



Construction Dewatering

Strategies to recapture & recycle groundwater dewatering from construction & development

Water Cabinet
October 31, 2018



Presentation Overview

- City of Los Angeles'
 One Water LA 2040 Plan
- Background of Construction Dewatering
- 3. 8 Ways to Reuse Groundwater from Construction Dewatering



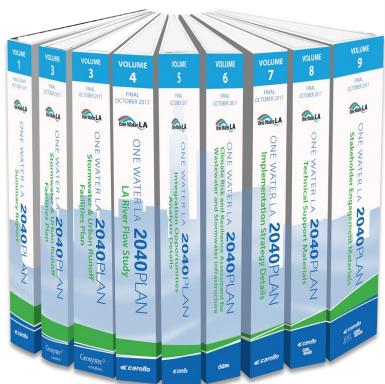


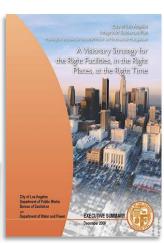


City of Los Angeles is Committed to a Collaborative Approach to Integrated Water Management

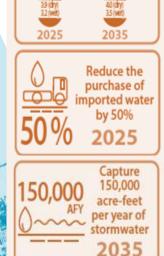
One Water LA 2040 Plan

Planning Horizon: 2040





Updates the 2006 Water Integrated Resources Plan Planning Horizon: 2020



Stormwater Quality:

Improve beach water quality

grade-point average (GPA) to:

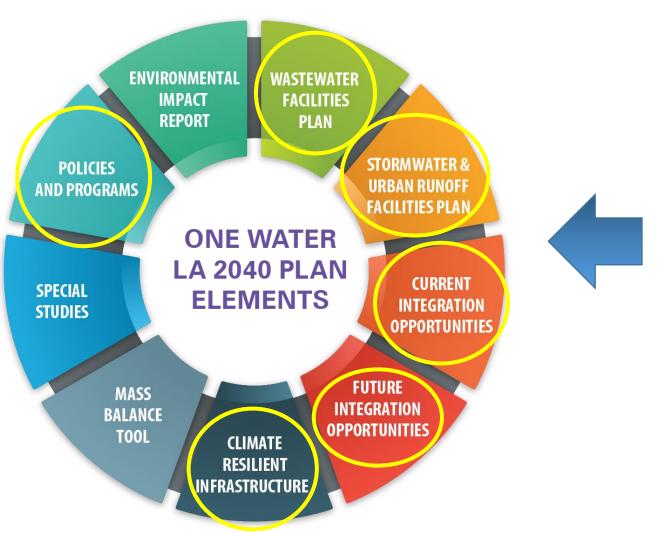
Supports LA's 2015
Sustainable City pLAn Goals







ONE WATER LA 2040 PLAN: Many Elements & Recommendations



500+

STAKEHOLDERS

30

MEMBER STEERING COMMITTEE

300+

ORGANIZATIONS REPRESENTED

10

STAKEHOLDER ADVISORY GROUP MEMBERS

30+

STAKEHOLDER AND ADVISORY GROUP MEETINGS

5

SPECIAL TOPIC GROUPS:

Decentralized Treatment/Reuse Stormwater & Runoff Management Partnerships, Collaboration & Innovation

Funding & Cost-Benefit Analysis Outreach & Communication

65+

PRESENTATIONS AND DISCUSSIONS AT NEIGHBORHOOD COUNCILS, CONFERENCES/EVENTS AND WITH EDUCATION PARTNERS



A Steering Committee Fostered Integration

Stakeholder Advisory Group

Developed Vision, Objectives,
 & Guiding Principles

Steering Committee Members

- 14 City Departments
- 6 Regional Agencies

Key Accomplishments

- Identified 44 water-related existing integration opportunities
- Identified policies to streamline integration between departments & agencies
- Created awareness to integrate water elements in projects & programs







Construction Dewatering History

Koretz – Huizar Dewatering Motion (Apr. 2015)

 explore incentivizing dewatering to onsite reuse or sewer system instead of stormdrain

Bonin – Koretz Dewatering Motion (Jan. 2018)

- Strategies to recapture and recycle groundwater from dewatering
- Study other jurisdictions costs and benefits
- Evaluate negative impacts of dewatering on stormwater
- Analyze limiting time or add dewatering fees to disincentivize





Currently

(2) Discharge Options for Developers for Discharging Groundwater from Construction Dewatering Activities

(1)	Discharge to Sewer	Based on sewer availability Fee-based permit issued to discharger by LASAN: SSC – Sewer Service Charge SFC – Sewer Facility Charge TUF – Temporary Usage Facility
(2)	Discharge to Stormdrain	No Sewer Availability, Permitted by RWQCB: The City has no fee-based permit associated with discharge

Disadvantages of Discharging to Stormdrain

- Potential increase risk of water quality violations
- Develop more BMPs
- Construct additional low flow diversions (LFDs), etc.





Background and Concerns

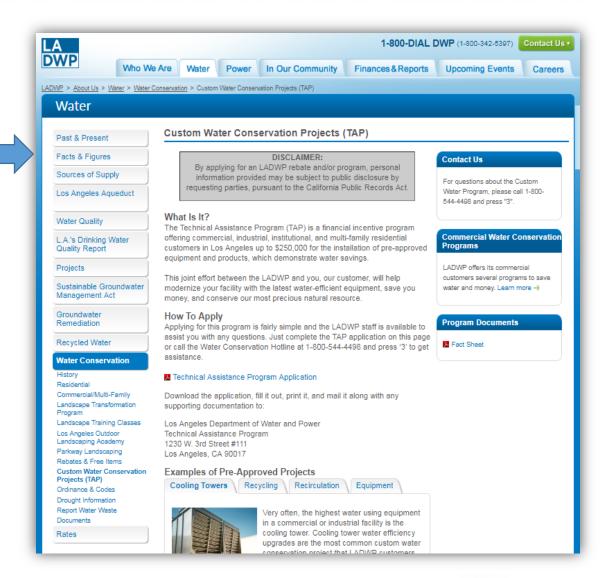
- Average No. of Permits 80
- Average Discharge Volume per RWQCB 185,000 gallons per day
- Discharged into ocean and unavailable for reuse
- Various City programs encourage infiltrate urban runoff and reusing water
- These require money, resources, and time to implement and maintain





Priority of Dewatering

- Create onsite reuse project
- Discharge into Sewer
- 3. Discharge into Stormdrain







8 Ways to Reuse Groundwater

- 1. On-site Construction Operations
- 2. Groundwater Recharge
- 3. Landscape Irrigation
- 4. Commercial Industrial Processes
- 5. Restroom Plumbing
- 6. Emergency Reserve Tanks
- 7. Discharge to the Sanitary Sewer
- 8. Treatment Wetlands





On-site Construction Operations



Dust control

- Concrete mixing
- Soil compaction





Emergency Reserve Tanks

 Fire protection water storage tanks









Discharge to Sanitary Sewer



- Recycled Water Supply
- Offset Potable Demand
- Irrigate Parks and Provide Green Spaces







Treatment Wetland













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