



TETRA TECH



Bolivar Park Stormwater and Urban Runoff Capture Project

SCWC Stormwater Workshop

September 27, 2019

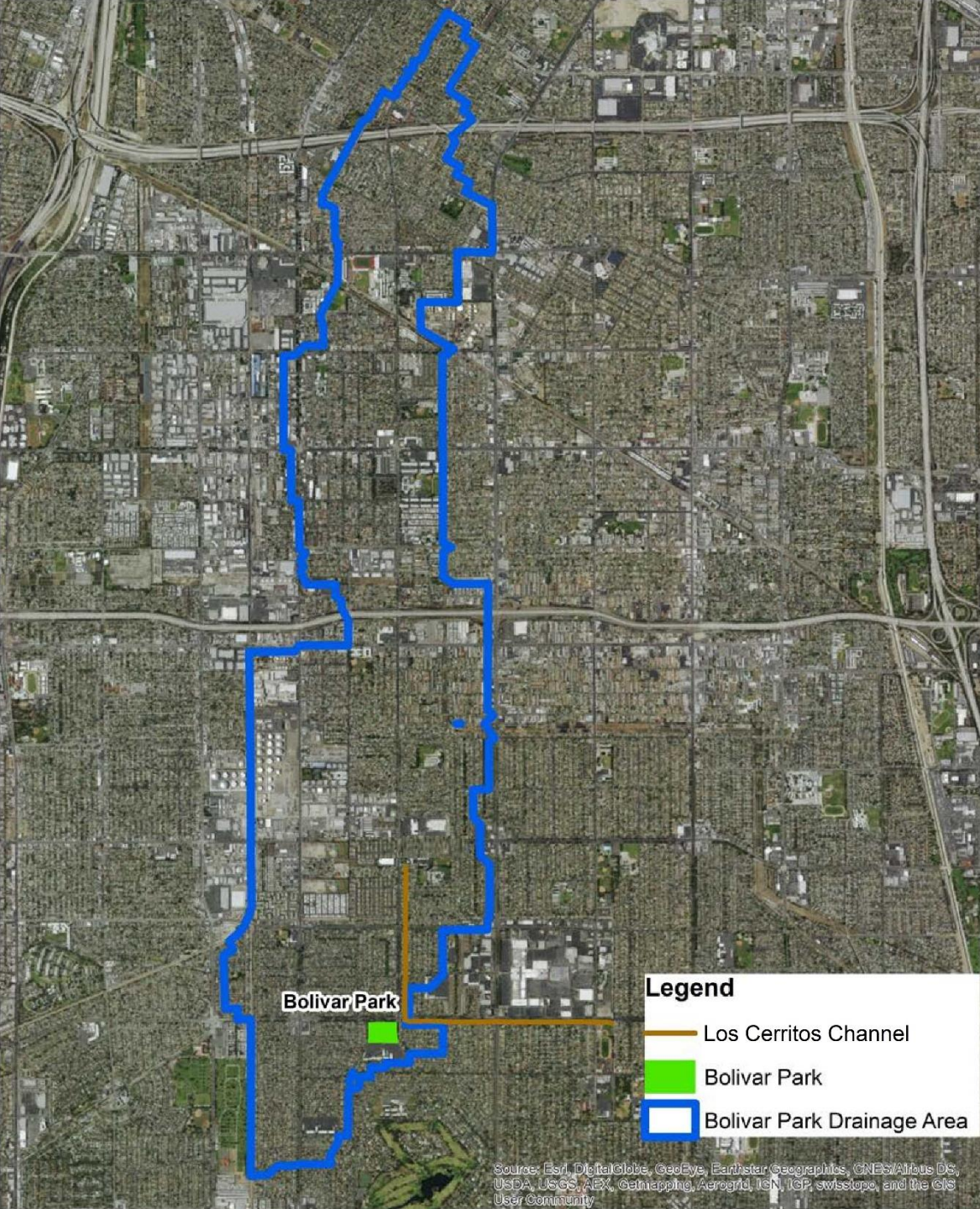
Jason Fussel, PE, PLS, Tetra Tech

Richard Watson, Richard Watson & Associates

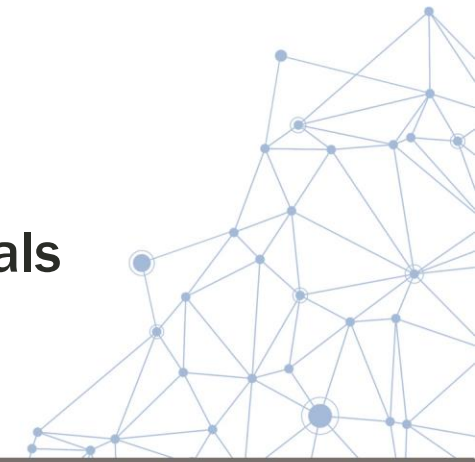


Bolivar Park Project Background

- **Los Cerritos Channel Watershed**
 - 17,711 acres
 - Project captures 3,018 acres
 - Largely urbanized
- **Los Cerritos Watershed Group**
 - Bellflower
 - Downey
 - Lakewood
 - Long Beach
 - Paramount
 - Signal Hill
- **Highest priority pollutant – Metals**
 - Bolivar Park – Zinc and bacteria



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroX, Gemapping, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community





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Project Objectives

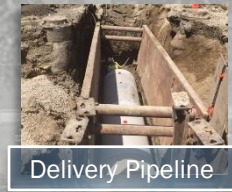
- To reduce the amount of potable water use for the irrigation of the park and nearby public open spaces
- To improve water quality and help the City of Lakewood meet the requirements set by the WMP



Bolivar Park - GENERAL PLAN



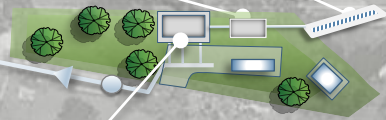
Discharge to Storm Drain



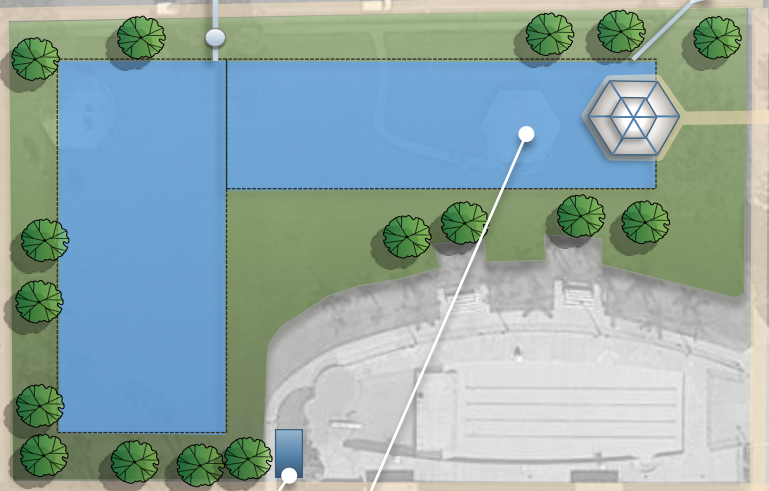
Delivery Pipeline

Inlet Structure
Pretreatment

Del Amo Channel



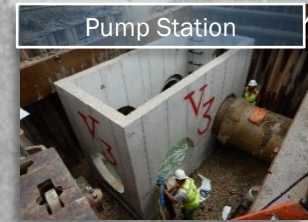
Levelside Ave



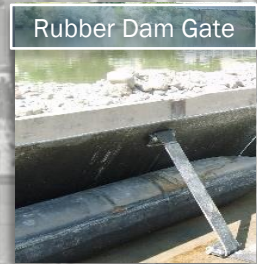
Stormwater Harvesting Unit



Storage and Infiltration Facility



Pump Station



Rubber Dam Gate

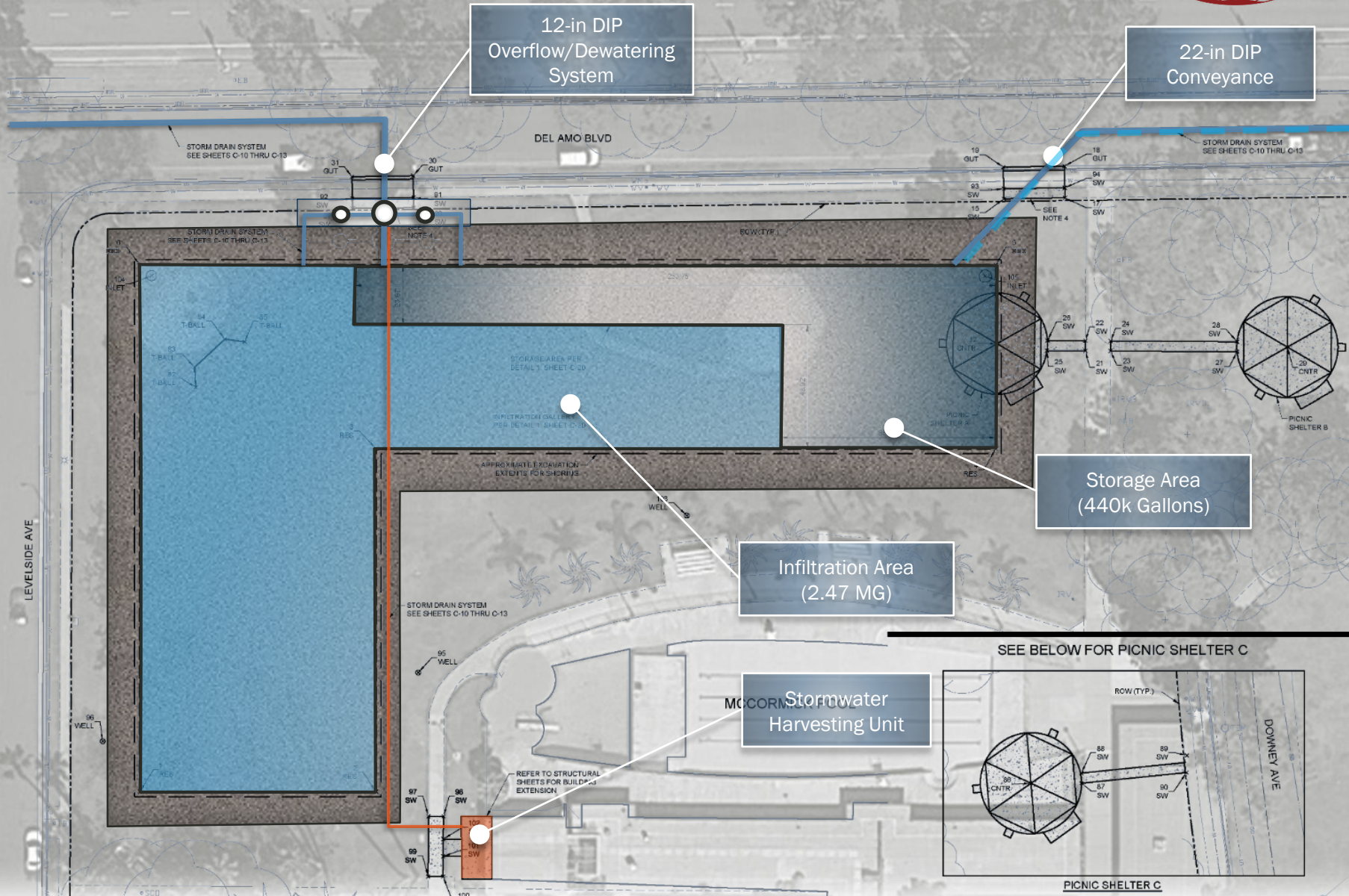
Ave

Downey

Allred St



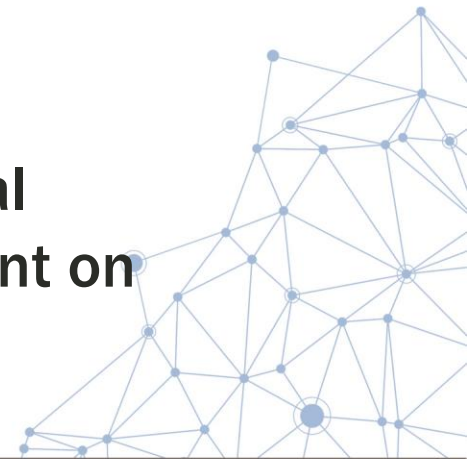
Subsurface Infiltration and Storage System





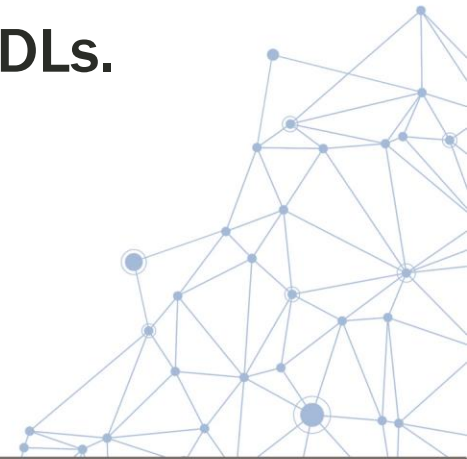
Overview of Caltrans Cooperative Implementation Agreement (CIA)

- One of the best stormwater funding programs in California
- The CIA Program was added to the Department's statewide NPDES stormwater permit as part of a 2014 permit amendment.
- Caltrans is required to earn 1,650 Compliance Units (CUs) per year. The Department earns one CU for each \$176,000 it spends in its own rights-of-way (ROW) to address water quality.
- The State Water Board encouraged Caltrans to provide funding to local governments by giving the Department one CU for every \$88,000 spent on local government water quality projects (a 50% reduction).



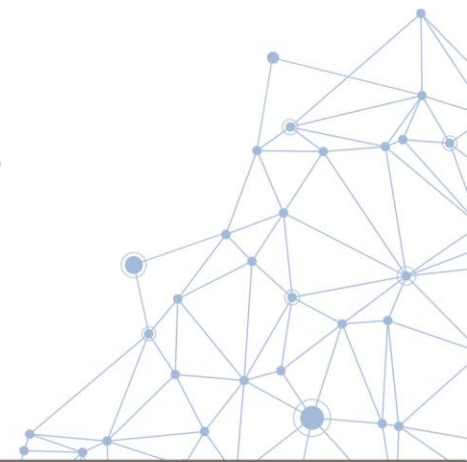
CIA Program Requirements

- Caltrans can enter into a Cooperative Implementation Agreement with a municipality for stormwater quality projects that meet Caltrans criteria.
- Caltrans can contribute money to construct a water capture facility, or other appropriate water quality improvement project.
- To be funded, projects must be in priority watersheds and address TMDLs.



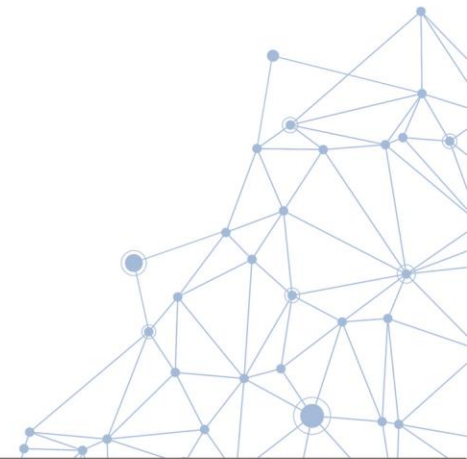
Experience Working with Caltrans

- **The first two CIA Projects were funded in Los Angeles County in June 2015. One is the Bolivar Park Project. The other, at the Long Beach Airport, later received additional funding from Caltrans and the County of Los Angeles.**
- **Thus far, Caltrans has funded five water capture projects in Los Angeles County and the first phase of a major treatment project.**
- **It has been great working with Caltrans – they did not require cities to follow Caltrans manuals and they paid invoices promptly.**



Problem with the CIA and the Future of the Program

- The Program does not have a dedicated revenue stream. It is funded using unallocated monies at the end of the fiscal year.
- Since transportation is a major source of water pollutants, it would be appropriate to dedicate a small portion of the funds generated through SB 1 to the Cooperative Implementation Agreement Program to address water quality.
- The future of the program is uncertain. State Water Board staff is apparently wanting Caltrans to directly meet waste load allocations within its own rights-of-way and other properties. A draft permit is due out soon.





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Questions & Answers

Jason Fussel, PE, PLS, Tetra Tech

Jason.Fussel@TetraTech.com

805-542-9052

Richard Watson, Richard Watson & Associates

rwatson@rwaplanning.com

949-855-6272

