


**Regional Recycled Water
Program Update**

Municipal Water District of Orange County
March 6, 2019



Deven Upadhyay – Metropolitan Water District

PROGRAM OVERVIEW

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PROGRAM CONCEPT

- Collaboration between Metropolitan and the Sanitation Districts of Los Angeles County
- Development of a new regional water source
- Up to 150 mgd (168,000 AFY)
- Deliveries to Member Agencies
- Recharge and store in groundwater basins
- Increase regional storage reserves and reliability

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METROPOLITAN & LACSD

- Decade of discussions on water recycling
 - 2010-12 Pilot studies on treatability of effluent
 - 2015 Discussions on a potential partnership
- November 2015 – Board authorized
 - Agreement with LA County Sanitation District No. 2 for development of potential regional recycled water program
 - Recycled water demonstration project
 - Feasibility and financing studies

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METROPOLITAN & LACSD

- November 2016 – Feasibility Study Report
 - RRWP at 150 mgd is technically feasible
 - Identified challenges and uncertainties
 - Recommended additional conceptual planning studies
 - Total Capital Costs: \$2.7 Billion (2016 dollars)
 - Unit Cost of Yield: \$1,610 per acre-foot (2016 dollars)

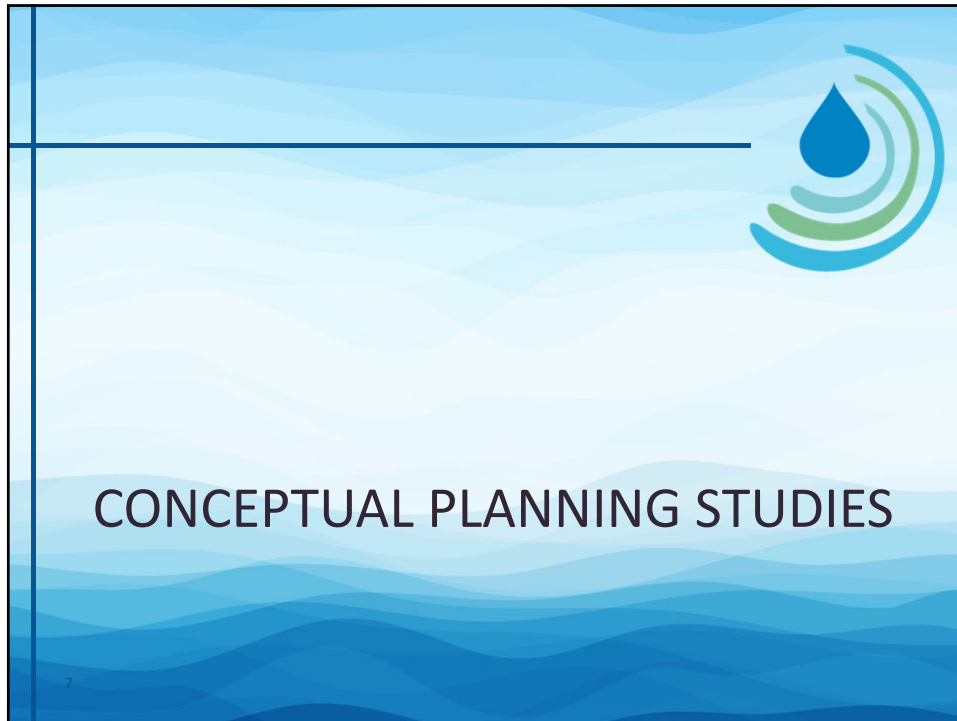


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AWT LOCATION AT JWPCP




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MAJOR CONCLUSIONS

- Phased implementation is recommended
 - Initial AWT capacity of 100 mgd
 - First phase backbone conveyance system
 - Flexibility for future DPR
- Cost-effective approach
 - Keeps unit costs of yield competitive with full-scale program
 - Reduces initial capital and O&M costs of the program



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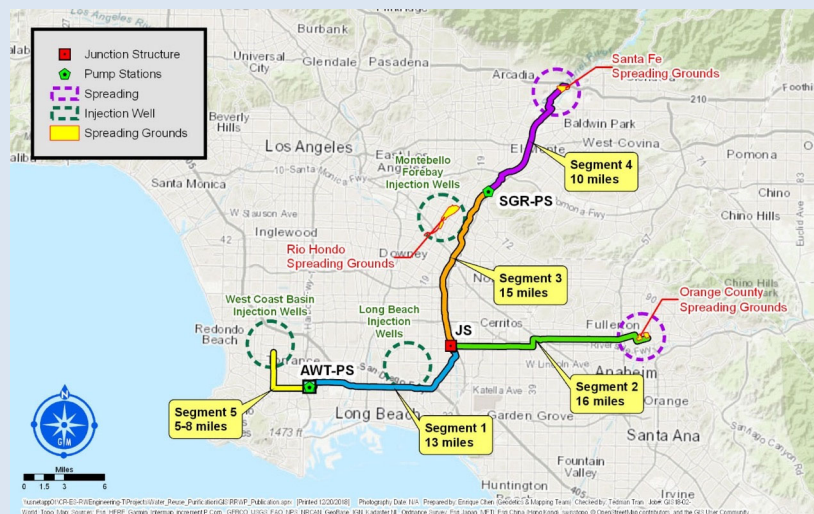
BENEFITS OF PHASING

- Annual yield at 100 mgd closely matches demands
- Initial production of 100 mgd increases certainty of wastewater flow availability
- Future DPR opportunities include Weymouth WTP
- Regulatory complexity reduced
- Unit production costs are competitive with full-scale implementation
- Impact on overall MWD costs reduced from full-scale implementation

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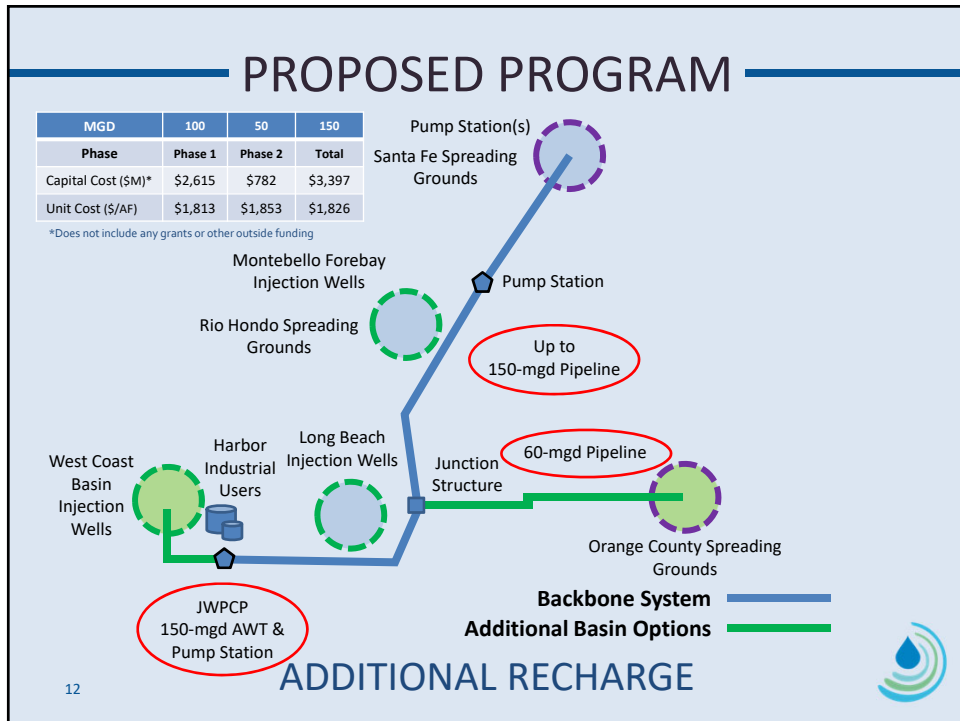
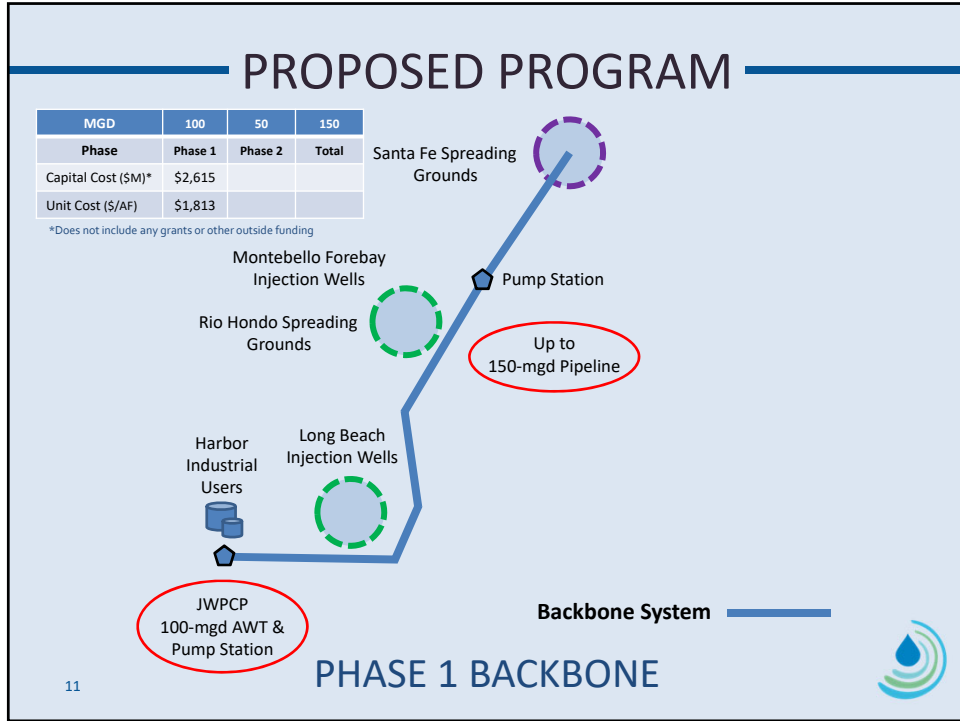


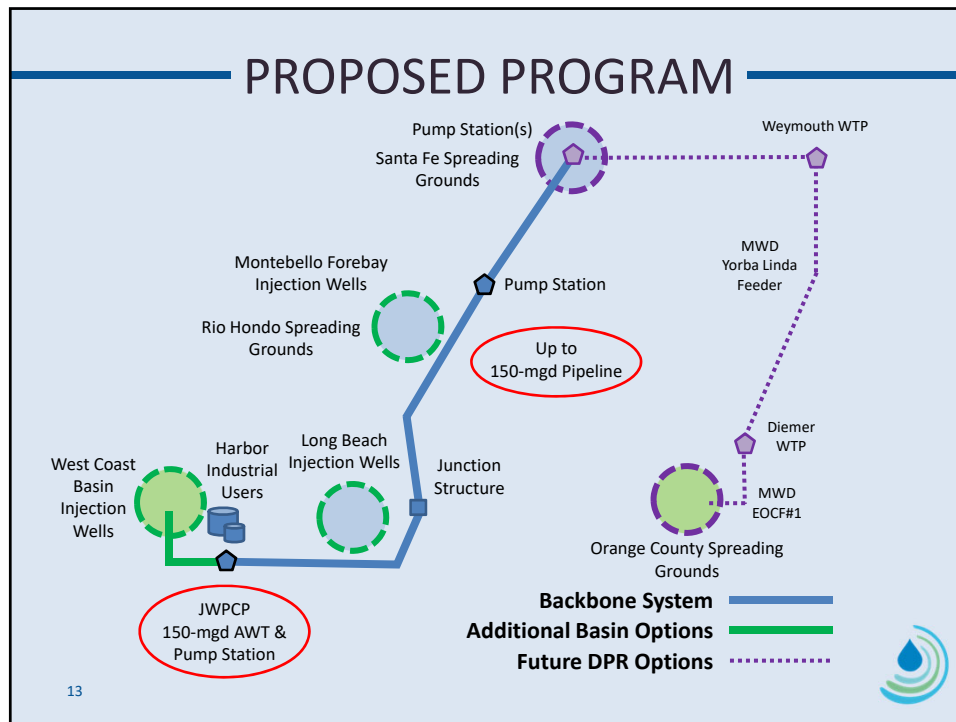
CONVEYANCE OVERVIEW



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- ## ADDITIONAL COMMENTS
- Further refinement of DPR options will continue during environmental planning
 - Full range of options to be included in a Programmatic Environmental Impact Report (PEIR) and a Programmatic Environmental Impact Statement (PEIS)
 - Preliminary cost estimates have been updated from 2016 to 2018 dollars
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PROGRAM COSTS

Recommended Program

	Phase 1 Backbone (2018 Dollars)	Full Program ^{1,2} (2018 Dollars)
Production Capacity (mgd)	100	150
Capital Program Cost ³	\$2.6 billion	\$3.4 billion
Program Unit Cost of Yield (\$/AF)	\$1,813	\$1,826

¹Adds Orange County and West Basin deliveries to Initial Backbone system

²Does not include costs for DPR to Weymouth or Diemer WTPs

³Costs include 25% for engineering services and 35% overall program contingency

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METROPOLITAN'S HISTORIC POLICY PROGRESSION

- Started as an importer of water
 - Develop and sell imported water
 - Local agencies plan for their own reliability
- Developed a policy to become regional planner
 - Help the region plan for reliable future
- Implemented regional programs to help pay for conservation and local supply development
 - Local agencies develop projects and MWD would help pay

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NOW CONSIDERING DEVELOPING NEW A LOCAL SUPPLY

- Scale and distribution of benefits warrants consideration
- Cost is higher than imported supplies, but less than many local supply alternatives
- Many institutional items to consider (examples):
 - Expansion of Metropolitan's regional role
 - Interaction with groundwater agencies
 - Splitting of costs
 - Operations and coordination with other supplies

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NEXT STEPS

- Post Final Conceptual Planning Studies Report (Mid-February 2019)
- Presentation to E&O Committee (March 2019 Meeting)
- Hold Board Workshops (Spring-Summer 2019)
- Request Board consideration to proceed with environmental process and engineering support (Fall 2019)
- Continue Demonstration Plant testing for regulatory approval and AWT optimization

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WORKSHOP QUESTIONS

- What additional information is needed before proceeding to CEQA and predesign activities?
- What level of commitment from recipients is needed before proceeding?
- How important is retaining the ability to incorporate future DPR opportunities?
- How should the program costs be recovered?
- Is the level of regional collaboration with Metropolitan sufficient to enable program implementation?
- Is early delivery of water a program goal?

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Update on CA WaterFix

- California WaterFix
 - Governor Newsom's February 12 State of the State
 - Key issues being reviewed and analyzed
- Delta Conveyance Design and Construction Authority and Delta Conveyance Finance Authority

Governor Newsom's State of the State

- I do not support the Water Fix as currently configured.
- Meaning, I do not support the twin tunnels. But we can build on the important work that's already been done. That's why I do support a single tunnel.
- The status quo is not an option.
- We need to protect our water supply from earthquakes and rising sea levels, preserve delta fisheries, and meet the needs of cities and farms.
- Conveyance and efficiency. And recycling projects like we're seeing in Southern California's Met Water District, expanding floodplains in the Central Valley, groundwater recharge, like farmers are doing in Fresno County. We need a portfolio approach to building water infrastructure and meeting long-term demand.
- Our first task is to cross the finish line on real agreements to save the Sacramento-San Joaquin Bay Delta.
- We must get this done – for the resilience of our mighty rivers, the stability of our agriculture sector, and the millions who depend on this water every day.



Key Issues Under Review

- Facility
 - State or State/Federal
 - Capacity
- Environmental Documentation Needs
 - CEQA
 - NEPA
- Permits
 - Existing
 - Endangered Species Act Permits
 - Federal
 - State
 - Pending
- Delta Stewardship Consistency Determination
- Financing Approach

Discussion / Q&A



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