



January 13, 2018

Sites Project Authority
EIR-EIS-Comments@SitesProject.org

Re: Comments on Draft Environmental Impact Report/Draft Environmental Impact Statement for the Sites Reservoir Project

Dear Sir or Madam:

The California Sportfishing Protection Alliance (CSPA), AquAlliance and the California Water Impact Network respectfully submit the following comments on the Draft Environmental Impact Report/Draft Environmental Impact Statement (DEIR/DEIS) for the Sites Project. The Project proposes to construct a Sites Reservoir and associated facilities west of Maxwell, CA.

I. Summary of Comments

On February 23, 2017, CSPA submitted comments on scoping for the Sites Project. CSPA's scoping comments are attached as an attachment to the present comments on the DEIR/DEIS. CSPA's scoping comments focused primarily on the need for the DEIR/DEIS to clearly describe operation of the proposed Project and to analyze the impact of this proposed operation. Unfortunately, the DEIR/DEIS did not adopt the approaches that CSPA recommended in comments on scoping. The DEIR/DEIS does not describe proposed Project operations or governance. It does not analyze alternative operational scenarios or analyze their impacts. It does not analyze operations under alternative regulatory constraints, such as constraints more stringent than existing regulatory constraints for the Sacramento River and the Bay-Delta estuary, but relies on constraints under Water Rights Decision 1641 (D-1641) and under Biological Opinions for the Long-Term Operation of the State Water Project and the Central Valley Project.

For these and other reasons, the DEIR/DEIS is deficient and must be recirculated.

II. The DEIR/DEIS does not contain an adequate description of the Project.

A. The DEIR/DEIS does not describe who will operate the Project.

The DEIR/DEIS does not describe who will operate the Project. It does not describe how operators will make decisions about operations, and to whom operators will be accountable.

Project proponents have stated in their advocacy for the Project that the Project will allow greater flexibility for operation of the State Water Project (SWP) and Central Valley Project (CVP). However, the DEIR/DEIS does not describe how operators will integrate the operation of Sites Reservoir with the operation of the State Water Project and Central Valley Project. The DEIR/DEIS does not describe how operators of Sites Reservoir would coordinate their decisionmaking with that of SWP and CVP operators. The DEIR/DEIS does not describe whether there would be overlap in operations personnel between Sites Reservoir operators and SWP and CVP operators. The DEIR/DEIS does not propose rules by which Sites Reservoir operators and SWP and CVP operators would divide the authority to allocate water stored in Sites Reservoir. It is in fact entirely unclear whether Sites operators would have any independent ability to prioritize uses of water stored in Sites Reservoir over uses to meet regulatory requirements of the SWP and CVP.

Pages 3-109 and 3-110 of the DEIR/DEIS provide a litany of potential operations and tells us that “cooperative operational strategies could improve ecosystem conditions by ... [o]perating in a flexible manner to support storage and associated releases that could be adaptively managed to support operational actions found to produce the greatest benefits over time.” Similar to the constructs that many proponents of Sites Reservoir have criticized in documents supporting the California WaterFix and the State Water Board’s update of the Bay-Delta Water Quality Control Plan, the DEIR/DEIS relies on a vague process to be developed and staffed in the future to describe and evaluate the operations that provide alleged benefits. The DEIR/DEIS does not describe the personnel or lines of accountability of these “adaptive managers” any more than it describes them for project operators.

B. The DEIR/DEIS does not describe operating rules for the Project.

Table 3-24 in Chapter 3 of the DEIR/DEIS describes general types of project operations. These include:

1. Providing storage to “supplement” deliveries to Tehama-Colusa Canal CVP contractors and to Glenn-Colusa Canal and RD108 Settlement Contractors. It is unclear whether this means that overall contract amounts would be increased or whether this is exclusively a matter of firming up reliability for these water users. It is also unclear whether this would facilitate water transfers by these entities. The DEIR/DEIS does not provide any rules for prioritizing this type of operation or quantification of this proposed operation (e.g. additional acre-feet delivered to different categories of water users).
2. Increasing deliveries to wildlife refuges both north and south of Delta. The DEIR/DEIS does not provide any rules for prioritizing this type of operation or any quantification of this proposed operation.
3. Increasing the water supply reliability of CVP contractors (generally) and SWP contractors. The DEIR/DEIS does not provide any rules for prioritizing this type of operation or any quantification of this proposed operation.
4. Releasing water for Delta water quality. The DEIR/DEIS does not describe the rules by which operators of Sites Reservoir will assure that the water quality of releases made for water quality purposes will not degrade actual water quality in the

Sacramento River or the Delta, thermally or in terms of biological or chemical contaminants.

The DEIR/DEIS states on p. 3-102: “Providing water to improve storage conditions in CVP and SWP facilities is a primary objective of the proposed alternatives.” The DEIR/DEIS describes many of the objectives of Project operation as offsets for water otherwise delivered or not delivered by the SWP and/or the CVP. However, the DEIR/DEIS does not describe rules that will assure that those offsets assure environmental benefits under operations not within the control of the Sites project operators. For example, where a proposed benefit of the Sites project is increased carryover storage in an SWP or CVP reservoir, the DEIR does not describe the operating rules for the SWP or CVP under which this ascribed benefit will assure carryover storage and not just enable increased SWP and/or CVP deliveries north or south of Delta. The DEIR/DEIS does not describe who will compose those rules, who will enforce those rules and how that entity will enforce them, and what entity or entities will be the subject of the conditions in those rules.

Absent such rules, the interaction of Project operation with the operation of SWP and CVP facilities, including Trinity, Shasta, Oroville, Folsom, and San Luis reservoirs, is completely speculative, nothing more than possible operations. The fact is that the SWP and CVP today could operate existing facilities to more consistently meet existing operational requirements or to meet more environmentally protective requirements. But the SWP and CVP do not. The objective opportunity to create environmental benefits does not in itself create those benefits. Equally, the impacts of Project operation in combination with the operation of SWP and CVP facilities are completely speculative and hypothetical.

Table 3-24 in Chapter 3 of the DEIR/DEIS also describes an “Ecosystem Enhancement Storage Account” and various potential environmental benefits of this construct. The DEIR/DEIS provides no rules for this concept either. Is the account one acre-foot out of two acre-feet stored? Out of ten? Out of a hundred? The DEIR/DEIS provides no clue. There is also no commitment of where the water will eventually go. For all the reader knows, the “environmental” benefit may simply be a means of claiming a flow benefit incidental to moving more water south of Delta, like the previous “Environmental Water Account” that allowed north of Delta water rights holders to sell export water at subsidized rates.

In the absence of rules to protect water quality in the Sacramento River and the Delta from degradation by releases from Sites Reservoir, the DEIR/DEIS falls back on averaging monthly model output, for instance for temperature: “As shown in Appendix 7F Sites Reservoir Discharge Temperature Modeling, Table ST-4a, releases from Sites Reservoir would not increase water temperatures in the Sacramento River downstream of the facility during the summer and fall in most years/months.” (DEIR/DEIS, p. 12-109). Because generally on a modeled average monthly basis there is no change in temperature, the DEIR/DEIS concludes that there is no impact and no need for mitigation. By averaging away and thus understating the impact, the DEIR/DEIS eliminates the need for mitigation. The correct way to approach the impact would be to make operating rules that did not allow discharges from Sites to the Sacramento River that would degrade water quality or water temperature within defined numeric values.

The averaging of thermal impacts becomes even more problematic in considering the likely need to limit pumpback power operations during hot times of year. The DEIR/DEIS informs the reader: “Potential temperature changes within conveyance features that would convey water to and from the Sites Reservoir were not taken into account when computing the inflow temperatures and the resulting blended Sacramento River temperatures.” (DEIR/DEIS, p. 7F-3). Pumpback operations between Holthouse Reservoir and Sites Reservoir could have a substantial thermal effect on the water temperatures in both reservoirs. Depending on the discharge point into Sites Reservoir, pumpback operations could cause thermal mixing of water relatively deep in the reservoir that would otherwise presumably be relatively cold. It is likely that analysis of thermodynamics within Sites Reservoir, within Holthouse Reservoir, and between the two reservoirs could reveal the need to modify design and/or to limit pumpback operations. However, the analysis to support such decisions is not present in the DEIR/DEIS.

III. The DEIR/DEIS does not contain a sufficient range of alternatives.

The DEIR/DEIS proposes and evaluates operation of the Project exclusively under existing flow constraints at Red Bluff (3250 cfs minimum bypass requirement), Hamilton City (4000 cfs minimum bypass requirement), and Wilkins Slough (5000 cfs minimum bypass requirement). (DEIR/DEIS, p. 3-106.) The DEIR/DEIS proposes a bypass flow requirement at Freeport “designed to protect and maintain existing downstream water uses and water quality in the Delta.” (*Id.*) This limited evaluation does not consider more environmentally protective bypass flow requirements. This limited evaluation therefore does not provide the reader or the decision maker with sufficient information to analyze different potential flow constraints for project diversions. It also does not allow analysis of the costs and benefits of the Project under different flow constraints. Such analysis is critical to an evaluation of whether the Project is in the public interest as well as an evaluation of potential tradeoffs between developmental and public trust values.

The limited evaluation of the Project under existing flow constraints and levels of protection also renders the cumulative effects analysis inadequate. Construction of the Project based exclusively on economics and hydrology that assume existing regulatory constraints would literally cast in concrete a new rationale to maintain the existing inadequate Sacramento River and Delta flow and water quality constraints. The Project could become a partially or even fully stranded asset if flow or water quality requirements became more stringent or were more stringently enforced. This potential new economic reality would cascade into a new, multi-billion-dollar rationale for maintaining existing inadequate flow and water quality protections.

The DEIR/DEIS should have included an alternative in which the Project is constructed and operated in conjunction with the proposed Delta tunnels (“California WaterFix”). The DEIR/DEIS does not include such an alternative. The DEIR/DEIS thus fails to describe how the tunnels would affect water availability for the Project, water deliveries from the Project (amount and destination), and operation of the Project. The DEIR/DEIS does not describe how much of the Project’s water supply benefits would be applied to water users south of the Delta with and without the Delta tunnels. The DEIR/DEIS also does not analyze potential conflicts with WaterFix over available water supply.

The DEIR/DEIS does not describe how climate change will affect Project operations and how Project operations under changed climate conditions will alter Project impacts. The DEIR/DEIS instead improperly substitutes modeling output for this analysis.

IV. The DEIR/DEIS does not adequately describe the portion of the regulatory setting that deals with water rights.

The DEIR/DEIS flies past the discussion of water rights to support the Project with the perfunctory statement: “The Authority intends to apply for water rights consistent with the application filed on September 30, 1977 (#25517). This application is under the control of the SWRCB and is expected to be treated as a ‘State Filing’ under California Water Code 10500.” (DEIR/DEIS, p. 4-15). The DEIR/DEIS does not propose any specifics for this water right, including rate of diversion, annual maximum diversion to storage, or season of diversion. Presumably, the Sites Authority would hold the water right, but the DEIR/DEIS does not specify the water right holder. The Authority discusses and appears prepared to claim priority over SWP and CVP exports pursuant to county of origin and related statutes that the DEIR/DEIS describes in general (DEIR/DEIS, p. 4-17), but the DEIR/DEIS is not specific on this point. The DEIR/DEIS is equally silent on how any county, area, or watershed of origin water right could be applied to storage of water for Project partners or contractors west or south of Delta, outside the area of origin.

Section 4.3.3 of the DEIR/DEIS discusses the water rights of the SWP and CVP generally, but does not discuss whether (and if so how) the Project would utilize SWP and CVP water rights. The DEIR/DEIS does not analyze whether or how the Department of Water Resources and/or the Bureau of Reclamation would modify SWP and/or CVP water rights to make use of Project facilities. The priority dates on SWP and CVP water right permits, and the enormous face value of these permits, have the potential to greatly affect the timing and amount of diversion to storage in Sites Reservoir. Understanding who holds the water rights to water stored in Sites Reservoir is also important in order to understand the timing, amount and duration of releases from Sites Reservoir. On these issues, the DEIR/DEIS is silent.

The DEIR/DEIS does not disclose whether the Project will store contract water for the SWP or the CVP, and if so, what the patterns of diversion and release of such contract water would be. Understanding this issue is also important in order to understand reservoir operations.

V. The DEIR/DEIS does not disclose how the Project will facilitate water transfers and does not disclose the impacts of such transfers.

The Project if constructed will allow the storage of water under various instruments, including water for CVP Settlement Contractors, CVP contract water, and water for Project beneficiaries out of the area pursuant to water rights or contracts that at this time are unknown. The availability of Project storage is highly likely to facilitate a net increase in the transfer of water originating in the Sacramento Valley.

Rather than disclosing this facilitation and the impacts of increased water transfers, the DEIR/DEIS contains a perfunctory dismissal of the cumulative effect of water transfers: “The conditions for each water transfer would be determined on a case-by-case basis.” (DEIR/DEIS, p. 35-12). The DEIR/DEIS then states existing protections will prevent impacts from groundwater substitution transfers, with no real foundation or analysis.

VI. The DEIR/DEIS does not disclose reduction of the frequency, magnitude and duration of floodplain inundation as a significant impact and does not propose specific mitigation.

Appendix 12N of the DEIR/DEIS summarizes in table form the frequency, magnitude and duration of inundation of the Sutter and Yolo bypasses, comparing the Project alternatives with the No Action Alternative. In spite of the reductions under all Project alternatives compared with the No Action Alternative, the DEIR/DEIS does not identify these reductions as a significant impact. The reduction in frequency, magnitude and duration of inundation of the Sutter and Yolo bypasses is a significant impact. The DEIR/DEIS should have identified it as such and proposed specific mitigation, such as releases from Sites Reservoir to, at minimum, maintain level of inundation equal to the levels under the No Action Alternative.

VII. Conclusion

Thank you very much for the opportunity to comment on the Draft Environmental Impact Report/Draft Environmental Impact Statement (DEIR/DEIS) for the Sites Project.

Respectfully submitted,



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Attachment 1

Comments of the California Sportfishing Protection Alliance
on the January 23, 2017 Supplemental Notice of Preparation of an
Environmental Impact Report for the Sites Reservoir Project

February 23, 2017



California Sportfishing Protection Alliance

"An Advocate for Fisheries, Habitat and Water Quality"

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February 23, 2017

Sites Project Authority

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Re: Comments on January 23, 2017 Supplemental Notice of Preparation of an Environmental Impact Report for the Sites Reservoir Project

Dear Sir or Madam:

The California Sportfishing Protection Alliance respectfully submits the following comments on scoping for the proposed construction of Sites Reservoir and associated facilities, as described in the January 23, 2017 Supplemental Notice of Preparation of an Environmental Impact Report for the Sites Reservoir Project, issued by the Sites Project Authority. Our comments are organized by number as a series of recommendations. The numeric designation is for ease of reference, and does not reflect any particular priority. Though we attempt to organize related issues sequentially, many issues have multiple facets, and we may not have reflected their connection to other issues in our comments.

1. The DEIR must describe who will operate the project. It must describe how operators will make decisions about operations, and to whom operators will be accountable.
2. The DEIR must describe how operators will integrate the operation of the reservoir with the operation of the State Water Project and Central Valley Project. The DEIR must analyze impacts of project operation on the operation of SWP and CVP facilities, including Trinity, Shasta, Oroville, Folsom, and San Luis Reservoirs, and describe how the project will affect storage in these facilities.
3. The DEIR must describe any proposed offsets by which the project would deliver water north of Delta in lieu of deliveries from Lake Shasta, Oroville Reservoir or Folsom Reservoir.
4. To the degree that any ascribed environmental benefits of the project are the result of offsets for water otherwise delivered or not delivered by the SWP and/or the CVP, the DEIR must disclose how those offsets assure environmental benefits under operations not within the control of the Sites project operators. For example, if a proposed benefit of the Sites project is increased carryover storage in an SWP or CVP reservoir, the DEIR must describe how this ascribed benefit will assure carryover storage and not just enable increased SWP and/or CVP deliveries north or south of Delta. The DEIR must describe

the rules that will assure the ascribed benefit, who will compose those rules, who will enforce those rules and how that entity will enforce them, and what entity or entities will be the subject of the conditions in those rules.

5. The DEIR must not claim that the project will provide environmental benefits because it will provide the objective opportunity to create environmental benefits. It must describe the precise mechanisms by which the project will provide and assure environmental benefits. The DEIR must specifically identify any ascribed environmental benefits by location, time, and species habitat.
6. The DEIR must carefully and clearly explain how environmental benefits that proponents ascribe to the project are not existing requirements, particularly unmet requirements of the SWP and/or CVP.
7. The DEIR must describe operational alternatives for the project under a variety of dry, average and wet water year conditions.
8. The DEIR must describe how climate change will affect project operations and how project operations under changed climate conditions will alter project impacts.
9. The DEIR must describe how the project will operate during high runoff conditions, and how it will manage sediment load into and through project facilities.
10. The DEIR must describe the performance (water availability, water deliveries, water for ascribed environmental benefits) of the project under multiple flow requirements both for the Sacramento River and Delta outflow, including constraints more stringent than D-1641, Water Rights Order 90-05, and other currently applicable requirements. The DEIR must clearly describe proposed bypass flow requirements for the project.
11. The DEIR must analyze a reasonable range of alternatives that are sufficiently distinct from one another. We recommend that the DEIR evaluate an alternative that includes a smaller reservoir than the proposed project, water supply priority to local investors and local water delivery, and a new intake/outfall on the Sacramento River. We also recommend that the DEIR analyze a maximum environmental benefits alternative that includes limited reservoir size, limited diversions, prioritization of offstream storage for existing north of Delta irrigation over other consumptive uses, release of reservoir water to augment flows for floodplain inundation at the top of the Yolo Bypass, specific, quantified benefits to waterfowl, and other environmental benefits that project proponents may identify.
12. The DEIR must include an alternative in which the project is constructed and operated in conjunction with the proposed Delta tunnels. It must describe how the tunnels would affect water availability for the project, water deliveries from the project (amount and destination), and operation of the project. The DEIR must describe how much of the project's water supply benefits would be applied to water users south of the Delta and what kind of quantified net environmental benefits the project would provide with and

without the Delta tunnels. The DEIR should analyze potential conflicts with WaterFix, especially over available water supply.

13. The DEIR must describe the water rights that will apply to the project, and who will own them. The DEIR must provide the priority date of the water rights and all sources of water. The DEIR must describe whether those rights will involve assignment of state filings and/or carry area of origin priority. The DEIR must describe how any regional priority will apply to water that is sold out of the area, particularly south or west of Delta.
14. The DEIR must describe whether the project will store any water pursuant to CVP and/or SWP contracts, and whether the project will assume or involve additions or changes to CVP and/or SWP water rights to facilitate storage in project facilities or to facilitate CVP and/or SWP deliveries from project facilities.
15. The DEIR must describe how the project will incentivize or facilitate water transfers from Sacramento Valley water rights holders or CVP and/or SWP contract holders to other entities. The DEIR must identify the likely recipients of such transfers by geographic region and by the types of water rights and/or contracts the recipients hold. The DEIR must disclose impacts of any such transfers, including impacts to Sacramento Valley groundwater.
16. The DEIR must identify the actual project investors and beneficiaries. It must describe how much the beneficiaries will contribute to project cost and how much water they will be assured on what schedule in return for their investment. The DEIR must describe how obligations to out-of-area investors will be prioritized in relation to local uses.
17. The DEIR must describe the complete regulatory setting, including contingencies should a preferred regulatory approach or outcome prove infeasible. The DEIR must describe all permits and approvals necessary to complete the project and bring it on line, and how proponents will sequence proceedings to obtain such permits and approvals.
18. It came to our attention during a scoping meeting that proponents are considering ownership of hydroelectric facilities by the Bureau of Reclamation, thus avoiding the need for an operating license from the Federal Energy Regulatory Commission. The DEIR must describe the legal basis for such a scenario in which ownership of hydropower infrastructure by a federal entity, without ownership of discharging or receiving waters, qualifies for exemption from regulation by FERC, including any precedent for such a regulatory arrangement. Such analysis should consider who proponents propose will operational control of the project and who proponents propose as the financial beneficiaries of hydropower operations.
19. The DEIR must describe the hydropower component of the project, including pumping operations to fill the reservoir and pumpback operations more strictly for hydropower (pumped storage) generation.

20. The DEIR must describe the thermal impacts of pumpback operations, particular during the summer, and evaluate limitations on the season of pumpback operations.
21. The DEIR must quantify the amount of water that the project will reliably produce on an annual basis under a variety of bypass flow and other physical and regulatory scenarios.
22. The DEIR must describe the hydrological impacts of project diversions on the Sacramento River and on Delta inflow and outflow.
23. The DEIR must disclose the water quality impacts of the project, including impacts in the Sacramento River and the Delta resulting from diversions to storage, impacts of releases from storage, and water quality in the reservoir. The water quality analysis must pay particular attention to water temperature, algal blooms, and mercury and other heavy metals.
24. The DEIR must describe all release points from the proposed reservoir and describe how the project will release water for environmental or water supply benefits without adversely affecting water quality. This DEIR should break down this analysis by month and water year type.
25. The DEIR must describe the thermal hydrodynamics of the proposed Sites reservoir, and in particular the seasonal stratification of the reservoir or absence of such stratification. The DEIR must describe how inputs and withdrawals from Sites reservoir will seasonally affect the thermal hydrodynamics of the reservoir, including the effects of pumpback hydropower operations. The DEIR must describe the thermal interaction of canal operations on the thermal hydrodynamics of all project facilities. The DEIR must describe proposed and other feasible facilities that would allow thermal management of project facilities and of discharges from them.
26. The DEIR must describe any alternative means to remove water from the project reservoir other than the primary proposed set of pipes and pump stations. The DEIR must describe the impacts of such alternative removal, or the absence of such alternative, from the perspective of flood control, public safety, and biological impairment, as well as from the perspective of water supply and environmental benefits.
27. The DEIR must describe whether the project will divert water from the Trinity River, and if so must describe the resulting impacts to the Trinity and Sacramento rivers the Shasta-Trinity Division of the CVP.
28. The DEIR must assess impacts of Sacramento River diversions and other project operations on threatened and endangered species and their habitat, including winter-run and spring-run Chinook salmon, steelhead, green sturgeon, Sacramento splittail, Delta smelt, bank swallow, yellow-billed cuckoo, Swainson's hawk, valley elderberry longhorn beetle, giant garter snake, and others.

29. The DEIR must assess impacts of Sacramento River diversions and other project operations on non-listed species, including fall-run Chinook salmon, white sturgeon, and striped bass.
30. The DEIR must assess impacts on habitat and species within the footprint of the reservoir and other project facilities (dams, canals, pumps, and power lines), including impacts on the protected golden eagle, bald eagle, Swainson's hawk, giant garter snake, burrowing owl, tricolored blackbird, loggerhead shrike, western pond turtle, pallid bat, American badger, valley elderberry longhorn beetle, and at least 12 rare or sensitive native plants.
31. The DEIR must detail impacts on cultural resources in the reservoir and facility footprints, including prehistoric and historic sites.
32. The DEIR must analyze the potential for reservoir-induced seismicity and must disclose public safety issues associated with reservoir-induced earthquakes on nearby unreinforced masonry structures must be examined in the report. The DEIR must also disclose the vulnerability of the project to earthquakes, including all local faults and known historical seismic activity, and must describe how project design will protect the project from failure in the event of a major earthquake in the vicinity of the project.
33. The DEIR must describe the zone of inundation in the event of partial or complete dam failure, and describe the impacts of such potential inundation.
34. The DEIR must base its analysis on transparent modeling to assess impacts on flow, water temperature, and water quality. The DEIR must employ and make available a public platform water balance model with a daily timestep to evaluate project operations and hydrological impacts.

Thank you very much for the opportunity to comment on the Supplemental Notice of Preparation of an Environmental Impact Report for the Sites Reservoir Project.

Respectfully submitted,



Chris Shutes
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California Sportfishing Protection Alliance