Proposed Stormwater Residual Designation and Draft NPDES General Permit in two Los Angeles Watersheds Both Actions Proposed on July 26, 2022 Comment Period Ends on October 24, 2022

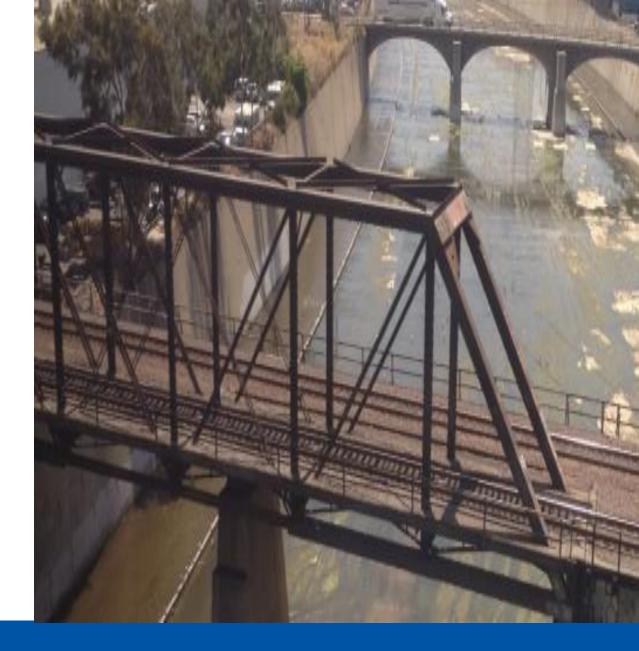
August 30, 2022

Elizabeth Sablad, USEPA Region 9 Milasol Gaslan, LA Regional Water Quality Control Board

EPA United States Environmental Protection Agency

Overview

- Stormwater and the Clean Water Act
- EPA's Proposed Designation
- State's Proposed Permit
- Next Steps





Clean Water Act

Uses regulatory and non-regulatory tools to:

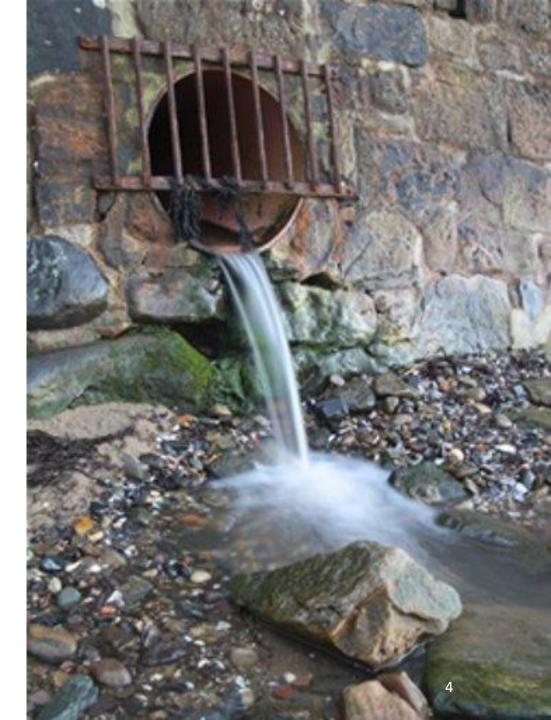
- Restore and maintain the chemical, physical, and biological integrity of the nation's waters
- Support protection and propagation of fish, shellfish, wildlife, and recreation in and on the water





Clean Water Act, Section 402

 Regulates <u>point</u> <u>source</u> discharges of <u>pollutants</u> into <u>Waters of</u> <u>the United States</u> via a National Pollutant Discharge Elimination System (NPDES) Permit



What is Stormwater?

- Stormwater runoff, surface runoff and drainage
 - Generated from rain events that flow over land or impervious surfaces (e.g., paved streets, parking lots, rooftops) and does not soak into ground





Why Can Stormwater Runoff be a Problem?

- Development in urban areas can increase stormwater volume and velocity and decrease groundwater recharge
- Pollutants in stormwater runoff can lead to:
 - Beach closures and swimming illnesses
 - Fishery and shellfish harvest impacts (sedimentation, nutrients, metals accumulation)
 - Drinking water treatment cost impacts



Effects of Stormwater Runoff

- Water quality impacts
 - Pollutants lead to toxicity, acidity/alkalinity, oxygen consumption and other effects
 - Warmer water temperature
 - Turbidity
- Water quantity impacts
 - Increased runoff/reduced infiltration
 - Changes to stream geomorphology
 - Disturbed aquatic habitat
- Can lead to impaired value or loss of use



Why is Stormwater Runoff a Problem?

Stormwater runoff is the source of problems in:

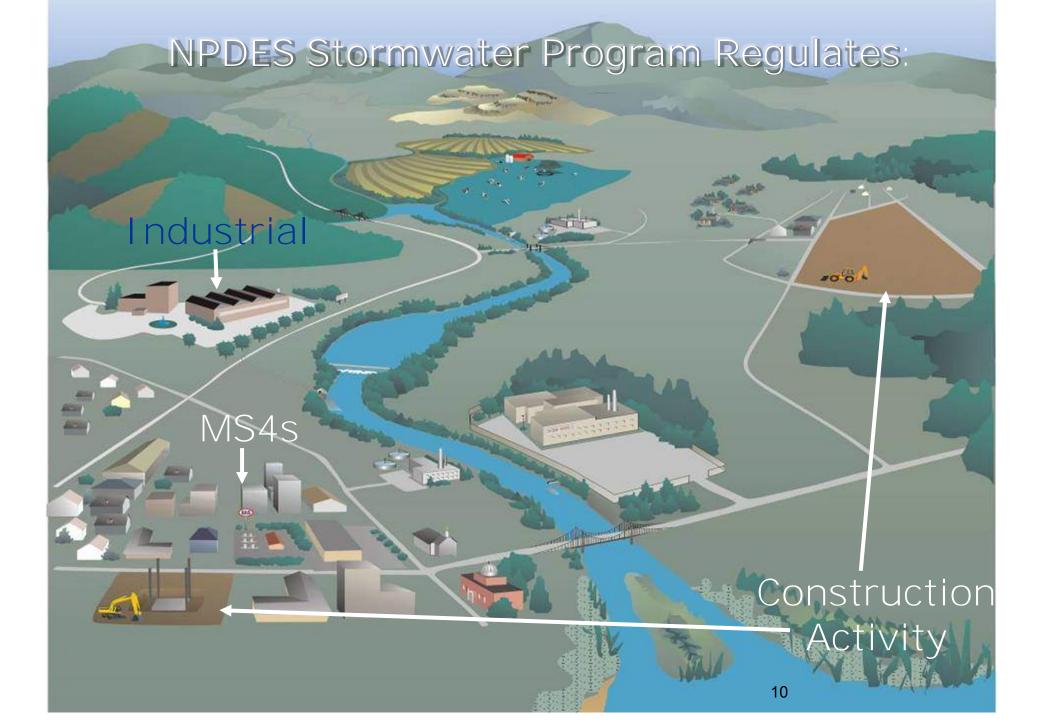
- 34,871 miles or 13% of all impaired rivers and streams
- 1,369,327 acres or 18% of all impaired lakes
- 5,045 square miles or 32% of all impaired estuaries





Pollutants That Affect Water Quality





Clean Water Act Authority to Regulate Stormwater

NPDES Permits are required for certain stormwater discharges:



Large, Medium, and Small Municipal Separate Storm Sewer Systems (MS4s)



Construction Activities Disturbing ≥ 1 acre



85

Others

Industrial Activities from specific industrial categories

Additional Discharges on a Case-By-Case Basis

Residual Designation Authority (RDA)



EPA's Residual Designation Authority

EPA can use its "residual designation" authority under <u>40 CFR 122.26(a)(9)(i)(C) and (D)</u> (<u>PDF</u>) to require NPDES permits for other stormwater discharges or category of discharges on a case-by-case basis when it determines that:

- the discharges contribute to a violation of water quality standards,
- are a significant contributor of pollutants to federally protected surface waters, or
- controls are needed for the discharge based on wasteload allocations that are part of "total maximum daily loads" (TMDLs) that address the pollutant(s) of concern.

Can be requested by petition



Water Quality Background

Petitions Under Review

- Petitions asking EPA to permit privately-owned commercial, industrial, and institutional (CII) sources in two highly urbanized watersheds
- Petitions focus on zinc and copper impairments

Water Quality Concerns

- Waterbodies are impaired
- Several TMDLs for these watersheds
- Other constituents of concern:
 - Other metals

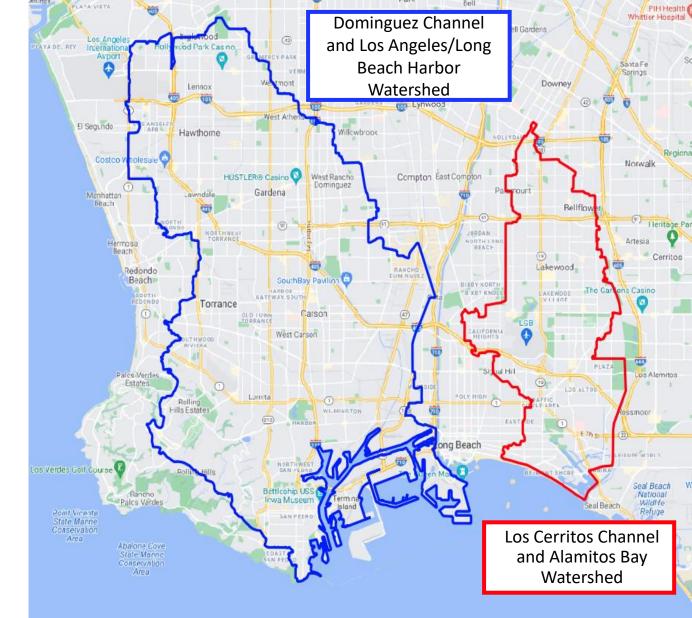
• PCBs

• PAHs

Trash

- Bacteria
- Legacy pesticides such as DDT

- Nutrients



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Community Background



- Highly-impacted, underserved communities
 - Pollution
 - Language isolation
 - Poverty
 - Unemployment
- Implementation may yield multi-benefits:
 - Water Resiliency/re-use
 - Greener communities
 - Lower Heat Island effect
 - Fewer Beach closures

LA Residual Designation Petitions Timeline

Petitioners appeal

2017

2013

NRDC, American Rivers, CA Coastkeeper Alliance, Conservation Law Foundation file petition for permitting of all non-de minimis CII facilities to all impaired waterbodies and EPA denied the petitions

> NGOs submit tailored petitions seeking permitting in 2 watersheds

> > 2015

2016

EPA denied petitions on basis that impairments being addressed through MS4 permit and its provisions for WMPs already underway 2018

District Court rules EPA's basis is not allowed in CWA and remands back to Region 9 for action.

2022

EPA reconsiders options/actions

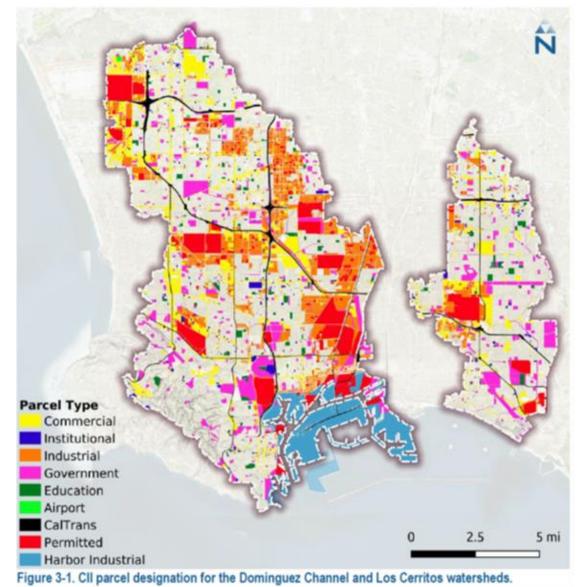
2019-2021

Proposed residual designation by EPA and draft general permit by Regional Board.

Separation United States Environmental Protection Agency

Pollutant Loading Analysis for CII Sources

- Watersheds are highly urbanized, containing a large amount of impervious cover that can convey pollutants.
- Completed watershed modeling for zinc and copper in stormwater discharges from CII parcels (based on LA Tax Assessor database).
- 2021 loading report for different types and sizes of CII sites (total area and acres of impervious cover).



*Used Los Angeles County land use classification data

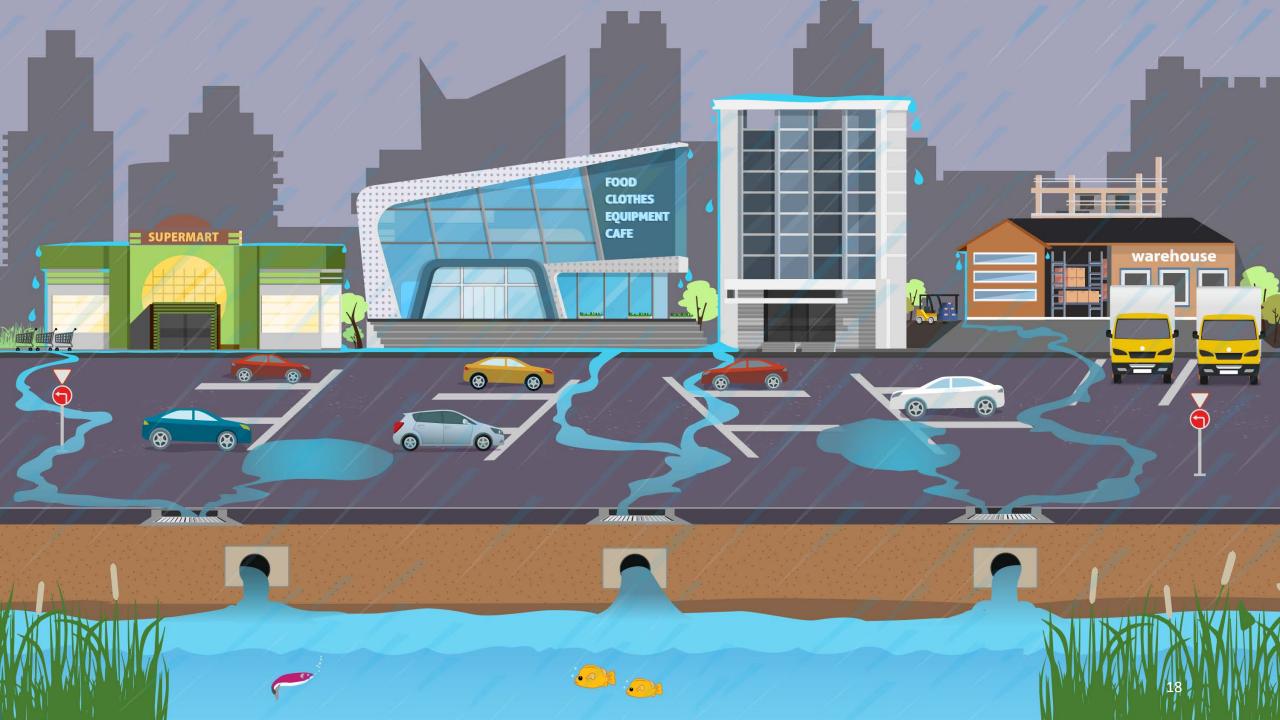


Watershed Hydrology and Water Quality Model Used

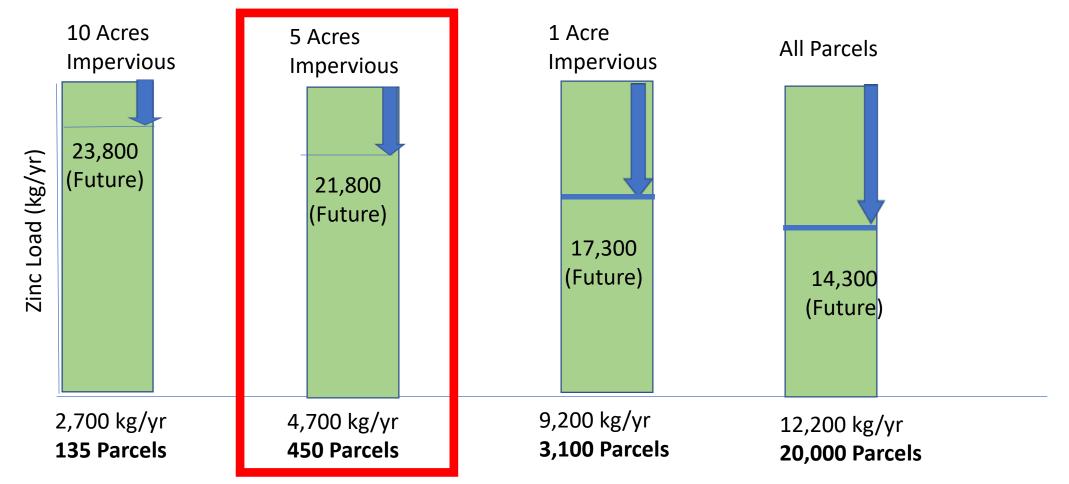
- Watershed Management Modeling System (WMMS) 2.0
 - Developed by Los Angeles County Flood Control District and Public Works Department.
 - Updated version released in June 2020.
- Provides simulation of water quantity and water quality in 2,655 subwatersheds in Los Angeles area.



2,655 Subwatersheds in WMMS 2.0



Estimated Pollutant Loads Addressed by Various CII Options (Of MS4 Load Responsibility for Zinc of 26,500 kg/yr)

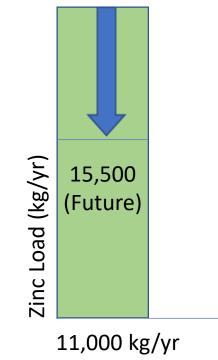




Estimated Zinc Load from Facilities Regulated Under the Industrial General Permit (IGP) that Are Five or More Acres in Total Area

- Load from unpermitted portions of industrial facilities permitted under the general permit
 - 5,100 kg/yr load
 - About 160 sources
- Load from facilities submitting no exposure certifications and notices of non-applicability.
 - 1,200 kg/yr load
 - About 30 sources





640 Sources

Combined Zinc Load from IGP Facilities (Five Acres) and CII Sources of 5 Acres Impervious Cover (of MS4 Load Responsibility for Zinc of 26,500 kg/yr)

Proposed Designation





- Only these two watersheds
- CII parcels with 5 or more acres of impervious cover
- <u>Unpermitted portions of IGP</u> facilities with 5 or more acres of total area
- COM, INST, IND land uses/examples: shopping centers, office complexes, car dealerships, warehouses, parking lots and private schools



EPA and LA Water Board Roles

- EPA administers the Clean Water Act, including the NPDES Program
- California is authorized to implement the NPDES Program
- For this overall action:
 - EPA proposes the designation
 - LA Water Board proposes the draft NPDES permit

We plan on simultaneous final issuance of both actions
Facilities seek coverage/enroll under the permit



Next Steps



Late	2022	2

- Ongoing coordination between USEPA, Los Angeles Water Board, and State Water Board
- Summer 2022: Simultaneously public notice draft permit and draft designation for public comment (July 26, 2022)
- 90-day comment period
- August 30, 2022: Workshop for stakeholders
- October 24, 2022: close of public comment period
- Late 2022: Potential USEPA final designation and Los Angeles Water Board adoption hearing for the permit

For more information, to submit comments or for questions about a specific facility, please use this contact email:

R9RDA@epa.gov

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