

Proposed Stormwater Residual Designation in two Los Angeles Watersheds

December 2021

Elizabeth Sablad, USEPA Region 9

Jenny Newman, LA Regional Water Quality Control Board

Overview

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



Clean Water Act

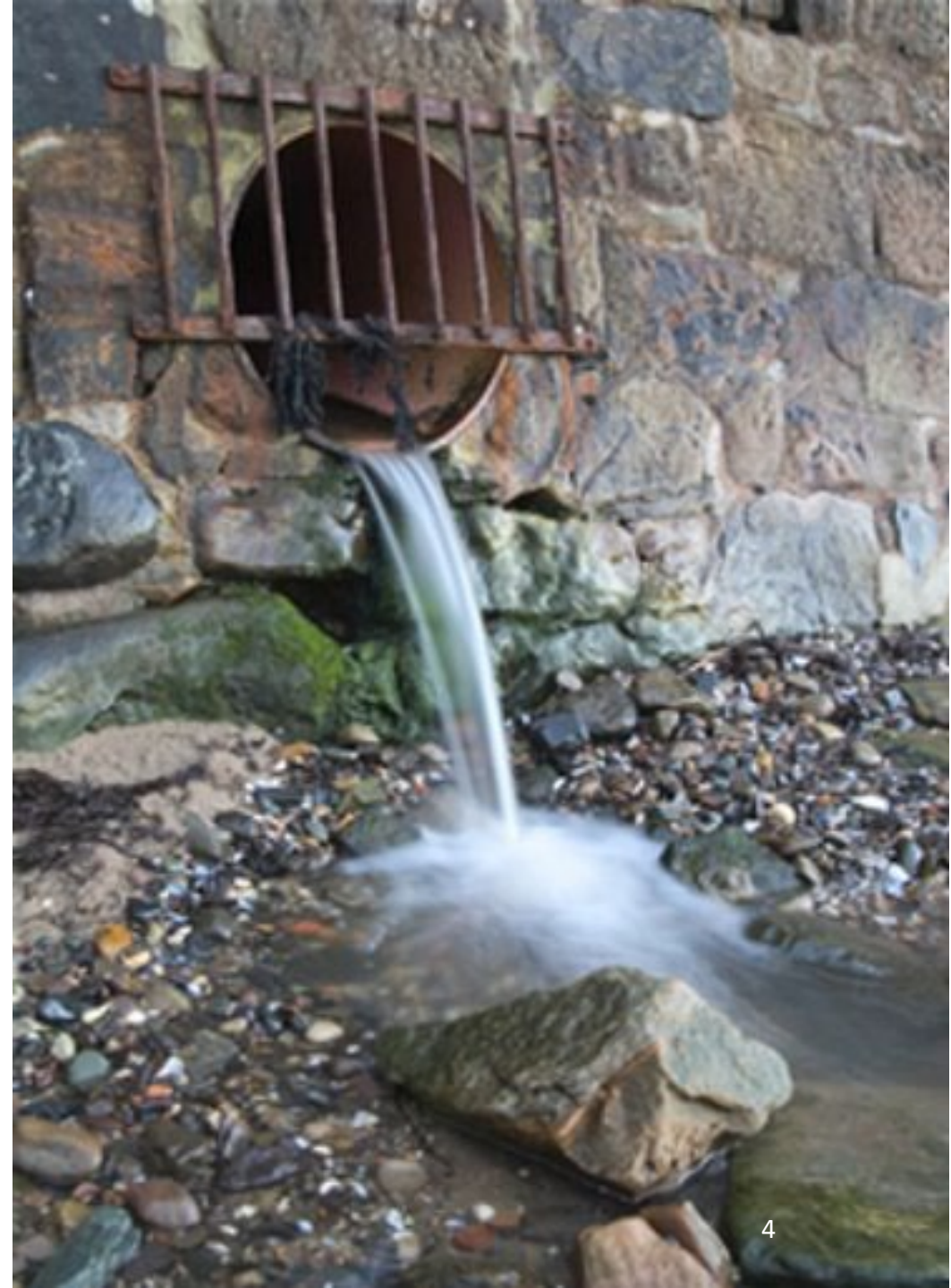
Uses regulatory and non-regulatory tools to:

- 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 point source discharges of pollutants into Waters of the United States via a National Pollutant Discharge Elimination System (NPDES) Permit



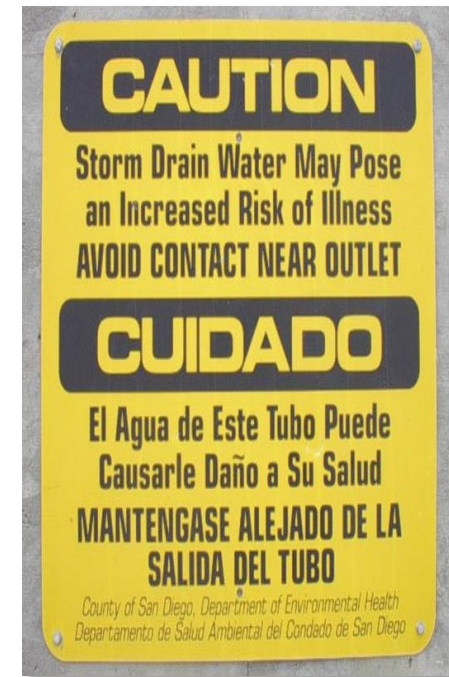
What is Stormwater?

- **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

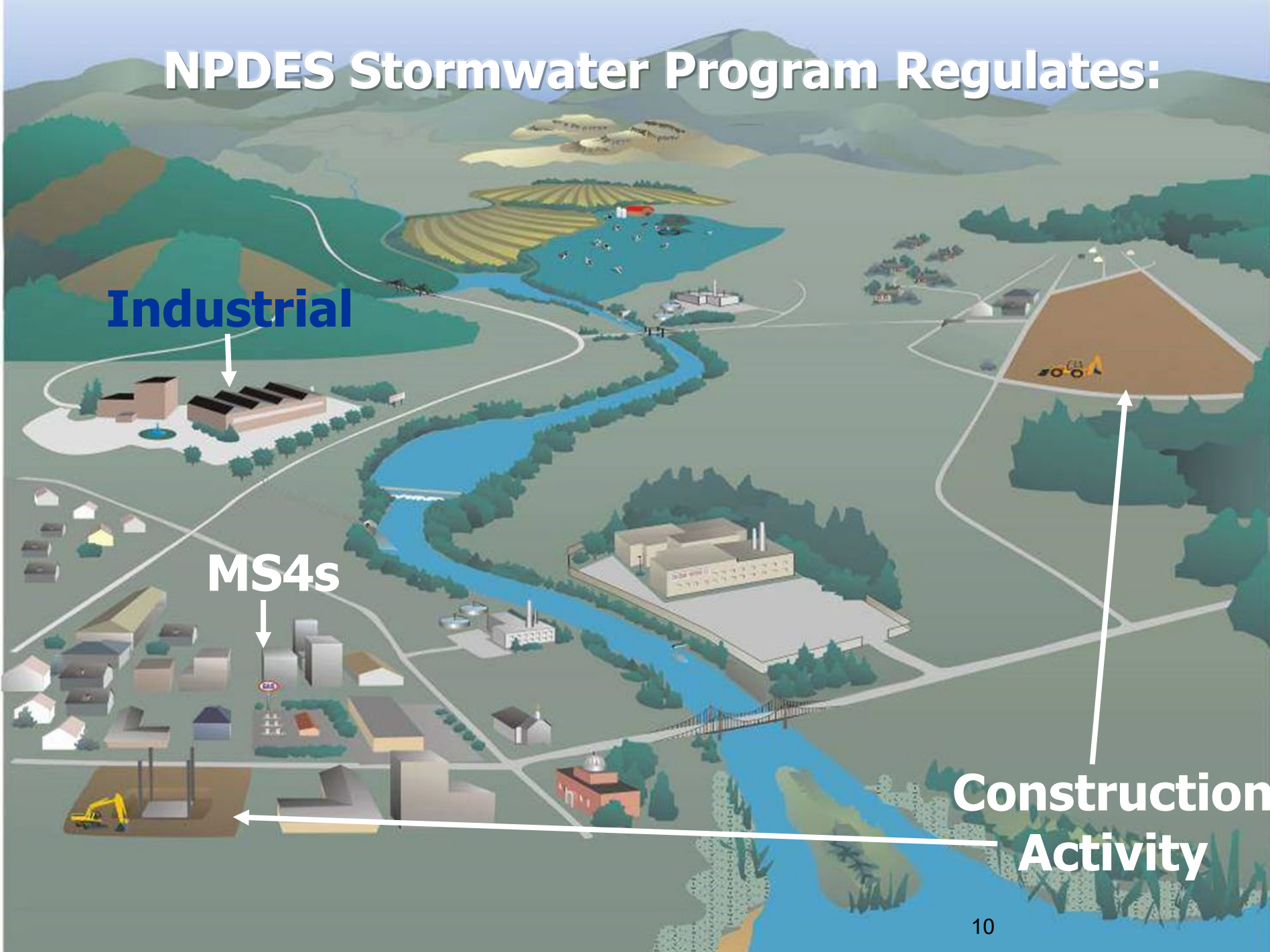


NPDES Stormwater Program Regulates:

Industrial

MS4s

Construction Activity



Clean Water Act Authority to Regulate Stormwater

NPDES Permits are required for certain stormwater discharges:



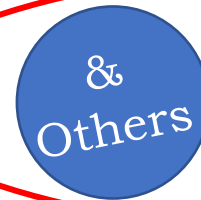
Large, Medium, and Small Municipal Separate Storm Sewer Systems (MS4s)



Industrial Activities from specific industrial categories



Construction Activities Disturbing ≥ 1 acre



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 [40 CFR 122.26\(a\)\(9\)\(i\)\(C\) and \(D\) \(PDF\)](#) 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

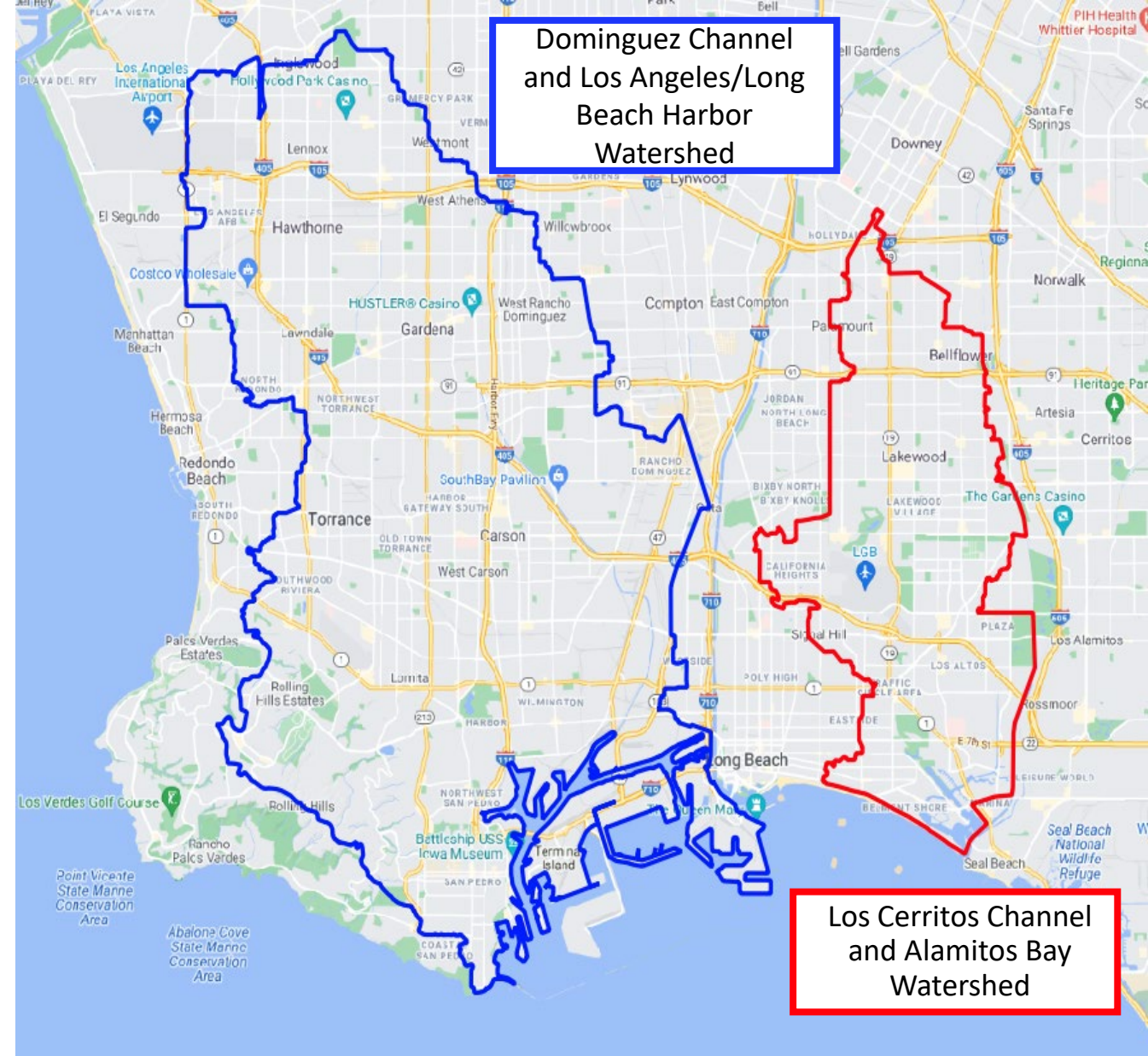
Water Quality Background

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
- 3 TMDLs for these watersheds
- Other constituents of concern:
 - Other metals
 - PAHs
 - Bacteria
 - Legacy pesticides such as DDT
 - PCBs
 - Trash
 - Nutrients



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

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

Petitioners appeal

2017

EPA reconsiders options/actions

2019-2021

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.

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).

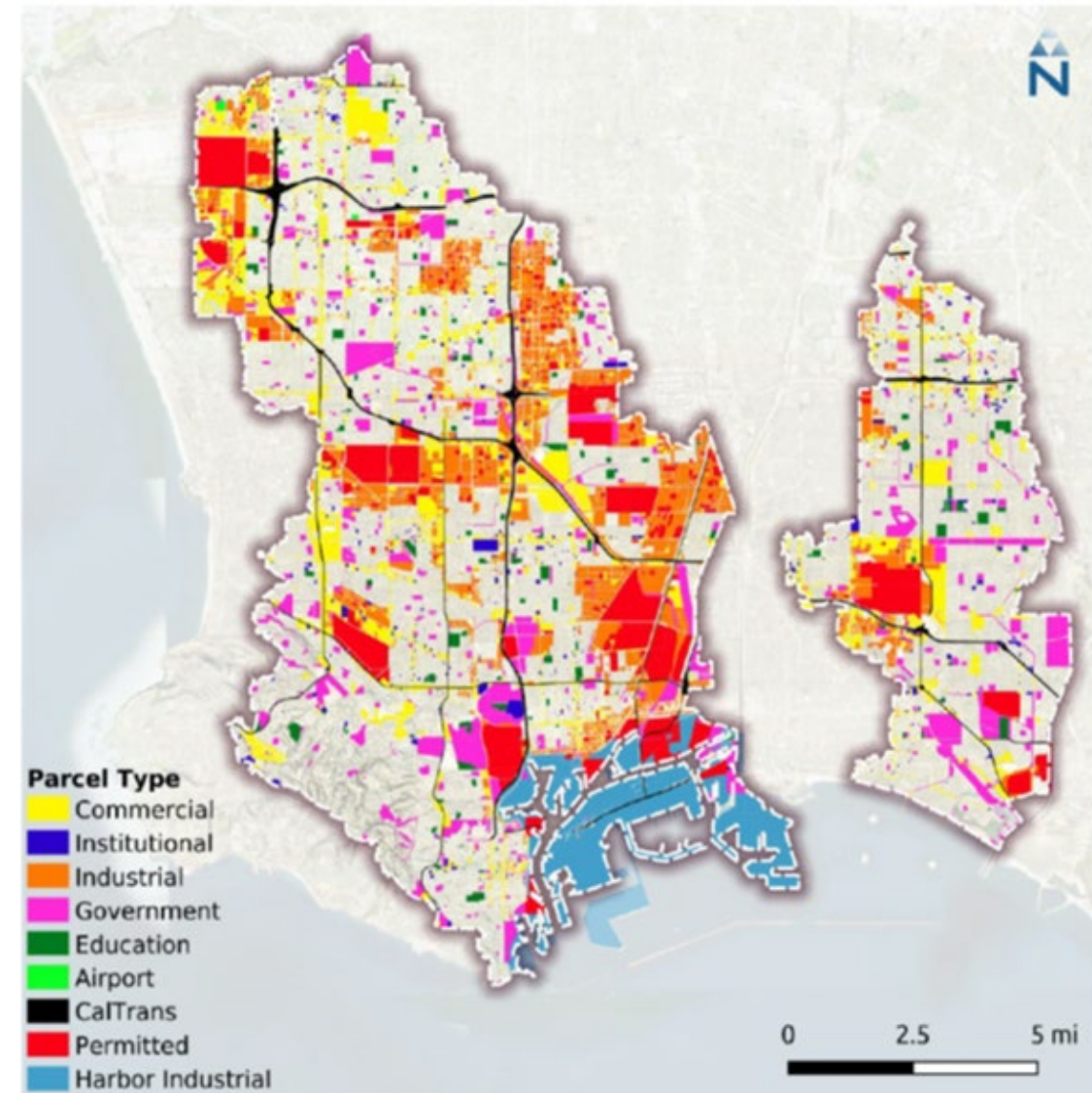
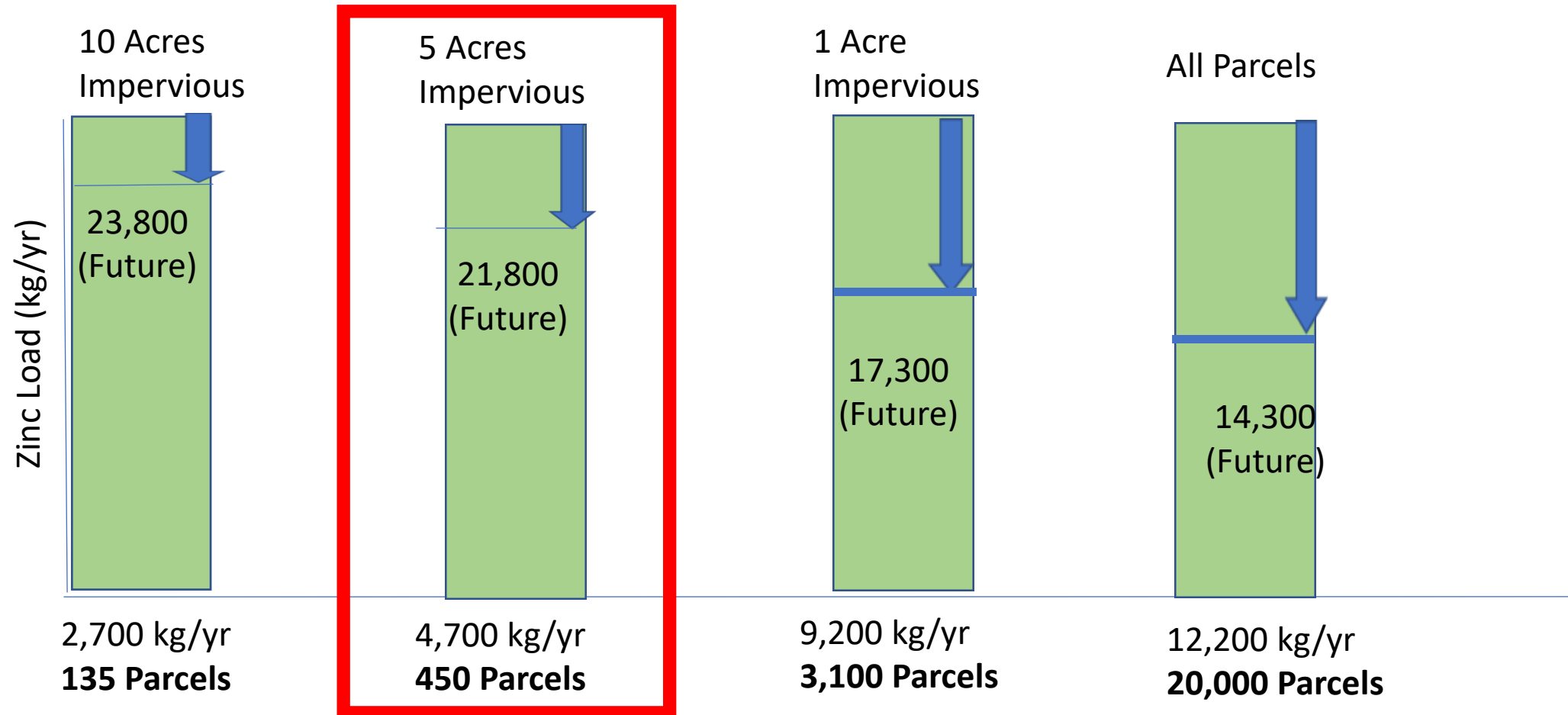


Figure 3-1. CII parcel designation for the Dominguez Channel and Los Cerritos watersheds.

*Used Los Angeles County land use classification data

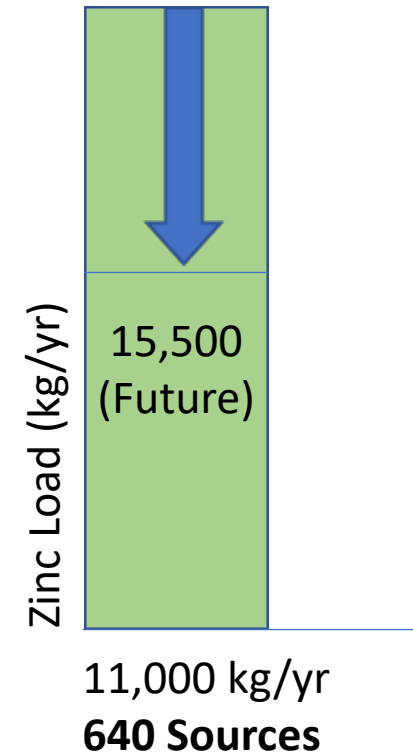


Estimated Pollutant Loads Addressed by Various CII Options (Of MS4 Load Responsibility for Zinc of 26,500 kg/yr)



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
 - 1,200 kg/yr load
 - About 30 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 Under Consideration



- Only these two watersheds
- CII parcels with 5 or more acres of impervious cover
- Unpermitted portions of IGP 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 Residual Stormwater Designation:
 - EPA issues a proposed designation
 - LA Water Board issues a proposed NPDES permit
- We plan on simultaneous public notice and final issuance of both actions
- Facilities seek coverage/enroll under the permit

Questions?

*For more information or questions about specific facility,
please use this contact email:*

R9RDA@epa.gov