



**VIA HAND DELIVERY**

March 17, 2017

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Re: Comment to the Amendment to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary and Supporting Draft Revised Substitute Environmental Document (September 2016) (“DRSED”)

**I. INTRODUCTION**

In July, 1887, the Modesto Irrigation District (“MID”) was formed as a publicly owned, California irrigation district. MID is the second oldest irrigation district in California. Our forefather’s vision was clear and their determination resolute as they began transforming a desert wasteland into one of the nation’s most productive regions. After 16 years and battling some opposition, the irrigation water that had been promised entered a newly constructed canal system moving water from east to west and providing irrigation to the early tracts of land. Property values climbed, land was subdivided and wheat fields were transformed into vineyards and orchards. By the 1920s, Modesto Reservoir and the original Don Pedro Project were built and helped MID bring nearly 60,000 acres into irrigation.

Building on the success of providing irrigation water to an otherwise barren landscape, MID’s forefathers’ vision wasn’t yet complete. By 1923, the first electrical pole was installed and MID embarked on a path to provide power. MID currently serves electricity via a mixture of owned and purchased resources, including wind, solar, large and small hydro, and natural gas. In addition to hydroelectric generation at Don Pedro Reservoir, MID owns several natural gas generation facilities. Electricity is transmitted and distributed over more than 1,800 miles of power lines throughout MID’s 560 square mile service area.

Fast forwarding to 1994, MID partnered with the City of Modesto to provide safe, reliable drinking water and built the Modesto Regional Water Treatment Plant. To date, MID has

provided close to 230 billion gallons of treated surface water to the City of Modesto, significantly reducing their reliance on groundwater and improving water quality for more than 250,000 area residents and 6,000 businesses. This partnership, which is memorialized in the Amended and Restated Treatment and Delivery Agreement (“ARTDA”), attached hereto and specifically incorporated herein<sup>1</sup>, provides that the City receives the same allocation of water as our agricultural customers. “[MID] promises and agrees to treat [MID’s] agricultural customers and [Modesto] **on parity basis.**” (ARTDA at 29, emph. added). “If [MID] is required to reduce deliveries, it will cut back its deliveries to its agricultural customers and to [Modesto] **in equal proportions.**” (ARTDA at p.29, emph. added). Thus, any decrease in surface water supplies to agriculture will result in the same level of decrease in drinking water supplies to the residents and businesses of Modesto. Further, pursuant to the ARTDA, MID “agrees that its commitments to its agricultural customers and to [Modesto] **shall be met before** any subsequent water transfers for delivery of water outside MID’s boundaries.” (ARTDA at p. 29, emph. added). Prior to MID’s agreement with Modesto, our groundwater supply was being used unsustainably, and the basin was being depleted at an alarming rate. Since completion of the plant, groundwater levels have rebounded approximately 40 feet and groundwater quality has been significantly improved. Today, our groundwater basin is one of only two in the central valley which are not in critical over-draft.

130 years later MID still relies on the foresight of its forefathers – providing electric service to more than 120,000 customers, irrigation water to more than 3,000 agricultural customers and treating and delivering drinking water to the City of Modesto. We continue to look for ways to enhance water and power service, work to protect its senior water rights, diversify power resources and monitor and respond accordingly to upward regulatory pressures of the water and power industries.

Throughout its existence, this publicly owned utility has worked to deliver the highest value of service at the lowest possible cost through teamwork, technology, innovation and commitment. It’s a mission MID plans to continue to fulfill in the years to come. Unfortunately the State Water Resources Control Board’s (“Board”) DRSED will make fulfilling this mission impossible. As explained in greater detail below, MID objects to the approval of the project.

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<sup>1</sup> All cited materials and documents in this MID Comment and the MID/TID Joint Comments are available at the following hyperlink. <http://www.mid.org/wyf/comments>. Additionally, all cited materials and documents are available in hardcopy upon request to [LegalDepartmentMail@mid.org](mailto:LegalDepartmentMail@mid.org). These materials are hereby submitted into the administrative record.

## II. COMMENTS

### **A. The DRSED is so Technically Flawed, it Does not Represent the Best Available Scientific Information Upon Which to Render a Decision Regarding Water Quality Objectives.**

As is discussed in even greater detail in the DRSED Technical Comments (“Technical Comments”) jointly submitted by MID and the Turlock Irrigation District (“TID”), specifically referenced and incorporated herein<sup>2</sup>, the DRSED does not provide any measure of credible scientific evidence or analyses to justify adoption of the unimpaired flow (“UIF”) regime as envisioned by Board staff. MID was an active participant to the Board’s two technical workshops held on the DRSED. MID transcribed the webcasts of these technical workshops and hereby specifically incorporate these transcripts into this proceeding’s record as well. The Board never responded to our February 16, 2017 request for an extension to the comment period, such request incorporated by reference herein, which was based on the California Department of Fish Wildlife (“CDFW”) “errors” of the SalSim model used in the DRSED. The public has never been afforded an opportunity to analyze the Project or the DRSED based on the Revised SalSim model, as Board staff has failed to provide access to it despite repeated requests. The SalSim model is the sole quantitative tool relating to fish populations and the most recent version must be publicly accessible. Unfortunately, the DRSED is as deficient legally as it is scientifically. As explained in greater detail below, the DRSED violates a multitude of state and federal laws and requirements, including, but not limited to, the California Environmental Quality Act (“CEQA”), Porter-Cologne Water Quality Act (“Porter-Cologne”), California Water Code, California Constitution, federal Endangered Species Act (“ESA”), federal Clean Water Act, and United States Constitution.

### **B. The DRSED Fails to Comport with the California Environmental Quality Act.**

The Board’s adoption of amendments to the Water Quality Control Plan for the San Francisco Bay-Sacramento/San Joaquin Delta Estuary is a discretionary action of a state agency and, thus, subject to the California Environmental Quality Act (“CEQA”). Because the water quality control planning program is a certified regulatory program under CEQA, the Board prepared the DRSED in place of an environmental impact report. (Cal. Code Regs., tit. 14, § 15251; Cal. Code Regs., tit. 23, § 3775). Importantly, the environmental review remains “subject to the Board policy goals and substantive standards of CEQA.” (*City of Arcadia v. State Water Resources Control Board* (2006) 135 Cal.App.4<sup>th</sup> 1392, 1442 (“*Arcadia*”). Unfortunately, the DRSED is so fundamentally flawed, as discussed in greater detail below, that it violates CEQA and adoption of the preferred alternative will be an abuse of discretion. (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4<sup>th</sup> 412, 435 (“*Vineyard*

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<sup>2</sup> In addition to these comments, MID also specifically references and incorporates all written and orally submitted comments of the San Joaquin Tributaries Authority or its predecessor agency, the San Joaquin River Group Authority, of which MID is a member, including but not limited to the materials presented as Technical Comments to the Phase 1 SED (2012). Many of these materials are posted on the Board’s website with the 2012 SED in the folder entitled “unsolicited comments.”

*Area Citizens*”) (citing Cal. Pub. Resources Code § 21168.5)). The Board’s adoption of the DRSED will be reviewed *de novo* to ascertain whether the Board has scrupulously enforced the legislatively mandated CEQA requirements. (*Vineyard Area Citizens*, supra, at 435).

The purpose of the DRSED is to give the public and government agencies the information needed to make informed decisions, thus protecting “not only the environment but also informed self-government.” (*In re Bay-Delta etc.*, (2008) 43 Cal. 4th 1143, 1162-63). As a CEQA-equivalent document, the DRSED must effectively disclose to the public the analytic route the agency traveled from evidence to action. (*Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515). Further, the DRSED 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, and must contain facts and analysis, not just bare conclusions or opinions. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405 (“*Laurel Heights*”); *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935). As currently written, the DRSED is woefully inadequate and the Board has failed to meet its CEQA requirements.

### **C. The DRESSED’s Notices of Preparation are Illegal.**

CEQA mandates the Board send a “notice of preparation” (“Notice”) to the Office of Planning and Research and to each responsible and trustee agency, stating that an EIR will be prepared. (Cal. Code Regs., tit. 14, § 15082(a)). The Notice, at a minimum, must include a description of the project, the locations of the project, and the probable environmental effects of the project in order to put the public and regulated community on notice about the Board’s intended action. (Cal. Code Regs., tit. 14, § 15082(a)(1)). In this instance, the Board prepared the first Notice, in 2009, of its intention to update and implement the Water Quality Control Plan for the San Francisco Bay-Sacramento/San Joaquin Delta Estuary. The 2009 Notice did not provide notice of a project that would create entirely new numeric flow objectives on the three eastside tributaries to the San Joaquin River. Additionally, the Notice did not state the Board planned to review or otherwise regulate waters outside the Bay Delta plan. In 2011, the Board issued a revised Notice. Once again, the 2011 Notice failed to indicate the Board was reviewing or amending the geographic scope of the Bay Delta plan nor notice that it would be regulating waters not included in the Bay Delta plan. These omissions are significant as waters regulated in the Bay Delta plan do not include the San Joaquin River system upstream of Vernalis, and specifically do not include the Stanislaus, Tuolumne or Merced Rivers. However, the DRSED proposes to regulate the San Joaquin River system from its confluence with the Merced River to Vernalis, which includes the Stanislaus, Tuolumne and Merced Rivers. Thus, the geographic scope and regulated waters are completely different than the noticed geographic scope and waters. Further, the Notices did not indicate a disconnect between the proposed Lower San Joaquin River (“LSJR”) Flow Objective and a Delta benefit.

Beginning with the 1978 plan, and spanning through its revisions in 1995 and 2006 plans, water quality objectives have been directly tied to the protection of beneficial uses in the Delta.<sup>3</sup>

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<sup>3</sup> The 1978 Bay Delta Plan’s water quality objectives protected “beneficial uses in the Delta and Suisun Marsh; the 1995 Bay Delta Plan’s water quality objectives protected the “multitude of beneficial uses” served by the “waters of

The DRSED, in contrast, proposes to protect beneficial uses in “the Lower San Joaquin River (downstream of the Merced River confluence); the major San Joaquin River (“SJR”) tributaries (the Stanislaus, Tuolumne, and Merced Rivers), below the rim dams that regulate their flows (the New Melones, New Don Pedro, and New Exchequer Dams, respectively); the reservoirs created by these dams (New Melones Reservoir, New Don Pedro Reservoir, and Lake McClure, respectively); and the southern Delta.” (DRSED at 7-1). This change represents a complete departure from the previous Bay Delta Plans, and the public and regulatory communities were not properly notified of such a drastic change.

Another major deficiency of the Notices centers around their failure to notify the general public as well as the specific irrigation districts, including MID, which are themselves local public agencies, that the Board was considering creating new numeric flow objectives on the Stanislaus, Tuolumne and Merced Rivers. (DRSED at Appx. K). In fact, the 2011 Notice expressly stated, “the State Water Board is **not** currently considering any other changes to the Bay-Delta Plan or any **specific changes to water rights or other requirements** implementing the Bay-Delta Plan.” (2011 Notice at p. 3 (emph. added)). The Board did assure the public it would provide “**additional notice** regarding review of other aspects of the Bay-Delta plan and its implementation in the future.” (2011 Notice at p. 3 (emph. added)). Unfortunately, the Board did not keep its word in either case. A crucial component of a properly prepared notice is an accurate project description. (Cal. Code Regs., tit. 14, § 15082(a)(1)). However, the DRSED violates this requirement as it proposes an entirely new project much larger in geographic scope that portends to regulate waters outside the Bay-Delta without directly linking these objectives to protected beneficial uses within the Delta. Further, the DRSED proposes numeric flow objectives on the Stanislaus, Tuolumne and Merced Rivers in contradiction of the Notices. (DRSED at Appx. K, p. 18). The DRSED also proposes a new narrative flow objective that is different than the narrative flow objective noticed in the Notices, minimum reservoir carryover storage targets and end-of-drought storage refill requirements. (DRSED at Appx. K, p. 18, p. 28; DRSED at Appx. F.1, p. F.1-32). The Board’s failure to issue a new or revised notice properly describing the current proposed project violates CEQA. Importantly, the Board cannot rely upon the 2012 SED as a substitute for the required Notice. (Cal. Code Regs., tit. 14, § 15082(b)(1)(a)).

The failure to prepare and circulate a proper notice that complies with CEQA’s mandates has resulted in a fundamentally flawed document. Had a proper notice been circulated, the responsible and trustee agencies have 30 days to provide the Board with a response that identifies significant environmental issues, reasonable alternatives, and mitigations measures, that those agencies “will need to have explored in the draft EIR.” (Cal. Code Regs., tit. 14, § 15082(b)(1)(a)). The regulations recognize that this dialogue may result in a draft document that “need[s] to be revised to expanded to conform to [those] responses . . .” (Cal. Code Regs., tit. 14, § 15082(a)(4)). In this case, the illegal Notice has prohibited responsible and trustee agencies from providing responses prior to and/or during the preparation of the DRSED. This lack of communication has resulted in a fatally flawed impact analysis, an insufficient alternatives analysis, and an legally and scientifically insufficient document.

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the Bay Delta estuary;” and the 2006 Bay Delta Plan’s water quality objectives protected the waters of the “Delta, Suisun Bay, and Suisun Marsh.”

#### **D. The DRSED Illegally Lacks a Sufficient Project Description.**

A fundamental purpose of environmental review is providing the public with detailed information about the effects a proposed project is likely to have on the environment. (*Laurel Heights, supra*, (1988) 47 Cal.3d at 391; *see also* Cal. Code Regs., tit. 14, § 15003(b)). The project description must be sufficient enough to permit preparation of a meaningful and accurate report of the impacts of the proposed project (*Laurel Heights, supra*, at 396). The DRSED, however, utterly fails to meet this requirement because its alleged project description includes a less than one page description stating the proposed project would create a new Lower San Joaquin River Flow Objective for the protection of fish and wildlife beneficial uses and an associated program of implementation. (DRSED at 1-1). Amazingly, this alleged project description makes no mention of the carry-over storage requirement contained in all alternatives proposed in the document, the end-of-drought storage refill requirements contained in all proposed alternatives, or the time frame envisioned for this project. In fact, throughout this process and perhaps because the project description is legally deficient, Board staff has made varying representations regarding each of these crucial components.

The DRSED states “[t]he Feb-June Vernalis base flow requirement may be adjusted on an annual or long term basis to any value between 800-1200 cfs. The Vernalis base flow requirement, with an adaptive range of 800-1200cfs, establishes a minimum flow in the event that the percent of unimpaired flow would have resulted in a lower number, such as in a critically dry year.” (DRSED at ES-17). This statement appears to control the quantity of water that is commanded by the Project because the minimum flow will be required even if the natural river does not produce enough water to meet the minimum under the unimpaired flow methodology. It is unclear how this “Vernalis base flow” requirement comports with the remainder of the Project, which is based on UIF -- a number that is “variable” and unknowable until it actually occurs. In fact, it is this very “variability” of the UIF flow that drives the Board staff’s “change” to the UIF methodology.

There is no explanation to describe how it is reasonable to set a new “annual” flow requirement for the Vernalis location that uses a different (but related) flat metric than the metric used in the Decision 1641 monthly flow requirements, which is yet again a different metric than the variable-flow UIF methodology that is used for the tributaries. (See *State Water Res. Control Bd. Cases*, 39 Cal. Rptr. 3d at 210 (citing Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, CAL. WATER RESOURCES CONTROL BD., 5 (May 1995),)

The DRSED does not provide any analysis or information to demonstrate how the minimum base flow requirement was contrived nor which benefits should be expected from the minimum base flow that are the same or different than those benefits contemplated by the “varied” nature of the flow objective.

Notwithstanding this “change” in flow management strategies that justifies the Lower San Joaquin River Objective, the DRSED fails to provide any information to justify why this static, artificial minimum flow remains scientifically justifiable or even how the old flow management theory (static, man-made flow quantities) relates or interacts with the new theory (regarding naturally occurring flows). It is critical that this comparison of benefits between the

two theories is analyzed, most especially if the Board staff intends to rely upon what may be mutually-exclusive scientific theories to justify the same Project. Excluding this component from the Project Description violates CEQA.

**E. The DRSED's Failure to Consider a Range of Reasonable Alternatives Violates CEQA.**

The DRSED must consider a reasonable range of alternatives which could feasibly attain the basic objectives of the Proposed Project. (*Friends of Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4<sup>th</sup> 859, 873 (“*Friends of Eel River*”); *see also*, Cal. Code Regs., tit. 14, § 15126(d)). Although environmental review is not required to analyze every possible alternative, CEQA demands the DRSED analyze a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. (*Preservation Action Counsel v. City of San Jose* (2006) 141 Cal.App.4<sup>th</sup> 1336, 1354). In fact, the DRSED’s discussion must focus on “alternatives capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.” (*Friends of Eel River, supra*, (2003) 108 Cal.App.4<sup>th</sup> at 873). Shockingly, the DRSED only considers additional flows from only three tributaries, Tuolumne, Stanislaus and Merced Rivers, and five irrigation districts, MID, Oakdale Irrigation District, South San Joaquin Irrigation District, Merced Irrigation District and TID. This analysis is woefully inadequate, and thus illegal, as it completely ignores all of the surface water sources within the entire San Joaquin River. The DRSED does not foster informed decision-making as required by law because of staff’s failure to consider these sources, which could feasibly attain the basic objectives of the Proposed Project.

**F. The DRSED Should Have Included an Alternative that Considered all San Joaquin River Water Sources**

When developing water quality objectives, “the Board is directed to consider not only the availability of unappropriated water (Cal. Water Code, § 174) but also *all* competing demands for water in determining what is a reasonable level of water quality protection (Cal. Water Code, § 13000).” *United States v. State Water Resources Control Bd.*, (1986) 182 Cal. App.3d 82, 118 (emph. in original) (*Racanelli*). Similarly, the State Water Board 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.*” (Cal. Water Code, § 13241(c) (emph. added)). In *Racanelli*, the First District Court of Appeal held that the Board’s decision to establish water quality objectives for the Delta based on the amount of water available prior to the construction and operation of the Central Valley Project (“CVP”) and State Water Project (“SWP”) facilities (collectively the “Projects”), known as the “without project” standard, violated these rules because the “Board considered only the water use of the Delta parties . . . and the needs of the customers served by the [P]rojects . . . [while] [n]o attention was given to water use by the upstream users.” (*Id.* at 118). In other words, the standard was set “only at a level which could be enforced against the projects.” (*Id.* at 119). The *Racanelli* Court stated that a “global perspective” of the available water resources was necessary. (*Id.*) The Court observed that the imposition of a “without project” standard upon the Projects themselves “represents one reasonable method” of achieving water quality control in the Delta, but the Court explained that

the Board cannot satisfy its water quality planning obligations if it does not consider “other actions which could be taken to achieve Delta water quality, such as remedial actions to curtail excess diversions and pollution by other water users.” (*Id.* at 120).

**G. The State Water Board’s Proposals for the Tributary Flow Objective and the Vernalis Flow Objective and the Alternatives Considered are Framed so Narrowly they Violate CEQA.**

The State Water Board’s Tributary Flow Objective and Vernalis Flow Objective are unlawful for the same reasons that the “without project” standard in *Racanelli* was unlawful, namely, they target a select group of water users and ignore the possible contributions or actions of other water users. The State Water Board’s new flow proposal has a narrative objective and two numeric flow objectives. (DRSED, at ES-4; Appx. K, p. 18). Both the narrative and numeric objectives purport to cover a broad geographic area that extends far beyond the locale of the three eastside tributaries that are identified as being the contributing resources for achieving those objectives. Specifically, the Narrative Objective states that inflow conditions from the “San Joaquin River watershed to the Delta” should be maintained at sufficient levels to support and maintain the natural production of viable native San Joaquin River watershed fish populations “migrating through the Delta.” (DRSED, at Appx. K, p. 18). Similarly, the program of implementation states, “[a]lthough the lowest downstream compliance location from the Lower San Joaquin River flow objective is at Vernalis, the objectives are intended to protect migratory Lower San Joaquin River fish in a larger area, including within the Delta . . .” (DRSED, at Appx. K, p. 28). Despite the broad geographic scope of the objectives, which covers the entire San Joaquin River watershed through the Delta, the Tributary Flow Objective only requires the maintenance of an unimpaired flow percentage below the rim dams on each of the Stanislaus, Tuolumne and Merced Rivers. (DRSED, at ES-5; 1-1 – 1-2; Appx. K, p. 18).<sup>4</sup> Likewise, the DRSED states that the Vernalis Flow Objective will be satisfied by releases from the Stanislaus, Tuolumne and Merced Rivers: “When the percentage of unimpaired flow requirement is insufficient to meet the minimum base flow requirement, the Stanislaus River shall provide 29 percent, the Tuolumne River 47 percent and the Merced River 24 percent of the additional total outflow to achieve and maintain the required base flow at Vernalis.” (DRSED, at Appx. K, p. 29).

By only requiring the maintenance of unimpaired flow below the rim dams on each of the three eastside tributaries, and by only requiring contributions from the three eastside tributaries to meet the Vernalis Flow Objective, the State Water Board’s proposed objectives are designed in such a way that they can only be enforced against water users who divert from the Stanislaus, Tuolumne and Merced Rivers, upstream of the compliance points on each of those rivers. All of the water users upstream of the confluence of the Merced River and the San Joaquin River are notably exempt from this regulation, as are the water users on the westside of the San Joaquin River, and the water users on the Calaveras, Mokelumne and Cosumnes Rivers. (DRSED, ES-1). By exempting these water users and the resources available to them, the State Water Board has improperly ignored numerous water resources that should have been included in developing

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<sup>4</sup> The “plan area” in the SED is described as the Stanislaus River watershed from New Melones to the confluence of the San Joaquin River, the Tuolumne River watershed from New Don Pedro Reservoir to the confluence of the San Joaquin River, and the Merced River watershed from the Lake McClure to the confluence of the San Joaquin River, as well as the mainstream of the San Joaquin River between its confluence with the Merced River downstream to Vernalis. (SED, at 1-2.)

the objectives designed to protect “the natural production of viable native San Joaquin River watershed fish populations migrating through the Delta.” (DRSED, at Appx. K, p. 18).

Specifically, on the Upper San Joaquin River, the State Water Board has ignored Eastman Lake behind Buchanan Dam on the Chowchilla River (Storage Capacity: 150,000 acre feet;<sup>5</sup>) Hensley Lake behind Hidden Dam on the Fresno River (Storage Capacity: 90,000 acre feet;<sup>6</sup>), and Millerton Lake behind Friant Dam on the Upper San Joaquin River (Storage Capacity: 520,500 acre feet;<sup>7</sup>). (Figure 2-3). The average annual unimpaired flow for the Upper San Joaquin River at Friant Dam is 1,702,000 acre feet, which, standing alone, “represents approximately 28 percent of the unimpaired flow on the SJR at Vernalis.” (DRSED, at 2-9). That figure of 28 percent does not include the resources on the tributaries further upstream on the Chowchilla and Fresno Rivers. The DRSED did not consider, nor incorporate, these resources when presenting and evaluating the range of alternatives.

The DRSED has also ignored the water users on the lower San Joaquin River that are downstream of the compliance points on each of the three eastside tributaries. These water users include but are not limited to the following: 1) Westside Irrigation District, with an average annual demand of 19,437 acre-feet; 2) Stevinson Water District, with an average annual demand of 17,533 acre-feet; 3) Patterson Irrigation District, with an average annual demand of 62,932 acre-feet; 5) West Stanislaus Irrigation District, with an average annual demand of 61,617 acre-feet; 6) El Solyo Water District, with an average annual demand of 60,252 acre-feet; 7) Banta-Carbona Irrigation District, with an average annual demand of 14,686 acre-feet; 8) Reclamation District 2075 (McMullin), with an average annual demand of 5,906 acre-feet; 9) Reclamation District 2064 (River Junction), with an average annual demand of 2,610 acre-feet; and 10) Byron-Bethany Irrigation District, with an average annual demand of 1,743 acre-feet.

Due to the location of these water users downstream of the compliance points, none can contribute to meeting the Tributary Flow Objective, and none are directed to contribute to the Vernalis Flow Objective, the latter of which has been impermissibly narrowly defined to ensure compliance can only be made with flows from the Stanislaus, Tuolumne and Merced Rivers. (DRSED, at Appx. K, p. 29).

In summary, the Plan Area includes:

<u>District</u>	<u>Acreage</u>
Merced Irrigation District	155,280
Turlock Irrigation District	186,558

<sup>5</sup> Eastman Lake storage: <http://cdec.water.ca.gov/cgi-progs/profile?s=BUC&type=res>

<sup>6</sup> Hensley storage: <http://cdec.water.ca.gov/cgi-progs/profile?s=HID&type=res>

<sup>7</sup> Millerton Lake storage: <http://cdec.water.ca.gov/cgi-progs/profile?s=MIL&type=res>

Modesto Irrigation District	101,915
Oakdale Irrigation District	73,133
South San Joaquin Irrigation District	72,586
SEWD & CSJWCD	217,075
TOTAL	806,547

The amount of land in the entire San Joaquin River Hydrologic Region is approximately 3.73 million acres (DRSED, at 2-5), which leaves approximately 2.92 million acres of land that are not included, but which still fall within the San Joaquin River basin.<sup>8</sup> When the hydrologically connected Kings River basin is added, the amount of land that is within the San Joaquin River basin that is not included in the plan increases even more. In addition, while the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (“WQCP”) focuses on the seven water right holders identified in the table above, it excludes approximately 4,500 water right holders in the San Joaquin River Basin. Even the DRSED admits most of the water rights which will be impacted are held by the U.S. Bureau of Reclamation, MID, Oakdale Irrigation District, South San Joaquin Irrigation District, Merced Irrigation District and TID at 98%, 99%, and 94% respectively. (DRSED at ES-23).

By developing numeric objectives that can only be achieved through the imposition of restrictions on a select group of water users, the Board has unlawfully excluded consideration of a potentially feasible alternative and has thus prevented consideration of “an intelligent decision as to the environmental consequences and relative merits” of such an alternative. (*Friends of Eel River, supra*, (2003) 108 Cal.App.4<sup>th</sup> 859, 873).

**H. The DRSED Failed to Consider a Reasonable Non-Flow Alternative**

The alleged purpose is to support and maintain the “natural production” of viable native San Joaquin River watershed fish populations migrating through the Delta. (DRSED at Appx. K). As MID has stated publicly in a variety of forums for several years, science specific to the lower Tuolumne River indicates that this purpose can be achieved through numerous non-flow actions. By way of example, studies indicate predation is the dominant stressor to salmon smolts in the San Joaquin River tributary systems, with less than five percent of salmon smolt surviving to the mainstem of the San Joaquin River. (*See generally*, Vernalis Adaptive Management Plan Report of the 2010 Review Panel, Delta Science Program, May 2010; *see also*, TID/MID 1992a and FishBio 2013a). Similarly, spawning gravel studies report downstream movement and loss of spawning gravels on the lower Tuolumne River. Further, spawning gravel quality can be

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<sup>8</sup> The map in figure ES-1 does not accurately depict the San Joaquin River Basin. The San Joaquin River Basin also includes the Kings River Basin. (*Turner v. James Canal Co.*, 155 Cal. 82, 91 [explaining that the Kings River and San Joaquin River are hydrologically connected through the Fresno Slough].)

negatively affected by in-filling of coarse sediment by fines resulting in decreased salmonid egg viability. (Stillwater Sciences 2013a and McBain & Trush 2004).

As such, the DRSED should have considered at least one reasonable non-flow alternative in its analysis. The scientifically supported non-flow measures could include items such as:

- Undertaking a program of gravel augmentation. (Stillwater Sciences 2013a and McBain & Trush 2004);
- Improving spawning gravel quality by removing fine sediments. (Stillwater Sciences 2013a and McBain & Trush 2004);
- Undertaking a focused native riparian vegetation planting program. (McBain & Trush 2000 and Stillwater Sciences 2013d);
- Installing permanent predation weirs to prohibit the upstream movement of striped bass and other bass species into the prime rearing areas for juvenile Chinook and O. mykiss.

Such an alternative, if included, would have met the alleged project goal without the tremendous environmental impacts to both groundwater and agricultural resources, and without dewatering the entire region. The DRSED's alternatives analysis violates CEQA because it fails to include a feasible non-flow alternative. In fact, the State's own salmon model, SALSIM, demonstrates the ineffectiveness of the Project's narrow focus on flow in an attempt to achieve salmon benefits in the SJR basin. The model showed only marginal benefits to the salmon population after two decades of 40% UIF, and actually showed decreasing salmon population at higher flows of 50% and 60% UIF.

## **I. The Proposed Narrative and Numeric Flow Objectives Violate the Porter-Cologne Act**

### **1. The proposed narrative flow objective violates the Porter Cologne Act.**

The Board proposes to modify the WQCP. The Porter-Cologne Act defines "water quality control plan" to include "water quality objectives". (Cal. Water Code § 13050(j)). The statute defines "water quality objectives" as "limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area." (Cal. Water Code § 13050(h)).

Objectives can be numeric or narrative. An example of a narrative objective is "no toxic pollutants in toxic amounts". (*City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 622, fn. 4). This narrative objective is also consistent with the statute because the phrase "in toxic amounts" establishes a limit or level. An objective determination could be made about when the addition of toxic substances results in toxic conditions in a specific water.

Here, however, the proposed narrative objective violates the Porter-Cologne Act because it does not establish limits or levels. No one can objectively determine (as opposed to subjectively determine) whether the San Joaquin River complies with the objective. Any possibility of an objective determination is destroyed by the objective itself, which includes two

laundry lists of factors but does not specify how they are to be used to ascertain compliance, and which specifically allows for other unspecified factors to be used:

Maintain inflow conditions from the San Joaquin River Watershed to the Delta at Vernalis, sufficient to support and maintain the natural production of viable native San Joaquin River Watershed fish populations migrating through the Delta. Inflow conditions that reasonably contribute toward maintaining viable native migratory San Joaquin River fish populations include, but may not be limited to, flows that more closely mimic the natural hydrographic conditions to which native fish species are adapted, including the relative magnitude, duration, timing, and spatial extent of flows as they would naturally occur. Indicators of viability include population abundance, spatial extent, distribution, structure, genetic and life history diversity, and productivity. (DRSED at 3-8).

Because there is no objective way to determine whether “inflow conditions” support “the natural production of viable native” fish populations, this objective does not establish “limits or levels” and therefore violates the Porter-Cologne Act. Although this language may help explain the Board’s intention, the Board is not authorized to propose a water quality objective that does not contain limits or levels. It should be deleted.

## **2. The Proposed Numeric Flow Criterion Also Violates the Porter-Cologne Water Quality Control Act (“Porter-Cologne”).**

The proposed numeric flow criterion requires “a percent of unimpaired flow”:

A percent of unimpaired flow between a lower and upper limit from each of the Merced, Tuolumne, and Stanislaus Rivers shall be maintained from February through June. (DRSED at 3-8).

Although the DRSED identifies three alternatives that evaluate ranges of 20-30 percent, 30-50 percent, and 50-60 percent, they are really all one alternative, because the Board can choose any percentage from 20 to 60 percent<sup>9</sup>. What’s more, the Board can vary the percentage as it pleases:

The unimpaired flow objective does not have to be implemented in a way that requires rigid adherence with a fixed percent of unimpaired flow. LSJR Alternatives 2, 3, and 4 include an adaptive implementation element. This adaptive implementation element allows for flows under each alternative to be “shaped” or shifted in time to provide more functionally useful flows and to respond to changing information and conditions. (DRSED at 3-10).

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<sup>9</sup> “Ultimately, however, the State Water Board, in exercising its authority and responsibilities, may select a range within the LJSR [i.e. Lower San Joaquin River] alternatives analyzed that is consistent with the requirements of applicable law, including CEQA and the Porter - Cologne Water Quality Control Act. In other words, the Board may select a percent of unimpaired flow anywhere between the 20 and 60 percent range evaluated in this SED.” (DRSED at 3-9).

As explained above, a water quality objective must have “limits or levels”. The proposed numeric criterion appears at first indeed to have limits or levels, because of the many percentages specified. But, the apparent specificity is illusory. The proposed objective does not specify any limit or level. Instead, it announces the Board will, in the future, choose a limit or level and that the Board is likely to change that limit or level whenever it chooses. Because the objective itself does not specify a limit or level, no one can make an independent determination of whether compliance with that objective has been achieved.

Here, the Board is proposing is a research project -- not a regulatory scheme. The indeterminacy of the proposed objective admits, de-facto, the Board cannot justify any specific percentage. The flexibility of the “adaptive implementation element” concedes that the Board wants power to control water releases and diversions so that the Board can collect data that may—or may not—eventually support its proposed action. Because the proposed numeric flow objective does not provide objectively determinable “limits or levels”, it violates Porter-Cologne.

### **3. The Proposed Flow Objectives Violate Cal. Water Code § 13241.**

Cal. Water Code § 13241 specifies that water quality objectives must “ensure the reasonable protection” of beneficial uses:

- Each regional board shall establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance....
- Beneficial uses for the lower San Joaquin River include municipal supply, agricultural supply, and groundwater recharge:
- Municipal and Domestic Supply (“MUN”) - Uses of water for community, military, or individual water supply.
- Agricultural Supply (“AGR”) - Uses of water for farming, horticulture, or ranching including, but not limited to, irrigation (including leaching of salts), stock watering, or support of vegetation for range grazing.
- Ground Water Recharge (“GWR”) - Uses of water for natural or artificial recharge of ground water for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.<sup>10</sup>

Beneficial uses for groundwater in the region include municipal and agricultural supply:

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<sup>10</sup> (California Regional Water Quality Control Board, Central Valley Region (Revised July 2016), The Water Quality Control Plan (Basin Plan) For The California Regional Water Quality Control Board Central Valley Region, Fourth Edition Revised July 2016 (With Approved Amendments), The Sacramento River Basin And The San Joaquin River Basin (the “San Joaquin River Basin Plan”) at II-1.00.)

Unless otherwise designated by the Regional Water Board, all ground waters in the Region are considered as suitable or potentially suitable, at a minimum, for municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO). (*Id.* at II-3.00).

The San Joaquin River Basin Plan makes clear that protecting ground water requires meeting quantity objectives:

The protection and enhancement of beneficial uses require that certain quality and quantity objectives be met for surface and ground waters. (*Id.* at II-1.00).

The proposed flow objectives violate Cal. Water Code § 13241 because they do not “ensure the reasonable protection” of the beneficial uses of municipal supply, agricultural supply, and groundwater recharge, and they do not ensure that reasonable quantity objectives be met for groundwater supply. The DRSED acknowledges that the proposed flow objectives will harm these beneficial uses by reducing the amount of water available for agriculture. It would also reduce groundwater recharge, leading to a lowering of groundwater levels, which will affect the availability of groundwater for “municipal supply”—in other words, the proposed flow objectives would cause groundwater levels to drop, thereby drying up some wells used by individuals and communities for drinking water. The proposed flow objectives would also affect the drinking-water supply for the City and County of San Francisco.

Although the DRSED does not fully describe all the harm it will cause to agriculture, to individuals, to poor communities who rely on shallow drinking-water wells, and to big cities like San Francisco—the absence of a full description is a violation of CEQA—the DRSED says enough to leave no doubt that the Board intends to harm these beneficial uses, that the harm will be significant, that farmers will be hurt, and that both rich and poor will be left without a full supply of drinking water.

#### **4. The Board Has Failed to Undertake the Required Balancing Among Beneficial Uses.**

As specified under Cal. Water Code § 13241, the Board has a duty to protect all beneficial uses, including municipal and agricultural. “While the Board had a duty to adopt objectives to protect fish and wildlife uses and a program of implementation for achieving those objectives, in doing so the Board also had a duty to consider and protect all of the other beneficial uses to be made of water in the Bay-Delta, including municipal, industrial, and agricultural uses.” (*State Water Resources Control Bd. Cases* (2006) 136 Cal.App.4th 674, 778). When uses conflict, the Board must balance competing interests. (*Id.*) In undertaking the balancing, the Board must explain itself with sufficient specificity to ensure a court can properly review the Board’s decision.

...[W]e agree with the trial court that the Board failed to make necessary findings reflecting the balancing of interests between the domestic uses of the canal and the domestic uses of the export recipients in determining the “public interest.” We recognize that such findings need not be stated with the formality required in

a judicial proceeding but must be adequate enough to permit a reviewing court to determine whether they are supported by sufficient evidence or a proper principle and to apprise the parties as to the reason for the administrative action in order that they may decide whether, and upon what grounds, additional proceedings should be initiated. (*Racanelli, supra*, (1986) 182 Cal.App.3d at 142, (ellipsis, quotation marks, and citations omitted)).

Here the Board has done no balancing. On the contrary, it has taken the position of salmon over everything—that water must be given to salmon no matter how small the benefit and how great the harm to other beneficial uses. Because Cal. Water Code § 13241 requires the Board to try to protect all beneficial uses, rather than protect one to the detriment of all others, the Board has abused its discretion.

If, as the Board asserts, “[f]ish species have not shown signs of recovery” in the more than 20 years since 1995<sup>11</sup>, then it is reasonable to conclude that the flow objectives have not been successful. There is little reason to believe that proposed flow objectives will succeed when everything else has failed. The DRSED all but acknowledges failure by noting that the objectives will not be sufficient to attain the temperature objectives, and by predicting that the flow objectives will increase the salmon population by only 1100 fish.

The DRSED estimates that the proposed project will produce \$64 million of harm to agriculture and to people who need drinking water. (DRSED at ES-31). It acknowledges, however, that the cost to the City and County of San Francisco alone could be \$119 million for alternative 3, and \$208 million for alternative 4. (*Id.* at ES-37). The true costs, as explained in these comments, are much higher: \$1.6 billion within MID and TID’s boundaries alone. Worse still, the DRSED acknowledges that the project will make drinking water “completely unavailable in some areas”:

A reduction in surface water supply would affect the groundwater aquifer by simultaneously causing a reduction in recharge volume (from a reduction in deep percolation from the distribution system and agricultural fields) and an increase in groundwater pumping (to replace lost surface water supplies). The reduction in surface water supply would therefore affect entities that rely upon groundwater as their principal source of drinking water by (1) increasing the need to drill deeper wells to continue to access groundwater, (2) increasing groundwater pumping costs, (3) degrading groundwater quality, and (4) making groundwater completely unavailable in some areas after some period of continued unrestricted groundwater pumping. (*Id.* at ES-35).

The people in the Central Valley should not be deprived of safe, reliable drinking water for the possibility of increasing LSJR salmon by approximately 1,100 fish. What makes them so valuable that the City and County of San Francisco might have to spend \$200 million for them, and everyone else more than \$1 billion? Never have so many been forced to contribute so much water to save so few fish. Spending more than \$1 million dollars per salmon and depriving

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<sup>11</sup> The Board last imposed flow objectives intended to protect fish in 1995.

entire communities of a safe, reliable drinking water supply is clearly an unbalanced approach that violates the letter and spirit of the California water code.

#### **5. The Proposed Flow Objectives Violate Cal. Water Code § 13241(c).**

The Board has failed to comply with Cal. Water Code 13241(c), which requires the Board to consider what can reasonably be attained. Neither the Delta nor the Central Valley rivers can ever be restored to their natural conditions, at least not if “natural” refers to conditions before 1849. The Technical Comments addresses these issues throughout its analyses but, more specifically, at Finding #1.

The SED has failed to demonstrate an understanding of the current physical conditions and resources of the Tuolumne River.” Further, that “Providing a “natural flow regime” to what is otherwise a completely modified, far from natural river-floodplain system is unlikely to lead to improvements to the anadromous fish populations of the Tuolumne River or the LSJR. (Technical Comments at p. 2).

Notwithstanding a sophisticated technical analysis, one could call upon common sense to recognize that even if all the dams in the Central Valley no longer existed, the Delta and rivers would not be natural. The Delta and rivers have been artificially channelized and controlled by levees, canals, and bypasses. Development within the Central Valley has changed the amount of stormwater that runs off the land, the pathway it takes, and what it picks up along the way. Among other things, so many of the dominant fish now residing in these river systems are not native as they were imported from the East Coast. Also, and as further described in the Technical Comments, it is hatchery fish (as opposed to “natural fish”) which constitute the vast majority (up to 100%) of the fish presently existing in tributaries. (*See*, Technical Comments at p.76; *Id.* at Appx. A).

It does not make sense to impose requirements and spend money with the goal of attaining objectives that cannot be attained for other reasons. This concept is the obvious purpose of Cal. Water Code § 13241(c). The code requires the Board ascertain, and then consider, what can “reasonably be achieved through the coordinated control of all factors which affect water quality in the area”. (*Id.*).

Even with the astronomical costs, in terms of water and money that the DRSED will impose, the Board concedes that flow criteria by themselves will not do the job:

The State Water Board also recognizes that Recommended Actions, including non-flow measures, such as habitat restoration, must also be part of efforts to comprehensively address Delta aquatic ecosystem needs as a whole. (DRSED, Appx K at 28).

Unfortunately, the Board does not say what habitat needs to be restored, whether that restoration can reasonably be achieved, and whether the Board’s goals for salmon (which are omitted from the document) can be attained. Because the Board does not know what can

reasonably be achieved for the salmon at issue here, it cannot say whether the vast expenditures of water and money that it is proposing here will make any difference in the long run. Thus, it has not complied with an explicit statutory requirement.

#### **6. The Proposed Flow Criteria are Improper Determinations of Water Rights Rather than True Water Quality Objectives.**

Porter-Cologne refers to “beneficial uses” and “water quality objectives”, which are incorporated into a “water quality control plan”. ( Cal. Water Code § 13241, §13050(f), (h), (j)). These are the California equivalents of what the federal Clean Water Act refers to as “designated uses” and “water quality criteria”, which are incorporated into “water quality standards”. (Clean Water Act § 303(c)(2)(A), 33 USC § 1313(c)(2)(A); *see* Cal. Water Code § 13372 (provisions of division apply when “consistent...with the requirements for state programs implementing the Federal Water Pollution Control Act”). In accordance with the Clean Water Act, all new or revised water quality standards must be submitted to EPA, which can approve it or promulgate its own standard. (Clean Water Act § 303(c)(2)(A), (c)(3), 33 USC § 1313(c)(2)(A), (c)(3)). If the proposed flow objectives are true water quality objectives issued in accordance with Cal. Water Code § 13241, then they must be submitted to the United States Environmental Protection Agency (“U.S. EPA”) for review and approval. However, the Board insists U.S.EPA “could not adopt standards for [flow and operations] under the Clean Water Act”, and that any attempt by EPA to adopt standards of this sort would “fundamentally interfere with the State’s water allocation authority.” (DRSED at App. K at 5).<sup>12</sup> This admission invalidates the proposed flow objectives. The Board tacitly acknowledges these objectives are really determinations of water rights, and the Board must use its water right authority to make them. Unfortunately, the Board has not conducted water rights hearings or otherwise used its water rights authority to reach these water rights decisions. The Board cannot adjudicate water rights under the guise of establishing water quality objectives—especially when it admits that the flow criteria are not true water quality objectives.

#### **7. The Proposed Narrative and Numeric Flow Objectives Violate the California Administrative Procedure Act (“APA”).**

The APA applies to revised plans adopted by the Board after 1992. (Gov. Code § 11353(b)(1)). The revised plans must comply “with the standards of necessity, authority, clarity, consistency, reference, and nonduplication set forth in subdivision (a) of [Government Code] Section 11349.1.” (Gov. Code § 11353(b)(4)). Section 11349.1, in turn, specifies six standards:

- (1) Necessity.
- (2) Authority.
- (3) Clarity.

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<sup>12</sup> “The State Water Board does not concede that it is required under the Clean Water Act to submit all parts of this plan to the USEPA. Assuming the USEPA has authority under the Clean Water Act to approve the objectives for flow and operations, the State Water Board believes that the USEPA **could not adopt standards for these parameters under the Clean Water Act**. If the USEPA attempted to adopt such standards, it could fundamentally interfere with the State’s water allocation authority under section 101(g) of the Clean Water Act.” (DRSED, app. K at 5, quotations omitted, *emph.* added).

- (4) Consistency.
- (5) Reference.
- (6) Nonduplication.

(Gov. Code § 11349.1) The proposed narrative and numeric flow objectives violate all of these requirements except reference.

The APA defines “necessity” as the need for a regulation to effectuate the purpose of a statute:

“Necessity” means the record of the rulemaking proceeding demonstrates by substantial evidence the need for a regulation to effectuate the purpose of the statute, court decision, or other provision of law that the regulation implements, interprets, or makes specific, taking into account the totality of the record. For purposes of this standard, evidence includes, but is not limited to, facts, studies, and expert opinion. (Gov. Code § 11349(a)).

Here the necessity standard is not met because there is no need to revise the basin plan and adopt new flow objectives. The Board proposes to initiate a research project rather than implementing a regulatory program. The indeterminacy of the proposal, and the insistence on adaptive management, make clear that the Board does not know what will be gained by the proposal, and what harm it will do to the other beneficial uses it is required to protect. The Board has not explained why it needs to increase the number of salmon in the LSJR by 1100 fish, especially considering the harm it will do to agriculture, groundwater and drinking water supplies.

Under the APA “authority” is defined as “the provision of law which permits or obligates the agency to adopt, amend, or repeal a regulation.”. (Gov. Code § 11349(b)). Here the Board lacks authority to establish water quality objectives that lack “limits or levels”, as explained above. Of particular importance, the APA defines “clarity” as “written or displayed so that the meaning of regulations will be easily understood by those persons directly affected by them.” (Gov. Code § 11349(c)). The DRSED’s proposed regulation could not be more unclear. As the Board concedes, the proposed objectives are themselves uninterpretable. Their meaning will be specified by the Board, or by its Executive Officer, as time goes on. This lack of clarity violates the APA. Rather than continue this folly, the Board should wait until it has specific, scientifically credible numbers and then propose those numbers as water quality objectives.

As used in the APA, “[c]onsistency” means being in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or other provisions of law. (Gov. Code § 11349(d)). Here the proposed flow objectives conflict with the water-rights law, CEQA, Porter-Cologne, the Clean Water Act, and the void-for-vagueness doctrine, among other statutes and laws.

Similarly, under the APA, “nonduplication” requires the identification of overlapping statutes, and a justification of any overlap. (Gov. Code § 11349(f)). Here the proposed flow objectives overlap with water-rights law, the Endangered Species Act and the Clean Water Act.

The Board has not justified the overlap as required by law. Given the multiple violations of the APA, the Board should withdraw these objectives until such time as legally defensibly, scientifically credible objective can be proposed.

#### **J. The Project has been Impermissibly Piecemealed**

The federal Clean Water Act requires states to identify those waters for which effluent limits required by the act “are not stringent enough to implement any water quality standard applicable to such waters.” (33 U.S.C. § 1313(d)(1)(A)). These waters are sometimes referred to as “impaired” waters, or as 303(d)-listed waters.<sup>13</sup>

For each 303(d)-listed water, a state must “establish...the total maximum daily load, for those pollutants which the Administrator identifies... as suitable for such calculation”. (33 U.S.C. § 1313 (d)(1)(C)). The EPA administrator as identified “all pollutants, under proper technical conditions, as being suitable for the calculation of total maximum daily loads.” (43 Fed.Reg. 60662 (1978)). Total maximum daily loads are usually referred to as “TMDLs”.

The Board has 303(d)-listed three segments of the San Joaquin River for temperature: San Joaquin River (Stanislaus River to Delta Boundary); San Joaquin River (Tuolumne River to Stanislaus River); and San Joaquin River ( Merced River to Tuolumne River). (*See* Decision ID 15202, 15203, and 15204; copies attached). For each of these, the pollutant is “Temperature, water”; the source is “Unknown”, and the expected TMDL date is 2021. (*Id.*) To meet this deadline, the Board will have to start work on the TMDL soon, if it has not already.

One of the purposes of the proposed flow criteria, according to the DRSED, is to improve compliance with the temperature objective for the San Joaquin River. The Executive Summary, for example, provides a graphic showing that the temperature goal for the core rearing of salmon is not being met in most of 52 miles of the lower San Joaquin River. (DRSED at ES-41, fig. ES-3). Nor are the other temperature goals consistently being met. (*Id.* at ES-42, table ES-15).

The proposed flow criteria will increase the frequency of compliance, but not to 100%. Even under the best alternative, the temperature goal for the core rearing of salmon will be met only 56% of the time. (*Id.* at ES-41, fig. ES-3). None of the EPA temperature criteria will be met 100% of the time. (*Id.* at ES-42, table ES-15). The DRSED, in other words, admits that the proposed flow criteria will not be sufficient to achieve the temperature criterion.

Because the flow criteria being proposed in the DRSED will not be enough to achieve the temperature objective, additional efforts will have to be made—efforts that are spelled out in the TMDL. Part of the project of protecting salmon is the establishment of TMDLs for temperature in the lower San Joaquin River, and the requirements and prohibitions imposed as a result of that TMDL.

Although the Board has not identified what specific requirements and prohibitions that will be imposed as part of the temperature TMDLs, there appears to be only one trick in the Board’s bag: taking water from upstream users and letting it flow downstream. It is therefore reasonable to conclude that the effects of the entire, non-piecemealed project will be much worse than those identified in the DRSED. After all, if the Board takes away half of the water a farmer

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<sup>13</sup> [http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/integrated2010.shtml](http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml)

needs, the farmer may be able to survive. But if it takes away all the water, the farmer cannot possibly survive. If the Board's decision causes groundwater levels to drop a little, then a water-supply well may still be able to provide some water. But if groundwater levels drop too far, then there will be no water for the users to pump. The supply of water to San Francisco could be cut back, producing severe urban stress.

A TMDL, like an EIR, is an informational document. (*City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1414). "A TMDL forms the basis for further administrative actions that may require or prohibit conduct with respect to particularized pollutant discharges and waterbodies." (*Id.* at 1415, quotation marks and square brackets omitted). Here, the Board admits that the proposed flow objectives are inadequate to achieve the applicable temperature objectives, which are intended to protect the very same salmon that proposed flow criteria are supposed to protect. It makes no sense to proceed with a fraction of the total salmon-protection project and pretend that the rest of the project doesn't exist.

The Board must consider whether the temperature objectives are unattainable, meaning that there is no reasonable set of circumstances that can lead to their attainment. (Cal. Water Code § 13241(c); see discussion below). If they are unattainable, the Board should conduct a "use attainability analysis" and revise the beneficial use so that it can be attained. EPA regulations specifically authorize the Board to revise the beneficial use to be protected. (40 CFR § 131.10(g); see discussion below).

Because the TMDL requirements and prohibitions are part of the same project, and because they indisputably have the potential to affect the environment, they must be considered as part of the DRSED.

#### **K. The Board Must Consider the Cumulative Effects of the Temperature TMDLs.**

Even if one were to argue that the temperature TMDLs are separate projects, their effects must be evaluated anyway because they are cumulative. "An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in section 15065(a)(3)." (14 CCR § 15230(a)). "'Cumulatively considerable' means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (14 CCR § 15065(a)(3)).

"The Agency must interpret this requirement in such a way as to afford the fullest possible protection of the environment." (*Friends of Eel River, supra*, (2003) 108 Cal.App.4th at 868, quotation marks omitted). In *Friends of the Eel*, the EIR was inadequate because the agency did not sufficiently consider the cumulative effects of FERC relicensing proposals, which would decrease flow in the river and exacerbate the environmental effects caused by the project. (*Id.* at 869-870).

Here the temperature TMDLs are future projects that will exacerbate the environmental effects of the current project under consideration, *i.e.* the proposed flow criteria. They will reduce the amount of water available for agriculture and drinking water, lower groundwater levels, dry up wells, and otherwise make the effects of the project under review much worse.

There are undoubtedly significant, and they are not speculative. The TMDLs are required by federal law, and the Board has established an expected completion date.

For these reasons, the effects of the temperature TMDLs must be considered as cumulative effects.

**L. The Board Must Consider a Reasonable Alternative: Providing Turbidity by Relaxing Restrictions on Construction Sites.**

According to the Board, one of the benefits of increasing the flow is increased turbidity, which can reduce predation:

[I]t is expected that large flow pulses during the spring time period will help juvenile salmonids migrate successfully to the Delta as a result of increased velocities, increased turbidity pulses, and increased volumes of water, all of which can reduce predation vulnerability. (DRSED at ES-38)

Turbidity is a measure of how much or how little light passes through a water sample. In this case, turbidity in the river comes from mud, which is often referred to as “sediment”. Higher concentrations of mud or sediment in the water protect against predation. Serious concerns have been raised about the erosion of sediment from the Delta and Suisun Marsh, and the need to additional sediment to offset the loss of valuable habitat and to raise the levels of the wetlands to keep pace with rising sea levels.

The goal of increasing protective turbidity can be achieved far more easily than through the proposed objective. The Board has issued a general construction stormwater permit that requires construction sites to implement measures, known as “best management practices” or “BMPs”, that reduce the amount of mud discharged into waters. ([http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/construction.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml)). By imposing a “numeric action level” of 250 NTU for turbidity, the stormwater permit forces construction sites to reduce their discharges of turbidity.

It make no sense for the Board to take water away from water users for the purpose of *increasing* turbidity, while at the same time forcing construction sites to take action that has the effect of *reducing* turbidity.

To be sure, the proposed flow objectives would do more than increase turbidity. But the other things it would do are all directed at the same goal, which is to increase the populations of salmon. The increase in turbidity that could be achieved by eliminating the turbidity restrictions on construction sites appears likely to be far greater than the increase that could be obtained with the proposed flow objective. It is possible that the greater protection provided by this increase in turbidity would by itself achieve the objective of the flow increase. Because the Board has not considered this alternative, it cannot say.

The Board should therefore evaluate the alternative of protecting salmon by increasing turbidity from construction sites rather than the flow objective.

**M. The Proposed Flow Objectives Commit Waste in Violation of Article X, Section 2 of the California Constitution.**

In 1926, Amelia Herminghaus prevailed in her suit against Southern California Edison. (*Herminghaus v. Southern California Edison Co.* (1926) 200 Cal. 81). (*Herminghaus*) Ms. Herminghaus asserted, and the trial court found, that in the spring the San Joaquin River flooded her land and left a very fertile silt deposit:

the natural flow of the waters of the San Joaquin River is variable in quantity, being more abundant during the period of rainfall in the winter season and also during the late spring and summer when the snows upon its watershed in the high Sierras melt and contribute their accretion to said river; that during these periods in the augmented natural flow of said river the waters thereof flowed naturally out and over the plaintiffs' said lands and saturated the same and deposited thereon a very fertile silt which enriched said land and caused an abundant growth of grasses thereon as the same would not have grown except for said natural irrigation by the overflow of said waters and the deposit of said silt...(*Id.* at 93).

Southern California Edison wanted to build a system of dams and reservoirs upstream, which would have captured the peak spring flows, thereby preventing them from flooding the land owned by Ms. Herminghaus and depriving her of that very fertile silt deposit. The California Supreme Court ruled that the riparian right of Ms. Herminghaus prevailed. (*Id.* at 108-113).

"The voters overturned *Herminghaus* in the 1928 election by adopting article X, section 2...." (*Capistrano Taxpayers Assn., Inc. v. City of San Juan Capistrano* (2015) 235 Cal.App.4th 1493, 1509). *Herminghaus* authorized what the dissent "perceived to be a plain waste of good water":

The Herminghaus decision, as Justice Shenk wrote in his dissent there, allowed downstream riparian landowners—basically farmers owning land adjacent to a river—to claim 99 percent of the flow of the San Joaquin River even though they were actually using less than 1 percent of that flow. To compound that anomaly, the downstream riparian landowners' claims came at the expense of the efforts of an electric utility company to generate electricity for general, beneficial use by building reservoirs at various points upstream on the river. In the process of upholding the downstream landowners' "riparian rights" over the rights of the electric company to use the water to make electricity, the Herminghaus majority invalidated legislation aimed at preserving water in the state for a reasonable beneficial use, thereby countenancing what Justice Shenk perceived to be a plain waste of good water. (*Id.* at 1509).

Here the Board's position is remarkably close the position of Ms. Herminghaus. It wants to take as much as 60% of the flow of the river to increase flooding along of the riverbanks, just as Ms. Herminghaus did, even though it would be committing a huge amount of water for a few fish. The proposed project, in short, is a plain waste of good water.

Even before *Herminghaus*, the California Supreme Court had considered the demands of the City of Antioch, which wanted a flow of 35,000 cubic feet per second maintained so that it could take less than one cubic foot per second of water. (*Antioch v. Williams Irrigation Dist.* (1922) 188 Cal. 451, 461). The Court reasoned that it “would be extremely unreasonable and unjust to the inhabitants of the valleys above and highly detrimental to the public interests besides”, and held that “an appropriator of fresh water from one of these streams at a point near its outlet to the sea does not, by such appropriation, acquire the right to insist that subsequent appropriators above shall leave enough water flowing in the stream to hold the salt water of the incoming tides below his point of diversion.” (*Id.* at 465).

The Board will undoubtedly point to the *Joslin* case, in which the California Supreme Court held that although “what is a reasonable use of water depends on the circumstances of each case, such an inquiry cannot be resolved *in vacuo* isolated from statewide considerations of transcendent importance.” (*Joslin v. Marin Municipal Water Dist.* (1967) 67 Cal.2d 132, 140). But *Joslin* was a pro-dam case, not a pro-fish case. Mr. *Joslin*, like Ms. *Herminghaus*, relied on spring floods to bring his land a valuable benefit. For Mr. *Joslin*, the benefit was gravel, which he harvested and sold. When the water district built a dam and reservoir (Nicasio Reservoir), his supply of gravel was cut off, and he sued for damages. The California Supreme Court held that his use had become unreasonable, and therefore that he was not entitled to damages. (*Id.* at 141).

In *Joslin*, the California Supreme Court recognized the transcendent importance of conserving water in reservoirs:

Paramount among these [statewide considerations of transcendent importance] we see the ever increasing need for the conservation of water in this state, an inescapable reality of life quite apart from its express recognition in the 1928 amendment. (*Id.* at 140).

Even the Mono Lake case, which greatly expanded the Board’s powers and the public trust doctrine, acknowledged that need “to make efficient use of California’s limited water resources”:

The population and economy of this state depend upon the appropriation of vast quantities of water for uses unrelated to in-stream trust values. California’s Constitution,<sup>14</sup> statutes,<sup>15</sup> decisions,<sup>16</sup> and commentators<sup>17</sup> all emphasize the need to make efficient use of California’s limited water resources: all recognize, at least implicitly, that efficient use requires diverting water from in-stream uses. Now that the economy and population centers of this state have developed in reliance upon appropriated water, it would be disingenuous to hold that such appropriations are and have always been improper to the extent that they harm public trust uses, and can be justified only upon theories of reliance or estoppel. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 446).

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<sup>14</sup> See, e.g., Cal. Constitution Art. X, § 2.

<sup>15</sup> See, e.g., Cal. Water Code, §§ 100, 104.

<sup>16</sup> See, e.g., *Waterford Irrig. Dist. v. Turlock Irrig. Dist.* (1920) 50 Cal.App. 213.

<sup>17</sup> See, e.g., Hutchins, *The Cal. Law of Water Rights*, *op. cit. supra*, p. 11

Here, the Board proposes to return to the days of *Herminghaus*, where dams were prohibited from diverting the natural flow, and where vast quantities of water were wasted in order to obtain small benefits. Because they would require so much water for so few fish, the proposed flow objectives would be an unreasonable use in violation of Article X, § 2 of California's Constitution. Rather than honoring Article X, § 2 and its historical importance in allowing for the construction of reservoirs and the storage of water for agricultural and drinking water supply, the Board threatens to use that provision against anyone who replaces lost surface water by pumping more groundwater:

In order to help ensure that actions taken in response to implementation of the LSJR flow objectives do not result in unreasonable redirected impacts to groundwater resources, the State Water Board will take actions as necessary pursuant to its authorities, including its authorities to prevent the waste, unreasonable use, unreasonable method of use, and unreasonable method of diversion of water (Cal. Const., art. X, § 2; Wat. Code, §§ 100, 275) and to enforce the Sustainable Groundwater Management Act (SGMA) (Wat. Code, § 10720 et seq.). (DRSED, Appx. K at 28).

The Board's threat to take away existing rights to divert and store water in dams, and its insistence on the proposed flow objectives, arise from a quasi-religious belief that salmon are more important to anything else. Protecting the environment, the Board might say, is the consideration of statewide importance that is transcendent over everything else—salmon over everything. But the Board has not provided any substantial evidence on the statewide need for those salmon. What is the economic value of those salmon? Why is the Delta's "crisis", which apparently refers to its declining fish populations, more important than the cutting off of drinking water to poor small communities in the Central Valley and to the City and County of San Francisco? Why are those fish more important than the loss of water essential to farmers in the Central Valley, and to all those people who depend on farming for their livelihoods? The Board's quasi-religious belief should not dictate California's water policy.

#### **N. The Proposed Flow Objectives Violate the Clean Water Act.**

As explained above, the proposed flow objectives are not true water quality objectives, but rather are water rights determinations. Couching a water rights determination as a water quality objective violates the federal Clean Water Act:

Consistent with section 101(g) and 518(a) of the Clean Water Act, water quality standards shall not be construed to supersede or abrogate rights to quantities of water. (40 CFR § 131.4(a)).

The proposed objectives also violate the Clean Water Act because they do not protect the beneficial uses. The Board must adopt objectives that protect the beneficial uses:

States must adopt those water quality criteria that protect the designated use. Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. (40 CFR § 131.11(a)).

EPA reviews water quality objectives to ascertain whether they are based on sound science and protect the beneficial uses:

Under section 303(c) of the Act, EPA is to review and to approve or disapprove State-adopted water quality standards. The review involves a determination of: ...

- (2) Whether the State has adopted criteria that protect the designated water uses based on sound scientific rationale consistent with §131.11. (40 CFR § 131.5(a)).

Here, as explained elsewhere, the proposed objectives are not based on a sound scientific rationale. Nor do they protect the beneficial uses.

As the Board acknowledges, the proposed flow objectives cannot produce full compliance with the temperature objectives. (DRSED at ES-41). At the mouth of the San Joaquin River, the temperature objective would be achieved only about half the time. (*Id.*) If the temperature objective is really needed to protect the beneficial use—apparently “Cold Freshwater Habitat (“COLD”)” (DRSED, app. K at 11)—then the establishment of flow objectives (which are more like programs of implementation) that do not attain the temperature objective is a violation of the Clean Water Act.

The Clean Water Act specifies that there should be an interim goal that, “wherever attainable... provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water”. (Clean Water Act § 101(a)(2), 33 USC § 1251(a)(2), emphasis added). Here, the COLD beneficial use appears not to be attainable. Beneficial uses (which the Clean Water Act refers to as “designated uses”) should be removed.

The Board was not and is not required to maintain the COLD use:

States may adopt sub-categories of a use and set the appropriate criteria to reflect varying needs of such sub-categories of uses, for instance, to differentiate between cold water and warm water fisheries. (40 CFR § 131.10(c)).

A use may be removed if it is not being attained and at least one of several specific conditions is met:

States may remove a designated use which is not an existing use, as defined in § 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because:

- (1) Naturally occurring pollutant concentrations prevent the attainment of the use; or;
- (2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the

discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or

(3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or

(4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or

(5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or

(6) Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact. (40 CFR § 131.10(g)).

The lower San Joaquin River meets several of these conditions, including those for low flow conditions, human caused conditions, hydrologic modifications, physical conditions, and widespread economic harm. The Board should therefore perform the use attainability analysis to determine whether the COLD use can be attained. If it cannot, then there is no reason to generate the extreme costs and hardships that the proposed flow objectives would produce.

Rather than specify a balancing of objectives, the Clean Water Act requires that where there are conflicts the most sensitive use must be protected:

For waters with multiple use designations, the criteria shall support the most sensitive use. (40 CFR § 131.5(a)).

Here the most sensitive use is surely the provision of drinking water to people, especially to poor communities. Surely the production of another 1100 fish, or any number of fish, cannot put human lives in jeopardy. Here the Board acknowledges that the proposed objectives will lower groundwater, thereby drying up wells that are used for drinking water as well as agricultural supply. Cutting off the supply of drinking water from farmers and communities does not “support the most sensitive use” of Municipal and Domestic Supply (MUN)”. (DRSED, Appx. K at 10; San Joaquin River Basin Plan at II-1.00).

To comply with the Clean Water Act, the Board must do more than say that no one will really die of thirst, that they will find some way of getting water. The question is whether this most sensitive use is being adequately protected. The Board has acknowledged that people will be deprived of their drinking water. That is enough to establish a Clean Water Act violation. The use is not being protected.

**O. The DRSED's Program of Implementation Will Constitute in a Compensable Taking under the Fifth Amendment.**

The DRSED provides that when the LSJR flow objectives are implemented, the Board “will include minimum reservoir carryover storage targets or other requirements...,” (DRSED, Appx. K, p. 28), including things like minimum end of September storage requirements, minimum diversion levels, and maximum allowable draws from storage (DRSED, Appx. F, p. F.1-31). While the DRSED does not establish any specific carryover storage or other requirements for any party or reservoir, it notes that such requirements will be needed because the additional streamflow requirements of the LSJR alternatives “require adjustment of parameters to ensure feasibility for the 82-year simulation so that the reservoirs are not drained entirely in the worst droughts of record.” (DRSED, Appx. F, p. F.1-31). And while the scope and magnitude of such requirements are yet unknown, they are expected to reduce the available water supply for consumptive use, particularly in dry and critical years. (Jan.3, 2017 Hearing Tr., p. 24, ln. 18-24).

Additionally, the DRSED provides that in some cases, the volume equivalent to that which would have been released via the unimpaired flow percentage from February through June can be treated as a block of water and a portion released outside of the February through June period, including in the following year. (DRSED, Appx. K., p. 30-31). For such a scheme to work, MID and TID, as owners of the New Don Pedro Dam and reservoir, will be required to divert into storage a quantity of water, maintain such quantity of water in storage, and then release such water from the dam at a later date.

All of these actions – requiring MID and TID to divert water into storage, requiring MID and TID to leave water in storage and refrain from diverting it for consumptive use, and requiring MID and TID to release water from storage for the benefit of fish and wildlife located downstream – constitute compensable takings under the Fifth Amendment to the United States Constitution.<sup>18</sup>

**P. MID and TID Have Private Property Rights Taken for a Public Purpose.**

To constitute a compensable taking under the Fifth Amendment, the government must take private property for public use. (*Klamath Irr. v. U.S.*, 129 Fed. Cl. 722 (2016)). The physical facilities necessary to effectuate the Board’s plan – the dams, canals, drains and other facilities MID and TID use to divert, store and deliver water from the Tuolumne River – are all private property facilities owned, operated, built and maintained by MID and TID. Further, the pre-and post-1914 appropriative water rights held by MID and TID are private property which cannot be taken by government action without just compensation. (See, e.g., *United States v. State Water Res. Control Bd.* (1986) 182 Cal.App.3d 82, 100).

The commandeering of MID and TID’s storage at New Don Pedro Dam and reservoir and subsequent release of stored water for the benefit of fish and wildlife downstream will be

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<sup>18</sup> Compensation will be required even if the appropriation is based upon the SWB’s alleged public trust authority. (See *National Audubon Soc. v. Superior Court* (1983) 33 Cal.3d 419, 440, citing *Illinois Central Railroad Co. v. Illinois*, 146 U.S. 387, 455, for proposition that use of public trust to order removal of improvements on public trust lands would require compensation.

considered a public use for purposes of the Fifth Amendment. (*Casitas Mun. Water Dist. v. United States* (Fed.Cir. 2008) 543 F.3d 1276, 1292-1293.) (*Castias III*.)

**Q. The DRSED's Program of Implementation Constitutes a Physical Taking.**

Regulatory action by a governmental entity is considered a per se, physical taking if it (1) requires the owner to suffer a permanent physical invasion of property, no matter how small (*Loretto v. Teleprompter Manhattan CATV Corp.*, (1982) 458 U.S. 419, 434-435, or (2) completely deprives the owner of all economically beneficial use of the property. (*Lucas v. S.C. Coastal Council*, (1992) 505 U.S. 1003, 1019). The carryover storage and withdrawal limitations of the DRSED constitute permanent physical invasions of MID and TID's New Don Pedro reservoir. Instructing MID and TID how much water they must store in New Don Pedro for future release to satisfy non-consumptive uses, and limiting the amount of stored water that they can release from storage for consumptive uses, are clear physical invasions of New Don Pedro Dam and reservoir by the Board. For all intents and purposes, the Board will have taken for itself some of the available storage space in New Don Pedro which currently belongs to MID and TID. The DRSED thus constitutes a "classic taking" via physical appropriation of available storage space in New Don Pedro Reservoir by the Board. (See, e.g., *United States v. Security Industrial Bank*, (1982) 459 U.S. 70, 78).

The requirement to release water stored in New Don Pedro Reservoir for purposes of fish and wildlife enhancement likewise constitutes a *per se*, physical taking of water rights owned by MID and TID. Once the stored water is taken and released for benefit of fish and wildlife, it is forever gone from the Districts, no different than if the Board piped the water from New Don Pedro to a different location. (*Casitas III, Supra*, at 1294). The government caused storage and release of water away from MID and TID will be analyzed under the physical takings rubric. (*Casitas III, Supra*, at 543 F.3d 1276, 1298; See also *Washoe Cty., Nev. v. U.S.*, 319 F.3d 1320, 1326 (Fed.Cir.2003) [physical taking where government has "decreased the amount of water accessible by the owner of the water rights."]).

Once the DRSED is adopted and allocates responsibility for implementing the DRSED's requirements, MID and TID will seek compensation for both the value of the storage space in Don Pedro reservoir taken by the Board, as well as the value of the water rights taken.

**R. Fish and Game Code Section 5937 Does Not Require the Release of Stored Water.**

The DRSED provides that in some cases, the volume equivalent to that which would have been released via the unimpaired flow percentage from February through June can be treated as a block of water and a portion released outside of the February through June period, including in the following year. (DRSED, Appx. K., p. 30-31). In either case, although the STM Working Group will be consulted, the Board's Executive Director can approve such a scheme upon the recommendation of a single member of the STM Working Group. (DRSED, Appx. K, p. 29-30, items (b) and (c)). Obviously, for such a scheme to work, the dam owner would be required to divert into storage a quantity of water, maintain such quantity of water in storage, and then release such water from the dam at a later date. During the public hearings regarding the DRSED, several parties raised concerns about the Board's ability to require the release of stored

water for the benefit of fish and wildlife beneficial uses located downstream. In response, Chairwoman Marcus identified Fish and Game Code Section 5937 as a source of the Boards's authority to require the release of stored water. (*See, e.g.*, Dec. 16, 2016 Tr., p. 216, ln. 3-11; Dec. 19, 2016 Tr., p. 152-153). The Chairwoman is incorrect, and Fish and Game Code Section 5937 does not authorize the Board to require the release of stored water.

Fish and Game Code Section 5937 requires dam owners to allow water to pass through a fishway, or in the absence of a fishway, pass over, around or through a dam to keep fish below the dam in good condition. Section 5937 does not mention stored water at all. As explained by the courts that have construed Section 5937, it is a limitation on the amount of water that can be appropriated from a stream.

For example, in *Natural Resources Defense Council v. Patterson*, 791 F.Supp.1425, 1435 (E.D. Cal. 1992), the court explained that

“[w]ithout deciding whether section 5937 is a water appropriation statute, vel non, the statute's plain language demonstrates that it was intended to limit the amount of water a dam owner desiring to collect for eventual irrigation may properly impound from an otherwise naturally flowing stream. Thus, it is a prohibition on what water the ... owner of the dam, may otherwise appropriate ... Put another way, ..., 5937 preserves from appropriation ... an amount of water necessary for instream uses ...”

A similar finding was made in *California Trout, Inc. v. State Water Resources Control Bd.* (1989) 307 Cal.App.3d 585, 599:

[t]hese provisions straightforwardly limit the amount of water that may be appropriated by diversion from a dam ... by requiring that sufficient water first be released to sustain the fish below the dam.”

Both of these cases correctly determined that Section 5937 is a limit on the appropriation of the natural flow of water in a stream or river. It does not require the release of stored water from a reservoir.

This interpretation is supported by the Board's own regulation designed to implement Section 5937, which states:

In the case of a reservoir, this provision shall not require the passage or release of water at a greater rate than the unimpaired natural flow into the reservoir.” (Cal. Admin. Code, tit. 23, § 782).

The plain language, implementing regulation, and controlling authorities clearly indicate that Section 5937 does not mandate the release of stored water to keep fish below a dam in good condition.

**S. The Carryover Storage Provisions Contained in the DRSED are Constitutional Impairments of the 4<sup>th</sup> Agreement Between MID, TID and the City and County of San Francisco.**

In 1966, MID, TID and CCSF entered into the 4<sup>th</sup> Agreement, by which CCSF participated financially in the costs of construction of New Don Pedro Dam and reservoir. (DRSED, Appx. L, p. L-3). Pursuant to the 4<sup>th</sup> Agreement, MID, TID and CCSF agreed to construct New Don Pedro reservoir to a capacity of 2,030,000 AF, with CCSF paying a significant portion of the costs of construction and other related costs in exchange for water banking privileges in New Don Pedro reservoir. The water banking privileges, the “principal benefit to be derived by [CCSF] in return for its payment of a substantial part of the cost” of construction, enable CCSF to release water to MID and TID: (1) in advance of the time when releases are required under the Raker Act; (2) when such releases can be stored in New Don Pedro Reservoir; and (3) to subsequently intercept or divert equivalent amounts of water which it would otherwise be required to pass to MID and TID to satisfy their superior water rights. (4th Agreement, Art. 7, p. 7; DRSED, Appx. L, p. L-3). As recognized by the Board, CCSF does not hold water rights to, nor physically divert from, New Don Pedro reservoir. All water in New Don Pedro reservoir is owned by MID and TID. (DRSED, Appx. L, p. L-3).

The carryover storage requirements established in the DRSED, including end of September storage targets, maximum allowable withdrawal from storage, and end of drought refill criteria (*See, e.g.*, DRSED, Appx. F, p. F.1-31-32) will result in storage levels in New Don Pedro being higher than under current conditions. As a result, there will be fewer times that there is room for in New Don Pedro reservoir for MID and TID to store water that is released by SF in advance of when it is required to make releases under the Raker Act. Since the capability of putting early releases into storage is a prerequisite to CCSF making such early releases, the carryover storage requirements will significantly impair CCSF’s “principal benefit” under the 4<sup>th</sup> Agreement.

Article I, Section 9 of the California Constitution prohibits legislative or judicial actions which significantly impair the obligations of an existing contract. (*Bradley v. Superior Court* (1957) 48 Cal.2d 509, 519). Since the Board’s DRSED is a quasi-legislative act, its significant impairment of the obligations and benefits of the 4<sup>th</sup> Agreement violates Article I, Section 9 of the California Constitution.

**T. The DRSED Cannot Be Made Applicable to MID and TID Via the Section 401 Process.**

The DRSED states in several places that its flow and carryover storage requirements may be implemented against MID and TID via the Clean Water Act Section 401 process. (*See, e.g.*, Appx. K, p. K-26). The Board has the authority and duty to certify that any discharge from MID and TID’s operation of the Don Pedro Project under a new FERC license will comply with the CWA and any appropriate water quality requirement of State law. (33 U.S.C. 1341 (a), (d)). As explained below, much of the DRSED does not fall within this authority granted to the Board by Congress and thus cannot be applied to MID and TID via the Section 401 process.

**1. The Alleged Harms to Native Fish To Be Rectified by the DRSED Is Not a Point-Source Issue that Can Be Addressed Via the 401 Process.**

The CWA regulates point-source pollution, and “[n]onpoint source pollution is not regulated directly by the [CWA] ...” (*ONDA v. Dombeck*, (9<sup>th</sup> Cir. 1998) 172 F.3d 1092, 1096). Section 401 certification thus does not apply to nonpoint source pollution. (*Id.* at 1097-1099). Traditionally, harms to fish allegedly caused by the existence of dams have been considered nonpoint source pollution. (*See United States ex rel. TVA v. Tenn. Water Quality Control Bd.*, (6<sup>th</sup> Cir. 1983) 717 F.2d 992, 999); *See also, Nat’l Wildlife Fed’n v. Gorsuch*, (D.Ci. Cir. 1982) 693 F.2d 156, 177). Significantly, the Board has relied upon this very distinction to argue that EPA cannot promulgate water quality objectives based upon streamflow under the CWA. According to the Board,

“These cases demonstrate ... that **changes in water quality caused by dams are the result of nonpoint sources of pollution**...Where the predominant or sole cause of pollution in a water body is operation of water diversions, as is the case with the proposed salmon smolt survival criteria ..., adoption of water quality standards under the Clean Water Act is not an appropriate method of regulation.” March 11, 1994 letter of the Board to U.S. Environmental Protection Agency, (p. 28, cited by the Board in its 2006 WQCP, p. 4, fn. 3)(emphasis added).

Controlling case law and Board policy<sup>19</sup> both demonstrate that alleged impacts to fish from the existence of dams is considered a non-point source of pollution. Since the Section 401 process does not apply to nonpoint source pollution, the flow and carryover storage requirements of the DRSED which are designed to provide floodplain, temperature and other benefits for native anadromous fish species cannot be applied to MID and TID via the Section 401 process.

## **2. Section 401 Applies Only to Water Quality Issues, Not Streamflow, Operations or Water Rights.**

As noted above, the Section 401 process applies to ensure a federal permittee complies with the CWA and any appropriate water quality requirement of State law. (33 U.S.C. 1341 (a), (d)). In this case, the UIF and carryover storage requirements proposed to be applied against MID and TID are not related to water quality and thus cannot be implemented via the Section 401 process.

For purposes of the CWA, “water quality” does not include impacts associated with reductions in freshwater flows caused by dams and diversions. (33 U.S.C. 1252(b); 33 U.S.C. 1313(c)). Thus, Board cannot rely on the authority of Section 401(a) for authority to apply the DRSED against MID and TID.

Nor can the Board rely upon the authority of Section 401(d), which enables a state to provide water quality certification to assure that the permitted activity complies with “any other appropriate requirement of State law...” This provision is limited in scope, and only authorizes a state to impose conditions “affecting water quality in one manner or another.” (*American Rivers v. FERC*, (2d Cir. 1997)129 F.3d 99, 107; *Arnold Irr. Dist. v. Department of Environmental*

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<sup>19</sup> Because of this policy, the holding of *S.D. Warren Co. v. Maine Bd. Of Environmental Prot.*, 547 U.S. 370 (2006) is not controlling here. In that case, the parties conceded that the pollution at issue was from a point-source. (*See Oregon Natural Desert Ass’n v. United States Forest Serv.*, 550 F.3d 778, 783-784 (9<sup>th</sup> Cir. 2008)). In this case, no such concession has been made, and in fact, the SWB has made the opposite assertion.

*Quality*, (1986) 717 P.2d 1274, 1279; *Matter of Eastern Niagara Project Power Alliance v. New York State Department of Environmental Conservation*, (2007) 42 A.D.3d 857, 859-860). In this case, it is clear that the flow and carryover storage requirements are not related to water quality, but rather are matters of streamflow, water rights, and operations of dams and diversions.

In 1994, EPA published a proposed rule to protect fish migration and protect cold water habitat pursuant to CWA Section 303(c), 33 USC 1313 (c)). In the proposed rule, EPA suggested that the Board should implement such criteria by amending water rights permits. These “salmon smolt survival” standards included both export limitations and minimum streamflow requirements. (59 Fed Reg. 810, 825-826 (January 6, 1994))<sup>20</sup>. In comments filed on March 11, 1994, the Board objected to the proposed rule, arguing strenuously that because the “salmon smolt survival criteria” were flow and export standards, they were not properly considered “water quality” issues for purposes of the CWA. The Board argued, for example:

- “the salmon smolt survival standards ... take direct control of the heart of the State’s water rights and water distribution system.” (p. 9)
- “Streamflow Matters Are Not To Be Regulated By EPA” (section heading, page 10).
- “For purposes of the Clean Water Act the proposed criteria for ... salmon smolt survival are streamflow requirements, not water quality criteria.” (p. 10).
- The only means of meeting EPA’s ... salmon smolt criteria would be for the State to regulate water project operations and allocate water storage and streamflow ... for instream flows.” (p. 11).
- “It is beyond dispute that outflow and water project operations are not water quality matters.” (p. 11-12).
- That the EPA had written that impacts caused by reductions in streamflow were a “stream flow/water allocation issue, not a water quality issue under Section 303.” (p. 15).
- “Here, EPA apparently wants the State to ‘work back’ and cut diversions to attain the water quality standards. This method is inappropriate...” (p. 26).

Each if the above statements apply equally to the UIF and carryover storage requirements of the DRSED. Although described as being promulgated as part of a water quality control plan amendment, clearly such requirements have nothing to do with “water quality” as described and understood in the CWA. As a result, the Board will not be able to implement the provisions of the DRSED against MID and TID using Section 401(d).<sup>21</sup>

Because the UIF and carryover storage requirements are not related to water quality, they exceed the authority delegated by Congress. This is significant since Section 401 is the only opportunity states get to expressly affect conditions imposed on federal power licenses; all other authority is vested in FERC. (See, e.g., *Karuk Tribe of Northern Calif. V. California Regional Water Quality Control Bd.*, (2010) 183 Cal.App.4<sup>th</sup> 330, 359-360 [CWA gives the states a

<sup>20</sup> SWB Chairwoman Marcus was the regional administrator for EPA Region IX at the time.

<sup>21</sup> *PUD No. 1 v. Wash. Dep’t of Ecology*, 511 U.S. 700 (1994) will not be of any assistance to the SWB. While the Supreme Court did conclude that Section 401(d) could be used to impose minimum instream flow requirements, in that case such requirements were adopted pursuant to CWA Section 303, 33 U.S.C. 1313. (*Id.* at 712-713). However, the SWB takes the position that Section 303 “is not intended to regulate pollution caused by reduction of fresh water flow.” (March 11, 1994 letter, p. 10; cited as current view at 2006 WQCP, p. 4, fn. 3).

significant role in federal hydropower licensing, but this is the only area Congress has allowed]; *American Rivers, supra*, 129 F.3d at 111 [noting the preemptive reach of the Federal Power Act had been diminished by Section 401]; *First Iowa Hydro-Elec Coop v. FPC*, 328 U.S. 152, 180 (1946) [detailed provisions of federal plan for regulation of power leave no room for conflicting state regulation]). This means that while the Board can participate in the relicensing process of Don Pedro, and provide FERC with suggestions and comments as to what the streamflow downstream of Don Pedro should be, FERC retains sole and exclusive jurisdiction to establish minimum streamflow and other conditions of the license. As explained by the U.S. Supreme Court when California made a prior effort to require flow requirements on a FERC-licensed project,

“we conclude that the California requirements for minimum in-stream flows cannot be given effect and allowed to supplement the federal flow requirements. ... As Congress directed in FPA 10(a), FERC set the conditions of the license, including the minimum stream flow, after considering which requirements would best protect wildlife and ensure that the project would be economically feasible, and thus further power development. Allowing California to impose significantly higher minimum stream flow requirements would disturb and conflict with the balance embodied in that considered federal agency determination. ... we agree that allowing California to impose the challenged requirements would be contrary to Congressional intent regarding [FERC’s] licensing authority and would ‘constitute a veto of the project that was approved and licensed by the FERC.’” *California v. FERC*, 495 U.S. 490, 506-507 (1990))(citations omitted).

Even if adopted, the UIF and carryover storage requirements cannot unilaterally be applied against MID and TID. Absent agreement by FERC, and inclusion of such requirements by FERC in any new license issued, the UIF and carryover storage requirements set forth in the DRSED will simply not apply to MID and TID.

### **3. Section 401 Certification is Likely Unnecessary for New Don Pedro**

Generally, an applicant for a FERC license for the operation of a hydroelectric facility that may result in a discharge into navigable waters must obtain certification from the state that the project will comply with state water quality standards. (33 U.S.C. 1341). However, not every circumstance requires a 401 certification from the state, particularly those that will either reduce the amount of water currently flowing through the turbines, or for which an increase may occur that will not have an adverse impact on the water quality of the discharge. Either of these exceptions will likely apply to New Don Pedro.

### **4. MID and TID May Apply for a New License that Will Reduce the Amount of Amount of Water Discharged By New Don Pedro Dam and Reservoir, Thus Nullifying the Need for Certification Under Section 401.**

As part of their effort to relicense the Don Pedro hydroelectric project, MID and TID may request a new license that results in less water being passed through the turbines than happens under the existing license. Such effort would eliminate the existence of a “discharge” as defined under the Clean Water Act. (*North Carolina v. FERC*, 112 F.3d 1175, 1188 [“A decrease in the volume of water passing through the dam turbines cannot be considered a ‘discharge’ as that

term is defined in the CWA.”)](citation omitted). Since a “discharge” is a prerequisite for Section 401 to apply, MID and TID will not need to obtain, and FERC will be able to issue a new license, without first obtaining a water quality certification from California. (*Id.*, p. 1189; *See also* 105 FERC ¶ 61,226 (2003) [“new certification would be required only if extending the license term would result in a new or greater discharge from the project.”]).

**5. Even if MID and TID Seek a New License that Would Keep the Flows through the Dam Substantially the Same or Even Result in a Slight Increase, Section 401 Certification May Not Be Needed.**

Not all increases in flows from hydroelectric projects will trigger the need for Section 401 certification. Under FERC’s rules, only those increases which will have a material adverse impact on the water quality of the discharge require Section 401 certification. (106 FERC ¶ 61,037 (2004)). For example, a licensee sought permission to replace its turbine generators, which would increase the project’s hydraulic capacity and enable water to be discharged more quickly. Parties argued that a new Section 401 certification was necessary, but FERC disagreed. FERC found that while increased discharges could occur, the “nature of the discharge would not change.” FERC also found that the environmental analysis accompanying the proposal revealed that the changes would have no adverse impact to the water quality. (106 FERC ¶ 62,014 (2004)).

For the Don Pedro hydroelectric project, MID and TID are confident that the studies they have performed at FERC’s direction, the proposed new terms and conditions, and the supporting environmental analysis under NEPA and CEQA will demonstrate that the nature of the discharge will not materially change from what it is now, and even if there is a slight increase in certain circumstances in terms of rate or volume, such increase will not result in a material adverse impact. As such, certification under Section 401 will not be required, and thus the DRSED will not be applied to MID and TID via Section 401.

**U. The DRSED has Improperly Exercised Quasi-Adjudicatory Authority.**

The DRSED is a water allocation decision that acts upon the USBR’s and the CDWR’s water rights by using the USBR/CDWR operations model, CalSim22, as the basis for the Board’s WSE. The DR SED ‘baseline’ established by CalSim has the USBR and the CDWR continuing

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<sup>22</sup> It is also objectionable that Mr. Grober was a *member* of the CalSim peer review panel; that he did not speak up at the Technical Workshop to disclose this information and arguable expertise; and that he is also a party promulgating a regulation derived from the same model that he peer reviewed, which serves as an undisclosed potential, if not actual, conflict of interest because Mr. Grober’s prior determinations about the acceptability of the model likely clouded his judgment as to its utility or acceptability in the WQCP process and may be violative of Health & Safety Code 57004(c)’s prohibition that “No person may serve as an external scientific peer reviewer for the scientific portion of a rule if that person participated in the development of the scientific basis or scientific portion of the rule.” Here, Mr. Grober has served as the scientific peer reviewer of the CalSim model, which is the parent and validating model to the Board-created WSE model. CalSim serves as the scientific basis to setting the flow objectives insofar as the WSE is the sole tool to quantify and analyze water flow, and the LSJR Flow Objective is solely and uniquely a flow objective. The Board-Staff chose the WSE model to be the sole resource of information to describe the sole tool to accomplish the LSJR Objective. The DRSED cites its compliance with this statute and must comply if it so represents. Otherwise, the Revised DRSED is materially misleading if it purports to comply with a statute that it has not.

to receive their customary entitlements to water as well as an additional, fictional water supply that represents the volume of water that would have been used to comply with water quality obligations but-for the USBR's failure to ever actually meet those same obligations. The WSE bases all analyses upon this assumption and it is a fatal flaw to the DRSED's credibility.

To the extent the DRSED specifically identifies the USBR as the water right holder subject to the Delta Salinity Objective; then identifies a relaxation in the salinity standard that explicitly correlates with a decrease in the USBR's environmental flow obligation; then identifies a "complementary" benefit of the LSJR Objective to the Delta Salinity Objective because of the increased flows from the LSJR Objective; the DRSED has engaged in a violation of due process because there is an explicit water allocation decision being made and other water right holders or affected parties are not being provided the opportunity to be noticed of this change and afforded an opportunity to a hearing to specifically deal with this change.

The DRSED must explicitly document in the record which findings or conclusions are based on an exercise of quasi-legislative authority and which are based on the quasi-adjudicative authority. There are separate legal obligations with respect to each type of authority.

**V. The Board Impermissibly Excluded The Public From Discussing CalWater Fix During The Public Hearings.**

The Board explicitly and repeatedly excluded information that members of the public attempted to provide during the public hearings about CalWaterFix, a topic of discussion within the DRSED itself, by falsely claiming that the Board Directors were legally prohibited from receiving such information.

Chair Marcus repeatedly stated throughout the proceeding that the Board would not receive any information about the CalWaterFix proceeding, notwithstanding the DRSED's discussion of same in the cumulative impacts section. (DRSED at 17-5). The CalWaterFix description had been updated as of July 2016. (DRSED at 17-6). Further, the Revised DRSED's describes CalWaterFix as a project that is able "to affect hydrodynamics...and water quality in the Delta, including the southern Delta." Elsewhere, the DRSED states that "CalWaterFix...could also change south Delta water circulation and salinity by reducing the amount of Sacramento River water drawn into the southern Delta, thereby increasing salinity in the southern Delta." (DRSED at 17-51). The southern Delta Salinity Objective is at issue in the DRSED, which is elsewhere acknowledged as 'complementary' to the LSJR Objective.

In short, CalWaterFix is intrinsically connected to the Project as was obvious to members of the general public. It was unquestionably a proper topic for discussion at the public hearing because the DRSED contains an analysis about it. It is an astonishing lack of coordination between the drafters of the DRSED, the Board Staff that presented it and the legal advisors to the Board Directors that the Board Directors would repeatedly discourage and outright reject information from the public on this important corollary Project. The Board Directors and Staff were in error to conflate their own responsibilities to remain impartial and unbiased in the CalWaterFix proceeding with excluding *other parties'* statements and information about CalWaterFix in this WQCP process.

There are extenuating circumstances that make this rejection of relevant information particularly noteworthy. CalWaterFix's environmental analysis fails to analyze this Plan Amendment, which is astonishing in light of the interrelated, if not duplicative, water allocation issues. Also, both proceedings (CalWaterFix and this Plan Amendment) are active proceedings being heard separately but simultaneously before the Board.

However, the WQCP is the broader environmental analysis between the two and the only analysis of the two that addresses the impacts of CalWaterFix in the broader environmental context of the Plan Area. Whether due to political favoritism or a remarkable inattention to detail, it is objectionable that the sole public outlet to discuss CalWaterFix's broader impact on the environment stumbled upon an artificial and somewhat illogical roadblock to receiving any public input or to encouraging informed discussion about CalWaterFix's potential impacts on the broader environment, the Plan Area.

In particular, the CalWaterFix has the acknowledged adverse impact on the water quality of the Delta by routing relatively clean water from the Sacramento River in the North Delta via the twin tunnels to the South Delta for export. The Project as set forth in the DRSED acts as de facto mitigation for these CalWaterFix's adverse impacts by routing the clean water from the three Eastside tributaries directly to the Delta to replace the lost clean Sacramento River water. The Project (DRSED) also facilitates the CalWaterFix's stated objective to "restore and protect the ability of the State Water Project and Central Valley Project to deliver up to full contract amounts" from the South Delta.

**W. The Revised DRSED Affirmatively Imperils the Health and Safety of Domestic Well Owners and Does Not Propose Any Mitigation.**

At the November 18, 2016, Technical State Water Board Staff/Community Water Interests Meeting, the Board Staff stated that the 2010 Census identified "approximately 1.25 million people living in the area overlying the four sub-basins" with approximately 130,000 people or 11% of the overlying population relying "on domestic, that is, private wells for their drinking water supply."<sup>23</sup>

The DRSED states that domestic wells primarily draw from shallow aquifers. It further concludes that groundwater impacts will include "Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies" [DRSED at p. 9-33] and an increased likelihood for domestic wells to be taken out of operation because the groundwater contamination might simply make the water unusable or the well owner cannot afford the water treatment costs. Board Staff has also stated that "there might be potential impact(s) on domestic well users because, unlike public water systems there's no systematic monitoring of water quality in domestic wells."<sup>24</sup>

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<sup>23</sup> Nov182016 Technical Meeting (Audio Transcription, pg. 15, lns.14-23).

<sup>24</sup> Nov182016 Technical Meeting (Audio Transcription), pg.19, lns. 2-9.

Taken together, these statements identify the creation of a public health crisis as domestic well owners are likely to be impacted by the Project with contaminated wells and no identifiable manner to inform them of the contamination or a manner to remediate the harms to reestablish the well users' water supply. The DRSED cannot choose an infeasible mitigation measure which results in a multiple impacts that could each threaten public safety. Further, it cannot create a public health crisis by implementing a Project that will contaminate the domestic wells in the Plan Area, which is 75% comprised of disadvantaged communities.

#### **X. Doctrine of Coordination Under the U.S. Land Management Policy Act.**

The DRSED fails to identify the manner in which the relevant federal agencies (*e.g.*, the STM Working Group and the federal agencies that will be consulted under the Endangered Species Act) will coordinate the Plan Amendments under the Federal Land Management Policy Act's relevant provisions (43 U.S.C. § 1720) governing federal/state cooperation of private land use activities on federal lands. Here, the Project appears to necessarily require the use of the local agencies' private property (*e.g.*, reservoir storage space) that operate on federal lands (*e.g.*, Don Pedro Dam is partially located on Bureau of Land Management lands) and therefore the Board must coordinate its WQCP activities with the appropriate federal and local agencies in conformity with the FLMPA.

#### **Y. The Project Violates the Endangered Species Act.**

The DRSED did not provide information to establish how the Board's staff consulted with the requisite federal and state agencies as required under the state and federal Endangered Species Act protection statutes.<sup>25</sup>

As well documented in the Technical Comments, the DRSED clearly does not use the best available science to determine impacts to the indicator-species, the fall run Chinook salmon. The DRSED uses three tools that are severely discredited and cannot serve as substantial evidence that the Project does not adversely impact the fall-run chinook salmon. In fact, the DRSED's science only demonstrates that the Project affirmatively harms the FRCS in many respects. For example, significant mitigation must occur to simply realize 1.5 months of Project benefits to water temperatures each year. The DR SED's scientific basis to propose increased floodplain habitat only create more risks to the FRCS and not benefits. And finally, the DRSED is unable to provide any quantitative assessment of fish population benefits but-for the SalSim results that promise approximately 1100 fish per year.

The DRSED does not use the best available science to analyze potential Project impacts to the terrestrial protected species. The DRSED's analysis of terrestrial species is entirely limited to riverine species. The DRSED does not provide the underlying data or its analysis to justify how a species that lives in the water can be the appropriate proxy for the harms that may occur to avian or terrestrial species that are not located next to a river.

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<sup>25</sup> 16 U.S.C. § 1538 (LexisNexis, Lexis Advance through PL 114-329, approved 1/6/17); and Cal. Fish & G. Code, § 2080 (Deering, Lexis Advance through all 2016 legislation and propositions (2016 Regular and 2015-2016 2nd Ex. Sessions)).

The DRSED fails to analyze the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (2000), which affects 97 special status plant, fish and wildlife species in 52 vegetative communities scattered throughout San Joaquin County's 400+ square miles and 900,000+ acres, which include 43% of the Sacramento-San Joaquin Delta's Primary Zone.

The DRSED acknowledges that the agricultural lands underlying the Pacific Flyway are in the Plan Area; later that the agriculture will be adversely impacted by the Project; but then fails to analyze Project impacts on the Pacific Flyway and the protected species and habitats including the federal wildlife preserves that will not be provided sufficient surface water due to the DRSED.

**Z. The DRSED Fails to Adequately Analyze Climate Change Impacts.**

The DRSED does not provide sufficient information to determine impacts related to climate change. The DRSED's only analysis is to pledge to incorporate climate change analyses into future Board planning documents and that the STM Working Group's real time operations (which we have not been identified) will address the impacts from climate change as they arise. This is clearly inadequate because, at base, it does not comply with state law, state policy or even Board policy to analyze climate change. This information must be provided to be "complete, reasoned, or adequately explained." (*Nw. Coal. for Alts. to Pesticides (NCAP) v. U.S. E.P.A.*, 544 F.3d 1043, 1052 n.7 (9th Cir. 2008)).

The California Water Action Plan ("CWAP") states that "the effects of climate change are already being felt" and that "the Sierra Snowpack is decreasing, which reduces natural water storage and also alters winter and spring runoff patterns." (CWAP (2016), p. 3.) Additionally, the CWAP goes on to state that climate change will factor in "higher river and ocean temperatures" that will "make it harder to maintain adequate habitat for native fish species." (CWAP (2016), p.3-4.) These factors are all immediately relevant to the Plan Area and the Project but none are analyzed, notwithstanding the Governor's planning document's recognition that these are factors of our current environment. As a result, the DRSED underestimates the impacts of the Project on groundwater, drinking water, agricultural resources and other parts of the environment because the State Water Board will likely need higher levels of UIF (*e.g.*, 50%) in order to attain its water temperature and floodplain inundation objectives.

According to California and federal studies, climate change would likely also result in more extreme weather events, such as more intense droughts, which will potentially increase future impacts of the Project. These governmental studies also conclude that climate change would change the timing of flows (*e.g.*, more late fall and winter flows, less spring flows) which would result in less efficient reservoir storage and likely impact carryover storage. These potential issues were not analyzed in the DRSED.

Clearly, the Board should follow the Plan and incorporate the two active, elemental factors that the CWAP identifies as an ongoing impact from climate change, namely sea-level rise and the warming temperature of rivers.

Additionally, the Governor has issued Executive Orders that inform the analysis that the DRSED should contain.

The Governor's Executive Order #S-13-08 (November 14, 2008)<sup>26</sup> states as a recital that “California's water supply and coastal resources, including valuable natural habitat areas, are particularly vulnerable to sea level rise over the next century and could suffer devastating consequences if adaptive measures are not taken...” The Order goes further to state that the Board is privy to a report from the National Academy of Sciences and the Office of Planning and Research that tracks sea level rise, which is an integral component of climate change analysis if the Project has a Salinity Objective in the tidal Delta.

Executive Order # B-30-15 (April 29, 2015)<sup>27</sup> “specifically addresses the need for climate adaptation and directs state government to. Factor climate change into state agencies' planning and investment decisions.” The Order further states that “The impacts of climate change are already being felt in California and will disproportionately impact the state's most vulnerable populations.”

Additionally, the California Natural Resources Agency has led California’s climate change adaptation strategy since 2008. The State of California released its “first comprehensive plan for adapting to climate change in 2009, and updated that strategy (in 2014). (California Natural Resources Agency: Safeguarding California: Implementation Action Plans (2014), pg. 9.) The CNRA states that “the first step in addressing climate change is to analyze impacts and the vulnerabilities they create.” (California Natural Resources Agency: Safeguarding California: Implementation Action Plans (2014), pg. ii.) The DRSED has failed to incorporate what was and is considered the “first step” in addressing climate change, which is to *analyze the impacts*. The CNRA goes on further to state that “[e]nsuring that California is ready for the changing climate will also require revising routine tasks of State governance” such as revising the DRSED to include a climate change analysis for the WQCP process instead of deferring it to some future date and circumstance. Finally, the CNRA states that the 2014 climate change plans “demonstrate how state agencies are implementing the Governor’s directive to take climate change into account in **all planning and investment decisions...**” [[California Natural Resources Agency: Safeguarding California: Implementation Action Plans (2014), pg. 12] (Emphasis added). Clearly, both the Governor and the California Natural Resources Agency expect the Board to include a climate change analysis in the DRSED to comply with state climate change policies.

Additionally, the CNRA also states that “for lower-income individuals and communities, the challenges of responding and adapting to climate change are even greater.” As stated often, the Plan Area is comprised of approximately 75% of disadvantaged communities. These communities especially require a climate change analysis of the Project impacts because they “lack the financial and organizational resources to respond to and recover from a disaster.” (California Natural Resources Agency: Safeguarding California: Implementation Action Plans (2014), pg. 11.)

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<sup>26</sup> <https://www.gov.ca.gov/news.php?id=11036> (website visited December 2016)

<sup>27</sup> <https://www.gov.ca.gov/news.php?id=18938> (website visited December 2016)

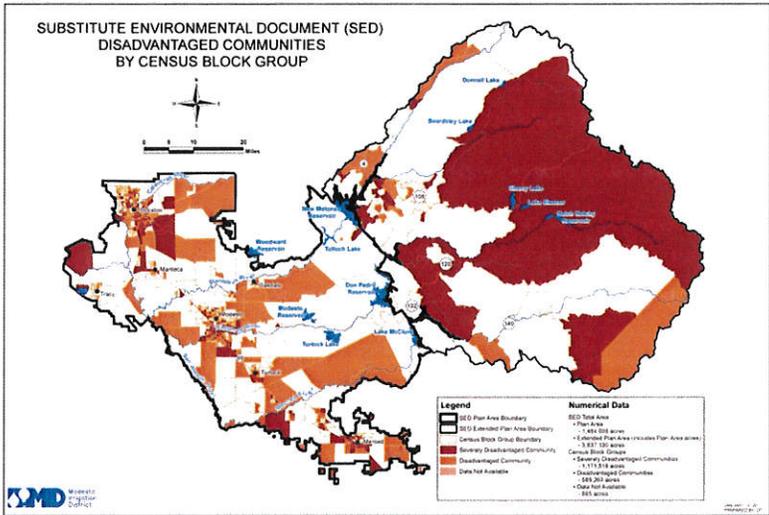
SB 350 (2015) directs the California Energy Commission to study the barriers that disadvantaged communities encounter when trying to invest in solar, energy efficiency and other renewable energy generation opportunities. The DRSED fails to comply with these important state legislative priorities by deliberately proposing a plan that will counter the CEC’s work under SB 350 because the Project involves removes an important carbon-free source of generation from the Plan Area service providers and also mitigates the Project by proposing that the Plan Area communities (comprised of approximately 75% disadvantaged communities) invest in substantial infrastructure to replace the water supplies that are being taken away by the Project. As proposed, the LSJR Flow Objective will adversely impact the utility rates of, and sources of supply for, these communities in a way that can only defeat the purposes of SB 350 (2015) which aims to assist in removing barriers – not to create new, expensive ones - to the benefits of renewable energy in disadvantaged communities.

Further, the DRSED’s wholesale deferral of any analysis of climate change is fatal to informed analysis or discussion about the Project.

**AA. The Board Failed to Consider Environmental Justice.**

The total DRSED plan area encompasses approximately 1.5 million (M) acres, with an extended plan area of approximately 3.7M acres. As highlighted in Figure #1 below, (approximately 1.8M acres of this area is made up of severely disadvantaged and disadvantaged communities. The Board has made no effort to include these minority and low-income citizens and communities within the DRSED’s impacted area, nor has the Board fully analyze the DRSED’s effect on these communities, despite the fact that these citizens will bear the greatest environmental burdens.

Figure #1



(Compiled from [http://www.census.gov/geo/maps-data/data/cbf/cbf\\_tracts.html](http://www.census.gov/geo/maps-data/data/cbf/cbf_tracts.html))

While environmental justice is not a mandatory topic in the Plan there is a strong case for its inclusion. There is a long history of applying federal and state anti-discrimination statutes to state projects. Furthermore, state and federal environmental justice laws and policies have strongly emphasized the need for public participation in the decision-making process. State law

defines environmental justice as, “The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies.” (Gov’t Code §65040.12) Further, the Legislature has found that, “the diversity of the state’s communities and their residents requires planning agencies and legislative bodies to implement this article in ways that accommodate local conditions and circumstances, while meeting its minimum requirements.” (Gov’t Code §64300.7).

Environmental justice is defined in state planning law as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. (Gov’t Code §65040.12(e)). The basis for environmental justice lies in the Equal Protection Clause of the U.S. Constitution. The Fourteenth Amendment expressly provides that the states may not “deny to any person within [their] jurisdiction the equal protection of the laws.” (U.S. Constitution, amend. XIV, §1). On February 11, 1994, President Clinton signed Executive Order (E.O.) 12898, titled “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.” In a memorandum accompanying E.O. 12898, President Clinton underscored existing federal laws that can be used to further environment justice. These laws include Title VI of the Civil Rights Act of 1964 and the National Environmental Policy Act (NEPA), among others. Title VI prohibits any recipient (state or local entity or public or private agency) of federal financial assistance from discriminating on the basis of race, color, or national origin in its programs or activities. (42 U.S.C. §2000(d)(7)). State and local agencies that receive federal funding must comply with Title VI. Pursuant to the Civil Rights Restoration Act of 1987, this requirement applies to all agency programs and activities, not just those that receive direct federal funding.

Consideration of environmental justice is not only consistent with federal law, but also expected at the state level. Anti-discrimination laws existed in California prior to the passage of the first state environmental justice legislation in 1999. The California Constitution prohibits discrimination in the operation of public employment, public education, or public contracting. (CA Constitution, Article I, §31). State law further prohibits discrimination under any program or activity that is funded or administered by the state “on the basis of sex, race, color, religion, ancestry, national origin, ethnic group identification, age, mental disability, physical disability, medical condition, genetic information, marital status, or sexual orientation.” (Gov’t Code §11135(a)).

CEQA governs the Boards implementation process. Because the Plan is a certified regulatory program, a SED may be prepared in lieu of an EIR. (Pub. Res. Code, §21080.5). The SED must describe the project, reasonable alternatives, and mitigation measures to minimize any adverse effect on the environment, and must also be available for a reasonable time for review and comment by other public agencies and the public. (Pub. Res. Code, §21080.5(d)(3)). Consistent with CEQA and other mandates, the Board is establishing an Environmental Justice Program “to promote and ensure public outreach, participation, and education regarding meetings, hearings and activities for all Californians.” (SWRCB Webpage – Water Issues – Outreach – Education – Environmental Justice). Pursuant to this program, the Board must integrate environmental justice considerations into the “development, adoption, implementation

and enforcement” of its decisions. Furthermore, the Board must promote meaningful public participation in its decision-making processes.

The SWRCB failed to encourage meaningful participation from those within the SED impacted area.

CEQA requires reasonable time for public comment and participation. (cite: Pub. Res. Code, §21080.5(d)(3)(b)) However, because the SED failed to consider the ethnic makeup of the impacted community, and therefore, failed to consider possible language barriers that may exist, the public process failed to encourage meaningful participation from those most impacted by the proposal.

Chapter 22 of the SED concedes the fact that the effects of drought and water quality issues are not felt equally, but instead are intensified in disadvantaged communities. However, even after acknowledging these impacts, and despite requests from the public for the SWRCB to allow for minority and low-income citizen participation, the SWRCB has failed to engage or involve these populations in the process. The project area consists in large part of agricultural lands with many of its citizens relying on farm labor to survive. The majority of these citizens identify as Hispanic with a large portion of these individuals identifying as Spanish-speaking only. These citizens have not been given a meaningful opportunity to participate. The SED was only printed in English, and at the public hearings, SWRCB staff only presented in English. The SWRCB has failed to meaningfully involve the community in the public decision making processes.

**1. The SWRCB failed to adequately analyze the impacts of the SED on Disadvantaged Communities.**

When analyzing a project’s impact on the environment, a lead agency must consider “adverse effects on human beings, either directly or indirectly.” (Pub. Res. Code, §21083(b)(3)). Public Resources Code §15064(b) emphasizes that the significance of an activity may vary with the setting. Specifically, §15064(b) notes that “an activity which may not be significant in an urban area may be significant in a rural area.” In addition to consideration of setting, CEQA requires a lead agency to consider the cumulative effect of a project. (Pub. Res. Code, §21083(b)(2)). Though each impact may appear minor in isolation, considering all impacts together could result in a significant effect on the environment. Though the DRSED briefly identifies the setting of the impacted area, it fails to adequately analyze the effects of the setting and the cumulative effects of the various impacts.

Chapter 22 of the DRSED indirectly notes that the DRSED impacted area includes disadvantaged communities. The report then briefly addresses the disproportionate impacts to drinking water supply that disadvantaged communities face. (DRSED Chapter 22.4.2 Disadvantaged Communities). Specifically, Chapter 22 notes that:

the systems serving DACs are more likely to have a difficult time responding to impacts on their water supply because they lack the infrastructure and financing that exists for the water systems serving more affluent communities, which may make them unable to afford treating or finding alternative supplies for a contaminated drinking water source. As a result, DACs may be more vulnerable

than other municipalities and cities to impacts associated with the LSJR alternatives.

This is the extent of the analysis regarding the impacts to disadvantaged communities. The DRSED fails to fully analyze the settings of the impacted area, including the minority and low income populations, the reliance that the affected disadvantaged communities place on farming, and the already strained drinking water situation. The SWRCB must consider that the community is predominately identified as disadvantaged because, as the DRSED notes, disadvantaged communities often feel the effects of reduced surface water more severely than non-disadvantaged communities.

In addition to its failure to consider the specific settings of the impacted area, the DRSED also fails to consider the impacts of the plan on a cumulative level. The DRSED considers impacts to drinking water, groundwater, and the economy of the impacted area. However, the document fails to consider these impacts cumulatively. Individually these impacts will be harmful to the disadvantaged communities within the DRSED territory. When combined, the impacts will have severe, unavoidable consequences on a community largely made up of minority and low income populations. The DRSED failed to adequately analyze the impacts of the DRSED on the largely disadvantaged population within the plan's territory.

### III. ADDITIONAL COMMENTS

DRSED TEXT	MID COMMENT
<p>ES-1: Responsibility for implementing flow objectives will be assigned through water right actions and water quality actions, including Federal Energy Regulatory Commission (FERC) hydropower licensing processes.</p>	<p>There are numerous other citations (e.g., Appendix K) to the DRSED's intent to implement the LSJR Objective through hydropower licensing proceedings. To be clear, there are only two such proceedings at issue and the Board has been party to both for the five-plus years that both proceedings have existed.</p> <p>Notwithstanding the DRSED's clear intention to implement through hydropower licensing proceedings, there has also been contradictory information from the Board Directors about such an intent. To the point, the Board Directors repeatedly stated in the DRSED's Public Hearings [See e.g., 12192017 DRSED Public Hearing, Merced Irrigation District Panel] that it does not intend to implement Phase I through FERC hydropower licensing proceedings.</p> <p>There are only two FERC licensing proceedings within the DRSED's Plan Area, both of which the</p>

	<p>Board is intimately involved and aware. There are sufficiently tangible and relevant facts within the Board's possession from which to communicate a clear message about the Board's intentions. Once those intentions are made explicitly clear in an environmental document, the regulated community and the public can make a reasonable analysis of the Project's potential impacts. The DRSED is required to specifically describe its Project and the proposed program of implementation to implement the Project Objectives. The current document is invalid for its failure to do so.</p>
<p>ES-2: The State Water Board also encourages voluntary agreements that will assist in implementing the flow objectives.</p>	<p>The DRSED is not clear how voluntary agreements can be accomplished when the DRSED acknowledges that further project-level analysis is required to implement the Program of Implementation. The MID Board of Directors cannot commit to a plan of action without appropriate project-level analysis and the DRSED's expectation that they do so is inappropriate and unlawful with respect to the particular project-level facilities and projects that have already been identified as part of the Project, such as carryover storage requirements that can only be accomplished by the Don Pedro Project on the Tuolumne River.</p> <p>As stated by MID Director Jake Wenger at the 12202016 Public Hearing, the DR SED does not provide any details about what the two words, "voluntary agreement," are supposed to mean vis-à-vis the 3500-plus page DR SED. Who are the parties to these agreements? What does the Board expect these agreements to be if nothing more than implementation of the DRSED's proposed Project? What is the assumed consideration for these agreements?</p> <p>The DR SED represents that "voluntary agreements" are reasonably likely and are therefore appropriate items for discussion in the environmental review. The DR SED should clearly define the elements of a voluntary agreement, to include the data upon which it bases its claims that</p>

	<p>they are feasible, and analyze them as part of the Project and analyze it as part of the potential alternatives.</p> <p>Generally, the term ‘voluntary agreements’ should be stricken if there is no factual basis upon which to justify its inclusion into the environmental analysis or, even if included over objections, there is no factual basis provided in the DRSED to allow for an environmental analysis of the project’s impacts if it is implemented in this way.</p>
<p>Page ES-2: In a separate process, referred to as Phase II, the State Water Board is reviewing and considering updates to other elements of the Bay-Delta Plan, including Delta outflows, Sacramento and tributary inflows (other than the SJR flows), and ecosystem regime shift. In Phase III, the State Water Board will consider changes to water rights and other actions to implement changes to the Bay-Delta Plan from Phases I and II. Phase IV is focused on the development and implementation of flow objectives in the Sacramento River Watershed to address public trust needs, with consideration for other beneficial uses of water.</p>	<p>The phasing separates out each step of the Amendment so that it is impossible to analyze the whole of the Amendment in any one review. There are numerous citations throughout the DR SED that demonstrate unquestionable physical connections (e.g., territory, water, etc.) as between Phases I, II and IV but there is no analysis to demonstrate how each affects the other to ensure there is a holistic analysis of the whole Project.</p>
<p>ES-12 : The current flow objective is tied, in part, to the hydrology of the Sacramento River Basin, meaning that if precipitation and runoff is high in the Sacramento River, higher SJR flows are required even if the conditions on the SJR are drier, and vice versa.</p>	<p>As stated at the 01032017 Public Hearing, the Sacramento River and San Joaquin Rivers are inextricably linked in any environmental analyses about the Delta. It is critical for the DRSED to explicitly identify the factors of each phase that scientifically justify a Phase I analysis that is independent from Phase II and the same is necessary as between all four proposed Phases.</p> <p>Ecosystem regime shift requires definition and, to our knowledge, has no scientific basis outside of the DRSED’s recitation. Further, because the DRSED intends to use “adaptive implementation,” which involves an “infinite” variety of possible scenarios that will be made “in real time” at some</p>

	<p>future date, it is critical for the public to understand how the Board intends to apply the tenets of the Board-created theory of ‘ecosystem regime shift’ to these unreviewable, “real time” goal-setting and decision-making.</p>
<p>Page ES-2: Phase IV is focused on the development and implementation of flow objectives in the Sacramento River Watershed to address public trust needs, with consideration for other beneficial uses of water.</p>	<p>The DRED must explicitly identify the factors of each phase and the scientific justification for four, independent phases of analysis. Per this statement, there is no physical distinction between Phase II and Phase IV but for the Board’s arbitrary decision to separate them because, presumably, public trust needs must be exercised in all Board decisions. A a separate proceeding is unnecessary, duplicative, and unlawful piece-mealing of the CEQA analysis unless the decisions made throughout Phases I through III are incomplete, and therefore unimplementable, without the necessary public trust analysis in Phase IV that must accompany all Board decisions to plan and allocate water resources.</p> <p>The DRSED must be updated to clarify how the public trust does or does not factor into each Phase, the respective Projects associated with each of those Phases, its respective role in their forthcoming record of quasi-adjudicative and quasi-legislative orders and decisions, and its anticipated physical dimensions of Phase IV with respect to the Plan Amendments more generally.</p>
<p>Page ES-4: The flow proposal would change the existing requirement from a specific monthly requirement that changes by month and year type to a flow parameter that more closely tracks natural flow variations.</p>	<p>The flow proposal does not “change” the monthly/year type requirement but, instead, extends the methodology to new locations at greater quantities than previously imposed on the USBR in the 1995 Bay Delta Plan and D-1641 (2000 et al.). DRSED @ Appendix K, Table 3, clearly retains a static quantity of water that is tracked in monthly metrics and that only changes between the 800cfs to 1200cfs range in light of that year’s water conditions, which is another way to say “water year type.” The current flow proposal does not and will not vary from the existing methodology.</p>

	<p>The extension of this methodology reinforces objections lodged elsewhere in this Comment that the Board must provide the scientific basis that justifies continued reliance on the 1995 Bay Delta Plan’s goals, objectives and science, especially to protect the DRSED’s goals of fish and wildlife. The DRSED did not provide information to justify the continued use of the flat, monthly flows and, instead, provides information that undercuts its utility, most notably the need to “change” to natural flow variations. Especially because the modeling only analyzes flat, monthly flows (and therefore the modeling never actually analyzes the project or LSJR Objective), it is critical for the DRSED to provide the factual basis upon which it has concluded that the Project should include the prior methodology and the “change” in methodology.</p> <p>The ES further states that “[t]hough unimpaired flow is not the same as natural flow, it is nevertheless reflective of the frequency, timing, magnitude, and duration of the natural flows to which fish and wildlife have adapted and have become dependent upon.” (Emphasis added.)</p>
<p>ES-4: The flow proposal would change the existing requirement from a specific monthly requirement that changes by month and year type to a flow parameter that more closely tracks natural flow variations.</p>	<p>The flow proposal does not “change” the monthly/year type requirement but, instead, extends the methodology to new locations at greater quantities than previously imposed on the USBR in the 1995 Bay Delta Plan and D-1641 (2000 et al.). DRSED @ Appendix K, Table 3, clearly retains a static quantity of water that is tracked in monthly metrics and that only changes between the 800cfs to 1200cfs range in light of that year’s water conditions, which is another way to say “water year type.” The current flow proposal does not and will not vary from the existing methodology.</p> <p>The extension of this methodology reinforces objections lodged elsewhere in this Comment that the Board must provide the scientific basis that justifies continued reliance on the 1995 Bay Delta</p>

	<p>Plan’s goals, objectives and science, especially to protect the DRSED’s goals of fish and wildlife. The DRSED did not provide information to justify the continued use of the flat, monthly flows and, instead, provides information that undercuts its utility, most notably the need to “change” to natural flow variations. Especially because the modeling only analyzes flat, monthly flows (and therefore the modeling never actually analyzes the project or LSJR Objective), it is critical for the DRSED to provide the factual basis upon which it has concluded that the Project should include the prior methodology and the “change” in methodology.</p> <p>The ES further states that “[t]hough unimpaired flow is not the same as natural flow, it is nevertheless reflective of the frequency, timing, magnitude, and duration of the natural flows to which fish and wildlife have adapted and have become dependent upon.” (Emphasis added.)</p>
<p>Page ES-4: In an emergency, a temporary change in the implementation of the flow requirements may be allowed in a water right proceeding, but measures must be taken to reasonably protect the fish and wildlife beneficial use in light of the circumstance of the emergency.</p>	<p>The Water Quality Control Plan must be “actually implementable” under the law. Appendix K’s Program of Implementation is not implementable because it is impossible to implement a plan with no goal, no measure of success and a “virtually unlimited number of flow options.”</p> <p>The DRSED must identify what environmental condition it presupposes will trigger a request for emergency relief from the WQCP requirements. Identifying these conditions are important because many parties including MID will allege that the WQCP is supposed to be relevant during times of drought. The ability to implement the plan during a drought is what makes it actually implementable. Further, the DRSED’s citation to drought conditions does not alleviate the Board Staff from identifying the role of the WQCP during those times of drought. In fact, water supply planning during times of drought is one of the most critical, if not the most critical, function of water supply planning.</p>

	<p>The DRSED fails to provide an analysis of the reasonably foreseeable, if not certain, occurrence where the WQCP's minimums (either D-1641 or as proposed) are not met. The Board approved multiple Temporary Urgency Change Petitions throughout 2014, 2015 and 2016 from the USBR and the CDWR for relief from the D-1641 requirements. At a minimum, the DRSED must provide an analysis of the WQCP's role in drought conditions from the USBR's and the CDWR's TUCP experiences as part of its "drought analysis."</p> <p>The DRSED's instruction that a "temporary change...of the flow requirements may be allowed..." and that certain "measures must be taken" in any such future emergency water rights proceedings appear to be outside the scope of the DR SED's analysis. The DRSED does not provide any information upon which to base conclusions related to drought conditions and, further, refuses to identify or analyze a scenario to prepare for drought or emergency conditions where the Appendix K minimum flow of 800cfs is not available. This failure to analyze potential impacts from the project is a violation of CEQA.</p>
<p>Page ES-7: The program of implementation contains actions that the SWB will undertake, including monitoring and special studies, to achieve the objectives and measure their benefits to fish and wildlife.</p>	<p>The objectives are not achievable as stated in the TUR Technical Report and elsewhere in this Comment.</p> <p>The DRSED states that "the program of implementation contains actions the Board will undertake." However, Appendix K clearly shows how the Board's "action" in an adaptive implementation plan is to have other agencies develop a list of actions. So, the "action" required in the adaptive implementation plan is to require others to take unspecified "actions."</p> <p>The program of implementation does not identify any manner in which to measure benefits to fish and wildlife. The program explicitly states that biological goals to measure fish and wildlife benefits will be established only after the Plan is adopted and only after the Board convenes, staffs,</p>

	<p>funds and organizes a multi-agency, multi-jurisdictional, multi-water user ‘working group’ to identify these goals while making “real time” decisions at the beginning and during each water year.</p> <p>The DRSED’s promise to measure at some future date by some future parties in some as-yet-unknown manner cannot support a statement in the executive summary that the program of implementation will “...measure benefits to fish and wildlife.”</p>
<p>Page ES-9: New flow objectives will fill the void left by the termination of the flow experiment conducted through the Vernalis Adaptive Management Program to determine flows and barrier operations that could be used to protect salmon.</p>	<p>The DRSED must describe or clarify how the proposed Project is capable of “fill[ing] the void” left by discontinuation of the VAMP. The VAMP flows, and presumably all the benefits that will accrue from them, are built into the baseline conditions. Therefore, there is no basis upon which the DRSED could analyze or discuss VAMP benefits as different from or an addition to the benefits that are calculated in the baseline setting.</p>
<p>Page ES-11: The narrative element of the objective is framed in terms of “maintaining viable native migratory San Joaquin River fish populations.</p>	<p>The DRSED does not contain any analysis about the ‘migratory’ path or activities of the target-species, FRCS. There is no evidence in the record to demonstrate how the Project or the LSJR Objective may potentially affect “migration” into or outside of the Plan Area.</p> <p>Notably, there is an absolute failure to describe the potential challenges that FRCS face when migrating through the lower Tuolumne River, through the Delta and while living in the ocean. At a minimum, the DRSED must analyze the effects of predation, climate change impacts like the warming of rivers and sea-level rise, and the commercial fishery catches in order to justify the statement that it analyzed migratory aspects of the FRCS.</p>
<p>ES-11: The narrative element of the objective is framed in terms of “maintaining</p>	<p>The DRSED does not contain any analysis about the ‘migratory’ path or activities of the target-</p>

<p>viable native migratory San Joaquin River fish populations.</p>	<p>species, FRCS. There is no evidence in the record to demonstrate how the Project or the LSJR Objective may potentially affect “migration” into or outside of the Plan Area.</p> <p>Notably, there is an absolute failure to describe the potential challenges that FRCS face when migrating through the lower Tuolumne River, through the Delta and while living in the ocean. At a minimum, the DRSED must analyze the effects of predation, climate change impacts like the warming of rivers and sea-level rise, and the commercial fishery catches in order to justify the statement that it analyzed migratory aspects of the FRCS.</p>
<p>Page ES-12: Expressing the objective as a numeric range achieves the following goals. Provides sufficient inflow conditions to support and maintain the natural production of viable native SJR Watershed fish populations migrating through the Delta. Provides maximum flexibility in addressing scientific uncertainty and changing conditions, developing scientific information that will inform future management of flows, and meeting biological goals, while still reasonably protecting the fish and wildlife beneficial uses. Provides the opportunity to manage flows in a manner that considers other beneficial uses, such as agricultural, municipal, and recreational uses, as long as intended benefits to fish and wildlife beneficial uses are not reduced.</p>	<p>The Board determines the balance between beneficial uses upon Project adoption. It is an unlawful modification of the adopted WQCP for there to be an “opportunity” at a later date to essentially re-weigh the Board’s decision that sets the balance between beneficial uses.</p>
<p>Page ES-13: Unimpaired flow clearly identifies the allocation of a seasonally and annually variable quantity of water between the reasonable protection of fish and wildlife and other beneficial uses of water.</p>	<p>This statement exemplifies a persistent analytical flaw where fish and wildlife benefits are specifically identified as the sole use to be protected and that it must be protected from all other uses combined. This “fish versus everything else” focus clearly contradicts scientific inquiry, state policy to protect the dual goals of the Delta, legislative priorities for various uses in the Water</p>

	Code, and the Board’s obligation to balance all beneficial uses of the water.
<p>Page ES-13: New flow objectives have not been proposed outside of the February-June timeframe. Through adaptive implementation, however, a portion of the Feb-June flows could be shifted to other months to avoid adverse temperature impacts to fish and wildlife.</p>	<p>Please see Technical Report.</p> <p>The DRSED’s own analysis demonstrates that the UIF proposal actually causes harm to fish and wildlife through temperature impacts for several months of the flow proposal. Therefore, every alternative without adaptive implementation adversely impacts “all” fish and wildlife if the FRCS is believed to be the appropriate proxy. The DRSED must clearly explain why the LSJR Objective and associated flow proposals are a “benefit,” and not a degradation of water quality.</p> <p>Again, it is critical for the DRSED to specifically describe the Project so that parties may understand its component parts and any proposed mitigation measures. Here, it is critical to understand whether the “flow shifting” away from the February through June timeframe is a part of the Project or a mitigation measure.</p>
<p>Page ES-16: It is intended to determine a quantity of water that can be “shaped” or shifted in time to provide more functionally useful flows.</p>	<p>Again, the quantity of water to be “shaped” is the granting of a water right to the Board-Staff without any due process or even a basic showing of how the water will be put to beneficial use. The state constitution commands that all water be put to beneficial use, which further evidences that this is a water allocation decision since the Board-Staff require another lawful water right holder’s beneficial use to apply the UIF theory.</p>
<p>Page ES-18: The program of implementation requires the development of biological goals...</p>	<p>This statement contradicts a prior statement that the biological goals would be satisfied with the program of implementation. Worth noting, the DRSED is herein stating that the <u>eventual development</u> of biological goals <u>is</u> the DRSED’s biological goal.</p>
<p>Page ES-19: Hydrological conditions, and</p>	<p>The DRSED sets the baseline at 2009 but then</p>

<p>water supply needs experienced during the current drought were analyzed in this SED, and so the analyses in this SED have accounted for a wide range of hydrologic conditions.</p>	<p>selectively incorporates data to include the drought years of 2014 to 2016. If the Board-Staff believed that the drought constituted new and relevant information sufficient to update the entire analysis, then the Board must update the environmental document and recirculate to reflect the substantial new developments.</p>
<p>Page ES-19: The flow proposal therefore includes a provision to adjust flows for a state of emergency, such as the current drought...Under this emergency provision, the SWB, at its discretion or at the request of any affected responsible agency or person, may authorize a temporary change to the implementation of the LSJR flow objectives in a water right proceeding...</p>	<p>It is a fundamental flaw of the DRSED that it deliberately avoids an environmental analysis of the WQCP's role in drought planning and under drought conditions. The DRSED itself acknowledges that it can identify and analyze 'emergency conditions' because it clearly states that the current drought has been analyzed and can be identified as such an emergency. It is incumbent upon the DRSED to then analyze those circumstances and craft a project and program of implementation that remain applicable during these certain future occurrences, and are therefore 'actually implementable' under the law.</p> <p>A future water rights proceeding is an inappropriate forum for the Board to identify its environmental standards for fish and wildlife in critical drought situations. A water rights proceeding, like the explicitly contemplated Temporary Urgency Change Petition process under Water Code §1435, is simply not capable of providing a holistic environmental analysis of the Project's benefits or impacts during drought conditions. TUCP proceedings only analyze the following issues with respect to the petitioning water right holder's operations: if there is an urgent need to make the proposed change; if the change causes injury to other lawful users of water; if the change causes unreasonable effects on fish and wildlife; and if the change is in the public interest.</p> <p>This DRSED is the sole forum to have an environmental review of the entire Project's potential impacts. The very purpose of a water resource planning document is to provide instructions and guidance for conditions of</p>

	<p>shortage, which is the exact planning function that the DRSED attempts to defer to the future, urgently-timed and surely controversial water rights proceedings. The DRSED must include an environmental analysis under drought conditions to reflect, at a minimum, potential impacts when the baseline flow of 800cfs cannot be met, which is the very circumstance that the DRSED confirms is certain but does not provide any further analysis to elucidate.</p>
<p>Page ES-21: The Water Supply Effects analysis takes into account greater reliance on storage to meet water demand in all years, so an additional effect of the flow proposal would be an overall decrease in the quantity of water stored in reservoirs. In other words, reservoir levels would be driven lower more frequently, but still would be required to maintain adequate cold water storage.</p>	<p>The DRSED's program of implementation does not explicitly identify the need to use the storage facilities on the tributaries but there are clearly statements elsewhere (e.g., the above-statement) that explicitly identify the need to use the storage facilities of the FERC licensees on the tributaries. The DRSED must be clearly define its Project and its requirements if there is to be informed public analysis of the Project.</p> <p>Elsewhere in Appendix K, the Board-Staff acknowledges that it intends to impose storage conditions on the USBR's storage facilities in the future by instituting appropriate due process to secure the public's use of private (non-State) property, to include notice and a hearing to determine the issues. The DRSED does not explain why the owners of Don Pedro Reservoir, the only storage facility on the Tuolumne River in the Plan Area, are not afforded the same procedure even though Don Pedro Reservoir is similarly situated to the USBR. The same is true for the owners of the sole storage facility on the Merced River.</p>
<p>Page ES-23: Specifically, the major districts analyzed in the plan area account for 98, 99 and 94 percent, respectively, of the water authorized for diversion (based on face value) under non-power, post-1914 water rights in the Stan, Tuolumne and Merced Watersheds.</p>	<p>The above-statement can be interpreted to mean that the Board-Staff performed a water right analysis to serve as the basis for determining the very scope of the Plan Area, which evidences the Board's conflation of its water rights and water quality authority because a water allocation is the sole tool authorized to implement the project. To the extent that the DRSED intends to define the Plan Area consistent with the area's major water</p>

	<p>right holders, the DRSED is obligated to perform a correspondingly detailed project-level analysis of potential project impacts and to explicitly describe proposed implementation measures, to include its intentions regarding carryover storage requirements.</p> <p>The DRSED's states elsewhere that "the impacts to water right holders is unknown." The above-statement (and many others within the DRSED) clearly contradict this conclusion. The DRSED fails to perform a correspondingly detailed project-level analysis of potential project impacts and to explicitly describe proposed implementation measures (including due process afforded to private property).</p>
<p>Page ES-24: Direct effects on surface water supplies in the CCSF and other areas served by CCSF. The effects on CCSF and related service areas would not be additive to the surface and GW effects in the plan area.</p>	<p>The Board Staff must explain the basis upon which the DR SED can conclude that there are "direct effects" to the parties in the extended plan area but that these same parties are not part of the Plan Area. Again, this is another instance of unlawful and arbitrary cherry-picking of information to present in the DRSED and, further, is a violation of CEQA's piece-mealing prohibitions, both of which frustrate CEQA's central goals of meaningfully informing decision makers and the public about the potential impacts of proposed projects.</p> <p>Further, the DRSED must identify or describe any data or evidentiary basis for its statement that the Project's surface water and groundwater effects in the extended plan area would "not be additive" to the effects in the Plan Area. As currently written, the DR DRSED can only make this assertion because the analysis artificially separates and silos the analyses of the Plan Area from the extended plan area.</p>
<p>Page ES-29: The effect of the flow proposal on specific water rights is unknown.</p>	<p>It is misleading for Board Staff to make the above-statement in light of the information contained within the DRSED.</p> <p>The DRSED explicitly identifies the central dispute</p>

is the quantity of flow, such flow serving simultaneously as the Plan's tangible goal, the underlying scientific theory and the sole tool of compliance. The Division of Water Rights, and not the Division of Water Quality, is promulgating this WQCP Amendment and the status of water rights is more consistent with the Division's traditional workload than promulgating WQCPs.

Below are several citations in the DRSED demonstrating that a water rights analysis had indeed been performed for several water right holders and that the DRSED intends to rely upon the results of those analyses.

ES-23: "Specifically, the major districts analyzed in the plan area account for 98, 99, and 94 percent, respectively, of the water authorized for diversion..."

ES-31 that "the effects of agriculture are analyzed for the irrigation districts that regularly obtain water... They are collectively referred to as the irrigation districts and include: South San Joaquin Irrigation District (SSJID), Oakdale Irrigation District (OID), Stockton East Water District (SEWD), Central San Joaquin Water Conservation District (CSJWCD), Turlock Irrigation District (TID), Modesto Irrigation District (MID), and Merced Irrigation District (Merced ID)."

ES-33: "Irrigation districts that also have surface water supplies use groundwater pumping to compensate for reduced surface water supplies in dry years. On average, however, for irrigation districts with access to surface water supplies (SSJID, OID, MID, TID, Merced ID, and the portions of SEWD and CSJWCD that use Stanislaus River water), their combined contributions to groundwater recharge in the plan area exceeds [sic] their combined groundwater pumping."

ES-31, "Minimum and maximum quantities of groundwater pumping, to supplement surface water supplies, are determined in this step."

ES-33: “Although the water balance for the water districts shows that they are currently recharging groundwater...” (emphasis added)

ES-36: “CCSF’s water rights for the Hetch Hetchy water system on the Tuolumne River are junior to the most senior rights held by MID and TID...”

ES-37: “Water supply effects were evaluated for two different scenarios that result from two different interpretations of the Fourth Agreement.”

ES-73: “The analysis in Appendix L is based on two different scenarios that result from different interpretations of the Fourth Agreement between CCSF and the MID and TID, which is an agreement that describes the details of the water banking and storage operations in New Don Pedro Reservoir. The two scenarios represent different outcomes regarding CCSF’s responsibility for additional flow releases that may result from the FERC relicensing process for New Don Pedro Reservoir.”

Here, the Board Staff not only identified potential impacts to water right holders but has analyzed varying scenarios about how these water rights interrelate with other water right holders.

16-9: “Water transfers involving reservoir storage releases in excess of what would normally be released annually is less likely to occur especially under the LSJR alternatives because most of the water rights associated with existing reservoirs would be fully used and the reservoir releases would occur regardless of the water transfer (i.e., release of excess water would not be a response to the LSJR alternatives).”

ES-31: “Although water users other than these districts could be affected by implementation of the LSJR alternatives, the overall effects would not be different or greater than described here.”

ES-31 explicitly presupposes that the senior water

	<p>right holders and the junior water right holders would be affected the same, which is contrary to the state law of water right priority. Additionally, the DRSED does not provide a scientific or evidentiary basis for this statement in the DRSED.</p> <p>If the status of the water rights is “unknown,” how can the effects of the lost water be examined with any degree of reasonable certainty? How can the DRSED purport to know the impacts to water users but simultaneously state that it doesn’t know about the water rights that, under state law, would set the order of parties to analyze for those impacts?</p> <p>The Board must “balance” the uses. If the DRSED cannot provide any metrics to explain benefits to fish populations (described elsewhere), and the DR SED herein acknowledges that its conclusions about impacts to water users is highly uncertain (if not “unknown”), then what information will the Board Directors have to weigh their decision?</p>
<p>Page ES-29: In no case, however, would the total effect be greater than has been quantified and explained for the plan area.</p>	<p>The DRSED does not provide the evidentiary basis for this statement. On its face, this statement does not appear credible. There are significant differences between the two areas with respect to geography, socio-economics, utility governance and access to water supply.</p> <p>Arguendo, if this statement is accurate, then the Board should merge the Plan Area and the extended plan area to perform one, single holistic analysis. The request appears both feasible and desirable. The Board Staff saw fit to create a formula to compare the impacts from the two areas in an ‘apples to apples’ manner so as to make the above-statement. This demonstrates the desirability of viewing these environmental analyses together in a connected manner. The analysis has been performed already, as demonstrated by the above-statement, so feasibility is self-evident.</p>
<p>Page ES-31: Although water users other</p>	<p>The DRSED states elsewhere in the Executive</p>

<p>than these districts could be affected by implementation of the LSJR alternatives, the overall effects would not be different or greater than here.</p>	<p>Summary that the “effects of the flow proposal on specific water rights is unknown.” Here, the effects appear to be known.</p> <p>The DRSED must provide the evidentiary basis for this statement. The DRSED must identify the parties that it identifies as “...water users other than these districts” that could be affected in order to establish and verify the universe of potentially impacted water users that exist and whether they are accurately grouped and analyzed here and elsewhere in the DRSED.</p>
<p>Page ES-32: While it is possible that some of the water-diversion and use measures, including irrigation efficiency, may have some applicability to reducing impacts or could be implemented as part of the water right proceedings that are expected to take place to implement the flow objectives, any application of these measures at this point would be speculative. Furthermore, it is unknown whether these activities would reduce the significant impacts to less-than-significant levels.</p>	<p>The Board is required to mitigate the impacts of its projects to the maximum extent and dismissing a difficult analysis as “speculative” in nature does not meet the substantive informational requirements of CEQA or the ESA. Additionally, it is arbitrary for the Board to see fit to analyze how building multi-million dollar water treatment and water conveyancing facilities was not speculative but that it was too “speculative” to identify potential mitigation measures related to conservation.</p> <p>Elsewhere, the DRSED touts the lessons that must be incorporated from the recent drought. To wit, the most recent drought involved nearly every water utility providing the Board with monthly conservation statistics and reports of conservation measures. In fact, the Board is uniquely capable of identifying, analyzing and quantifying the application of these measures, as well as their efficacy, because the Board enforced the water use and measurement regulations and the water conservation mandates all throughout the drought. The above-statement is an arbitrary conclusion and the topic requires further analysis.</p>
<p>Page ES-33: Although the water balance for the water districts shows that they are currently recharging groundwater and would continue to do so under LSJR Alternative 3, this is not the case for the groundwater subbasins in the plan area.</p>	<p>There is no scientific or evidentiary basis upon which the DRSED can make any conclusions that compare the groundwater impacts to the Study Area (which is the geographic area specifically used in the groundwater impact analysis) to the Plan Area, which is a different and much larger</p>

	<p>geographic area than the Study Area. Further, according to the DRSED, the groundwater impact analysis was confined to the Study Area. The DRSED purportedly does not contain any analysis of groundwater impacts outside of the Study Area. From the above-statement, it appears that the Board-Staff performed a groundwater analysis of the Plan Area but then chose to remove that information from the DRSED save the above-statement.</p> <p>Until this information is provided, the public is unable to analyze the DR SED’s conclusions or analyses on the issue.</p>
<p>Page ES-35: The reduction in surface water supply would therefore affect the entities that rely upon groundwater as their principal source of drinking water by (1) increasing the need to drill deeper well to continue to access groundwater, (2) increasing groundwater pumping costs, (3) degrading groundwater quality, and (4) making groundwater completely unavailable in some areas after some period of continued unrestricted groundwater pumping.</p>	<p>CEQA demands that an agency mitigate the impacts of its projects. In this case, it is unclear whether the flow shifting is the mitigation measure or if these groundwater impacts are the “resources” to mitigate the Project’s Objectives, which is objectionable as stated elsewhere herein. Clearly, if the Board-Staff identifies the groundwater impacts as the mitigation, the DRSED has simply failed to identify a lawful mitigation measure because it is neither feasible nor consistent with state policy to purposefully create a condition of unmitigated, unsustainable overdraft.</p>
<p>Page ES-36: Under the assumption that SFPUC would purchase replacement water supplies from MID and TID, water costs to SFPUC were calculated based on the predicated annual average shortages that would occur...</p>	<p>There is no information in the record to demonstrate how MID and TID would have sufficient water available to accomplish these proposed transfers. This is especially true in dry and critically dry years when, presumably, MID and TID may not have sufficient supplies to meet each agency’s own water supply obligations.</p>
<p>Page ES-37: Water supply effects were evaluated for two different scenarios that result from two different interpretations of the Fourth Agreement.</p>	<p>The DRSED chose to perform this one impact analysis to recognize the state law of priority. Notwithstanding this unexplained anomaly in methodology for the impact analysis, the DRSED’s deeply-flawed interpretations of the Fourth Agreement do not accurately depict the situation where all three parties to the agreement are without</p>

	<p>a stable water supply, which the DRSED concludes is a certain impact of the LSJR Objective. As stated herein and elsewhere, the DRSED fundamentally undercuts water supply stability and must analyze the impacts by incorporating this fundamental factor.</p> <p>The DRSED cannot substitute ‘contract interpretation’ for an actual analysis of the physical Project impacts to the environment.</p> <p>The above-statement contradicts the DRSED’s previous statement at ES-29 that “The effect of the flow proposal on specific water rights is unknown.” This analysis demonstrates that the Board Staff has not only analyzed and assessed the water rights of the parties subject to the Fourth Agreement, it also analyzed various scenarios that may befall the parties.</p>
<p>Page ES-38: As mentioned in ES2.1, Need for Flow Objectives, nearly every feature of habitat that affects native fish and wildlife is, to some extent, determined by flow (e.g., temperature, water chemistry, physical habitat complexity).</p>	<p>The DR SED needs to provide information upon which to base this statement with respect to non-aquatic wildlife. It is not clear how flow would affect the temperature, water chemistry and physical habitat complexity of non-aquatic species that the FRCS-proxy is supposed to represent. Additionally, the DRSED must provide its data and analysis upon which it identifies the benefits to native fish and wildlife as opposed to non-native fish and wildlife.</p>
<p>Page ES-49: SDWQ Alternative 1, together with LSJR Alternative 1, comprises the No Project Alternative assumes full compliance with all flow and water quality objectives in the 2006 Bay-Delta Plan as implemented through D-1641 and the NMFS BO on the Stanislaus River (which is included in the baseline)...</p>	<p>Please reconcile the above-statement with the closing statement of the paragraph that “Under baseline, these salinity levels are not always met.” The Board cannot rely upon information that it knows to be inaccurate. If the baseline salinity levels are not always met, it is inaccurate to “assume full compliance” in the No Project Alternative. The assumption simply “creates” water that is not otherwise present, which disguises or confuses Project impacts.</p>
<p>Page ES-50: Substituting these three stream</p>	<p>The DRSED did not provide data upon which to</p>

<p>reaches for fixed-point compliance locations is designed to provide more accurate representations of salinity throughout the southern Delta.</p>	<p>base this conclusion. At base, the DRSED chose not to analyze the Delta Salinity Objective and the LSJR Objective together and it is unclear upon what basis the DR SED would conclude that elements of the LSJR Objective would provide increased benefits (i.e., ability to measure compliance) for the Salinity Objective.</p>
<p>Page ES-50: The program of implementation for this alternative would continue to require DWR and USBR to address the impacts of their operations on interior southern Delta salinity levels.</p>	<p>This statement reflects the DRSED’s attempts to unlawfully impose water right allocation decisions on specific parties without appropriate due process to all affected parties.</p> <p>This statement appears to contradict the DRSED’s explicit, deliberate decision to <u>not</u> include the CalWaterFix proceeding into the impacts analyses. CalWaterFix is a water right proceeding for the CDWR and the USBR that is underway in a simultaneous proceeding to this environmental document and both are under review by the Board’s Division of Water Rights.</p>
<p>Page ES-50: The SJR flow element complements the southern Delta salinity element by augmenting flow in the southern delta that would have the incidental benefit of flushing of salts early in the irrigation season.</p>	<p>While framed in terms of water quality, this statement clearly demonstrates the DRSED’s unlawful water rights allocation decision. The DRSED explicitly states that the salinity objective is and shall remain the responsibility of the USBR and the CDWR. The DR SED also proposes a less-stringent salinity objective, which translates into less water from the USBR to meet that decreased flow objective. Here, the above-statement explicitly acknowledges that the basis for lowering the salinity objective is because other water rights holders, those that are subject to the LSJR Objective, will provide water to “augment” the salinity objective by way of “flushing of salts early in the irrigation season.” The DR SED acknowledges the physical connections between the water right allocation decisions for the USBR (and the CDWR) but then fails to analyze that connection and, further, fails to acknowledge how the change in the Salinity Objective is an explicit water allocation decision.</p>

<p>Page ES-51: The baseline reflects the physical conditions in 2009 as they existed under the 2006 Bay-Delta Plan.</p>	<p>This statement is inaccurate according to the DRSED. The baseline describes a physical state of affairs where there is perpetual compliance with the prior WQCP and such compliance has never occurred. For example, the DRSED at ES-51 states that “periodic exceedances of salinity objectives at the three interior southern Delta salinity compliance locations occur in the historical record...” As another example, Table ES-26 shows that Appendix D “provides a technical evaluation of the No Project Alternative and assumptions used to estimate the changes in flow needed to fully comply with the No Project Alternative (i.e., the 2006 Bay-Delta Plan as implemented through D-1641).” The DR SED-itself provides evidence that the baseline conditions are not and have never been an accurate description of the environment.</p>
<p>Page ES-51: These changes could occur as a result of releasing stored water, by reducing surface water diversions through bypassing flows at reservoirs or direct diversion points, or by reoperating reservoirs, all of which are reasonably foreseeable methods of compliance.</p>	<p>The DRSED does not provide any information upon which to base the above-statement or to inform the public about the activities necessary to implement these proposed methods of compliance. If part of the Project, then they must be specifically described and analyzed in the DRSED.</p> <p>The DRSED should describe the analytical disconnect whereby the Board-Staff can determine what is ‘reasonably foreseeable’ for surface water diverters that will lose their surface water supply (e.g., the above-statement) but then does not analyze what groundwater pumpers would do to replace the groundwater supply that would be impacted by the LSJR Objective as “too speculative.”</p> <p>There must be an analysis of an alternative where the impacted parties simply run out of water (no groundwater to unsustainably pump; no water transfers from other parties impacted by the LSJR Objective), which is the DRSED’s unanalyzed but anticipated Project impact.</p>
<p>Page ES-51: Reservoirs and streamflows in</p>	<p>It is unclear why the Plan Area and extended plan</p>

<p>the extended plan area are smaller than reservoirs and streamflows in the plan area and, thus, are potentially more susceptible to variations resulting from the LSJR Alternatives 2, 3, or 4 than in the plan area. Changes in river flow, and water supply effects, will be bigger in the plan area than in the extended plan area. Separate impact determinations are therefore identified for the plan area and extended plan area.</p>	<p>area should have been analyzed separately based on their reservoir storage capacity and quantity of streamflow, which are elements traditionally analyzed in a water rights analysis. The DRSED must explain its choice of these factors and why they served as threshold factors for analysis.</p> <p>The statement that "...water supply effects will be bigger in the plan area than in the extended plan area" does not support the conclusion that "separate impact determinations" are appropriate to describe the Project impacts. In fact, the statement demonstrates that the extended plan area and the Plan Area should be analyzed as a single Plan Area to demonstrate the Project's entire impact and not just the 'bigger impacts' for one analysis and a second, separate analysis for what the Board-Staff assumes (without evidence) will be an area to suffer smaller impacts.</p>
<p>Page ES-52: Table ES-20.</p>	<p>The DRSED has no basis upon which to determine that there are Less than Significant impacts to terrestrial species. The DRSED does not have any data upon which to base its conclusion that FRCS serves as an appropriate proxy for all fish and wildlife in the Plan Area. This analysis fully fails to analyze the Project under the Endangered Species Act. Finally, the analysis fails as a threshold matter because the DRSED fails to analyze any piece of non-riverine territory and therefore there are thousands of unanalyzed acres in the Plan Area without scientific explanation.</p>
<p>Page ES-53: The No Project Alternative is not included in this table because it would have no effect in the extended plan area.</p>	<p>The DRSED does not provide any information or data upon which to base this conclusion. This Amendment is the first time that the Board has included the extended Plan Area into its environmental analyses. Therefore, the above-statement is a matter that has never undergone an environmental analysis.</p>
<p>Page ES-53: The SDWQ alternatives are not included in this table because they</p>	<p>The DRSED does not provide any information or data upon which to base this conclusion. This</p>

<p>would have no effect in the extended plan area.</p>	<p>Amendment is the first time that the Board has included the extended Plan Area into its environmental analyses. Therefore, the above-statement is a matter that has never undergone an environmental analysis.</p>
<p>Page ES-54: The chapter identifies actions that the regulated community could take to reduce potential reservoir or water supply effects associated with implementing... The activities evaluated in Chapter 16 that result in significant and unavoidable impacts include: [specified list]</p>	<p>The DRSED must provide sufficient information to demonstrate that each or any of the listed activities is a reasonably foreseeable occurrence. Of the list proposed, two are simply not reasonably foreseeable in light of the Board’s experience with permitting in-Delta diversions (or the lack thereof). For example, the USBR and the CDWR have been trying, unsuccessfully, for at least ten years to permit their in-Delta project.</p>
<p>Page ES-61: Table ES-26.</p>	<p>The DRSED states that Appendix D “provides a technical evaluation of the No Project Alternative and assumptions used to estimate the changes in flow needed to fully comply with the No Project Alternative (i.e., the 2006 Bay-Delta Plan as implemented through D-1641).”</p> <p>This statement demonstrates the inaccuracy of the baseline because the current water quality objectives are not being met. Further, it demonstrates that additional flow must be manufactured through a Board-Staff “estimate” to justify using the proposed baseline.</p>
<p>Page ES-62: The State Water Board is the only public agency with discretionary approval over the proposed amendments to the Bay-Delta Plan and, therefore, no other agencies are expected to use this SED for decision making.</p>	<p>The Revised SED identifies the FERC relicensing proceedings as a forum where related measures would be implemented to further the WQCP. The above-statement appears inaccurate with respect to the FERC proceedings.</p> <p>The DRSED also identifies the USFWS, NOAA-NMFS and the CDFW as parties that will actually implement the Program of Implementation through adaptive implementation and the STM Working Group, all of which would require using the DRSED for these future projects.</p>

	<p>And finally, any agency that has ESA responsibilities within the Plan Area will be required under federal law to consider (i.e., “use”) the DRSED when adopting plans or undertaking actions in the Plan Area.</p>
<p>Page ES-63: The statute further requires that the environmental analysis, at a minimum, include...an analysis of reasonably foreseeable alternative means of compliance with the rule or regulation.</p>	<p>The DRSED simply fails to provide any information demonstrating the statutorily-required analysis of the “reasonably foreseeable alternative means of compliance” to the LSJR Flow Objective as required under Public Resources Code 21159(a). By simply defining the tool (flow) as the only means of compliance, the DRSED simply fails to consider any alternatives as required by law.</p> <p>Most notably, the DRSED defines the Project, the goals and the objectives as the same thing, the quantity of water that is flowing down a river during a given time period. There is no substitute. There is no alternative. It becomes impossible to analyze an alternative means because only the proposed Project can meet the goals (like 40% of the flow of a given river between months X and Y) and, therefore, only the proposed Project can meet the threshold requirements for further analysis.</p>
<p>Page ES-65: The SJR flow element of the proposal complements the southern Delta salinity element by augmenting flow in the southern delta, particularly in February – June. Increased flows under the flow alternatives would have the incidental benefit of flushing of salts...</p>	<p>The DRSED must analyze the impacts of the LSJR Flow Objective and the Delta salinity objective together, instead of separately, because CEQA requires an analysis of the entire Project and the DRSED-itself acknowledges the ‘complementary’ connection between the two.</p> <p>The above-statement is a water right allocation decision without appropriate due process or analysis. The USBR is responsible for meeting the Delta salinity objective, primarily by releasing fresh water from New Melones Reservoir on the Stanislaus River to dilute the saltier water in the south Delta. Here, the DRSED acknowledges that the LSJR Flow Objective is “augmenting flow” in the southern Delta to “complement” the Delta salinity objective’s goal. This ‘augmentation’ is explicitly relieving the USBR from releasing water that it otherwise would have to release in order to</p>

	<p>dilute the saline water in the south Delta.</p> <p>Additionally, the USBR has a lower priority to water than any of the named parties in the DRSED under the state’s law of water right priority. It violates the state’s law of priority for the DRSED to allocate out the water to the junior water right holder without appropriate findings and due process.</p>
<p>Page ES-73: ...the regional effects on the four-county Bay Area regional economy and ratepayers are evaluated based on the need to obtain replacement water as a result of the LSJR alternatives.</p>	<p>The DRSED does not contain any information upon which to base this conclusion that water supply impacts to the CCSF equates perfectly with the ‘regional effects’ of the four-county Bay Area regional economy. To the extent the DRSED recognizes a connection between these two areas, especially one so inextricable that the DRSED attempts to declare them duplicative analyses, then the DRSED should provide the information relevant to demonstrate that connection and perform an adequate environmental analysis of the four-county Bay Area region. It is a matter of Board-Staff conjecture to make a threshold scoping decision that an analysis isn’t necessary because the impacts are somehow already known.</p> <p>The DRSED does not provide an evidentiary basis to determine that there is available replacement water to either CCSF or to the four-county Bay Area region. This type of “impact” is one of many potential impacts, and is sufficiently unlikely that it cannot credibly serve as the sole metric to determine Project impacts. The choice to use this sole metric was a threshold determination based on Board-Staff conjecture that deliberately removed any analysis of the Project’s potential impacts upon an area that the DRSED acknowledges will certainly be impacted.</p> <p>The DRSED provides no information upon which to justify its conclusion that replacement water would be available for use. The very purpose of the LSJR Flow Objective is to identify and seize a unique resource, the surface water flow from the rivers, and the DRSED has not (and cannot)</p>

	<p>credibly claim that there is a readily available but as-yet-unnamed source of replacement water available to the named irrigation districts, the residents of the Plan Area, and the millions of Bay Area residents. The DRSED contemplates that they will all lose the primary source of their water supply but not their water supply reliability.</p>
<p>Page 9-1: This chapter analyzes increased GW pumping, reduced GW recharge from SW percolation, and related effects (i.e., subsidence) that may occur as a result of the effect of the LSJR alternatives on surface water supplies to the irrigation district service areas.</p>	<p>The DRSED does not and must explain why the irrigation districts are the only parties analyzed for groundwater impacts. Each irrigation district belongs to a groundwater management entity, which is the proper agency to review for groundwater impacts for each subbasin. Framing the groundwater impact analysis in this way clearly communicates the DRSED's deliberate and unscientifically-sound limitation to the environmental analysis, which results in a pre-determined water allocation decision.</p>
<p>Page 9-1: Southern Delta WQ alternatives are not discussed in this chapter because the SDWQ alternatives would not result in a change in groundwater pumping or groundwater recharge from surface water that currently takes place in the plan area.</p>	<p>The DRSED does not disclose the evidentiary basis upon which it based this conclusion. Elsewhere, the DRSED refuses to analyze the potential mitigation measures to significant and unavoidable groundwater impacts specifically because the Board-Staff determined that estimating groundwater pumping responses would be "too speculative."</p> <p>There is no evidentiary basis upon which the DRSED can make this conclusion because the groundwater impact analysis was solely focused on the Study Area, which is a much smaller geographic area than the plan area. The DRSED must expand the groundwater impact analysis to the entire Plan Area in order to justify the above-statement.</p>
<p>Page 9-2: The study area represents the primary area that could potentially experience GW effects associated with the LSJR alternatives.</p>	<p>The DR SED does not provide the evidentiary basis upon which it based this conclusion. Namely, what was the geographic or hydrographic relationship substantiating the use of four Irrigation District service areas as the only proxy to determine</p>

	<p>impacts to the entire Plan Area? The DRSED must describe and provide any analyses that it performed regarding the potential for groundwater impacts to the entire Study Area as well as any analyses about the effects of the salinity objectives' potential impacts to groundwater.</p>
<p>Page 9-2: The impacts of the LSJR alternatives on GW elevations, aquifer storage, and risk of subsidence cannot be determined with certainty because GW conditions vary within each aquifer subbasin and water users would have varied responses to reduced surface water deliveries.</p>	<p>These are unsubstantiated conclusions that purport to excuse a lack of analysis. The DRSED should provide information to explain how the above-statement is reconciled with the determination of “one inch” impacts, which is an undoubtedly specific metric in light of the above-statement.</p>
<p>Page 9-33: If local agencies are unwilling or unable to manage their GW resources, SGMA authorizes the State Water Board to step in to protect a GW basin in limited circumstances: (1) if no agency has opted by the June 30, 2017 (sic) to serve as a GSA for a basin, (2) when a GSA does not complete a GSP by the relevant deadline (2020 or 2022, or (3) when the GSP is inadequate or the GSP is not being implemented in a manner that is likely to achieve the plan's sustainability goal(s), and the basin is either in a condition of long-term overdraft or, after 1/31/25, the SWB determines that the basin is in condition where GW exactions result in significant depletions of interconnected surface waters.</p>	<p>In this instance, it is the SWB that is proposing a Project that results in significant and unavoidable impacts to groundwater. In light of this, it is difficult not to interpret the above-statement to mean that (1) the Board admittedly is removing the primary and historical tool to recharge groundwater basins to sustainably manage them and (2) once the Project is imposed, the Board intends to act upon the unsustainable situation that it created to allege that the Board should “step in” because the local agencies cannot manage their sub-basins sustainably. It is a Catch-22 and obvious circumvention of the legislature and state constitution’s mandates that local agencies manage their groundwater.</p>
<p>Page 9-35: The SWB also has authority to address the waste, unreasonable use, unreasonable method of use, and unreasonable method of diversion of water through quasi-legislative action.</p>	<p>Citations to the DRSED’s bases for this statement should be included. Until then, the statement is objectionable as an inaccurate statement of the law.</p>
<p>Page 9-44: In order to assess the effects of the LSJR alternatives on GW, GW in the</p>	<p>The DRSED must provide the scientific basis for choosing this methodology. An arithmetic exercise</p>

<p>four subbasins was considered to be four separate pools of water, each with no separation between shallow and deep aquifers.</p>	<p>is not the best available science for the analysis.</p> <p>If the DRSED did not intend to analyze impacts related to the “depth” of any of the subbasins, what is the significance or relevance of the maps provided at Figures 9-3 to 9-5?</p>
<p>Page 9-44: The evaluation of GW effects was not separated by depth because: (1) there is some connectivity between the different depths (2) increased GW pumping would occur in both shallow and deep wells.</p>	<p>Please cite to the evidence supporting the statement "increased GW pumping would occur in both shallow and deep wells." Elsewhere, the Revised SED fails to identify the potential for groundwater impacts because it was too “speculative” to try and identify potential groundwater pumping patterns in response to the Project.</p> <p>Please provide the data to demonstrate the scientific soundness of this analytical methodology. This is especially important because groundwater impacts are described in terms of “depth,” as in one-inch as across hundreds of square miles, while the above-statement clearly acknowledges that the Revised SED did not analyze “depth” in its impact analysis.</p>
<p>Page 9-44: These simplifying assumptions of separating the aquifer by subbasin and not by depth are acceptable because the purpose of the analysis is to estimate the general magnitude of the average effect of the LSJR alternatives on the subbasins, not effects at specific well locations.</p>	<p>The DRSED must identify the evidentiary basis for the above-statement.</p>

#### IV. CONCLUSION

MID respectfully requests the Board to rescind the DRSED. The document is scientifically and legally deficient in a variety of areas. The DRSED is a misguided attempt to improperly use the water quality control planning process to adjudicate water rights for MID and several other senior water rights holders in the San Joaquin Valley. This document will completely devastate the entire Central Valley, turning one of the nation’s most productive regions into a desert wasteland. Sadly, the DRSED will impose tremendous socio-economic, economic, and environmental costs on the area with little to no improvement to the environment. It will jeopardize the habitat of a variety of terrestrial species which are currently listed under the federal Endangered Species Act, violating that act, and for the hoped-for benefit of a mere 1,100 salmonid species. The human cost will be devastating as families are torn apart and entire

communities are turned into ghosts towns due to a lack of work, and/or in some instances, the most basic requirement of civilization – a reliable, safe supply of drinking water. Please stop this madness. Rescind this document and utilize the readily available scientific information to set balanced, meaningful, and legal defensible water quality objectives that benefit humans and a variety of other species and their habitats. MID stands ready, willing and able to continue our well-documented, successful, and scientifically based stewardship of our watershed and valley.

Sincerely,



Ronda Azevedo Lucas  
General Counsel

**Modesto Irrigation District  
 March 17, 2017 Comments  
 September 2016 – Recirculated Draft Substitute Environmental Document**

**Index of Attachments**

	<b>Document</b>	
1	Community Water Interest Meeting - Transcript – Modesto – November 18, 2016 Vol 1 of 1 Amendment to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: San Joaquin River Flows and Southern Delta Water Quality and on the Adequacy of the Supporting Recirculated Draft Substitute Environmental Document (SED)	Disk 5
2	Technical Workshop Transcript – Sacramento –December 5, 2016 Vol 1 of 1 Amendment to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: San Joaquin River Flows and Southern Delta Water Quality and on the Adequacy of the Supporting Recirculated Draft Substitute Environmental Document (SED)	Disk 3, 5
3	Technical Workshop Transcript – Sacramento – December 12, 2016 Vol 1 of 1 Amendment to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: San Joaquin River Flows and Southern Delta Water Quality and on the Adequacy of the Supporting Recirculated Draft Substitute Environmental Document (SED)	Disk 4, 5
4	Public Hearing Transcript – Sacramento – November 29, 2016 Vol 1 of 1 Amendment to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: San Joaquin River Flows and Southern Delta Water Quality and on the Adequacy of the Supporting Recirculated Draft Substitute Environmental Document (SED)	Disk 1, 5
5	Public Hearing Transcript – Stockton – 16, 2016 Vol 1 of 1 Amendment to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: San Joaquin River Flows and Southern Delta Water Quality and on the Adequacy of the Supporting Recirculated Draft Substitute Environmental Document (SED)	Disk 1, 5
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1	U.S. DOI Bureau of Reclamation, <i>SECURE Water Act Section 9503(c) – Reclamation Climate Change and Water 2016</i> , Chapter 8: Sacramento and San Joaquin River Basins (Mar. 2016)	Disk 6
2	M.K. Matella and A. M. Merenlender, <i>Scenarios for Restoring Floodplain Ecology Given Changes to River Flows Under Climate Change: Case from the San Joaquin River, California</i> , River Res. Applic. (2014).	Disk 6

3	California Natural Resources Agency, <i>2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008</i> (2009)	Disk 6
4	U.S. DOI, Bureau of Reclamation, <i>West-Wide Climate Risk Assessment: Sacramento and San Joaquin Basins Climate Impact Assessment</i> , RECLAMATION: Managing Water in the West (Sept. 2014)	Disk 6
5	California Attorney General's Office, <i>Addressing Climate Change at the Project Level</i> (Rev. Jan. 6, 2010) (visited Dec. 27, 2016), available at <a href="http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf">http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf</a>	Disk 6
6	Assembly Bill No. 32 a/k/a California Global Warming Solutions Act of 2006 Cal. Health & Safety Code § 38500 <i>et seq.</i>	Disk 6
7	CARB, <i>Climate Change Scoping Plan: A Framework for Change</i> (Dec. 2008)	Disk 6
8	IPCC, <i>IPCC Second Assessment: Climate Change 1995, A Report of the Intergovernmental Panel on Climate Change</i> (1995)	Disk 6
9	Dept. of Water Resources, <i>Progress on Incorporating Climate Change into Planning and Management of California's Water Resources, Technical Memorandum Report</i> (July 2006)	Disk 6
10	Sea-Level Rise Task Force, <i>State of California Sea-Level Rise Interim Guidance Document</i> (Oct. 2010)	Disk 6
11	Executive Order S-3-05	Disk 6
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13	California Natural Resources Agency, <i>2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008</i> (2009)	Disk 6
14	Cal. Water Code § 85320(b)(2)(C)	Disk 6
15	California Dept. of Water Resources, <i>Managing an Uncertain Future: Climate Change Adaptation Strategies for Water</i> (Oct. 2008)	Disk 6
16	Cal. DWR, <i>California Water Plan Update</i> (2009)	Disk 6
17	California DWR, <i>Central Valley Flood Protection Plan</i> (2012)	Disk 6
18	Cal. DFW, <i>Unity, Integration, and Action: CDFW's Vision for Confronting Climate Change in California</i> (2011)	Disk 6
19	CA Dept. of Food & Agriculture, <i>California Agricultural Vision: Strategies for Sustainability</i> (2010)	Disk 6
20	CNRA, <i>Safeguarding California Plan</i> (2014)	Disk 6
21	Cal. Dept. of Forestry and Fire Protection, <i>An Adaptation Plan for California's Forest Sector and Rangelands</i> (Dec. 2008)	Disk 6
22	CALFED Bay-Delta Program, <i>Independent Science Board Memorandum</i> (2007)	Disk 6
23	Delta Protection Commission, <i>2006-2011 Strategic Plan</i> (2006)	Disk 6
24	Ocean Protection Council, <i>Sea Level Rise Task Force Interim Guidance Document</i> (October 2010, original report)	Disk 6

25	Ocean Protection Council, Sea Level Rise Task Force Interim Guidance Document (March 2013 Update)	Disk 6
26	Cal. Dept. of Trans., Addressing Climate Change Adaptation in Regional Transportation Plans: A Guide for California MPOs [Metropolitan Planning Organizations] and Regional Transportation Plans Agencies (ongoing)	Disk 6
27	Caltrans Activities to Address Climate Change: Reducing Greenhouse Gas emissions and Adapting to Impacts (April 2013)	Disk 6
28	Cal. EMA & Cal. NRA Climate Adaptation Planning Guide (Sept. 2012)	Disk 6
29	SWRCB Press Release Re: Revised Draft Resolution No. 2017- Comprehensive Response to Climate Change	Disk 6
30	SWRCB Revised Draft Resolution No. 2017- Comprehensive Response to Climate Change	Disk 6
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32	Amended and Restated Treatment and Delivery Agreement Between Modesto Irrigation District and City of Modesto, Dated October 11, 2015	Disk 6
33	Modesto Irrigation District, Fifteenth Issue, New Don Pedro Dam Bonds, Dated August 1, 1967	Disk 6
34	Salsim, Salmon Simulator, As Implemented for the San Joaquin River System, Dated June 2013	Disk 6
35	Salsim, Salmon Simulator, As Implemented for the San Joaquin River System, Dated February 2014	Disk 6
36	Agreement for Mitigation Impacts to Contra Costa Water District From Constuction and Operation of Bay Delta Conservation Plan/California Waterfix. Dated March 24, 2016	Disk 6
37	The Vernalis Adaptive Managemnt Program (VAMP) Report of the 2010 Review Panel	Disk 6
38	DWR California Data Exchange Center, Don Pedro Dam, Printed March 15, 2017.	Disk 6

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