

Topic: Authority Board Agenda Item 6-2

2019 July 22

Subject:

Draft Water Storage Policy Development

Requested Action:

No action requested. Informational item for reviewing the Reservoir Committee's Ad hoc Operations Work Group's discussion and development of a water storage policy.

Detailed Description/Background:

The Reservoir Committee's Ad hoc Operations Workgroup envisions that each Sites Participant that invests in water supply related benefits from Sites Reservoir would be allocated a specific amount of storage space in Sites Reservoir that they will manage to optimize the water supply benefits for their respective organization. This concept is being used successfully in a couple of on-river reservoirs. The Reservoir Committee's Ad hoc Operation Workgroup has been working of developing a Storage Policy that sets out the operating rules for both the storage of water and releases of water among the Sites Storage Partners and the Authority. The current Working Draft is composed of the following sections:

- Introduction
- Definitions
- o Roles
- Storage of Water
- Accounting for losses
- Sharing of Leasing of Storage Space
- o Releases from Storage
- o Operations, Maintenance and Replacement

Since the last Reservoir Committee meeting, a series of Ad Hoc Workgroup and Subgroup conference calls were held with staff to develop the Working Draft of the Storage Policy (attached). Although the Reservoir Committee's Ad hoc Operations Workgroup has not yet concluded a formal recommendation for the Reservoir Committee, consensus has been reached on most of the sections. Two key policy elements remain outstanding at this time:

- a procedure and example of how to convert current Sites participation based on yield into participation based on reservoir storage, including public benefits storage, and
- 2. whether to recommend storage as a basis for cost allocation in 2020.

The attached version will be discussed at the July 19, 2019 Reservoir Project Committee meeting in order to obtain input from all Reservoir Committee Members. A revised version is planned to be brought to the Reservoir Committee for consideration at their regularly scheduled August 22, 2019 meeting.

	Final	labaa				
Status:	Final	Preparer: Johns	Phase:	2	Version:	Α
Purpose:	Sites Authority Board Staff Report	Checker: Kunde/Ruiz	Date:	2019	July 22	
Caveat:	Informational	QA/QC:	Ref/File #:			
Notes:			Page:	1	of	2

Prior Authority Board Action:

None.

Fiscal Impact/Funding Source:

None, at this time.

Staff Contact:

Jerry Johns/Rob Thomson

Attachments:

Attachment A: Working Draft - Storage Policy by the Sites Authority

Working Draft

STORAGE POLICY BY THE SITES PROJECT AUTHORITY

(1) This Stor	rage Policy was adopted by the Si	tes Authority on	day
of	2019, to assist in the dev	velopment of the Site:	s Reservoir
Project b	y the Sites Project Authority and t	the Sites Storage Part	tners listed in
Attachme	ent 1.		

INTRODUCTION

(2) The Sites Project Authority (Authority) will apply for and expects to hold the water rights and be responsible for the operation of the Sites Reservoir Project with the Reservoir Committee being responsible for the planning, permitting and realtime operations implementation. There are numerous financial participants in the Sites Reservoir Project. These participants will receive water supply benefits, water supply related environmental benefits and other benefits from Sites Reservoir operation. These participants include the (1) State of California, (2) United States Bureau of Reclamation, (3) Northern California agencies and organizations, and (4) water agencies both west and south of the Sacramento-San Joaquin Delta. The participants in the Sites Reservoir Project who receive water supply related benefits are considered Sites Storage Partners. The Sites Storage Partners will enter into agreements with the Authority that in part will specify each Sites Storage Partners allocated storage space in Sites Reservoir. Each of these Sites Storage Partners will have control over the use of their storage allocation space based on the conditions set forth in this policy. The water supply related benefits derived from these storage allocation spaces will depend in large part on how the each Sites Storage Partner manages the water stored and released from their allocated storage space. The Reservoir Committee is responsible for accounting for all the water placed into each Sites Storage Partner's allocated storage space, water released from that storage space and any losses on a daily basis. This policy may be modified in the future by the Authority.

DEFINITIONS

(3) Sites Participants – Government Agencies, Water Organizations and others who financially contribute to the planning and construction of the Sites Reservoir Project.

- **(4) Sites Storage Partners** The Sites Participants who have funded and receive water supply or water supply related environmental benefits from the Sites Reservoir Project (see Attachment 1 for the list of current Sites Storage Partners)
- **(5) Active Storage** That portion of Sites Reservoir above dead pool that can be exercised to create water supply related benefits. The total maximum storage in Sites Reservoir is expected to be 1.81 MAF. Firm dead pool storage is expected to be about 60 TAF. However, operationally another 60 TAF will likely be needed to prevent water quality issues in the storage releases. Therefore, the operational dead pool is considered to be 120 TAF. For this Policy the Active Storage for Sites Reservoir is considered to be about 1.69 MAF. These values are approximate and subject to change in the future.
- **(6) Water Year** The California Water Year is from October 1 through September 30.
- **(7) Operation and Maintenance and Replacement- (O&M) or (O&M&R).** Those costs associated with the operations the Sites Reservoir Project. These can be broken down into:
- (a) fixed operations and maintenance and replacement costs that are more stable year-to-year and that are not significantly influenced by varying diversions of releases of water, and
- (b) variable operations and maintenance costs that reflect annual operations and maintenance costs that vary based on actual operations each year.

Examples are given in item 17.

ROLES

- **(8) Sites Project Authority (Authority)** The Authority will apply for and expects to hold the water rights for the Sites Reservoir Project and be responsible for its operation.
- **(9) Reservoir Committee** The Reservoir Committee is a standing committee of the Authority and oversees the planning, permitting, and day-to-day operation of Sites Reservoir and related activities including coordination with the Sites Storage Partners.
- **(10) California Department of Water Resources** The Department of Water Resources will work with the California Water Commission and the Resources

Agency to manage at their request the water held in the storage allocation space obtained by the Water Commission for environmental purposes. However, the nonconsumptive use of "delta smelt" water intended for use in the Yolo Bypass/Cache Slough areas after its use there will remain under the control of the Reservoir Committee for allocation to other in-basin or out-of-basin uses. In addition, the Department of Water Resources will coordinate with the Reservoir Committee's operation of Sites Reservoir and that of the State Water Project to maximize the water supply and water supply related benefits of Sites Reservoir.

STORAGE OF WATER

(11) Water Storage by the Appropriation of Water: The Authority will be responsible for compliance with water right provisions and other conditions that control the appropriation of water into storage in Sites Reservoir. The Authority through the Reservoir Committee will take all actions necessary to appropriate water into storage consistent with regulatory requirements, physical constraints and hydrologic conditions. Water appropriated will be placed into Sites Reservoir and then divided into each Sites Storage Partners allocated storage space proportional to their allocated storage space amount.¹

If a Sites Storage Partner's storage allocation space is filled, the remaining water will be allocated to the remaining Sites Storage Partners who still have a vacated storage allocation space and the water will be used to fill the other Sites Storage Partner's storage allocation spaces until all Sites Storage Partners storage allocation spaces are filled. Each Sites Storage Partner will be responsible for the Operation and Maintenance (O&M) costs associated with the use of their storage allocation space as set forth below. However, a Sites Storage Partner may opt out of having water appropriated into their storage space and avoid the variable O&M costs if they so inform the Reservoir Committee at the beginning of the Water Year or as otherwise established by the Reservoir Committee.

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¹ For example, if only 340 TAF of water is able to be appropriated into Sites Reservoir in any one year, this represents 20% of the total allocated storage of Sites Reservoir (340/1,690) = 20%. In that year each Sites Storage Partner will receive an amount of water equal to 20% of their allocated storage space amount.

(12) Water Storage from Other Sources: There are opportunities for the Sites Storage Partners to request that the Reservoir Committee place water from sources other than that by appropriation into their storage allocation space. These other sources could include among other things: the re-diversion of previously stored water, water transfers, exchanges between Sites Storage Partners, exchanges with other entities, etc. The Reservoir Committee will take all reasonable steps to help facilitate these requests. The Sites Storage Partners will be responsible for the costs of obtaining these other sources of water including any water right changes and environmental compliance, and Reservoir Committee costs associated with the review these requests that may be needed. Also, the Sites Storage Partner is responsible for all O&M costs of placing this water into their storage allocation space as set forth below. Water storage from other sources shall not impact the ability of the Reservoir Committee to appropriate water or release water from Sites Reservoir.

ACCOUNTING FOR LOSSES

(13) Allocation of Losses: Losses of water held in Sites Reservoir storage including evaporation and seepage will be accounted for on a daily basis. These losses will be allocated to each Sites Storage Partner based proportionally on the amount of their water in storage that day.

SHARING OR LEASING OF STORAGE SPACE

- **(14) Sharing or Leasing of Storage Allocation Space:** The Sites Storage Partners are allowed to share or lease their storage allocation space with other Sites Storage Partners or other entities. This sharing or leasing could span multiple years and will be subject to several conditions set forth below.
 - Any sharing or leasing of storage allocation space shall be coordinated with the Reservoir Committee so that proper water accounting can be maintained.
 - If the Sites Storage Partner's storage allocated space fills, then any shared or leased water held in that storage space that day will stay in the shared or leased space unless the Reservoir Committee receives written instructions otherwise from the Sites Storage Partner.
 - The responsibility for collecting payment for the use of a Sites Storage Partners shared storage space will be the responsibility of the Sites Storage Partner and not that of the Reservoir Committee.
 - The Sites Storage Partner maintains the responsibility to the Reservoir Committee for all the O&M costs of placing water of any source into its storage allocation space. However, the Sites Storage Partner will likely

collect costs of placing water into any shared storage space from the party making use of that shared space.

RELEASES OF WATER FROM STORAGE

(15) Water Released From Storage: The Sites Storage Partners have total discretion on the amount of water held in their storage allocation space that they wish to be scheduled for release in any calendar year for their use. These requested stored water releases and their schedule for release shall be coordinated with the Reservoir Committee so the Reservoir Committee can coordinate this request with the other Sites Storage Partners, State Water Project, Central Valley Project and any regulations related to the release of water from Sites Reservoir.

The Reservoir Committee will work with the Department of Water Resources and the U. S. Bureau of Reclamation to manage these releases with those of the State Water Project and Central Valley Project to maximize the benefits to these parties.

(16) Scheduling Stored Water Releases: No later than February 20th of each water year the Reservoir Committee will make a water storage forecast for each Sites Storage Partner for that water year based on each Sites Storage Partner physical storage to date and several examples of projected hydrologic conditions ranging from critically dry to far above normal. These forecasts will be updated each month by the 20th of every month until April 20th. Each Sites Storage Partner will provide the Reservoir Committee the monthly schedule and amounts of the water they wish to be released that calendar year based upon each of these forecasts 15 days after the receipt of these forecasts. These schedules will be updated monthly as needed until June and changes after that will be accommodated to the extent it does not conflict with those of other Sites Storage Partners. Any water held in a shared allocation space will be the responsibility of the Sites Storage Partner to communicate the requested release of that water to the Reservoir Committee unless other arrangements are provided to the Reservoir Committee in writing.

The Reservoir Committee will work with each Sites Storage Partner, the State Water Project, Central Valley Project and regulatory agencies and make all reasonable efforts to satisfy the water release schedules requested by each Sites Storage Partner. If there is a Sites Reservoir release constraint affecting the ability of meeting the requested water release schedules from Sites Reservoir, the Reservoir Committee will first work with those conflicted Sites Storage Partners to see if accommodations can be made. If the conflict cannot be resolved, the priority for the

releases will be in proportion to the Storage Allocation space as divided among the conflicted Sites Storage Partners.

(NOTE: There is still discussion on whether the above sentence should apply equally to both Sites and Non-Sites water held in storage or whether Sites water should have a priority over Non-Sites Water.)

(NOTE: The Operations Workgroup July 10 Comments are incorporated through this point. The discussion on the remainder of this draft will continue on July 16th.)

OPERATION, MAINTENANCE AND REPLACEMENT

(17) Operation and Maintenance Cost Allocations: Operation and Maintenance (0&M) costs will be divided into fixed 0&M&R and variable 0&M. Fixed 0&M&R will cover those 0&M&R costs that are generally stable from year to year like monitoring costs, routine maintenance, Reservoir Committee staff costs, repair funds, replacement of equipment funds etc. These costs will be calculated by the Reservoir Committee and paid by the Sites Storage Partners for the coming Water Year in advance. They will be allocated to all the Sites Storage Partners in the same manner as the capital costs.

Variable O&M costs include pumping costs to appropriate water into storage, pumping water from other sources into storage, and other costs related to the placement of water into storage. These costs will be assessed to each Sites Storage Partner based on the amount of water placed into their storage allocation. An estimate of these costs will be made by the Reservoir Committee. These costs will be assessed to each Sites Storage Partner and paid for the coming Water Year in advance. However, a Sites Storage Partner may opt out of having water appropriated into their storage space and avoid the variable O&M costs if they so inform the Reservoir Committee at the beginning of the Water Year. At the end of each Water Year any revenue received in excess of costs will be returned to the Sites Storage Partners or applied as a credit to the next year's variable O&M costs.

However, the Reservoir Committee will retain a reasonable reserve fund to cover any unforeseen variable O&M costs that may come up in any year.

(18) Power Revenue. Any power revenue received by the Authority or the Reservoir Committee generated by the operation of the Sites Reservoir Project will be used to offset the variable O&M costs of the collective Sites Storage Partners that year. If this revenue exceeds the total variable O&M cost in any one year, then the amount over the variable O&M will be applied to the total fixed O&M&R that year.

SIGNATURES		
DATE	_	

ATTACHMENT 1

SITES STORAGE PARTNERS

ENVIRONMENTAL

WSIP - California Water Commission

WIIN- United States Bureau of Reclamation

WATER USERS

America Canyon, City of Antelope Valley-East Kern WA Carter Mutual Water Company Coachella Valley Water District Colusa County Colusa County Water District Desert Water Agency Glenn-Colusa Irrigation District MWD of So. California **Reclamation District 108** San Bernardino Valley MWD San Gorgonio Pass WA Santa Clara Valley WD Santa Clarita Valley WA TC-4 Cortina Water District TC-4 Davis Water District TC-4 Dunnigan Water District TC-4 LaGrange Water District Westside Water District Wheeler Ridge-Maricopa WSD

Zone 7 Water Agency