Public Comment 2016 Bay-Delta Plan Amendment & SED Deadline: 3/17/17 12:00 noon



United States Department of the Interior

BUREAU OF RECLAMATION Mid-Pacific Regional Office 2800 Cottage Way Sacramento, CA 95825-1898

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Ms. Jeanine Townsend Clerk to the Board State Water Resources Control Board 1001 I Street, 24th Floor Sacramento, California 95814

Subject: Comment Letter – 2016 Bay-Delta Plan Amendment & Substitute Environmental

Document

Dear Ms. Townsend:

The Bureau of Reclamation appreciates the opportunity to comment on the "Revised Draft Substitute Environmental Document for Flow Objectives on the Lower San Joaquin River and Salinity Objectives for the Southern Delta-Phases I." We recognize the State Water Resources Control Board's (Board's) monumental efforts in updating the Bay-Delta Water Quality Control Plan and appreciate the time your staff has taken to discuss this Substitute Environmental Document (SED) and future Phases with us. This response letter summarizes Reclamation's key comments on the draft document and identifies concerns moving forward in the process.

Reclamation supports the Board's proposal to distribute flow requirements to each of the lower San Joaquin River tributaries. Reclamation does not support placing the sole responsibility for requirements along the San Joaquin River upon the Federal government via the Central Valley Project (CVP). Our key comments are as follows:

1. For the Stanislaus River, it appears as though the Board would implement the flow standards as New Melones releases and carryover storage targets. The Board should focus on curtailing diversions, prior to meeting objectives with reservoir releases. Reclamation questions State-imposed carryover storage targets at New Melones. Such requirements, if valid, would increase water-short years for senior water right holders¹, and other State water quality objectives, such as salinity control and dissolved oxygen. State-imposed carryover targets also threaten to increase water short years for Federal purposes of the reservoir including water supply for CVP contractors, the Central Valley Project Improvement Act flows, and Endangered Species Act requirements.

¹ Because the State of California allocated water to the senior water right holders on the Stanislaus, not Reclamation, the State should be responsible for directly regulating senior water use to implement new instream flow requirements. This should not be a responsibility placed on Reclamation.

2. Reclamation has not been able to operate to the D-1641 spring pulse flows since the expiration of the San Joaquin River Agreement. Reclamation recommends that for an accurate assessment of the proposed changes, the No action Alternative should include the 2E flows, dissolved oxygen, D-1641 February through June base flows and Vernalis salinity (assuming that b(2) and the 1987 California Department of Fish and Wildlife agreement are covered under the 2E flows).

Reclamation agrees that voluntary settlement agreements may provide a viable, sustainable, and holistic approach to meeting the Board's statutory obligations in relation to the San Joaquin River interests. However, voluntary settlements are not guaranteed to succeed and do not replace the standard-setting phase; therefore, we ask that the Board continue to work with us and engage in active discussions in order to address our concerns prior to a decision on the SED.

Reclamation believes the many competing requirements should be resolved prior to implementation of the Board's proposed Bay-Delta Water Quality Control Plan amendments. Reclamation is in the process of developing a Revised Plan of Operation (RPO) of New Melones Reservoir and associated facilities. The RPO could ultimately facilitate settlement of the Stanislaus River portion of the Board's plan amendments and represent a viable future plan of implementation for the Stanislaus River. Reclamation welcomes the Board's participation in the RPO and looks forward to working with your agency on this important action. Also underway is the Re-initiation of Consultation on the Coordinated Long-term Operation of the Central Valley Project and State Water Project, which is expected to further contribute to the RPO.

Enclosed is a table which contains Reclamation's more specific comments on the Draft SED for the potential amendments to the Water Quality Control Plan for the Lower San Joaquin River and Southern Delta – Phase I.

If you should have any questions on this matter, please contact Ms. Carolyn Bragg, Reclamation's point of contact for this review, at 916-414-2433 or cbragg@usbr.gov.

Sincerely,

Pablo R. Arroyave Acting Regional Director

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Enclosure

SWRCB Amendment to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary Comment Form

Document: San Joaquin River Basin Substitute Environmental Document (SED)

Comment Source: Reclamation

Submittal Date: ____

#	Page	Line #	Comment
		General	There are several references to submittal of an annual adaptive operations plan by January 10 of each year (see, for example, page ES-18 and K-34). Reclamation believes January 10 is much too early in the year to develop a useful operations plan. Based on San Joaquin 5-Station Precipitation Index historic averages, less than 1/3 of the water year's typical precipitation falls prior to this date, leaving such a large amount of uncertainty in projected hydrology and operations that any operational forecast will not provide an adequate basis for any meaningful decisions on adaptive management for the year. The Board should discuss the contents and uses of the operations plan with Reclamation to ensure a worthwhile product.
		General	The basic premise for unimpaired flow operations is management to a 7-day running average of the inflows. Reclamation is concerned that this operation is not likely feasible based on issues including the need to conduct power scheduling, data availability and quality, coordination with other operations (both on the San Joaquin and at other CVP facilities such as Delta export facilities and upstream reservoirs on the American and Sacramento), downstream impact protection, and public notification, in addition to potential other unanticipated impacts. Further, Reclamation is concerned that the increased frequency of operational changes may impact our facilities and infrastructure, potentially leading to more frequent outages and unscheduled maintenance, and potential equipment/facility failures. The Board should work with Reclamation to identify feasible operations metrics
		General	It is not clear how the operating to the 7-day running average of unimpaired flow will be conducted/coordinated when considering rivers with multiple reservoirs in series. For instance, if one or more water right holders are in the process of adding water to storage in upstream reservoirs, the furthest downstream reservoir may be required to release additional water from storage to meet the requirement.
1.	ES-1	35-37	The SED should specify which parties and the process the Board will use to assign responsibilities in order to pay for the monitoring and special studies
2.	ES-4	29-31	The Board should identify an expectation for whether the need for temporary emergency changes will increase under these regulations.
3.	ES-4	32-37	Reclamation requires additional information on "recommendations for non-flow measures" to understand how such measures will play a role and requests that the Board elaborate on the description and process.
4.	ES-5	23-25	The techniques to measure salinity in segments is not known. The Board should either specify a method or require measurements at fixed points
5.	ES-11 to ES- 13	Sec. ES5	"The unimpaired flow range element of the objective, proposed to be 30 to 50 percent of unimpaired flow, provides the bounds of the flow that is required to reasonably protect the fish and wildlife beneficial use. The proposed starting point, within the proposed 30 to 50 percent adaptive range, is an unimpaired flow of 40 percent." (ES-11) The flow proposal would move the current flow objective from a single location on the SJR near Vernalis upstream to include the three salmon-bearing tributaries of the LSJR: the Stanislaus, Tuolumne, and Merced Rivers." (ES-12)

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			Reclamation supports distributing responsibilities for meeting requirements to for each of the San Joaquin tributaries instead of a Vernalis-only flow standard. If Reclamation is in a position to consider requirements from Phase 1 that extend beyond the confluence of the Stanislaus, Reclamation requests that other entities who manage water at the downstream locations, e.g. DWR, also contribute to meeting downstream requirements (through agreements, infrastructure, monetary contributions or other mechanisms).
6.	ES-14	4-6	Reclamation would appreciate clarity on how base flows are measured (instantaneous or averaged daily/weekly/monthly). If Reclamation is in a position to consider requirements from Phase 1 that extend beyond the confluence of the Stanislaus, Reclamation requests that other entities who manage water at the downstream location, e.g. DWR, also contribute to meeting downstream requirements (through agreements, infrastructure, monetary contributions or other mechanisms).
7.	ES-19	41-42	Reclamation would like clarification on how the STM Working group would integrate with river-specific groups and what decisions are made at each level.
8.	ES-19	Sec. ES5	"The flow proposal therefore includes a provision to adjust flows for a state of emergency, such as the current drought emergency. Hydrologic conditions, and water supply needs experienced during the current drought were analyzed in this SED, and so the analyses in this SED have accounted for a wide range of hydrologic conditions. Under this emergency provision, the State Water Board, at its discretion or at the request of any affected responsible agency or person, may authorize a temporary change to the implementation of the LSJR flow objectives in a water right proceeding if the State Water Board determines that either (1) there is an emergency as defined by CEQA (Pub. Resources Code, §21060.3), or (2) the Governor of the State of California or a local governing body has declared a state or local emergency pursuant to the California Emergency Services Act (Gov. Code, § 8550 et seq.)." Reclamation believes that Temporary Urgency Changes should be allowed as provided by the California water code and that the plan should not artificially create a condition precedent before water right holders can avail themselves of remedies allowable under the California water code. However, at the very least, TUCPs should be allowed when material assumptions upon which the numeric or narrative standards are constructed, do not actually occur.
9.	ES-23 ES-29	Sec. ES5	"When implemented through a water right proceeding, implementation would generally follow the water right priority system and in accordance with applicable law." California law does not require that junior water right holders who lawfully store water under priority, mine their stored supplies before senior water right holders contribute to instream flows. A source of instream flow is decreased diversion of unimpaired flow. In any discussion of the implementation, or water rights, phase, the Board should be forthcoming about how its analysis impacts individual water right holders. The 1988 Stipulation and Agreement between OID/SSJID and Reclamation is merely an operational arrangement to satisfy the senior rights of OID/SSJID. The State of California has allocated water rights to OID/SSJID, not Reclamation. Any curtailment of senior water rights for State instream flow contributions should be a State action. Water Supply Effects Outside of the Immediate Plan Area – "In general, the flow objectives would be implemented through water right actions that would follow the water right priority system, and in accordance with applicable law, and limit water availability starting with the most junior water rights in the plan area."
			Under the priority system, junior status is relevant in relation to other diverters of the same source, not across wholly separate sources

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11.	ES-24, ES-33, ES-35	ES5.4	Direct Net Effect on Surface Water Users and Indirect Effects on Groundwater Users (ES-24) – "The net effect of the flow proposal on water supplies for agricultural purposes would be moderated to some extent by increased reliance on groundwater to make up for some of the loss in surface water diversions." Groundwater Effects (ES-33) – "The overall rate of groundwater pumping in the plan area, particularly during the recent drought, is likely not sustainable." These statements are contradictory. To resolve it, the SED states "Improved municipal and agricultural water use efficiency and conjunctive water management, with increased groundwater recharge, would reduce the water supply deficit and mitigate potential impacts associated with increased groundwater pumping." An analysis should be performed to determine whether these measures practical or feasible? Are there enough gains in water use efficiency in the affected areas to offset the reduction in supplies?
12.	ES-25	Table ES-3	Reclamation is concerned that in critically dry years, where water already is scarce, the SED requires more than 200 TAF (or 42%) of Water Supply.
13.	ES-31	27-29	Reclamation believes that impacts outside of the plan area are cumulative impacts and should be included along with the effects within the plan area. List of cumulative actions being taken?
14.	ES-38	1	Reclamation would like to see estimates in how much groundwater pumping could be sustainably reduced through water conservation, and whether these conservation measures are financially feasible for the area. How would these groundwater estimates be made?
15.	ES-38	7-10	Based on the impacts seen from recent conservation cuts, is this level of conservation reasonable and sustainable for the long-term? Explain impacts – water conservation?
16.	ES-50	ES6.2	"SDWQ Alternative 2 would establish a numeric salinity objective of 1.0 dS/m as a maximum 30-day running average of mean daily EC for all months in the SJR between Vernalis and Brandt Bridge, Middle River from Old River to Victoria Canal, and Old River/Grant Line Canal from the Head of Old River to West Canal."
17.	ES-65	1-4	Reclamation supports the new salinity objectives described in SDWQ Alternative 2. Reclamation does not consider an SED adequate to analyze the effects of this plan. We recommend an EIR so that the Board can consider alternatives proposed by other sources. Although this is a CEQA issue, the main question here is why other, previously defined, plans such as the Reclamation Revised Plan of Operation and the OID/SSJID Plan of Operation are not evaluated for consideration. Reclamation recommends that previously defined plans be considered and analyzed as alternatives to the preferred alternative.
18.	2-2	Note 3	Add "and reduce the frequency of flood control releases"
19.	2-30	31-32	Reclamation recommends including the requirements under D-1641 and associated compliance for Dissolved Oxygen.
	2-32		AFRP objectives are changing and being guided by a structured decision making tool assessment of multiple flow, habitat, and hatchery scenarios to achieve productivity, abundance, life history diversity and genetic diversity metrics. It is feasible that restoration and recovery actions on the Stanislaus may impact fall run Chinook salmon. The doubling metric of the AFRP is not a number developed through a scientific process. The statute behind the AFRP call for reasonable efforts, not achievement of an arbitrary doubling metric.
21.	2-33	28-31	While it is true that deliveries to OID and SSJID are 600 TAF when inflow to New Melones is over 600 TAF, OID and SSJID get all of

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	Ü		the inflow plus a third of the difference between the inflow and 600 TAF
22.	2-35		It should be noted that the allocations for SEWD and Central are not controlled by the Municipal and Industrial Water Shortage Policy.
23.	2-36	Central	Central's interim supply is defined as such to allow development of future in-basin demands.
	0.27	El D	Low storage levels are not restricted to drought years since New Melones Dam is over allocated and relies upon frequent very wet years
24.	2-37	Flow Reqts	to remain operational throughout the average and below average years.
25.	2-37	Flow Reqts	The Board referenced the D1641 spring pulse flow as a "requirement" yet use VAMP to define the No Action Alternative. The no action description should be consistent with how it's analyzed. Using VAMP would not be appropriate since it expired in 2011, but using full D-1641 pulse flows would also not be appropriate since Reclamation has not been able to operate to those flows since VAMP ended. Reclamation recommends the No action be the 2E flows, dissolved oxygen, D-1641 Feb-June base flows and Vernalis salinity. This assumes that b(2) and the 1987 CDFW agreement are covered under the 2E flows.
26.	2-37	1987 Agreement	The Interim Plan of Operations is unrelated to the 1987 CDFW agreement. The IPO was developed in 1997 in response to both CVPIA and the 1995 WQCP which both included increased releases from New Melones. The increase in fishery releases from 98-302 was developed under the 1987 CDFW agreement and relied upon a calculation that defined "available water." The IPO was only intended for 2 years (1997-1998) and did not address critical or "low" water year types. The "Fishery releases" in the IPO ranged from 98-467 TAF to address both the 1987 CDFW agreement and CVPIA (b)2 releases. The 1997 IPO also define the New Melones Index as a decision making indicator for New Melones rather than using the San Joaquin River Index.
27.	2-37	1422	D-1422 also included a fishery release of 98 TAF
28.	2-38	VAMP	VAMP also included an increased flow requirement for successive wet year periods (referred to as the "double step"). In 2011, Reclamation developed an agreement with Merced Irrigation District to ensure water would be available to meet the VAMP flow requirements (except the double step if applicable). Although Reclamation developed the agreement with the intention of Merced Irrigation District increasing releases to meet Vernalis flows, the natural hydrology, along with New Melones RPA releases were able to meet Vernalis requirements for that 2 year period and no additional water was released from Merced.
29.	2-31	D1641	"Due to inadequate water supplies in New Melones Reservoir to meet all of Reclamation's various obligations and the lack of water releases from elsewhere in the SJR Watershed, Reclamation has repeatedly failed to comply with the SJR flow objectives since the SJRA expired." Reclamation maintains that the lack of water to meet SJR flow objectives reveals an issue with the obligations, not a compliance issue. Suggest changing "failed to comply with" to "been unable to meet the requirements for".
30.	2-38	USFWS	Reclamation is not required to operate New Melones in accordance with the AFRP. Reclamation is required to operate the CVP in accordance with CVPIA which defines a limited volume of increased releases (and/or export restrictions) that may be made in an effort to reach the AFRP goals, but are at the discretion of USFWS. The increased releases are referred to as (b)2 flows because they are in section 3406 (b)2 of CVPIA. The IPO defined a quantity of "fishery releases" that would satisfy the (b)2, CDFW and 1995 WQCP requirements. This amount was 98-467 TAF as defined by the New Melones index. There are no "basic IPO flows" as referenced in this section. CVPIA (b)2 releases are measured against those required at the time D-1485 was passed, not the 1997 IPO. AFRP flows are much higher than those released from New Melones. The text infers that we're already meeting AFRP flows, which is false. The main point here is that the system is over allocated, so the numerous, layered flow objectives that have been applied are not feasible. To state that we operate New Melones to AFRP misses the point that we can't operate to our current requirements, let alone the recommended flows.
	2-38	NMES BO	It should be noted that the 2009 NMFS BO also allows for reshaping of this volume to different days and even months through a Stanislaus Operations Group.
1 31	2-39 through		The flow releases shown (2000-2009) should include 2010-2012. It is misleading to characterize flood release frequency during a period of time that did not included the large release requirement of the 2009 NMFS BO.

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			If analyzing actual releases, then recommend including through 2015.
			It should be noted that the minimum Vernalis flow requirements included in the NMFS BO were temporary and have ended.
33.			Reclamation also has San Joaquin River Settlement Contractors that are served from Jones Pumping Plant.
34.	2-49		Since the historical period of 2000-2009 is being referenced, CVPIA (b)2 export reductions should also be referenced in this section.
35.	chapter 5		Statements and excerpts such as the following (see below this paragraph) occur throughout Chapter 5 and others. Reclamation will assume "reasonably protect" and or "viable" is defined elsewhere in the document. If not please do as readers may want to know the criteria these entail. Several native fish species are at low levels, some at the lowest levels in recorded historyit may be prudent to consider and state if 'reasonably protect', 'viable' and other statements along these linesand the criteria thereinallows for growth of those populations and not just maintenance at their current low levels. "The plan amendments would establish narrative and numeric flow objectives that would maintain flow conditions from the SJR Watershed to the Delta at Vernalis sufficient to support and maintain the natural production of viable native SJR fish populations migrating through the Delta." "suitable for reproduction and early development of fish" "for the survival and successful maintenance of plant and animal species established under state or federal law as rare, threatened, or endangered" "methods for adaptive implementation to reasonably protect fish and wildlife beneficial uses" "The operational changes made using the adaptive implementation methods above may be approved if the best available scientific information indicates that the changes will be sufficient to support and maintain the natural production of viable native SJR Watershed
			fish populations migrating through the Delta and meet any biological goals."
36.	5-16		Add "and reduce the frequency of flood control releases"
37.	5-26	21-22	OID and SSJID do not jointly hold rights with Reclamation to divert from New Melones; they are senior water rights holders and the up to 600 TAF they divert from New Melones is part of a settlement to avoid injury to OID and SSJID when New Melones inundated old Melones Dam and Reservoir. As written, it implies that Reclamation and the Districts have equal water rights.
38.	5-26	24-25	This calculation of maximum diversion from the Stanislaus River does not include all of the Riparian Water Rights.
39.	5-34		Since 90+% of fish are usually lost if entering the SWP's CCFB via the radial gatesmay consider incorporating language that limits using radial gates during migration periodsCVP may be used instead as needed.

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40.		18-21	The change of seasons for hydropower may have financial impacts that have not been quantified.
41.	6-30	5	Delete 'or turbidity' in parentheses [turbidity is an optical property]
42.	6-33	5	Delete 'or turbidity' in parentheses [turbidity is an optical property]
43.	6-36	3	Delete 'or turbidity' in parentheses [turbidity is an optical property]
44.			The document discusses potential impacts to bank erosion, bank armoring and bed siltation, but does not address the potential effect of enhanced flows on bed armoring.
45.			Where are effects of climate change discussed?
46.	15-2	25-8	Reclamation believes VAMP should not be used in the No Project Alternative, particularly when elsewhere in the document defines the current requirements as the D1641 Table 3 flow requirements. VAMP ended in 2011 and no further funding agreements have been in place to continue a similar program.
47.	15-16		Under Additional Resource Areas Considered: 3 rd sentence, "and thus are were only" Delete "are"
48.	Appx K 28	7-8	Using a Narrative to describe Vernalis conditions for July through January leaves a lot of room for interpretation. Reclamation recommends including quantitative requirements in the plan table.
49.		7-8	The Board needs to clarify how the 7-day running average may be feasibly implemented. Reclamation is concerned that this operation is not likely feasible based on issues including the need to conduct power scheduling, data availability and quality, coordination with other operations (both on the San Joaquin and at other CVP facilities such as Delta export facilities and upstream reservoirs on the American and Sacramento), downstream impact protection, and public notification, in addition to potential other unanticipated impacts. Further, Reclamation is concerned that the increased frequency of operational changes may impact our facilities and infrastructure, potentially leading to more frequent outages and unscheduled maintenance, and potential equipment/facility failures.
			In addition, it is not clear how the operating to the 7-day running average of unimpaired flow will be conducted/coordinated when considering rivers with multiple reservoirs in series. For instance, if one or more water right holders are in the process of adding water to storage in upstream reservoirs, the furthest downstream reservoir may be required to release additional water from storage to meet the requirement.
50.	K-28	7-8	How will the Board ensure that the Vernalis base flow requirement responsibility is shared appropriately between the tributaries?
51.	K-44	29-31	The additional studies on the October pulse flow are an additional use of water that is not accounted for in the WSE model, and therefore the impacts are not analyzed. This document only addresses the Feb-June flows, so an October action would be out of scope for this analysis.
52.	K-46	13-24	The Board is not clear at what level the Comprehensive Reporting is to be done. It is also unclear if this process is going to replace the multiple other processes that are intended to do the same thing. Reclamation can provide an example of how current reporting is being completed (i.e., information in a current update plan that is already sent to the Board regularly) and would be happy to discuss a more

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			straightforward process.
53.	K-53	5-8	Reclamation is unclear on how to measure salinity in segments as opposed to fix points.
54.	K-53	31-32	Environmental conditions are not in the control of Reclamation, as such all operations and salinity conditions cannot be predicted for the Comprehensive Operations Plan. Additional discussion is needed with the Board on an operational plan and moving forward.
55.	K-54	1-3	Reclamation does not believe that a Comprehensive Operations Plan can be completed within 6 months. Additional discussion is needed with the Board on an operational plan and a feasible timeline.
56.	K-54	18-35	Reclamation does not believe that a special study can be designed with public input within 6 months. Additional discussion is needed with the Board on an operational plan and a feasible timeline.
57.	K-64	16-18	"Interested parties should evaluate SJRRP flow contributions to flow and water quality requirements at Vernalis" Replace evaluate with monitor
58.	K-70	36	It is unclear on how the Board expects these non-flow recommendation to be funded, timelines, and how these differ from the projects already underway as a part of FERC requirements and/or Reclamation's Biological Opinions on Long-term Operations of the Projects. Reclamation suggests discussions with the Board on the feasibility of non-flow recommendations. We will work towards and address those issues on the Settlement Discussions, but these discussions may not be successful in the time period contemplated here.
59.	Water supply effects model - CCAO		Reclamation is concerned by the use of a 700 TAF carryover storage target at New Melones. While storage volumes may affect release temperatures at certain times of the year, there does not appear to be sufficient data to support this particular volume. A firm carryover storage target also limits the flexibility to balance water supply and downstream demands. In addition, we are unaware of the Board's authority to mandate such a requirement.
60.			According to the 1988 stipulation agreement between Reclamation and OID/SSJID, Reclamation must use the volume identified by the agreement formula water or consumptive use, whichever is smaller. The agreement allows Reclamation to store water in New Melones (and inundate old Melones Dam) without causing injury to the Districts who have senior water rights. This agreement (originally drafted in 1972 and revised in 1988) was in place prior to the Board issuing D-1422 and was assumed in drafting the water right permit requirements. The Board's modeling, however, allows the Districts' deliveries to be reduced in order to meet carryover storage and release requirements. As such, reductions to the Districts' supply seems inconsistent with the agreements in place. Note: The New Melones Revised Plan of Operation assumes full compliance with the 1988 stipulation agreement. In addition, a new plan would need to address (in some form) all of the following in addition to sustainability and general water supply reliability. — Prior Water Rights Agreements: Dedicate half the average inflow (600 TAF), Riparian Water Rights (~36TAF) — D-1422: Salinity and Dissolved Oxygen Requirements (up to 70 TAF) — CVP Contracts: Required to fill and limited discretion to reduce (up to 155 TAF) — California Fish and Game Agreement: Up to 302 TAF — CVPIA releases: contribute towards 800 TAF of fishery releases (assume 200 TAF) — D-1641:Vernalis salinity and flow requirements — NMFS BO: Up to 589 TAF of instream releases, temperature requirements (requires

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			storage), Periodic high release requirements for gravel movement
61.			As a result of litigation, we have limited ability to release sustained flows above 1,500 cfs into the Stanislaus River since it may cause harm to Stockton East Water District through increased seepage and damage to root zones of particular crops.