Pollutant Source Characterization Study

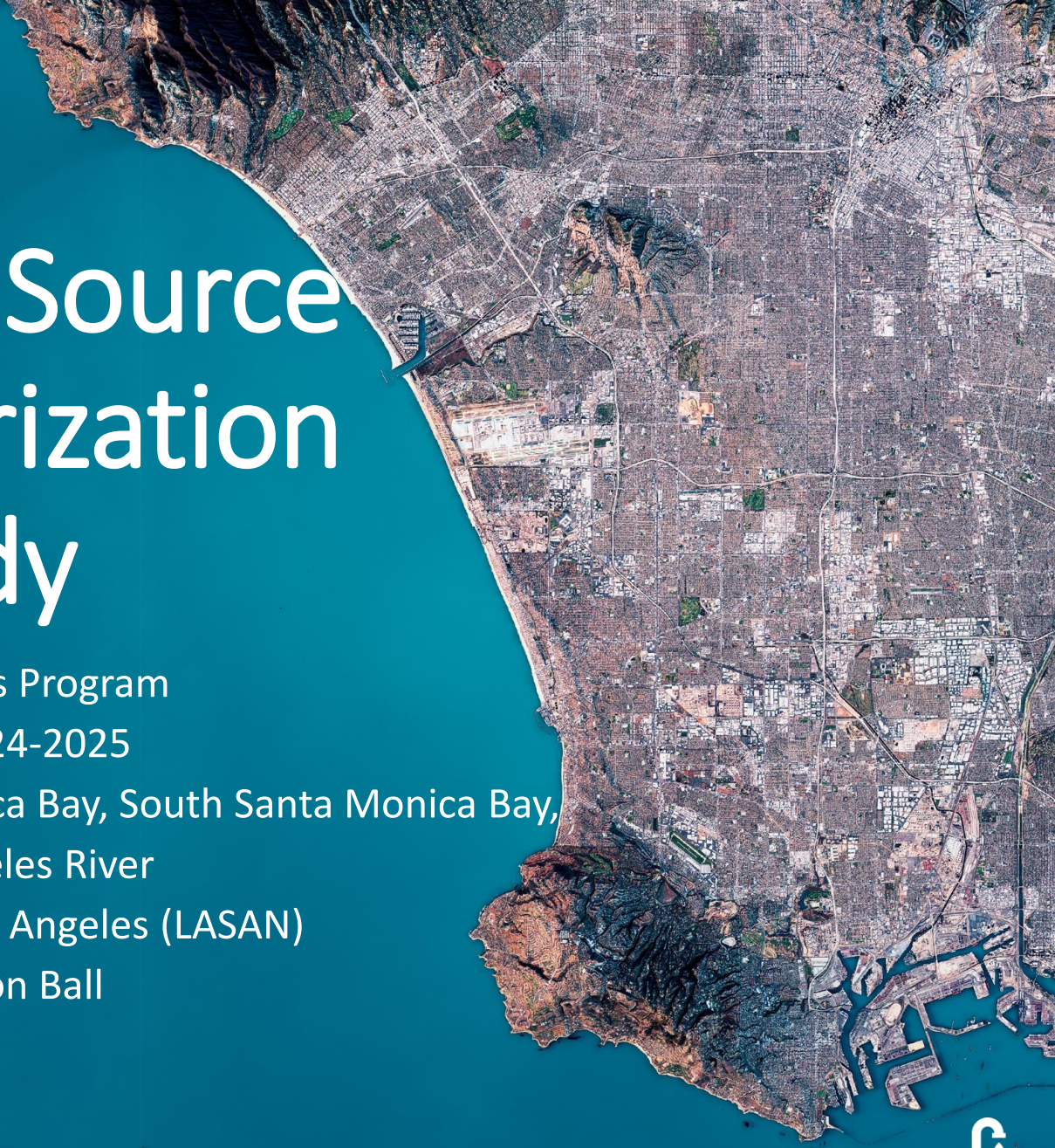
Scientific Studies Program

Fiscal Year 2024-2025

Watershed Areas: Central Santa Monica Bay, South Santa Monica Bay, Upper Los Angeles River

Project Lead: City of Los Angeles (LASAN)

Presenter: Jon Ball

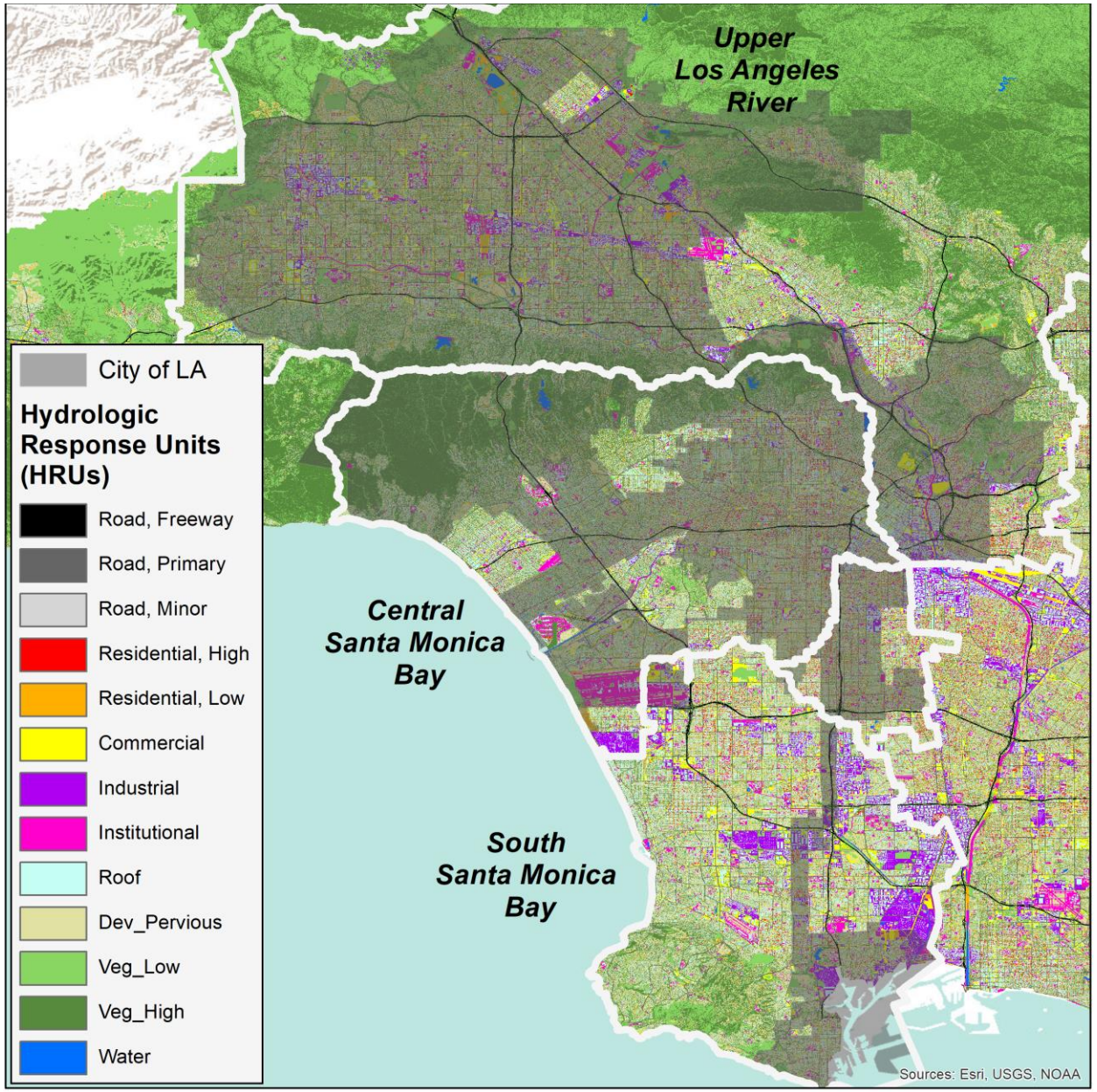


Study Overview

The Pollutant Source Characterization Study will collect data to better understand pollutant sources, improve water quality model configuration and calibration based on current conditions, and support Best Management Practice (BMP) planning.

- The Study will support stormwater capture and pollutant reduction by providing the information needed to:
  - Improve the precision and accuracy of water quality modeling
  - Select and site more effective structural BMPs
  - Identify and implement potential source control BMPs
  - Maximize the water quality benefit from SCWP and other investments

Study Location



- SCW watershed areas:
  - Central Santa Monica Bay
  - South Santa Monica Bay
  - Upper Los Angeles River
- Study locations will include:
  - Sites representing runoff from homogenous land uses
  - Sites representing hydrologic response units (HRUs) modeled in WMMS 2.0

Study Team

- Study Lead: LASAN Watershed Protection Division (WPD)
  - Jon Ball, Environmental Affairs Officer
  - Miller Zou, Environmental Supervisor II
  - Bryan Truong, Environmental Supervisor II

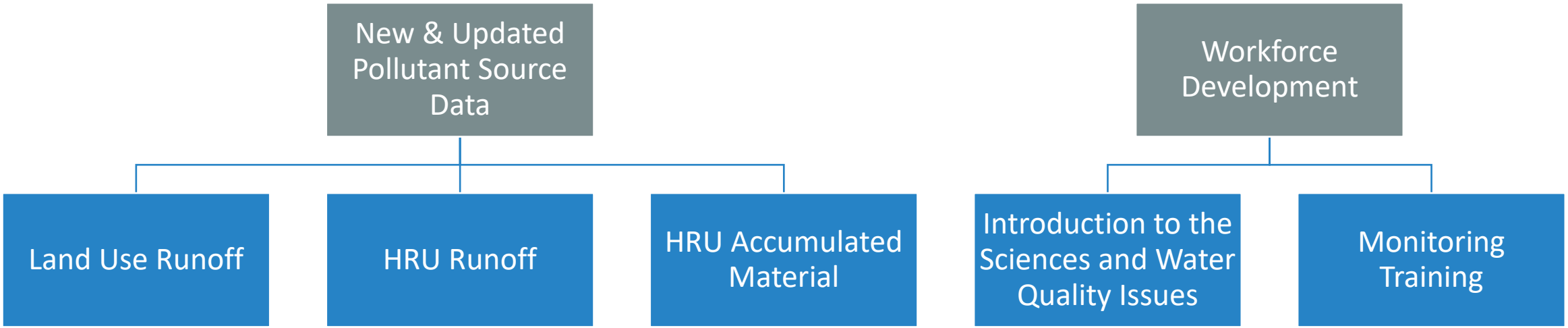
- Study Support: LWA & Paradigm Environmental
  - Accomplished in the implementation of large studies involving multiple stakeholders
  - Experienced in utilizing pollutant source data to calibrate and configure water quality models (e.g., WMMS 2.0)

Study Details: Problem Statement

- Existing pollutant source data were collected 20+ years ago by SCCWRP and LA County
  - Do not reflect current conditions
  - Lack sufficient data for important pollutants
  - Lack the spatial resolution of current water quality models
- Modeling and decision making based on existing data can lead to:
  - Implementation of BMPs that provide suboptimal water quality benefit
  - Inefficient use of Safe Clean Water Program and other resources
- Updated data are needed to inform effective management decisions

Study Details: Objectives and Outcomes

- Objective: Improve understanding of pollutant sources to inform more effective implementation of structural and source control BMPs.



Study Details - Methodology

Task 1: Work Plan Development

- Selection of representative sites and constituents
- Design of workforce development approach
- Input from Technical Advisory Group & stakeholders

Task 2: Data Collection and Workforce Development

- Collection of runoff and accumulated material samples
- Coordination with local organizations and institutions to implement workforce development approach

Task 3: Reporting and Data Summary

- Annual and final reports on methodology and results
- Final dataset to support future model calibration and inform other program elements

Task 4: Stakeholder Engagement

- Technical Advisory Group (TAG)
- Interested stakeholders

Cost & Schedule

Phase	Description	Cost	Completion Date
1	Task 1: Work Plan Development	$110,000	10/1/2025
2	Task 2: Data Collection and Workforce Development	$2,940,000	5/1/2029
2	Task 3: Reporting and Data Summary	$275,000	9/30/2029
1 & 2	Task 4: Stakeholder Engagement	$175,000	9/30/2029
TOTAL		**$3,500,000**	

Funding Request

WASC	Year 1	Year 2	Year 3	Year 4	Year 5	Total
CSMB	$24,920	$193,130	$155,750	$155,750	$93,450	$623,000
SSMB	$16,240	$125,860	$101,500	$101,500	$60,900	$406,000
ULAR	$98,840	$766,010	$617,750	$617,750	$370,650	$2,471,000
TOTAL	**$140,000**	**$1,085,000**	**$875,000**	**$875,000**	**$525,000**	**$3,500,000**

Summary of Benefits

Improved understanding of pollutant sources in stormwater

More accurate and precise water quality modeling

Greater water quality benefit from improved BMP selection and siting

Development of water work force and community relationships

Questions?

Jon Ball

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