



Chandra Ferrari, California Water Policy Director  
Rene Henery, California Science Director

Sent via email to [commentletters@waterboard.ca.gov](mailto:commentletters@waterboard.ca.gov)

March 29, 2013



Charles Hoppin, Chair  
c/o Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
Cal/EPA Headquarters  
1001 "I" Street, 24th Floor  
Sacramento, CA 95814

**Re: Draft Substitute Environmental Document in Support of Potential Changes to the Water Quality Control Plan for the San Francisco Bay-Sacramento/San Joaquin Bay-Delta Estuary: San Joaquin River Flows**

Dear Mr. Hoppin:

Trout Unlimited (TU) appreciates the opportunity to provide comments on the draft Substitute Environmental Document (SED) for the proposed update to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan). The proposed changes to the Bay-Delta Plan include revised San Joaquin River flow objectives for the protection of fish and wildlife beneficial uses, as well as an updated program of implementation. TU understands that the State Water Resources Control Board (Board) faces a substantial challenge in adopting water quality objectives that reasonably protect beneficial uses and fairly weigh the needs of competing water users. However, TU is concerned that the proposed draft objectives for the lower San Joaquin River (LSJR) will provide little benefit to fishery resources and will cement the long-standing water management practice of placing the burden of an uncertain strategy on the most compromised water user in the system, the fish.

TU is a non-profit organization with a mission to conserve, protect and restore North America's cold-water fisheries and their watersheds. With 140,000 members nationwide and more than 10,000 in California, TU is specifically dedicated to the recovery of trout, salmon, and steelhead, which comprise the historic backbone of California's commercial and recreational fishing industries and are keystone species for California's coastal and Central Valley watersheds. TU members regularly fish on the Tuolumne, Merced, Stanislaus and San Joaquin Rivers and otherwise utilize them for the recreational and aesthetical opportunities they provide. The San Joaquin watershed historically supported robust salmon runs, as well as healthy populations of popular sport fish like steelhead trout. However, several factors, including increasing water diversions, have resulted in severely depressed fish populations. TU considers it a priority to ensure that balance is restored to the San Joaquin River and its tributaries through

*Trout Unlimited: America's Leading Coldwater Fisheries Conservation Organization*

California Office: 2239 5th Street, Berkeley, CA 94710

Direct: (916) 214-9731 • Fax: (510) 528-7880 • Email: [cferrari@tu.org](mailto:cferrari@tu.org) • [www.tu.org](http://www.tu.org)

implementation of measures intended to reverse the downward trajectory of the watershed's cold-water fish species. TU's comments and suggestions are presented below.

- I. The proposed project lacks sufficient detail to permit informed decision-making and does not provide for the reasonable protection of beneficial uses.

TU agrees with the general approach of the draft LSJR objective and its program of implementation (Preferred LSJR Alternative) which anticipates the provision of more flow of a more natural pattern to support and maintain viable native fish populations. There is overwhelming scientific evidence in the record to support the premise that providing flow patterns that more closely align with the frequency, magnitude, duration and timing of natural flow patterns is beneficial for fish and wildlife resources. However, the draft narrative objective and its accompanying plan of implementation is broadly written and lacks sufficient detail necessary to give the public a meaningful understanding of what is being proposed and how its implementation will affect fish and wildlife beneficial uses. It is therefore ineffective as a public disclosure tool or to provide substantiation to its claim that it adequately protects fish and wildlife beneficial uses.<sup>1</sup> An EIR must describe a proposed project with sufficient detail and accuracy to permit informed decision-making. (See CEQA Guidelines §15124.) The SED should define and describe in detail the components of the narrative objective and adaptive management program in such a way that allows the public, other agencies, and the Board a full comprehension of what is proposed and facilitates a more transparent analysis of the effects of the measure on fish and wildlife resources. This could be accomplished, in part, with the inclusion of specific population and/or habitat targets for all species of concern into the LSJR objective and adaptive management program as discussed more fully below.

- (1) The narrative objective and adaptive management program should provide more definition through the inclusion of specific and measurable population and/or habitat targets

The SED notes that one of its main purposes is to document the Board's analysis of the effects of the updated LSJR objective. However, the narrative form of the LSJR draft objective and the unstructured nature of the proposed adaptive management process make it difficult to discern what the objective actually requires, what environmental changes will result from its implementation and how the program of implementation expects to achieve the objective. The narrative LSJR draft objective requires flows "sufficient to support and maintain the natural production of viable native San Joaquin River watershed fish populations migrating through the Delta." (SED App. K, p.1.) It further states that "[i]ndicators of viability include abundance, spatial extent or distribution, genetic and life history diversity, migratory pathways, and productivity." (Id.) The narrative objective represents an adequate overarching goal statement however it does not provide any specific and measurable targets or metrics for the indicators it references. Such metrics are necessary to provide the objective sufficient structure to allow the

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<sup>1</sup> "The goal of the Preferred LSJR Alternative is to protect fish and wildlife by supporting and maintaining the natural production of viable native SJR watershed fish populations migrating through the Delta." (SED, ES-2.)

effects of its implementation to be meaningfully analyzed and to determine whether the program of implementation will actually achieve it.

Similarly the program of implementation, while establishing an initial February–June flow rate of 35 percent of unimpaired flow for the Merced, Stanislaus, and Tuolumne Rivers as well as an adaptive management flow range, lacks quantifiable biological and/or habitat criteria to guide management actions and track their progress at meeting the objective. The program of implementation must include a “description of the nature of actions which are necessary to achieve the objectives....” (Water Code § 13242(a).) Therefore, the adaptive management plan must be described with sufficient specificity to allow an informed decision regarding whether or not it will achieve the objective. As it stands, the program of implementation defers the articulation of the adaptive management specifics to an implementation committee that will convene after the objectives are adopted. Even though the adaptive management program contains few specifics, it expressly allows for the annual modification of the flow requirements as long as the average flows over the February through June period are no less than 25 percent of unimpaired flow on each tributary. Essentially the program allows for a decrease in flow requirements (to levels potentially less than baseline conditions) without the assurance that science-based indicators and decision-making will drive the change.

TU agrees with the inclusion of an adaptive management program however the Board must provide its framework and governance structure (the “Logic Chain” structure advanced by The Bay Institute and American Rivers and the “structured decision making” structure advanced by the United States Fish and Wildlife Service are both good examples) and must establish biological and/or habitat targets and desired outcomes for public trust resources that are specific, measureable, achievable and relevant and timebound (S.M.A.R.T.). In addition, the program must have a mechanism for evaluating, using the best available science, the performance of the targets toward achieving the goals stated in the objective. These changes to the adaptive management program are necessary to provide more clarity to the SED, allow an adequate assessment of the effects of implementation of the objectives on fish and wildlife beneficial uses and ensure that the program of implementation will actually achieve the objective. Importantly, inclusion of population and habitat targets also incentivizes parties to implement non-flow related measures because flow requirements can be modified downward if the specified targets are met.

(a) Recommendations for biological and habitat targets

As noted above, TU recommends that the narrative objective and adaptive management framework include biological and habitat metrics (SMART objectives) for all fish species that utilize the San Joaquin watershed for rearing, spawning or migration. This includes metrics for fall-run Chinook salmon, steelhead and other species of concern (including Sacramento splittail and green and white sturgeon). The salmon doubling requirement contained in the existing

(2006) Bay-Delta Water Quality Control Plan (Bay-Delta Plan) is an appropriate inclusion as it is required by state<sup>2</sup> and federal<sup>3</sup> law, is a good salmon abundance target and the Anadromous Fish Restoration Plan (AFRP) has developed the salmon doubling production targets for each tributary.<sup>4</sup> TU recommends that Board staff use the best available science and work with interested parties to develop specific biological and habitat criteria to include in the draft narrative objective and/or adaptive management program using the approaches/examples described below as a guide.

### **Biological Criteria: Defining Objectives to Accomplish Goals**

To support flow management addressing species needs and attaining interim targets towards population recovery goals, specific biological criteria should be identified. Specifically, biological criteria provide the basis for establishing goals, defining objectives, structuring adaptive management approaches and triggering management actions. The following table provides examples of biological criteria for Chinook salmon, as well as goals related to those criteria, specific objectives towards those goals, and the timeframe associated with those objectives.

<b>Criteria</b>	<b>Goal</b>	<b>Objective</b>	<b>Timeframe</b>
<b>Abundance</b>	Increase	Achieve AFRP Targets	15 years - in proportional increments quantified generationally (3 years)
<b>Life History Diversity</b>	Increase	Expand distribution of size and timing of outmigrants (relative to existing CV range)	15 years - quantified generationally (3 years)
<b>Juvenile Production</b>	Increase	Cohort replacement rate >1 in ~7 of 10 years (75%)	15years (Measured annually)

<sup>2</sup> “It is the policy of the state to significantly increase the natural production of salmon and steelhead trout by the end of this century. The department shall develop a plan and a program that strives to double the current natural production of salmon and steelhead trout resources.” (Cal. Fish & Game Code section 6902.)

<sup>3</sup> “Develop within three years of enactment and implement a program which makes all reasonable efforts to ensure that, by the year 2002, natural production of anadromous fish in Central Valley rivers and streams will be sustainable, on a long-term basis, at levels not less than twice the average levels attained during the period of 1967-1991.” Central Valley Project Improvement Act. 34 U.S.C. § 3406(b)(1). (1992.)

<sup>4</sup> Anadromous Fish Restoration Program Final Plan, Appendix B-1. 2001. Population targets for fall-run Chinook salmon necessary to achieve the doubling requirement include 22,000 for the Stanislaus River, 38,000 for the Tuolumne River and 18,000 for the Merced River.

*Note: The 15year timeframe associated with the objectives in this example is based on the analyses of TBI and others demonstrating the potential, given historical trends in population increase, to achieve AFRP population targets within 15 years, given suitable conditions.<sup>5</sup>*

### **Physical Habitat Attributes: Defining Objectives to Accomplish Goals**

Given adequate flow, ensuring that sufficient habitat area, access, and functionality is provided to meet species needs and achieve biological targets, as a complement to biological criteria, physical criteria for adaptive management actions should also be established. Physical criteria for adaptive management can be described in terms of habitat attributes related to flow and necessary for maintenance of species individual and population condition as quantified in terms of the biological criteria. The following table provides examples of specific flow related, physical habitat attributes, goals related to those attribute necessary to meet species needs, specific objectives associated with those goals, and timeframe.

<b>Attribute</b>	<b>Goal</b>	<b>Objective</b>	<b>Timeframe</b>
<b>Channel</b>	Optimize	Optimize temperature to minimize predation and increase survival	Annually during critical migration windows, for those portions of the window where temperature can be affected by flow
<b>Inundated Floodplain</b> (Hydrologically connected)	Increase	Increase floodplain habitat to meet needs of population targets	15 years (Annual increments)

### **Physical Habitat Attributes Related to Flow: Components and Quantification**

The physical habitat attributes recommended as indicators and described in the example above entail multiple functions, each of which needs to be quantified as a component of making objectives SMART and establishing targets and thresholds for adaptive management. The table below provides an example of how flow related physical habitat attributes can be broken down into their component functions and associated indicators and quantified.

#### **Table Key:**

<b>Attributes:</b>	Components of functional aquatic habitat, definable in terms of the suite of functions it provides for a given species/ community
<b>Function:</b>	Categories of ecosystem functionality characterizing a given habitat type
<b>Indicators:</b>	Measurable components/ dimensions of a function used to define and quantify the specific range of functionality for purposes of a) relating a function to the needs of a particular species, and b) establishing targets for adaptive management

<sup>5</sup> See TBI et al, 2013.

**Units:** Units in which indicator can be quantified, targets set, and performance measured

<b>Attribute</b>	<b>Function</b>	<b>Indicator</b>	<b>Unit(s)</b>
<b>Channel</b>	Temperature	Temperature Range/Time	Degree /Days
		Timing	Calendar Days
	Extent	Length	Linear feet/M
		Area	Square Meters or Acres
	Flow	Volume/Time	CFS
		Total Volume	Acre/ Feet
		Timing	Calendar Days
		Duration	Hours or Days
		Depth	M/Days
		Timing	Calendar Days
<b>Inundated Floodplain 15years (Measured annually) (Hydrologically connected)</b>	Inundation	Area/Frequency	EAH <sup>6</sup>
		Duration	Hours or Days
		Timing	Calendar Days
		Depth	M/Days

It is important to note that functional habitat is composed of attributes beyond those associated with flow. Additionally, habitat quality and ability to meet species needs may hinge on the interaction between flow and non-flow driven attributes. For that reason, designing an adaptive management approach that quantifies the extent to which flow is or is not addressing species needs will likely necessitate the inclusion of non-flow related attributes as well (e.g. substrate, vegetation structure, vegetation taxonomic composition, etc.). In order to be effective non-flow attributes should also be described in terms of quantifiable indicators and assigned specific targets and thresholds to trigger adaptive management actions.

- (2) The draft LSJR objective does not provide for the reasonable protection of fish and wildlife beneficial uses

<sup>6</sup> American Rivers, October 26, 2012. Letter to Jeanine Townsend of SWRCB from John Cain of American Rivers regarding Bay-Delta Workshop #3: Analytical Tools. See Appendix C for Description of EAH approach.

As noted above, the narrative form of the draft LSJR objective and its lack of specific biological or habitat criteria make it difficult to determine what environmental outcomes can be expected from its implementation and therefore it is difficult to analyze how it will affect fish and wildlife beneficial uses. What is clear, however, is the draft LSJR objective will result in significantly less flow than what the Board previously determined was required to fully recover public trust resources.<sup>7</sup> In its 2010 Delta Flow Criteria Report, the Board determined that 60% of unimpaired flow in February through June was required to protect public trust resources and extensive scientific information submitted by fish and wildlife agency scientists and conservation groups in this proceeding has corroborated that finding. The SED contains insufficient analysis to support a contention that a lesser standard is adequate for protection of fish and wildlife beneficial uses. An objective must "...ensure the reasonable protection of beneficial uses..." (Water Code § 13241.) Without a scientific justification for concluding that a lesser standard reasonably protects fish and wildlife beneficial uses, the Board must require flows as close to 60% of unimpaired flow as is reasonable considering other demands on the system. The Board must adopt water quality objectives that intend "...to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved..." (Water Code § 13000.)

The SED's identification of an initial flow rate requirement of 35% is not grounded in science and is not sufficient to protect fish and wildlife beneficial uses. The SED's primary support for its conclusion that implementation of the draft LSJR objective will not result in significant impacts to fish and wildlife resources and will actually improve conditions for fish and wildlife uses is the expected increase in mean annual flows in the Tuolumne and Merced Rivers in the February through June time period. Minimal change in flow is expected in the Stanislaus or lower San Joaquin Rivers. Unfortunately, the SED does not provide analysis regarding whether or how the expected increase in flow will translate into measurable improvement for aquatic resources. Information exists in the record (see The Bay Institute (TBI) et al comments to Chair Hoppin on the Substitute Environmental Document (TBI, 2013); see also the Board's 2010 Flow Criteria Report which both provide flow thresholds) indicating that certain flow thresholds must be met to achieve ecological functions or habitat parameters that are linked to demonstrable improvement of aquatic resources. It is not clear that implementation of the draft objective will result in the attainment of any of these flow thresholds nor is it clear how frequently the threshold events are expected if they can be attained. The lack of parameters in the objective coupled with the lenient allowance of lower flows in the adaptive management process does not inspire confidence that anything other than the lower flow thresholds will be hit. In addition, assuming sufficient water is available to facilitate hitting the higher flow thresholds, the objective constrains such events through the imposition of restrictive flood caps that are significantly lower than existing channel capacity. Therefore, nothing in the SED's analysis suggests that the 35 percent of unimpaired flow requirement is likely to translate into meaningful improvement to the condition of aquatic resources. This is consistent with information submitted

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<sup>7</sup> Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem. State Water Resources Control Board. August 3, 2010.

by others (see TBI, 2013) showing that the 35 percent unimpaired requirement will essentially maintain status quo conditions, which are far from protective.

- II. The SED does not sufficiently explain what balancing factors were taken into account to arrive at the proposed objective and does not support its contention that it strikes a reasonable balance between competing uses

The Board is charged with adopting a water quality control plan that will ensure "the reasonable protection of beneficial uses" and it must attain the highest water quality possible considering all demands being made on the system. (Water Code §§ 13241, 13000.) This inevitably requires that the Board will be required to balance the needs of competing uses before arriving at an objective. However, the Board's balancing discretion is somewhat constrained by state and federal law. For instance, the Board "has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses wherever feasible." (See *National Audubon Society v. Superior Court*, 33 Cal.3d 419, 446 (1983); *State Water Resources Control Board Cases*, 136 Cal.App.4th 674, 777-78 (2006).) The Board must also comply with federal law and ensure that "[f]or waters with multiple use designations, the criteria shall support the most sensitive use." (40 CFR § 131.11(a).) Therefore, as the Board attempts to determine what objectives will provide reasonable protection of beneficial uses, it must also ensure that its objectives support the most sensitive use and must consider the extent to which protection of public trust resources is feasible.

The SED claims that the proposed LSJR objective strikes a balance between "providing water for fish and other competing uses of water." (SED, ES, p. 2.) However, the SED does not contain any explanation of what balancing factors were taken into account to arrive at the proposed objective. Unfortunately, the structure of the document leads to the conclusion that the balancing factors were not equally weighted. The impacts to the agricultural sector and water supply were determined using worst case scenario assumptions while the impacts to fish and wildlife resources were determined using best case scenario assumptions. Not only is such an approach fundamentally flawed and likely to result in an inequitable solution, it is also misleading to members of the public attempting to obtain a reasonable comprehension of what effects can be expected from implementation of the objective.

For instance, the SED presents the worst possible scenario regarding the impacts to the agricultural sector by using a conservative economic analysis that calculates the maximum possible economic impacts if there is no additional groundwater pumping to replace reduced surface water supplies even though it is acknowledged that some of the potential supply reductions would be made up through increased groundwater pumping. At the same time, the SED calculates the impacts to groundwater resources conservatively by calculating the maximum possible groundwater impact if all modeled shortfalls in surface water supplies are replaced by pumped groundwater. The analysis therefore assumes worst case scenario impacts to both surface and groundwater supplies. The analysis occurs without due recognition that agricultural and municipal users of water have greater flexibility than fish and wildlife users as a result of being able to implement a broad suite of management actions to more efficiently divert



and store water supplies; secure water supplies from alternative sources; and/or switch to different activities. (see TBI et al, 2013 for more detailed information on this point.)

On the other hand, the document, with little justification, determines that there will be no significant impacts to fish and wildlife beneficial uses and even assumes their improved condition. The document does not explain how implementation of the proposed objective (assuming there will be an increase in water from baseline conditions in February through June on the Tuolumne and Merced Rivers) will translate into improved conditions for aquatic resources. Many sections suggest the conditions won't be demonstrably different from baseline conditions. Therefore, implementation of the project is expected to result in conditions very near the status quo, which is a condition of rapid decline of aquatic species. In addition, the SED conclusions are made without acknowledgement that aquatic resources are the most sensitive (and therefore least flexible) use in the system.

Given that there is no information in the SED regarding the process used or factors considered to balance the beneficial uses, it can only be assumed that such an effort did not legitimately take place or was not conducted in a thoughtful manner. This assumption is supported by the clearly inequitable structure of the impacts analysis and the identification of an objective that is clearly insufficient to protect fish and wildlife beneficial uses or the public trust. Balancing competing uses of water is a delicate task and is certain to generate heated debate. The Board does the public a disservice by presenting information in an inconsistent fashion or in such a way to make it susceptible to misconstruction. In order to promote an honest conversation about this difficult topic, the SED should provide the public a realistic assessment of the impacts (and benefits) expected to all beneficial uses from implementation of the objective. In addition, the SED should be consistent regarding whether impacts to beneficial uses under baseline conditions will be assessed. As it stands, the SED should assess whether there are impacts to aquatic resources under baseline conditions as it takes such an approach when assessing the impacts to agricultural resources. The status quo condition of cold-water aquatic resources is a condition of continued decline. Therefore, the SED should analyze the impacts to aquatic resources with the consideration that the baseline condition is insufficient to stabilize fish populations and thus continued declines of fish populations can be expected.

- (1) The Board must consider the economic benefits of improved flows for public trust resources in its balancing

As noted above, the SED should provide the public a realistic assessment of the impacts (and benefits) expected to all beneficial uses from implementation of the objective. Water Code section 13241 states that "economic considerations" should be considered in establishing water quality objectives. The Board's economic analysis is heavily focused on quantifying the costs to certain affected parties (mainly farmers and water districts). The SED notes that evaluation of other potential economic effects, such as water quality benefits, is conducted more qualitatively. (SED, ED-43.) In order to ensure a balanced solution, the Board must consider the economic benefits (even in a qualitative sense) that would result from reduced diversions and improved flows for fishery resources and ecosystem needs.

Clearly the largest economic returns expected from recovered salmon (and steelhead) populations are associated with a more robust sport and commercial fishing industry which has been estimated to contribute at least hundreds of millions of dollars each year to local and state economies and thousands of jobs. Projections of the economics and jobs impact of restored salmon and steelhead fisheries for California have been estimated from \$118 million to \$5 billion dollars with the creation of several thousand jobs.<sup>8</sup> Sportfishermen alone spend approximately 2.4 billion dollars in California annually on angler-related expenses (the 5<sup>th</sup> highest in the nation).<sup>9</sup> Such numbers would be expected to significantly increase with healthier fish populations as anglers spend more money at locations that support their fishing experience such as marinas, tackle shops, restaurants, gas stations and hotels. In addition, there is value to avoiding another salmon fishery collapse. According to the State of California, the salmon fishery closure in 2008 and 2009 resulted in the loss of thousands of jobs each year and the loss of more than \$250M each year. Another study showed that California's economy suffers a \$1.4 billion negative impact every year that the salmon season is closed with a loss of almost 23,000 jobs.<sup>10</sup>

Additionally, the benefits of improved flows and healthier ecosystems extend much farther than the fishing industry. Healthier fish and wildlife populations translate to increased consumer spending on other recreational activities, such as bird watching, boating, hunting, hiking, camping and other activities that support the outdoor recreational industry in California, an industry that generates 85.4 billion in consumer spending annually (the highest in the nation.)<sup>11</sup> In addition, healthier ecosystems translate to enhanced aesthetic values (that can't always be quantified), improved water quality and ensured preservation of tribal and cultural heritage. Increases in productive, functioning habitats also produce savings associated with reduced expenditures on bank stabilization, flood control actions and groundwater management measures. Investments in enhanced flows and watershed recovery should be viewed holistically with the recognition that they produce direct and indirect economic benefits, societal benefits in clean rivers and healthy ecosystems and intangible benefits such as preserving for future generations an "iconic" species like the salmon that holds a notable place in California's culture and history.

### III. Recommendations

In summary, we recognize that the task before the Board is not an easy one however the proposed objective is simply inadequate to provide a reasonable level of protection to fish and wildlife beneficial uses. In addition, in its current form, the SED fails to constitute a meaningful public disclosure document. We encourage the Board to begin by providing more detail and

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<sup>8</sup> Calculation of the Projected Economics and Jobs Impact of Salmon Recovery in California. Southwick Associates (June 21, 2009). (see also Michel, 2010)

<sup>9</sup> Sportfishing in America, American Sportfishing Association (January, 2013).

<sup>10</sup> Calculation of the Projected Economics and Jobs Impact of Salmon Recovery in California. Southwick Associates (June 21, 2009).

<sup>11</sup> The Outdoor Recreation Economy. Study commissioned by the Outdoor Industry Association, (2013).

structure to the LSJR objective and adaptive management program. The Board should also “show its work.” Use the SED to provide the public a realistic and fair assessment of what impacts (and benefits) to beneficial uses and benefits can be expected from implementation of the objective. Provide scientific support for the proposed objective, show how it will translate into measurable benefit for fish and wildlife beneficial uses and clearly articulate the balancing factors that were taken into account to arrive at the objective. The Board should also acknowledge that its balancing function must comport with, and does not replace, its other legal obligations under state and federal law, including its legal obligation to protect public trust resources whenever feasible. It is likely that some stakeholders will still be dissatisfied with the final outcome but at least they will be adequately informed of the factors and analysis that led to it and the legal requirements that guided it.

TU’s specific recommendations are as follows:

- (1) Include population targets for salmon and other species in the narrative objective and adaptive management program;
- (2) Expressly include into the narrative objective the salmon population targets defined by the AFRP and required by the CVPIA;
- (3) Establish and include in the adaptive management program biological and physical criteria to track progress toward meeting the population targets contained in the objective and trigger adaptive management changes;
- (4) Adopt an initial flow rate that is based on the best available science; without adequate scientific justification for a lower rate, it should be as close to 60 percent of unimpaired flow as reasonable to ensure fish and wildlife beneficial uses are adequately protected and the Board’s public trust obligations are fulfilled;
- (5) Expand the adaptive management range upwards (the top of the range should exceed 60 percent of unimpaired flow) and remove flood cap limits on the tributaries to allow high flow events to be utilized;
- (6) Restructure the impacts analysis in the SED to ensure that it provides a realistic assessment of the expected impacts for all beneficial uses; this includes using consistent methods and realistic assumptions throughout the document and accounting for the ability and flexibility of water users to adapt to changes in supply;
- (7) Clearly articulate the balancing factors taken into account to arrive at the proposed objective;
- (8) Acknowledge in the balancing analysis that the disproportionate allocation of water between in-stream and out-of-stream water users over the last several decades has resulted in the extremely compromised condition of salmon and other public trust resources;
- (9) Consider, as a balancing factor, the broad economic benefits of improved fisheries and healthy ecosystems.

Thank you for your consideration of TU’s comments on the draft SED for the Bay-Delta Plan. If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in blue ink that reads "Chandra Ferrari". The signature is written in a cursive style and is set against a light blue rectangular background.

Chandra Ferrari  
California Water Policy Director  
[cferrari@tu.org](mailto:cferrari@tu.org)  
(916) 214-9731

A handwritten signature in black ink that reads "Rene Henery". The signature is written in a cursive style and is positioned above the printed name and contact information.

Rene Henery  
California Science Director  
[rhenery@tu.org](mailto:rhenery@tu.org)  
(510) 528-4164