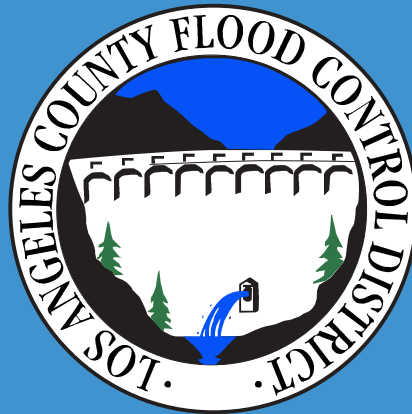


Enhanced Watershed Management Programs

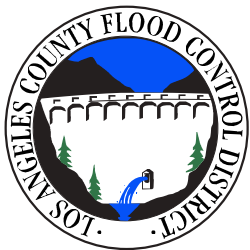
Program Environmental Impact Report Scoping Meeting

Los Angeles County Flood Control District



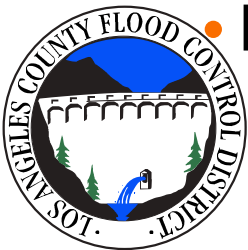
Welcome and Introductions

- Los Angeles County Flood Control District (LACFCD)
 - Gregg BeGell, P.E., Project Manager
 - TJ Moon
- Weston Solutions, Inc.
 - Andrea Crumpacker
- Environmental Science Associates
 - Environmental Consultant: ESA
 - Tom Barnes, Project Director
 - David Pohl, Project Manager



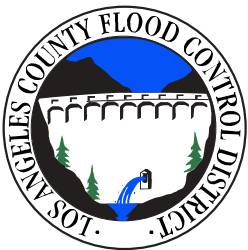
Scoping Meeting Agenda

- Municipal Separate Storm Sewer System (MS4) Discharge Permit
 - Enhanced Watershed Management Program (EWMP)
 - LACFCD Role
- California Environmental Quality Act (CEQA) Overview and Process
- Issues to be analyzed in the Program Environmental Impact Report (PEIR)
- CEQA Schedule
- Receive Public Comments



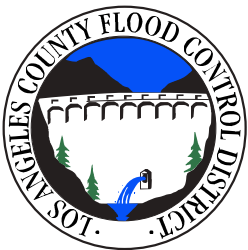
MS4 Permit Compliance

- **Project Purpose:** MS4 Permit Compliance (R4-2012-0175)
 - Each Permittee is responsible for its local MS4 compliance
 - Permit compliance through EWMPs
 - 12 NOIs submitted to LARWQCB
 - Collectively prepared by participating Permittees
 - Los Angeles Regional Water Quality Control Board (LARWQCB) approves EWMPs

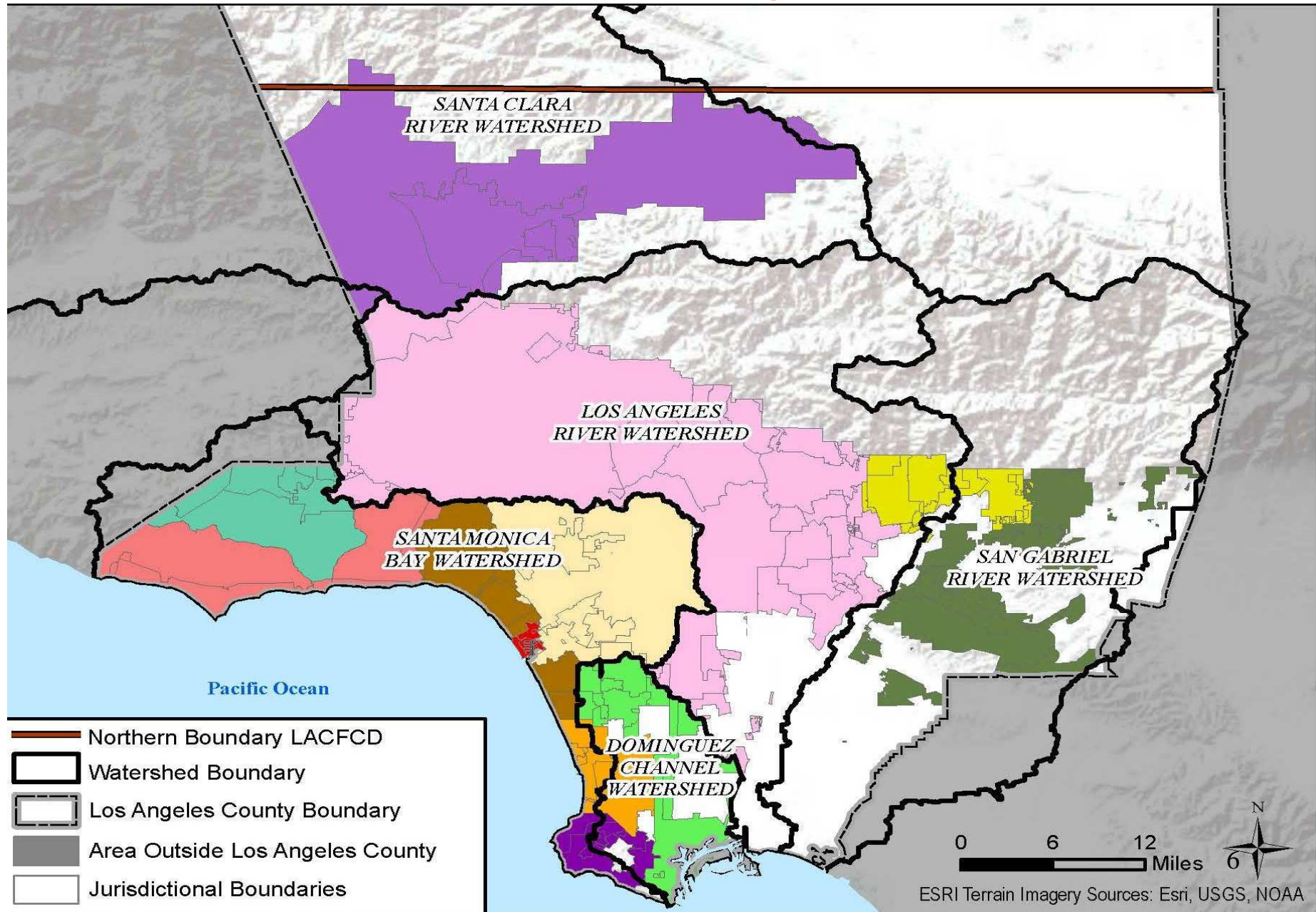


Enhanced Watershed Management Program (EWMP)

- Identify Watershed Control Measures
 - Structural Best Management Practices (BMPs)
 - Non-Structural BMPs
- Reasonable Assurance Analysis
- Priority Ranking
- Implementation by each participating Permittee

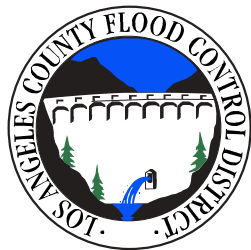


MS4 EWMP Participating Permittees



MS4 EWMP Participating Permittees

Group Name	Permittees Involved
Ballona Creek	Beverly Hills, Culver City, Inglewood, Los Angeles, Santa Monica, West Hollywood, LA County, LACFCD
Beach Cities Watershed Management Group	Hermosa Beach, Manhattan Beach, Redondo Beach, Torrance, LACFCD
Dominguez Channel Watershed Management Group	El Segundo, Hawthorne, Inglewood, Los Angeles, Lomita, LA County, LACFCD
Malibu Creek Watershed	Agoura Hills, Calabasas, Hidden Hills, Westlake Village, LA County, LACFCD
Marina Del Rey	Culver City, Los Angeles, LA County, LACFCD
North Santa Monica Bay Coastal Watersheds	LA County, Malibu, LACFCD
Palos Verdes Peninsula EWMP Agencies	Palos Verdes Estates, Rancho Palos Verdes, Rolling Hills Estates, LA County, LACFCD
Rio Hondo/San Gabriel River Water Quality Group	Arcadia, Azusa, Bradbury, Duarte, Monrovia, LA County, Sierra Madre, LACFCD
Santa Monica Bay Watershed Jurisdictions 2 & 3	Los Angeles, El Segundo, Santa Monica, LA County, LACFCD
Upper Los Angeles River Watershed	Alhambra, Burbank, Calabasas, Glendale, Hidden Hills, La Canada Flintridge, Los Angeles, Montebello, Monterey Park, Pasadena, Rosemead, San Gabriel, San Marino, South Pasadena, Temple City, LA County, LACFCD
Upper San Gabriel River	Baldwin Park, Covina, Glendora, Industry, La Puente, LA County, LACFCD
Upper Santa Clara River Watershed	LA County, Santa Clarita, LACFCD



California Environmental Quality Act (CEQA)



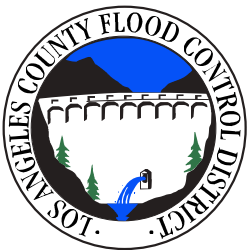
Identifies potential impacts to the environment



Informs the public and decision makers about potential environmental impacts

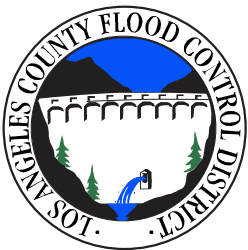


Identifies ways to avoid or reduce potential impacts



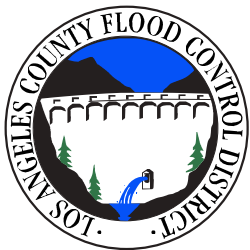
Overview – Why is LACFCD leading this PEIR?

- LACFCD operates and maintains flood control facilities in all 12 EWMP Groups
- LACFCD has vested interest in increasing opportunities for stormwater capture and groundwater recharge
- LACFCD will be working with Permittees and other stakeholders in all 12 EWMP watersheds to identify potential projects
- The proposed projects may have an environmental impact



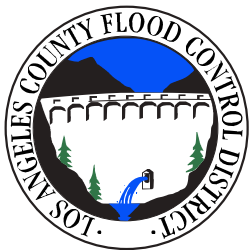
Overview - Role of Permittees

- EWMPs will be implemented by the Permittees with jurisdiction in EWMP area
- The Permittees implementing the proposed projects, or “Implementing Agencies,” will vary between EWMPs and individual projects



Proposed Project Objectives

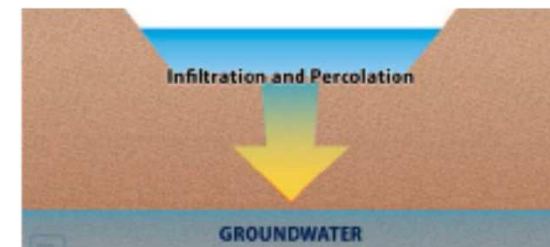
- Achieve Water Quality Performance goals through EWMP implementation
- Regional Compliance with the MS4 Permit
 - Coordinated implementation of compliance strategies
 - Watershed-specific compliance strategies
- Environmentally Responsible Opportunities
 - Beneficial flood control, water supply, and habitat



Watershed Control Measures

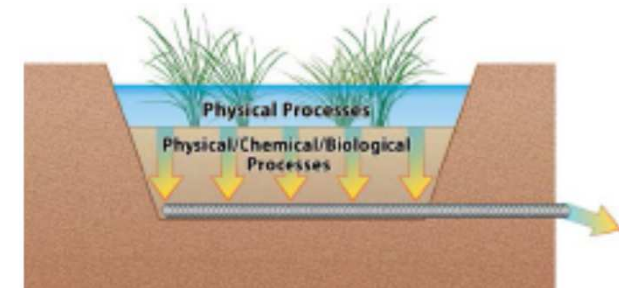
- Structural BMPs or Physical Control Measures

- Infiltration
- Water quality treatment
- Storage

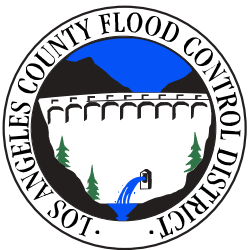
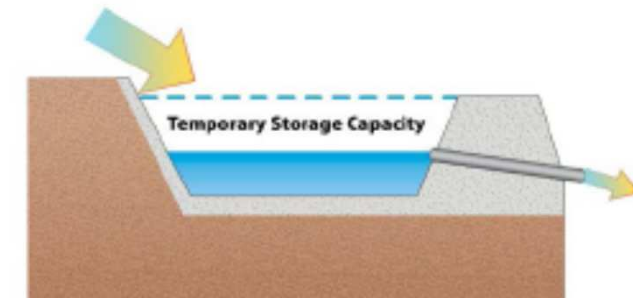


- Categories of Structural BMPs

- Regional
- Centralized
- Distributed

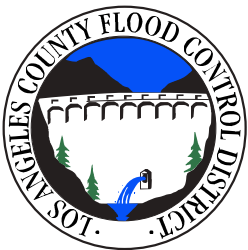


- Non-Structural BMPs

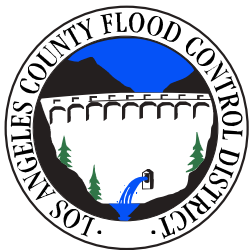
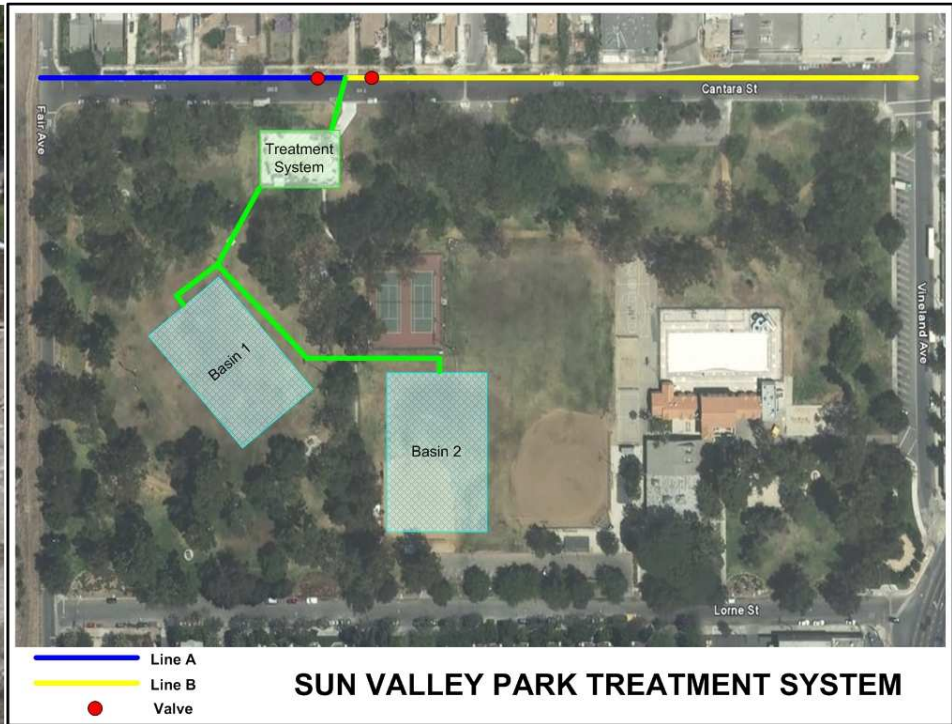


Regional EWMP Projects

- Retain all runoff from the 85th percentile, 24-hour storm event for tributary drainage area
 - Infiltration BMPs
 - Retention basins
 - Capture and Use BMPs
- May include use of public lands with open space areas, e.g., parks, large parking lots, or vacant space



Example Regional EWMP Project – Retention and Infiltration Basin





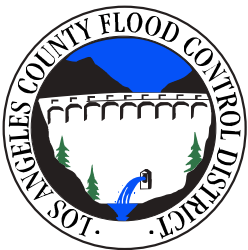
Sun Valley Park Drain and Infiltration System





Centralized Structural BMPs

- Constructed structural practices intended to treat runoff from a contributing area of multiple parcels
- Generally installed on large public parcels or adjacent to storm drain outfalls and receiving waters
- Examples:
 - Bio-filtration BMPs
 - Constructed wetlands
 - Treatment BMPs low-flow diversion
 - Creek/River restoration



Tujunga Wash - Before



Tujunga Wash - After



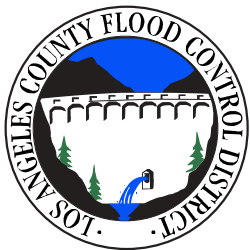
Example Centralized Structural BMP – Dominguez Gap Wetlands Project



Before

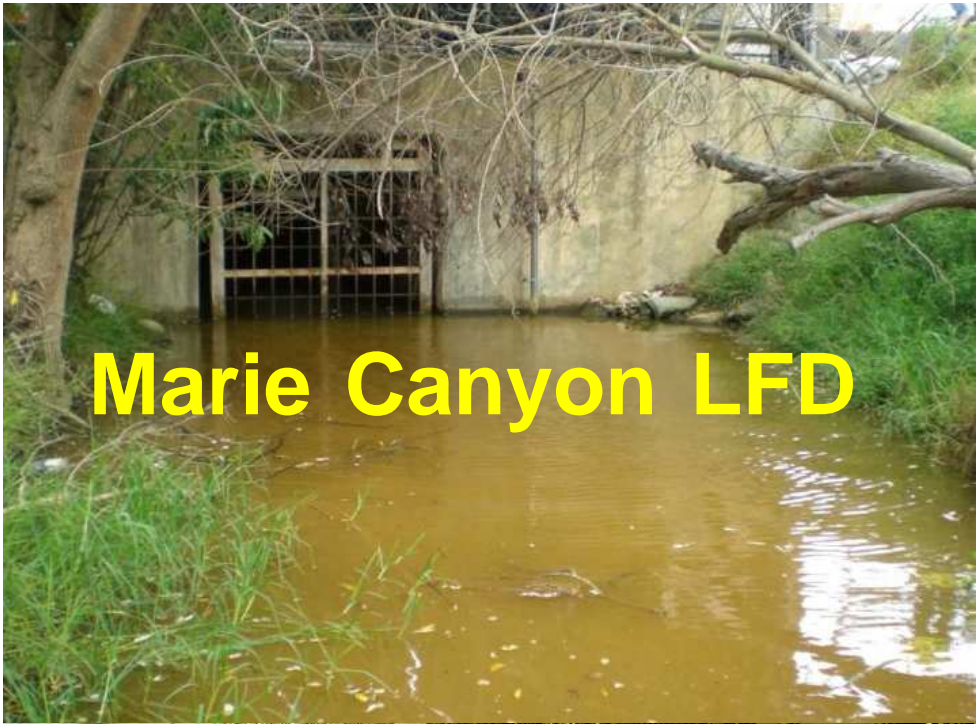


After



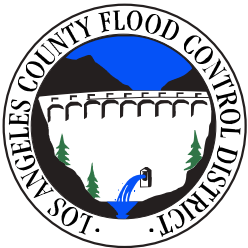
Example Centralized Structural BMP – Marie Canyon Low Flow Diversion (LFD)



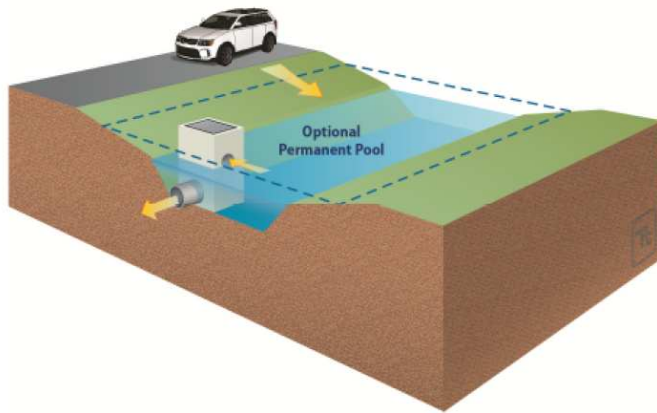


Distributed Structural BMPs

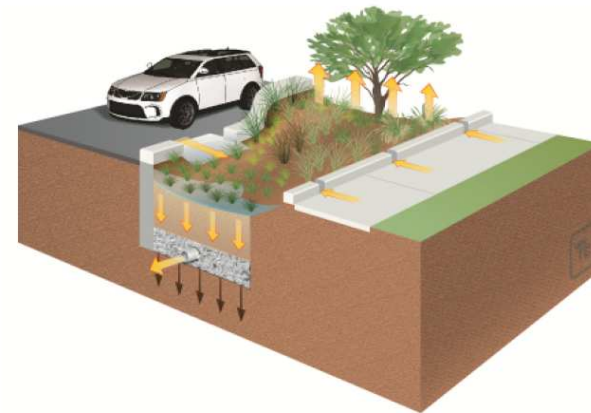
- Constructed BMPs that treat runoff close to the source and typically implemented at a single- or few-parcel level
- Green Infrastructure / Low Impact Development
 - Biofiltration
 - Bioretention
 - Bioswales / buffer strips
 - Green streets
 - Infiltration BMPs
 - Rainfall harvesting
 - Porous / permeable pavers
 - Planter boxes
- Flow-Through Treatment BMPs
 - Media / Cartridge filters
 - High-flow biotreatment
- Source Control Treatment BMPs
 - Catch basin inserts / screens
 - Gross solids removal devices
 - Hydrodynamic separators



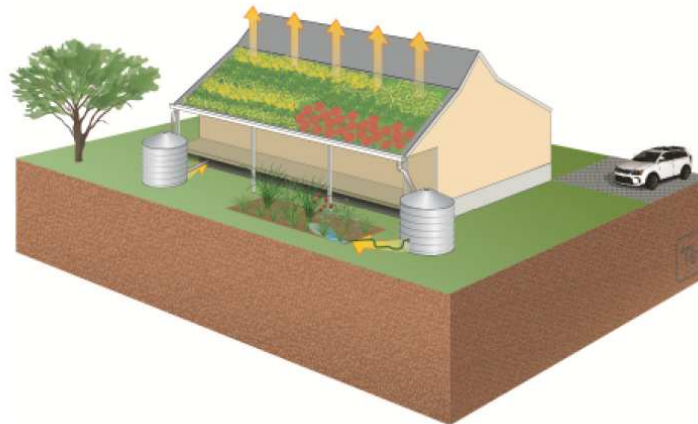
Distributed Structural BMP Proposed Projects



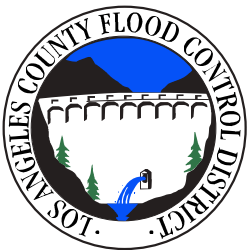
Typical distributed site-scale detention schematic (arrows indicate water pathways).



Typical distributed bioretention and biofiltration schematic showing underdrain option (arrows indicate water pathways).



Typical distributed rainfall harvest schematic (arrows indicate water pathways).



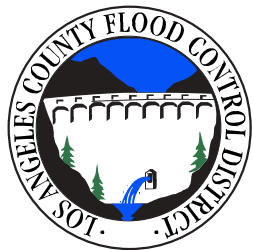
Valinda Greenway Project (2009)



Non-Structural BMPs

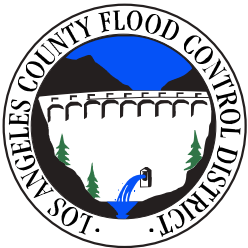


- Prevent and/or reduce runoff and/or pollution close to the source
- Nonstructural BMPs part of overall EWMP implementation program – Examples:
 - Irrigation control
 - Covered trash receptacles
 - Replacement of brake pads & lead in wheel weights
 - Pet waste cleanup stations
 - Street sweeping
 - Catch basin cleaning
 - Downspout disconnect program

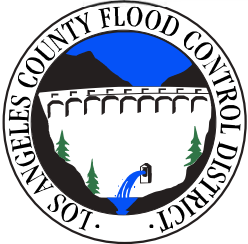
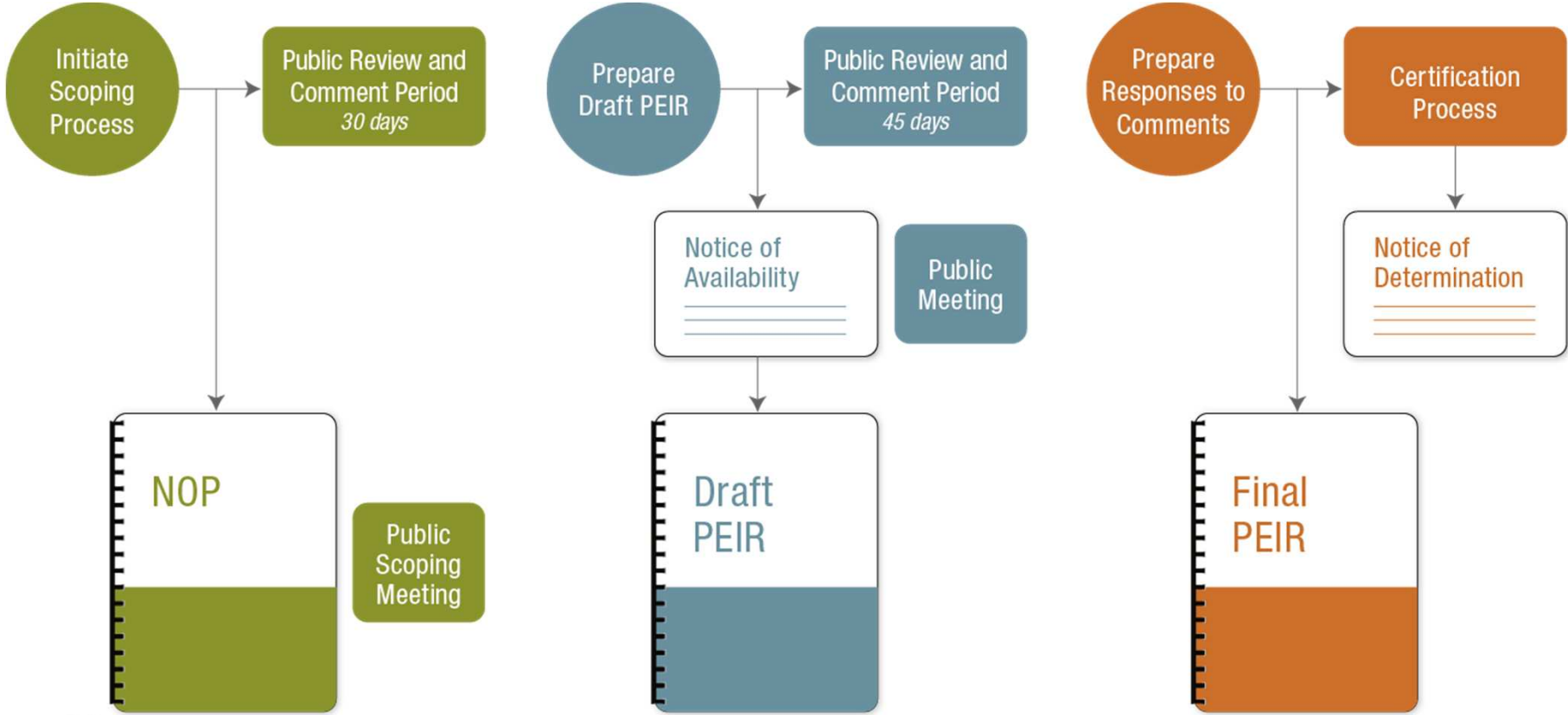


Program-Level Assessment

- Program assessment for LACFCD to submit EWMPs to LARWQCB
 - LARWQCB Responsible Agency for Approving EWMPs
- Used to evaluate a plan or program that has multiple components or actions
 - Focuses on the Effects of Implementing EWMPs
- Individual projects will be reviewed as they are further developed to determine what if any further review under CEQA is necessary

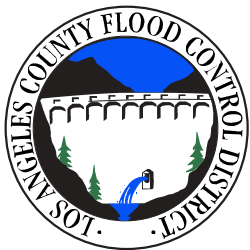


CEQA Process for an EIR



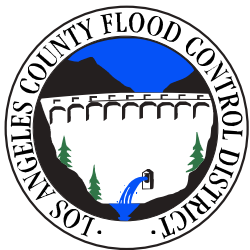
Issues to be Analyzed in the PEIR

- Aesthetics
- Air Quality
- Agriculture and Forestry
- Biological Resources
- Cultural Resources
- Geology, Soils & Seismicity
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Mandatory Findings of Significance
- Hydrology & Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population & Housing
- Public Services
- Recreation
- Traffic & Transportation
- Utilities & Energy
- Alternatives
- Cumulative Projects



PEIR Schedule Estimate

2014 - 2015	Deliverable/Milestone
August - September	<ul style="list-style-type: none"> • 30-Day public review of Notice of Preparation • Three scoping meetings
October - December	<ul style="list-style-type: none"> • Draft PEIR preparation
January - March	<ul style="list-style-type: none"> • 45-Day public review period for PEIR • Public review meetings
March	<ul style="list-style-type: none"> • Response to Comments • Final PEIR preparation
April	<ul style="list-style-type: none"> • Submission to Board of Supervisors for consideration of project approval and certification of PEIR



NOP Comments

- Comment period closes **September 29, 2014** by 5:00 PM
- NOP and other project information can be downloaded from www.LACoH2Osheds.com
- Submit Comments
 - At scoping meeting: verbal or written comments
 - Or mail or email comments **no later than September 29th** to:

Gregg BeGell, P.E.
County of Los Angeles Department of Public Works
900 South Fremont Avenue, 5th Floor
Alhambra, CA 91803

gbezell@dpw.lacounty.gov

