



Engineering, Operations, & Technology Committee

Diamond Valley Lake and Garvey Reservoir Data Acquisition Systems Upgrades

Item 7-6

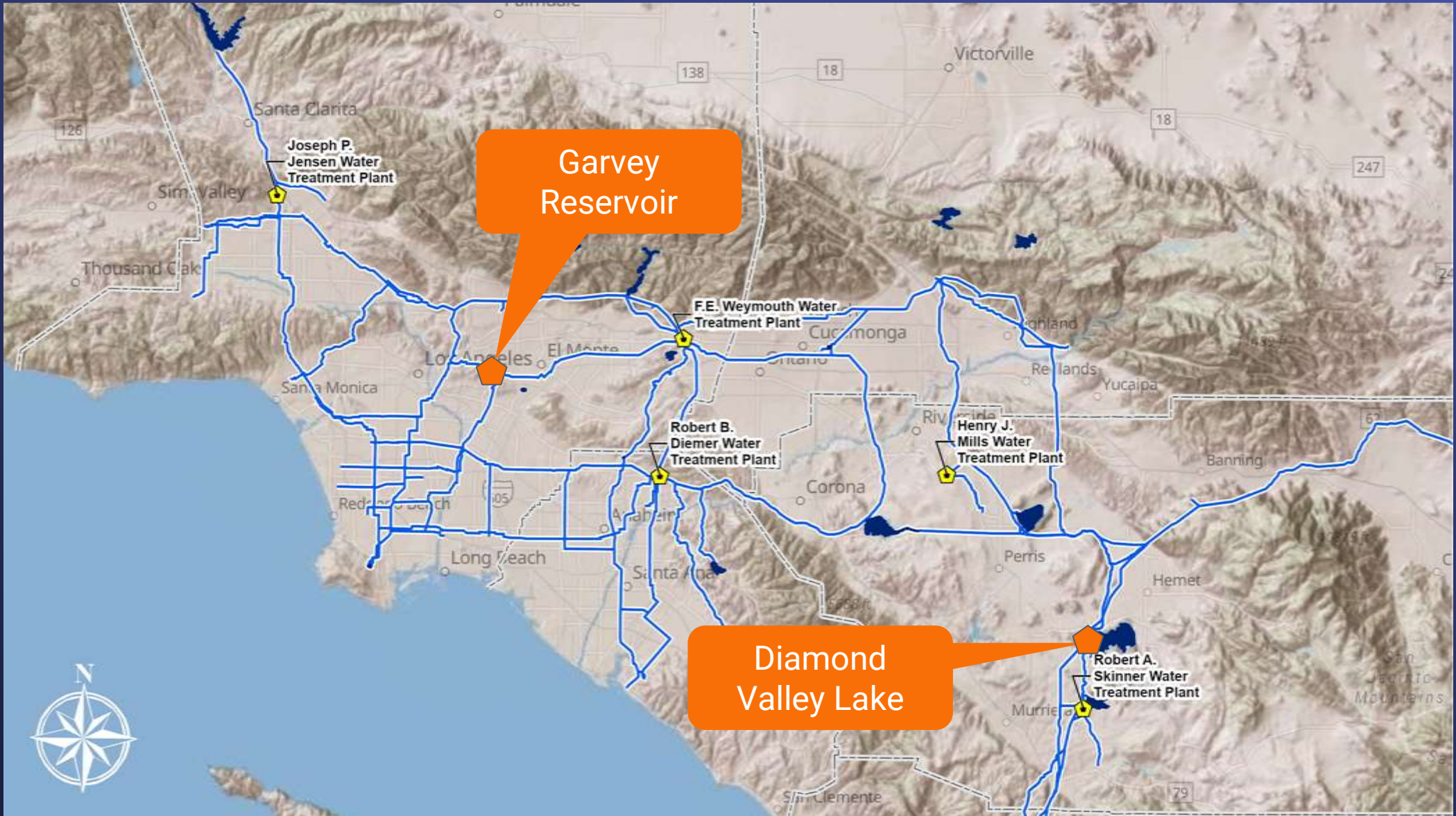
April 10, 2023

Automated Data
Acquisition
System Upgrades
Diamond Valley
Lake and Garvey
Reservoir

Current Action

- Authorize an agreement with Canary Systems California, LLC, for an amount not to exceed \$1.95 million to upgrade the data acquisition systems at Diamond Valley Lake and Garvey Reservoir

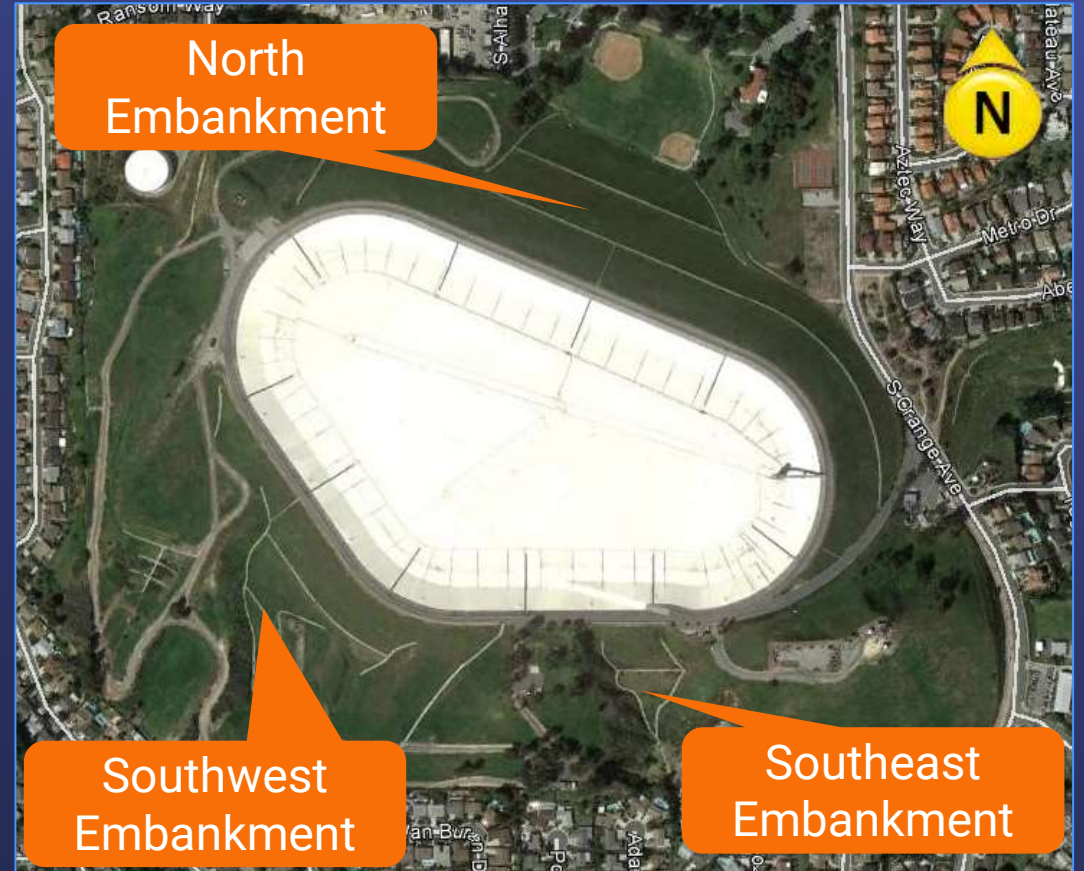
Distribution System



Background – Diamond Valley Lake

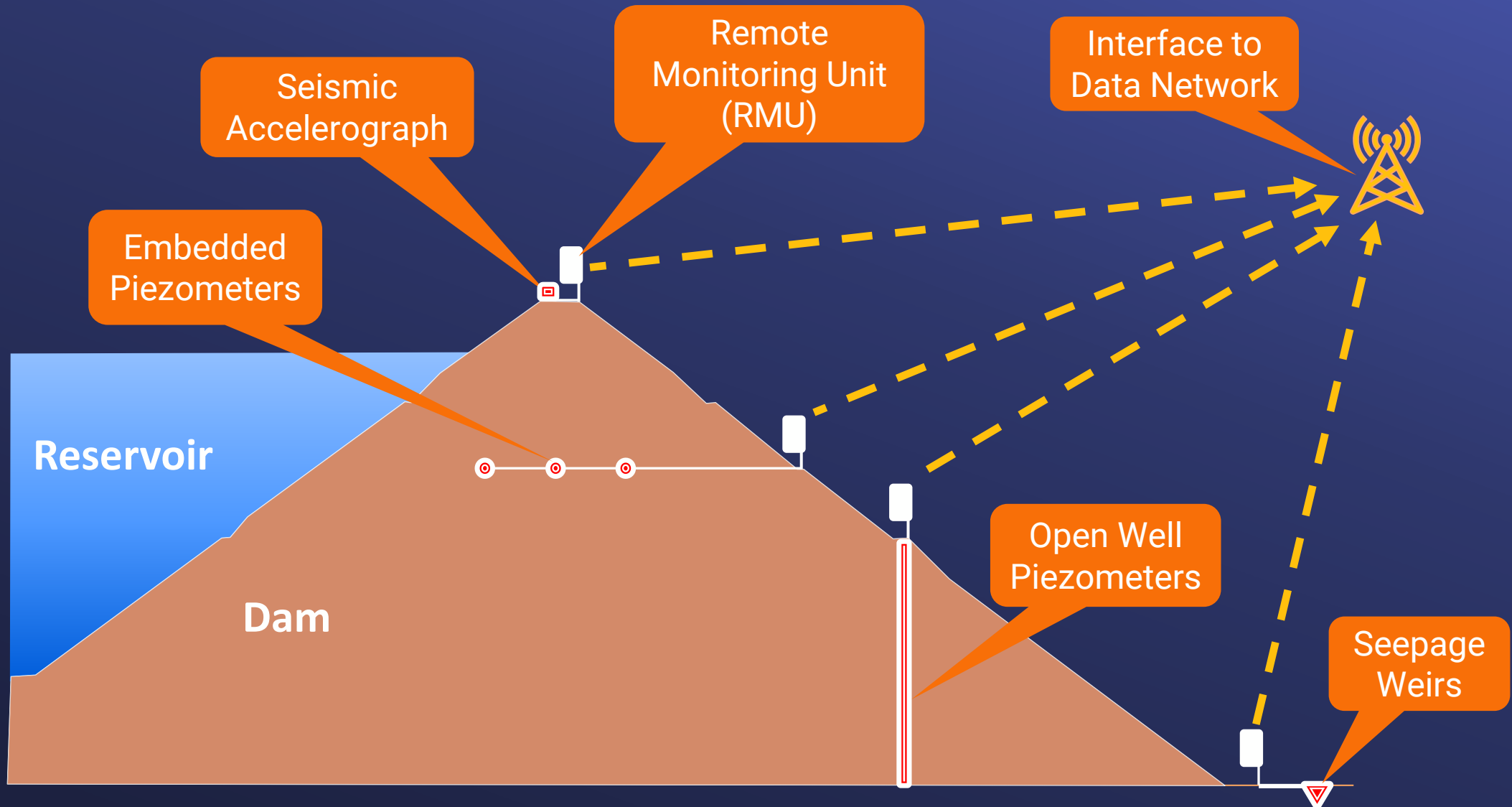


Diamond Valley Lake



Garvey Reservoir

Background – Automated Data Acquisition System



Diamond Valley Lake and Garvey Reservoir Data Acquisition System Upgrades

Background

- Data from dam safety instrumentation:
 - Necessary to monitor dam performance
 - Included in mandatory California Division of Safety of Dams (DSOD) reports
- Systems are reaching the end of their service life:
 - Hardware parts are obsolete
 - Software is no longer supported



DVL Typical RMU



Garvey Typical RMU

Diamond Valley
Lake and Garvey
Reservoir
Data Acquisition
System Upgrades

Alternatives Considered

- Traditional design-bid-build
 - Requires significant coordination
 - Potential for hardware/software compatibility issues
- Selected alternative
 - Utilize industry expert to design system and provide hardware and software
 - Utilize Metropolitan forces for installation of new equipment

Diamond Valley
Lake and Garvey
Reservoir
Data Acquisition
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Canary Systems – New Agreement

- Selected under RFQ 1318
- Scope of Work:
 - Field evaluations and design workshops
 - Development of design criteria
 - Furnishing new system hardware
 - System programming, commissioning and testing
 - Real-time data management and dashboarding
- Not to exceed amount: \$1,950,000
- Small Business Enterprise (SBE) participation level: 100%

Diamond Valley
Lake and Garvey
Reservoir
Data Acquisition
System Upgrades

Metropolitan Scope of Work

- Geotechnical, structural, and electrical design support
- Technical reviews
- Removal of old equipment
- Installation of new equipment
- Acceptance testing
- Project management

Allocation of Funds

Automated Data Acquisition System Upgrades at DVL and Garvey Reservoir

Metropolitan Labor

Final Design	\$ 392,000
Owners Costs (Proj. Mgmt., Contract Admin., Envir. Support)	275,000
Force Construction	500,000
Submittals Review, Tech. Support, Record Dwgs.	107,000

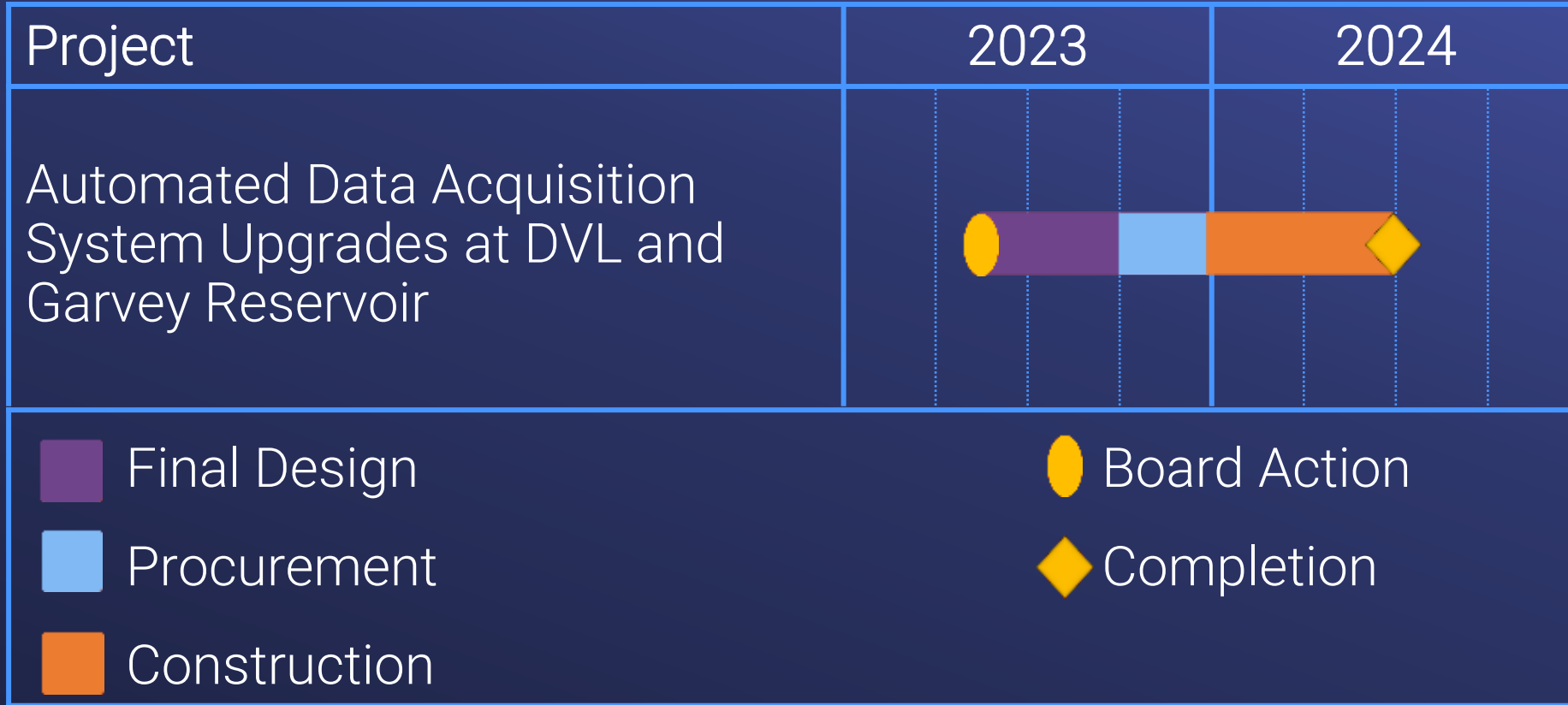
Professional/Technical Services

Canary Systems California, LLC	1,950,000
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Remaining Budget	256,000
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Total	\$ 3,480,000
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Project Schedule



Board Options

- Option #1
 - Authorize an agreement with Canary Systems California, LLC, for an amount not to exceed \$1.95 million to upgrade the data acquisition systems at Diamond Valley Lake and Garvey Reservoir.
- Option #2
 - Do not proceed with the project at this time.

Staff Recommendation

- Option #1

