

Engineering, Operations, & Technology Committee Colorado River Aqueduct Operations

ltem 6a May 12, 2025 Item 6a Colorado River Aqueduct Operations

Subject

Colorado River Aqueduct Operations

Purpose

Overview of Colorado River Aqueduct Operations and Challenges

Desert Section Overview





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Item # 6a Slide 3

May 12, 2025

Desert Section Organization

The Desert Section comprises 132 employees across 5 facility locations. Area of responsibility from the Intake Pump Plant to Mile Marker 167.68.





Aqueduct Maintenance



High Voltage Operations and Maintenance

Diverse Operations

The challenges of operating a series system with individual component facilities, each having their own priorities and obstacles.



Village Drinking Water Operations and Water Quality Testing

Adaptability

Flexible and adaptable teams shift priorities daily to ensure each facility is operable. Time lost to travel and mobilization is a constant challenge inherent to Desert logistics.



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May 12, 2025

Engineering, Operations, & Technology Committee

Item # 6a Slide 6

Emergency Response

Emergency response poses a challenge as you never know where in the service area a problem will arise. Maintaining a large stock of renewal parts and components is vital to rapid response. Storing heavy equipment in strategic locations minimizes response time.





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CRA Shutdown

Extensive planning and coordination is required to facilitate an entire CRA Shutdown once a year and accomplish all critical tasks within a short window of time.



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Delivery Line Mortar Repair



Tunnel Cleaning Machine



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Item # 6a Slide 8

May 12, 2025

Challenges



Aging Infrastructure





Main Pump Installation 1939



Main Pump Removal 2024

May 12, 2025

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Item # 6a Slide 10

System Refurbishment

As equipment ages, the scope of work and technical expertise required to perform corrective maintenance increases. "Quick Fixes" become large scale repairs that require additional downtime.









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May 12, 2025

Engineering, Operations, & Technology Committee

Item # 6a Slide 12

