



## MEMORANDUM

TO: SLDMWA Water Resources Committee/ Finance & Administration Committee/  
Board of Directors, Alternates

FROM: Pablo Arroyave, Chief Operating Officer

DATE: November 1, 2021

RE: Recommendation to Select Non-Federal Investment Option/Financial  
Recommendations to Board of Directors regarding B.F. Sisk Dam Raise and  
Reservoir Expansion Project

---

### BACKGROUND

Since 2019, the U.S. Bureau of Reclamation (Reclamation) and the Water Authority have been completing the steps necessary to evaluate and ultimately implement the B.F. Sisk Dam Raise and Reservoir Expansion Project (project). The project is estimated to provide an additional 130,000 acre-feet of water storage capacity in San Luis Reservoir by raising the crest height of B.F. Sisk Dam by 10 feet. The project is being pursued under the Reclamation Safety of Dams Act (Pub. L. 95-578, as amended) as a connected action to Reclamation's B.F. Sisk Safety of Dams (SOD) Modification Project which proposes raising the height of B.F. Sisk Dam for Dam Safety purposes. As a "connected action" under the amended Safety of Dams Act, Reclamation must determine and affirm that the Water Authority's interest in increasing water storage supply in San Luis Reservoir provides an additional benefit in conjunction with the current B.F. Sisk Dam SOD Modification Project, is consistent with Reclamation Law, can support a Secretary of Interior's finding of feasibility, has federal benefits pursuant to the Water Infrastructure Improvements for the Nation (WIIN) Act, and can be accomplished without negatively impacting the B.F. Sisk Dam SOD Modification Project. The Final Environmental Impact Report/Supplemental Environmental Impact Statement (EIR/SEIS) and the final Feasibility Report for the project were completed in December 2020. The final Feasibility Report was submitted for review to the U.S. Office of Management and Budget and subsequently transmitted to Congress with a Secretary of Interior finding of feasibility.

In addition to the Safety of Dams authority, Reclamation is pursuing this project as a federally led storage project within the WIIN Act authorization. As a federally led storage project, the Federal Government could fund the project in the amount associated with the percentage of federal benefits, both reimbursable and non-reimbursable, up to 50% of the overall project cost. The Federal Government may fund less than 50% of the project cost with a corresponding benefit of less than 50%. The current federal benefits identified in the Feasibility Report are increases in

irrigation, municipal and industrial, and refuge water supply deliveries and the transportation safety benefits generated by modifications to State Route 152. The refuge water supply deliveries and transportation safety benefits are both identified in the Feasibility Report as non-reimbursable benefits.

In considering the 2020 Feasibility Report, OMB required that an addendum to the report be completed prior to the commencement of construction providing the cost allocation for the additional water supply with supporting economic analysis. To develop the initial cost allocation, Reclamation and the Water Authority are pursuing the selection of one of the specific operational configurations (sub-alternatives) analyzed in the 2020 Feasibility Report. In addition to the operational configuration selection, the addendum will include the following additional information:

1. An update to the 2016 Reclamation Sisk Dam Raise cost estimates (to 2021 levels);
2. The selection of a specific methodology to illustrate the transportation safety benefits of the project; and
3. The associated water supply benefits for the selected operational configuration

#### Draft Participation and Operations Terms Proposed by Reclamation

Given the 130,000 acre-feet of increased water storage space in San Luis Reservoir associated with the project, Reclamation initially identified 50% (65,000 acre-feet) of that storage to be treated as an extension of available CVP supply (CVP-only) and the remaining 50% (65,000 acre-feet) to be managed by the participating agencies (investor-directed).

As part of the initial concept, Reclamation also proposed key assumptions for consideration, including but not limited to:

- Operation of the additional space will have no impact to existing CVP contractors;
- The additional space will be operated to maximize CVP project benefits; and
- The investor directed portion of the storage will have a higher level of protection and spill priority than the storage within the current rescheduling guidelines.

In response to OMB's requirement above, the selection of the specific assignment of the investor-owned storage has been the focus of attention with a Water Authority-led technical team, and is the crux of the current effort. The three specific configurations of the investor-owned storage presented for consideration are:

- a. 78% Ag/7% M&I/15% Refuge
- b. 10% Ag/90% M&I
- c. 70% Ag/15% M&I/15% Refuge

Because a-b above are the bookends analyzed in the Feasibility Report and the corresponding environmental document, operational configurations with different percentage allocations of Ag,

M&I and Refuge can be identified. If this is the case, additional analysis and modeling will need to occur to develop the associated supporting economic analysis.

**ISSUES FOR DECISION**

1. **Water Resources Committee:**
  - a. What non-federal investment option (e.g. 50% CVP-only and 50% investor-owned or 30% CVP-only and 70% investor-directed) should be adopted for the project?
  - b. Should the Water Authority select one of the three specific operational configurations identified above, or an alternative configuration?
2. **Finance & Administration Committee:** Are there any relevant financial recommendations to the Board regarding the project, e.g. considerations regarding feasibility given other planned large-scale projects?
3. **Board of Directors:** Whether to adopt the Water Resources Committee and Finance & Administration Committee Recommendations Regarding the B.F. Sisk Dam Raise and Expansion Project.

**ANALYSIS**

**1. Non-Federal Investment Option / Operational Configuration**

In order to meet the conditions within the WIIN Act authorization and coordination with SOD Modification implementation, construction of the project must commence in early 2022 to allow the project to align with the Reclamation SOD Modification project. The construction phase is currently being defined by Reclamation as the commencement of final design, including initiating geotechnical investigations. In accordance with the WIIN Act, prior to commencement of construction, a cost share agreement for any reimbursable federal benefits must be developed and executed.

In order to compare the three specific operational configurations, the modeled water supply benefits associated with each are below by water year type:

**Additional South of Delta CVP Delivery (1,000 acre-feet)**

	Sub-alternative	Water Year Type					
		W	AN	BN	D	C	All
<b>Total SOD CVP</b>	Sub-Alt A/C	31	39	58	31	23	<b>35</b>
	Sub-Alt B/D	29	36	56	34	25	<b>35</b>
	New Investor Sub-Alt	31	38	58	32	23	<b>35</b>
<b>SOD CVP M&amp;I</b>	Sub-Alt A/C	1	2	3	2	1	<b>2</b>
	Sub-Alt B/D	6	7	16	16	13	<b>11</b>
	New Investor Sub-Alt	1	2	4	3	3	<b>2</b>
	Sub-Alt A/C	28	35	52	28	20	<b>31</b>

<b>SOD CVP Ag</b>	Sub-Alt B/D	23	29	40	19	12	<b>24</b>
	New Investor Sub-Alt	28	35	51	27	19	<b>30</b>
<b>SOD CVP Refuge</b>	Sub-Alt A/C	1	2	3	2	2	<b>2</b>
	Sub-Alt B/D	0	0	0	0	0	<b>0</b>
	New Investor Sub-Alt	1	2	3	2	2	<b>2</b>

Notes:

1. All examples above allocate 65 TAF of new storage in San Luis Reservoir to all SOD CVP water users consistent with the existing reservoir, and the other 65 TAF to investors in the project
2. The investor supplies are allocated as follows: Investor A/C - 78% Ag / 7% M&I / 15% Refuge; Investor B/D - 10% Ag / 90% M&I; New Investor - 70% Ag / 15% M&I / 15% Refuge
3. The results indicate total changes in South of Delta CVP deliveries not just deliveries specific to the different investor groups

Completion of the addendum to the Feasibility Report also requires completion of an initial cost allocation process. The methodology required for this allocation is prescribed by Reclamation for all feasibility studies. It is expected that all operational configurations will have a benefit/cost ratio higher than 1.0. Per this initial cost allocation methodology, benefits that are monetized for this project are:

- a. Increased M&I water supply reliability
- b. Increased Irrigation water supply reliability
- c. Enhanced emergency M&I water supply reliability
- d. Increased Incremental Level 4 Refuge Supply
- e. Seismic Improvements to SR-152 (Transportation Benefit)

As noted above, d-e are considered non-reimbursable federal benefits and a-c are considered reimbursable to the project beneficiaries.

## 2. Financial Considerations

Members of the Water Authority technical team have expressed concerns with the initial cost allocation in the Feasibility Report and the bearing this initial cost allocation will have in the final cost allocation once construction commences. There are several policy decisions to be addressed by Reclamation and the Water Authority that could have a bearing on specific investor benefits that could therefore change the participation levels of specific member agencies and could affect the final cost allocation. In addition, the final determination of federal benefits and the split of reimbursable versus non-reimbursable may affect participation as well. For example, if final federal benefits realized are less than 50%, that could result in additional investment potential for some member agencies. In order to address these concerns, the Water Authority staff has coordinated with Reclamation regarding a number of key questions. Reclamation provided answers to these questions in a Special Joint Workshop of the Board of Directors, Water Resources Committee, and Finance & Administration Committee held on Thursday, October 21<sup>st</sup>. Among these answers, was confirmation that the Addendum will include an initial cost allocation and a final cost allocation will be completed at the conclusion of Project implementation when final costs are known and final benefits are determined. This is because specific non-federal

participants have not yet been determined and there will be a final confirmation of federal benefits (both reimbursable and non-reimbursable) and non-federal benefits. In addition, Reclamation confirmed that if the Federal investment is limited to the non-reimbursable contribution only, then no cost recovery methodology is required.

The attached pie chart (Attachment 1) was also shared at the October 21<sup>st</sup> workshop. As the pie chart indicates, the current project benefits and funding (cost) assumptions are:

1. Non-Federal Benefits of at least 50% of the total project costs and benefits.
2. Federal Non-Reimbursable Benefits of approximately 30%, with the precise percentage for Level 4 refuge supplies to be subject to further analysis.
3. The remaining 20% of benefits could ultimately either end up as federal reimbursable benefits or additional non-federal benefits.

Further, due to questions and concerns regarding the Emergency Water Supply assumptions and analysis developed for the Feasibility Study, for the addendum, the Delta facility outage duration has been changed from 1-year to 2-years. This length of outage is based on probability values provided in DWR's Delta Risk Management Strategy Report that was also used as the basis for emergency water supply benefit estimates developed for other Reclamation storage projects including the Los Vaqueros Reservoir Expansion. This 2-year outage evaluation approach is currently under review by Reclamation economists.

In addition, Reclamation is looking into whether or not resulting water supply benefits for disadvantaged communities could be deemed non-reimbursable. If ultimately deemed non-reimbursable, additional coordination will be required with Reclamation to see if it should be added into the addendum. Further, if the total federal non-reimbursable benefits at the time of the final cost allocation are affirmed at 30%, the non-federal participants could choose to fund/receive direct benefits for 70% of the cost and no federal cost allocation/federal repayment obligation would be necessary for the reimbursable benefits. Those costs would be directly paid by the non-federal participants.

The recovery/distribution of the non-Federal benefits and associated costs of the project (minimum of 50%) are at the discretion of the non-Federal participants. This same flexibility would be afforded if the investors decide to take over the Federal reimbursable portion of the project and increase their contribution, and storage amount, by the Federal reimbursable amount.

#### **ATTACHMENTS**

Project Benefits & funding Example diagram

# B.F. Sisk Dam Raise and Reservoir Expansion Project

## SLDMWA Special Board Meeting

October 21, 2021

1:00 pm to 2:30 pm PST

Handout 1

**DRAFT**

### Project Benefits & funding Example diagram (Assume \$1B in 2021 Dollars)

