



**Welcome to the December 10  
Stakeholder Workshop!**



# WELCOME AND INTRODUCTIONS





# One Water LA Vision

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*One Water LA is a collaborative approach to develop an integrated framework for managing the City's watersheds, water resources, and water facilities in an environmentally, economically and socially beneficial manner.*



*One Water LA will lead to smarter land use practices, healthier watersheds, greater reliability of our water and wastewater systems, increased efficiency and operation of our utilities, enhanced livable communities, resilience against climate change, and protection of public health.*



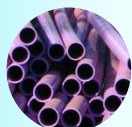


# Practically, One Water LA will . . .

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1. Support the Mayor's Goals to reduce imported water use to less than 50% by 2040.



2. Improve wastewater facilities to meet regulatory and recycled water needs.



3. Manage runoff to meet water quality requirements AND increase water supply.

4. Balance needs for water.





# AGENDA, GROUND RULES, OBJECTIVES





# Today's Workshop Agenda

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1. Introductions
2. Agenda Overview and Ground Rules
3. Today's Objectives
4. One Water LA Consultant Team
5. One Water LA Update
6. Department Updates: LAWA and LADOT
7. Phase 2 Stakeholder Involvement
8. BREAK
9. Existing and Future Conditions
10. Discussion Group Exercise
11. Next Steps



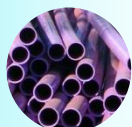


# We Commit To:

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1. Listening attentively and with an open mind.
2. Ensuring transparency in sharing information.
3. Respecting your ideas and perspectives.
4. Keeping good records of discussion and input.
5. Providing information in a timely manner (whether at the workshop or as a follow-up).





# What we expect from you:

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1. Contribute to make the group's time together productive.



2. Respect the ideas and perspective of others. Give everyone a chance to speak. Don't interrupt.



3. Listen attentively and with an open mind.

4. Maintain focus on the topic currently under discussion. Avoid repeating issues that have already been raised or recorded.



5. Consistent participation and engagement is critical. Commit to attend workshops, tours, and other sessions as often as possible.





# Today's Workshop Objectives

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1. Provide Update on One Water LA
2. Review Existing and Future Conditions
3. Identify Stakeholder Roles and Create Opportunities for Involvement
4. Answer Your Questions





# In Memory of Frank Wada (1953-2015)

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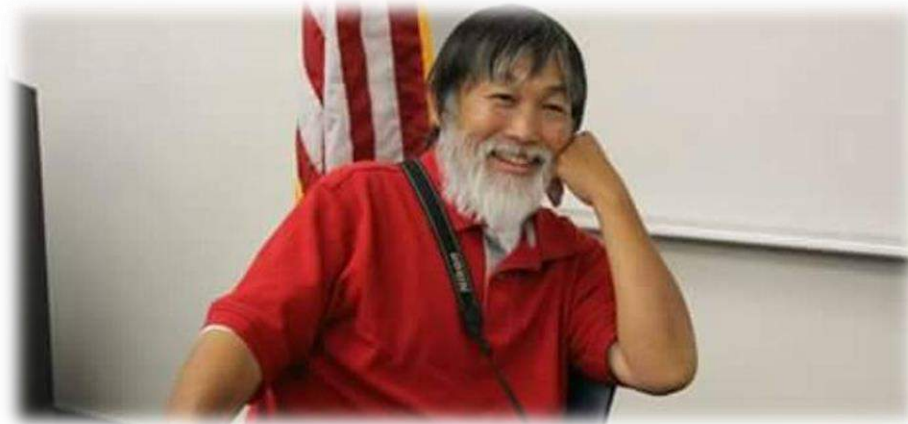
- Active member in the Lincoln Heights Neighborhood Council since its inception.



- One of the founding members of the Lincoln Heights Dollars for Scholars foundation.



- Often participated in the Water Integrated Resources Plan and One Water LA Stakeholder Workshops.





# One Water LA Staff Updates

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- Doug Walters, P.E., BCEE appointed Acting Chief Sustainability Officer for LA Sanitation



## Additions to One Water LA Group:



- Azya Jackson, P.E., hired as Civil Engineer Associate III
- Flor Burrola, hired as Civil Engineer Associate



# ONE WATER LA PHASE 2 CONSULTANT TEAM





# ONE WATER LA UPDATE





# Phase 1 Summary

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- Collaboratively developed One Water LA Vision, Objectives, and Guiding Principles

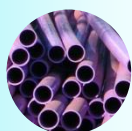


- Meetings/Collaboration:
  - 27 City meetings with individual departments and regional agencies
  - 3 Stakeholder Workshops
  - 4 Advisory Group Meetings
  - 5 Steering Committee Meetings
- Developed Initial Water Balance Tool





# City Departments and Regional Agencies



## Regional Agencies:

- Caltrans
- High Speed Rail
- LA County Flood Control District
- LA County Department of Public Works
- LA County Sanitation Districts
- LA Unified School District
- METRO
- Metropolitan Water District
- Southern California Association of Governments
- United States Army Corps of Engineers



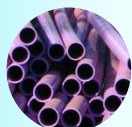


# Ongoing One Water LA Work

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- Steering Committee identified over 40 policies to better coordinate activities
- Partnered with Pepperdine University E2B Program – MBA Students developed marketing/communications plans
- Working on RW Use in Concrete Mixing
- Greywater and Onsite Treatment Preliminary Research/Studies
- Working with 13 City Departments and multiple regional agencies on integration opportunities and data sharing







# Key Activities in Phase 2



## Specific Tasks



## Ongoing Tasks



# One Water LA Phase 2 Schedule

Task	Task Description	2015					2016												2017											
		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Existing Flow Conditions				◆			◆					◆																	
2	Future Flows Conditions				◆			◆					◆																	
3	Existing Integration Opportunities							◆			◆		◆																	
4	Funding Strategies						◆			◆		◆																		
5	Integration Alternatives Evaluation								◆		◆		◆																	
6	Cost-Benefit Analysis							◆		◆		◆																		
7	Wastewater Facility Master Plans								◆				◆																	
8	Stormwater Runoff Facility Plans								◆				◆																	
9	Project Timelines											◆																		
10	Implementation Strategies											◆																		
11	Pilot Studies										◆		◆																	
12	Special Studies							◆		◆		◆																		
13	Policies and Ordinances								◆		◆		◆																	
14	Supporting Graphics																													
15	One Water LA 2040 Plan														◆		◆		◆											
16	Program EIR																								◆		◆		◆	
17	Stakeholder Activities				●			●			●			●			●		●											
18	Marketing Strategy & Outreach						◆		◆		◆																			
19	Project Management																													

◆	Draft TM
◆	Final Draft TM
◆	Final TM
●	Stakeholder Meeting

# Los Angeles World Airports Presentation



# LA Department of Transportation Presentation





# PHASE 2 STAKEHOLDER INVOLVEMENT



## Stakeholder Participation Approach





# Expanding Stakeholder Advisory Group



*Purpose: Provide advice to enhance stakeholder engagement and communication.*



## Current Members

- Carolyn Casavan
- David Nahai
- Jack Humphreville
- Ken Murray
- Melanie Winter
- Mike O’Gara
- Veronica Padilla



## Proposed Additional Members

- Business interests
- Academia





# Forming Four Special Topic Groups Where Your Input is Needed

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- *Meet 3 times in first half of 2016*
- *Provide progress report at stakeholder meetings*



## **Funding, Cost Benefit Analysis**

- New funding sources
- Input on B/C analysis



## **Outreach and Marketing**

- Provide input and ideas
- Recommend resources



## **Partnerships and Collaboration**

- Implementation ideas
- Leveraging existing efforts

## **Stormwater and Urban Runoff**

- Implementation ideas
- Integration opportunities
- Monitoring and maintenance



# 10 MINUTE BREAK



# EXISTING AND FUTURE CONDITIONS

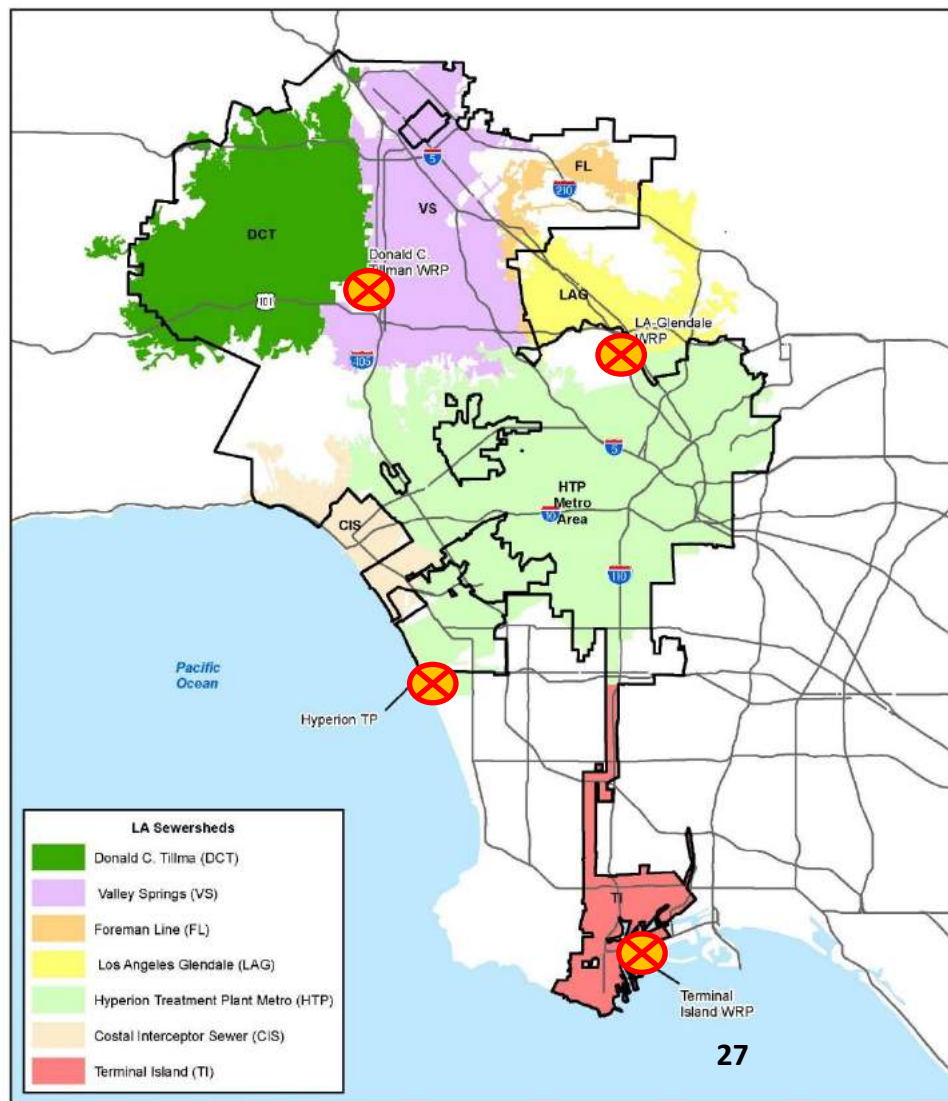
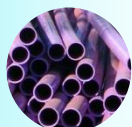




# Existing Conditions



- Water Supply
  - Local Groundwater
  - LA Aqueduct
  - MWD Imported water
- Wastewater:
  - 4 treatment plants
- Recycled Water
  - 3 reclamation plants
- Stormwater
  - Rainfall
  - Run-on
  - Irrigation







# Flow Balance Model Components



## Potable Water

### Supplies:

Local Groundwater  
LA Aqueduct  
Imported (MWD)

### Demands:

Indoor  
Outdoor



## Wastewater

### Treatment Plants:

Donald C. Tillman WRP  
LA-Glendale WRP  
Hyperion TP  
Terminal Island WRP

### Wastewater Flows:

City flows (indoor water)  
Industrial Discharges  
Contract Agencies  
Dry Weather Diversions  
Stormwater Infiltration

## Recycled Water

### Supplies:

Donald C. Tillman WRP  
LA-Glendale WRP  
Terminal Island WRP  
Hyperion TP (WBMWD)

### Demands:

Title 22 Customers  
Environmental Uses  
West Basin MWD  
Barriers

## Stormwater

### Supplies:

Rainfall  
Run-on  
Irrigation

### Outflows:

Natural GW Recharge  
BMPs GW Infiltration  
Evapotranspiration  
Stormdrain discharges  
(LA River, Creeks, Ocean)





# Flow Balance Model Components



## Potable Water

### Supplies:

Local Groundwater  
LA Aqueduct  
Imported (MWD)  
DPR (Future)  
Desal (Future)

### Demands:

Indoor  
Outdoor



## Wastewater

### Treatment Plants:

Donald C. Tillman WRP  
LA-Glendale WRP  
Hyperion TP  
Terminal Island WRP

### Wastewater Flows:

City flows (indoor water)  
Industrial Discharges  
Contract Agencies  
Dry Weather Diversions  
Stormwater Infiltration

## Recycled Water

### Supplies:

Donald C. Tillman WRP  
LA-Glendale WRP  
Terminal Island WRP  
Hyperion TP (WBMWD)  
Hyperion WRP (Future)  
New WRPs (Future)

### Demands:

Title 22 Customers  
Environmental Uses  
West Basin MWD  
Barriers  
IPR (Future)  
DPR (Future)

## Stormwater

### Supplies:

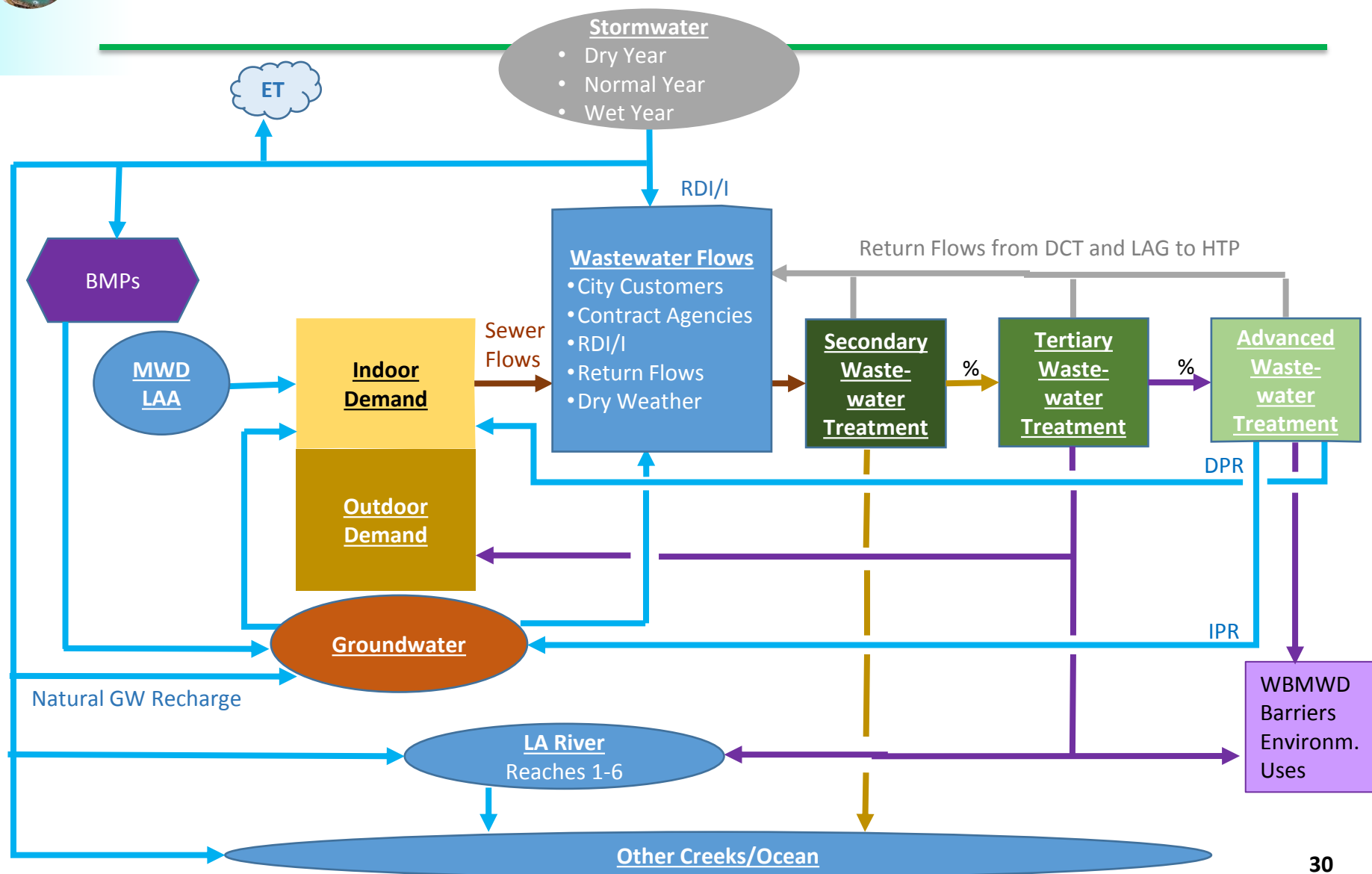
Rainfall  
Run-on  
Irrigation

### Outflows:

Natural GW Recharge  
BMPs GW Infiltration  
Evapotranspiration  
Stormdrain discharges  
(LA River, Creeks, Ocean)



# Simplified Mass Balance Flow Model





# Challenges to Optimize Water Flow Balance

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- Water Supply
- Wastewater flows



- Recycled Water
- Stormwater/Urban Runoff



- Climate Change Impacts
- Other Uncertainties



# DISCUSSION EXERCISE







# Question #1: Recycled Water



- Given the competing needs and uses for wastewater (recycled water, graywater, satellite treatment, etc.) as a resource along with its finite nature, do you have any suggestions or recommendations on how we should approach this dilemma?





## Question #2: Stormwater Capture

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Given the goal of reducing dependence on imported water, improving water quality and flood management, capturing and using stormwater as an increased local water source is both desirable and challenging.



- From what you know already about stormwater, what do you think are the best ideas out there to maximize its potential?



- What do you perceive to be the challenges to implementing significantly greater stormwater capture?



# NEXT STEPS



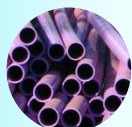


## Next Steps

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- Special topic group discussions (Jan – June)
- Expand advisory group
- Next stakeholder workshop (March 2016)
  - Integration of projects
  - Climate change impacts
  - Alternatives development
- Email questions and comments to [OneWaterLA@lacity.org](mailto:OneWaterLA@lacity.org).







**THANK YOU!**

**[OneWaterLA@lacity.org](mailto:OneWaterLA@lacity.org)**



**Innovation • Integration • Inclusion**