



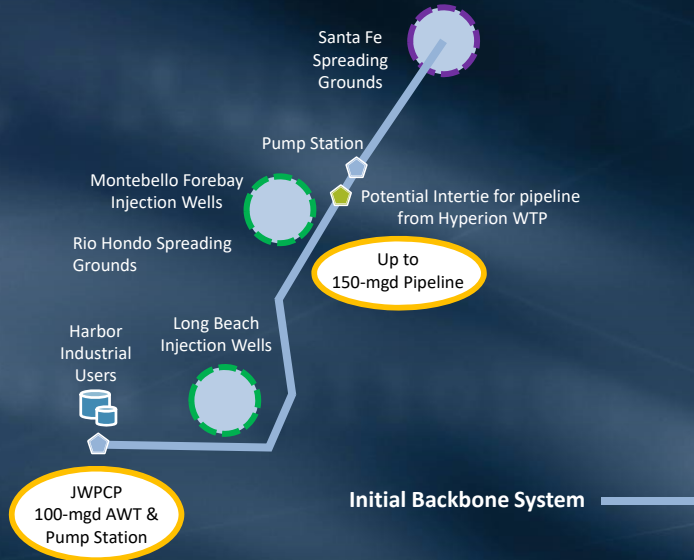
Regional Recycled Water Program

Municipal Water District of Orange County
Board Meeting
November 4, 2020

Agenda for Today

1. Discussion of recent White Paper (#2)
2. Outline of Proposed November Board Actions

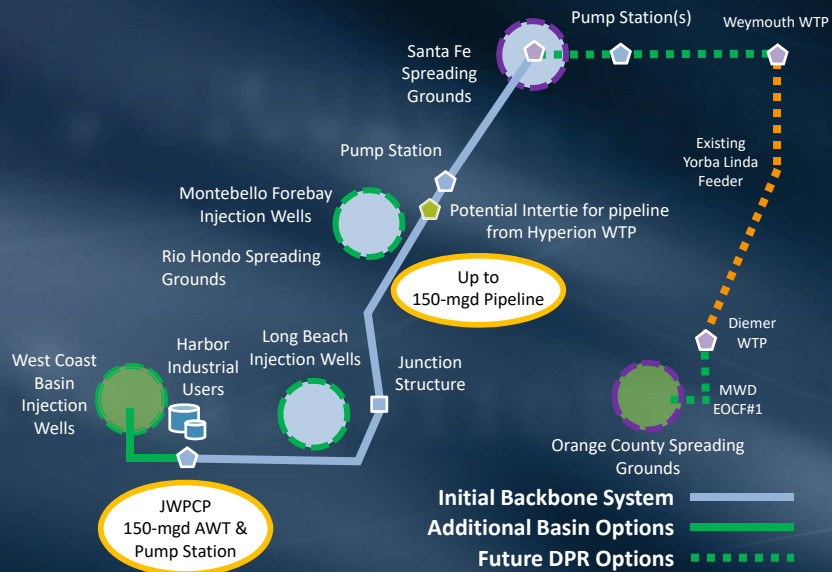
Phase 1: Backbone System



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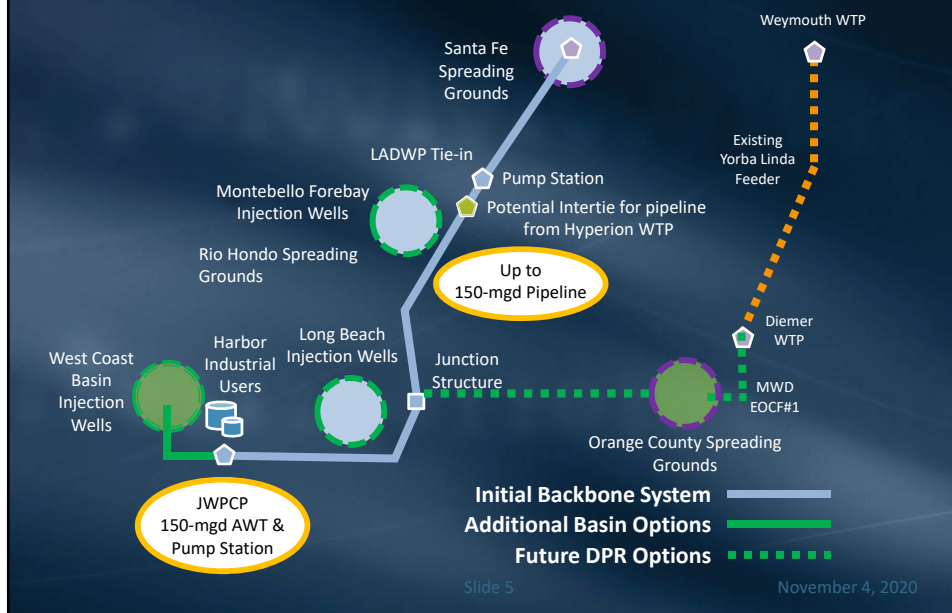
DPR Option: Northern Route



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DPR Option: Southern Route



Program Cost (2018 costs)

Cost Description	Backbone System (2018 Dollars)	Full Program (2018 Dollars)
Production Capacity (mgd)	100	150
Capital Program Cost ¹	\$2.6 billion	\$3.4 billion
Annual O&M Cost (\$/year)	\$69 million	\$129 million
Program Unit Cost of Yield		
Capital Unit Cost	\$1,181/AF	\$1,054/AF
<u>O&M Unit Cost</u>	<u>\$631/AF</u>	<u>\$772/AF</u>
Total Program Unit Cost	\$1,813/AF	\$1,826/AF

1. Costs are from the Conceptual Planning Studies Report (2018 dollars). Costs will be updated during the PEIR phase, if approved by the Board. Does not include cost of DPR

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White Paper #1 & Workshop No. 1

- Discussed multiple potential approaches to program implementation
 - Approach 1: Traditional
 - Approach 2: Accelerated Construction
 - Approach 3: Accelerated Water Delivery
- Outlined potential for DPR applications
 - Raw water augmentation at Metropolitan's treatment plants
 - Regulations in development
- White Paper No. 2 – Planning, Financial Considerations, and Agreements

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Overview of White Paper #2

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White Paper #2: Key Questions



What kind of institutional arrangements or agreements would be required?

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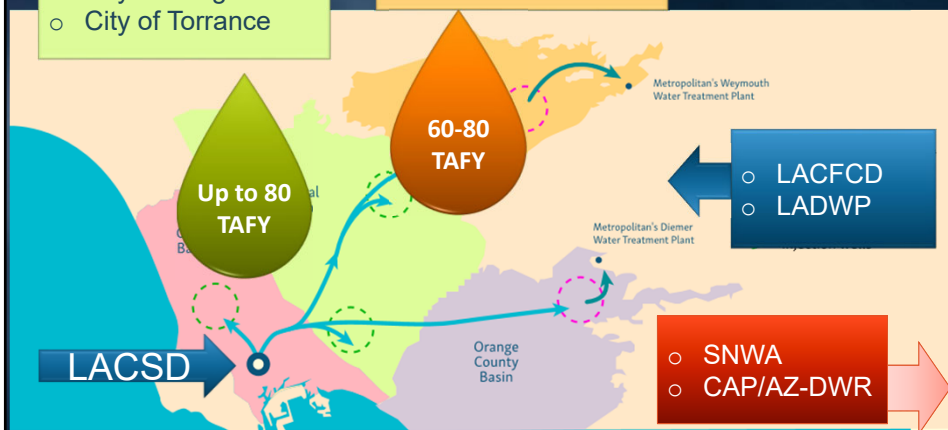
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Collaboration and Funding

LOIs and MOUs developed

- WRD
- City of Long Beach
- City of Torrance

- MSG Watermaster
- Three Valleys MWD
- USGVMWD



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Collaboration and Funding

More than \$ 2 million in Grants Awarded to Date

Program	Amount
USBR Title XVI Reuse Research Grant	<ul style="list-style-type: none"> • Awarded \$750,000 to study MBR pathogen removal
California Water Recycling Funding Program (WRFP) State Prop 1 /68	<ul style="list-style-type: none"> • Awarded \$1M for Demonstration Plant • Awarded \$300,000 for four groundwater basin planning studies

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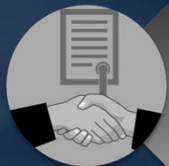
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Collaboration and Funding

Potential Future Grants and Loans

Program	Type	Amount
USBR Title XVI	Grant	Up to \$20M for future construction
California Water Recycling Funding Program (WRFP) State Prop 1 /68	Grant	Up to \$5M for construction
USEPA Water Infrastructure Finance and Innovation Act (WIFIA) program	Loan	49% of eligible costs up to \$20M
California Clean Water State Revolving Fund (CWSRF)	Loan	Up to 50% of eligible costs

White Paper #2: Key Questions



What kind of institutional arrangements or agreements would be required?

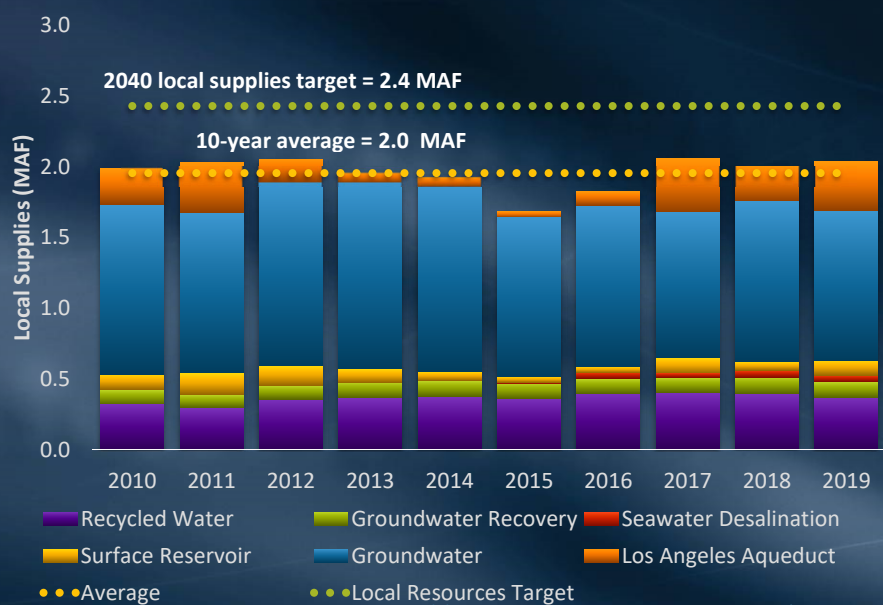


How does the RRWP fit into Metropolitan's regional resource planning?

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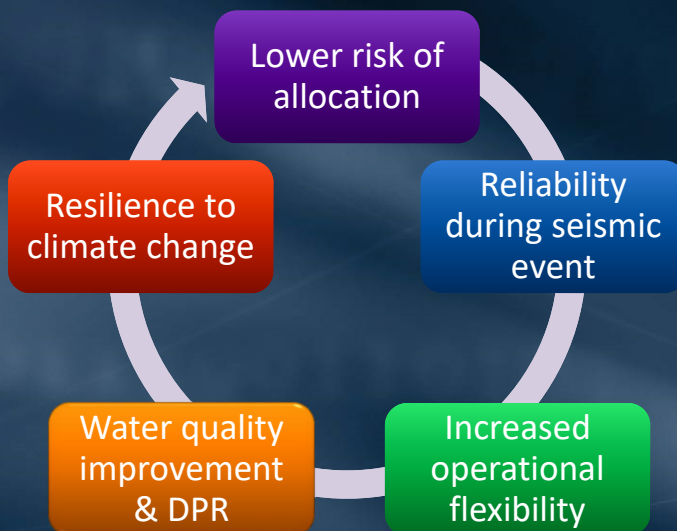
Progress in Local Supply Development



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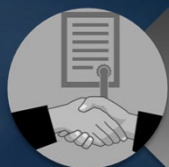
A Selection of Benefits to the Region from Implementing the RRWP



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White Paper #2: Key Questions



What kind of institutional arrangements or agreements would be required?



How does the RRWP fit into Metropolitan's regional resource planning?



How could the Program's costs be recovered by Metropolitan?

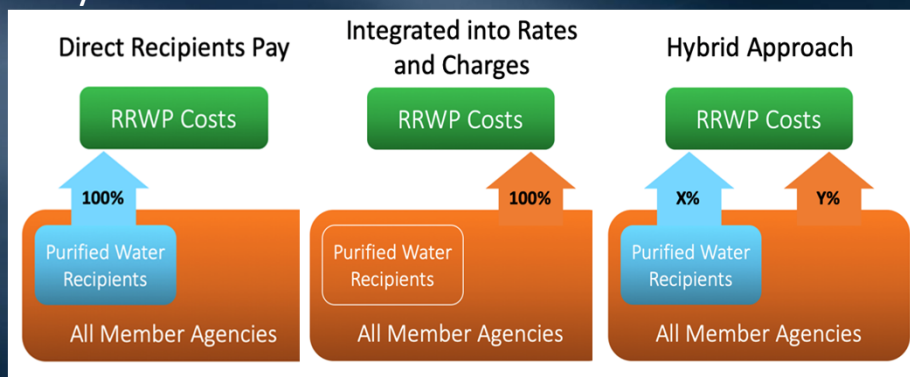
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Potential Cost Recovery Approaches

Overview

- Preliminary evaluation in the context of Metropolitan's organizational structure and systems



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Potential Cost Recovery Approaches

Summary of Significant Factors

Factor	Direct Recipients Pay 100%	Integrated Approach	Hybrid Approach
Cost impact to Direct Recipients for Same Service	Significant increase in cost to direct recipients	No significant increase in cost because cost recovery is through current rate structure	The cost impact is unclear and depends on the hybrid selected
Accounts for regional benefits	No	Yes	Depends upon how hybrid approach is implemented
Firm commitments mandatory	Yes	Yes	Yes
Reasonable	No	Yes	Unlikely

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Outline of Proposed November Board Actions

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Proposed November Board Action

July 2019	October 2020	November 2020
<p>DONE</p> <p>Workshop #1: Implementation and DPR Considerations</p> <p>White Paper #1</p>	<p>DONE</p> <p>Workshop #2: Planning, Agreements and Financial Considerations RRWP Information</p> <p>Letters of Intent White Paper #2</p>	<p>Board Action to start CEQA Amend LACSD Agreement Approve SNWA Agreement Amend NWRI Agreement</p> <p>Board Letter</p>

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Proposed November Board Actions

Board Action 1

- Authorize staff to commence Environmental Planning phase for RRWP

Board Action 2

- Amend existing LACSD Agreement
- Provide \$4.4M support for the Environmental Planning phase
- Site prep
- Study basin retrofits

Board Action 3

- Amend existing NWRI Agreement
- Provide continued support for Demo Plant testing program

Board Action 4

- New SNWA Agreement
- Provide \$6M support for Environmental Planning phase

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Regional Recycled Water
 Advanced Purification Center

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[HOW IT WORKS](#)
[PROCESS](#)
[BENEFITS](#)
[STRATEGY](#)
[MILESTONES](#)
[RESOURCES](#)
[PARTNERSHIP](#)


Regional Recycled Water
 Advanced Purification Center

A NEW SOURCE OF WATER FOR SOUTHERN CALIFORNIA
 Water is too precious to use just once. So the Metropolitan Water District of Southern California is making a major investment in a potential water recycling project that will reuse water currently sent to the ocean.

www.mwdh2o.com/RRWP

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Thank you for the discussion today!

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