

NETWORKING LUNCH & VIDEO INTERVIEWS





STAKEHOLDER MEETING & CELEBRATION

March 5, 2018



MEETING AGENDA

- | | |
|------------------------------------|---------|
| 1. Welcome and Introductions | 1:00 pm |
| 2. Guest Speaker | 1:10 pm |
| 3. One Water LA Plan Overview | 1:15 pm |
| 4. Future Engagement Opportunities | 1:50 pm |
| 5. Acknowledgements | 2:25 pm |
| 6. Group Photo | 2:45 pm |
| Adjourn | 3:00 pm |



WELCOME AND INTRODUCTIONS



MARK PESTRELLA
DIRECTOR LA COUNTY DPW

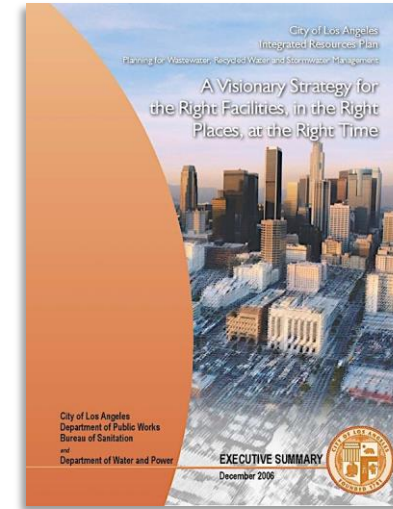
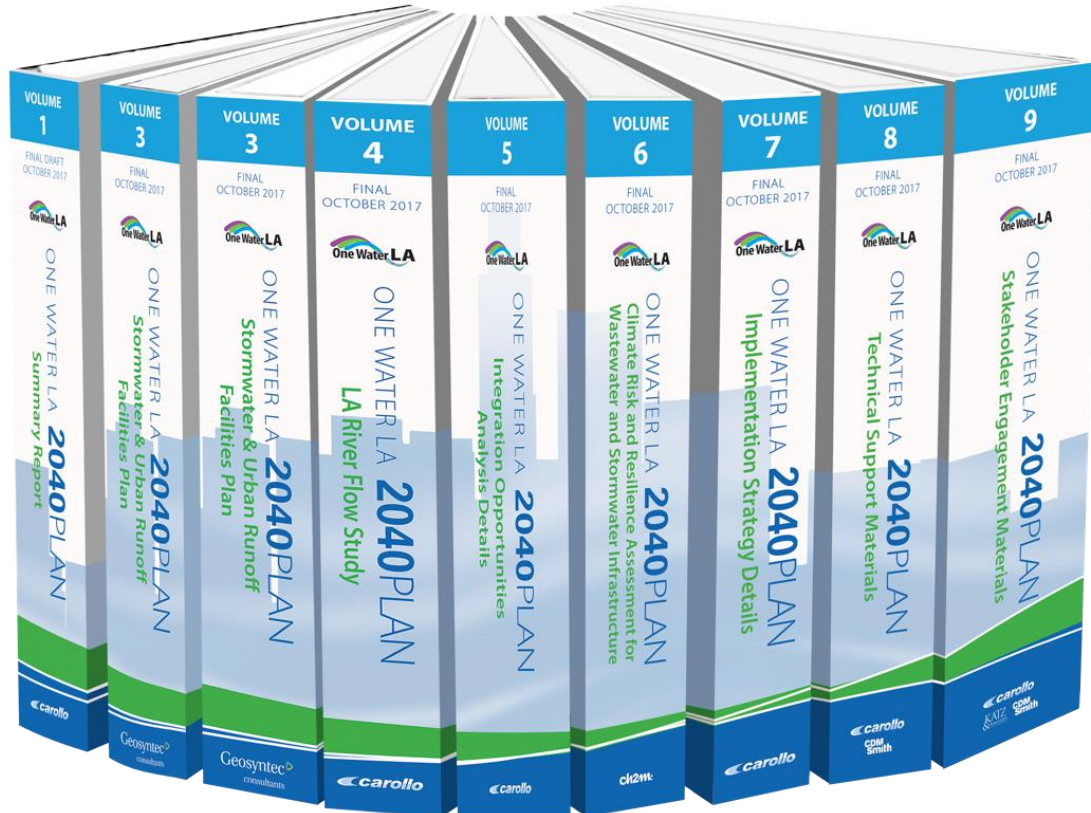


ONE WATER LA 2040 PLAN OVERVIEW



THE CITY OF LA IS COMMITTED TO A COLLABORATIVE APPROACH TO INTEGRATED WATER MANAGEMENT

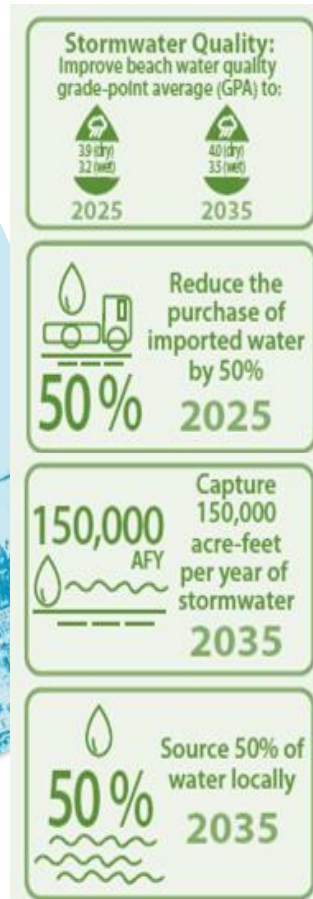
One Water LA 2040 Plan Planning Horizon: 2040



Updates the 2006 Water Integrated Resources Plan Planning Horizon: 2020



Supports LA's 2015 Sustainable City pLAN Goals

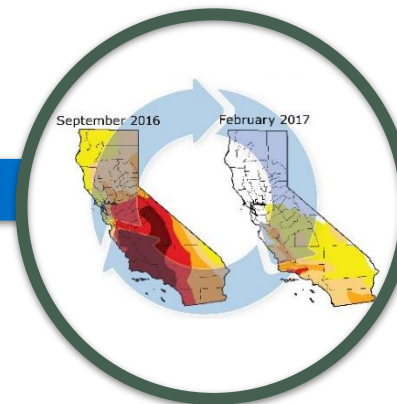
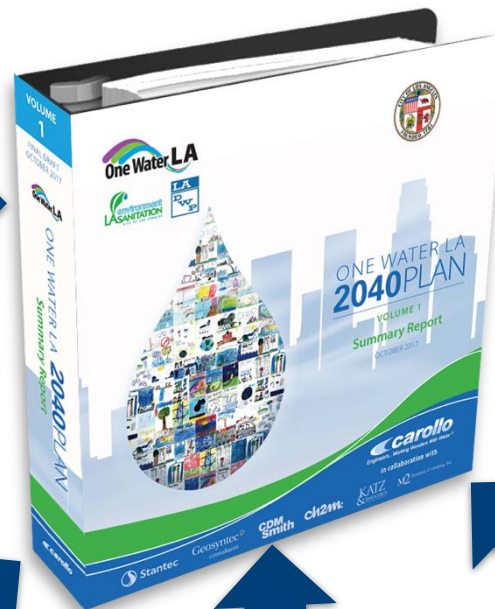




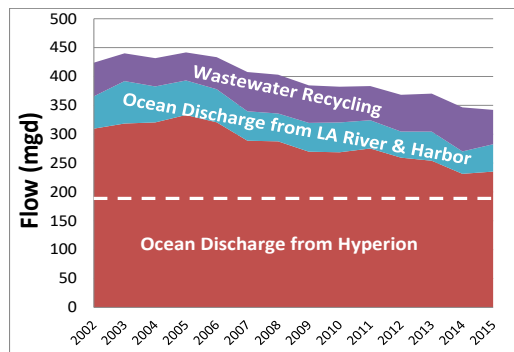
INCORPORATING CHANGES IN THE WATER LANDSCAPE



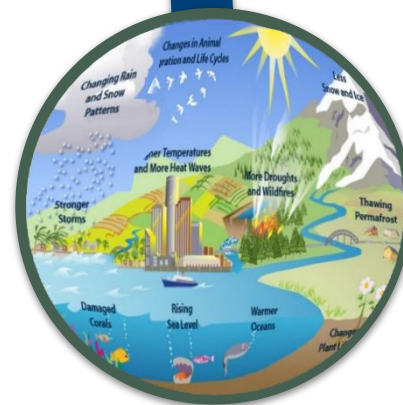
New Plans & Goals



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





THE STEERING COMMITTEE FOSTERED INTEGRATION

Steering Committee Members

- 14 City Departments
- 6 Regional Agencies

Key Accomplishments

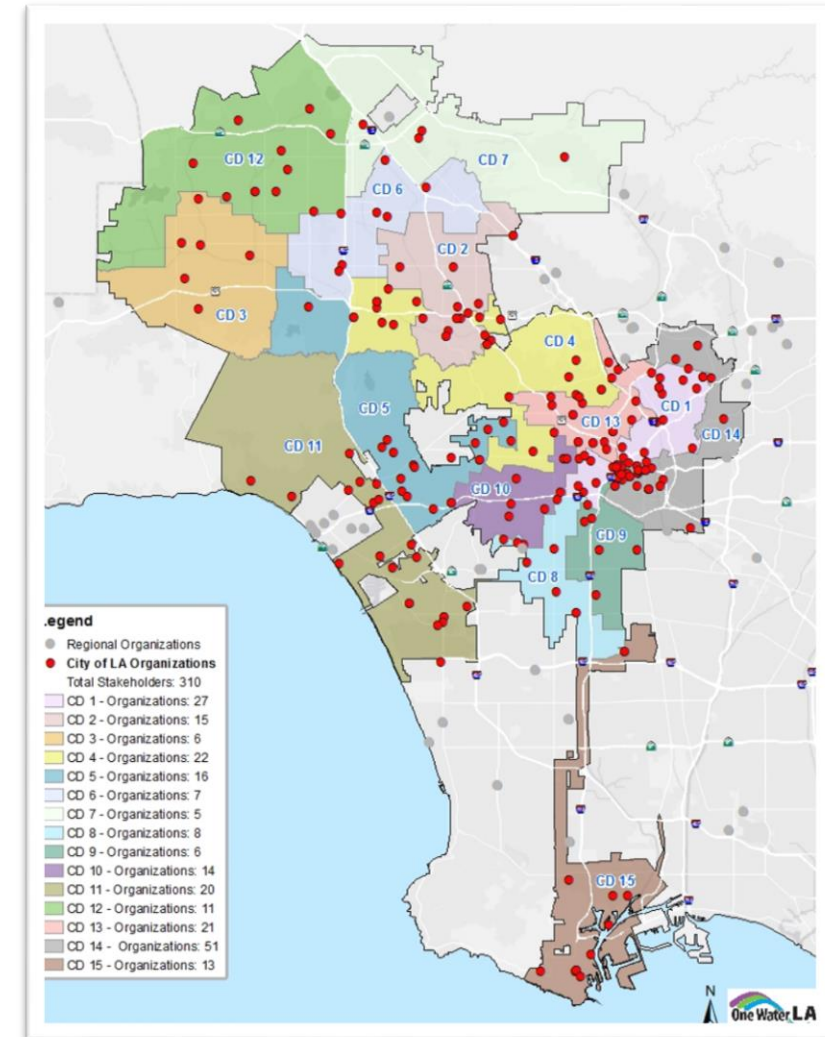
- Developed Vision, Objectives, & Guiding Principles
- Identified existing integration opportunities
- Identified policies to streamline integration between departments & agencies
- Created awareness to integrate water elements in projects & programs





A STAKEHOLDER DRIVEN PLANNING APPROACH WITH BROAD INVOLVEMENT

250+ Stakeholders | **150+** Organizations





THE ONE WATER LA 2040 PLAN CONSISTS OF MANY ELEMENTS & RECOMMENDATIONS





PLAN ELEMENT — STORMWATER & URBAN RUNOFF FACILITIES PLAN



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

STORMWATER & URBAN RUNOFF FACILITIES PLAN

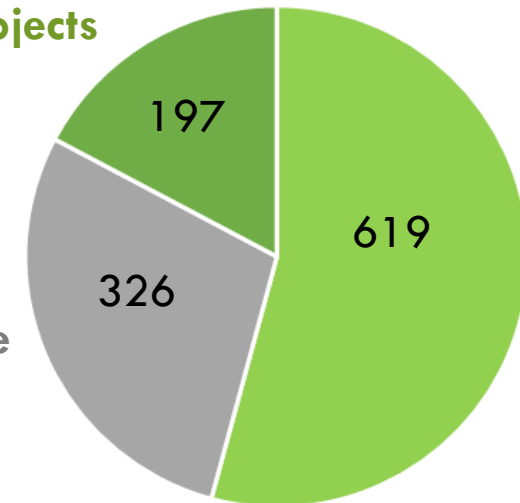
Recommendations

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

Regional Green Infrastructure Projects

Grey Infrastructure Projects

Distributed Green Infrastructure Projects

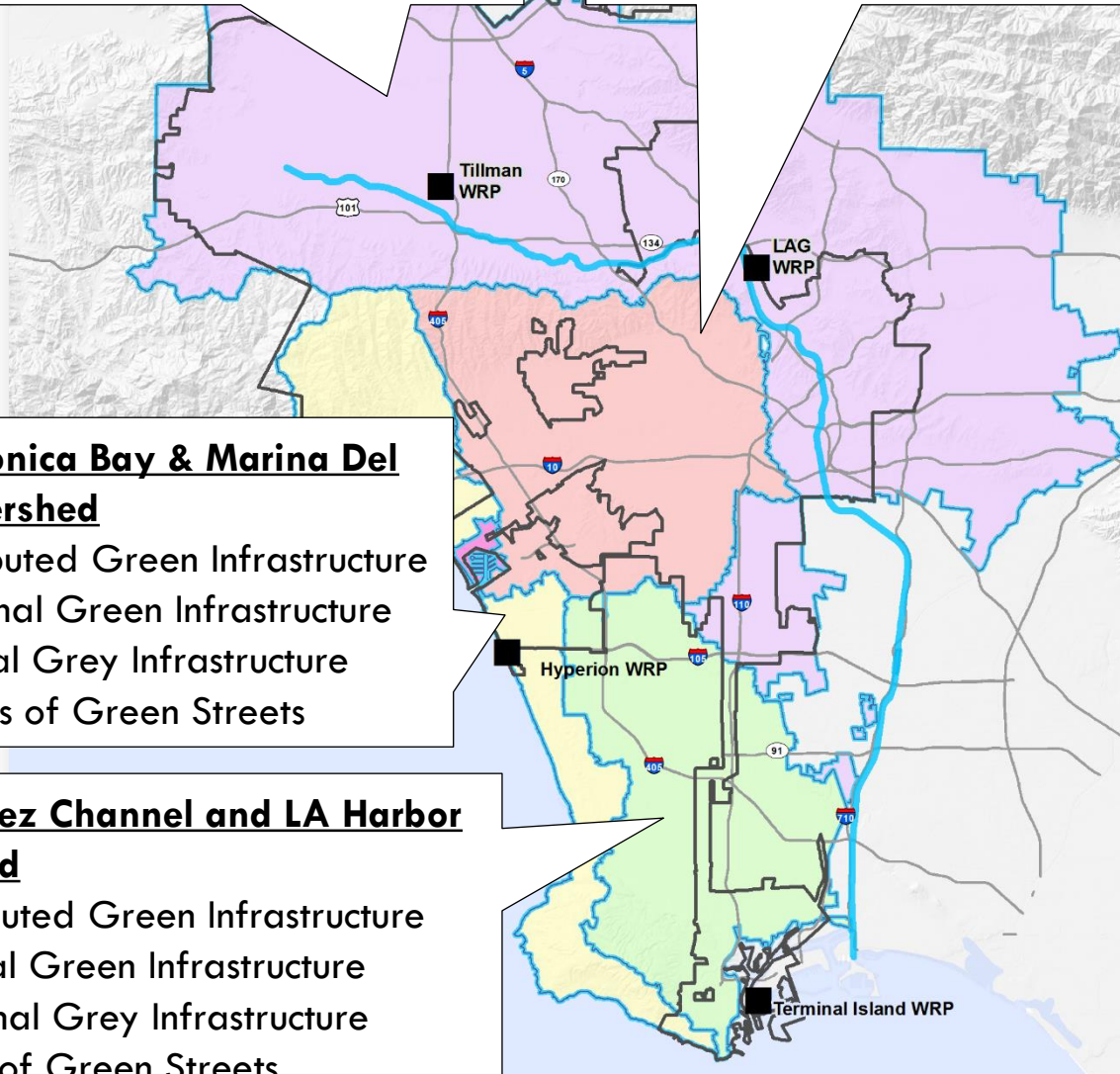


Upper Los Angeles River Watershed

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



STORMWATER & URBAN RUNOFF FACILITIES PLAN

Outcomes

- Refined Green Streets opportunity areas from EWMPs
- Projects with a wide range of benefits to improve the City's resiliency
- Policies and Programs to help reduce roadblocks and incentivize distributed and other solutions
- Funding strategies to help close the gap





PLAN ELEMENT — WASTEWATER FACILITIES PLAN



WASTEWATER FACILITIES PLAN

Planning Approach

- Potable Reuse Treatment Upgrades for Future Concepts
- Capital Improvement projects for all 4 reclamation plants
- Rehabilitation and Replacement (R&R) projects for all 4 reclamation plants
- Wastewater conveyance projects
- Climate resiliency projects



WASTEWATER FACILITIES PLAN RECOMMENDATIONS

Donald C. Tillman WRP

23 Planned Projects
8 Planned R&R Projects
2 Climate Resiliency Projects
6 Future Concepts

LA-Glendale WRP

2 Planned Projects
18 Planned R&R Projects
3 Climate Resiliency Projects
2 Future Concepts

Collection System

15 Planned Projects
105 Planned R&R
Projects
29 Climate
Resiliency Projects

Hyperion WRP

7 Planned Projects
37 Planned R&R Projects
1 Climate Resiliency Projects
7 Future Concepts

Terminal Island WRP

10 Planned Projects
18 Planned R&R Projects
2 Climate Resiliency Projects

Water Reclamation Plants & Collection System Projects

- 57 Planned Projects
- 186 Planned Rehabilitation and Replacement (R&R) Projects
- 37 Climate Resiliency Projects
- 15 Future Concepts
- Future Projects (2025-2040)
- Future R&R Projects (2025-2040)



WASTEWATER FACILITIES PLAN

Outcomes

- Protect our facilities and assets from climate related risks
- Prepare Water Reclamation Plants to maximize potable reuse
- Implement, monitor, and maintain a reliable wastewater system



- Hyperion WRP: 95 mgd MBR/advanced treatment
- Tillman WRP: 15 mgd advanced treatment
- LA-Glendale WRP: 5 mgd advanced treatment



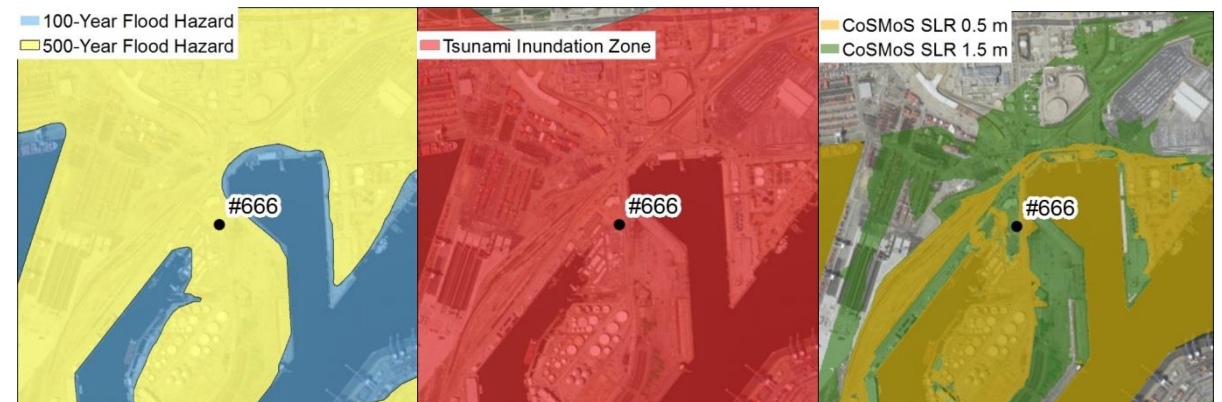
PLAN ELEMENT — CLIMATE RESILIENT INFRASTRUCTURE



CLIMATE RESILIENCY ASSESSMENTS OF CRITICAL WASTEWATER AND STORMWATER INFRASTRUCTURE

Planning Approach

- Multi-Disciplinary Field Visits
- EPA Climate Modeling (CREAT)
- Flood & Tsunami Zone Modeling
- Review of Facility Designs
- Identify Adaptation and Mitigation Strategies

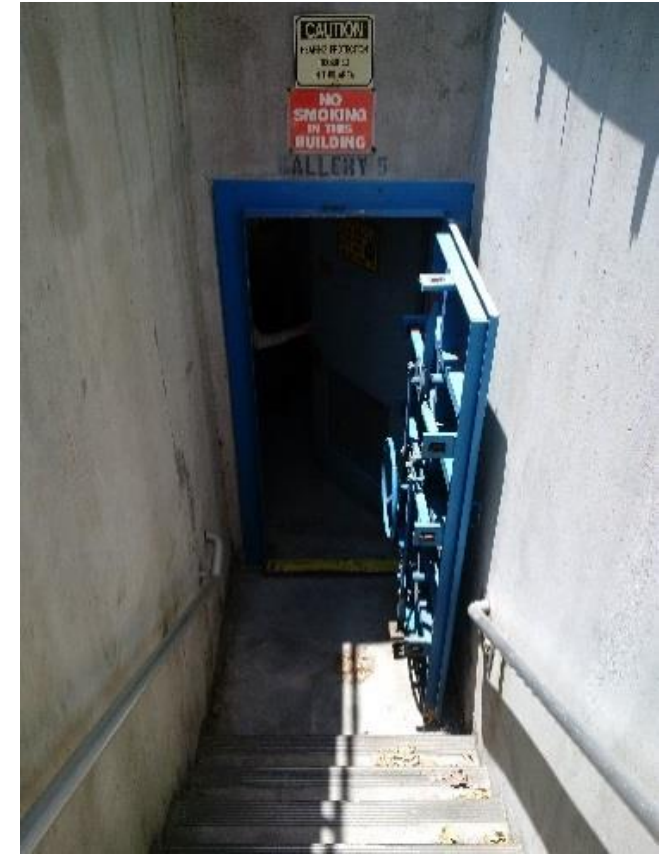




CLIMATE RESILIENCY ASSESSMENTS OF CRITICAL WASTEWATER AND STORMWATER INFRASTRUCTURE

Plan Recommendations

- Waterproof Structures
- Perimeter Walls around facilities
- Slope stabilization
- BMPs for stormwater management
- Waterproof protection of electrical equipment
- Below-ground pump station modifications

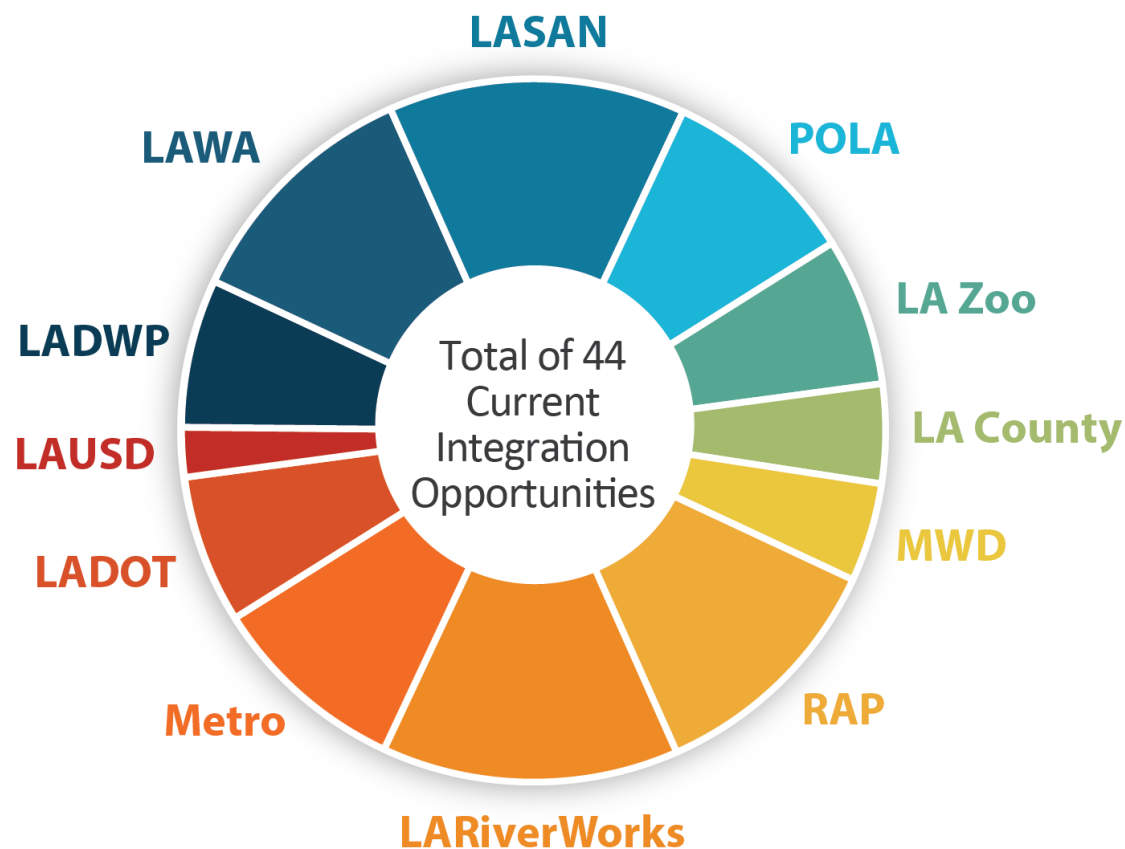




PLAN ELEMENT — CURRENT INTEGRATION OPPORTUNITIES



CURRENT INTEGRATION OPPORTUNITIES IDENTIFIED WITH THE STEERING COMMITTEE MEMBERS



- 44 water-related integration opportunities
- Fact Sheets were developed for the Top 10 opportunities
- The top 5 opportunities were further developed as case study examples
- Periodic updates to identify new integration opportunities with other City Departments & Regional Agencies



TOP 10 CURRENT INTEGRATION OPPORTUNITIES



Caballero Creek Park

LA River Bike Path



Water Management Strategies for the LA Zoo Master Plan



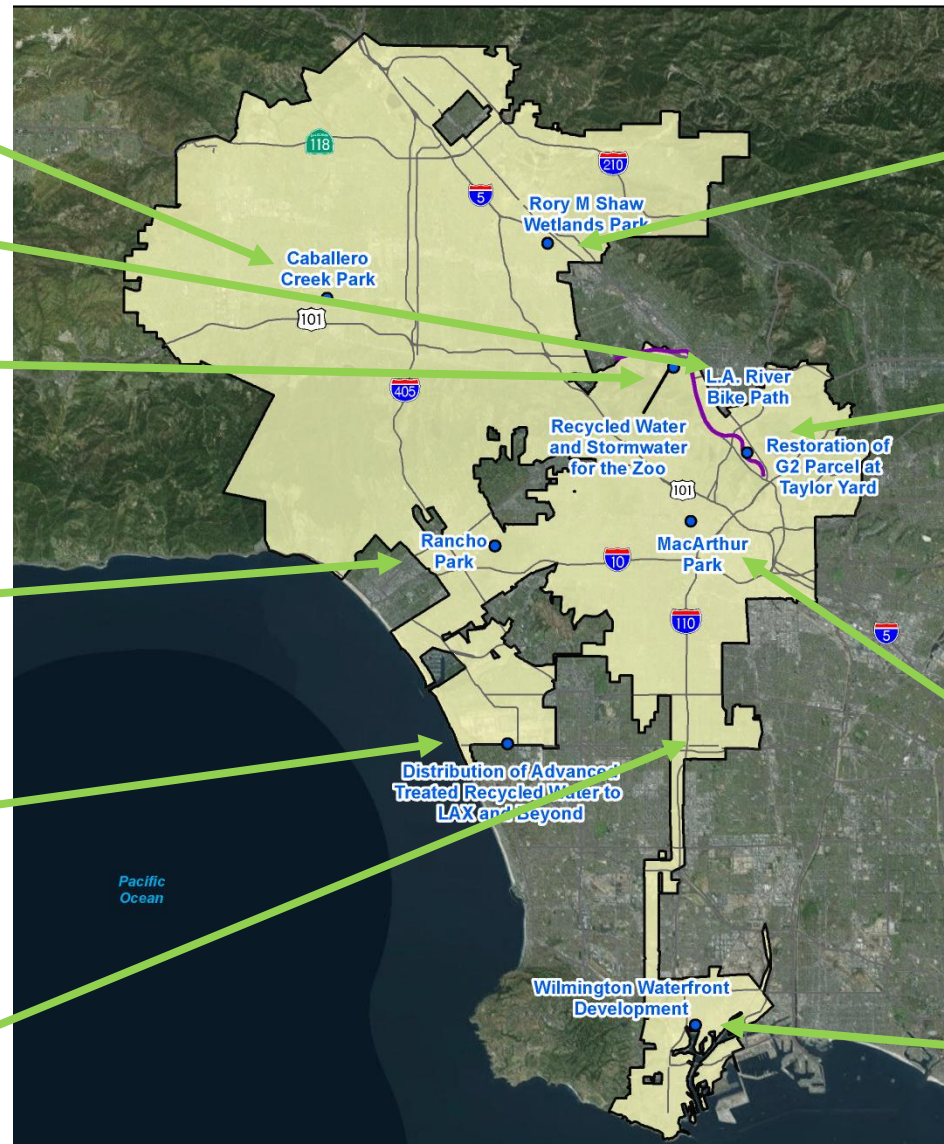
Rancho Park Water Reclamation Facility



Advanced Treated Recycled Water Delivery to LAX and Scattergood



Capture of Off-Site Stormwater at LAUSD Schools (location TBD)



Rory M. Shaw Wetlands Park



Restoration of G2 Parcel at Taylor Yard



MacArthur Park



Wilmington Waterfront Development



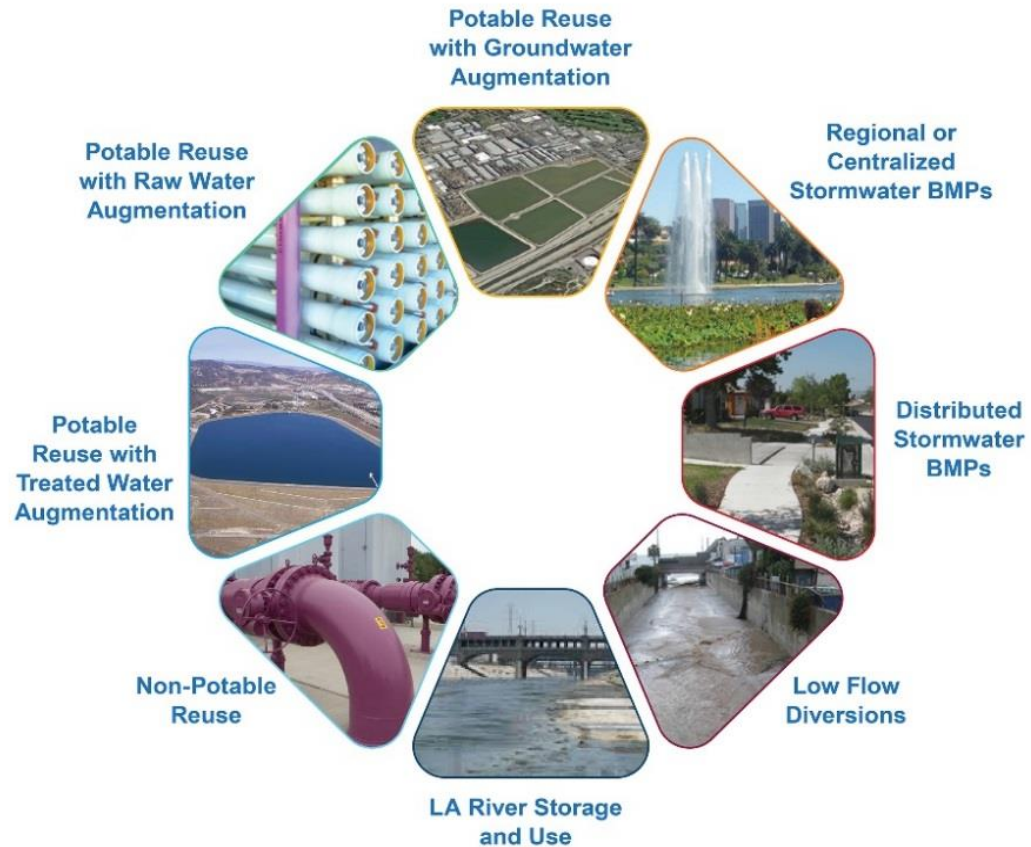


PLAN ELEMENT — FUTURE INTEGRATION OPPORTUNITIES

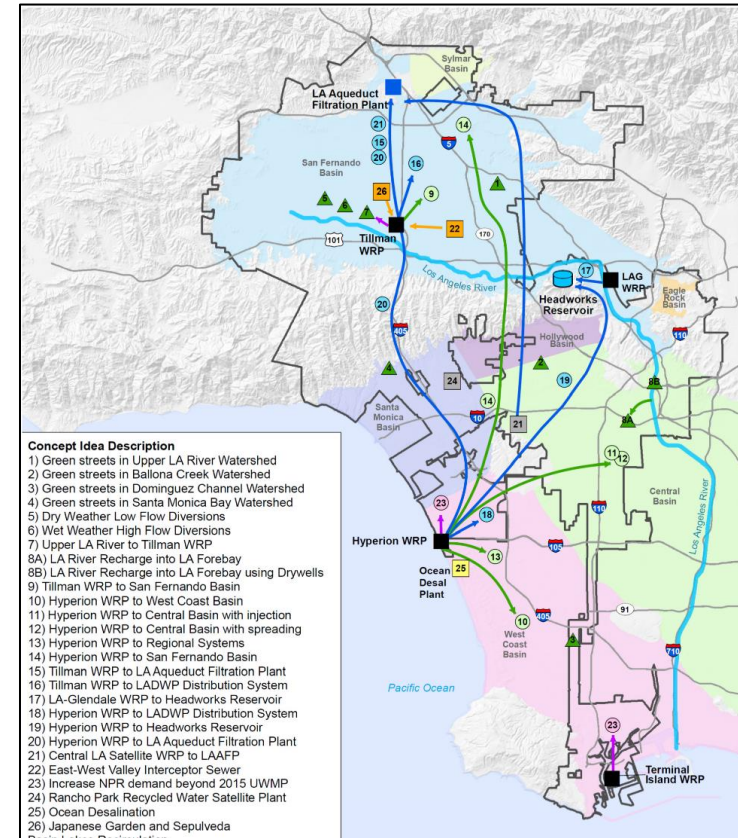


FUTURE INTEGRATION OPPORTUNITIES

8 Recommended Strategies



27 Concept Options



6 Preferred Concepts



THE 6 PREFERRED CONCEPTS ADD TO THE BENCHMARK PORTFOLIO COMPONENTS

Projects or Programs that are expected to occur independent of the One Water LA Plan

1. San Fernando Groundwater Basin Cleanup & Remediation
2. Expand Pumping in West Coast Basin to Maximum Water Right
3. Expand Pumping in Central Basin to Maximum Water Right
4. Expand Pumping in Sylmar Basin to Maximum Water Right
5. Develop Groundwater Management Strategy for the Santa Monica Basin
6. Develop Groundwater Management Strategy for the Hollywood Basin
7. Groundwater Replenishment Project with Advanced Water Purification Facility (AWPF) at DCTWRP (up to 30,000 AFY in San Fernando Basin)
8. Terminal Island Expansion to 12 mgd
9. Expansion of Non-Potable Reuse (NPR) per 2015 UWMP
10. Hyperion WRP Demonstration Plant & Delivery to LAWA and Vicinity
11. Hyperion WRP Delivery Expansion to 70 mgd for West Basin & LA Harbor

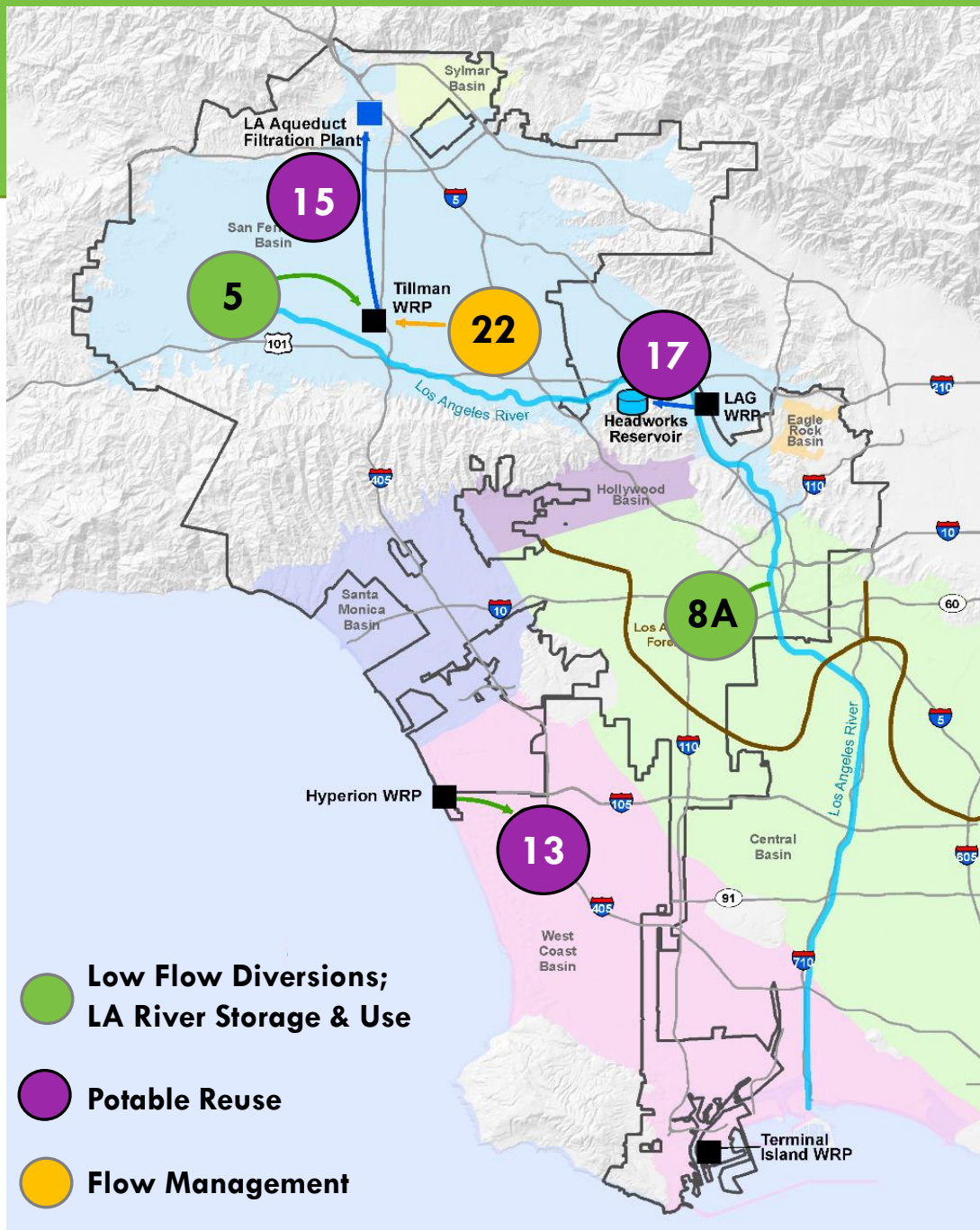
Benchmark



- All EWMP projects
- Prop. O. projects
- SCMP projects
- Other 5-year CIP projects
- Existing Wastewater CIP
- Wastewater R&R Projects

- Groundwater
- Stormwater
- Recycled Water
- Water Conservation
- LA Aqueduct
- Purchased Imported Water from MWD

6 PREFERRED FUTURE CONCEPTS



#5: Dry Weather Low Flow Diversions	6,200 afy
#8A: LA River recharge into LA Forebay with injection wells	25,000 afy
#13: MBR at Hyperion WRP to Regional System	95,000 afy
#15: Potable Reuse with raw water augmentation from Tillman to LAAFP	15,000 afy
#17: Potable Reuse with treated water augmentation from LAG to Headworks Reservoir	6,000 afy
#22: East-West Valley Interceptor Sewer	0 afy

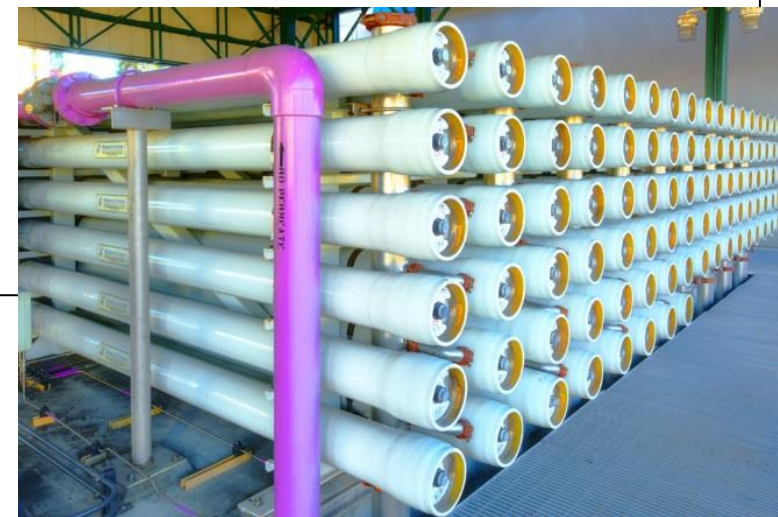
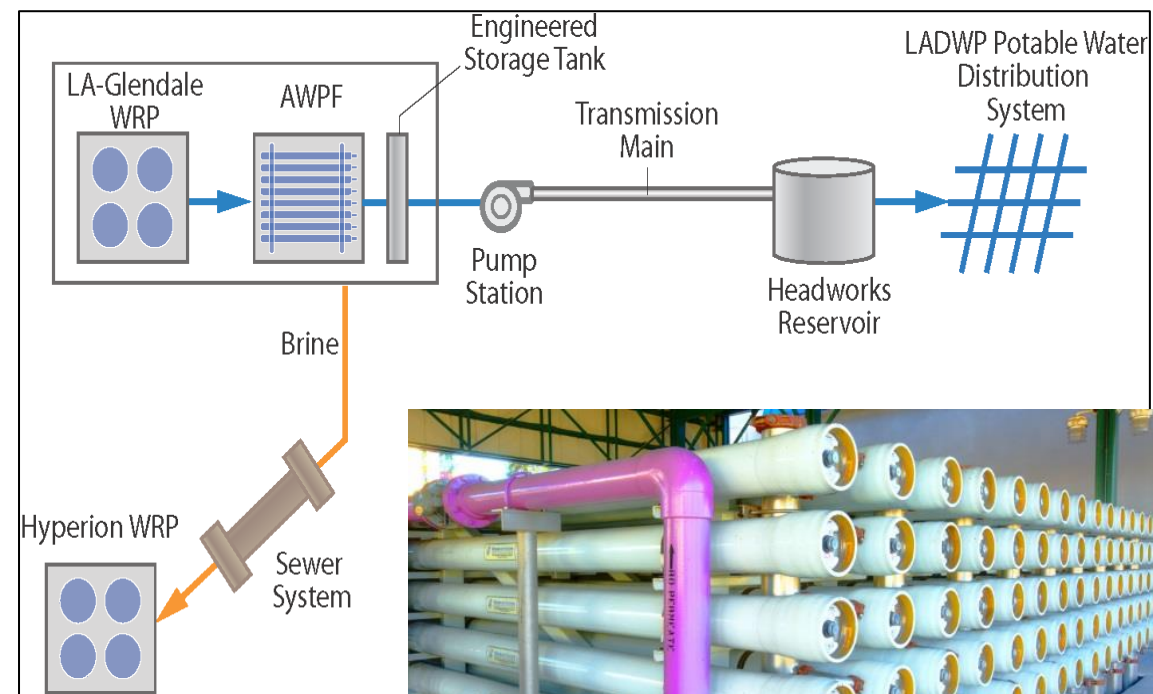
Total: 147,200 afy



FUTURE INTEGRATION OPPORTUNITIES BENEFITS

Anticipated Outcomes

- Improve local water supply reliability
- Maximize potable reuse to minimize discharge to the ocean
- Minimize dry-weather runoff to receiving waters
- Increase climate resilience

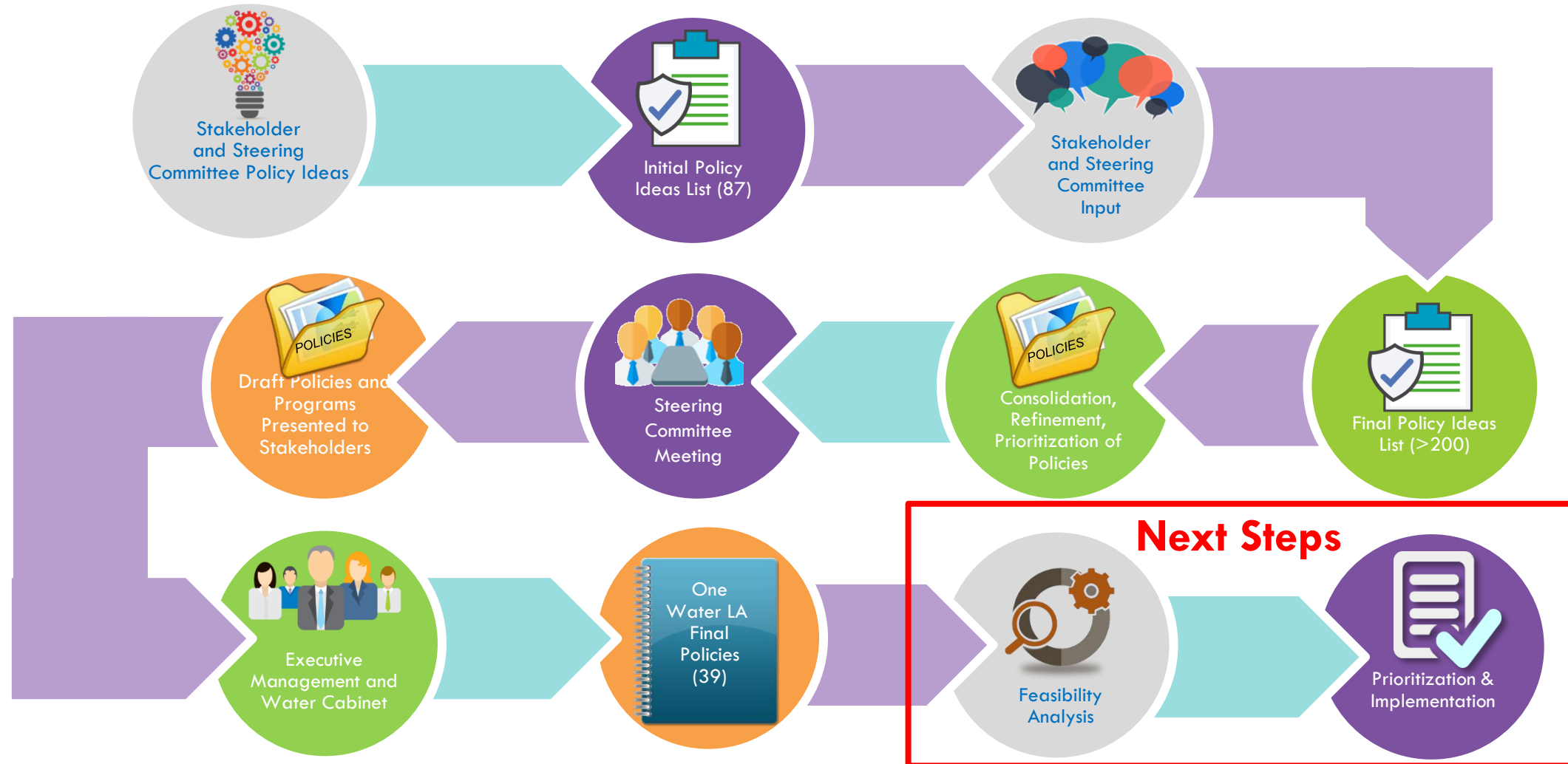




PLAN ELEMENT — POLICIES AND PROGRAMS



POLICIES AND PROGRAM IDEAS





POLICIES AND PROGRAM RECOMMENDATIONS

39 Policy & Program Recommendations



9 Categories

- Integrated Planning and Design
- Stormwater and Urban Runoff Management
- Training and Education
- Streamlining Collaboration and Implementation
- Funding and Partnerships
- Sustainability and Climate Change
- Water Conservation
- Recycled Water
- LA River Revitalization

Moving these policies forward is critical to the implementation of the Plan's recommendations



EXAMPLES OF POLICIES AND PROGRAM RECOMMENDATIONS

39 Policy & Program Recommendations



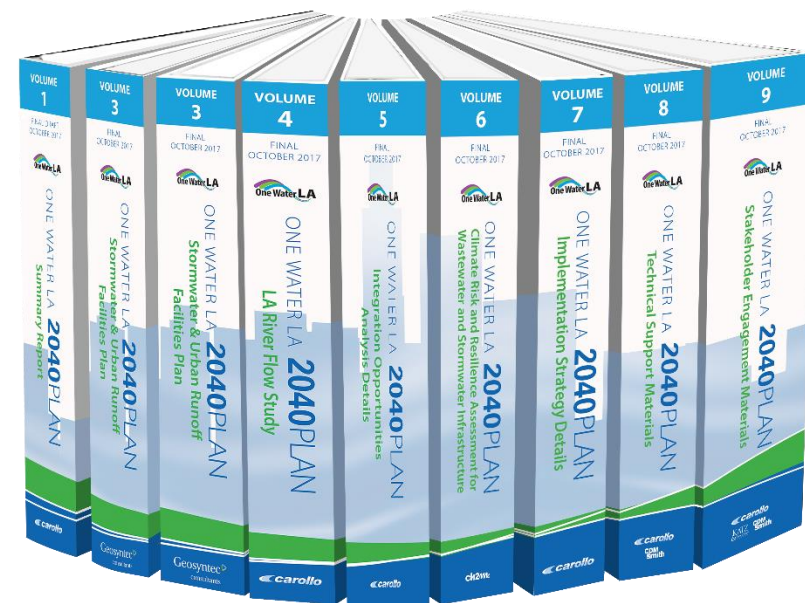
Lead Agencies	Policy or Program Idea
LASAN, LADWP, BOE	Create a city-wide database to identify collaborative opportunities for water-related multi-benefit projects.
LASAN, LADWP	Expand education and engagement programs for Potable Reuse.
LASAN, BOE, DCP	Simplify the process and remove barriers to installing distributed green infrastructure BMPs on private properties in the City.
LASAN	Maximize opportunities to incorporate integrated water management strategies, including Green Infrastructure, into on-going and emerging opportunities.



THE ONE WATER LA 2040 PLAN CONSISTS OF MANY ELEMENTS ORGANIZED IN 10 VOLUMES

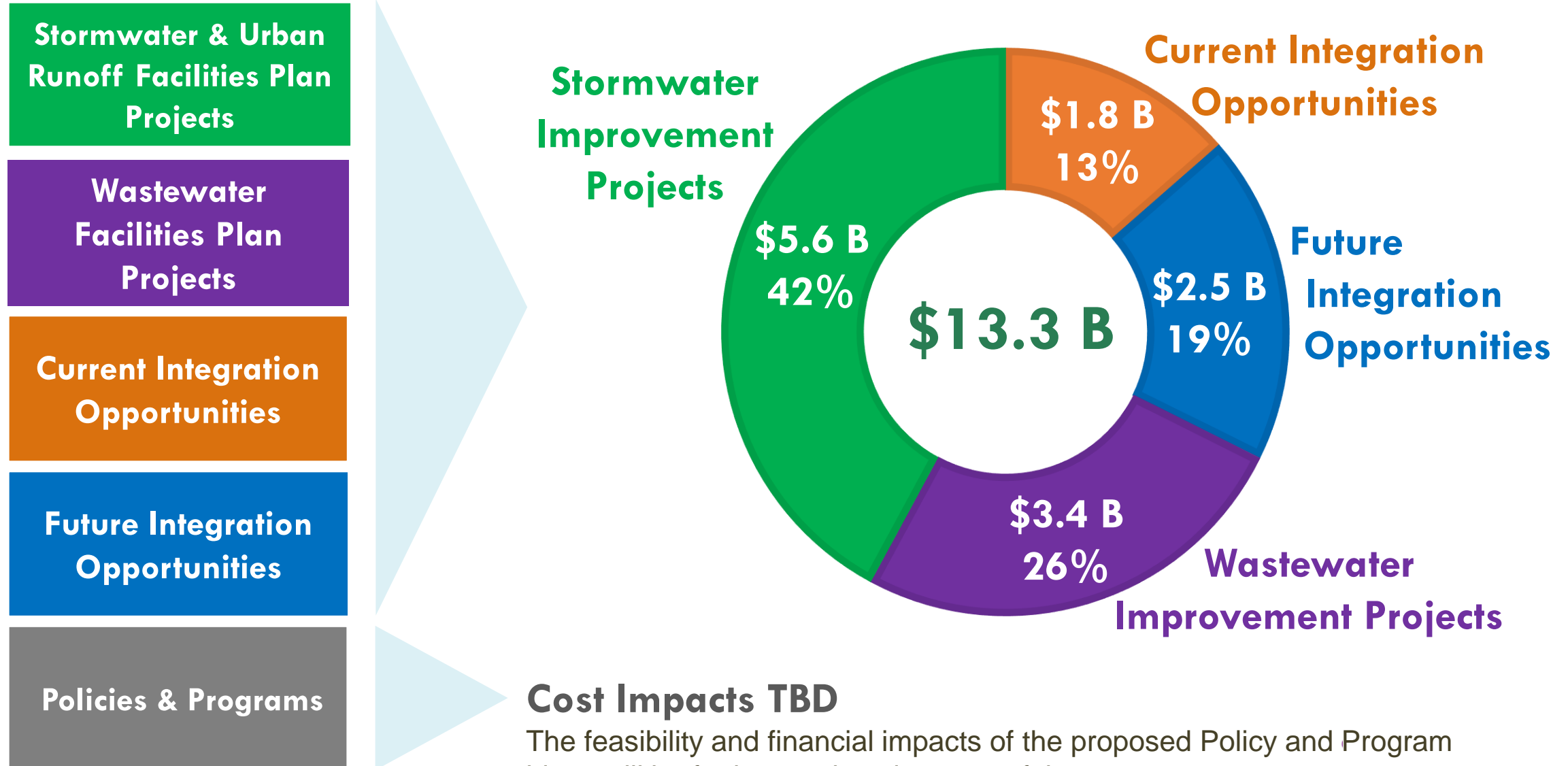


ONE WATER LA 2040 PLAN



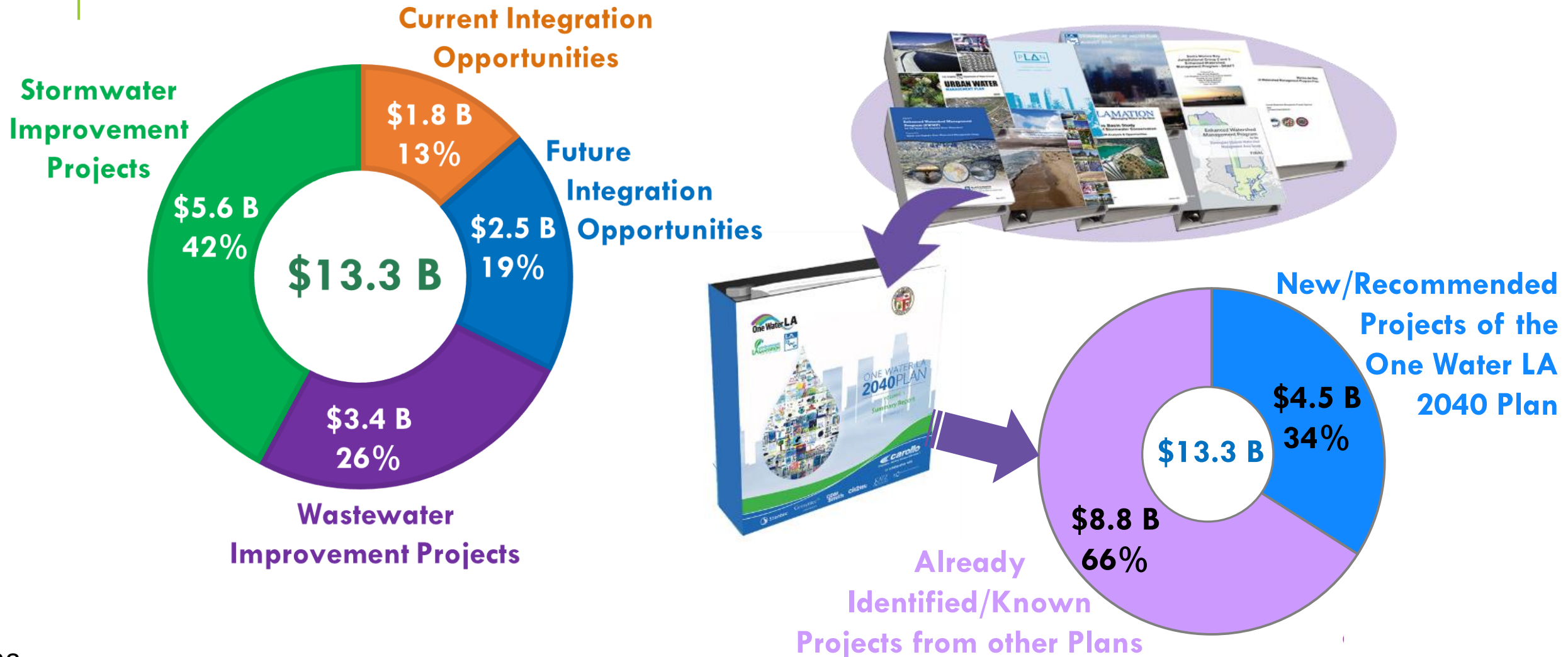


POTENTIAL FISCAL IMPACTS OF ONE WATER LA PLAN RECOMMENDATIONS





THE ONE WATER LA PLAN ALSO COMBINES MANY RECOMMENDATIONS OF OTHER PLANS





FUNDING IDEAS AND RECOMMENDATIONS GATHERED FROM CITY STAFF AND STAKEHOLDERS

Develop a One Water LA Funding Plan

- Explore stormwater tax or fee options
- Review and streamline grant management process
- Understand how multiple agencies could identify benefit-based costs for water-related projects
- Increase use of State Revolving Funds for multi-benefit projects
- Develop partnerships to reduce costs and maximize upstream solutions

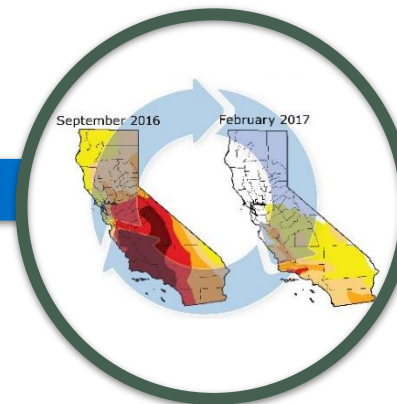
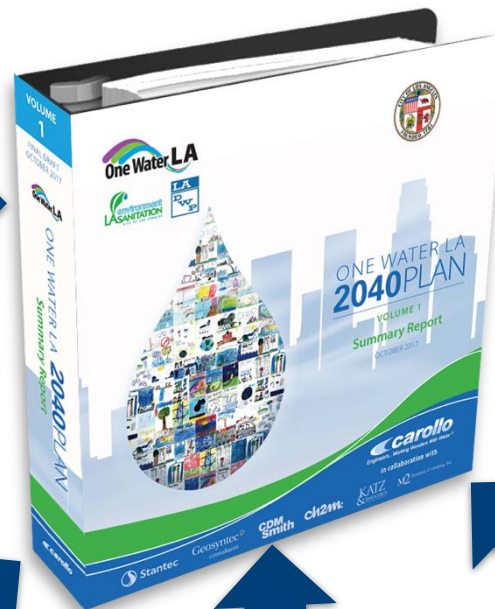




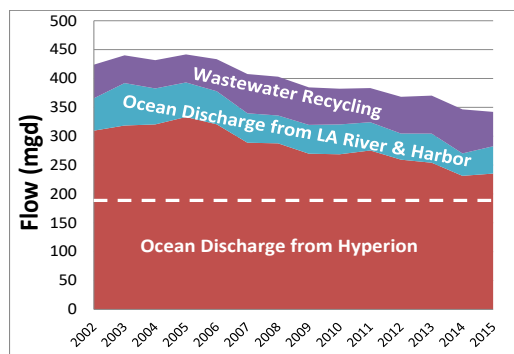
INVESTMENT IS NEEDED TO PLAN FOR A MORE RESILIENT FUTURE



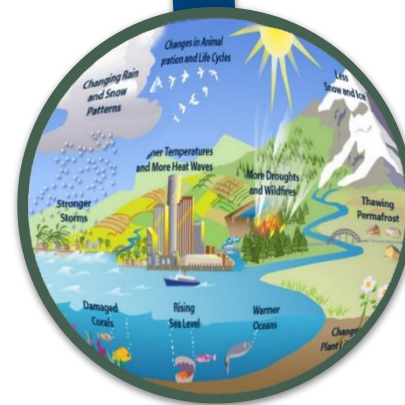
New Plans & Goals



Recurring Droughts



Declining Wastewater
& Reduced Recycled
Water Availability



Climate Change



New Stormwater &
Receiving Water
Quality Regulations



Q&A

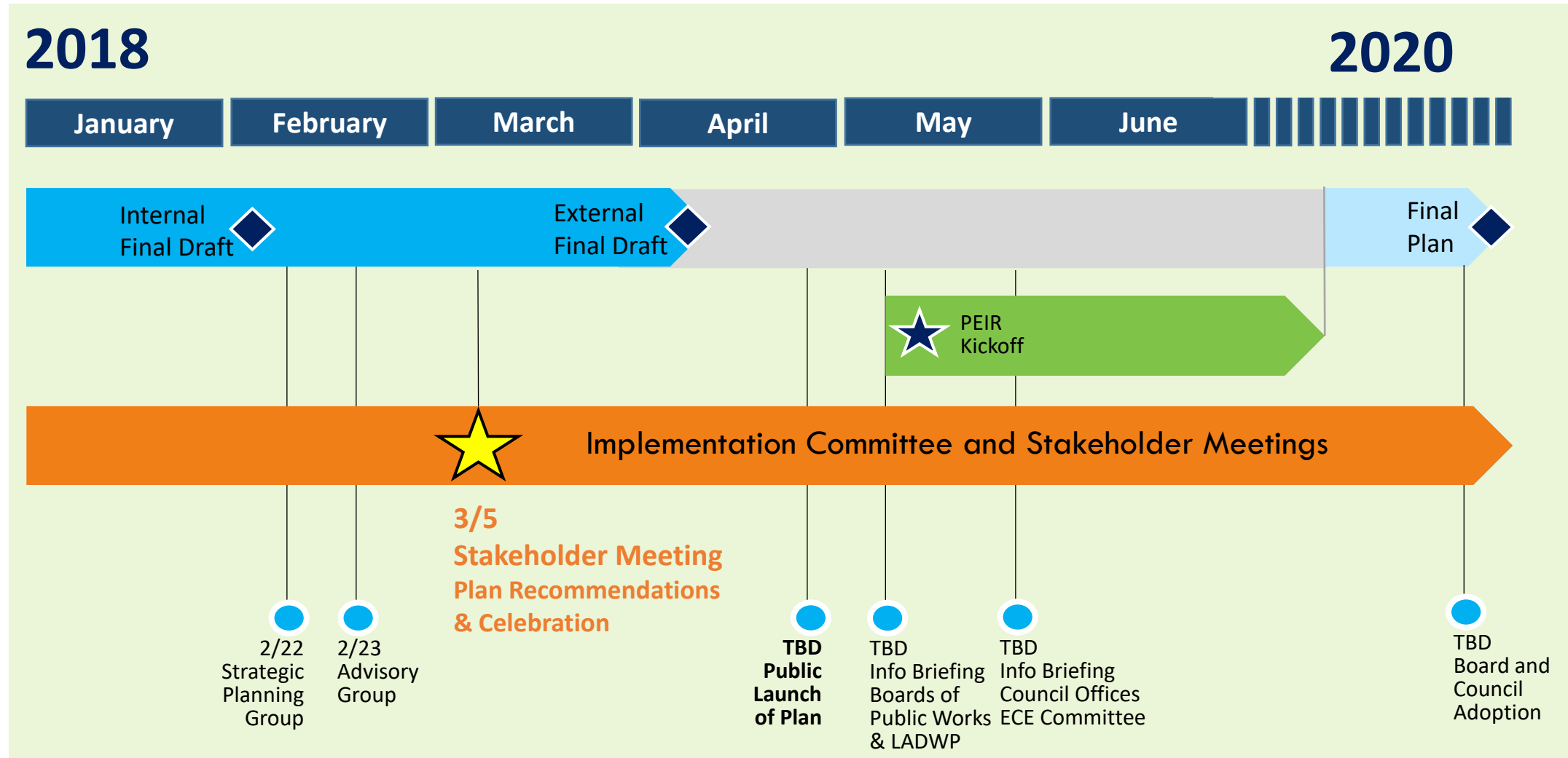




FUTURE ENGAGEMENT OPPORTUNITIES



NEXT STEPS





PLAN IMPLEMENTATION FOCUS AREAS

Future City Activities for Plan Implementation:

- Prepare Programmatic EIR
- Conduct Continued Technical Analysis
- Create Supporting Databases
- Work with other Departments & Agencies on Current and Future Integration Opportunities
- Conduct Policy & Program Feasibility Analysis
- Pursue Funding Opportunities
- Develop Interagency Agreements





CONTINUED STAKEHOLDER ENGAGEMENT THROUGH IMPLEMENTATION COMMITTEES

Potential Implementation Committees

- Policy & Program Feasibility Analysis
- Funding, O&M, and Cost-sharing
- Partnership Strategies
- Climate Change & Resiliency Expert Panel
- Other?



Additionally, Stakeholder Workshops will continue through Plan Implementation



FUTURE COLLABORATION ACTIVITIES

COLLABORATION WITH:	EXAMPLE(S)
Mayor's Water Cabinet	<ul style="list-style-type: none"> Accelerate Select Policy Ideas
City Departments	<ul style="list-style-type: none"> LA Zoo Master Plan Recycled Water to LAX & Scattergood
Regional Agencies	<ul style="list-style-type: none"> Off-site Stormwater at LAUSD Schools High Speed Rail stormwater capture
Academic Partnerships	<ul style="list-style-type: none"> Research partnerships with UCLA, CSUN, & others
School Education Programs	<ul style="list-style-type: none"> Continue Young Citizen Artists school program Refine One Water LA curriculum to meet state standards

The City is committed to a Collaborative Approach to Integrated Water Management





CLAIRE BOWIN
DEPARTMENT OF CITY PLANNING



ACKNOWLEDGEMENTS



THANK YOU TO OUR STAKEHOLDERS

We appreciate your involvement!





THANK YOU TO THE PARTICIPANTS OF THE SPECIAL TOPIC GROUP: PARTNERSHIP, COLLABORATION, AND INNOVATION

Partnership, Collaboration & Innovation	
Facilitator(s)	Glen Dake
Technical Lead	Miguel Luna
LASAN reps	Eliza Jane Whitman Troy Ezech
LADWP reps	Serge Haddad Anthony Tew Bob Sun
Participants	Clint Granath David Nahai Deborah Bloome Ghina Yamout Nurit Katz Bonny Bentzin Guangyu Wang Grant Jean Melanie Winter Anthea Raymond Meredith McCarthy Tom Williams





THANK YOU TO THE PARTICIPANTS OF THE SPECIAL TOPIC GROUP: FUNDING & COST BENEFIT ANALYSIS

Funding & Cost Benefit Analysis	
Facilitator(s)	Jack Baylis
Technical Lead	Rob Grantham
LASAN reps	Eliza Jane Whitman Flor Burrola Doug Walters Andre Goodridge
LADWP reps	Kim O'Hara Bob Sun Rafael Villegas
Participants	Carolyn Casavan Johanna Dyer Jack Humphreville Rita Kampalath Andy Lipkis Denny Schneider Guangyu Wang David Nahai Alex Paxton Tom Williams





THANK YOU TO THE PARTICIPANTS OF THE SPECIAL TOPIC GROUP: STORMWATER & RUNOFF MANAGEMENT

Stormwater & Runoff Management

Facilitator(s)	Rebecca Drayse Stephen Groner
Technical Lead	Mark Hanna
LASAN reps	Wing Tam Azya Jackson Steve Nikaido Kosta Kaporis
LADWP reps	Rafael Villegas Art Castro
Participants	Liz Crosson Bruce Reznik Arthur Pugley Shawn Warren Jack Humphreville Kevin Fellows Guangyu Wang Daniel Berger Melanie Winter Rita Kampalath Natalia Gaerlan Johanna Dyer Lee Alexanderson Claire Latane Ghina Yamout Becky Hayat Katie Mika Steven Johnson





THANK YOU TO THE PARTICIPANTS OF THE SPECIAL TOPIC GROUP: OUTREACH & COMMUNICATION

Outreach & Communication	
Facilitator(s)	Patsy Tennyson
Technical Lead	Karen Snyder
LASAN reps	Rebecca Drayse Pam Perez Doug Walters Eliza Jane Whitman
LADWP reps	Serge Haddad Anthony Tew Michelle Figueroa
Participants	Matthew King Anthea Raymond Tom Williams Tony Wilkinson Ken Murray Veronica Padilla





THANK YOU TO THE PARTICIPANTS OF THE SPECIAL TOPIC GROUP: DECENTRALIZED USE & ONSITE TREATMENT

Decentralized Use & Onsite Treatment	
Facilitator(s)	Hampik Dekermenjian
Technical Lead	Robin Nezhad
LASAN reps	Lenise Marrero Denise Chow Flor Burrola
LADWP reps	Penny Falcon Mario Acevedo Serge Haddad
Participants	Craig Kessler Jim Stahl Sarah Munger Cris Sarabia Steven Johnson Ruth Doxee Margot Jacob Robin Nezhad Katie Mika Tom Williams Bonnie Bentzin Margot Jacobs Nuritz Katz Guangyu Wang





THE ONE WATER LA ADVISORY GROUP DEDICATED FOUR YEARS TO THE DEVELOPMENT OF THE PLAN



Carolyn Cassavan
Sherman Oaks
Neighborhood Council



Jack Humphreville
Greater Wilshire
Neighborhood Council



Ken Murray
Wilderness Corps



David Nahai
David Nahai Companies



Melanie Winter
The River Project



Brad Cox
Los Angeles Business
Council



Mike O'Gara
Sun Valley
Neighborhood Council



Veronica Padilla
Pacoima Beautiful



Kelly Sanders
University of Southern
California



Louise McCarthy
Community Clinic Association
of Los Angeles County



WE WANT TO THANK OUR STEERING COMMITTEE MEMBERS AND OTHER REGIONAL PARTNERS

Bureau of Engineering

Alfred Mata
Gene Edwards
Kenneth Redd
Michael Affeldt
Mike Sarullo

Bureau of Street Services

Nishith Dhandha
Robert Gutierrez

Dept. of City Planning

Christopher Pina
Diana Kitching
Erick Lopez
Jonathan Hershey
Michelle Levy
Tom Rothmann
Claire Bowin

Dept. of Neighborhood Empowerment

Stephen Box

General Services Dept.

Michael Salumon

High Speed Rail

Michelle Boehm
Meg Cederoth
Karl Fielding

LA County

Angela George
Daniel Bradbury

LA Zoo

Darryl Pon

Dept. of Building and Safety

Domenico Barbato
Younan Osama

Caltrans

Patty Watanabe

LA Dept. of Transportation

Tomas Carranza
David Somers

Los Angeles Unified School District

Christos Chrysiliou
Talal Balaa

Los Angeles World Airports

Jeffery Smith
Robert Freeman

METRO

Cris Liban
Jacob Lieb
Julia Salinas

Metropolitan Water District

Christine Frey
Grace Chan

Port of LA

Chris Brown

Recreation and Parks Dept.

Tom Gibson

SCAG

Stephen Patchan

U.S Army Corp.

Ed De Mesa

LADWP & LASAN

Multiple team members
(see subsequent slides)





OUR CITY'S COLLABORATION LEADERS

Mayor's Office

Eric Garcetti – Mayor of Los Angeles

Liz Crosson - Deputy Chief Sustainability Officer

Executive Management LASAN

Enrique Zaldivar – Director

Traci Minamide – Chief Operating Officer

Adel Hagekhalil – Assistant Director

Ali Poosti – Division Manager Wastewater Engineering Services Division

Shahram Kharaghani – Division Manager Watershed Protection Division

Executive Management LADWP

Marty Adams – Chief Operating Officer

Richard Harasick – Assistant General Manager

David Pettijohn – Director of Water Resources

Evelyn Cortez-Davis – Assistant Director of Water Resources

William Van Wagoner – Assistant Director of Water Engineering
& Technical Services





OUR CITY'S ONE WATER LA PROJECT TEAM

City's Project Managers

Lenise Marrero – LASAN

Penny Falcon – LADWP



LASAN's Project Team

Azya Jackson
Regidia Voong
Flor Burrola
Denise Chow
Troy Ezeh
Ani Abassian
Aron Sordan
Andre Goodridge
Rafael Rincon
Cesar Cortes
Rowena Lau
Manik Mahandas
Oscar Figueroa
Wing Tam
Hubertus Cox
Alfredo Magallanes
Stefanie Perez
Susie Santilena
Jane Parathara
Steve Nikaido
Ryan Thiha
Roshanak Aflaki
Timeyin Dafeta
Mark Starr

LADWP's Project Team

Serge Haddad
Anthony Tew
Bob Sun
Rafael Villegas
Art Castro
Mario Acevedo
Delon Kwan
Simon Hsu
Julie Spacht
Christine Tran
Darline Troung
Jevon Lam
Kim Ohara
Greg Reed
Chris Repp
Austin Straus
Virginia Wei
Scott Hungerford
Anthony Nercessian
George Zordilla
Amy Lee Webb
Yoshi Tsunehara
Terry Nguyen
Stephanie Spicer



THE CONSULTANT TEAM WHO SUPPORTED THIS EFFORT

Carollo Engineers (Prime)

Gil Crozes
Inge Wiersema
Jacquelin Reed
Tom West
Matt Huang
Ryan Hejka
Sarah Deslauriers
Pavitra Rammohan
Bronwyn Kelly
Amy Martin
Elisa Garvey
Jackie Silber
Susan Gilbert
Lana Luburic
Silvia Backlund
Chris Hurlburt

EW Consulting

Eliza Jane Whitman
Rebecca Drayse

Kennedy/Jenks

Tim Chen

Geosyntec Consultants

Mark Hanna
Christopher Wessel
Curtis Fang

Stantec

Sarah Munger
Areeba Syed
Jim Stahl
Don Bassett

Katz & Associates

Karen Snyder
Lewis Michaelson
Camile Stephens

CDM Smith

Hampik Dekermenjian
Jennifer Thompson
Arthur Goh

CH2M now Jacobs

Judi Miller
William McMillin
Jagjit Kaur

Cordoba

Danielle Chupa
Jenny Morataya
Narbeh Issagholian

Kris Helm Consulting

Kris Helm

Baylis Group

Jack Baylis

Arcadis

Venu Kolli

DakeLuna

Miguel Luna
Glen Dake

Fehr & Peers

Jeremy Klop

M2 Resource Consulting

Karen Miller

John Robinson Consulting

John Robinson

Larry Walker & Associates

Tom Grovhoug

Paradigm Environmental

Dustin Bambic

SEITec

Shariar Eftekharzadeh

SGA

Stephen Groner

Tetra Tech

Ira Artz

The Morcos Group

Sherif Morcos



A TOKEN OF OUR APPRECIATION FOR THE ONE WATER LA STAKEHOLDER GROUP

**Thank
You!**



GROUP PHOTO





MEETING CLOSE