board and US EPA have developed total maximum daily loads (TMDLs)³ to remedy water quality impairments in various waterbodies within Los Angeles County. In most cases, these TMDLs identify MS4 discharges as a source of pollutants to these waterbodies and, as required, set waste load allocations (WLAs) for MS4 discharges to reduce the amount of pollutants discharged to receiving waters. As part of the update of the LA County MS4 Permit, the Regional Board developed numeric limitations and other provisions to implement the TMDL WLAs assigned to permittees regulated by the LA County MS4 Permit. The Regional Board has some flexibility when establishing permit provisions that are designed to determine compliance with the numeric limitations derived from the TMDL WLAs. Broadly, this means that the Regional Board may either require a demonstration that permittees comply with the numeric limitations through monitoring (such as outfall and/or receiving water monitoring) or, alternatively, allow permittees to develop and implement control measures to achieve the numeric limitations (referred to as an “action-based” compliance demonstration) where there is an adequate demonstration that the selected control measures and schedule will achieve the numeric limitations. As described below, the manner in which the TMDLs were incorporated in the new MS4 permit is one of the

³ When designated beneficial uses of a particular receiving water body are being compromised by water quality, Section 303(d) of the CWA requires the EPA to identify and list that water body as “impaired.” Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for the impairing pollutant(s). A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards (plus a “margin of safety”). Once established, the TMDL allocates the loads among current and future pollutant sources to the water body as Waste Load Allocations.

key comments that underlie much of the controversy in the development of the reissued MS4 permit.

Lastly, when an NPDES permit is renewed, reissued or modified, it generally must be at least as stringent as the prior permit (referred to as *anti-backsliding*). This is consistent with Congress' intent that state management programs evolve based on changing conditions from program development and implementation and corresponding improvements in water quality.

The new NPDES permit calls for establishment of a Watershed Management Program. Previously the City of Beverly Hills was merged together with the entire region tributary to Santa Monica Bay, which included all jurisdictional agencies from Malibu to the Palos Verdes Peninsula. Under the new permit, Beverly Hills will be able to focus on watershed management for Ballona Creek, a subwatershed of Santa Monica Bay. This watershed is approximately 128 square miles in size and is bounded by the Santa Monica Mountains to the north and the Baldwin Hills to the south. Approximately 81% of the Ballona Creek watershed is within the City of Los Angeles. The other 19% of the watershed area is within the jurisdictions of the City of Beverly Hills, Culver City, Inglewood, Santa Monica, West Hollywood, and the County of Los Angeles. The City of Beverly Hills comprises roughly 4.4% of the Ballona Creek Watershed. The proposed new permit provides for a very short timeline (just 12 to 18 months) for the jurisdictional agencies to develop watershed management and monitoring programs. Therefore, it will be challenging for staff from the Ballona Creek jurisdictions to work quickly to enter into cooperative agreements, secure funding, and implement required monitoring programs. Fortunately, over the past three years, the Ballona Creek jurisdictions have executed Memorandums of Agreement for implementation of stormwater monitoring and reporting programs for pollutant loading of bacteria, metals, and toxic pollutants.

II. THE LOS ANGELES COUNTY MS4

The Los Angeles County MS4, like many MS4s in the nation, is based on regional floodwater management systems that use both natural and altered waterbodies to achieve flood management goals. The LA County MS4 is a large interconnected system, controlled in large part by the Los Angeles County Flood Control District (County FCD), among others, and used by multiple cities along with Los Angeles County. These systems convey stormwater and nonstormwater urban runoff across municipal boundaries where it is commingled within the MS4 and then discharged to a receiving waterbody.

The Los Angeles County Flood Control Act was passed in 1915. The original storm drain system was developed in the 1930s by the U.S. Army Corps of Engineers (ACOE). As Los Angeles began to grow rapidly in the 1920s and 1930s, stormwater that was once absorbed by acres of undeveloped land began to run off the newly paved and developed areas, leading to an increased amount of water flowing into the region's rivers and local creeks. These waterways could not contain the increased amount of water and the region experienced extensive flooding. In response, the ACOE lined the Los Angeles River and Ballona Creek with concrete and initiated the development of an underground urban drainage system. As Los Angeles continued to grow, the complex drainage system we now know as the Los Angeles County MS4 developed.

Today, a total of approximately 120,000 catch basins, over 2,800 miles of underground pipes, and 500 miles of open channels comprise the Los Angeles County MS4. In total, runoff from approximately 1,060 square miles of developed land reach Santa Monica and San Pedro Bays through approximately 60 storm drain outfalls. Approximately 100 million gallons of urban runoff flow through Los Angeles County's MS4 on an average dry day. When it rains, the amount of water flowing through the channels can increase to 10 billion gallons, reaching speeds of 35 mph and depths of 25 feet. The chemical and hydrological variability of stormwater and urban runoff within the MS4 creates both technical and regulatory complexity. The treatment technologies for these discharges are not as well developed as those for sewage and industrial waste discharges and cannot be easily centralized. Issues of shared responsibility for compliance with TMDL wasteload allocations and receiving water limitations, and equity and fairness between multiple permittees are far more complex in an MS4 permit that regulates commingled discharges compared to an individual NPDES permit.

III. LA County Funding Initiative

In 2008, the County FCD began pursuing the establishment of a new funding source that would finance projects and activities designed to improve water quality. In 2010, the Governor approved Assembly Bill 2554 (Brownley), which amended the Los Angeles County Flood Control Act, authorizing the District to impose a parcel fee, subject to a public vote, to improve water quality and reduce stormwater and urban runoff pollution. AB 2554 provides the foundation for the proposed water quality fee (Fee) and requires the adoption of an implementation Ordinance.

On July 3, 2012, the Los Angeles County Board of Supervisors voted to move forward with the Water Quality Funding Initiative which would place, on average, a \$54 per parcel tax on approximately 2.1 million LA County parcels to raise funds to address polluted stormwater. Voting would take place in a 45-day mail-in ballot election taking place in May of 2013 with the fee taking effect in July. Countywide the proposal would raise as much as \$270 million per year. As required by AB 2554, the District would apportion revenues collected from each parcel within the Fee service area as follows:

- 40% would be allocated to the cities in proportion to the Fees collected from within the respective municipalities. Municipalities will be required to prepare and provide to the public informational materials on the municipality's actual and budgeted use of Fee revenue.
- 50% would be allocated to nine Watershed Authority Groups (WAGs), in proportion to the Fees collected from within the respective watershed area of each WAG.
- 10% would be allocated to the District.

The annual parcel Fee, as proposed, would vary from \$8 to \$83 per year - based on property size and impervious surface area. Single family parcels would account for 75 percent of the properties. Commercial and industrial parcels, which typically have more impervious area, would pay more. A public hearing would occur in the middle of January 2013. Unless a majority of all property owners submit protests, the Board would vote to proceed with an election. Passage would require a majority of *returned* ballots.

A review of the Engineer's Report indicates the Ballona Creek watershed would raise \$28,317,660 million dollars per year to be disbursed accordingly: \$14,158,830 for watersheds; \$11,327,064 for cities; \$2,831,766 for administration. The City of Beverly

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Hills would receive approximately \$402,000 per year as a result of the successful passage of the measure.

FISCAL IMPACT

The Clean Water Fund generates approximately \$1.8 million in annual revenue by imposing a bi-monthly fee of \$17.56 on residential accounts and \$143.26 on commercial accounts. The fund experiences an annual operating deficit of about \$1.6 million which does not take into account the CIP budget. A transfer from the General Fund of \$1.3 million was approved for FY 12/13 and an additional \$1 million is being appropriated from an FY 11/12 unanticipated budget surplus. As of June 30, 2012, the fund had \$277,578 in cash and equivalents.

RECOMMENDATION

This item is submitted for informational purposes and intended to elicit further discussion.

 _____
David Gustavson
Approved By

Attachment 1

Los Angeles County

clean water, clean beaches measure



Water and Beaches Today

Water quality in rivers and creeks, lakes, the bay and coastal waters continue to be a challenge for counties throughout California:

- Water pollution is at levels well above accepted health standards and Clean Water Act regulations.
- Sources of clean drinking water are threatened by contamination.
- Independent Water quality tests have recently determined that 7 out of 10 most polluted beaches in California are on the Los Angeles coast.

The Clean Water, Clean Beaches Measure would fund projects to reduce trash and pollution in our waterways and protect local sources of drinking water from contamination.

The Problem

Water runoff is a major source of pollution in rivers, creeks, lakes and along our coastline. When it rains or we water lawns, wash cars or hose down sidewalks, water rushes down the street, picking up trash and toxic pollutants. On a typical rainy day, billions of gallons of contaminated stormwater flows directly—untreated—into rivers, creeks, lakes, bays and coastal waters. These polluted waters include toxic substances that can affect our health, and the health of fish and marine life. These pollutants include:

- Industrial solvents, paints and chemicals
- Toxic metals like lead, mercury, chromium and arsenic
- Infection-causing bacteria
- Pesticides and fertilizers
- Trash like plastics, cigarette butts, candy wrappers and syringes

Municipalities now face stormwater pollution regulations and fines—with no dedicated funding source to address the problem.



Top: During storms, rushing water picks up trash from the streets and sends it into storm drains. The trash flows to the ocean and washes back onto beaches.

Bottom: The fee could fund new screen inserts in storm drains to trap trash before it enters waterways, and fund ongoing maintenance to keep them clean.

A Solution

The County of Los Angeles Flood Control District is proposing to establish an annual clean water fee to fund the Clean Water, Clean Beaches Program.

The clean water fee would provide dedicated funding to municipalities for pollution prevention, cleaning up waterways, protecting local drinking water sources from contamination, and for capturing stormwater before it enters waterways.

Captured water can then be held, filtered and cleansed naturally in groundwater basins—increasing local drinking water supplies and reducing the need for imported water from Northern California and the Colorado River. This can

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www.LACountyCleanWater.org

help ensure that we are able to fulfill our current and future water demands and protect our environment.

Allocating the Fee

The fee will be allocated with 90% local return—invested back where it was raised:

- 40% returned to cities and County unincorporated communities for new or existing local water quality projects
- 50% to watershed area groups for regional collaborative projects
- 10% to the District for countywide water quality monitoring, projects for improving water quality, technical assistance to cities and watershed groups and performance oversight

Multi-Benefit Projects

A clean water fee will generate about \$270 million a year. The value of clean beaches and coastal waters to commercial and tourist industries is invaluable—a major driver of our economy.

There are tangible financial benefits from investing in infrastructure. A recent study by the independent Economic Roundtable in Los Angeles analyzed spending on storm water and water conservation projects:

- 100% of all funds will be spent locally.
- Projects will generate thousands of local jobs in engineering, construction, landscaping, environmental clean-up and related tasks.
- Every \$1 in direct stormwater investment stimulates \$2 in economic activity.

Cleaning up waterways now can also help avoid stricter and more costly water quality regulations by the state. That's a potential burden that could impact everyone.

The Proposed Fee

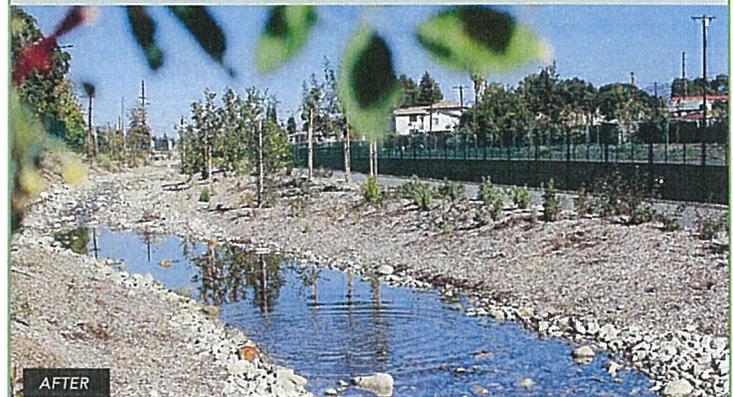
All properties generate water runoff. The more hard surfaces that a parcel has (such as buildings and pavement), the more water runoff it will generate. If passed by voters, the fee will be determined by the amount of runoff properties generate, based on the size of each parcel (but not its value) and its land use (residential, commercial/industrial or undeveloped).

The typical single-family residential fee will be \$54 annually. About 75% of commercial properties would pay less than \$420 a year. For example:

- Typical convenience store or fast food restaurant property (10,000 square feet): \$250 a year
- Typical city park (5 acres): \$600 a year
- Typical "big box" store (10 acres): \$11,000 a year

Tujunga Wash Greenway: New Drinking Water Supply Source

This is an example of a multi-benefit project that could be funded and result in benefits that include improved water quality and increased drinking water supplies. The Tujunga Wash Greenway, in the urban San Fernando Valley, creates a restored stream and ecosystem that naturally cleanse millions of gallons of water, neutralizing pollutants and replenishing groundwater supplies.



Strict Fiscal Safeguards

The proposed measure includes strict fiscal safeguards:

- All funds are required by law to be completely dedicated to *local* water quality improvement projects and cannot be diverted or used for anything else.
- An Oversight Committee reviews expenditures; subject to independent annual audits.
- By law, the fee could not be increased without another vote.