



Regional Recycled Water Program Update

Engineering and Operations Committee

Item 6a

June 10, 2019

Outline

- Program Background
- Demonstration Plant
- Upcoming Activities
 - White Papers
 - Board Workshops
 - Potential Board Action

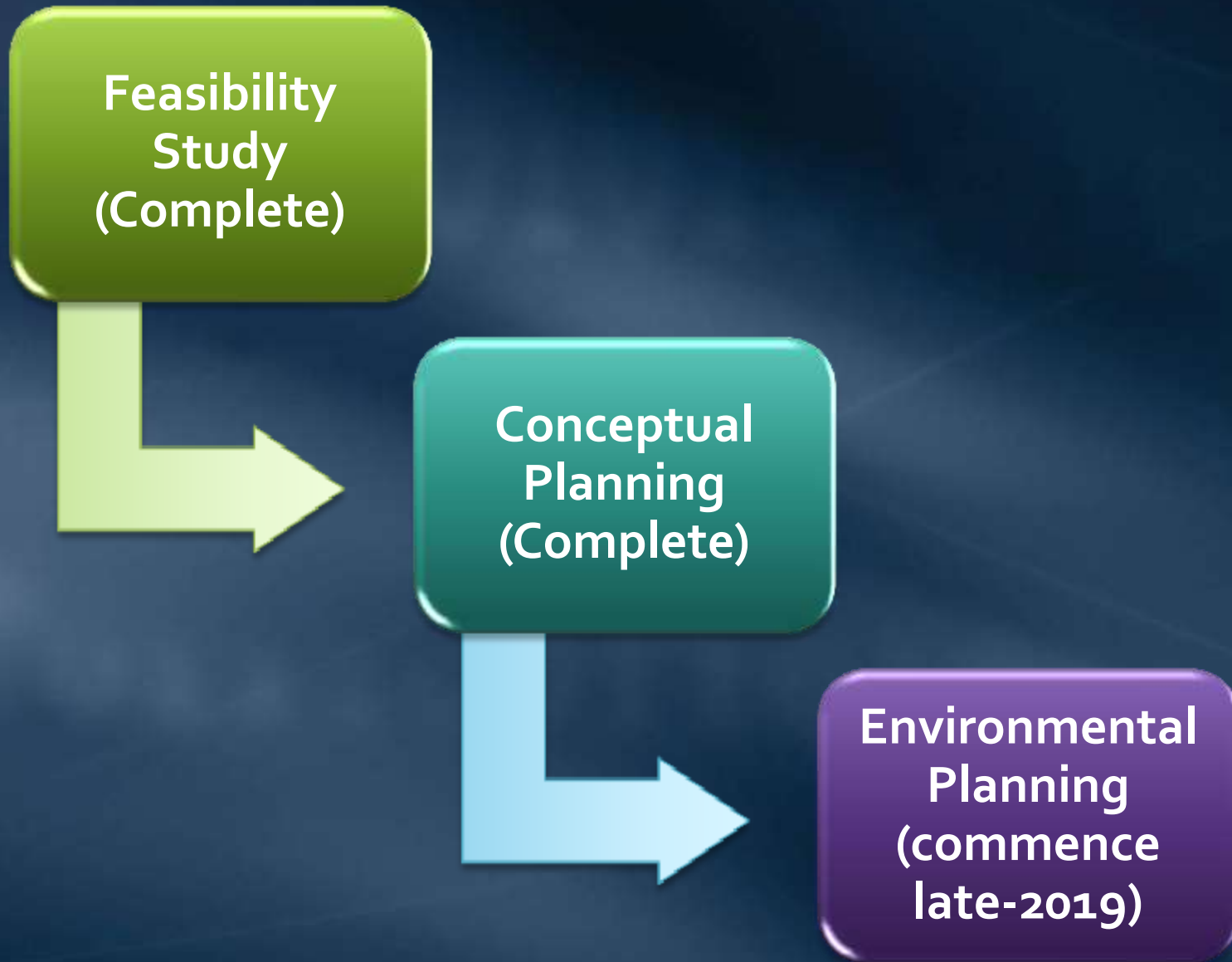
Program Concept

- 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
 - Groundwater replenishment
 - Industrial consumption
 - Future direct potable reuse applications

Metropolitan & LACSD

- Decade of discussions on water recycling
 - 2010-12 Pilot studies on treatability of JWPCP effluent
- 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 phasing studies

Three-Step Planning Process

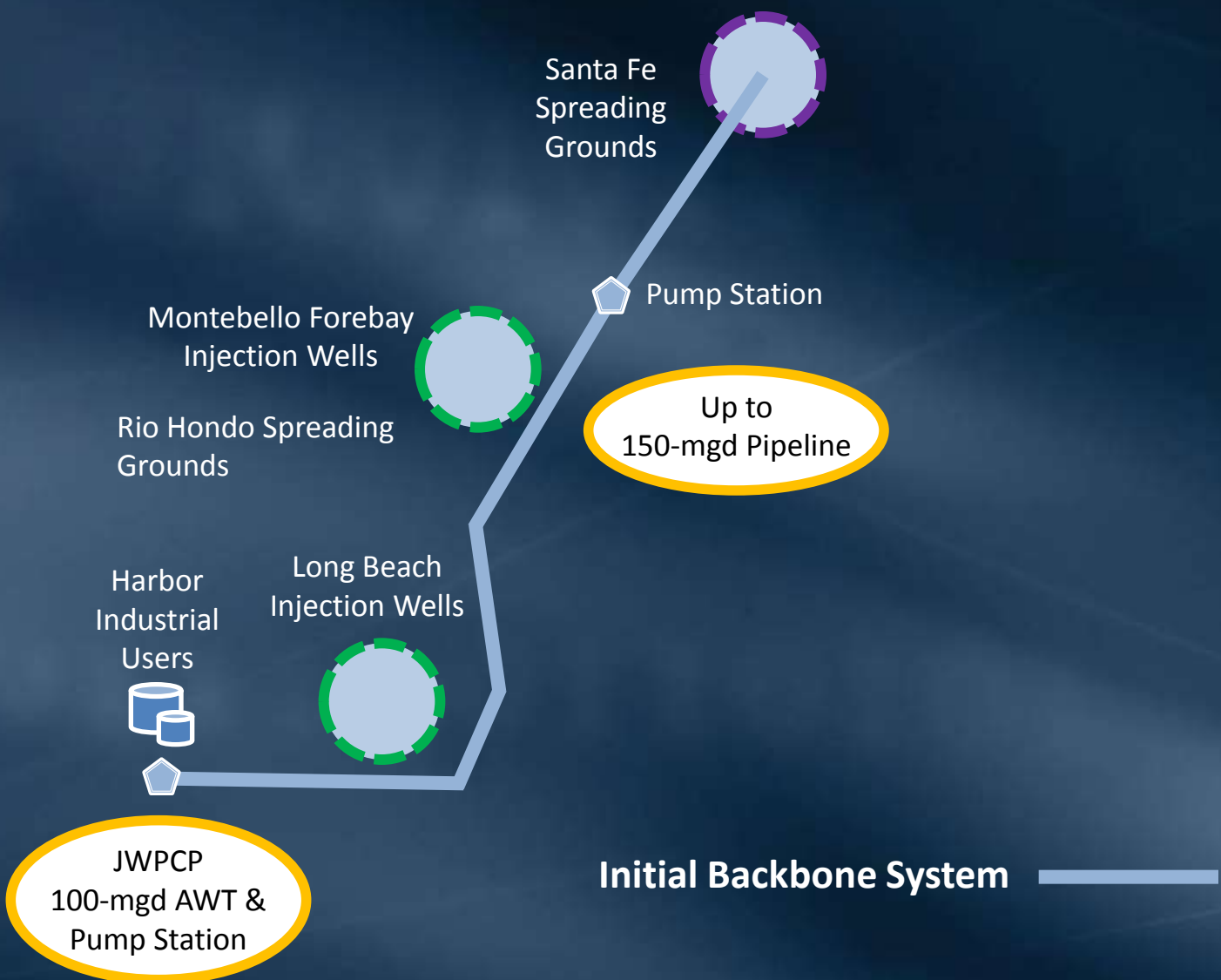


Conceptual Planning Studies

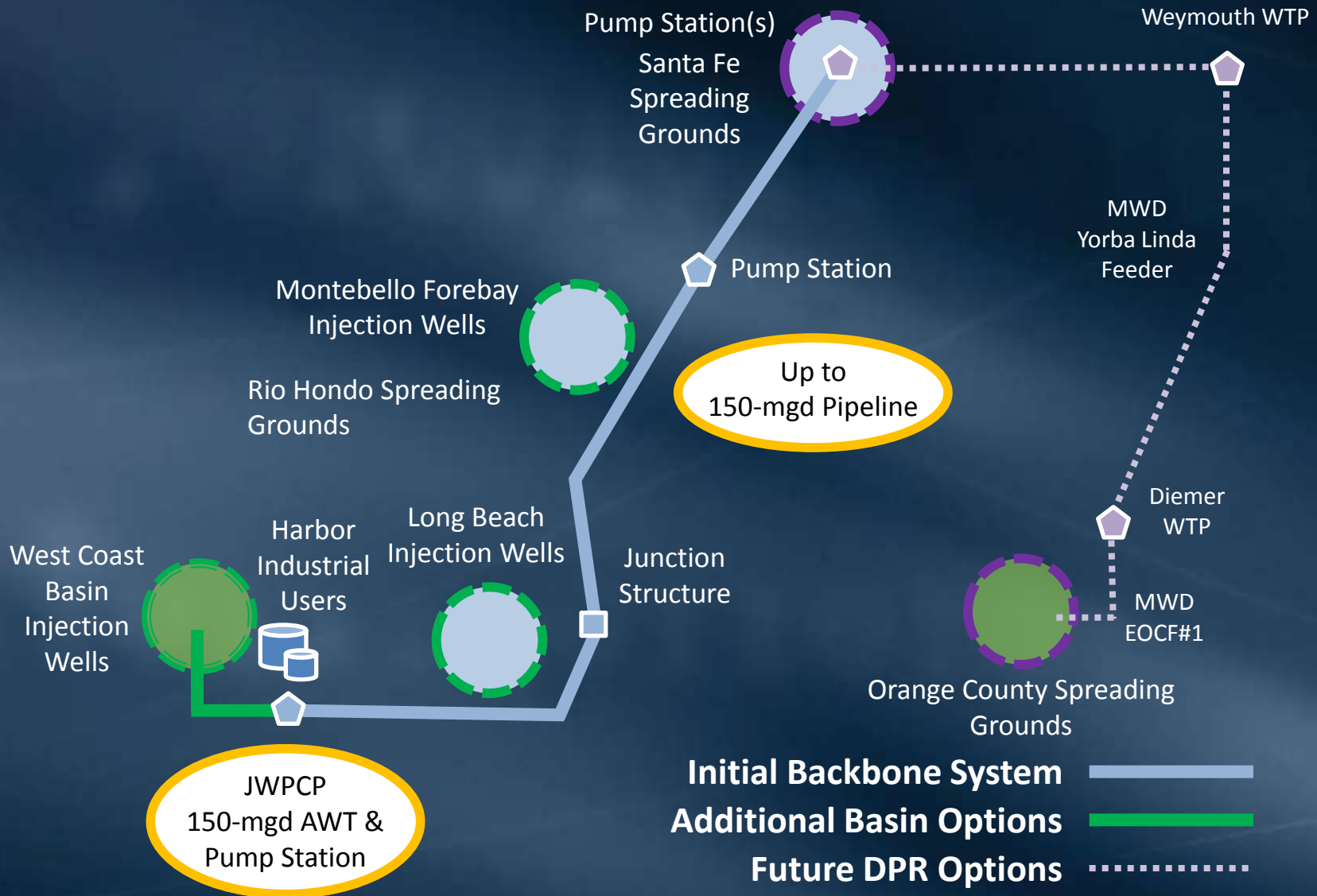
Major Conclusions

- Phased implementation is recommended
 - 100 MGD first phase
 - Construct backbone conveyance system within first phase of program (capacity up to 150 MGD)
 - Provide flexibility for future conditions
- Include potential for future Direct Potable Reuse (DPR) applications within overall program
 - Focus on raw water augmentation at existing treatment plants
 - Potential regulations by 2023
- Programmatic environmental document

Phase 1: Backbone System



Phase 2: DPR Option at Weymouth WTP



Demonstration Plant

Advanced Water Treatment at JWPCP



Demonstration Plant Construction

- Capital Budget: \$17 million
- Construction Contract: \$13.85 million
- Construction status: 98% complete
- Commence operation: August 2019



Remaining Construction Activities

- Obtain final operational permits
- Replace deficient chemical feed pumps and piping
- Install weather covers on chemical feed pumps
- Conduct final contract-required commissioning



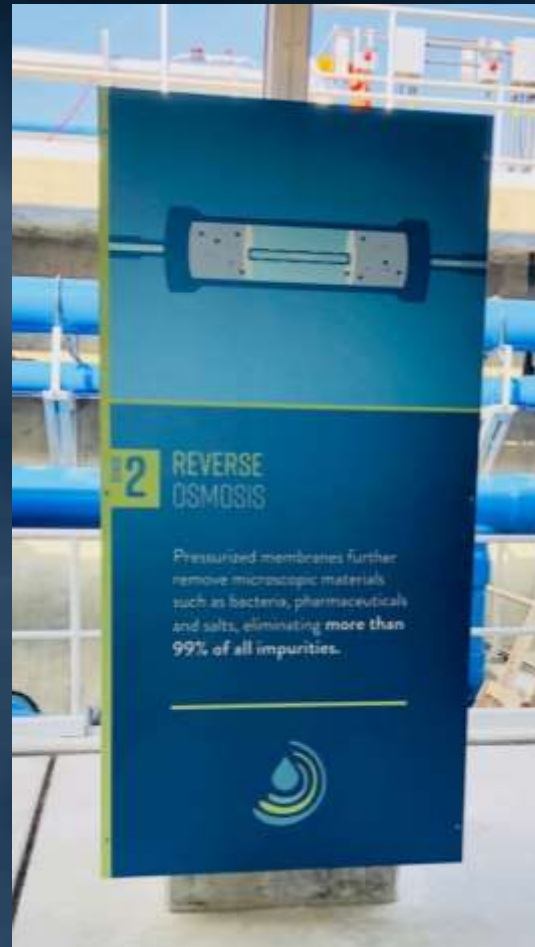
Chemical Feed Pump Enclosures



Learning Center



Exhibits



Tours



Employees



Member agencies



Key stakeholders

Upcoming Activities

Upcoming Activities

- Commence Phase 1 of Demonstration Plant testing (August)
- Continue Stakeholder engagement
- Issue White Papers (July and September)
- Conduct Board Workshops
 - July/August: Approach to Implementation
 - September/October: Agreements and Financial Considerations
- Board Action on environmental planning process (Winter 2019/Spring 2020)

Preliminary Board Workshop Goals

- Provide sufficient information for consideration of a Board action, potentially consisting of:
 - Commencing CEQA process
 - Beginning preliminary engineering
 - Refining rights of way
- Define approach to cost recovery
- Develop consensus on integration of program into CIP budget cycles
- Discuss alternatives for early delivery of purified water

White Paper No. 1

Program Implementation and Delivery

- Environmental Planning Process
- Program implementation options
 - Traditional approach
 - Accelerated path to construction
 - Accelerated path to make early deliveries of water
- Scopes of work and budget estimates for potential board action
- Benefits and risks of schedule acceleration
- Direct Potable Reuse opportunities

White Paper No. 2

Agreements and Financial Considerations

- Implementation agreements
- Delivery commitments
- Potential partners
- Debt financing
- Other sources of funds
- Cost recovery from Member Agencies

Metropolitan Recycled Water Website



INTRODUCTION 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

