

California WaterFix Update

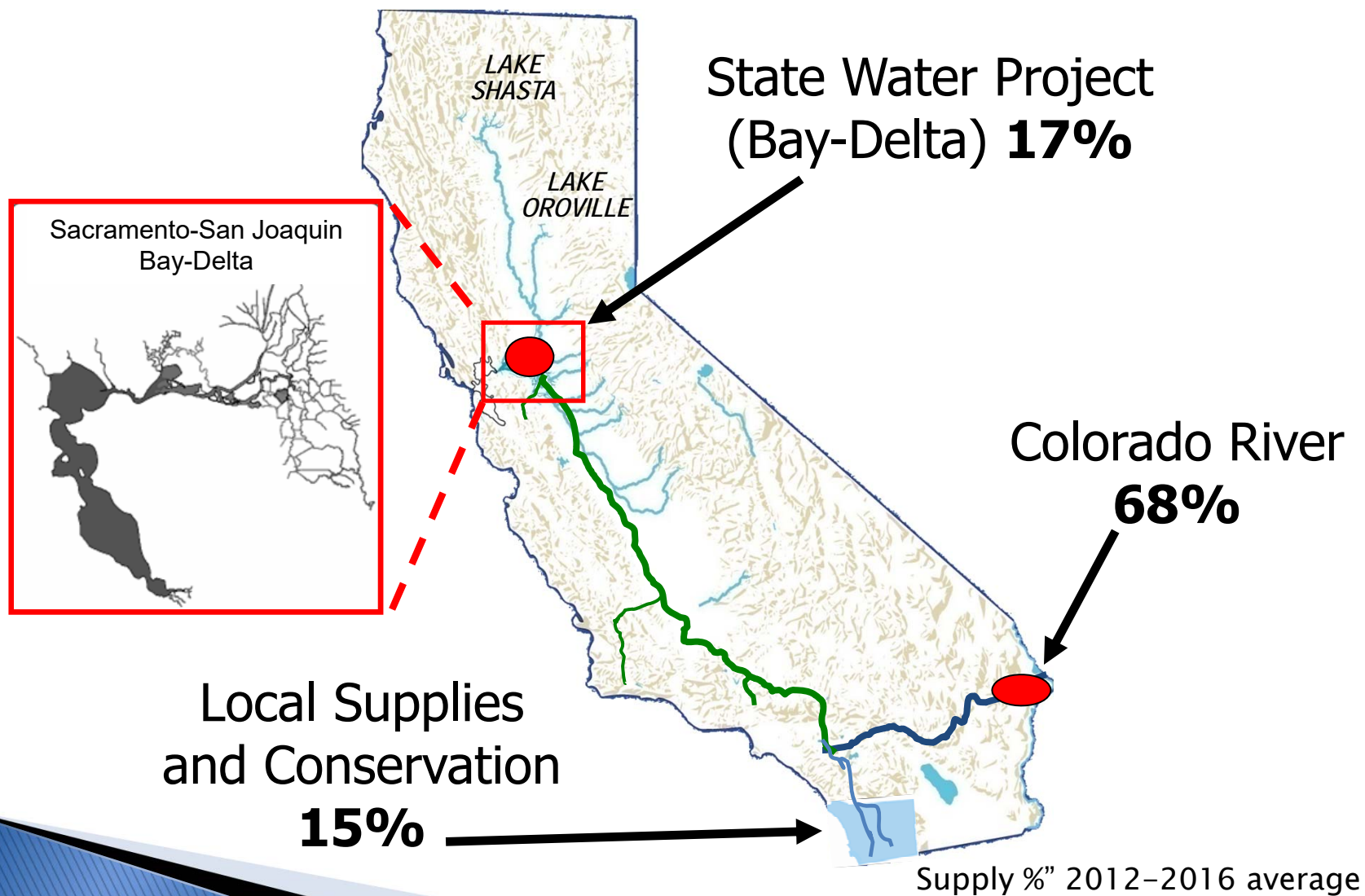
MWD White Paper Review: Physical Infrastructure

Imported Water Committee
July 27, 2017

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Bay-Delta's Relevance to Water Authority



Unanswered Questions From Last Review

How much will the project cost?

How much water will San Diego County receive?

What portion of the costs will San Diego be expected to pay?



What other agencies will commit to pay for the project?

How will San Diego County ratepayers be protected from paying an unfair share?

WaterFix Infrastructure

North Delta

- Three new intakes
- Short tunnels
- Intermediate forebay

Twin Tunnels

- 150 feet below surface
- Two- 40 feet diameter
- 30 miles
- 9,000 cfs

South Delta

- Clifton Court
- Old River Gate

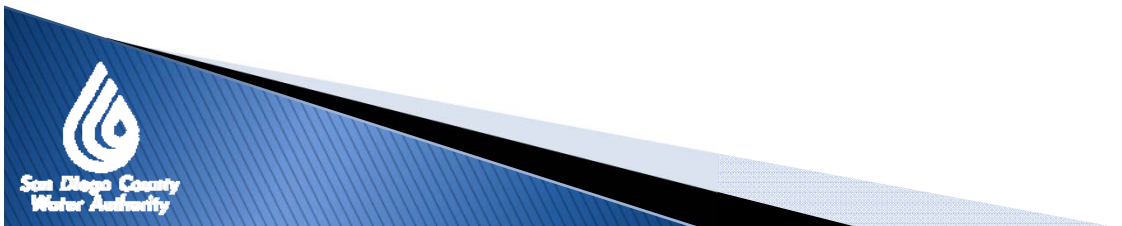


Source: MWD

Construction Risks

- ▶ Limited Geotechnical Assessments
 - Environmental issues
 - Property access denials

- ▶ Subsurface Conditions
 - Variability of soils (clay, sand, silt)
 - Groundwater
 - Boulders/Rocks



Risk Management

- ▶ Safety and Risk Management Group
 - Risks affecting scope, schedule or budget
 - Relating to design, construction or operations

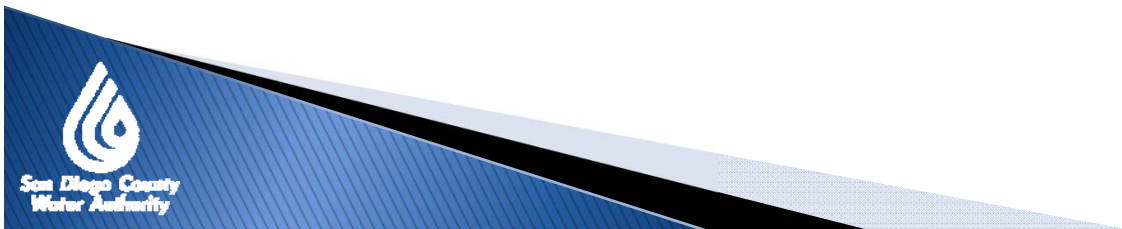


Cost Estimates

MWD Whitepaper

- ▶ Program estimate \$15.74B
 - Program Management, construction management and engineering – \$1.91B
 - Construction – \$9.50B
 - Land Acquisition – \$0.15B
 - Contingency – \$3.38B (36% of Construction)
 - Environmental Mitigation – \$0.80B

All costs in 2014 dollars



Cost Escalation

- ▶ Program estimate \$15.74B (2014 dollars)
- ▶ Construction mid-point – 2027
- ▶ Industry standard escalation – 2.5 percent
- ▶ Therefore, budget would need to be ~ \$22 billion to cover costs.
- ▶ Delays due to escalation alone would be ~ \$40 million per month



Project Implementation Structure



Project Implementation

- ▶ Structure
- ▶ Processes
 - Streamlined approval processes
 - Cost
 - Schedule
 - Operation
 - Permits
 - Well defined dispute resolution processes
 - Technical Review Workgroup (internal)
 - Dispute Process for contractor(s)
- ▶ People

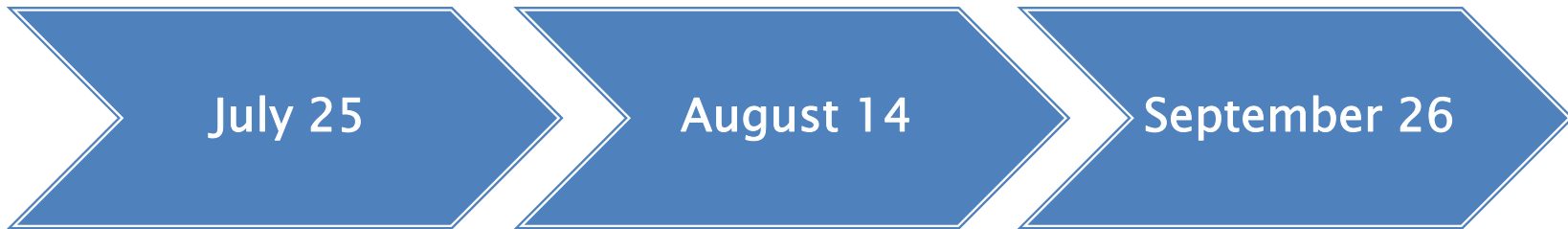


Water Authority's Major Concerns

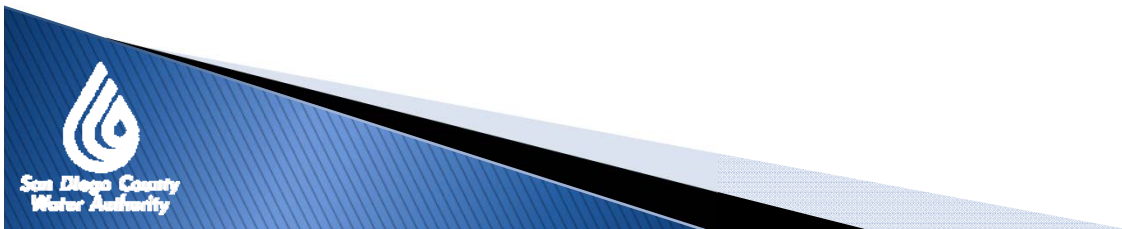
- ▶ Identification and tracking of construction risks during design
- ▶ Accurate budgeting for anticipated project costs
- ▶ Effective overall risk management
- ▶ Strong dispute/ Issue resolution processes



Next Steps at MWD



- Operations whitepaper presented at special committee on Bay-Delta
- Finance/cost allocation presented at WPS Committee
- Board Workshop
- Action



Questions?