

Memorandum Responding to the State  
Water Resources Control Board,  
Division of Water Rights  
August 26, 2022 Acceptance Letter

January 6, 2023

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## 1.0 Introduction and Background

The Sites Project Authority's (Authority) application for assignment of a portion of State Filed Application A025517 for the Sites Reservoir Project (Sites Reservoir or Project) was submitted on May 11, 2022, and accepted by the State Water Resources Control Board (State Water Board), Division of Water Rights (Division) on August 26, 2022. The Project's Application has been assigned Application No. A025517X01. The Project's Application identifies a September 30, 1977 priority date and requests diversion of up to 1.5 million acre-feet per year of water to storage through Project components in Tehama, Glenn, and Colusa counties. Diversion to storage would include two points of diversion (POD) on the Sacramento River at the Tehama-Colusa Canal at Red Bluff (referred to herein as the "TCC POD") and the Glenn-Colusa Irrigation District's Hamilton City Pumping Plant (referred to herein as the "GCID POD"), at a maximum combined diversion rate of 4,200 cfs during September 1 through June 14 (i.e., outside of the fully-appropriated stream designation). In addition, Sites Reservoir would include construction of two main dams resulting in PODs on Funks Creek (Golden Gate Dam) and Stone Corral Creek (Sites Dam).

The August 26, 2022 Acceptance Letter (Acceptance Letter) requested additional information to be submitted to the State Water Board within 60 days to address what the Division staff determined to be incomplete aspects of the application. The Authority requested additional time to provide the additional information and on October 28, 2022, the Division approved the requested time extension, providing the Authority until January 6, 2023, to submit the additional information identified in the Division's Acceptance Letter.

This Memorandum (Memo) provides the Authority's response to all components identified as incomplete in the Acceptance Letter. While preparing this Memo, the Authority and its consultants met with Division staff on multiple occasions to review and discuss the general and technical aspects of the requests in the Acceptance Letter. Key topics discussed during these meetings can be generally grouped into two categories: the water availability analysis (WAA) and missing information summarized in Attachment 1 to the Acceptance Letter.

Through these discussions, the Authority developed the information and analysis described below. The Authority appreciates the opportunity to provide this additional clarification and analyses, as requested.

In addition to the information requested in the Acceptance Letter, the Authority has continued coordination efforts with parties interested in the water right application. This coordination has resulted in two Sites-specific water right permit terms which the Authority requests that the State Water Board include in any permit issued pursuant to Application No. A025517X01. This is further described below.

## 2.0 Water Availability Analysis

Section 1.0 of the Acceptance Letter provides comments regarding Water Availability (Wat. Code, § 1260, subd. (k)). Specifically, Section 1.2 of the Acceptance Letter sets forth a list of "variables, data inputs, and operational constraints" which State Water Board staff identified to satisfy the requirements of the Water Code. The Authority has addressed Section 1.2 of the Acceptance Letter in two ways, as described below.

## **2.1 Update of Submitted Water Availability Analysis Report**

The Authority and its consultants, MBK Engineers (MBK), have prepared an updated WAA report and accompanying analyses which are included as Appendix A. The WAA report and accompanying analyses supersede the May 2022 WAA in order to provide the additional content requested in the Acceptance Letter.

The updates to the WAA include changes to each of the three approaches to demonstrate a reasonable likelihood of water available for appropriation: the Historical Analysis, CalSim II Analysis, and the Face Value Analysis. In addition, the Authority has included several new analyses to evaluate potential future conditions. The future conditions analyses provided three additional water availability analyses: two using CalSim II model runs with Sites Reservoir under different sets of climate change hydrology (2035 Central Tendency (CT) climate change hydrology and 2070 CT climate change hydrology); and a third using the Alternative 4 CalSim II model of the Reinitiation of Consultation (ROC) on the Coordinated Long-Term Operation (LTO) of the Central Valley Project and State Water Project Principals Meeting (ROC on LTO) to estimate water availability under a 55% unimpaired flow requirement as proposed in potential updates to the Bay-Delta Water Quality Control Plan. Finally, the updated WAA report also describes how the Sites Reservoir Project is consistent with proposed Voluntary Agreements.

Together, the approaches and future conditions analyses presented in the updated WAA address each of the items in the list of “variables, data inputs, and operational constraints” which State Water Board staff identified as needed to satisfy the requirements of the Water Code in the Acceptance Letter. Multiple analyses are provided, and alternative conditions were considered in each analysis, to evaluate water availability from several perspectives.

## **2.2 Results from Division of Water Rights’ Water Availability Tool**

On October 21, 2022, State Water Board Division staff presented a water availability analysis tool (Division’s WAA Tool). Division staff shared a beta version of the tool with MBK on November 8, 2022. Division staff met multiple times with MBK and the Authority to discuss content of, and revisions to, the Division’s WAA Tool. The latest version of this tool was provided by Division staff on December 9, 2022, and used to produce results presented in Appendix B to this Memo. It is the Authority’s understanding that the Division’s WAA Tool is intended to meet the list of requirements identified in the Acceptance Letter. In the transmittal of the Division’s WAA Tool, Division staff identified specific expectations for use of the tool, which are documented in an email included in Appendix B to this Memo.

The Authority and MBK did not modify the Division’s WAA Tool as it was provided on December 9, 2022. MBK post-processed the results from the Division’s WAA Tool to evaluate specific Sites operational considerations. The Authority continues to have concerns about specific elements of the Division’s WAA Tool because they result in inaccurate and/or unrealistic water supply and demand estimates. Nevertheless, at the State Water Board staff’s request, the Authority has run the Division’s WAA Tool to generate an estimate of water availability for the Sites Project. The Authority and MBK, however, do not endorse the accuracy, reliability or results of the Division’s WAA Tool.

### **3.0 Response to Identified Missing Information**

As noted above, Attachment 1 to the Acceptance Letter provided a table of “Missing Information” requested by State Water Board staff to supplement the original Application. Table 1 is a revised version of the Missing Information table, with two columns added to provide a brief response explaining how the item was addressed and a reference to the Memo appendix letter where a detailed response and supporting information is located.

**TABLE 1. MISSING INFORMATION RESPONSE**

<b>Topic/Citation</b>	<b>Location</b>	<b>Comment</b>	<b>How to Address</b>	<b>Sites' Response</b>	<b>Jan. 6, 2022 Memo Appendix</b>
<b>Section 4.1: Engineering Maps</b>					
CCR § 718-719	Maps	CCR Sections 718 and 719 require the project maps to delineate the place of use for municipal and irrigation respectively. The map only delineates the general place of use irrespective of use type.	Indicate which purpose applies to which PLSS sections of the place of use. If it seems unfeasible to do so, provide explanation why.	Supplemental maps are provided.	Appendix C
Power Purpose of Use	Maps	CCR Section 720 lists specific requirements for projects with power listed as a purpose of use. These requirements are not covered by the project maps.	Provide maps showing the location of hydropower facilities and a profile of penstock structure	Maps are provided.	Appendix D
<b>Section 5: Project Description</b>					
Project Photos; Form Field	Item 7	Photos do not include dates.	Resubmit photos with dates of when photos were taken.	Photos were revised to include dates and resubmitted.	Appendix E
<b>Section 6: Purpose of Use</b>					
Justification of Water Requested; Form Field	Section 6, Attachment 1	It is unclear what the justification is for the water being requested. The storage partners have existing water sources to provide their customers. How does the requested water fill the need of the storage partners to acquire more water? Information could discuss how often the storage partners are unable to receive full CVP/SWP allocations and/or how often storage partners are unable to maximize their current water rights or other water sources.	Provide additional information	Additional information provided.	Appendix C

Topic/Citation	Location	Comment	How to Address	Sites' Response	Jan. 6, 2022 Memo Appendix
Amounts Requested for Each Purpose of Use; Water Code § 1260(c); CCR §§ 696-698	Section 6, attachment 1	Need clarification on the amounts requested for each purpose of use. In section 6, attachment 1 the purposes of use are broken down by participant. As several participants have multiple uses, it is hard to determine how much water will be utilized for each purpose of use. The information in section 6, attachment 1 differs from the estimates provided in section 6 of the application. Specifically, there is no estimated amount for Industrial use.	Provide clarification on the amounts requested for each purpose of use. Provide an estimated annual amount of use for Industrial.	Additional information provided.	Appendix C
Agricultural Purpose of Use; Water Code § 1262	Section 6	CA Water Code § 1262 requires applications for agricultural purposes to give the legal subdivisions of the land and the acreage to be irrigated, as near as may be. While section 6, attachment 1 lists the acreage amount, it does not give the legal subdivisions of the land to be irrigated.	Provide legal subdivisions of the land that will be irrigated.	Additional information provided.	Appendix C
Power Purpose of Use; Water Code § 1263	Section 6	Water Code § 1263 requires applications for power purposes to state the nature of the works by means of which the power is to be developed, the head and amount of water to be utilized, and the use to which the power is to be applied.	Provide information on the nature of the works by means of which the hydropower is to be developed, the head and amount of water to be utilized, and the use to which the power is to be applied.	Information regarding the hydropower facilities is provided.	Appendix D



Topic/Citation	Location	Comment	How to Address	Sites' Response	Jan. 6, 2022 Memo Appendix
<b>Section 8: Point Locations</b>					
Point Numbers	Section 10, Attachment 2	PORDs 21 (Los Vaqueros Dam) and 23 (Del Valle Dam) are labelled as PORDs 16 and 22 on the adjacent tab titled "SOD Reservoir Details". On the same tab, Arroyo del Valle Diversion Structure is also listed as PORD 22. Similarly, PORDs 28-30, 50, and 52-56 are also mismatched.	Confirm point numbers. Once clarified, confirm that reservoir details correspond to the intended PORD.	The numbering has been corrected.	Appendix F
Proposed or Existing PODs	Section 10, Attachment 2	A majority of PODs do not explicitly say whether they are proposed, existing or partially existing. The application form does not require this information, but it is needed for eWRIMS. Division staff have tentatively labeled these PODs as 'proposed' in eWRIMS due to lack of information. PODs confirmed to be proposed or existing are listed in the 2nd tab of Section 10 – Attachment 2, SOD Reservoir Details.	Provide clarification	The status of each POD and PORD has been added to the updated Section 10 – Attachment 2.	Appendix F

Topic/Citation	Location	Comment	How to Address	Sites' Response	Jan. 6, 2022 Memo Appendix
Construction of PODs	Section 10, Attachment 2	Although the applicant lists construction plans in the draft EIR (appendix 2C), construction plans are not noted by POD. It may be beneficial to know specific PODs requiring construction through an organized table, as this can influence whether a facility or canal is considered existing, proposed, or partially existing.	Provide additional information	Only Golden Gate Dam (POD 1) and Sites Dam (POD 2) are proposed to be constructed for the Project. All facilities are either existing or constructed by others. Improvements to POD 3 (TC Canal) and POD 4 (GCID Canal) are considered but not required for Project operations.	Appendix F
Rediversion Rates	Section 10, Attachment 2	A majority of PODs/PORDs do not define rediversion rates. These rediversion rates may be necessary to ensure the applicant does not cause injury to other water right holders using shared facilities.	Provide additional information	A column has been added to Section 10 – Attachment 2 to provide the facility capacity of each POD and PORD associated with diversion and rediversion of water.	Appendix F

Topic/Citation	Location	Comment	How to Address	Sites' Response	Jan. 6, 2022 Memo Appendix
<b>Section 10: Point and Facilities Information</b>					
Points 1 and 2; Form field	Section 10	The maximum annual amounts diverted at Golden Gate Dam and Sites Dam shall be limited to the amounts available from Funks and Stone Corral Creeks, respectively, and not the total diversion amount of 1.5 MAF for the project. The annual amounts diverted at Golden Gate Dam and Sites Dam must reflect the maximum annual diversions that will occur from Funks and Stone Corral Creeks, respectively.	Adjust the maximum annual amounts for diversions by onstream dam at Golden Gate Dam and Sites Dam for PODs 1 and 2.	The annual maximum diversion of water to storage at POD 1 and POD 2 is provided in Attachment 6.	Appendix F
Points of re- diversion; form field	Section 10, Attachment 2	PODs 1 and 2 in "Section 10 - Attachment 2" are listed as PORDs in column A, but aren't listed as PORDs in column R	Correct 2b under PODs 1 and 2 in the form and update Attachment 2.	Section 10 – Attachment 2 has been updated to identify POD 1 and POD 2 as being used for diversion and redirection.	Appendix F
South of Delta reservoirs	Section 10, Attachment 2	The South of Delta reservoirs are labeled as points of onstream storage in column T of "Section 10 – Attachment 2", but are listed only as PORDs in column A. Please clarify how these reservoirs will be used for the project. The relevant point numbers based on the "Point Details" tab are 21, 23, 28, 29, 31, 53, 54, 55, and 56.	Provide additional information regarding the function of the South of Delta reservoirs in the Sites application. Please clarify if any of these reservoirs will have a storage feature for the project besides a PORD.	Section 10 – Attachment 2 and Section 11 have been updated to provide clarification and additional information.	Appendix F

Topic/Citation	Location	Comment	How to Address	Sites' Response	Jan. 6, 2022 Memo Appendix
Points of offstream storage	Section 10, Attachment 2	POD 22 was labeled as a point of offstream storage in the "SOD Reservoir Details" Tab, but not in the primary tab of the attachment.	Confirm whether it is a point of offstream storage for the application.	Section 10 – Attachment 2 and Section 11 have been updated to provide clarification and additional information.	Appendix F
<b>Section 11: Additional Facilities</b>					
Form field	Section 11	Some form fields in the table in Section 11 were left blank for some facilities (e.g., cross section, material, lift/fall height, capacity).	Provide information for fields that are incomplete	This information is provided.	Appendix G

## 4.0 Proposed Sites-Specific Terms

The Authority included a list of Sites-specific terms with its May 2022 submittal at Section 5 – Attachment 2. That attachment noted that the Authority has been coordinating with the Department of Water Resources and the Bureau of Reclamation to develop a mutually agreeable, Sites-specific term. In addition, the Authority has proactively reached out to water agencies, regulatory agencies, tribal entities, and non-governmental organizations to discuss the Project’s water right application approach, identify concerns, and proactively address those concerns.

As a result of this ongoing coordination, the Authority requests that the two additional terms provided in Appendix H to this Memo be included in the Project’s water right permit.