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Sent via U.S. Mail and via email to sha-mpr-usjrbsi@usbr.gov

RE: Comments on the Upper San Joaquin River Basin Storage Investigation Draft Environmental Impact Statement

Dear Ms. Harris:

Thank you for providing us the opportunity to submit comments on the Draft Environmental Impact Statement (TFD dEIS) for the Upper San Joaquin River Basin Storage Investigation. As river, fishing, and wildlands advocacy groups, we cherish what is left of the San Joaquin River and work to preserve it for future generations. The San Joaquin River, including river mile 274 and upstream, provides an invaluable source of recreation and scenic beauty to our members. With this interest in mind, we request that Reclamation re-conceive the project alternatives and release a new draft EIS with a longer public comment period. On September 5, 2014, Reclamation released 7,000 pages of dEIS and announced that it would accept public comments until only October 27, 2014. This inadequate comment period ensured the failure of interested parties to meaningfully review and offer comments on the dEIS.

Nevertheless, our limited review of the dEIS has revealed critical flaws in the proposed project and violations of the National Environmental Policy Act (NEPA). We oppose the action alternatives.

Project Description

It is impossible not to note the Temperance Flat Dam dEIS project description:

[T]o increase storage of water from the upper San Joaquin River watershed to improve water supply reliability and operational flexibility in CVP San Joaquin Valley areas and other regions of California; and to enhance water temperature and flow conditions in the San Joaquin River downstream from Friant Dam for salmon and other native fish.

p. 2-8 dEIS. As noted in our comments on the feasibility report and NRDC et. al. comments on the report and dEIS, the environmental and other benefits are illusory. But there are other problems with the project purpose.

The project description tiers off the CALFED record of decision (ROD), which recommended more detailed study of five sites, including the Temperance Flat Dam (TFD). (p. 1 TFD dEIS.) However, Reclamation fails to reveal that the CALFED ROD also contains a discordant note, the resolution of which should have been fundamental to the TFD feasibility report and dEIS:

The financing strategy for individual storage projects will vary due to the design and planned operations of each project. Final cost allocations, however, will be made based on the principle of “beneficiaries pay.”

p. 47 CALFED ROD.

Beneficiaries Pay. A fundamental philosophy of the CALFED Program is that costs should, to the extent possible, be paid by the beneficiaries of the program actions.

p. 34 CALFED ROD. The ROD is clear: projects that are being investigated without beneficiaries willing to bear the financial burden of the investigated projects should not be carried forward, submitted for authorization, and whose reimbursable costs would be added to the CVP repayment obligations. Repayment by beneficiaries is also a tenet of Reclamation law: the water and power beneficiaries of the Central Valley Project (CVP) pay off the debts and operation and maintenance costs of the project.

Yet there seems to be little awareness or discussion in Reclamation’s TFD Feasibility Report or dEIS about these twin prongs of the CALFED ROD: storage investigations and “beneficiaries pay” for any resulting projects. Instead, we have a storage investigation that allegedly demonstrates environmental feasibility (but, in fact, does not) and strikingly little water-supply yield (perhaps negative yield) in comparison to the potential cost of the project. What’s more, Reclamation makes no demonstration that it has even made an inquiry into willingness of beneficiaries to pay for the project.

Thus, the dEIS purpose of the project is ill-formed: the project does not pass the tests of the CALFED ROD, and unless it is able to, it is improper for Reclamation to rely on the CALFED ROD in this NEPA analysis.

Financial feasibility

There appears to be no analysis of the project costs to beneficiaries. There appears to be no analysis of whether beneficiaries exist willing to bear project costs. There does not appear to be an analysis of what beneficiaries may exist and who will bear project costs or how much they will be. Given Reclamation’s intention to tier off the CALFED ROD, a discussion and resolution of these elementary issues would seem to be fundamental to any Temperance Flat Dam Final EIS

and Record of Decision. Indeed, they should have been fundamental to the draft feasibility report and draft EIS.

This is not a small matter. Federal water policy, particularly since President Ronald Reagan¹, has required commitments by beneficiaries to shoulder the costs of the water and power features of federal dams (in Reclamation's case, by cost recovery in water and power rates). These commitments need to be made in advance of Secretarial recommendations and are of vital interest to the Office of Management and Budget review as well. (*Reshaping National Water Politics: The Emergence of the Water Resources Development Act of 1986*, Office of History, Headquarters, U.S. Army Corps of Engineers.)

It seems odd that commenters, not Reclamation, are apparently required to raise these issues. But the fundamental data is there. Setting aside the issue of what the true costs of the project and required mitigation and project yield actually is, Reclamation estimates the cost of this project to be \$2.35 billion dollars with a project long-term average annual yield to beneficiaries of 61,000 to 87,000 acre-feet (depending on the Alternative Plan chosen). Reclamation estimates typical CVP yield to be 100 times larger, approximately 7,000,000 acre feet per year (Mid Pacific Region website). In a 2013 report, the Inspector General USDI characterized the unpaid CVP irrigation and municipal & industrial water-service reimbursable debt as \$1.3 billion dollars. (p. 2, *Central Valley Project, California: Repayment Status*, Office of the Inspector General, USDI, Report No.: WR-EV-BOR-0003-2012, March 2013.) Adding Temperance Flat Dam to the reimbursable rather than non-reimbursable debt of the CVP (as we and others argue must be done if constructed) increases the CVP debt burden by nearly three times (2.8) while being modeled to increase potential project deliveries by one percent.

While a more sophisticated analysis and different assumptions about reimbursable costs might refine these numbers, it will remain clear that the addition of the Temperance Flat Dam to the CVP would increase the debt burden substantially without any corresponding increase in project yield for water-service contractors. It seems unlikely that CVP contractors will find the dam to be a worthwhile investment for the contractors who bear the burden of the CVP debt, with cascading consequences to a broad suite of Reclamation's characterizations in the dEIS. To complete a feasibility report and environmental review without addressing the fundamental financial infeasibility of the TFD does a disservice to the public, CVP contractors, the Secretary of the Interior, and the U.S. Congress.

In fact, the TFD dEIS fails to evaluate the impact of the alternatives on the future water costs for Friant Water Districts and the negative impact that could have on groundwater recharge or water available to areas that receive Friant water.

¹ The Reagan cost-sharing policy is discussed, along with the identified exhibits, in the Opening Statement and Witness Testimony for Friends of the River, Save the American River Association, Defenders of Wildlife by Ronald Stork and Jonas Minton, July 21 & 22, 2008, Before the State Water Resources Control Board, Water Right Hearing Regarding Proposed Revocation of Auburn Dam Project Permits, pp. 5–7. http://www.waterboards.ca.gov/waterrights/water_issues/programs/hearings/auburn_dam/exhibits/x_1corrected.pdf

The impact to surface water supplies cannot be adequately evaluated with the CALSIM model since it does not account for the sensitivity of the demand for agricultural surface water, particularly in the Friant service area to its price. A significant increase in the price of Class 2 water and a reduction in the availability of lower cost Section 215 and RWA water in wetter years will affect the use of surface water if lower cost water is accessible to a grower from groundwater and surface runoff from the Chowchilla, Fresno, Kings, Kaweah, Tule, or Kern River. Thus the CALSIM-modeled average increase of 239 TAF/YR in wet years and 133 TAF/YR in above normal years for Alternative 1 in Table 2-11 should be viewed as an upper limit of the demand for Class 2 water. The CALSIM model also is unable to dynamically operate the reservoirs in the Tulare Basin to which Friant districts have access in order to adequately determine the impact of the No-action and Project Alternatives would have on the availability of surface water from those reservoirs.

The TFD dEIS also fails to analyze the impact of the reduction in Millerton storage by at least 75 TAF during the multi-year dam construction period on the availability of surface water. During that period, Millerton Reservoir will be lowered by at least 75 TAF or more (more until the TFD downstream coffer dam is removed). The reduction in storage will have some effect on surface-water yield and incidental floodwater-management performance.

The TFD dEIS also fails to address the impact that the alternatives will have on Class 1 and Class 2 water rates given that the project will increase the long-term debt of the Central Valley Project which must be recovered through water rates. Increased rates could have a cascade of consequence. For example, the higher water rates could contribute to the ongoing conversion of agricultural land from lower value annual crops to higher value permanent crops, whose gross profit margins may be better able to absorb higher water rates. The conversion to permanent crops and consequent hardening of the demand is already occurring and causing significantly increased prices on the transfer market particularly in dry periods.

Water Rights

Reclamation's diversions, storage, and use of water have been subject to state water rights since the organic act (§8). This has been reaffirmed in Supreme Court decisions (*California v. United States*, 438 U.S. 645, 675 (1978) and restated in legislation (CVPIA § 3406). Thus it could have been helpful for Reclamation to describe its rights concerning its Friant Division and at Friant Dam (Table 14.1, TFD dEIS). It might also have been helpful for Reclamation to disclose of what relevance these rights might be to the operation of a proposed TFD and the availability of rights to water available for operation of the TFD. However, it does not do so. We do learn that in Reclamation's view the TFD dEIS and modeling "provides the complete environmental review and demonstration of requisite findings under the [California Water Code] in order for the State Water Board to approve the water right application described above." (TFD dEIS, p. 22-58

Reclamation's confidence is misplaced. The SWRCB's August 7, 2014, letter to Reclamation reveals more than the TFD dEIS. For example, according to SWRCB, TFD operations cannot be conducted under Reclamation's current CVP San Joaquin River (Friant) water rights.

At that time, the issue arose whether it would be possible to file a change petition to use the as-yet undeveloped portion of the water rights permit for the Friant Project for the Temperance Flat Reservoir Project (Temperance Flat), and Division staff agreed to research the question further and to follow-up. Upon further consideration, this option is not viable.

SWRCB letter to Robert Colella, KDM:A005638. The SWRCB letter sheds more light on the availability of water rights for TFD.

Division staff has evaluated whether Temperance Flat could be pursued under a new appropriative right. The San Joaquin River is listed in the Declaration of Fully Appropriated Streams (Declaration) as fully appropriated throughout the year based on State Water Board Decision 935. (State Water Board Order WR 89-25, Exhibit A.) Decision 935 authorized issuance of the permits for the Friant Project. If the Friant Project is licensed, and water allocated to the project in Decision 935 has not been used, if Reclamation no longer wishes to pursue continued development of the permitted amounts discussed in Decision 935, or if other information indicates that water is available, Reclamation may seek a revision of the Declaration of Fully Appropriated Streams on the basis of changed circumstances. (Cal. Code Regs., tit. 23, sec. 871.)

SWRCB letter to Robert Colella, KDM:A005638. According to the SWRCB, the San Joaquin River is fully appropriated twelve months in the year. In other words, the Board and other legal users of water presume, in these circumstances, that additional rights are not available.

The SWRCB letter notes that if Reclamation was prepared to go to licensing hearings where the degree to which its permits had been put to beneficial use was determined, that amount licensed, and the rest of its permits voided, the Declaration could be revisited. Reclamation has, instead, requested an extension of time to more fully develop its CVP permits. In response, numerous protestants suggested that Reclamation recognize that the CVP is fully (or over-) developed and move to perfect (license) water rights for diversions that it has so far appropriately accomplished and put to beneficial use. This would permit the SWRCB to release from permit those waters not being used or expected to be developed. Reclamation has not done so, nor do we expect it to. (See Friends of the River's November 2, 2009, Protest and February 22, 2010, reply to Reclamation's comments, all regarding the Protest of Friends of the River Concerning U.S. Bureau of Reclamation Petitions for Extension of Time of water rights permits associated with the Central Valley Project.)

In fact, the SWRCB's fully appropriated stream status confirms that the San Joaquin River is, in practice, fully appropriated all twelve months of the year, hardly surprising given the near complete drying up of the river that the operations of the upstream hydroelectric dams and Reclamation's Friant Dam and Friant and Madera Canals have been able to accomplish for more than a half century.

As the Board itself has noted, claimed water rights and permitted water appropriations in California amount to at least five times California's average annual surface water supply

(California Water Boards Strategic Plan Update 2008-2012). A UC Davis study recently analyzed the Water Board's data and broke down the water rights over-allocation by watershed. The study found that water rights allocations in the San Joaquin River watershed exceeded the average runoff in the basin by an astounding 861% (100 years of California's water rights system: patterns, trends and uncertainty, Grantham, Theodore E., J.H. Viers, Center for Watershed Sciences, University of California, Davis, August 2014)².

Thus the question will necessarily arise in any SWRCB proceedings (starting with a request by Reclamation to revise the river's Fully Appropriated Stream status) whether water "developed" by TFD would be available or, instead, unfeasibly junior in right to other legal users of water and public trust obligations of the state. But Reclamation here provides no analysis of what users there might be, or what rights they may have, or what public trust interests might be compromised by diversions to storage at TFD. Nothing could be more central to the project purpose, which can accomplish little in the absence of water rights to store, divert, and release water.

We recognize that new water rights can sometimes be awarded on fully appropriated streams. Nevertheless, the designation itself carries a considerable burden of proof to reverse, and should, by its very name, have merited considerable attention from Reclamation in these documents, not the two paragraphs largely quoted here.

Place of Use

Four of the five TFD project alternatives deliver water to south-of-delta urban State Water Project (SWP) urban water contractors. This is consistent with the project description "to improve water supply reliability and operational flexibility in CVP San Joaquin Valley areas and other regions of California." (*emphasis added*)

To meaningfully accomplish this, Reclamation must successfully petition the SWRCB to expand Reclamation's water-rights place of use. But first Reclamation must decide to expand its service area to encompass the service areas of these mostly Southern California urban water contractors.

These are major matters, potentially changing the water landscape of California and fundamentally changing the purpose of the CVP (and representing a large prize for the SWP).

Yet the TFD dEIS is silent on all this. There are no details on how Reclamation would seek to change its place of use, the implications of doing so, or of the environmental impacts of such a fundamental change in purpose. Presumably, Reclamation would do this by expanding its consolidated or Friant Division water-rights place of use to include south-of-delta SWP service areas. It may also require Congressional authorization to serve these new areas. Presumably the SWRCB would have to evaluate the considerable implications of such an action to the future of the CVP and the SWP. There would be winners and losers. Again, silence.

² https://watershed.ucdavis.edu/files/biblio/WaterRights_UCDavis_study.pdf

We know the SWRCB is sensitive to the consolidation issue because of an exchange in the press that occurred between Friends of the River and SWRCB Chair Felicia Marcus when the Governor's drought emergency declaration ordered the Board to consolidate the places of use of both the state and federal projects. Ms. Marcus was anxious to assure Friends of the River and the public that the action would only be for the duration of the drought emergency.

This is no small matter for Reclamation. Reclamation has long struggled to deliver water to CVP contractors without creating the expectation that it is always able to provide the full contract amounts to all of its contractors all of the time. It is often unsuccessful about managing expectations—either in the federal court of claims or in the political realm. Serving the SWP, with its built-in large contract shortfalls, will create even larger expectation-management problems.

This is not the only issue. The Friant CVP service area is coincident with and near the largest, most persistent groundwater overdrafting area in the state. The TFD documents simply have no realistic discussion about the policy implications of Reclamation assuming a new burden (the SWP) when its historic service-area environs have dug themselves into such a deep hole.

Consolidating places of use is of concern CVP system wide. The SWP evidently intends to be a beneficiary of the expansion of Shasta Dam, Reclamation's keystone Central Valley dam and reservoir³. Would a consolidated place of use enable the SWP to gain access to this iconic CVP dam? How? To what degree? What are the impacts of such an action? The TFD dEIS is silent.

Flood Control—Financing implications

Reducing flood damages downstream is a secondary objective. (TFD dEIS, p. 2-11) Flood Control is described as an incidental benefit of TFD. (TFD dEIS, pp, 2-101, 2-102) No doubt TFD will reduce the frequency of flows in excess of minimum stream-flow requirements below Friant Dam and also of Central Valley Flood Control Board flood-corridor capacity exceedance flows. If this does not induce development in areas still subject to flooding, TFD may reduce annualized flood damages (although as explained later, it is unlikely to affect single-year damages for large multi-wave rainfloods). However, Reclamation is not proposing to identify project beneficiaries willing to pay for these incidental benefits.

Traditionally, flood-damage-reduction beneficiaries have been identified during Corps of Engineers' planning processes associated with reservoirs (such as Friant Dam) subject to the provisions of Section 7 of the Flood Control Act of 1944. Floodwater-management operations at these reservoirs are subject to regulations prescribed by the Army Corps of Engineers. (*Reshaping National Water Politics*, Corps of Engineers, Office of History, 1991; p. 1, *Friant*

³ “The Metropolitan Water District (MWD) of Southern California voted Tuesday to include raising of Shasta Dam as one of its ‘legislative priorities.’ The Board of MWD voted to support “administrative/legislative actions to remove existing prohibition for state funding to raise Shasta Dam.” December 13, 2012, Fish Sniffer.

<http://www.fishsniffer.com/reports/details/mwd-votes-to-support-shasta-dam-raise/>

Dam and Millerton Lake, San Joaquin River, California, Report on Reservoir Regulation for Flood Control, December 1955, Rev. August 1980, Department of the Army, Sacramento District, Corps of Engineers, Sacramento, California). Costs associated with Section 7 floodwater-management facilities have been assumed by the Corps of Engineers and non-federal beneficiaries on a 65%/35% split since the Water Resources Development Act of 1996 (75%/25% since WRDA 1986).

Somewhat surprisingly, Reclamation does not propose that TFD become a Section 7 reservoir. So far as we know, the Corps of Engineers is not proposing this either. Thus, there appears to be no proposed funding mechanism to bring U.S. taxpayer or floodwater-management beneficiary dollars to subsidize the water and power beneficiaries of the TFD.

It is perhaps appropriate for TFD not to claim any formal floodwater-management benefits. The San Joaquin Valley floodwater-management system is a flood-conveyance-constrained system:

The San Joaquin Valley is also rimmed with dams, but floodway capacities in this system are small and designed for managing snow-melt flooding. Unregulated rain-flood flows from many dams are quite foreseeable (and occurred in 1997), in part because major reservoir-flood-space encroachments can occur from storms that may have happened days, weeks, or even months earlier.

(*A California Challenge—Flooding in the Central Valley*, A Report from an Independent Review Panel to the Department of Water Resources, State of California, p. 11, October 15, 2007). Once rainfloods fill the reservoirs, required flood-control spaces cannot be evacuated quickly because of limited downstream floodway capacities. In these circumstances, these space reservations are not reliable and do not deliver the performance that might be expected when subsequent rainfloods materialize. These events have occurred in the past and will do so again. “[A] prolonged storm sequence with truly extreme precipitation totals...is demonstrably possible...” (p. 9, Requirements and Designs for a Winter Storm Scenario for Emergency Preparedness and Planning Exercises in California, Michael D. Dettinger, USGS, Scripts Institution of Oceanography, et. al., submitted to AMS-journal Weather, Climate and Society, 9 February 2010) (See also Warning from the Past: The message, meteorology and myths from the Great West Coast flooding of 1861, Lawrence J. Schick, Meteorologist, Water Management, U.S. Army Corps of Engineers, Seattle District, p. 106, Proceedings of the 2102 California Extreme Precipitation Symposium, Theme, The 1861–1862 Floods: Informing Decisions 150 Years Late, June 26, 2012.)

Note the TFD dEIS 90% exceedance plots for monthly flood-storage availability for dEIS alternatives. (TFD dEIS, p. 4-111) Large rainfloods are rare events, and although antecedent runoff events that encroach on incidental or required flood-control space are less rare, the events that count (large rainfloods that hit reservoirs that could not and cannot evacuate flood space) are rare enough that they are unlikely to register on such an exceedance plot. The meaningfulness problem with the exceedance plot is compounded by the operational reality that TFD has no contemplated floodwater-management requirement to evacuate water stored there. The exceedance plots merely display modeled incidental space available TFD and modeled

space available at Millerton Reservoir, only the latter having a requirement to evacuate its required flood pool.

Thus “incidental” is probably the right word. Decisions to re-occupy San Joaquin River floodplains or failure to floodproof small downstream San Joaquin River bottomland communities will remain ill-advised even if TFD is constructed. (For example, see also TFD dEIS tables 12-5 and 12-6.) And funding for “incidental” benefits is doubtful and apparently not proposed.

Groundwater—Water Supply Reliability

The TFD dEIS characterizes the Friant Project appropriately: a large conjunctive-use operation with a project purpose of restoring groundwater levels in and near the Friant service area. It also describes the baseline condition of a long-term groundwater overdraft. TFD dEIS, p. 13-6.

The reason for this is obvious: Reclamation (and nearby Corps of Engineers projects) have been pouring surface water from nearby Sierran Rivers (and the Sacramento River) into the San Joaquin Valley groundwater “bank” by in-lieu “deposits,” but Reclamation has had no control on the withdrawals from the bank. In fact, there have been no controls. Predictably, a long-term water spending spree has been taking place. As a result, the huge⁴ San Joaquin Valley underground aquifer has been declining at the rate of millions of acre-feet per year.

The yield of the TFD can do little to arrest a decline of this magnitude (the TFD at 70 thousand average annual acre feet versus an average of 2 to 4 million acre-feet per year in the San Joaquin Valley⁵). The consequences of the failure to arrest the decline are described to some degree in the TFD dEIS. But with the emphasis on minor surface-water augmentations to CVP supply and reliability, the major consequence of the failure of the CVP, even the CVP with TFD, to stabilize groundwater is not well described: the loss of dry-year reliability supplies to the Friant service area caused by decline in water tables, stranded dry wells, wells that are no longer economic to pump, or that experience water-quality declines.

The TFD dEIS fails to analyze the impact that the action alternatives will have on groundwater recharge resulting from higher Class 2 water rates and reduced availability of lower-cost Section 215 and RWA water. Friant water districts use the availability of plentiful Class 2, 215 water or now RWA water during wetter periods to directly or indirectly (through in-lieu programs) recharge groundwater.

⁴ (The *California Water Atlas* estimates the storage capacity of the San Joaquin Valley as 570 million acre feet, State of California, 1978, 1979. pp. 68, 69)

⁵ “Satellites see lower Central Valley water table,” Tim Sheehan, Fresno Bee, 12/15/09, <http://www.fresnobee.com/updates/story/1748159.html>. “Get Some Real Units,” <http://onthepublicrecord.org/2009/12/15/get-some-real-units-jpl/>, “San Joaquin Valley sinking as groundwater stores are depleted,” Tom Knudson, Sacramento Bee, 4/6/2014, <http://www.sacbee.com/news/local/article2594798.html>

The loss of these flows may have subtle effects. For example, reduced San Joaquin River flood flows on subsidence mitigation proposals on lands east of the San Joaquin River (Red Top Farm lands) that are counting on using Bypass flows for recharge. For example, from CCID presentations: “The plan converts the subsidence area into a shallow groundwater storage area for use on overlying land, using flood flows from San Joaquin, Kings, Fresno and Chowchilla Rivers for recharge.”; “Irrigation water to the 25,000 acres of farmland in the area would be supplied through a combination of shallow groundwater aquifers, flood flows and supplemental annual supplies.”

Fortunately, shortly before the publication of the TFD dEIS, bills sponsored by the Association of California Water Agencies (ACWA) were passed by the California legislature. The purpose of the legislation is to charge local agencies with the responsibility to fix this problem, and if they fail the SWRCB will assume the responsibility. The groundwater spending spree has to end. The ACWA website⁶ provides extensive information on the groundwater legislation, including the following summary:

Summary

AB 1739 (Dickinson), SB 1168 (Pavley) and SB 1319 (Pavley)

The Sustainable Groundwater Management Act empowers local agencies to manage groundwater basins in a sustainable manner over a long-term horizon. The Act provides five to seven years for locals to form a Groundwater Sustainability Agency (GSA) and to create a Groundwater Sustainability Plan (GSP). The plan would have a 20-year implementation horizon with the opportunity for two five-year extensions, if the agency is making progress towards sustainability.

(All references to code sections are to the Water Code, unless otherwise noted.)

State Policy and Local Government Coordination

- Establishes that it is the policy of the state that groundwater resources be managed sustainably for long-term water supply reliability and multiple economic, social, or environmental benefits for current and future beneficial uses. Section 1. (a) of SB 1168
- Requires a city or county planning agency, before adopting or substantially amending a general plan, to review and consider groundwater sustainability plans. Government Code Section 65352.5

By implication the TFD dEIS is assumed to “improve water supply reliability...of the CVP,” presumably by augmenting surface-water deliveries to the Friant service area. Although we have and are disputing this conclusion, regardless of the resolution of this dispute, the size of its

⁶ <http://www.acwa.com/content/groundwater/groundwater-sustainability>

potential contribution is dwarfed by the magnitude of the loss of groundwater that, to the extent it is in healthy condition, provides supply reliability orders of magnitude greater than the TFD.

Yet the TFD dEIS does not consider the change in the California firmament caused by the groundwater legislation, nor is the enormous contribution to CALFED water reliability concerns that the legislation is aimed at solving. For once the state seems determined to fixing the problem that the CVP has been unable to solve, and with it one of the project purposes the TFD was aimed at and failed to hit. One of the elements of the purpose of the project, water-supply reliability, is now going to be addressed by non-federal action. And of course, the TFD dEIS is silent.

Economic impact on Restoration Project water-management and restoration goals of the SJRRP

The TFD dEIS fails to evaluate the economic impact the action alternatives have on the Water Management Goal and the Restoration Goal of the San Joaquin River Restoration Project (SJRRP) as a result of a significant reduction or possible elimination in the sales of the Recovered Water Account (RWA) water, the proceeds of which go into the SJRRP restoration fund. The reduction in the RWA sales also impacts the effectiveness of the groundwater banking projects that the SJRRP is funding to meet the Water Management Goal.

These issues are raised in the NRDC et. al. comments on the draft feasibility report and TFD dEIS, but they bear repeating because they are likely to be at cross purposes with the purpose of the project. In nearly all alternatives, in all year types and all months, Section 215 water (in effect, RWA water⁷) availability is nearly eliminated, being reduced by 100 percent in many years, an annual decrease of 15 to 137 TAF. To demonstrate the problem in another way, under Alternative 5, Section 215 water is available in 8 months in the 82-year CALSIM modeling period (p. 1250 CALSIM Modeling appendix). In the no-action alternative, Section 215 water is available in 125 months (p. 1249 CALSIM Modeling appendix).

This matter is of significance. In particular, the legislation authorizing the SJRRP provides \$50 million dollars for groundwater banking projects, which makes such projects even more feasible and lower in cost for the Friant districts, but they are premised upon the availability of lower cost water for groundwater recharge which would be significantly reduced or eliminated in all of the action alternatives.

Clearly, if project deliveries are reduced because of loss of Section 215/RWA water, the claimed yield benefits become illusory. Also, to the extent that this water becomes economically unavailable to recover groundwater basins, the project purpose of water reliability is put at some risk.

⁷ The assumption stated by the Friant Districts and Reclamation in their deliberations on the Restoration Flow Guidelines and the RWA accounting is that much of the previously delivered Section 215 water would be taken as RWA water, both because of its generally lower price and Reclamation policy of making RWA more readily available than Section 215 water.

TFD Ownership and Operation Responsibilities

Reviewing the TFD dEIS it seems that Reclamation intends to own and operate the dam and reservoir. That does raise two questions: (1) does Reclamation intend to own and operate the power facilities there? and (2) why is the Department of Water Resources going to do the dEIR for this project?

Loss of Power Generation. As noted in the dEIS (TFD dEIS, table 2-13), TFD is a net power loser, requiring the retirement of the two powerhouses downstream of Kerckhoff Dam in the San Joaquin gorge above Millerton Reservoir. Reclamation intends to build as partial mitigation for lost grid power and ancillary services a powerhouse between the TFD reservoir and Millerton Reservoir. It calls this the “onsite hydropower replacement option.” This option is to be “combined with additional mitigation as needed,” calling this “cost effective and is Reclamation’s preferred power mitigation option...” (TFD dEIS, p. 1-20)

But the Pacific Gas and Electric Company (PG&E) is losing the generation (approximately an average of 530 GWh/year) (TFD dEIS table 20-1), and Reclamation is gaining generation (TFD dEIS, chapt. 20). Will the purpose of Reclamation’s TFD power facilities be to supply CVP project power consistent with Reclamation law and practice or to supply PG&E’s load demand? These are not necessarily the same thing, and the TFD dEIS is simply silent on this matter. Perhaps it is the latter since the TFD dEIS notes that “PG&E’s net lost power generation value after development of new on-site hydropower facilities would be compensated...” (TFD dEIS p. 20-41). But the meaning of those words is still difficult to divine. For Reclamation, the resolution of these issues will be deferred: “[h]ydropower mitigation issues will continue to be coordinated with affected stakeholders during the development of the Final Feasibility Report and EIS.” (TFD dEIS, p. 1-20) This is probably an improper deferral given that affected stakeholders extend further than PG&E.

Plans for State Partnership. Reclamation was unable to find a California Environmental Quality Act (CEQA) partner but claims the TFD dEIS was prepared as a CEQA document. This lack of a CEQA partner is not explained but probably reflects the lack of a state government partner that receives sufficient benefit from the TFD. However, we learn from a SWRCB memo on a July 17, 2014, meeting that this decision was, in fact, already made during the preparation of the TFD dEIS.

During the meeting, Reclamation informed the Division that the Department of Water Resources (DWR) will be the California Environmental Quality Act (CEQA) lead agency. Reclamation anticipates that a National Environmental Policy Act document will be circulated in September, 2014. The CEQA document will be circulated at a later date by DWR. (Memo from Katherine Mrowka, Inland Streams Unit, Division of Water Rights, SWRCB, August 7, 2014)

The memo does not explain why DWR will be the lead CEQA agency. Perhaps it is because Reclamation is open to the possibility of TFD being a shared Reclamation/DWR facility like the San Luis Dam and Reservoir complex. Perhaps it is because four of the five TFD action alternatives involve deliveries to south-of-delta SWP urban water contractors.

As noted here and in the comments of NRDC et. al., Reclamation's EIS cannot properly serve as the basis of a CEQA document, should a state agency or political subdivision of the state wish to prepare one. That is the time that lead-agency status should be determined. For example, if the state water bond passes, the California Water Commission, rather than DWR, would be the state agency in charge of handing out design and construction money. However, given the lack of actual public benefits for TFD, this might result in a very different EIR than the one prepared by Reclamation for DWR. On the other hand, the complete lack a water-rights-specific water-availability analysis in the Reclamation TFD feasibility and dEIS would demand a very different EIR in SWRCB fully appropriated streams and water rights proceedings . Indeed, the SWRCB would seem to be the logical CEQA lead agency if Reclamation wishes to press the matter further.

Of course our advice is for Reclamation to conclude sooner than later that the TFD is not economically feasible, there are no beneficiaries willing to assume its costs, and the environmental and recreational costs are illusory. Instead, it should work with the Bureau of Land Management to recommend protection of the San Joaquin River gorge from dam projects. It would save somebody the cost of an EIR.

Unanalyzed Impacts to the Millerton Cave Complex and its Ecosystems

NEPA requires Reclamation to describe "any adverse environmental effects which cannot be avoided should the proposal be implemented..." 42 U.S.C. § 4332(C)(ii). The project area includes the Millerton Cave Complex. If implemented, the proposed project will inundate the Millerton Caves, flooding the cave and radically altering its environment. Caves create unique environments and ecosystems. The species in a cave ecosystem often become highly specialized to the cave's environment and incapable of surviving outside or without the cave. The dEIS fails to identify whether such an ecosystem exists in the Millerton Caves. It is possible that the Millerton Caves support species that exist nowhere else. Inundating the caves may destroy a unique environment and extinguish rare species eligible for listing under the Endangered Species Act. In order to comply with NEPA and describe the "adverse environmental effects," Reclamation must study the Millerton Cave Complex to determine whether it supports a unique ecosystem. Until then, Reclamation is incapable of complying with NEPA and meaningfully analyzing impacts to the Millerton Caves.

Chapter 17 – Land Use & Wild and Scenic River

The dEIS recognizes the Bureau of Land Management's (BLM) Bakersfield Resource Management Plan, which recommended a 5.4 mile segment of the San Joaquin River Gorge as a National Wild and Scenic River. Pg. 17-29. The narrative on this page focuses primarily on the wild and scenic river recommendation and gives short shrift to other management direction provided in the plan, including establishment of the 6,490-acre San Joaquin River Gorge Special Recreation Management Area (SRMA). All TFD action alternatives are in substantial conflict with both the recommended wild and scenic river and the recreation management goals of the SRMA. For example, targeted activities in the SRMA including hiking, mountain biking, horseback riding, fishing, water play, gold panning, camping, cultural interpretation, and environmental education. The opportunities for many of these activities would be completely

lost under the still waters of a TFD reservoir, while other recreational opportunities would simply be degraded.

The dEIS also recognizes conflict with the management and protection of the California Dept. of Fish and Wildlife's (CDFW) Big Table Mountain Ecological Reserve, which would be impacted by vegetation removal and project construction.

Reclamation proposes to conduct conflict resolution with the BLM and CDFW to mitigate significant and unavoidable impacts on the San Joaquin River Gorge SRMA and CDFW's Big Table Mountain Ecological Reserve.

To minimize or avoid conflict with adopted land use plans, goals, policies, and ordinances of affected jurisdictions, Reclamation will consult with BLM and CDFW, [sic] and enter into agreements, as appropriate to resolve potential conflicts with the BLM Bakersfield Proposed Resource Management Plan and the Big Table Mountain Ecological Reserve, respectively.

TFD dEIS p. 17-33. However, the dEIS is not clear as to what this means. Does it mean that Reclamation will accept the no action alternative if there is no other way to resolve conflicts with these agencies, areas, and the respective land use plans? The dEIS should be revised to provide clarity on this crucial mitigation measure.

Friends of the River commented extensively on the wild and scenic river issue in response to the TFD draft Feasibility Report. Although it's gratifying to see that this issue is at least addressed in the dEIS, the lack of detail and ambiguity in the document concerning this issue is seriously detrimental to good public decision and policy making.

The TFD reservoir would flood the San Joaquin River Gorge, an area made up largely of federally managed public lands administered by the Bureau of Land Management (BLM) for public recreation and preservation of scenic resources, wildlife habitat, botanical resources, and cultural values.

According to the BLM, the San Joaquin River Gorge is an exemplary example of a low elevation (2,000 feet) major drainage originating from the southern Sierra Nevada. The BLM found 10.75 miles of the San Joaquin River Gorge between Kerkhoff Dam and Millerton Reservoir to be eligible for National Wild & Scenic River protection and the agency recommended 5.4 miles of the river for wild and scenic river protection.

The purpose of the BLM's preliminary recommendation to Congress is to protect the free-flowing character of the San Joaquin River Gorge and its outstandingly remarkable scenic, recreation, wildlife, and cultural values. The BLM's recommendation makes the San Joaquin River Gorge a very special river. Only about 6% (by mileage) of California rivers are eligible for or protected in the National Wild & Scenic Rivers System and only about 1% of American rivers are protected in the System.

According to the BLM Manual for Wild & Scenic Rivers Policy and Program Direction (Chapter 6400, July 13, 2012), the agency has made a preliminary recommendation for wild and scenic river protection that will move up through the BLM chain of command to the Interior Secretary, who then transmits the recommendation to Congress. In the meantime, the BLM is required to protect the free flowing condition and outstandingly remarkable values of the suitable river, "...which will not be altered by the construction or development of stream impoundments, diversions, or other water resources projects." (BLM Manual, Chap. 6400, pg. 3-8)

There is a clear national policy requirement that Reclamation must address the San Joaquin River Gorge's wild and scenic river potential. In establishing the National Wild & Scenic Rivers System in 1968, Congress declared

that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. (16 USC Sec. 1271)

Congress further declared

that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

To help fulfill this declared intent, Congress established a study process:

In all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas, and all river basin and project plan reports submitted to the Congress shall consider and discuss any such potentials. The Secretary of the Interior and the Secretary of Agriculture shall make specific studies and investigations to determine which additional wild, scenic and recreational river areas within the United States shall be evaluated in planning reports by all Federal agencies as potential alternative uses of the water and related land resources involved. (16 USC Sec. 1276(d)(1))

USC Sec. 1276(d)(1) makes it clear that wild and scenic protection for the San Joaquin River Gorge is an alternative to the proposed TFD that must be considered by Reclamation in the TFD dEIS. The TFD is a project plan report expected to serve as the basis for a project authorization.

So where is the wild and scenic river alternative in this dEIS?⁸ We believe that the dEIS must be revised to include wild and scenic protection in at least one action alternative (that action being protecting the river and not drowning it).

At the minimum, the dEIS should revisit one of the alternatives identified in the initial screening of storage alternatives – raising Friant Dam by 25 feet. This alternative would increase the storage capacity of Millerton Reservoir by 130,000 acre-feet and was modeled to provide 24,000-acre feet annually in new water supply.⁹ It would also be compatible with BLM's wild and scenic recommendation for the San Joaquin River Gorge since it would not flood the recommended segment.

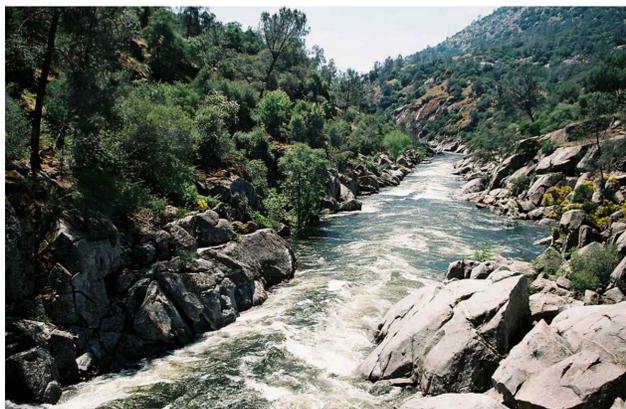
Chapter 22 – Recreation

Reclamation provides a reasonably detailed summary of the outstanding recreational values and resources of the San Joaquin River Gorge. The Gorge attracts an average of more than 54,000 visitors annually, who visit the area to hike and backpack, ride horses and bicycles, and participate in competitive trail events on its extensive trail system, camp in three different (walk-in, group, equestrian) campgrounds, picnic, pan for gold, climb and boulder its rock formations, kayak its challenging rapids, view wildlife and wildflowers, hunt and fish game species, appreciate the rich cultural heritage of the area, explore the unique Millerton Cave system, and participate in environmental and cultural education programs.

Much of the public land and most of the facilities that provide recreational opportunities on those lands would be flooded by the proposed TFD Reservoir. In the dEIS, Reclamation attempts to mitigate these significant impacts by simply proposing to relocate and/or replace facilities. Although it is technically to relocate many of the recreational facilities, the dEIS ignores the qualitative difference in replacing a high quality recreational experience within a spectacular natural-appearing river gorge with recreation located adjacent to a reservoir with significant seasonal fluctuations that will expose canyon slopes cleared of all vegetation. The dEIS only admits this significant impact by noting unavoidable impacts such as degradation and/or blocking of scenic views and the inconsistency of the TFD with BLM's plan to protect the outstanding scenic values of the San Joaquin River Gorge (dEIS pg. 28-3).

⁸ Development of a wild & scenic river alternative is not groundbreaking policy for Reclamation. It made this determination of responsibilities for its American River Water Resources (Auburn dam) Investigation that was completed in 1998. See Exhibit X-26, USBR Determination of Eligibility, Friends of the River and Planning and Conservation League, Auburn dam revocation proceeding, SWRCB, 2008. http://www.waterboards.ca.gov/waterrights/water_issues/programs/hearings/auburn_dam/exhibits/x_26.pdf

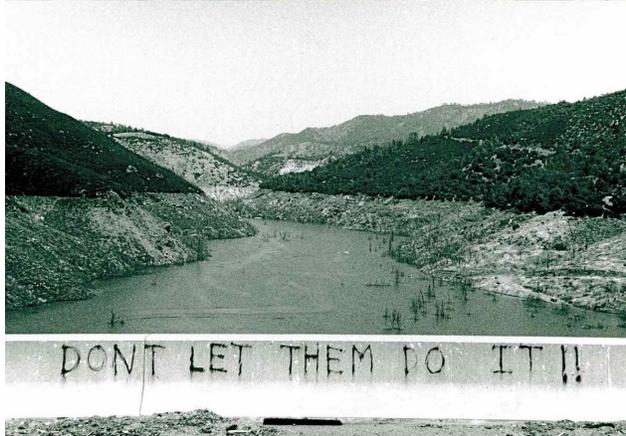
⁹ Upper San Joaquin River Basin Storage Investigation, Initial Alternatives Report, June 2005, USDI Bureau of Reclamation.



Where would you like to recreate?

A natural-appearing wild river canyon does not provide the same kind of recreational and scenic values as a canyon flooded by a reservoir with acute seasonal fluctuations.

Top: The San Joaquin River Gorge as viewed downstream of the trail bridge. This is part of the segment recommended by the BLM for Wild & Scenic River protection in recognition of its outstanding scenery, recreation, wildlife, and cultural values. Photo: Steve Evans (2005).



Bottom: The Stanislaus River as viewed upstream from the Parrott's Ferry Bridge, partially flooded by the New Melones Reservoir, with its slopes cleared of vegetation for "public safety" and maximum storage. Photo: Friends of the River archives (1983?).

The failure to provide an accurate qualitative analysis in the dEIS in regard to the recreational and scenic impacts on visual quality and the recreational experience is unacceptable. The assumption in the dEIS that river-based recreation will continue on seasonally inundated stretches when reservoir levels permits is particularly inexplicable and indicates either a willful ignorance of why people seek to recreate outdoors in natural settings or a significant lack of knowledge in non-reservoir-based recreation. The dEIS must be revised to better reflect and compare the quality of the recreational and visual experiences between the river gorge and the proposed reservoir.

Page-specific comments –

Pg. 22-17: The relatively detailed description of the San Joaquin River Gorge's extensive trail system fails to include a very important fact – current access to all trails on the north side (Madera County) side of the river (or reservoir) is provided exclusively by Ya Gub Weh Tuh Trail and the San Joaquin River trail bridge. This is a crucial point in the subsequent discussion later in this Chapter about mitigating the permanent loss of the bridge and access trail with a proposed water taxi. The narrative on this dEIS page should be revised to reflect this fact.

Table 22-15, pg. 22-44: The table indicates the proposed mitigation for the potential loss of most of the permanent recreation facilities in the Gorge (including the campgrounds, museum, education center, and village site) is to relocate these facilities uphill of their existing relocation.

These facilities are currently located on a relatively gently sloping geographic bench sandwiched between steeper downhill and uphill slopes. The dEIS fails to provide a map of sufficient detail to reasonably convince public reviewers that the proposed new locations for the facilities would be of equal quality in terms of visual setting, slope, and functionality to the existing ones. The dEIS should be revised to provide a more detailed topographic map depicting recreation facility relocation sites so that the public can be assured that these sites are practicable and of the same quality as the current sites.

Pg. 22-47 thru 62: The analysis of permanent loss and long-term reduction of recreational resources beneath the reservoir take-line is rife with inflated assumptions. The BLM's recreation visitor and specific use numbers are not based on year-round visitor use surveys or permits (except for campground and learning center use) and necessarily include visitation estimates. Therefore, the quantitative analysis in this section in regard to the permanent or seasonal loss or reduction in rock climbing, kayaking, caving, hunting and other recreational activities below and above the reservoir take line is largely subjective. Comparing family hiking opportunities to the trail bridge with professional spelunkers exploring the Millerton Cave system is like comparing apples and oranges. Both have intrinsic value beyond the numbers indicating the level of use or visitation. The dEIS should concentrate instead on more clearly displaying the quality of the recreational opportunities that would be lost and degraded under all action alternatives.

Pg. 22-57: The statement "The overall change of setting may result in visitors choosing to visit another location for recreation activities" falsely assumes that there are other recreational settings that can provide the same qualitative recreational experience that the Gorge provides. Basing the analysis of impacts and mitigations on the assumption that visitors will simply go elsewhere skews the dEIS in favor of the action alternatives. The dEIS should be revised to assume that no locations are suitable for shifting recreation use or identify specific alternative recreation destinations and provide a qualitative comparison with the Gorge.

Pg. 22-62: The title "Impact REC-4: Loss of Access to a Locally Important Recreation Site or Area" is misleading. Although currently the majority of recreation visitors in the Gorge tend to be from the local region, the BLM has determined that the San Joaquin River Gorge possesses nationally significant scenic and recreation values that "have the potential to attract visitors from outside the geographic region."¹⁰ Indeed, BLM estimates that recreational use of the Gorge will increase significantly in the coming years. In addition, much of the trail system in the Gorge consists of National Recreation Trails (NRTs). NRTs are designated by the Interior Secretary to recognize exemplary trails of local and regional significance that should become part of the national trails system. Their status as NRTs confirms the importance of these trails and the title of this particular impact should be expanded to reflect a "Loss of Access to a Locally, Regionally, and Nationally Important Recreation Site."

Pg. 22-64: The dEIS admits here that "Inundation of the San Joaquin River Trail bridge would result in the loss of access to recreation lands on the Madera County side of the SJRG..." and it

¹⁰ Draft Bakersfield Resource Management Plan & Environmental Impact Statement, Vol. 3, Appendix A Eligibility Reports, Sep. 2011, USDA Bureau of Land Management.

acknowledges that the proposed water taxi intended to replace the bridge will only partially offset the loss of the bridge. But the repeated assertion on this page that trails on the Madera side “are not locally important sites” for the diverse recreational opportunities provided by the Gorge is particularly troubling. Two of the trails on the Madera County side are National Recreation Trails. Surely the Interior Secretary did not designate these trails only to have Reclamation so blithely reduce access to them? In regard to the proposed mitigation for the loss of the trail bridge, the dEIS admits that the water taxi will not be available 24 hours a day and that it will not be able to accommodate equestrian use. There is no discussion in the dEIS as to what agency will operate the taxi and pay for the annual cost of operation (which will likely cost considerably more than routine annual maintenance of the existing bridge). This mitigation seems likely to fail just on the basis of reliable funding alone. More detail must be provided in the dEIS to assure the public that this proposed mitigation measure is feasible and implementable. If Reclamation is serious about proposing this mitigation measure, it should include details in the dEIS on which agency will oversee water taxi operations and how its costs will be covered over time. In addition, the dEIS should simply recognize the national and local importance of the trail system forego the repeated but failed attempts to disparage the importance of the Madera-side trail system.

Pg. 22-69 through 70: We concur that there will be significant unavoidable impacts on recreation resources and use. However, we believe that these impacts are even more significant than impacts documented in the dEIS because it fails to provide a qualitative analysis of recreational activities that currently occur in a natural-appearing river gorge compared to the level or types of recreation that will likely occur if that gorge is flooded by a reservoir with acute seasonal fluctuations. Further, we believe the dEIS fails to recognize the full significance of some of these impacts because the proposed water taxi and other mitigation measures are dubious or may be impracticable. As a result, we believe that dEIS should reassess recreational impacts and mitigations and better document the likely significant reduction in access to the Madera County side of the trail system for equestrians, hunters, hikers, mountain bikers, and others; the practical and qualitative value of relocating BLM campgrounds, learning center, village, and museum uphill on slopes that may be steeper than existing sites; reduced kayaking and gold panning opportunities within the reservoir take-line, and the permanent loss of caving in the Millerton Cave system and rock climbing opportunities along the river.

Pg. 22-71: The proposed whitewater boating improvements to supposedly mitigate the loss of whitewater boating quality and access ignore the fact that whitewater boating is largely flow based. Given the level of existing water-resource development in the region, it is unlikely that there is any stream with sufficient boating flows that isn't already providing boating opportunities where only a few boulders are required to provide improved whitewater boating opportunities to mitigate what will be lost or degraded under the TFD reservoir. The area around The Gorge is not exactly *terra incognita*, it has been well mapped by various parties, including the U.S. Geological Survey, for more than a half century. Given the time Reclamation has had for this investigation, if it has any feasible alternatives in mind that would comply with these

conditions¹¹, it would be appropriate to reveal those alternatives now rather than reveal that no such feasible alternatives exist at some later time. Also, please note that deliberate modification of a natural river system for whitewater boating is controversial and is fraught with legal impediments¹². For this to be considered a real mitigation measure, Reclamation should conduct this study immediately and provide the results in a revised dEIS.

Pg. 22-72: Since the San Joaquin River Trail has already been proposed for completion through to the Sierra National Forest boundary, the proposed mitigation that the Reclamation “will assist BLM” with completing the trail cannot be considered an actual new mitigation measure. Unless of course Reclamation in a revised dEIS provides details as to how much funding it will provide to complete the trail. Since funding is a primary obstacle to the trail’s completion, a Reclamation proposal that directly addresses this need would make this a more real and practicable mitigation measure.

Sincerely,

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¹¹ At the October, 16, 2014, Fresno TFD public hearing, American Whitewater (AW) suggested the removal of the 155-ft high Kerckhoff Dam, which would be decommissioned by the creation of the TFD reservoir and not proposed for removal by Reclamation. American Whitewater’s concept here is to partially mitigate in place by allowing whitewater boating access to the TFD reservoir area from upstream. We expect that his proposal presumes that Reclamation would provide access to boating takeouts in the river gorge within the reservoir bathtub ring. Reclamation should provide cost estimates for this proposal.

¹² http://www.americanwhitewater.org/content/Wiki/stewardship:river_modification,
<http://www.utne.com/environment/engineering-the-danger-out-of-whitewater.aspx#axzz3HN4uZw7m>

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