



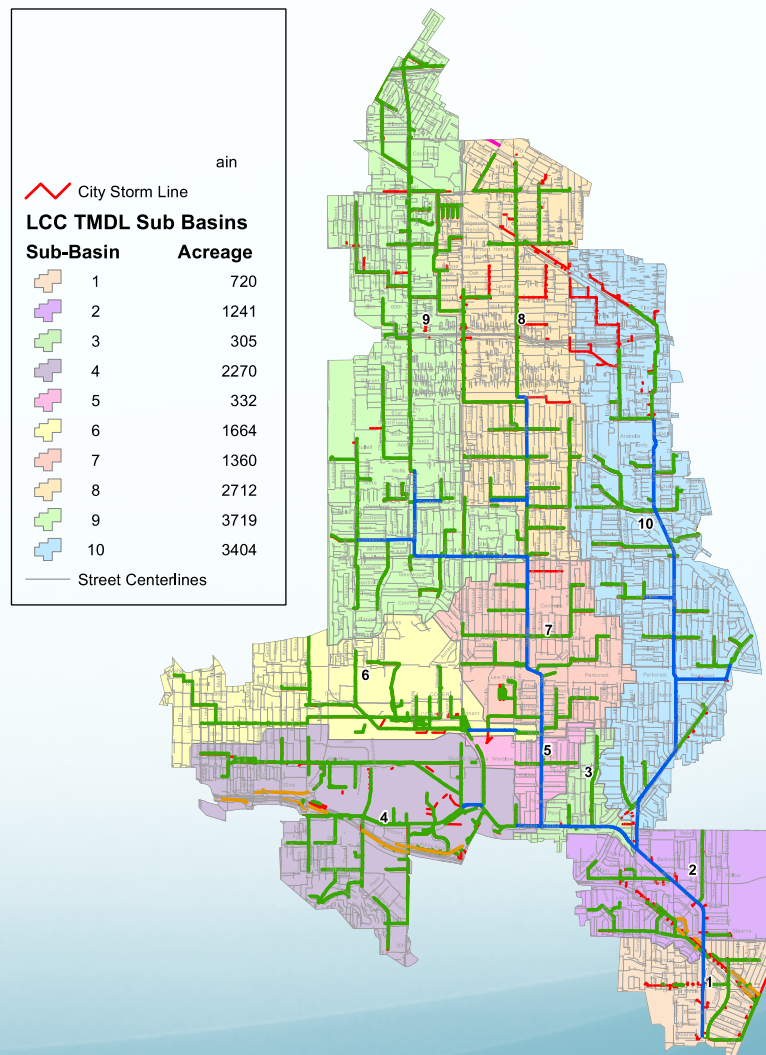
Implementation of Los Cerritos Channel WMP and Evaluation of Monitoring Data

A Presentation to
Los Angeles Regional Water Quality Control Board
By
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Overview of Los Cerritos Channel Watershed

- Small, 17,711-acre watershed
- Ten sub-basins
- Drains through estuary and Alamitos Bay to East San Pedro Bay

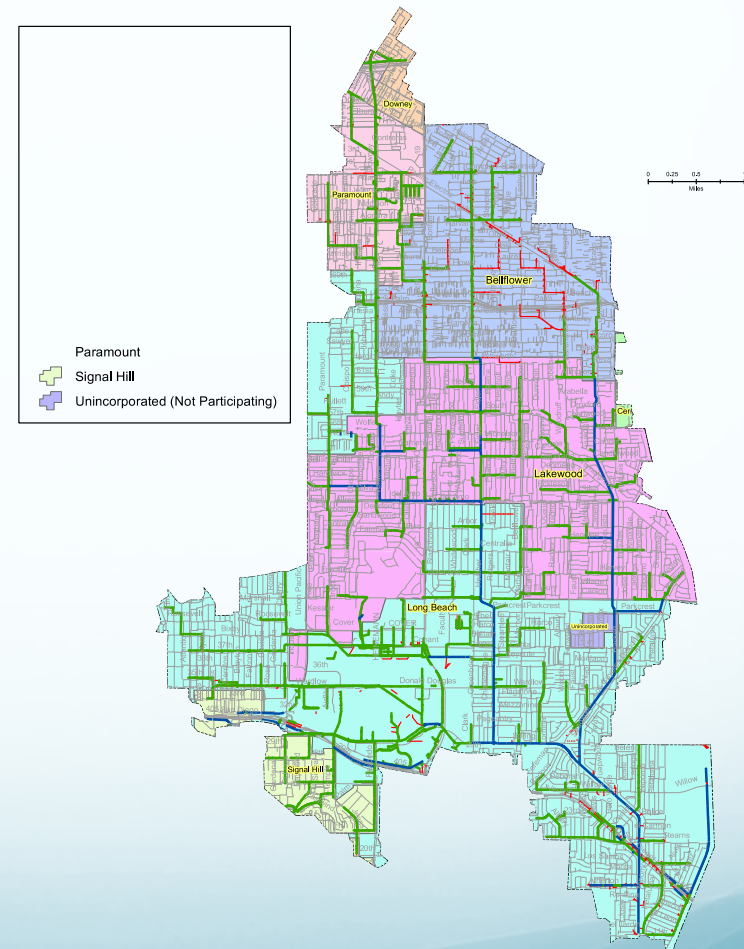
LCC Cities: Bellflower, Cerritos, Downey, Lakewood, Long Beach, Paramount, Signal Hill



History of Los Cerritos Channel Watershed Group



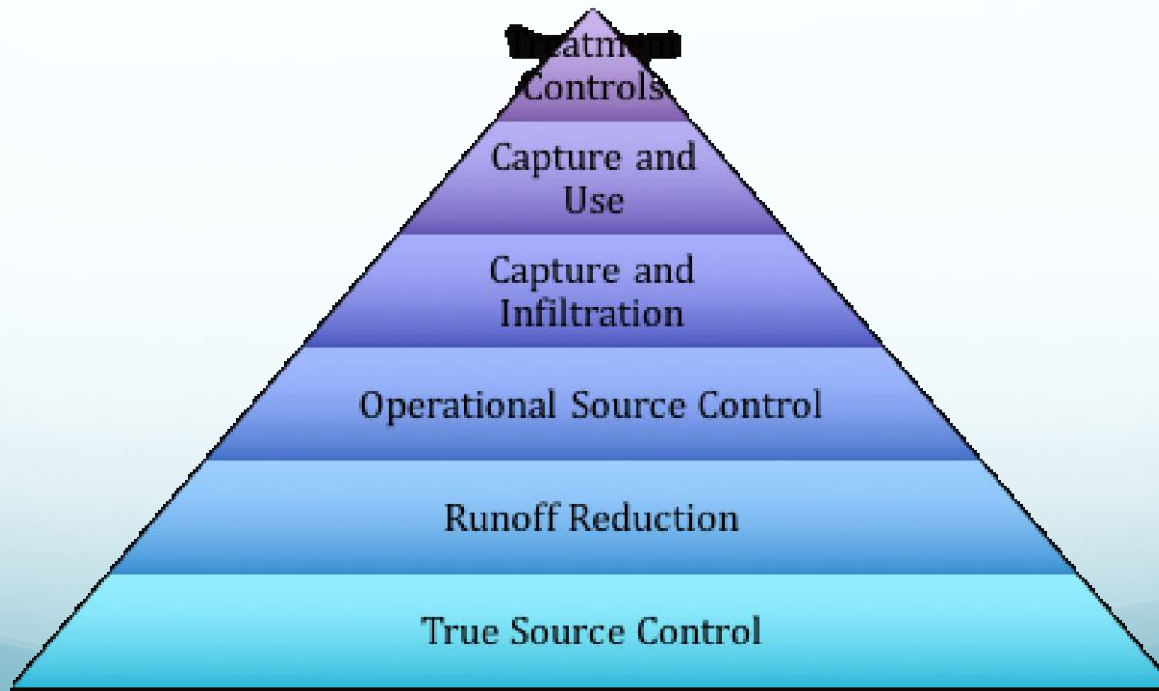
- Seven cities formed an informal Technical Committee in late 2008
- Negotiated three metals TMDLs with USEPA
- EPA established TMDLs on 17 March 2010
- Entered into MOA with GWMA in 2010
- Participated in workshops and hearings on 2012 MS4 Permit
- Entered into revised MOAs in 2012
- Separate Long Beach Permit adopted in 2014



Watershed Management Program Strategy



- Multipronged strategy
- Source control strategy
- Runoff Reduction Strategy
- Total Suspended Solids (TSS) Strategy
- Runoff Capture and Infiltrate or Use Strategy
- Financial Strategy
- Uncertainties





Watershed Management Program Commitments

- Comply with Implementation Schedules in WMP, including ongoing measures with interim milestones
- Initiate adaptive management process and submit adaptive management reports every two years
- Submit ROWD 180 days before Permit expiration date



Implementation Schedule Components

- On-going measures include minimum control measures, true source control, TSS reduction, runoff reduction and stormwater capture, trash reduction and control, and storm water financing
- Measures with interim milestones include TSS reduction, runoff reduction and stormwater capture, trash reduction and control and treatment control
- Initial 26-year (2015-2040) schedule structured into eight three-year phases and a two-year phase
- Each phase addresses priority sub-basin targets

Watershed Process Accomplishments Since Permit Became Effective



- LID Ordinances and Green Street policies developed and put in place by municipalities
- WMP developed and approved
- RAA developed and approved
- CIMP developed and approved
- First adaptive management report developed and approved
- ROWD developed and submitted
- Annual reports developed and submitted

Watershed Project Accomplishments Since WMP Approval



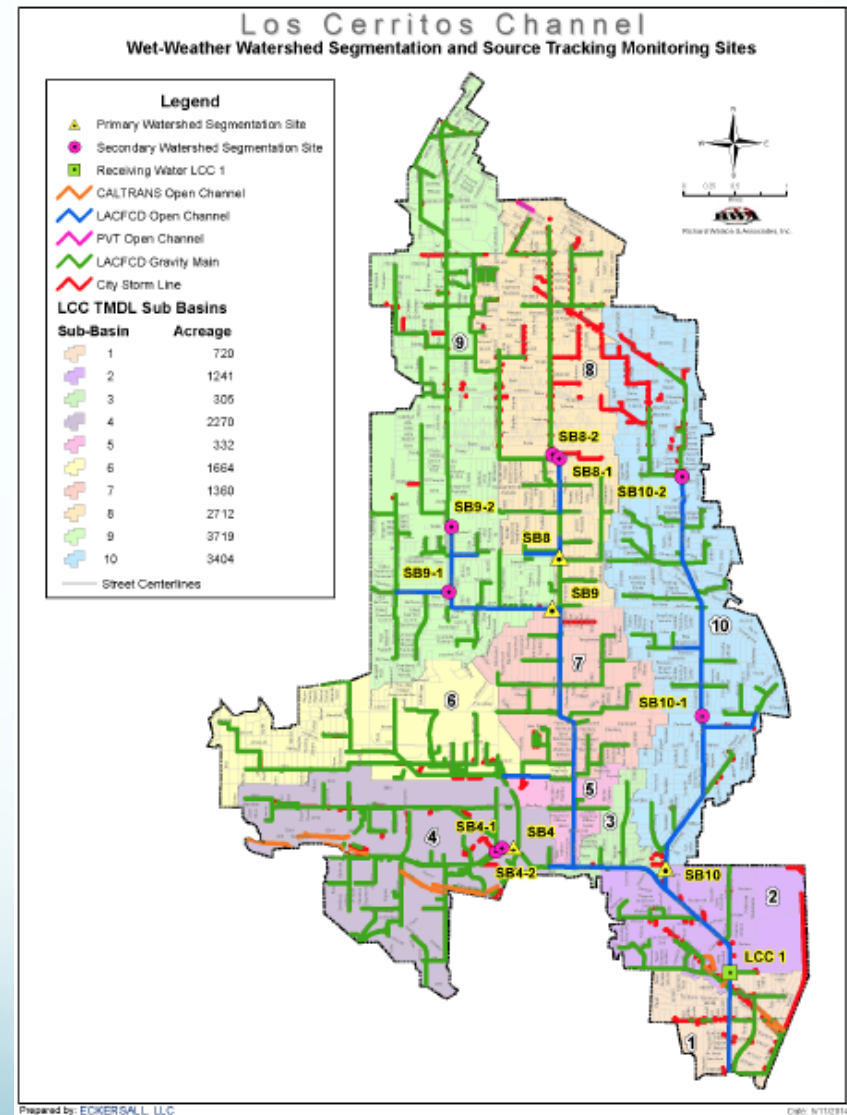
- Funding for four water capture projects
- Funding for Green Street project in Lakewood
- Construction of Bolivar Park and Long Beach Airport Water Capture Projects
- Award of construction contract for Mayfair Park Water Capture Project
- Award of procurement contract for Caruthers Park Water Capture Project components
- Adoption of Signal Hill Vacant Parcel Ordinance



Watershed Monitoring Accomplishments Since CIMP Approval



- Completion of a dry-weather flow and metals assessment Prop 84 project in 2014
- Construction of four First Order Watershed Segmentation Monitoring Sites in 2016 and 2017
- Initiation of Second Order Watershed Segmentation Monitoring Sites (forensic monitoring) in 2018
- Initial assessment of pollutant distribution within Watershed

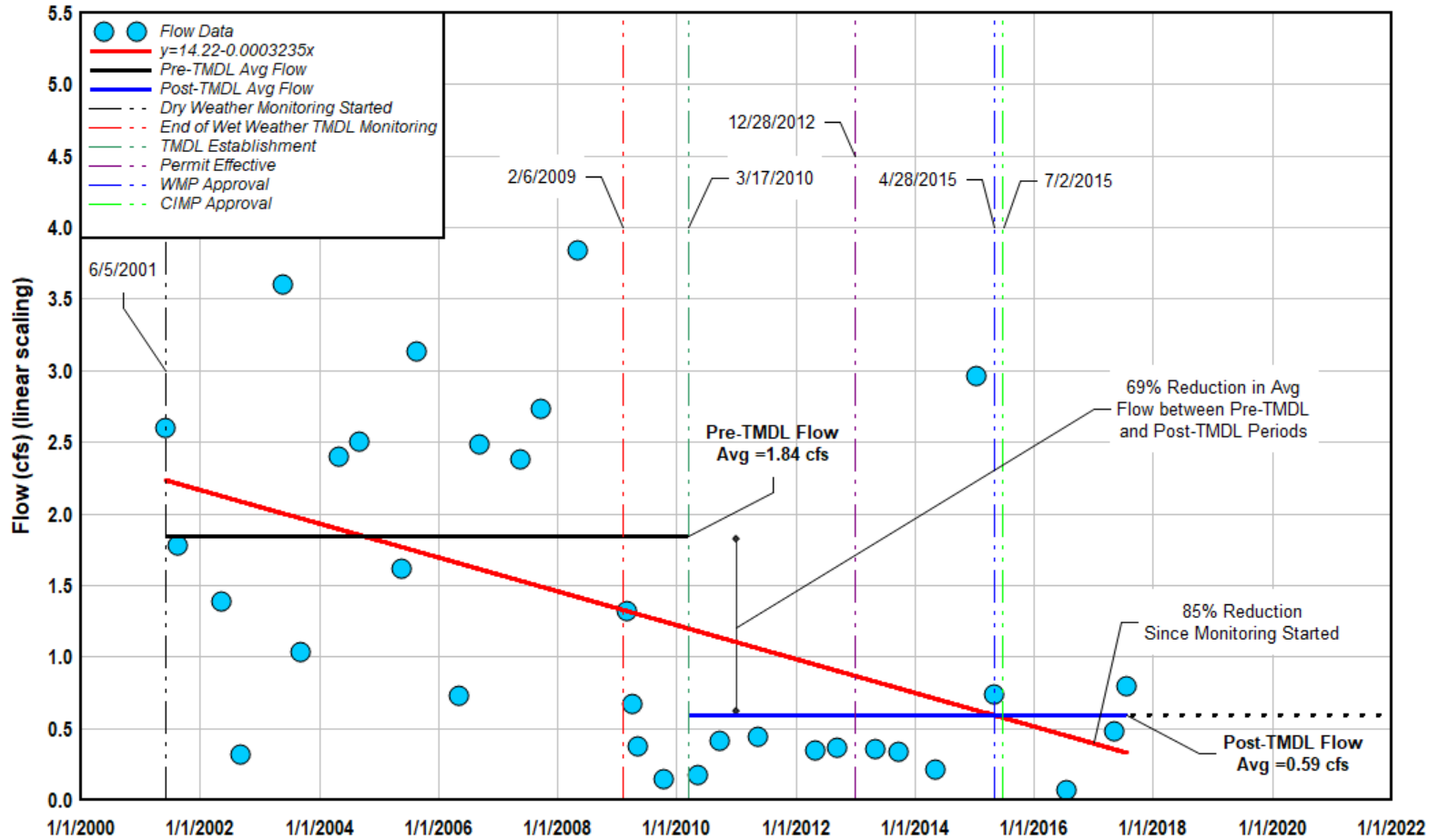


Evaluation of Monitoring Data

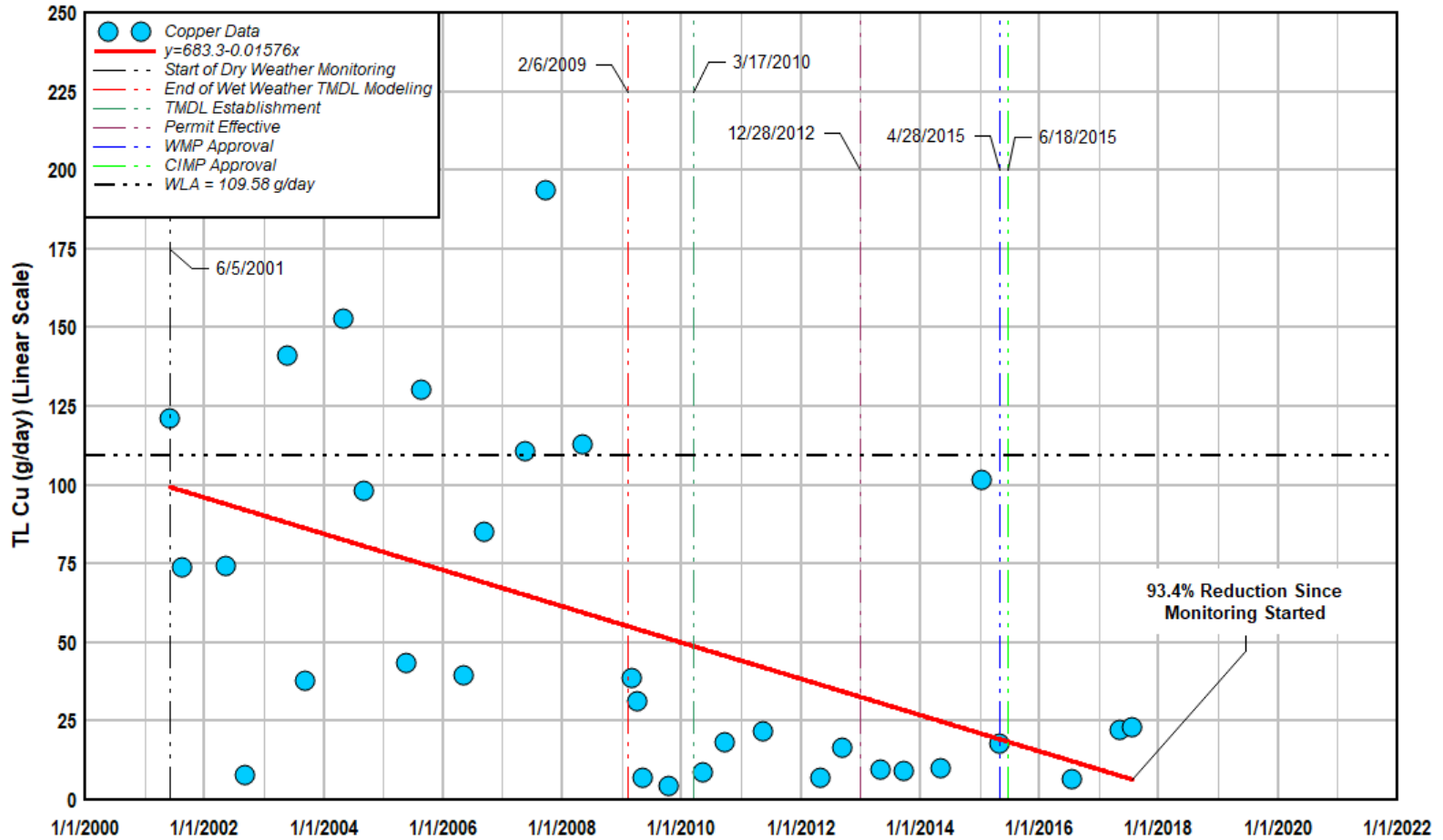


- Data from mouth of watershed from 2001 through January, 2018
- Data from watershed segmentation sites from 1-2+ years (not enough for meaningful evaluation)
- Data from dry-weather special study in 2014
- Primary emphasis on flows, TSS, and metals
- Secondary emphasis on indicator bacteria
- Tertiary emphasis on conventionals, pesticides, PCBs, PAHs, and legacy pollutants

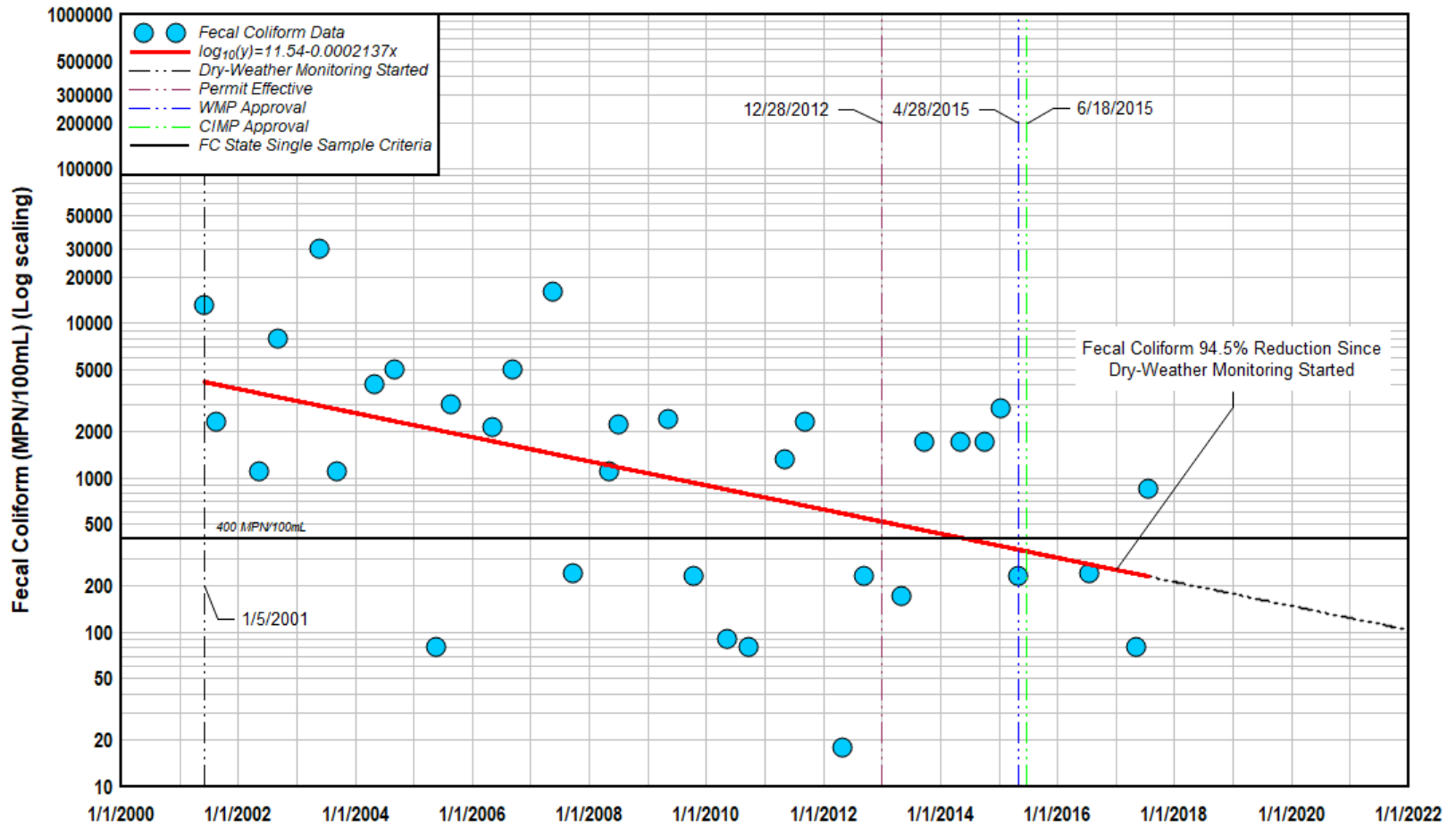
LCC1 Dry Weather Flow from 2001 through 2017



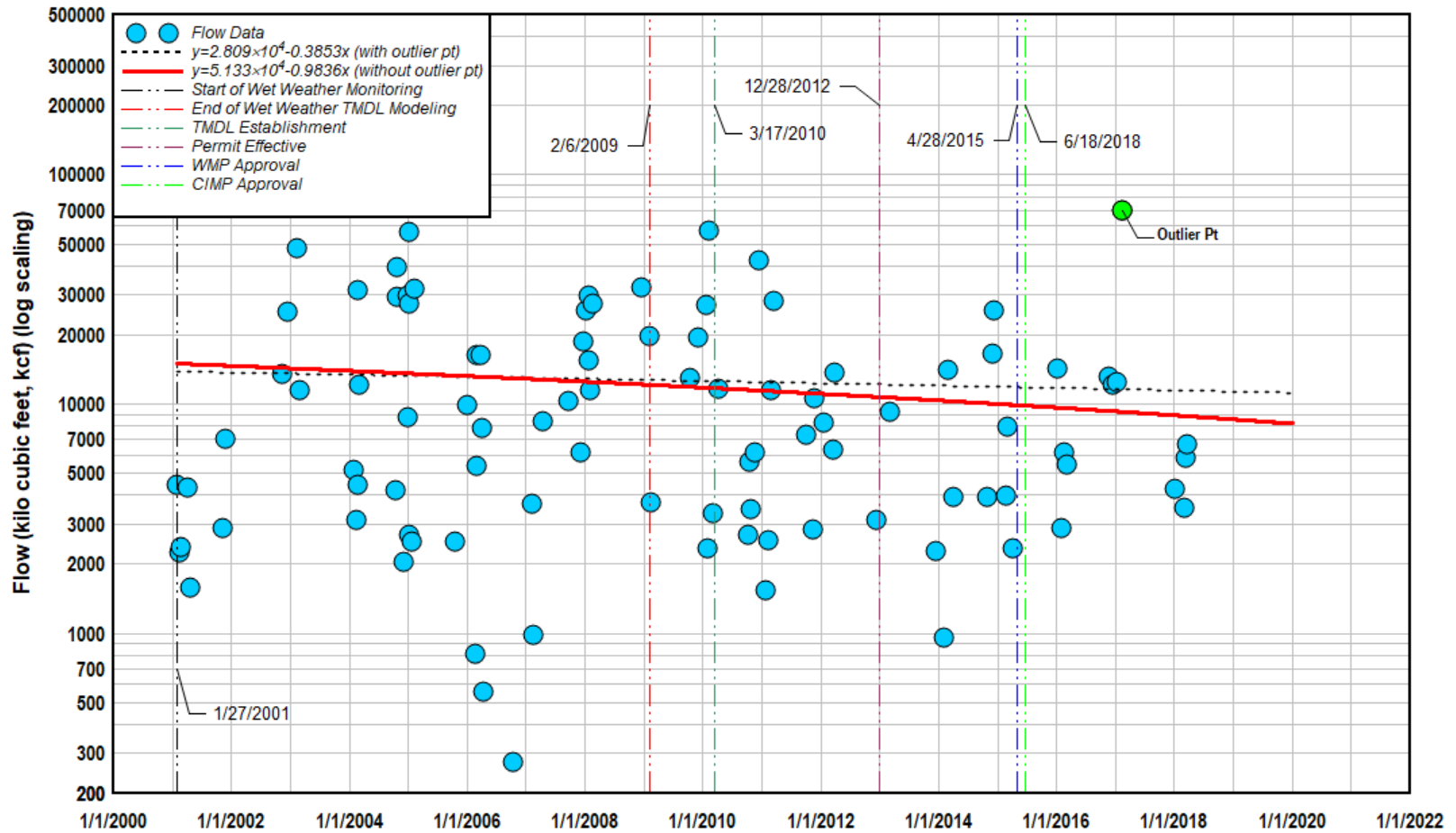
LCC1 Dry Weather Copper Loading from 2001 through 2017



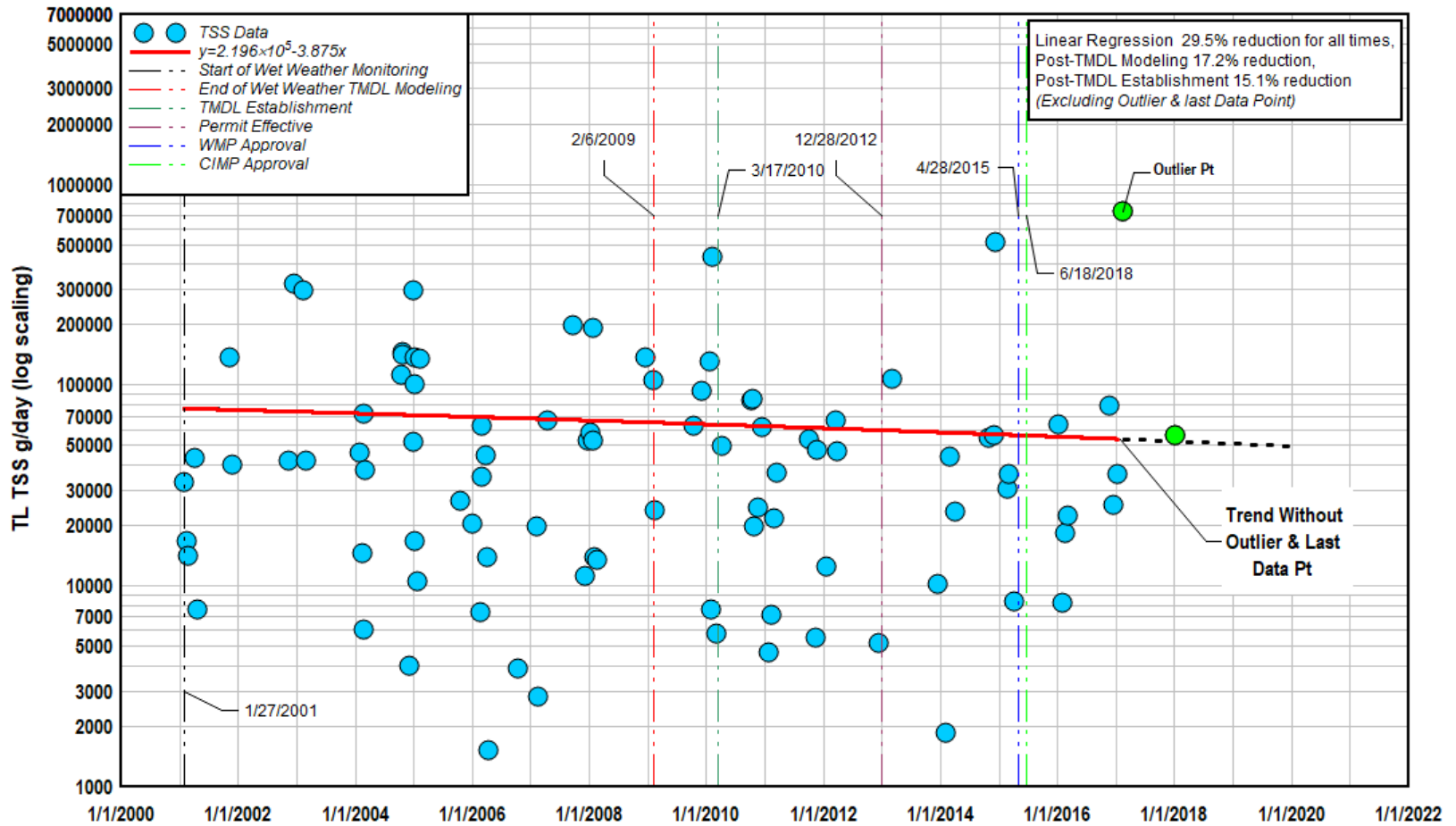
LCC1 Dry Weather Fecal Coliform Indicator Bacteria from 2001 through 2017



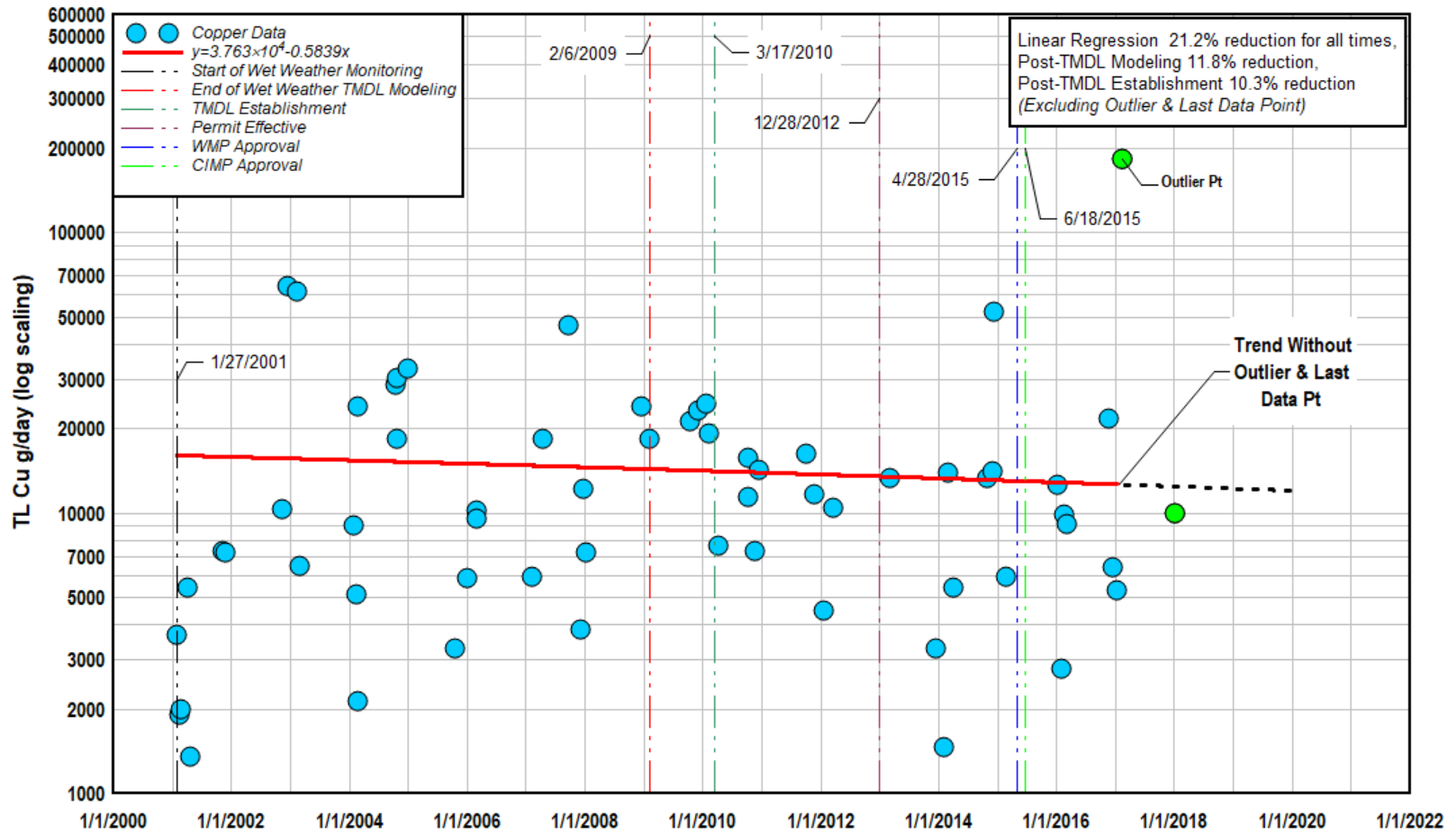
LCC1 Wet Weather Flow from 2001 through 2018



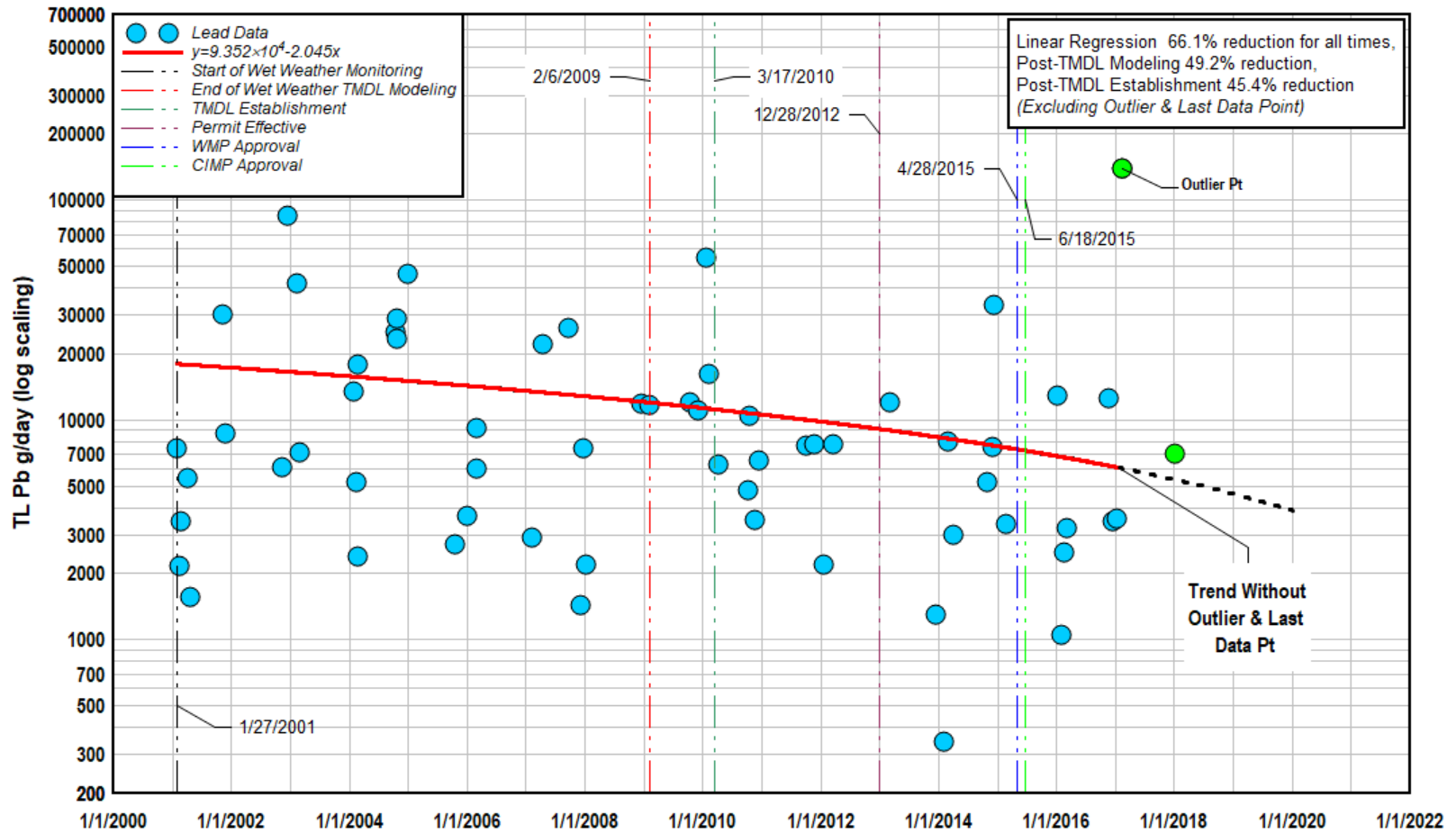
LCC1 Wet Weather TSS Total Loading from 2001 through 2018



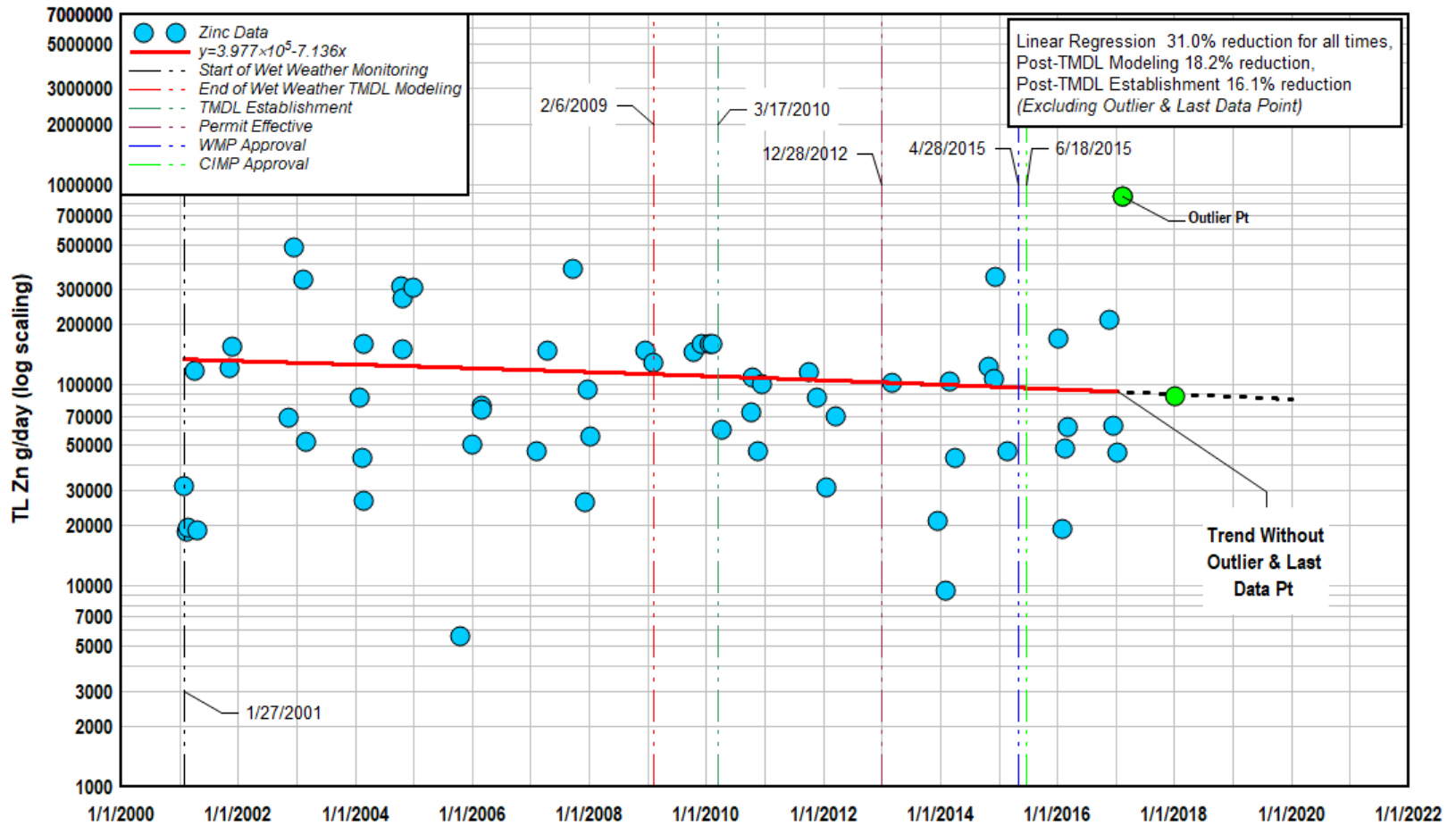
LCC1 Wet Weather Copper Total Loading from 2001 through 2018



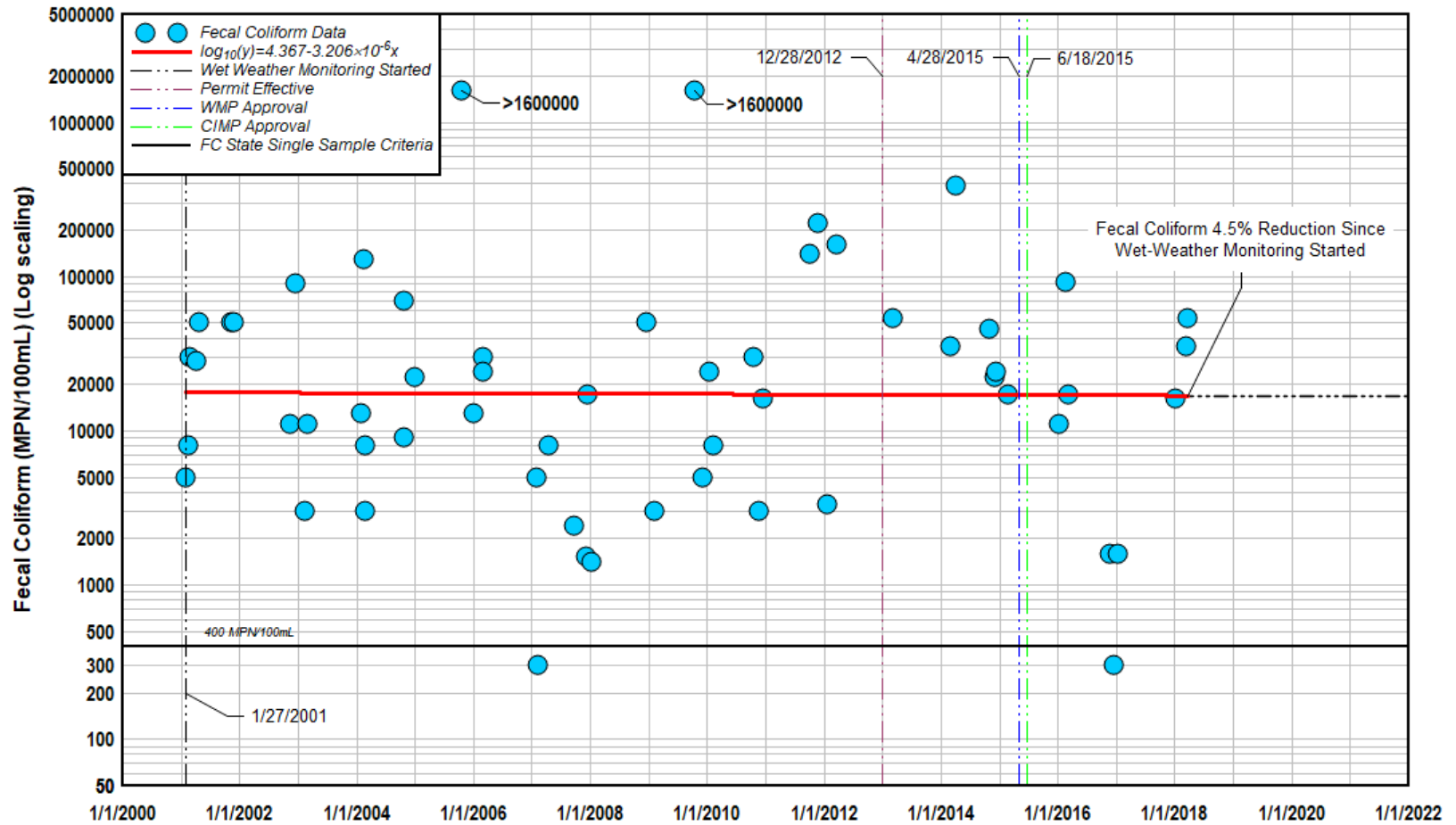
LCC1 Wet Weather Lead Total Loading from 2001 through 2018



LCC1 Wet Weather Zinc Total Loading from 2001 through 2017



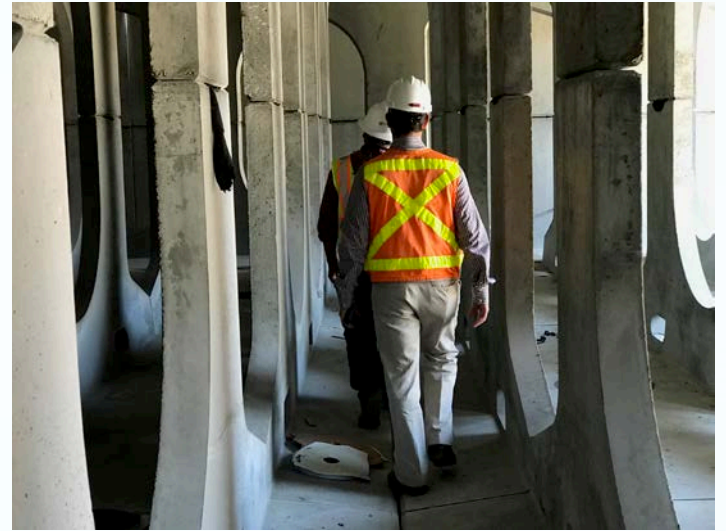
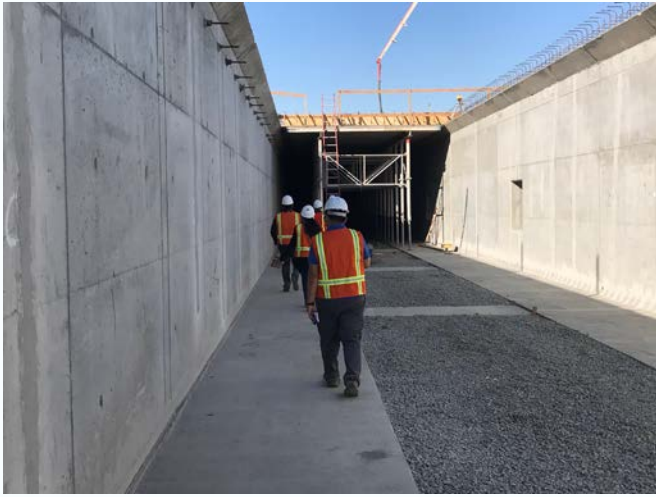
LCC1 Wet Weather Fecal Coliform Indicator Bacteria from 2001 through 2018



Conclusions



- Member agencies have been working well, with an emphasis on watershed projects.
- Being a small, self-contained watershed helps.
- Caltrans participation since 2008 has helped.
- Fortunate to get funding for water capture projects.
- Water conservation and water capture projects helping to reduce dry-weather flows and loads of potential pollutants.
- Multi-pronged strategy, emphasizing source control, runoff reduction, and TSS reduction is working.
- Fortunate to have 17 years of water quality data
- Making significant progress in improving water quality



Q&A

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