



Jeanne M. Zolezzi
jzolezzi@herumcrabtree.com

VIA E-MAIL

commentLetters@WaterBoards.Ca.Gov

State Water Resources Control Board
Attn: Jeanine Townsend
Clerk to the Board
Post Office Box 100
Sacramento, CA 95812-2000

Re: Comments on Bay-Delta Substitute Environmental Document for Phase I of the Bay-Delta
Water Quality Control Plan

Members of the Board,

The following comments are made on behalf of Banta-Carbona Irrigation District, Patterson Irrigation District, and West Stanislaus Irrigation District (collectively "**Districts**") on the Recirculated Draft Substitute Environmental Document ("**SED**") prepared by the State Water Resources Control Board ("**Board**") to support potential changes to the Water Quality Control Plan for the San Francisco Bay-Sacramento/San Joaquin Delta Estuary ("**Plan**"): San Joaquin River Flows and Southern Delta Water Quality (LSJR Flow Objectives and South Delta Salinity Objectives or Phase I).

At the outset, the Districts would like to join in support of the extensive comments submitted by the San Joaquin Tributaries Authority (SJTA). The SJTA raise many legal challenges to the Board's manner of proceeding, as well as a host of California Environmental Quality Act ("**CEQA**") challenges to the SED. The Districts support the SJTA comments to the extent they are consistent or not in conflict with the District's comments.

THE SED DOES NOT IDENTIFY A NEEDED BENEFICIAL USE

The water quality objective being proposed include a narrative objective that requires: "the maintenance of flows sufficient to support and maintain the natural production of viable native San Joaquin River watershed fish populations migrating through the Delta". The unimpaired flow proposal is intended to implement this Narrative Objective. However, the SED itself (Table 19-32) indicates that approximately 11,373 Central Valley Fall-Run Chinook Salmon are produced annually on the three tributaries. There is no indication in the SED that the current flow regimes on the tributaries would not "support and maintain" that population. The SED seems to conclude that if the base case is continued with no changes to the system, there will continue to be 11,373 Central Valley Fall-Run Chinook Salmon annually; therefore, the **current** flow regimes would maintain this productivity as required by the Narrative Objective. It appears that despite the wording of the

Narrative Objective, the unimpaired flow proposal is actually intended to **improve**, not support and maintain production on the tributaries.

This was emphasized by one of the Peer Reviews of the 2010 Technical Review, who took issue with the conclusion in the report's conclusion "... since 1952, the average escapement of fall-run Chinook salmon has shown a steady decline." The peer review stated: "This statement is contradicted by the figure (3.5) associated with it. There is no obvious trend downward but rather there are a series of pronounced peaks (a pair of peaks around 1954 and 1960, then discrete ones around 1970, 1985, and 2003). Each of the peaks lasted about 8 years, with distinct 'troughs' in between. I think the conclusion that this was a 'steady decline' is not supported". This peer review comment has not been addressed.

The unimpaired flow proposal, therefore, is not required to meet the Narrative Objective, and would therefore appear to be an unreasonable use of water.

ONLY PART OF THE SAN JOAQUIN RIVER IS BEING CONSIDERED

The Plan purportedly involve changes in flow objectives in the San Joaquin River ("SJR") basin. As depicted in Figure ES-1, the SJR basin includes numerous watersheds and reservoirs, including the Friant Dam and the main stem of the river. The flow objectives included in the Plan and evaluated in the SED are based upon an August 2010 technical report on the *Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem* ("**2010 Flow Criteria Report**"). The 2010 Flow Criteria Report "concluded that 60 percent of flow should be left in the Lower San Joaquin River for the benefit of fish." That analysis included the entire SJR. The importance of including the entire river is evident when you look at the historic percentage contribution of flow on the river.

Appendix C

*Technical Report on the Scientific Basis for Alternative
San Joaquin River Flow and Southern Delta Salinity Objectives
February 2012 (Updated June 2016)*

Table 2-8. Median Annual Percent Contribution of Unimpaired Flow and Observed Flow by SJR Tributary and Upper SJR to Flow at Vernalis (1984 - 2009)

	Stanislaus	Tuolumne	Merced	Upper SJR at Friant	Fresno/Chowchilla/Tulare/Valley Floor
Unimpaired Flow (1984 to 2009)	20%	31%	14%	30%	2%
Observed Flow (1984 to 2009)	24%	21%	14%	8%	26%

The percent of flow contributed at Vernalis by the Stanislaus River during June and July has increased dramatically, accounting for roughly 40% of flow during these months, while the contributions from the Tuolumne have been reduced to roughly 20% during these same months (Figure 2.9). The Upper SJR contributes a much lower percentage of flow compared to unimpaired conditions. At p. 2-24.

Yet, the Plan would impose the unimpaired flow obligation on only the three main tributaries – completely ignoring the historical 30% contribution from the main stem. There has been no analysis of changing the parameters established in the Flow Criteria Report – a percentage

contribution from the entire watershed, to imposing unimpaired flow requirements only upon part of the river. Such a change cannot be supported without that analysis.

Staff indicates that only the three tributaries are being included because they are the only salmon bearing rivers, and because Friant has already contributed through the San Joaquin River Restoration Plan settlement. Neither of these excuses support exclusion: first – the flows anticipated by the settlement have not materialized. Friant is not contributing its fair share, and further, the criteria should be whether or not the stretch of the river is attaining its share of what this plan is requiring – is it meeting the 30 to 50% proposal?

THE GEOGRAPHIC SCOPE OR PLAN AREA OF THE PROPOSED PLAN IS ARBITRARY.

The stated goal of the Plan is to “Maintain inflow conditions from the San Joaquin River (SJR) Watershed sufficient to support and maintain the natural production of viable native fish populations migrating through the Delta.” [SED pg. 3-2] Yet, rather than include the entire watershed in the Project, the State Water Board defines the Project area as only “the portion of the SJR between its confluence with the Merced River and downstream to Vernalis,” a segment of the SJR that receives flow from only three of the river’s numerous tributaries.

The Board provides a weak rationale for a Plan Area excluding the Upper SJR:

The State Water Board identified the geographic scope of the plan amendments to protect the existing fishery in the [Lower] SJR (LSJR)] Watershed—the three eastside salmon-bearing tributaries—because that portion of the watershed supports an existing fishery that can be maintained and improved. The State Water Board will consider additional measures in future Bay-Delta Plan updates to protect beneficial uses in other areas, such as the Upper SJR, when those areas are restored and can support a fishery. [SED pg. 3-4]

This statement only reinforces the need to include the upper river in the Plan. Most importantly, it will be impossible to support the existing fishery on the three eastside tributaries without the historic flows of the entire SJR, as those fish utilize the entire SJR for most of their life stages.

Further, the State Water Board makes unsupported and largely nonsensical statements to support its failure to include flows from the Upper SJR:

Though these goals do not explicitly preclude consideration of alternative flow objectives upstream of the Merced River confluence, that area does not currently support viable native fish populations, and such alternatives would not reduce or avoid impacts. For example, such an alternative would not reduce the quantity of water needed from the Stanislaus, Tuolumne, and Merced Rivers to achieve the goals. Inclusion of the flow alternatives for the SJR upstream of the Merced River confluence would increase the adverse environmental effects of the LSJR alternatives in a larger geographic area by reducing the quantity of water available for other uses in areas that rely upon water supplies in the SJR upstream of Merced River confluence. For this reason, alternatives that considered establishing flow objectives in geographic areas other than the LSJR Watershed and the Stanislaus,

Tuolumne, and Merced Rivers, were eliminated from further consideration. [SED pg. 3-5]

Frankly, it appears that the Board simply chose three tributaries of the SJR, and then drew a line around the rim reservoirs on those without any support or explanation. The arbitrary designation of the plan area violates due process rights and water priority rules, and, because certain portions of the watershed are excluded, violates the California Environmental Quality Act prohibition against piecemealing.

1. **Limiting the geographic scope of the Plan Area Violates the Rules of Water Right Priority.**

Water right priority is one of the central principles of California water law. *El Dorado Irr. Dist. v. State Water Resources Control Bd.* (2006) 142 Cal.App.4th 937, 938. The rules of water right priority requires curtailment of all junior use prior to reducing senior water rights. (*Id.* at 963-964.) The Plan's limited geographic scope violates the rules of water right priority. The SED assumes, without adequate justification, that the water right holders within the Plan Area will exclusively be responsible for meeting the LSJR Flow Objectives. However, there are water right holders upstream of the rim reservoirs, on the tributaries of the western San Joaquin watershed, and in the upper San Joaquin, that are junior to water right holders included within the Plan Area. The proposed Project requires, without legal basis, that the senior water right holders within the Plan Area will contribute to flows to meet the flow objectives before junior water right holders outside the Plan Area. This violates California's water right priority system. The Board is obligated to protect water right priorities; its failure to do so by limiting the scope of the Plan Area directly contravenes this obligation, and violates the law.

The limited geographic scope of the Plan Area for the LSJR Flow Objective excludes the contribution of water upstream of the rim reservoirs on the San Joaquin tributaries, the west side of the San Joaquin River, and on the upper San Joaquin River. The explanation for excluding these areas and their corresponding water contributions is inadequate and not legally supported.

a. **Contribution from Upstream of Rim Reservoirs.** The SED does not consider contributions from reservoir operation and water supply upstream of the rim reservoirs on the Stanislaus, Tuolumne and Merced Rivers, and fails to explain why the State Water Board reached the conclusion that these operations and diversions are not important. The SED does not evaluate respective water right priority, nor describe the amount of water diverted. Without this information and analysis, the State Water Board's conclusion that upstream contributions will not be considered is unsupported by reason or analysis.

b. **Contribution from the Upper San Joaquin River.** The Plan fails to include the Upper San Joaquin River, both below and above Friant Dam, despite the fact that the Upper SJR represents approximately 28% of the unimpaired annual flow of the SJR. The Board's rationale to exclude the Upper SJR is insufficient, and forcing the senior water right holders on the lower San Joaquin River to meet the fishery beneficial uses for the entire river without contribution from the junior water right holders on the Upper SJR violates water right priorities in an egregious manner.

c. **West Side Contribution.** The SED fails to discuss and analyze contributions to the SJR from return flows from land to the west of the river. The SED fails to adequately identify the quantity and quality of water contribution from the west side in its baseline.

2. **The SED Provides No Evidence that the Plan will Protect Fish and Wildlife Beneficial Uses.**

The 2010 Flow Criteria Report suggested that 60% of unimpaired inflow from the SJR from February–June would preserve the attributes of a natural variable system to which native fish species are adapted. Unlike the Plan, however, the flow recommendation in the 2010 Flow Criteria Report included the entire San Joaquin River, not merely a portion of it. The SED does not discuss this change, and does not demonstrate or even suggest that the same water quality objectives could be met by using the suggested flows in a portion, rather than the entire river; therefore, there is no demonstrated rational connection between the conclusions in the 2010 Flow Criteria Report and the Plan that proposes to rely exclusively on three of the river’s tributaries to meet the same goals.

Logic would lead to a conclusion that it would be impossible to mimic the magnitude, duration, and timing of historic flows if one-third of the contribution to the magnitude, duration and timing of the historic flows is excluded from the analysis. The SED provides no information to the contrary. The Plan’s failure to include the Upper SJR is contrary to the state purpose of the Plan. The SED does not explain how relying exclusively on the Lower SJR will affect the analysis of unimpaired flow or protection of fish and wildlife. The SED also fails to provide sufficient explanation for excluding the Upper San Joaquin River from the Plan area. For the foregoing, the SED and proposed Plan are legally deficient.

THE NATURAL HYDROGRAPH FALACY

Board staff has stated that the benefits of the unimpaired flow proposal is to “restore the pattern and some limited magnitude of flow that are more closely aligned to the conditions to which native fish species are adapted.” The 2010 Flow Criteria Report on which the SED is based emphasized the importance of a natural flow regime – noting “it is important to preserve the general attributes of the natural hydrograph to which the various salmon runs adapted to over time, including variations in flows and continuity of flows”. To “mimic the natural hydrograph during the peak emigration period of February through June”.

Peer reviewers of the 2010 Flow Criteria Report emphasized that: “. . . a more natural flow regime is necessary if the fish are to recover. Indeed, I would further conclude that the other stressors such as contaminants and non-native fishes will be less consequential for salmon and steelhead in a more natural flow and thermal regime, so the benefits of flow enhancement will likely be both direct and indirect”. Despite the statements in the SED and the Peer review emphasis on the importance of natural flow regime, the proposed alternative would not actually implement a natural flow regime because the program of implementation instead includes:

- a. “Optimized flow shaping” to improve temperature
- b. Flow shifting to fall
- c. Carryover storage guidelines
- d. End of September guideline
- e. Percent drawdown from storage

- f. Minimum district diversion during dry conditions
- g. Drought refill constraints

There has been no analysis of these changes, and no discussion of the impact of these manipulations in flow and timing. Such flow shaping moves away from a natural flow regime and more towards a steady state, which has created the conditions with which we are now faced that are optimal for predation.

THE BOARD MUST ADOPT A PLAN THAT REASONABLY PROTECTS BENEFICIAL USES.

The Board has a statutory commitment to establish flow objectives assuring the “reasonable protection of beneficial uses.” *United States v. State Water Resources Control Bd.* (1986) 182 Cal. App. 3d 82, hereinafter “**Racanelli**”, citing Water Code § 13241. The Racanelli court notes that it is the Board’s obligation to attain the highest reasonable water quality “considering all demands being made on those waters.” *Id.* at 116, citing Water Code § 13000. In performing its role in developing water quality objectives, the Board is required to consider all competing demands for water in determining a reasonable level of water quality protection. *Id.* at 118; Water Code § 13000.

The Plan does not achieve the reasonable protection of beneficial uses. The SED impact evaluation suggests that impact to water users will be minimal because reduction in available surface water will be replaced with groundwater pumping. There is actually no evaluation of the impacts to agriculture production in the Plan Area. In the Chapter 11 – Agricultural Resources it asserts no impact to agriculture because the lack of surface water will be mitigated through groundwater substitution. While noting that groundwater pumping in most of these area is already unsustainable, the SED fails to evaluate the impact of Sustainable Groundwater Management Act (“**SGMA**”) on this increased and continued unsustainable use of groundwater. Reductions in pumping that will be imposed by SGMA are not even considered in the SED.

The SED does not demonstrate how the proposed project will protect fish and wildlife beneficial uses, nor does the SED support the Board’s presumption that 30-50% unimpaired flow will provide benefit to fish and wildlife. The SED simply *assumes* that 30-50% unimpaired flow will increase fish populations – an assumption that does not satisfy the requirements of Water Code section 13241. If the Board has scientific evidence that demonstrates the proposed flows will benefit fish and wildlife, then the Board is required to include that evidence in the SED; instead, the Board relies exclusively upon the 2010 Flow Criteria Report as supporting its flow standards. Such reliance is neither appropriate nor sufficient for several reasons:

- As mentioned above, the 2010 Flow Criteria Report suggested that 60% of the unimpaired flow of the entire SJR would provide benefit to fish and wildlife. The SED does not propose to require 60% of the unimpaired flow of the entire river, and yet arbitrarily concludes that requiring 30-50% flows from a portion of the river would achieve the same results.
- As recognized by the Board when it adopted the 2010 Flow Criteria Report, the report suggests the flows that would be needed in the Delta ecosystem if fishery protection was the sole purpose for which its waters were put to beneficial use. The State Water Board recognized that many other factors must be considered before flow objectives could be adopted. However, the Plan appears to randomly select

numbers from the 2010 Flow Criteria Report, and then compare them to a faulty evaluation of potential impacts to other beneficial uses.

- At no time does the SED evaluate the specific benefit to fishery from a 30% or 50% flow, and compare that demonstrated benefit to the potential impact to other beneficial uses. Such balancing is required to legally update the Plan.

THE PROPOSED UNIMPAIRED FLOW OBJECTIVES EXCEED THE STATE WATER BOARD'S JURISDICTION TO PROTECT "BENEFICIAL USES," AND IS ARBITRARY, CAPRICIOUS, AND LACKING IN EVIDENTIARY SUPPORT.

The State Water Board is required to balance several factors identified in Water Code §13241 when developing water quality objectives, including:

- (a) Past, present, and probable future beneficial uses of water.
- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control factors which affect water quality in the area.
- (d) Economic considerations.
- (e) The need for developing housing within the region.
- (f) The need to develop and use recycled water.

All of these factors must be identified and the Board must thereafter demonstrate a rational connection between those factors and the proposed regulation. *Racanelli*, at 182; *California Hotel & Motel Assn. v. Industrial Welfare Com.* (1979) 25 Cal.3d 200, 212. The SED discloses that the Board has failed to adequately consider these factors, and the Plan does not demonstrate a rational connection, or nexus, between the factors and the proposed flow objectives for the Lower SJR.

1. **The SED Does Not Confirm that the Plan Would Reasonably Protect All Beneficial Uses.**

In order to increase water dedicated to fish and wildlife beneficial uses the Plan decreases beneficial uses of water for agriculture, domestic, municipal and industrial uses. Before taking this action, the Board is legally required to determine whether the proposed flow objectives provide reasonable protection of all beneficial uses. This determination requires the State Water Board to weigh and balance all beneficial uses and then demonstrate a rational, causal connection and nexus between the Project and the benefit to fish and wildlife beneficial use. The SED fails to include such an analysis. The Board acknowledged this requirement when it adopted the 2010 Flow Criteria Report, stating: "The State Water Board's evaluation will include an analysis of the effect of any changed flow objectives on the environment in the watersheds in which Delta flows originate, the Delta, and the areas in which Delta water is used." 2010 Flow Criteria Report at p. 3. Nowhere in the SED does the Board undertake such an analysis of the 30-50% proposed flow criteria.

2. **The Plan Of Implementation For Carryover Storage Is Also Not Supported By Substantial Evidence.**

In order to adequately satisfy the balancing requirement for beneficial uses, the SED must understand and demonstrate the level of protection or extent of the benefit the Plan will provide to fish and wildlife. This level of protection must then be weighed against the adverse impacts to all other beneficial uses, including agriculture, hydropower, municipal use, etc. that the proposed Plan will adversely impact. This essential balancing of competing interests is fundamental to the development of water quality objectives. The proposed flow objectives would drain most of the reservoirs in the SJR basin, resulting in no water available for fish and wildlife, or any other beneficial uses in following years. In an attempt to prevent such a catastrophe, the Board proposes in its plan of implementation a requirement for minimum carry-over storage in the three tributary reservoirs. Such requirements drastically change operations of the reservoirs in the SJR basin, as well as drastically reducing the quantity of water available for beneficial uses. **Despite this, the SED does not include any analysis of the potential impacts or benefits of this proposed action.** Because the SED fails to include this analysis, the carryover storage requirements are not supported by substantial evidence and cannot be approved by the Board as part of the plan of implementation.

REQUIRING THE BYPASS OF 30-60 PERCENT OF UNIMPAIRED FLOW WITHOUT DOCUMENTED BENEFITS TO FISH AND WILDLIFE IS AN UNREASONABLE USE OF WATER.

Article X, Section 2 of the California Constitution prohibits the “waste or unreasonable method of use or unreasonable method of diversion of water.” The Board is required to “take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion in this state.” Water Code § 275; 23 CCR § 764. Besides preventing the unreasonable use of water, the Board is prohibited from compelling the unreasonable use of water. *State Water Board Cases*, at 762; *Baldwin v. County of Tehama* (1994) 31 Cal.App. 4th 166, 183. Whether a use is “reasonable” is a question of fact to be determined by the facts and circumstances of each case. *Joslin v. Marin Municipal Water Dist.* (1967) 67 Cal.2d 132, 139; *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194; *Jordan v. City of Santa Barbara* (1996) 46 Cal.App.4th 1245, 1268. To determine whether any particular use is “reasonable,” the Board must evaluate: (a) the quantity of water needed for the beneficial use served (*City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1241); (b) a comparison of other potential uses (*Imperial Irrigation Dist. v. State Water Resources Control Bd.* (1990) 225 Cal.App.3d 548, 570-571); and (c) local environmental conditions (*Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist.* (1935) 3 Cal.2d 489, 567), among others.

As mentioned above, the SED does not even attempt to estimate or analyze the level of benefit the proposed Plan will provide to viable fish populations. In addition, no scientific or other evidence supports the assumption that the proposed flow objectives alone will provide reasonable protection to fish. Conversely, even though the impacts to agriculture and other consumptive beneficial uses are drastically underestimated in the SED, the SED nevertheless demonstrates adverse impacts. When unsupported benefits to fish and wildlife are compared to documented adverse impacts to agriculture, it becomes clear that the contribution of the recommended 30-60% unimpaired flow to fish and wildlife is unreasonable. Without specifically documenting that the

Plan will protect beneficial uses, and comparing those specific benefits against the documented injuries, the proposed Plan cannot be deemed a reasonable and beneficial use of water.

THE STATE WATER BOARD'S PLAN AND PLAN OF IMPLEMENTATION VIOLATE THE PUBLIC TRUST DOCTRINE.

1. **The Public Trust Doctrine Requires the State Water Board Ensure Water be Placed to Beneficial Use to the Fullest Extent.**

The overarching principle of the public trust doctrine is “the general welfare requires that the water resources of the state be put to beneficial use to the fullest extent to which they are capable, and that the waste or unreasonable use of water must be prevented.” *Siskiyou* at 423-424, citing *People v. Weaver* (1983) 147 Cal.App.3d Supp. 23, 28-29. Because the proposed Plan fails to adequately analyze and balance the reasonable and beneficial uses of water, the Board has failed to fulfill its fundamental duty under the public trust. In particular, the Board does not indicate how the dedication of a randomly selected percentage unimpaired flow to the benefit of fish and wildlife, to the documented detriment of other trust uses, is consistent with the purposes of the trust. Although the Board attempts to protect an important state interest by providing flow to fish and wildlife, the reasonableness of these flows cannot be determined *in vacuo*, isolated from other statewide interests, and without considering the effect of these unimpaired flows on all of the needs of those in the stream system. *Siskiyou* at 424; *In re Waters of Long Valley Creek Stream System* (1979) 25 Cal.3d 339, 354 (*Long Valley*).

Failure to adequately analyze the effect of the unimpaired flows on other important needs on the stream system is inconsistent with the Board's duty under the Public Trust Doctrine. In addition, this failure lends additional support that the unimpaired flow objectives constitute an unreasonable use of water, because the Board fails to demonstrate that through the unimpaired flows that “‘limited water resources be put only to those beneficial uses ‘to the fullest extent of which they are capable,’ that ‘waste or unreasonable use’ be prevented, and that conservation be exercised ‘in the interest of the people and for the public welfare.’” Cal. Const. art. X, § 2; *Long Valley* at 354; *Light v. State Water Resources Control Bd.* (2014) 226 Cal.App.4th 1463, 1479-1480.

2. **The Board cannot rely on its authority under the Public Trust as support for its decision to impose the unimpaired flow criteria.**

Under the Public Trust doctrine, the Board may curtail water rights in certain narrow circumstances. *State Water Board Cases*, 149-150; 23 CCR, § 780(a). However, this authority does not justify curtailing water rights to implement the LSJR Flow Objectives for several reasons. First, the Board may only utilize the Public Trust Doctrine to curtail vested water rights when it “is necessary” to protect the public trust interest. 23 CCR, § 780(a). This is a stringent standard that exceeds the standard required for the Board to set water quality objectives; that standard requires that the Board “establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection” of the beneficial use. Water Code § 13241. Even assuming, *arguendo*, that the Board's analysis for the establishment of the flow objectives were sufficient, it may not rely on that analysis to implement the flow objectives under its public trust authority. Instead, the Board needs to notice and perform separate Public Trust proceedings to determine whether the objectives are necessary to protect the public trust:

The continuing authority of the board also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Sec. 2; is consistent with the public interest and is necessary to preserve or restore the uses protected by the public trust. 23 CCR 780(a)

To curtail a vested appropriative right under the Public Trust Doctrine, the State Water Board must first affirmatively find based on substantial evidence, that the particular diversion is “harmful to the interests protected by the public trust.” *State Water Board Cases* at 151. Essentially, the Board may not justify the exercise of its public trust authority to curtail a particular vested appropriative right simply because fish and wildlife are specifically harmed by the particular diversion at issue. This severely limits the Board’s ability to exercise its public trust authority to implement in the unimpaired flow objective.

Even if the Board demonstrated the flow necessary to protect public trust resources, it must also find that the proposed curtailment of the targeted vested water right(s) is in the “public interest.” *Id.*; Water Code § 1253; 23 CCR § 780(a). The public interest consideration requires that the Board “consider and protect all of the other beneficial uses. . . including municipal, industrial, and agricultural uses.” *State Water Board Cases* at 778. The great majority of the beneficial uses the flow objective supports are municipal and agricultural uses, which many people rely on for their livelihood and health and safety. The SED fails to establish the level of protection, if any, the proposed Plan will provide to fish and wildlife. The established benefit of existing uses, combined with the undefined benefit of the Plan, reveals that it’s unlikely that an appropriate balancing of the public interest would result in the curtailment of these vested rights pursuant to the public trust.

THE PLAN FAILS TO ADEQUATELY CONSIDER AND ESTABLISH WATER QUALITY OBJECTIVES THAT CAN REASONABLY BY ACHIEVED THROUGH THE COORDINATED CONTROL OF ALL FACTORS.

1. Requiring the Bypass of 30-60 Percent of Unimpaired Flow without Implementing Other Physical Solutions is an Unreasonable Use of Water.

When it adopted the 2010 Flow Criteria Report, the State Water Board acknowledged the need for an integrated approach to management of the Delta:

Best available science supports that it is important to directly address the negative effects of other stressors, including habitat, water quality, and invasive species, that contribute to higher demands for water to protect public trust resources. The flow criteria highlight the continued need. . . to develop an integrated set of solutions and to implement non flow measures to protect public trust resources. 2010 Delta Criteria Report.

Yet the SED fails to adequately address other local environmental conditions that limit the survival of fish, and thus cannot support unimpaired flow as a reasonable use of water. Predation is one example of the local environmental conditions that pose a significant threat to the survival of native anadromous fish. Other examples include fish mortality caused by dewatering, lack of velocity,

impaired water quality, or local hatchery practices. Requiring increased flow without addressing these other factors impacting fish populations is a legal flaw in the SED and proposed flow objectives. The SED's failure to properly account for and evaluate these other local environmental conditions demonstrates that the proposed flow objectives are an unreasonable use of water.

Predation is probably the biggest barriers to increasing fish populations. The National Marine Fisheries Service's 2009 Draft Recovery Plan for salmon and steelhead found predation to be one of the most important stressors. A 2014 study by Department of Water Resources found that "predation plays a large role in the survival rates of out-migrating salmon." This Board has identified non-native species as one of the water quality impairments in the Bay-Delta. Water quality laws require that before flow is used, this Board must control all factors that can reasonably be controlled through non-flow measures.

The facts on predation are simply illustrated by the following:

- Research on the Tuolumne River shows 95% to 98% of salmon and steelhead – which are protected under the federal Endangered Species Act — are lost to predation before they even leave that river (attempts to collect similar data on the Stanislaus River have been blocked by government red tape).
- There are 300 bass per kilometer in the San Joaquin River – this is not hot spots, this is the entire river.
- It is estimated that 800,000 to 1.5 million adult striped bass live in the Delta, with a total (all age groups) predator population of 6 million to 8 million.
- In Clifton Court Forebay we have from 80 to 100% loss to predation with no fix being planned.

Until predation is addressed, native salmon and steelhead populations may never increase in the river, no matter how much water is released.

The recent actions with hatchery fish in the SJR watershed raises more issues with the unimpaired flow proposal – and provides a perfect illustration of the reasons that flow will not provide the result sought by the Plan. The Stanislaus River has already met the doubling goal for salmon:

- *Spawning adult salmon in the Stanislaus have increased by a factor of five since 2007*
- *Numbers in 2015 were the 12th highest since 1950.*

However, flow is not responsible for this success. Study of the fish returning to the Stanislaus River show that they are all hatchery fish. In 2013 California Fish and Wildlife increased hatchery production on the Merced River to 1.5 million fish. These fish are spawned and reared in the hatchery, but they are not then released into the Merced River; rather, they are trucked to the Bay and released. As a result, these fish do not face the gauntlet of predation that is described above resulting in 98-100% predation rates. Rather, they are escorted past the predators, and released into the ocean where they must face only an ocean harvest of 60%. Therefore, up to 40% of these hatchery fish are returning to the tributaries to spawn. Under Department of Fish and Wildlife regulations, when these hatchery fish spawn in the Stanislaus River, they are no longer hatchery

fish, but are considered natural. Despite reports to the contrary, because of this combination of predation and increased hatchery production, there is no natural production of Central Valley Fall-Run Chinook Salmon on the tributaries; they have been overrun by hatchery practices.

The non-flow issues currently drive fish populations in the tributaries – not flow. Yet again, the SED focuses strictly on flow – which is irresponsible, and an unreasonable use of water under the circumstances. Again, even the 2010 Flow Criteria Report acknowledged that issues other than flow must be considered, stating: “it is highly unlikely that any fixed or predetermined prescription will be a ‘silver bullet’. The performance of native and desirable fish populations in the Delta requires much more than fresh water flows.” They also need “habitat having a particular range of physical characteristics, appropriate variability, adequate food supply and a diminished set of invasive species.”

While folks ask “How much water do fish need?” they might well also ask, “How much habitat of different types and locations, suitable water quality, improved food supply and fewer invasive species that is maintained by better governance institutions, competent implementation and directed research do fish need?” The answers to these questions are interdependent.

The Recirculated Draft SED indicates that “non-flow measures can also be important, but State Water Board has limited authority to require non-flow measures.” This is simply not the case.

The State Water Board has consistently acknowledged that flow alone is insufficient to meet the beneficial uses for fish and wildlife.

Successful implementation of nonflow measures may support adaptive adjustments to the required flow within the adaptive range of 30 to 50 percent of unimpaired flow, as long as the criteria for such adjustments are met. *Summary of Proposed Updates to the Bay-Delta Water Quality Control Plan* (September 15, 2016).

... a key element of successful adaptive management is the implementation of non-flow measures that could reduce the flows needed, within the adaptive range, to achieve reasonable fish and wildlife protection goals, such as restoration of gravel spawning beds, suppression of habitat beneficial to predatory fish, and enhancement of habitat beneficial to native species”. *Summary of Proposed Updates to the Bay-Delta Water Quality Control Plan* (September 15, 2016).

The State Water Board recognizes the importance of habitat restoration and direct control of other stressors, and that non-flow actions could reduce the flows needed to achieve reasonable fish and wildlife protection goals. These factors also interact with flow; therefore some level of increased flows will be needed even with non-flow actions, but non-flow actions can also mitigate the need for increased flows. *Fact Sheet: Working Draft Scientific Basis Report for Flow Requirements on the Sacramento River, its Tributaries, Eastside Tributaries to the Delta, Delta Outflow, and Interior Delta Flows Oct. 19, 2016*

While flow is one of the primary factors affecting fish and wildlife, the Report also describes other stressors, such as pollutants, predation by non-native species, and habitat alteration, and how stressors interact in the ecosystem. Non-flow measures

will be addressed in the Bay-Delta Plan program of implementation, including actions the State Water Board may take related to those issues. *Fact Sheet: Working Draft Scientific Basis Report for Flow Requirements on the Sacramento River, its Tributaries, Eastside Tributaries to the Delta, Delta Outflow, and Interior Delta Flows Oct. 19, 2016 FN 2*

Despite these acknowledgements, the SED neither includes nor implements identified non-flow actions beneficial to fish and wildlife that would reduce the need for flow in the SED. This failure to analyze impacts to and solutions to address water quality issues through non-flow measures is unreasonable, and the Plan's reliance on flows exclusively when the Board acknowledges that adoption of non-flow factors would require less water violates Article X Section 2 of the California Constitution and the Public Trust.

2. The Plan's exclusive reliance on unimpaired flows to address fish and wildlife beneficial uses violates Water Code section 13241.

When establishing its Plan, the Board must "ensure the reasonable protection of beneficial uses" and in doing so must consider "[w]ater quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area". Clearly in order to remain consistent with the Board's emphasis on the reasonable use of water, controlling water quality conditions through the coordinated control of all factors" that affect water quality rather than relying exclusively on flow measures is required. Failure to do so violates Water Code §13241.

When establishing its Plan, the Board must "ensure the reasonable protection of beneficial uses" and in doing so must consider "[w]ater quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area". [Emphasis added] The Plan fails to do so. California law prohibits the Board from adopting a plan requiring more flow be released from reservoirs on the SJR than is required for the beneficial use to be served: "[t]he right to water or to the use or flow of water in or from any natural stream or watercourse in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served. . ." Water Code §100 [Bolding and underlining added]. The Board acknowledges that implementing non-flow measures would reduce the amount of flow needed to meet the beneficial uses; therefore, California law requires those actions be required as part of the Plan.

3. The Board's Assertion That It Has No Authority to Require Non-Flow Factors Is Absurd.

The law clearly requires the Board to consider control of all factors, including non-flow actions, when protecting beneficial uses. Water Code section 13241. In fact, the constitution and the public trust would require that non-flow factors be looked to first in order to protect flows, and ensure that water is being placed to its highest and best use.

The Board recommends, but does not require, non-flow actions be undertaken by regulated parties as part of the implementation plan:

While flow remains a key factor, the State Water Board also recognizes that a number of other factors, such as nonnative species, predation, high water temperatures, barriers to fish passage, and habitat loss contribute to the degradation of fish and wildlife beneficial uses in the LSJR. Direct actions to address these other stressors would complement LSJR flows to protect fish and wildlife. The State Water Board, therefore, recommends certain actions in the program of implementation. These recommended actions, together with the coordinated monitoring and adaptive implementation described above, are expected to improve habitat conditions that benefit native fish and wildlife or are expected to improve related science and management within the LSJR Watershed, and could reduce the flows needed, within the adaptive range, to achieve reasonable fish and wildlife protection goals. ES-19.

The SED does not explain why essential non-flow measures are not imposed as part of the plan of implementation, to be implemented as conditions to water right permits. In oral statements, not included in the SED, Board members have stated that it does not have the legal authority to impose non-flow conditions - nothing could be further from the truth. The instances of the Board's imposition of non-flow requirements as conditions on water right permits are too numerous to mention; the State Water Board has required permit holders to perform fishery studies (D 1616), groundwater studies (D 869), studies for mitigation of streamflow reductions and sediment buildup (D 1582), to consult with other regulatory agencies to develop plans to reduce fish losses resulting from diversion of water, and to identify proposed sources of funding to implement projects (D 1644), to fund a study to be performed by the Department of Fish and Game of the steelhead resource potential and flow requirements necessary for the transport of adult and juvenile steelhead to and from spawning and rearing areas to gather data and make recommendations as to feasible alternatives for the improvement and perpetuation of a steelhead resource that may reasonably be undertaken using water appropriated pursuant to a permit (D 1586), to conduct a study to determine the permitted project's impacts on fishery habitat and fish populations. (D 1609), to install physical barriers in the river (D 1641) to study recirculation, and hundreds of other examples. In addition, to demonstrate that the Board itself believes it has authority to impose non-flow conditions on water right permits, one need look no further than the carryover storage requirements its Plan of Implementation proposes to impose on all SJR water right holders.

THE RECIRCULATED DRAFT SED IS LEGALLY DEFICIENT FOR PURPOSES OF COMPLYING WITH THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

The failure of a CEQA document to fulfill its informational duty is prejudicial to the decision makers and public. Rather than certify the SED, the Board must produce a sufficient evaluation of the potential environmental effects and thereafter provide a new public review draft SED and comment period. The Legislature declares that environmental quality is a statewide concern and requires public agencies to exercise regulatory authority "so that major consideration is given to preventing environmental damage." Pub.Res.C. §21000(g); Title 14 California Code of Regulation §15002(a)(2)-(3) (hereinafter unidentified reference refer to the CEQA Guidelines).¹ Ignoring

¹We acknowledge the citations presented herein involve challenges to EIRs rather than to a SED. Nevertheless, substantial overlapping legal requirements applicable to each type of document make these important citations directly applicable here. Throughout this comment letter we rely on statutory, administrative guidelines and decisional law statements that apply with equal dignity to the legal sufficiency of either an EIR or a SED. Hence, the term "EIR" and the term "SED" may be used interchangeably in this comment.

direct and cumulative impacts defeats an overriding policy as articulated by the Supreme Court that CEQA is “to be interpreted...to afford the fullest possible protection to the environment within the reasonable scope of the statute language.” *Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259. “The EIR requirement is the heart of CEQA.” §15003(a). A legally adequate SED demonstrates “to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its actions” (§15003(d)); and “enable[s] the public to determine the environmental and economic values of their elected and appointed officials thus allowing for appropriate action come election day.” *People v. County of Kern* (1976) 39 Cal.App.3d 830, 842. The Supreme Court succinctly observes, “The EIR process protects not only the environment but also informed self government.” *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 392 (“*Laurel Heights*”).

If the SED is adopted without sufficiently discussing and mitigating environmental effects, the Board has not proceeded in a manner required by law. *TRIP v. City Council* (1988) 200 Cal.App.3d 671, 679. The Fifth District underscores the EIR’s information disclosure feature: “A prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process.” *Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 26 (“*Dry Creek*”); *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 712 (“*Kings County*”).

Thus, an “adequate EIR must be ‘prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences.’ (Citation) It ‘must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.’” *Kings County* at 712 citing *Laurel Heights* at 405. See, also *Dry Creek* at 26. Omitting relevant information itself “is prejudicial if the failure to include relevant information precludes informed decision making and informed public participation.” *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722.”).

The SED’s legal sufficiency is determined by Code of Civil Procedure (C.C.P.) §1094.5 and Pub.Res.C. §21168. An abuse of discretion occurs if an agency does not proceed in a manner required by law or if the decision is not supported by substantial evidence. “Failure to provide enough information to permit informed decision making is fatal.” *Napa Citizens for Honest Government v. Napa County* (2001) 91 Cal.App.4th 342, 361. To put a finer point on it, certifying “an EIR which is legally deficient because it fails to adequately address an issue constitutes a prejudicial abuse of discretion regardless of whether compliance would have resulted in a different outcome.” *Citizens to Preserve Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421, 428.

The applicable two prong standard presented by C.C.P § 1094.5 compels a trial court to take a hard and demanding evaluation of the evidence and the agency’s treatment of this evidence. In sum, a reviewing court ascertains whether a challenged EIR or SED was prepared “with a sufficient degree of analysis” to allow “a decision which intelligently takes account of environmental consequences.” *Dry Creek* at 26. This means the SED “must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.” *Laurel Heights* at 405. Therefore, “where the failure to comply with the law results in a subversion of the purpose of CEQA by omitting information from the environmental review process, the error is prejudicial.” *Rural Landowners v. City Council* (1983) 143 Cal.App.3d 1013, 1023

The SED acts as an informational document identifying potentially significant impacts of a project, as well as alternatives and mitigation measures necessary for informed decision-making (Pub.Res.C. §21002.1), and substantial evidence must support the SED's findings and conclusions. *Laurel Heights* 47 Cal.3d 376. An adequate SED "must be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences" and "must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." *Id.* The SED does not meet this threshold; accordingly, it is not adequate for certification, and the Plan cannot be approved until a legally sufficient SED is prepared.

The Board must proceed in a manner required by law, failure to do so represents an independent and separate prong of abusing discretion as identified in C.C.P. § 1094.5. Omitting relevant data or failing to conduct environmental studies or analysis based on a legally sufficient project description or baseline amounts to a failure to proceed in a manner required by law. *Rural Landowners v. City Council* (1983) 143 Cal.App.3d 1013, 1023. This is because CEQA is to be expansively interpreted in order to provide maximum evaluation and consideration of potential direct and indirect environmental effects. § 15003(f); *Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259. Cohering to this expansive statutory mandate the "EIR requirement is the heart of CEQA." § 15003(a); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795. More specifically, a SED must consider both direct and indirect environmental effects (§ 15064(e)). The expansive interpretation of this rule was presented in *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1205-1206 and illustrates the meaningful relationship between socio-economic direct effects to secondary or indirect environmental effects:

Guidelines section 15131, subdivision (a) provides, "An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes in turn caused by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes."

Case law already has established that in appropriate circumstances CEQA requires urban decay or deterioration to be considered as an indirect environmental effect of a proposed project. The relevant line of authority begins with *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 217 Cal.Rptr. 893 (*Bishop*). There, the appellate court held that adoption of multiple negative declarations for different aspects of the same large regional shopping center violated CEQA. (*Id.* at p. 167, 217 Cal.Rptr. 893.) The court also agreed with appellant that on remand "the lead agency must consider whether the proposed shopping center will take business away from the downtown shopping area and thereby cause business closures and eventual physical deterioration of downtown Bishop." (*Id.* at p. 169, 217 Cal.Rptr. 893.) Citing Guidelines section 15064, the court found that the lead agency had an affirmative duty to consider whether the new shopping center would start an economic chain reaction that would lead to physical deterioration of the downtown area. (*Id.* at p. 170, 217 Cal.Rptr. 893.) Therefore, "[o]n remand the lead agency should consider physical deterioration of the

downtown area to the extent that potential is demonstrated to be an indirect environmental effect of the proposed shopping center.” (*Id.* at p. 171, 217 Cal.Rptr. 893.)

Accordingly, in *Bakersfield Citizens* the socio-economic impact of store closures required the two EIRs to study in depth the potential that this non-environmental effect could start a “chain of events” leading to urban decay, a recognized environmental effect. To the same extent, the SED fails to identify and omits significant secondary effects of the proposal. For instance, as explained later, the Plan will induce agricultural operations to rely more heavily on groundwater as a substitute for reduced surface water deliveries. This in turn means that more air pollution will be emitted as agricultural operations increasingly use diesel engines to pump groundwater for application to crops. Against the *Bakersfield Citizens* standard of legal sufficiency the SED is legally deficient and approval of the SED as currently presented amounts to a prejudicial abuse of discretion.

THE RECIRCULATED DRAFT SED’S PROJECT ENVIRONMENTAL SETTING AND BASELINE IS LEGALLY DEFICIENT

Evaluating a project’s potential to cause individual and/or cumulative impacts requires identifying an accurate environmental setting/baseline. *See* §15130(b) (1). Indeed, “[t]he purpose of CEQA is not to generate paper, but to compel government at all levels to make decisions with environmental consequences in mind. (*Bozung v. LAFCO* (1975) 172 Cal.App.3d 151),” §15003(g)), and an analysis relying on a factually inaccurate environmental setting/baseline reflects an exercise in paper pushing rather than good-faith information disclosure. Accordingly, incorrectly including certain features or omitting relevant features of the baseline or environmental setting is inherently prejudicial, for a “[p]roper cumulative impacts analysis is absolutely critical to meaningful environmental review.” *Bakersfield* at 1217.

The environmental setting and baseline consists of “the physical environmental conditions in the vicinity of the project” viewed from “local and regional perspective(s).” §15125(a) and (c). It should be sufficiently comprehensive to allow a project’s significant impacts “to be considered in the full environmental context.” §15125(c). It should also be sufficiently clear and accurate to allow informed comparisons of the pre-project and post-project conditions. *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 955. The SED’s assessment of a project’s environmental impacts must examine changes to existing physical conditions expected to result from the Plan’s implementation. §15126.2(a). It must focus on the project’s impacts to the environment, not its impacts on hypothetical situations. *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App. 4th 931, 952.

The SED’s baseline is legally deficient, rendering the SED inadequate as a CEQA compliance document. The SED contains multiple baseline deficiencies:

1. The baseline incorrectly assumes implementation of the San Joaquin River Agreement and the Vernalis Adaptive Management Plan (VAMP) flows which expired in 2011.
2. The baseline include the June 2009 National Marine Fisheries Service’s Biological Opinion and Conference Opinion on the Long-Term Operations of the Central Valley Project and State Water Project (NMFS BiOp) when the Notice of Preparation (NOP) for the SED was published (February 3, 2009) [SED pg. 1-6].

3. The baseline omits flows from the San Joaquin River Restoration Program stemming from the settlement reached in 2006.
4. Finally, the baseline improperly assumes Reclamation making releases to meet the existing February through June flow objectives assigned to Reclamation as part of D1641. Reclamation has informed the Board that it is not making these releases, as such, it is improper to include them in the baseline.

Including features not reasonably part of the environmental setting/baseline while unreasonably excluding features of the existing environmental setting/baseline is incoherent in the extreme. These materially defective errors results in the SED inaccurately analyzing significant impacts from implementing alternatives and grossly underestimate impacts to water diversions. The understated environmental effect also results in inadequate analysis and a failure to consider mitigation measures to minimize this more significant environmental effect.

A project's environmental effects must be measured against actual physical conditions on the ground as opposed to hypothetical uses. *City of Carmel-by-the-Sea v. Board of Supervisors* (1986) 183 Cal.App.3d 180, 186-187. "[T]he environmental baseline is the basis on which the environmental impacts of the project are to be measured normally is the physical condition of the project site at the time the notice of preparation of the EIR is published." *Woodward Park Homeowners Assoc., Inc. v. City of Fresno*, (2007) 150 Cal.App.4th 683 (citing to §15125(a)). There the court determined an EIR for a shopping center that used operation of an authorized but non-existent office building as its baseline was "legally inadequate as an informational document because it failed to analyze consistently and coherently the impacts of the project relative to leaving the land in its existing physical condition." *Id.* at 710. The court ultimately held the EIR was deficient because it "failed to use the existing physical environment as the environmental baseline" and inappropriately compared the project's environmental effects to a hypothetical project and not the existing conditions on the ground. *Id.* at 711.

THE SED LACKS AN ADEQUATE PROJECT DESCRIPTION

A Project Description is a mandatory element of a legally sufficient SED. §15124. At a minimum the SED's Project Description must include four elements: (1) "The precise location and boundaries of the proposed project"; (2) "A statement of the objectives sought by the proposed project"; (3) "A general description of the project's technical, economic and environmental characteristics"; and (4) "A statement briefly describing the intended uses of the EIR." §15124(a) through (d).

The SED's Project Description plainly does not meet minimum legal requirements and this deficiency is fatal. This is because a "finite project description is indispensable to an informative, legally adequate EIR." *County of Inyo v. City of Los Angeles* (1977) 71 Cal.3d 185,199. Thus a project description omitting integral components of the project may result in a SED that fails to disclose all relevant impacts of the project. *Santiago County Water District v. County of Orange* (1994) 118 Cal.App.3d 818, 829. Simply stated, "an accurate project description is necessary for an intelligent evaluation of the potential environmental effects of the proposed activity." *San Joaquin Raptors/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 730.

The Supreme Court has concluded that if the description is inadequate because it fails to discuss the complete project, the environmental analysis will probably reflect the same mistake. *Laurel Heights Improvement Association v. Regents* (1988) 47 Cal 3d 376. There is a general mention of the consideration of amendments to the 2006 Bay-Delta Plan to change flow requirements in the San Joaquin River basin and changes to water quality objectives in the Southern Delta, but nowhere in the body of the SED is there a clear concise description which sets forth the objectives of the proposed Project and measurable benefits that will be achieved by implementation of the proposed Project.

Appendix K of the SED contains the program of implementation that fails to set forth in sufficient detail the suite of actions that will be undertaken to implement the Plan. Instead, there are many references to actions to be developed by federal and state agencies with participation by stakeholders and delegation of actions to the Executive Director of the Board. The SED fails to describe the proposed Project, improperly excludes mandatory areas and fails to describe the program of implementation in sufficient detail to conduct a legally adequate evaluation of the environmental impacts associated with the proposed project including the program of implementation. This lack of a sufficient project description renders the SED fatally flawed. A revised SED must include a clear concise project description and well-articulated program of implementation from which there can be a thorough analysis of the environmental impacts of implementation of the proposed project.

THE SED FAILED TO IDENTIFY AND CONSIDER A REASONABLE RANGE OF ALTERNATIVES AND FAILED TO EXPLAIN WHY FEASIBLE ALTERNATIVES WERE REJECTED FROM THE REASONABLE RANGE OF ALTERNATIVES

CEQA requires an EIR or SED to describe a range of reasonable alternatives to a proposed project, or to the location of a proposed project, which feasibly obtain most of the basic objectives of the proposed project, but would avoid or substantially lessen any of the significant effects of the proposed project, and evaluate the comparative merits of the alternatives. §15126.6(a). “The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects.” §15126.6(c). Indeed, an alternatives analysis is “the core of an EIR.” *Citizens for Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564. A SED must describe a reasonable range of alternatives. It must evaluate the comparative merits of those alternatives. §15126.6(a). A SED must explain how project alternatives were selected for analysis. It should also identify alternatives rejected as infeasible and explain why they were rejected. §15126.6(c).

The SED statement of the Project Purposes and Goals is ill defined and singularly focused in order to result in the Board’s desired outcome: **more flow for fish**. The eight goals set forth by the Board are solely focused on flow so that the Board may achieve its desired outcome of implementation of a percentage of unimpaired flow. Virtually no other action could achieve the desired goals except more flow. The Purposes and Goals section must be modified so that a broad range of alternatives could achieve the desired goals. The goal should be expressed as “establish water quality objectives and a program of implementation for the reasonable protection of fish and wildlife beneficial uses in the LSJR Watershed.” Other feasible alternatives exist that do not require the draconian harm inflicted by the percentage of unimpaired flow paradigm. Alternatives do exist that would avoid or substantially lessen potentially significant impacts of the Plan. As such the proposed Project must

be rejected. For example, the primary goal should be to increase the survival of juvenile outmigrants through the LSJR watershed and Delta. This can be done by implementation of a predator suppression program; creation of greater habitat and gravel augmentation for spawning and rearing in LSJR. Ensure adequate conditions for emigration including implement ocean harvest practices that maximize returns of adult salmon to the LSJR tributaries.

With respect to LSJR flow objectives, the only alternatives considered were based on dedication of a percentage of unimpaired flow. The purported purpose of the LSJR flow objective is the reasonable protection of fish and wildlife and to support and maintain the natural production of native fish populations. However, there are other feasible alternatives including targeted short duration pulse flows during the time period needed for emigrating juvenile fish. These feasible alternatives were rejected without sufficient explanation by the SED or the Board. Choosing an alternative that uses more water than reasonably necessary to meet the purpose of the water quality objective certainly constitutes an unreasonable use of water violating the California Constitution, as discussed above.

There are other feasible non-flow alternatives that will reasonably protect the fishery including, but not limited to, improving riparian habitat, gravel enhancement and augmentation, and reduced ocean harvest are present. Most importantly excluded from consideration is a predator suppression program. Extensive information was submitted to the Board regarding the significant effects of predation both in the tributaries and in the Delta. For instance on the Stanislaus River, 95% of the juvenile fish population is lost to predation in the river, that is, fish are caught at an upstream rotary screw trap and then 95% are not captured at the lower trap – lost to predation. It is essential that the Board consider non-flow measures to lessen the environmental effects of implementing only flow based alternatives. A failure to consider such an alternative renders this SED legally deficient.

THE RECIRCULATED DRAFT SED FAILS TO ACCURATELY DISCLOSE ENVIRONMENTAL EFFECTS OF THE IMPLEMENTATION OF THE PROJECT

The Water Board created the Water Supply Effects (WSE) model to evaluate the environmental effects of implementation of the proposed Project. In addition to the errors in the baseline as described above, the WSE Model contains a series of operational parameters that are unreasonable, illegal, and not within the Board's authority, including minimum carryover requirements, restriction on storage drawdown, drought reservoir refill requirements, flow shifting to fall, and restricting diversions in dry years. The WSE Model assumes that New Melones Reservoir would have a minimum carryover storage requirement of 700,000 acre feet. However, nowhere in the Project Description of the LSJR Flow Objectives is this requirement included as part of the Project or any of the other operational parameters.

The modeling assumptions that form the basis of the WSE Model and the entire SED effects analysis is flawed, inaccurate and misrepresents impacts associated with implementing any of the Alternatives. Instead of identifying impacts from Plan implementation, the WSE Model analysis in the SED includes mitigating factors in an attempt to make the analysis work. As a result it is impossible to evaluate the environmental effects to groundwater resources, agricultural resources, municipal service providers, as well as all of the other resources. The SED must correctly quantify reduction in surface water available to water users, and then correctly analyze the impacts. The SED purports to show the impacts to water users from the implementation of the LSJR Flow and Salinity Objectives, but these modeled results are neither reliable nor realistic. First, the

Recirculated Draft SED minimizes the actual impacts to water right holders by collectively calculating reductions and shortages by tributary, and using annual averages among all year types. The result of this is that the Recirculated Draft SED concludes that the long-term reduction in surface water supplies resulting from the Plan is a mere 14% reduction from the current condition. That result simply defies reality. While the SED shows an overall 14% reduction in supply, it also states that reductions will take place in accordance with water right priorities. This means that those with junior water rights would bear the brunt of the reductions, while others will suffer no impacts. The SED does not identify these very real ramifications anywhere in its graphs or summary of water supply effects.

The most insulting aspect of the impact evaluation is the suggestion by the staff that impact to water users will be minimal because reduction of available surface water will be replaced with groundwater pumping. The SED estimates that the proposal could result in an average annual increase in groundwater pumping of 105,000 acre feet. The SED acknowledges that there is already a 45,000 acre feet annual deficit in current groundwater supplies. While noting that groundwater pumping in most of these areas is already unsustainable, the SED fails to evaluate the impact of SGMA on this increased and continued unsustainable use of groundwater. Reductions in pumping that will be imposed by SGMA are not even considered in the SED.

THE SED FAILS TO IDENTIFY AND EVALUATE ALL FEASIBLE MITIGATION MEASURES

In the SED the Board has a duty to “set forth” (P.R.C. §21100), “identify” and “describe” (§15126.4(a)(1)) proposed feasible mitigation measures. “A gloomy forecast of environmental degradation is of little or no value without pragmatic, concrete means to minimize the impacts and restore ecological equilibrium.” *Environmental Council of Sacramento v. City of Sacramento* (2006) 142 Cal.App.4th 1018, 1039. Thus the SED must describe feasible mitigation measures that could minimize the preferred project’s adverse environmental effects. §15126.4(a)(1). Omitting feasible mitigation measures undermines the minimum requirements of a SED. This is because “[w]here several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified.” §15126.4(a)(1)(B). By omitting feasible mitigation measures the SED cannot comply with the requirement to discuss each feasible mitigation measure and provide guidance to decision-makers and the public about the relative merits of selecting one measure over another measure. Specifically, the SED states:

“The LSJR alternatives could require higher river flows in the three eastside tributaries and would potentially result in a change in surface water diversions. The runoff to the eastside tributary reservoirs is determined by rainfall and snowmelt conditions and the reservoir storage capacity is fixed. Accordingly, there is no possibility of increasing the total surface water supply to provide more water for surface water diversions. More water released to the rivers would leave less water available for water supply diversions. The WSE model was used to predict the change in annual surface water diversions expected under each LSJR alternative...”

SED at p. 5-73.

The SED introduces the fatally flawed WSE Model as the tool to evaluate the impacts of the LSJR Alternatives which completely masks the impacts on water diversion. As described above, the WSE model utilizes an inaccurate baseline and unreasonable and/or unlawful operational assumption.

Inclusion of these unreasonable and/or unlawful operational assumptions thwarts any ability to develop feasible mitigation measures for the severe impacts to water diversions. The SED concludes based on the flawed modeling that a 14% reduction in water diversion is less than significant. Where is the evaluation of the feasible mitigation measures to mitigate the actual 100% reduction in supply to a junior diverter? Or a similar 100% reduction to water users in dry years and critically dry years?

For each significant impact, the SED must identify specific mitigation measures. Where several potential mitigation measures are available, each should be discussed separately, and the reasons for choosing one over the other should be stated. *Id.* If the inclusion of a mitigation measure would itself create new significant effects, these too, must be discussed, though in less detail than that required for those caused by the project itself. (*Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1027; *Mount Shasta*, at 439; 23 CCR, § 3777(b)(3); Pub. Resources Code, § 21002.) The SED has not provided the requisite mitigation analysis. Instead of proposing feasible mitigation measures for the impacts to groundwater basins, the SED defers to the yet to be formed Groundwater Sustainability Agencies. This deferral violates CEQA and is not supported by substantial evidence rendering the SED legally deficient. Moreover, the SED does not consider the feasibility of non-flow mitigation measures in any of its analysis rendering the SED legally deficient.

THE SED'S TREATMENT OF THE GREEN HOUSE GAS ENVIRONMENTAL IMPACT IS LEGALLY DEFICIENT

The SED dispensed with the direct impact of the proposed project's on the environmental condition of global warming (referred to as "climate change" in the SED) by asserting without evidence that the impact was too remote to be studied. See SED page 14-1 at footnote 1. Failing to address the global warming issue is a serious deficiency. Such an omission as found here results in the failure to proceed in the manner required by law and an agency must explain in at least minimum detail the "compelling, countervailing considerations". *Citizens to Preserve the Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421, 430. ["The EIR does not explain in even minimum detail the basis for the omission and provides no reasoned analysis clarifying why complete reliance on the AQNP is justified when this major omission exists."] The error is at least three-fold. First, the SED fails to adopt a legally sufficient threshold of significance for purposes of evaluating the significance of the potential environmental impact. Second, the SED omitted clearly understood potential environmental impacts flowing from the preferred project. Third, the SED did not evaluate feasible mitigation measures that could lessen the impact of global warming caused by the preferred project.

This failure is exacerbated by the fact the State of California has aggressively promoted a policy requiring government agencies to consider and mitigate cumulative global warming impacts and yet here a state agency sidesteps this obligation. Without referencing or applying any threshold of significance the SED nakedly concludes that an individual project cannot have a direct environmental effect. This conclusion is reached without any analysis or any effort to compare some type of analysis to the applicable threshold of significance. This poses two problems. First, it truncates the analysis required by CEQA and collapses intermediate procedures required by CEQA before a public agency can conclude that a direct impact is not significant. Second, the approach conflicts with various state policies regarding climate change.

The SED is inherently contradictory. At footnote one at page 14-1 it announces that climate change is too regional or global for an individual project to have a direct effect. However, at page 14-14 it provides a generalized threshold that apparently concludes that “climate change impacts were determined to be potentially significant (citation) and therefore are discussed in the analysis.” The two statements are contradictory and promote confusion. Indeed the so-called threshold of significance for climate change is no criteria at all but instead a tautological mixed word salad. According to the SED, “climate change would be significant if the LSJR alternatives result in any of the following conditions. Generate GHG emission, either directly or indirectly, that have a significant impact on the environment.” SED at 14-15. The abject defectiveness of this abbreviated threshold of significance is explained by the CEQA Guideline definition of a threshold of significance:

“A threshold of significance is **an identifiable quantitative, qualitative or performance level** of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined as less than significant.”

§15064.7(a) (bolding and underscoring added.) The SED’s embryonic threshold of significance lacks “an identifiable quantitative, qualitative or performance level” and therefore is insufficient for CEQA purposes.

Public agencies are encouraged to adopt thresholds of significance. §15064.7. For evaluating individual projects the State of California and regional state agencies offered multiple thresholds of significance for global warming. For instance, the South Coast Air District believes a project emitting three tons of GHG a year is significant. South Coast Air Quality Management District, Draft Guidance Document—Interim CEQA Greenhouse Gas (GHG) Significance Threshold (October 2008). AB 32 establishes a state goal of reducing GHG emissions to 1990 levels by 2020 (a reduction of approximately 25 percent from forecast emission levels).

Recently the State Air Resources Board concluded that the threshold should either be a zero threshold or, if a non-zero threshold is employed it “must be sufficiently stringent to make substantial contributions to reducing the State’s GHG emission peak, to causing that peak to occur sooner or to putting California on the right track to meet its interim (2020) and long term (2050) emissions reduction targets.” California Air Resources Board. Preliminary Draft Staff Proposal, Recommended Approaches for Setting Interim Significant Thresholds for Greenhouse Gases under the California Environmental Quality Act (October 24, 2008). In any event, the threshold is either a net no increase in emitting GHG or “stringent” steps to foster attaining the 2020 and 2050 goals.

Since this public agency is acting as an agency of the State of California, it is bound by Executive Order Number 3-05 (June 1, 2005) calling for a reduction in GHG emissions to 1990 levels by 2020 and for an 80 percent reduction in GHG emissions to 1990 levels by 2050. This Executive Order constitutes a mandatory duty to all state agencies and constitutes a threshold of significance whenever a state agency is reviewing a proposal.

At least two fatal flaws are embedded in the SED concerning GHG. First, the section lacks a threshold of significance involving “an identifiable quantitative, qualitative or performance level”. Instead the threshold of significance has as the threshold “significance”. This tautological threshold

prevents the reader from determining whether the impact is significant or not. Instead, the section, without any evidentiary support, concludes the emissions of a lone single project will not cause global climate change. Yet the various thresholds of significance discussed earlier, and ignored by the SED, do not focus on this question. Instead, the thresholds of significance focus on whether the proposal helps or hurts efforts to meet the 2020 and 2050 goals. Without a threshold of significance statement the entire analysis lacks an intellectual context and results in omitting relevant information.

Indeed, a SED's sketchy treatment of the threshold or method to conclude whether an environmental effect is significant renders such a SED legal deficient. In *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099. The court discussed the use of thresholds in determining (1) whether to prepare an EIR and (2) whether any of the possible significant environmental effects of the project will, in fact, be significant. *Id.* at 1106-09. The court held that "the fact that a particular environmental effect meets a particular threshold cannot be used as an automatic determinant that the effect is or is not significant...a threshold of significance cannot be applied in a way that would foreclose the consideration of other substantial evidence tending to show the environmental effect to which the threshold relates might be significant." *Id.* at 1109.

In the EIR, the Amador Water Agency set forth various standards of significance, which mirrored Appendix G sample questions. The agency determined the reduced stream flows "are insignificant since the thresholds developed from the standardized Appendix G checklist make it so." *Id.* at 1111. Petitioner asserted the agency abused its discretion by adopting narrow and irrelevant thresholds of significance which did not address the particular physical change the project would have on the seasonal reduction of surface flow in local streams.

The court did not even address petitioner's claim because "contrary to CEQA requirements, the EIR fails to explain the reasons *why* the Agency found the reduction in stream flow would not be significant." *Id.* at 1111. The court held the EIR provided nothing but a "bare conclusion" because it simply explained how construction would affect existing local hydrology by reducing surface flow and then baldly concluded the impact would not be significant. *Id.* Because the EIR lacked a "statement of reasons", the court was unable to determine whether the agency reached its "less than significant" conclusion based on substantial evidence in the record or because it applied standards of significance that did not address reduction in stream flow as a potential environmental effect of the project. *Id.* at 1112. Either way, the agency abused its discretion by omitting the required statement of reasons. *Id.*

Second, the SED does not provide information about the amount of GHG produced by the Project and whether the amount emitted facilitates meeting the 2020 and 2050 goals. In short, rather than contribute to reducing GHG emissions to 1990 standard this project has the individual characteristic of making the GHG situation substantially worse. This means, according to the Governor's Executive Order, the Project has a direct significant environmental effect to GHG. Accordingly, under any of the proposed and adopted thresholds of significance discussed earlier, the Project's individual impact on GHG is significant. The SED omits relevant information and data and reaches the wrong conclusion about whether the impact is significant or not.

Besides presenting a flawed analysis due to the lack of a legally sufficient threshold to evaluate the potential impact, the SED also fails to address at least one potentially significant environmental

effect. The preferred proposal will induce agricultural operations to rely more on groundwater to make up for the loss of surface water lost as surface water is diverted to environmental purposes. This means agriculture will rely more heavily on gas diesel pumps to obtain the groundwater that is being substituted for surface water. The SED fails to make any effort to quantify the significance of this material change in agricultural practices induced by the preferred alternative. Certainly the amount of additional pumping could be quantified and the amount of additional gas diesel emitted as a result of this new policy could be quantified and evaluated against existing air pollution standards. In addition, the SED could correlate the increased emission of diesel pollution to increase incidents of health ailments.

Failing to correlate the Project's adverse air quality impacts to increased incidents of health ailments constitutes a prejudicial abuse of discretion. Health problems caused by a project must be addressed in an EIR, including health effects caused by increases in air pollution. *Bakersfield* at 1220. Specifically, CEQA requires an EIR to discuss "health and safety problems caused by the physical changes" by the proposal. §15126.2 (a). In order to meet CEQA's disclosure requirement, an EIR must "*correlate* the identified adverse air quality impacts to resultant adverse health effects." *Bakersfield* at 1219 (italics added). "Correlate" is defined as: "to bring (a thing) into mutual relation (*with* another thing); **calculate** or show the reciprocal relation between; specif., to bring (one or two related or interdependent **quantities**, sets of statistics, etc.) into contrast (*with* the other)." Webster's New World Dictionary 319 (2d College ed. 1985) (italics in original; bold added).

Thus, the court in *Bakersfield* used "correlate" to mean a SED must disclose the proportional relationship between increased tonnages in air pollution and increased incidents of health ailments. This SED fails to comply with this necessary informational disclosure requirement. Indeed, *Bakersfield* teaches us a truncated analysis involving a bare statement that increased air pollution tonnages means more people get ill fails to satisfy CEQA's information disclosure requirement. In *Bakersfield*, the two EIRs at issue calculated the approximate increased tonnage of air pollution and then baldly concluded that more air pollution means more health and respiratory ailments. *Id.* at 1220. According to *Bakersfield*, this embryonic level of detail is insufficient and resulted in the Appellate Court rejecting the air quality analyses for failing to quantify or correlate the relationship between increased health ailments and increased air pollution. *Id.* at 1220-1221. Accordingly, it is not enough for a SED to simplistically conclude air pollution will increase and then supply a laundry list of pollutants and related health effects. Rather, CEQA is satisfied only when a SED discloses and quantifies anticipated increases of health ailment events resulting from a project's increases in air pollution tonnages.

As *Bakersfield* holds, brief references to, or the listing of, potential respiratory illnesses do not satisfy CEQA. *Bakersfield* at 1220. It is only when correct and feasible scientific analysis is conducted and the SED calculates the significance of the impact in terms of increased events of disease and suffering, are the public and decision makers notified of a project's true impacts. This correlation information is scientifically possible and legally required (*Bakersfield* at 1220), and the omission amounts to a prejudicial failure to proceed in the manner required by law.

Moreover, the SED fails to discuss the feasibility of multiple mitigation measures that could be imposed to reduce this significant effect. CEQA requires all feasible mitigation measures to be incorporated into a project, even if the environmental effect remains significant. The State of California, Office of the Governor, Office of Planning and Research, has identified thirty-three (33) feasible mitigation measures to reduce GHG and attain the 2020 and 2050 goals. See State of

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California, Office of Planning & Research. CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review (June 19, 2008). Each mitigation measure is feasible for the proposal and the SED has a duty to identify and discuss each proposed measure. Failing to perform this task results in an omission of information and failure to proceed in a manner required by law.

CONCLUSION

The best conclusion is provided by Dr. Julian D. Olden School of Aquatic and Fishery Sciences University of Washington Seattle, WA in his peer review of the 2010 Technical Report:

In conclusion, it is my opinion that although components of the Technical Report are based on sound scientific knowledge the appropriateness of using a percentage of unimpaired flow (ranging from 20 to 60 percent) as a methodology for implementing the San Joaquin River flow objective is overly simplistic and only in part accounts for the full suite of flow conditions likely required to provide a reasonable level of protection for fish and wildlife beneficial uses.

The SED is fatally flawed and must be redone again. The SED must utilize a model and assumptions that accurately represents baseline and water supply operations. We appreciate the opportunity to comment and look forward to working with your staff on an additional revised and recirculated SED.

Very truly yours,



JEANNE M. ZOLEZZI
Attorney-at-Law

cc: Mr. David Weisenberger
Mr. Robert Pierce
Mr. Marc Vanden