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

Local Supplies and Conservation 15%

State Water Project (Bay-Delta) 17%

Colorado River 68%

Supply %” 2012–2016 average
Unanswered Questions From Last Review

How much will the project cost?

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

How much water will San Diego County receive?

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

Design and Construct Authority

- State Department of Water Resources
- Joint Powers Authority (Public Agency)
- Program Director
  - Finance & Accounting
  - Public Education
  - Internal Audit
  - Program Manager
  - Legal Counsel
  - Safety & Risk Management
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

July 25
- Operations whitepaper presented at special committee on Bay-Delta

August 14
- Finance/cost allocation presented at WPS Committee

September 26
- Board Workshop
- Action
Questions?