



Topic: **Authority Board Agenda Item 4.3**

**2020 November 23**

Subject: **Preliminary Draft Master Project Schedule through Construction Completion**

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**Requested Action:**

Review and comment on the preliminary draft master project schedule through construction completion (2021 to 2030 schedule).

**Detailed Description/Background:**

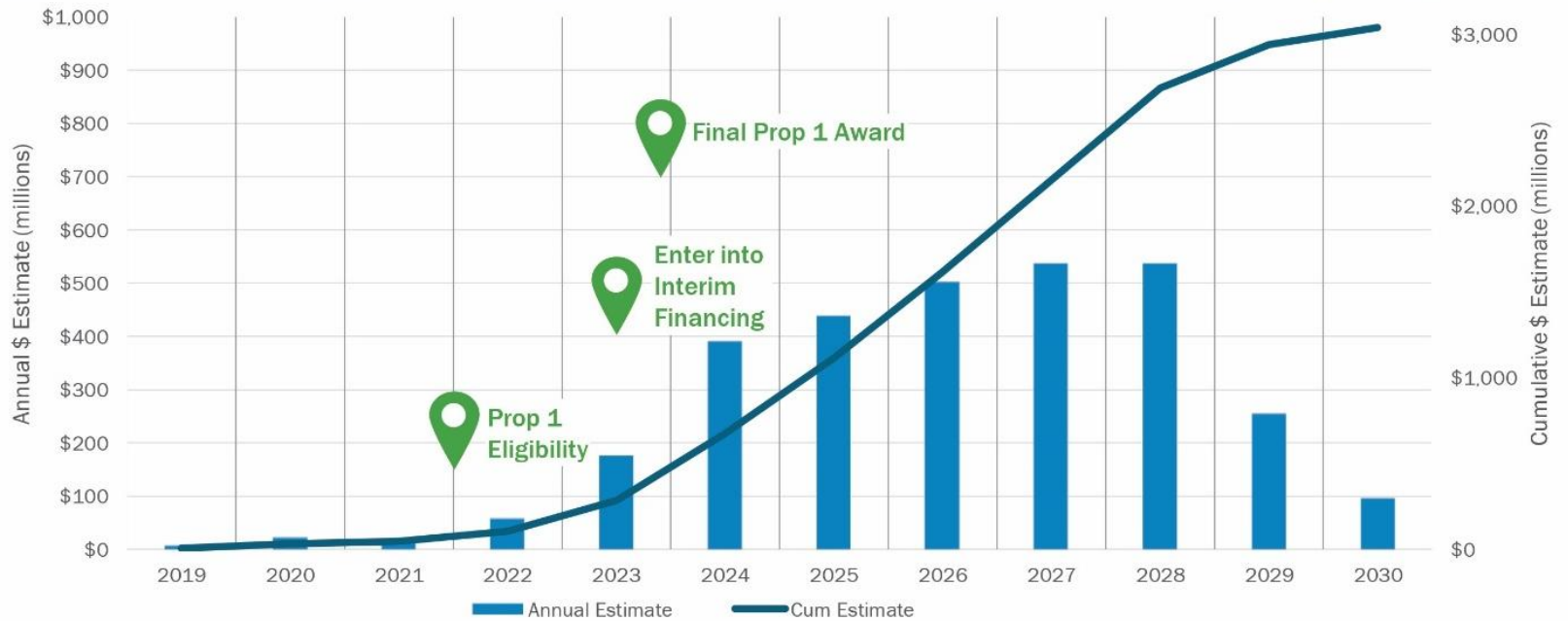
As the project moves forward into detailed planning, design and funding considerations, a master project schedule is being developed that brings together the timing and sequencing of activities through the completion of construction. Cost loading is also included as this is important to plan for the project's future financial needs. Staff has developed a preliminary draft master schedule along with an assumed cost loading by year for the Reservoir Committee and Authority Board's review and input.

A summary of the key activities and milestones in the schedule along with the cash flow through completion of construction (anticipated in 2029) is provided in Figure 1. The following is a summary of the sources and assumptions for this effort:

- Project costs are based on the construction cost estimate in the April 2020 Value Planning Report for VP-7. Costs were grouped into four categories, non-contract, construction, mitigation and contingency. A cost curve was then applied to each group to spread costs over the expected period of activity.
- For planning purposes, funding mechanisms in 2022 and 2023 were assumed to be 1) continued cash calls shown below to support advancing key deliverables and 2) the initiation of interim bank financing would not occur until after all of key permits and water rights are acquired which is also a condition of the final award of State funding. This does not preclude the Reservoir Committee and Authority Board from initiating bank financing earlier, however we don't yet know how early this could occur until progress is made on the Plan of Finance.
  - Total activities in 2022 were assumed to be a total cost of \$60 million, comprised of a \$150/acre-foot (AF) cash call, \$19 million in Proposition 1 (WSIP) which exhausts the early funding, and \$15 million in WIIN Act appropriations.
  - Total activities in 2023 were assumed to be limited to a total cost of \$157 million, comprised of a \$200/AF cash call, \$22 million in WIIN Act appropriations, and \$100 million in local financing.
  - The allocation between Local/State/Federal and amounts of bank financing for locals (interim and long term) will be evaluated beyond 2023 in the next version of the master project schedule.
- WIIN Act funds were assumed to support federal participation at the ~\$200M level which has been discussed with Reclamation as the lower level of a range of possible federal investment.
- Project activities, sequencing and activity duration are generally based on experience of staff and the consultant teams on other construction projects. Alternative delivery procurement methods were not considered during this exercise, but there is time in the schedule to consider these in the future.

## Sites Reservoir Project Cash Flow to Construction Completion

| Summary Schedule Timeline         | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| EIR/EIS                           | █    |      |      |      |      |      |      |      |      |      |      |
| Permitting                        | █    |      |      |      |      |      |      |      |      |      |      |
| Mitigation Implementation         |      |      |      | █    |      |      |      |      |      |      |      |
| Right of Way Acquisition          |      |      |      | █    |      |      |      |      |      |      |      |
| Design Level Geotech & Survey     |      | █    |      |      |      |      |      |      |      |      |      |
| Preliminary and Final Engineering |      | █    |      |      |      |      |      |      |      |      |      |
| Construction                      |      |      |      | █    |      |      |      |      |      |      |      |
| Commissioning                     |      |      |      |      |      |      |      |      |      | █    |      |
| Full Operations Begins            |      |      |      |      |      |      |      |      |      |      | ◆    |



**Figure 1. Sites Project Construction Estimated Cost Loading (2019 Dollars)**

The results of this effort indicate the following:

- WSIP early funding will be exhausted in 2022. WSIP construction funding is expected to be available in mid-2023 (note, this does not supplant the need for financing in 2023 as WSIP funding is a cost share and is paid in the arrears).
- Limiting activities to the assumed funding amounts in 2022 and 2023 (\$60 million and \$157 million, respectively) allows for additional time to secure project financing. Obtaining financing after mid-2023 is likely to delay property acquisition and construction actions.
- An increase in WIIN Act funding is needed in 2022 and 2023 (\$15 million and \$22 million, respectively).
- The completion constraint of January 2030 will receive further review. Rapid completion of the project is important but needs to be balanced with cost impacts and other considerations. At this preliminary stage there hasn't been any optimization performed on the schedule.

As described above, this preliminary draft master project schedule and cost projection is based on the results of the Value Planning Report. The engineering team is working on an updated construction schedule along with updated cost estimates, both of which will be available in spring 2021. Staff will bring back an updated master project schedule and cost loading in spring 2021.

**Prior Action:**

None.

**Fiscal Impact/Funding Source:**

No impact.

**Staff Contact:**

Ali Forsythe / JP Robinette

**Attachments:**

None.