One Water LA 2040 Plan

Integrating Major Stormwater Efforts Creates Opportunities

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Presentation Overview

- About the One Water LA 2040 Plan
- Stormwater & Urban Runoff Facilities Plan
- Overall Fiscal Impacts of One Water LA
Acknowledgements

Los Angeles Department of Sanitation
• Ali Poosti, P.E. - Wastewater Engineering Services Division Manager
• Lenise Marrero, P.E. – Asst. Division Manager, One Water LA Project Manager
• Azya Jackson, P.E. – One Water LA Asst. Project Manager, Stormwater & Urban Runoff Facilities Plan Lead, LA River Flow Study Lead

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• Evelyn Cortez-Davis, P.E. – Assistant Director of Water Resources
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• Mark Hanna, P.E. – Stormwater & Urban Runoff Facilities Plan Lead
One Water LA 2040
Plan Overview
One Water Plan Overview: A Collaborative Approach To Integrated Water Management

One Water LA 2040 Plan
Planning Horizon: 2040

One Water LA 2040 Plan
Planning Horizon: 2040

Supports LA’s 2015 Sustainable City pLAn Goals

Updates the 2006 Water Integrated Resources Plan
Planning Horizon: 2020

- Stormwater Quality: Improve beach water quality grade-point average (GPA) to:
  - 2025: 2025
  - 2035: 2035
- Reduce the purchase of imported water by 50%: 50% 2025
- Capture 150,000 acre-feet per year of stormwater: 150,000 2035
- Source 50% of water locally: 50% 2035
Incorporating Changes In The Water Landscape

- New Plans & Goals
- Recurring Droughts
- Declining Wastewater & Reduced Recycled Water Availability
- Climate Change
- New Stormwater & Receiving Water Quality Regulations
The Plan Was Developed Through Extensive Collaboration From A Variety Of Groups

- Over 30 representatives from City departments & regional agencies
- Monthly meetings for input from Executive Management and Senior advisors
- More than 15 in-depth discussions around 5 special topics:
  - Partnerships & collaboration
  - Stormwater management
  - Communication & outreach
  - Decentralized/on-site treatment
  - Funding & cost-benefit
- Over 40 one-on-one meetings with departments & regulatory agencies
- 250+ stakeholders and 15 workshops held to date
- 10 stakeholders representing a diversity of groups & interests
PRIORITIZING STAKEHOLDER ENGAGEMENT & PUBLIC EDUCATION

TEAMWORK

The One Water LA team dedicates countless hours to public and community outreach and engagement activities, inviting input and raising awareness about the program’s purpose and needs.

Engagement and Education Goals

» Increase community involvement, awareness and advocacy for sustainable water
» Align expertise with subject matter discussions, maximizing stakeholder input
» Increase number and diversity of stakeholders
» Provide clear, consistent information to diverse communities
The ONE WATER LA 2040 PLAN CONSISTS OF Many Elements & Recommendations

- Environmental Impact Report
- Wastewater Facilities Plan
- Stormwater & Urban Runoff Facilities Plan
- Policies and Programs
- Current Integration Opportunities
- Future Integration Opportunities
- Special Studies
- Mass Balance Tool
- Climate Resilient Infrastructure

TECHNICAL SESSION
Stormwater & Urban Runoff Facilities Plan

Purpose
To address future system needs through 2040

Why are we doing it?
To develop a more coordinated and comprehensive approach
• Water quality
• Water supply
• Flood protection
• Sustainability
Leveraging Previous Stormwater Plans

5 Enhanced Watershed Management Plans

City of LA Stormwater and Green Infrastructure 5-year CIP

LA River Ecosystem Restoration Integrated Feasibility Report

Stormwater Capture Master Plan

LA Basin Stormwater Conservation Study

Additional information from City and regional agencies
Stormwater & Urban Runoff Facilities Plan

Planning Approach

- The **Three-legged Stool** approach integrates water quality, water supply and flood risk mitigation benefits.

- **Project Prioritization** is based on these 3 benefits & TMDL compliance deadlines.
TMDL ComplianceDeadlines By Watershed

<table>
<thead>
<tr>
<th>Watershed</th>
<th>2024</th>
<th>2028</th>
<th>2032</th>
<th>2037</th>
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<tbody>
<tr>
<td>Upper LA River Watershed</td>
<td>50% Metals TMDL</td>
<td>100% Metals TMDL</td>
<td>50% Bacteria TMDL</td>
<td>100% Bacteria TMDL</td>
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<tr>
<td>Ballona Creek Watershed</td>
<td>2021 Metals &amp; Bacteria TMDL</td>
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<tr>
<td>Dominguez Channel Watershed</td>
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<td>2026 50% Toxins TMDL</td>
<td>2032 100% Toxins TMDL</td>
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<tr>
<td>Santa Monica Bay &amp; Marina Del Rey Watershed</td>
<td>2021 Bacteria TMDL</td>
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</table>
Stormwater Improvement Program (SIP)

- Assign “Three-Legged Stool” selection criteria to each project
- Sort database based on selection methodology
- Update the Dynamic 5-year SIP phase
- Establish 10-year and 25-year SIP phases
- Compute annual SIP costs

LASAN 5-year CIP

EWMPs

SCMP

Other watershed planning efforts

OWLA – Climate Resiliency Projects and New LFDs

Green Streets Programs

Other watershed planning efforts

OWLA – Climate Resiliency Projects and New LFDs

Green Streets Programs

TECHNICAL SESSION
• **1,201** planned/potential projects identified (incl. Regional projects):
  • **308** projects meeting all criteria
  • **614** projects meeting two criteria
  • **279** projects meeting one criteria
Project Distribution By Ownership

- **City Ownership Projects**: Projects proposed by a City agency (LASAN, LABOE, LADWP, etc.)

- **Multi-Agency Ownership Projects**: Projects proposed by a non-City agency or entity (LACFCD, ACOE, NGOs, etc.) with City agency or funding

- **Non-City Ownership Projects**: Projects identified without current participation from any City agency

Only City-led and collaborative projects (1,142 out of the 1,201 projects) were included in the City’s Stormwater Improvement Program.
Stormwater Projects By Watershed & Type

- 1,142 Projects Total
- 71% Green Infrastructure Projects
- 155 miles of Green Streets

### Upper Los Angeles River Watershed
- 434 Distributed Green Infrastructure
- 93 Regional Green Infrastructure
- 301 Regional Grey Infrastructure
- 69.8 miles of Green Streets

### Ballona Creek Watershed
- 113 Distributed Green Infrastructure
- 83 Regional Green Infrastructure
- 5 Regional Grey Infrastructure
- 61.3 miles of Green Streets

### Santa Monica Bay & Marina Del Rey Watershed
- 41 Distributed Green Infrastructure
- 15 Regional Green Infrastructure
- 8 Regional Grey Infrastructure
- 14.4 miles of Green Streets

### Dominguez Channel and LA Harbor Watershed
- 31 Distributed Green Infrastructure
- 6 Regional Green Infrastructure
- 12 Regional Grey Infrastructure
- 8.9 miles of Green Streets

### Pie Chart
- 619 Regional Green Infrastructure Projects
- 326 Grey Infrastructure Projects
- 197 Distributed Green Infrastructure Projects
## Stormwater Improvement Program (SIP)

<table>
<thead>
<tr>
<th>SIP Phase</th>
<th>Implementation Period</th>
<th>Number of Projects</th>
<th>Estimated Capital Cost ($M)</th>
<th>Estimated O&amp;M Cost ($M/year)</th>
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<tr>
<td>5-year SIP phase</td>
<td>2017 - 2022</td>
<td>390</td>
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<td>10-year SIP phase</td>
<td>2022 - 2027</td>
<td>206</td>
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<td>25-year SIP phase</td>
<td>2027 – 2042</td>
<td>546</td>
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<td>$70</td>
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*$5.6B TOTAL

*$250M PER YEAR

Costs are initial estimates. The EWMPs report a $7.3B and concepts are in process to allow for capitalization. Previously planned projects are included in the In-progress projects section (Volume 1, Ch.6).
Project Type Breakdown

- Category 3 - Distributed Green Infrastructure
- Category 2 - Regional Green Infrastructure
- Category 1 - Regional Grey Infrastructure

- Water Quality & Water Supply & Flood Risk Mitigation
- Water Quality & Water Supply
- Water Quality & Flood Risk Mitigation
- Water Supply
- Flood Risk Mitigation
Project Cost Breakdown

Category 3 - Distributed Green Infrastructure
Category 2 - Regional Green Infrastructure
Category 1 - Regional Grey Infrastructure

Water Quality & Water Supply & Flood Risk Mitigation
Water Quality & Water Supply
Water Quality & Flood Risk Mitigation
Water Supply & Flood Risk Mitigation
Water Supply
Flood Risk Mitigation
O&M Cost Breakdown

- Category 3 - Distributed Green Infrastructure
- Category 2 - Regional Green Infrastructure
- Category 1 - Regional Grey Infrastructure

- Water Quality & Water Supply & Flood Risk Mitigation
- Water Quality & Water Supply
- Water Quality & Flood Risk Mitigation
- Water Supply
- Flood Risk Mitigation
Annual SIP Calculation

• Capital Cost is amortized by:
  • 20% Pay-As-You-Go (PAYGO)
  • 80% Financing
  • 4.5% Interest Rate
  • 30 Years Borrowing Period
  • 1-Year Debt Issuance

• O&M Cost is assumed to cumulatively increase until all SIP projects are implemented
Annual SIP Cost Projection

- Annual SIP Cost Overview – Constant Dollar Value
- Neglect Inflation Factor

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>PAYGO Capital Cost</th>
<th>Amortized Capital Cost - Financing</th>
<th>SIP O&amp;M Cost</th>
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Funding Assumptions

• Existing Revenue Sources
  • $28M/YR SPAF - $23 per parcel per year, 1.2M parcels
  • $2M/YR in grant funding
  • $1.2M/YR from developer plan review fees
  • Future projections do not rely on the General Fund ($13 Million Recent)
    • Used as cost recovery and this is not an accessible fund

• Additional Potential Revenues
  • ~$72M/YR from LA County Fee - $54 per parcel per year, 1.4M parcels (escalates with inflation).
  • ~$Variable LADWP Water Supply (continuous)

• Potential Partnerships and Offsets
  • ~$5M/YR from Measure A
    • G.O. bond proceeds assumed to be used cooperatively. Examples include Albion Riverside Park, Aliso Creek Confluence Park, etc
  • ~$20M from Measure M
    • Funding derived from transportation sales tax – reduces City costs to address transportation related water quality impacts
Projected Revenue Requirements

- O&M obligations = $44 million, plus O&M from CIP
  - Recent Capital Projects O&M increases not shown
  - Inflation of O&M = assumed inflation rate for all costs (2%)

- Assumed debt financing used to smooth revenue requirements from Capital Projects
  - Historic inability to issue debt due to insufficient revenues and reliance on General Fund
  - Prop O has been principal source of capital funds helping City meet trash and bacteria TMDLs
  - LADWP has translated anticipated annual funding into capital subvention

- Debt Assumptions
  - 20% of Capital Funded PAYGO
  - 80% of Capital Funded from 30-yr Bonds (5%)
Funding Strategy

Current Revenue Sources Insufficient
Other Potential Funding Strategies Under Consideration

- **New Revenues (Taxes)**
  - Property Tax
  - Sales tax
  - Gas tax
  - Transient occupancy tax
  - Other

- **Financing options**
  - Bonds associated with new taxes above
  - Clean Water State Revolving Fund
  - Water Infrastructure Finance Innovation Act
  - Public-private partnership Financing
  - Other

- **Volunteerism**

- **Additional Policies and Programs**
  - Source Control
  - Private Property Participation
Additional Benefits

• LASAN has identified:
  • Avoided fines of thousands of dollars per day per pollutant
  • Habitat and open space
  • Local green jobs
  • Climate resiliency and adaptation
  • Public health improvements
Please visit
www.onewaterla.org

A complete draft of the One Water LA 2040 Plan including the Stormwater & Urban Runoff Facilities Plan (Volume 3) will be available soon!
Questions?

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