ROLL CALL & QUORUM: Roll was called (see Attachment A), which resulted in 23 eligible representatives. This equates to 92% of the current participation percentage being in attendance, which is greater than the 50% needed to have a quorum of the Reservoir Committee.

ATTENDANCE: See Attachment B.

CALL TO ORDER: Chairman Bettner called the meeting to order at 9:32 AM followed by the Pledge of Allegiance.

AGENDA APPROVAL: It was moved by Traynham and seconded by Vanderwaal to approve the March 16, 2018 Sites Reservoir Committee Agenda. The motion was approved unanimously.

MEETING MINUTES APPROVAL:

Approval of February 15, 2018 meeting minutes was moved by Headrick and seconded by Hartwig with no changes. The motion was approved unanimously.

INTRODUCTIONS

PERIOD FOR PUBLIC COMMENT:

Mike Salmon (WSP USA) provided flyers for a P3 Water Summit on April 3-4, 2018.

1. **Chairpersons’ Report:** Bettner & Headrick
   1.1 Introductory remarks
   1.2 Follow-up presentation by John Bischoff (AECOM) regarding Turnkey as an alternative delivery method

John Bischoff presented Turnkey procurements as an alternative delivery method (See Attachment C). In summary, Turnkey may be a viable alternative if project financing is needed. However, the use of this method may be limited due to the project’s significant permitting requirements, need to acquire property in a timely manner, and the design must be well-developed at the time of bid to minimize contractor...
contingencies and total project cost; which will limit the Owner’s ability to provide input after award.

2. **Manager’s Report:**

   Watson

2.1 Informational discussion of project status for the month of February 2018. *(Attachment 2-1)*

   Staff has been advancing procedures and processes for reporting finances and continues to work on procurements.

   The WSIP appeal was submitted on February 23, 2018.

   A risk workshop was held in early February and the Risk Management Work Group is currently reviewing an unmitigated risk report put together by AECOM.

2.2 Report on February 26, 2018 Sites Project Authority Board of Directors meeting *(Attachment 2-2)*

   The meeting provided a legislative update of activities in Washington DC and testimony was provided to the House Subcommittee regarding the benefits of low-interest financing.

   On the state level, staff attended Capitol Day and spoke with representatives of the state’s legislature.

   The Agenda for the upcoming Sites Project Authority meeting will be posted on the website.

   The Reservoir Committee was informed the Authority approved a contract with Flechert and Company to provide financial auditing services.

2.3 Discussion and possible direction to staff regarding the Phase 1 Completion Schedule *(Attachment 2-3)*

   After significant discussion of the schedule, budget, retention of a financial advisor, and the $60/acre-ft. in the Phase 1 agreement, it was motioned by Headrick and seconded by Vanderwaal to approve the time extension from end of July 2018 to the end of December 2018. The motion was approved unanimously.

   Further, direction was given to staff to evaluate the implications of increasing the current Phase 1 revenue; which is based on $48.50/acre-ft of Class 1 water.

2.4 Report on Regulatory Agency coordination activities

   Staff has previously met with the National Marine Fisheries Service (NMFS) and the California Department of Fish and Wildlife (CDFW). NMFS, staff will prepare an outline for a biological assessment work plan.
3. **Ad Hoc Finance & Economics Work Group:** Traynham

3.1 Review Payment of Claims and Treasurer’s Report *(Attachment 3-1)* and consider approval to the Authority Board

Traynham provided an overview and review of the Treasurer’s Report as of February 28, 2017. It was motioned by Vanderwaal and seconded by Cheng to approve the Payment of Claims and Treasurer’s Report. The motion was approved unanimously.

3.2 Consider approval of a recommendation to the Sites Project Authority Board of Directors to award the Municipal Financial Advisory services contract to Montague DeRose and Associates, LLC.

Representatives from the Reservoir Committee and Authority’s Board conducted interviews of firms that had submitted proposals, and selected Montague DeRose and Associates, LLC, to take on the municipal financial advisory role, for recommendation to the authority. It was motioned by Cheng and seconded by Hartwig to approve the recommendation to the Authority. The motion was approved unanimously.

4. **Ad Hoc Document Review Work Group:** Bettner/Thomson

4.1 Report on Prop 1 WSIP application status and activities.

No action was taken.

The work group reviewed the appeal, which was submitted on February 23, 2018. The appeal included a 20-page summary with attachments. The document submitted to the California Water Commission (CWC) addressed all comments, including questions on anadromous fish, refuges, and temperature benefits. The CWC staff has not corresponded with the Authority since submittal of the appeal. Staff expects to hear back prior to April 20, 2018, when Water Commission staff will release their decision. Commissioners will ultimately assign funding to the projects, not staff, at the upcoming Water Commission meetings on May 1 - 3, 2018.

5. **Ad Hoc Reservoir Operations Work Group:** Kunde & Ruiz

Report on activities to define the Phase 1 rebalancing process as an input to the Phase 2 participation agreements.

No Action was taken. A meeting is scheduled for the following week to continue discussions on the rebalancing process.

6. **Ad Hoc Water Facilities Work Group:** Watson on behalf of Arita

6.1 Discussion and possible direction to staff regarding the proposed Phase 2 procurement plan. *(Presentation)*

No Action was taken.

The procurement plan that was presented (see Attachment D), builds from the December Reservoir Committee meeting, where members provided input regarding their values; which was presented at the January meeting. The February meeting
included a presentation summarizing different delivery methods. The current plan consists of 9 “services lines” that will be needed in Phase 2 as well as the need to retain specialized services. An updated timeline was also provided.

Headrick suggested that a panel of experts with large capital infrastructure projects be assembled that can advise on the packaging and provide lessons learned. Vanderwaal’s concern is that several participants in the Reservoir Committee don’t have experience managing such projects. He would like to hear from owners of projects (not just consultants).

7. **Ad Hoc Siting Work Group:**

   Azevedo

   No Report

8. **Ad Hoc Risk Management Work Group:**

   Vanderwaal

   8.1 Report on progress to develop risk-adjusted project cost and schedule

   No action was taken.

   An initial draft risk assessment has been reviewed to obtain input on potential mitigation strategies that could be used to manage the key risks. Based on this input, an updated report will be provided to the work group.

9. **Recap & Adjourn**

   Bettner/Headrick

   9.1 Agenda topics for next meeting?

   ▪ A “deep dive” on lessons learned by owner’s who have completed large capital infrastructure projects.

   ▪ Agenda topics for Workshop at ACWA (May 8):

     Members proposed to have a presentation and an industry outreach session to talk to consultants and provide outreach to participating agency board members

   9.2 Upcoming Reservoir Committee meetings:

   **Regular Monthly meeting:** 2:00 PM on April 19, 2018 at Tsakopoulos Library Galleria (East Meeting Room)
   828 I Street, Sacramento, CA 95814

**ADJOURN**

Meeting adjourned at 12:19 PM.

Chairperson
Thad Bettner

General Manager
Jim Watson

2018 April 19
## Attachment A to Meeting Minutes

### Current Voting Committee Participants (27):

<table>
<thead>
<tr>
<th>Pct</th>
<th>Participant</th>
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<tbody>
<tr>
<td>1.93</td>
<td>4M Water District</td>
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<tr>
<td>2.31</td>
<td>American Canyon, City</td>
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<td>4.03</td>
<td>Cal Water Service</td>
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<td>1.91</td>
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<td>Davis WD</td>
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<td>Metropolitan WD</td>
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<td>Pacific Resources MWC (2)</td>
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<td>4.47</td>
<td>US Bureau of Reclamation (non-voting)</td>
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</table>

### Voting members present (See Note 1)

91.2% Participation percentage in attendance

Representation has been delegated as follows:

1. To Trimble (Western Canal WD)
2. To Kunde (WRM-WSD)
3. 
4. 

**NOTE 1:** Participation by phone are not counted in quorum or voting.

**NOTE 2:** Additional participants were on the phone but did not identify themselves.
### Current Voting Reservoir Committee Participants (27):

<table>
<thead>
<tr>
<th>Participant</th>
<th>☑️ Representative</th>
<th>☑️ Alternate</th>
<th>Others</th>
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<tr>
<td>4M Water District</td>
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<td>American Canyon, City</td>
<td>☑️ Steve Hartwig</td>
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<td>AVEK WA</td>
<td>☑️ Dwayne Chisam</td>
<td>☑️ Dan Flory</td>
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<td>☑️ Rob Kuta</td>
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<td>☑️ Ben Carter</td>
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<td>☑️ Robert Cheng</td>
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<td>☑️ Nicole Van Vleck</td>
<td>☑️ Jon Munger</td>
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<td>☑️ Don Bransford</td>
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<td>☑️ Bill Vanderwaal</td>
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<tr>
<td>San Bernardino V MWD</td>
<td>☑️ Doug Headrick</td>
<td>☑️ Bob Tincher</td>
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</table>

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<th>✅ Alternate</th>
<th>Others</th>
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<tr>
<td>San Gorgonio Pass WA</td>
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<td>☐ Cindy Kao</td>
<td>☑ Eric Leitterman</td>
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<td>Santa Clarita Valley Water Agency (Formerly Castaic Lake WA)</td>
<td>☐ Dirk Marks</td>
<td>☐ Rick Viergutz</td>
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<td>Western Canal WD</td>
<td>☑ Ted Trimble</td>
<td>☐ Greg Johnson</td>
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<tr>
<td>Westside WD</td>
<td>☐ Allan Myers</td>
<td>☑ Dan Ruiz</td>
<td>☐ Blake Vann</td>
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<td>Wheeler Ridge-Maricopa</td>
<td>☑ Rob Kunde</td>
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<td>Zone 7 WA</td>
<td>☑ Amparo Flores</td>
<td>☐ Jarnail Chahal</td>
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**Non-Voting Committee Participants (2):**

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<tr>
<td>Dept of Water Resources</td>
<td>☐ Rob Cooke</td>
<td>☐ David Sandino</td>
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<td>☐ Ajay Goyal</td>
<td>☐ Jim Wieking</td>
</tr>
<tr>
<td>Bureau of Reclamation</td>
<td>☐ Richard Welsh</td>
<td>☐ Don Bader</td>
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<tr>
<td></td>
<td>☐ David Van Rijn</td>
<td>☑ Mike Dietl</td>
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<td></td>
<td>☐ Shana Kaplan</td>
<td>☐ Mike Mosley</td>
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**Pending Reservoir Committee Participants (1):**

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<tr>
<td>LaGrande WD</td>
<td>☐ Matt LaGrande</td>
<td>☐ Dennis Zachary</td>
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**Authority, Non-Signatory (7):**

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<td>Glenn County</td>
<td>☐ John Viegas</td>
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<tr>
<td>Maxwell ID</td>
<td>☐ Mary Wells</td>
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<tr>
<td>PCWA</td>
<td>☐ Ed Horton</td>
<td>☑ Ben Barker</td>
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<tr>
<td>Roseville</td>
<td>☐ Sean Bigley</td>
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<tr>
<td>Sacramento, City of</td>
<td>☐ Jim Peifer</td>
<td>☐ Dan Sherry</td>
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<td>☐ Kerry Schmitz</td>
<td>☐ Michael Peterson</td>
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<tr>
<td>Tehama-Colusa Canal Authority</td>
<td>☐ Jeff Sutton</td>
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### Staff & Consultants:

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<tbody>
<tr>
<td>Barbieri, Janet</td>
<td>JB Comm</td>
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<td>Barnes, Joe</td>
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<td>Black, Lyna</td>
<td>Ch2m</td>
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<td>LWA</td>
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<td>Bruner, Marc</td>
<td>Perkins Coie</td>
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<td>Carlson, Nik</td>
<td>AECOM</td>
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<td>Conant, Ernest</td>
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<td>Davis, Kim</td>
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<td>Herrin, Jeff</td>
<td>AECOM</td>
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<td>Johns, Jerry</td>
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<td>Kuney, Scott</td>
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### Other Attendees: (An email address is required to be added to the distribution list)

<table>
<thead>
<tr>
<th>Name</th>
<th>Representing</th>
<th>Contact (Phone &amp; E-mail)</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Bischoff</td>
<td>AECOM</td>
<td></td>
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<tr>
<td>Marttin McIlroy</td>
<td>Shannon &amp; Wilson</td>
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<tr>
<td>Stan Boyle</td>
<td>Shannon &amp; Wilson</td>
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<tr>
<td>John Buttz</td>
<td>HDR</td>
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<td>Paul Marshall</td>
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<td>Monique Briard</td>
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<td>Arun Parsons</td>
<td>Black &amp; Veatch</td>
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<td>Barry Scott</td>
<td>GEI Consultants</td>
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<td>Russell Ryan</td>
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<td>Brian Bullock</td>
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<tr>
<td>Brain Person</td>
<td>AECOM</td>
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TURNKEY CONTRACTING

As a Potential Alternative for Delivering the Sites Project

John Bischoff (AECOM)
March 16, 2018
Spectrum of Owner and Contractor Risk Allocation

- Who holds the project Contingency?
- Risk extremes are “D/B” and “D-B-B”
Agenda

- What is Turnkey Contracting
- Advantages/Disadvantages of Turnkey Contracting
- Summary
Spectrum of Owner and Contractor Risk Allocation

- Who holds the project Contingency?
- Risk extremes are “D/B” / “Turnkey” and “D-B-B”
Turnkey Contracting

- Who holds the project Contingency?
- Risk extremes are “D/B” / “Turnkey” and “D-B-B”
What Is a Turnkey Contract?  

With a Turnkey Contract, the Contractor:

- **Is fully responsible for both Design and Construction**
- **Delivers project at an agreed-upon Lump Sum price and by an agreed-upon fixed date.**
- **Typically provides project financing and sometimes land acquisition**

Turnkey contracting is often used when owner does not have **adequate** expertise, resources, or financing for implementing and managing the detailed design and construction of a project.
1. Contractor is fully responsible for design and performance of the Project.

2. The technology components of the project (i.e. patents, user rights, etc.) are Contractor’s responsibility.

3. Contractor “owns” the Construction (i.e. Site, Materials, Equipment, etc.) until project is “turned over” to the Owner
A Turnkey Contract is essentially the same as a Design-Build Contract - - but typically includes project financing (and sometimes lease-back of Project to Owner).

- Designer and contractor on the same team (either as a JV or Prime-Sub) to deliver project
- All risk is allocated to contractor/designer
- Owner often has little to no influence on detailed design
- Contractor responsible for all permits and local controls
- Works best where risks are well defined and schedule is limited
- Performance disappointment is not uncommon particularly if design changes are needed
Bid Phase

- Typically Contractor/Designer teams are short-listed
- Owner’s design concept is usually not fully developed at time of bid
- Bidders usually fund up-front design work, but Owner sometimes provides a design allowance
- Limited geotechnical baseline information
- Limited time for design and bidding
- Strong inducement for cost saving innovations to be competitive
Design Phase (After Award)

- Design is typically fast-track
- High risk of data gaps with fast track geotechnical & environmental investigations
- Little time (or incentive) to improve the concept design
- Limited innovation because focus is typically on refining previously delivered projects
- Early constructability reviews by contractor team member can help focus design and construction approach.
- Schedule advantages result from ability to initiate construction prior to completing all detailed designs
Turnkey Contracting

**Construction Phase**

- High risk of cost increases if design changes are needed.
- Active Owner’s Site representative can help manage risk and monitor quality of Construction.
- Contractor builds project with limited interference by owner.
- Problems must be resolved in a timely manner.
- Fast paced with a strong schedule incentive.
- Little to no opportunity for Contractor claims against owner - - as long as Owner fulfills its obligations.
Advantages of Turnkey Contracting

- **Single Source Responsibility.** Provides single source of responsibility for design and/or construction defects.

- **Protection Against Design Deficiencies.** Contractor bears additional cost of defective or inadequate plans prepared by his engineer.

- **Project Performance.** Contractor must meet performance specifications in addition to building project.

- **Schedule.** Project can be completed in a shorter time period.

- **Reduced Bid Cost.** Contractor’s increased control over schedule and design details may result in reduced cost, but not necessarily total project cost.

- **Cost Certainty.** Greater total cost certainty with Lump Sum pricing.
Disadvantages of Turnkey Contracting Versus Traditional Design-Bid-Build Contracting

- **Comparing Contractor Bids.** It is often difficult for Owner to compare preliminary designs submitted by Turnkey Contractor.

- **Limited Design Input.** Owner’s input to detailed design is extremely limited and finished facility may not be as envisioned.

- **Increased Total Project Cost.** Total lump sum project cost will likely be greater because of risks associated with limited design details (at bid time), project financing, and Contractor Contingencies included in Bid to cover uncertainties.

- **Cost of Design Changes.** Changes in design during construction can result in significant cost increases.

- **Designer Independence.** Independence of Design Professional will be illusory in a dispute.

- **Form of Contract.** The Turnkey contact must be carefully drafted to achieve the ultimate certainty of the Lump Sum Price.
SUMMARY

- Turnkey Contracting may be a viable alternative if project financing is needed.
- Design must be well-developed at time of Bid to minimize Contractor Contingencies and Total Project Cost.
- Owner’s ability to provide input to detailed design is limited.
- Use of Turnkey Contracting method for delivery of all or part of the project will depend on:
  - Project size, complexity and inherent risks
  - Project-specific cost and schedule constraints
  - Need to manage risk and allocate risks fairly
Phase 1 Completion Schedule

Reservoir Committee Meeting

March 16, 2018
## Phase 1 Completion Schedule

### CA WATER COMMISSION PROP 1 FUNDING
- CWC Staff Posts Public Benefit Ratio
- Appeals Process Ends. Commission Finalizes PBR
- ~5/25: Draft ROI
- ~7/26: MCED & Early Funding Agreement
- Early Funds Received by Authority
- CWC Participation & Monitoring

### FEDERAL WIIN ACT (§4007)
- 1/15: Close Public Comments (154 days)
- Compile Application
- 8/31: Application to Dept. of Interior (w/ Feasibility Study & Letter from Governor)
- Funds Received (for pre-construction)
- Q3 2019 Request Appropriation per §4010(b)(6)

### ENVIRONMENTAL PLANNING & PERMITTING
- Develop Cooperative Operations Principles, Biological Assessment Contents, SWRCB Approach, CDFW Permit Principles
- Develop Responses to Comments
- BA, Water Right Application, formal permit consultations

### ENGINEERING & REAL ESTATE
- Risk Workshop
- Risk Register
- Phase 2 Work Plan & Target GMP
- Phase 2 Work Plan
- Phase 2 Work Plan
- Early Studies & optimization

### PHASE 1 REBALANCE PROCESS
- 1st Iteration
- Rebalance 2nd Iteration
- Rebalance 3rd Iteration
- Execute Phase 2 Res. Comm. Agreements
- Initial Phase 2 Cash Call

### FINANCING PHASE 2
- Award Municipal Financial Advisor
- Initial Phase 2 Finance Plan
- Proposed Phase 2 Finance Plan
- Support Members with financing

### PHASE 2 PROCUREMENTS
- Procurement Strategy
- Approve Release RFP
- Proposals Due
- Board Approve Consultant Selection
- Board Approve NTP
- Initial Task Orders developed & negotiated
- Board & Res. Comm. Approve Task Orders
- Next Set of Task Orders

### Timeline
- 6/30: Phase 1 Administratively Ends
- 9/30: Phase 1 Res. Comm. Budget Ends

---

2018 Jan 19 Working Draft, Subject to Change
Proposed Phase 2 Procurement Plan

Reservoir Committee Meeting

March 16, 2018
Phase 2 Procurement Plan

- What is the need?
- Why are we doing this now?
- How does this fit with the overall process?
- Is this the ‘right’ way to meet the need?
- Will we get the ‘correct’ products, within time and budget?
- How does this fit with ‘Rebalancing’?
This Plan

Describes what, when, & how

- **What** - what is the need?
  - How does it fit with Phase 1?
  - How does it fit with Subsequent Phases?
- **When** - Selection and Delivery schedules
- **Who** - Fits with the current organization
- **How** - RFQ, reviews and selection
The Draft Work Plan

- Scope of work
- Organization
- Schedule
- Responsibility Matrix
- Draft RFQ
Business Drivers/Best Practices

- Staffing & appropriate span of control
- Provides checks and balances
- Early price certainty (affordability)
- Achieve best value
  - Competitive selection
  - Equitable risk allocation
- Flexibility to adjust
  - Adjust to schedule delays – external & internal
  - Ability to off-ramp
  - Sufficient bench strength (& succession planning)
- Diverse participation (includes small, local, DVBE, others)
General Contract Concepts

- Evaluate new contracts for all required service
- Existing providers may be selected to continue to provide that service
- Respondents can compete for multiple scopes
- Contracts may be stopped at Phase 2b or be extended into Phase 3+
- Contracts may be modified to serve as Authority’s representative for Phase 3 or 4
- Contracts are “umbrellas”. Work and budget managed by task order
- Awards are based on qualifications of the firm and their team
  - Allows use of alternative delivery methods (start of Phase 2B)
  - Provides flexible task order service contracts
  - Addresses administrative needs
Overall Schedule:

Phase 1:
- 2017: Prepare Proposal
- 2018: Application Review

Phase 2A:
- 2019: Final EIR/S
- 2020: Permits

Phase 2B:
- 2021: Final Design

Phase 3A & B:
- 2022: Construction Management

Phase 4:
- 2029: Final Funding Agreement

CALIFORNIA WATER COMMISSION PROP 1 FUNDING
PLANNING & PERMITTING
ENGINEERING
CONSTRUCTION & COMMISSIONING
OPERATIONS
## Overall Phase Spending Plan

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Estimate ($million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 2A</td>
<td>June 2018</td>
<td>December 2019</td>
<td>$177</td>
</tr>
<tr>
<td>Phase 2B</td>
<td>January 2020</td>
<td>December 2021</td>
<td>$149</td>
</tr>
<tr>
<td>Phase 3A</td>
<td>January 2022</td>
<td>December 2022</td>
<td>$529</td>
</tr>
<tr>
<td>Phase 3B</td>
<td>January 2023</td>
<td>December 2023</td>
<td>$691</td>
</tr>
<tr>
<td>Phase 4</td>
<td>January 2024</td>
<td>January 2030</td>
<td>$3,812</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>(includes estimate of finance)</strong></td>
<td></td>
<td><strong>$5,358</strong></td>
</tr>
</tbody>
</table>
Phase-level Funding Concept (Local, WSIP, WIIN, & Other)

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2A</th>
<th>Phase 2B &amp; 3</th>
<th>Phase 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEDERAL</td>
<td>WIIN §4007(k) (CalFed)</td>
<td>WIIN §4007(h) Final Design &amp; Early Construction</td>
<td>WIIN §4010(b)(6) (reimburse storage account)</td>
</tr>
<tr>
<td>(~15%)</td>
<td>Storage Application §4007(h)</td>
<td>Final EIR/EIS</td>
<td>Permits acquired to encumber WSIP funds per CCR §6013(c)</td>
</tr>
<tr>
<td>CalFed (NEPA)</td>
<td>WIIN §4007(h) Pre-construction (Design)</td>
<td>Federal Feasibility</td>
<td>Congress appropriates fund</td>
</tr>
<tr>
<td></td>
<td>CalFed (Draft Feasibility Report) USBR is lead</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STATE</td>
<td>No funding contribution</td>
<td>WSIP Early Funding (environmental documentation &amp; Permits)</td>
<td>WSIP Funds Encumbered</td>
</tr>
<tr>
<td>(~25%)</td>
<td>However, eligible for reimbursement at end of Phase 3 (per §6013(f)(7))</td>
<td>WSIP Early Funding (DSOD &amp; USACE Permits)</td>
<td></td>
</tr>
<tr>
<td>LOCAL</td>
<td>Self-funded (prepare WSIP Application)</td>
<td>Self-fund followed by Interim Debt Finance</td>
<td>Debt Financed</td>
</tr>
<tr>
<td>(~60%)</td>
<td>Self-funded (prepare Draft joint EIR/EIS)</td>
<td>Interim Debt Finance</td>
<td>Low-interest Loan Program (WIFIA, New WATER Act or Transmission Infrastructure Program)</td>
</tr>
<tr>
<td>Authority is lead w/ Reclamation Support</td>
<td>Self-funding followed by Interim Debt Finance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-funded (Technical Studies)</td>
<td>Interim Debt Finance</td>
<td>Grant Funding (if available)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grant Funding (if available)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Phase 1</th>
<th>Phase 2A</th>
<th>Phase 2B &amp; 3</th>
<th>Phase 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>CalFed (NEPA)</td>
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<td></td>
<td></td>
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<tr>
<td>2018</td>
<td>WIIN §4007(k) (CalFed)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>WIIN §4007(h) Final Design &amp; Early Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>Final EIR/EIS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>Permits acquired to encumber WSIP funds per CCR §6013(c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>Congress appropriates fund</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Working Draft, 2018 Feb 08
What is the Authority buying?

1. Project Integration
2. Project Controls
3. Communications
4. Reservoir Operations Planning
5. Environmental Analysis - EIR/S
6. Permitting & Agreements
7. Real Estate
8. Engineering Design
9. Geotechnical Engineering

+ specialized contracts (e.g. legal, independent review boards)
1. Project Management Integration

- Reports to the Project Operations Manager
- Provides:
  - Integration of the Project’s components and other needs
  - Quality Management,
  - Risk Management,
  - Seismic performance
  - Geographic Information System
  - Health & Safety,
  - Staff support to Owner’s Representatives
2. Project Controls & Contract Administration

- Reports to the Project Operations Manager
- Provides:
  - Scheduling,
  - Budget,
  - Cost Tracking,
  - Contract administration & compliance support,
  - Reporting & documentation
  - Document Management & Control,
  - Administrative Support
3. Communications and Facilitation

- Reports to the Real Estate & Outreach Manager
- Provides:
  - ✓ Landowner coordination support
  - ✓ Stakeholder & local agency coordination
  - ✓ Government affairs & legislative support
  - ✓ Public outreach & community relations
  - ✓ Media affairs & strategic communications
  - ✓ Project website and social media platforms
4 Reservoir Operations Simulations

- Reports to the Environmental Planning & Permitting Manager

- Provides:
  - Model simulations, in river & in-reservoir
    1. Final EIR/S
    2. Permits applications, and acquisition
    3. Agreements
    4. Financing & repayment
  - Coordinate with preliminary engineering designs development
5. Environmental Analysis – EIR/S

- Reports to the Environmental Planning & Permitting Manager

- Provides:
  - Responses to comments on the Draft EIR/S
  - Prepares Final EIR/S
  - Coordinates with other CA and federal agencies
  - Prepares draft notices, MRMP, and findings
6. Permitting and Agreements

- Reports to the Environmental Planning & Permitting Manager
- Provides:
  - Prepare permitting plans and permit applications
  - Collect environmental field data (e.g.; wetland surveys)
  - Coordinate with permitting agencies
  - Prepare draft agreements.
  - Support permit acquisition
7. Real Estate

- Reports to the Real Estate & Outreach Manager
- Provides:
  - Obtains temporary access agreements
  - Support permanent real estate acquisition actions
  - Interim land management (post acquisition through Construction)
8. Preliminary Engineering Design

- Reports to the Engineering, Procurement & Construction Manager
- Provides:
  - Optimization & preliminary plans & specifications
    - All facilities
    - Grid interconnection
    - Recreation
    - Hydropower
  - Common platforms (Hydraulics, topographic survey & controls)
  - Incorporates refined geotechnical
  - Cost and construction schedule estimates
  - Support to environmental planning and permitting efforts
  - Provides requirements to real estate
9. Geotechnical Engineering

- Reports to the Engineering, Procurement & Construction Manager
- Provides:
  - Investigates geotechnical conditions at key facilities location
  - Geotechnical Data Report
## Phase 2 Consultant Packages

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Project Integration (PM/CM)</td>
</tr>
<tr>
<td>2</td>
<td>Project Controls &amp; Contract Admin.</td>
</tr>
<tr>
<td>3</td>
<td>Communications</td>
</tr>
<tr>
<td>4</td>
<td>Reservoir Operations Simulations</td>
</tr>
<tr>
<td>5</td>
<td>NEPA/CEQA, ESA/CESA, &amp; Water Rights</td>
</tr>
<tr>
<td>6</td>
<td>Environmental Permit &amp; Agreements</td>
</tr>
<tr>
<td>7</td>
<td>Real Estate &amp; Rights of Way Acquisitions</td>
</tr>
<tr>
<td>8</td>
<td>Engineering Design Manager (Prelim Dgn+)</td>
</tr>
<tr>
<td>9</td>
<td>Round 1 Geotechnical Data Collection</td>
</tr>
</tbody>
</table>

### Timeline

- **End of Phase 1**
  - Start 2A
  - Start 2B
- **Prop 1 $ Encumbered**
  - 3A
  - 3B
  - Start Phase 4
  - Phase 5

### Milestones

- **Prop 1 $ Encumbered**
- **+ Owner’s Engr (if off-ramp to Traditional)**
- **+ Constr. Mgmt & closeout**
- **+ Support during construction & closeout**
- **+ Early Constr. Outreach**
- **+ Constr. Mgmt & closeout**
- **+ Constr. Outreach**
- **Prep to Acquire**
- **Prep to Acquire**
- **Acquisitions**
- **Land Management**
- **Owner’s Engineer during construction, Start-up, & closeout**

### Dates

- **2018 Jan 19 Working Draft, Subject to Change**
How will these services fit into the Authority’s structure
**Phase 2 Organization**

**1. Project Integration (PM/CM)**
- Project Integration, Quality Mgmt, Risk Mgmt, Process Implementation & Oversight, Staff augmentation & support – including GIS/Data Management, Survey and IT Support

**2. Project Controls Contract**
- Administrative Support
- Contract Management
- Invoicing
- Work Planning
- Scheduling Management
- Cost Controls & Mgmt
- Document Management
- Reporting
- Health & Safety Mgmt

**SITES PROJECT AUTHORITY**

- General Manager
  - Jim Watson

- Deputy GM
  - TBD

**RESERVOIR COMMITTEE**

- General Counsel
  - Ernest Conant
- Water Rights
  - TBD
- NEPA/CEQA
  - B. Schussman
- Bond Counsel
  - TBD
- Real Estate
  - TBD
- Contracts
  - TBD

**Independent Advisors**
- (Management & Technical)
  - TBD

**Financial Advisor**
- TBD

**Program Operations Manager (POM)**
- Joe Trapasso

**Engineering, Procurement & Construction Manager (EPC)**
- TBD

**Environmental Planning & Permitting Manager (EPP)**
- TBD

**Real Estate & Local Agency Coordination Manager**
- Kevin Spesert

**Contract Packages**

8. Preliminary Engineering Design
9. Geotechnical

4. Reservoir Operation Simulations
5. Environmental Planning Support
6. Permitting/Agreements

7. Real Estate/Right-of-Way
3. Communications/Facilitation Legislative Affairs

2018 Mar11 Working Draft, Subject to Change
How will the Phase 2 services be delivered?
Example A Package
Example C – Separate Environmental Package

SITES PROJECT AUTHORITY
RESERVOIR COMMITTEE

General Manager
Jim Watson

Deputy GM
TBD

Communications - Real Estate Manager

Engineer, Procurement & Construction Manager (EPC)

Environmental Planning & Permitting Manager (EPP)

Program Operations

Integration Contract Program Manager

Integration Contract Real Estate PM
Integration Contract Engineering PM
Integration Contract Environmental PM

Real Estate - Right-of-Way
Engineering Design
Geotechnical Engineering

Reservoir Operations

Project Controls – Admin Support

Real Estate - Right-of-Way

Authority Staff
Independent Contract
Integration-led Contract
Integration Contract
Authority staff or Integration Staff Augmentation
## Contract Packaging Example - Dams

### Timeline

<table>
<thead>
<tr>
<th>Event</th>
<th>Year</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start 2A</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Start 2B</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Prop 1 $ 3A</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>3B</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Start Phase 4</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Phase 5</td>
<td>2023</td>
<td></td>
</tr>
<tr>
<td>End of Phase 1</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Project Integration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Mgmt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Owner’s Engr (if off-ramp to Traditional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Constr. Management &amp; closeout</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Design Manager (Prelim Dgn+)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner’s Engineer during design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner’s Engineer during construction, start-up &amp; closeout</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Round 1 Geotechnical Data Collection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sampling &amp; Prepare GDR &amp; Input to seismic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import Borrow Areas (Dams)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add’l Geotech &amp; SMARA permits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarry processing &amp; stockpile operations</td>
<td></td>
<td></td>
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<tr>
<td>Local Borrow (Dams)</td>
<td></td>
<td></td>
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<tr>
<td>Sites Dam</td>
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<td></td>
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<tr>
<td>Golden Gate Dam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Saddle Dams &amp; Spillway</td>
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<td></td>
</tr>
<tr>
<td>30% Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Design, DSOD approvals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor reservoir filling &amp; grouting program (if needed)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Timeline is not linear
# Phase 2 Consultant Selection – (Jan 18 Workshop)

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>RFQ published</td>
<td>Early April 2018</td>
</tr>
<tr>
<td>B.</td>
<td>Contractor Questions</td>
<td>April 16</td>
</tr>
<tr>
<td>C.</td>
<td>Answers Deadline</td>
<td>April 27</td>
</tr>
<tr>
<td>D.</td>
<td>SOQ Submission Deadline</td>
<td>May 14</td>
</tr>
<tr>
<td>E.</td>
<td>Completion of review of SOQ</td>
<td>June 1</td>
</tr>
<tr>
<td>F.</td>
<td>Interview Dates</td>
<td>June 11 – June 20</td>
</tr>
<tr>
<td>G.</td>
<td>Recommendation of Selection</td>
<td>August 20</td>
</tr>
<tr>
<td>H.</td>
<td>Service Contract Selection (Intent to Award)</td>
<td>Sept 17</td>
</tr>
<tr>
<td>I.</td>
<td>Contract Task Orders Funded (Phase 2 initial funding)</td>
<td>Dec 21</td>
</tr>
</tbody>
</table>
Phase 2 Consultant Selection - Delayed

Document Development (staff): April 1
Work Group: April 18
Reservoir Committee: May 18
Authority: May 21
A. RFQ published Early July 2018
B. Contractor Questions July 12
C. Answers Deadline July 18
D. SOQ Submission Deadline August 10
E. Complete review of SOQs August 31
F. Interview Dates Sept 10- Sept 30
G. Selection Recommendation Oct 18
H. Service Contract Selection Nov 19
I. Execute contracts & NTP with early task orders Dec ‘18– Feb ’19

Intent to Award
Phase 2 initial funding

2018 Mar16 Working Draft, Subject to Change