



tel: 916.455.7300 • fax: 916.244.7300
510 8th Street • Sacramento, CA 95814

December 3, 2018

SENT VIA EMAIL (CoveredActions@deltacouncil.ca.gov)

Delta Stewardship Council
980 Ninth Street, Suite 1500
Sacramento, CA 95814

**RE: Atherton Cove Property Owners Association's Appeal of
San Joaquin Area Flood Control Agency's Certification of Consistency
for the Smith Canal Gate Project (C20188)**

Dear Chair Fiorini and Members of the Delta Stewardship Council:

This is an appeal of the San Joaquin Area Flood Control Agency's ("SJAFCA") Certificate of Consistency ("COC") for the proposed Smith Canal Gate Project ("Project"), certificate ID C20188. This appeal is filed on behalf of the Atherton Cove Property Owners Association ("ACPOA"). This appeal challenges SJAFCA's consistency determinations concerning Policies G P1(b)(2): Mitigation Measures, G P1(b)(3): Best Available Science, G P1(b)(4): Adaptive Management, and ER P5: Invasive Nonnative Species.

Policy G P1(b)(2): Mitigation Measures

The Delta Plan Programmatic EIR ("PEIR") includes extensive mitigation measures that apply to covered actions through G P1(b)(2) (Cal. Code Regs., tit. 23, § 5002). These mitigation measures are meant to ensure covered actions conform to the Delta Plan. SJAFCA has failed to meet its burden to demonstrate the Project's mitigation measures are equal to or more effective than the Delta Plan's mitigation measures. In support of its Certification of Consistency, SJAFCA offered a document that merely lists the Delta Plan mitigation measures along with the purportedly consistent Project mitigation measures. Each Delta Plan mitigation measure includes multiple individual sub-measures, yet it is unclear which Project mitigation measures are meant to apply. SJAFCA has abdicated its duty to demonstrate consistency between the Project and the Delta Plan's mitigation measures. As SJAFCA does not make a claim that the Project includes the Delta Plan's mitigation measures, SJAFCA must demonstrate how the Project's mitigation measures are "equally or more effective" as the Delta Plan's. (G P1

(b)(2).) Further, SJAFCA has failed to also demonstrate consistency with specific mitigation measures, detailed below.

A. SJAFCA's Undeveloped Invasive Species Management Plan Is Not Consistent with MM 4-1 and MM 4-4

SJAFCA has objectively failed to comply with Delta Plan mitigation measures MM 4-1 and MM 4-4, and has also failed to provide information necessary to establish that its chosen mitigation strategy is “equally or more effective” than MM 4-1.

MM 4-1 includes multiple elements intended to mitigate for impacts to biological resources. One of these elements is the requirement for “an invasive species management plan,” which is described in detail in MM 4-1:

An invasive species management plan shall be developed and implemented for any project whose construction or operation could lead to introduction or facilitation of invasive species establishment. The plan shall ensure that invasive plant species and populations are kept below preconstruction abundance and distribution levels. The plan shall be based on the best available science and developed in consultation with Department of Fish and Wildlife (DFW) and local experts, such as the University of California Extension, county agricultural commissioners, representatives of County Weed Management Areas (WMA), California Invasive Plant Council, and California Department of Food and Agriculture. The invasive species management plan will include the following elements:

- Nonnative species eradication methods (if eradication is feasible)
- Nonnative species management methods
- Early detection methods
- Notification requirements
- Best management practices for preconstruction, construction, and post construction periods
- Monitoring, remedial actions and reporting requirements
- Provisions for updating the target species list over the lifetime of the project as new invasive species become
- potential threats to the integrity of the local ecosystems

SJAFCA's EIR concedes that the Project would admittedly exacerbate the presence of water hyacinth within Atherton Cove (EIR, pp. 3.2-11, 3.7-22), and further explains that this impact would be mitigated “through development and implementation of a water hyacinth control program.” (EIR, p. 2-17.) Several flaws exist with this

strategy, however. First, SJAFCA refuses to include this water hyacinth removal program as a mitigation measure despite clear caselaw explaining that “invasive plant removal” is “plainly [a] mitigation measure.” (*Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 656, fn. 8 (*Lotus*).) *Lotus* further explained that an EIR cannot incorporate “the proposed mitigation measures into its description of the project and then conclude[] that any potential impacts from the project will be less than significant.” (*Id.* at 655–656.) This practice, according to the *Lotus* decision, would make it “impossible to determine whether mitigation measures are required or to evaluate whether other more effective measures than those proposed should be considered.” (*Id.* at 656.)

The second fundamental deficiency with SJAFCA’s claimed water hyacinth harvesting program is SJAFCA’s inexplicable decision not to actually develop the program when it approved the Project. This inexplicable deferral of mitigation is a procedural violation of CEQA. (*POET, LLC v. State Air Resources Board* (2013) 218 Cal.App.4th 681, 736 (deferral allowed only when EIR establishes why “practical considerations prevented the formulation of mitigation measures at the usual time in the process”); *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 671 (“no reason or basis is provided in the EIR for the deferral to a future management plan (or plans) of these particular mitigation measures”). Setting aside the procedural violation of CEQA, SJAFCA’s impermissible deferral thwarts the Delta Stewardship Council’s (“Council”) consistency review because it is impossible for the Council to: (i) predict this method’s efficacy in mitigating water hyacinth impacts, or (ii) assess potential environmental impacts of the harvesting program itself.

With respect to the efficacy of the undeveloped hyacinth harvesting program, the EIR merely prescribes the harvester’s use “whenever cover of water hyacinth reaches 20% in the most impacted areas behind the sheet pile wall” (EIR, p. 2-18) without explaining how this strategy is effective to control water hyacinth. BSK Associates explains, “The Water Quality Maintenance is not itself an effective control tool for Water hyacinth, since it arbitrarily picks a 20% threshold, which has no basis in science and would still provide a massive seed source.” (Exhibit A, BSK Report, p. 6.) The EIR also fails to explain what constitutes “the most impacted areas,” or how SJAFCA determined that focusing on the “most impacted areas” would result in effective mitigation of the impact. The EIR never describes the time period between reaching the 20 percent cover trigger and the commencement of actual harvesting, which is significant because “[t]he surface area of water hyacinth mats can double in size in a week.” (EIR, p. 3.2-5.) It is impossible, without even the most rudimentary explanation of how mechanical harvesting is accomplished, to analyze whether this mitigation measure is effective and whether other mitigation measures might be more effective. Indeed, it is telling that neither the EIR nor SJFCA’s consistency determination gives any information

demonstrating compliance with the detailed requirements for an “invasive species management plan” set forth in MM 4-1.

SJAFCA’s failure to actually develop the program as promised in the Draft EIR also prevents any meaningful assessment of potentially significant impacts of that program. Where a mitigation measure “would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed.” (CEQA Guidelines, § 15126.4, subd. (a)(1)(D).) The record contains evidence demonstrating that the mechanical harvesting proposed here would cause its own environmental impacts. (SJA-CEQ-02000–01, 02034–38.) An Integrated Weed Management Plan (“IWMP”) for the Lake Tahoe Keys Lagoons prepared by the Tahoe Keys Property Owners Association, and previously submitted to SJAFCA, identified several potentially significant environmental impacts associated with mechanical harvesting, which include:

- All mechanical methods create viable plant fragments and release viable plant propagules that can disperse to uninfested areas by water fowl, wind and water movement, and boat traffic.
- Harvesting is a non-selective operation that does not discriminate nuisance plants from beneficial plants. This lack of sensitivity can negatively impact desirable, native aquatic species.
- The physical actions from these operations can cause direct harm to fish, amphibians and invertebrates and other organisms through injury or mortality or by removing cover to protect native fish from prey. These impacts are directly related to the scale of operations and to the abundance and occurrence of non-target organisms in the treatment area.
- Mechanical harvesting can impact water quality by increasing turbidity and releasing nutrients usually bound in the sediment.
- Mechanical cutting is conducted during the early rapid growth phase and continuing growth period of the plants throughout the summer. Cutting plants during these periods can stimulate their growth and also cause more lateral growth or side-branching to occur which results in a denser plant canopy.
- Disposal costs can be expensive. Often plant material must be hauled to locations remote from the harvested area and disposal costs can constitute a large part of the budget.
- The fuel used to run harvesters and associated vehicles adds to the overall carbon footprint of the maintenance operation which has air quality impacts.

(Exhibit B, Tahoe Keys IWMP, p. i, 38.)

The EIR completely omits any discussion of these or other potential impacts from mechanical harvesting, and so the public is left no information about whether additional mitigation is necessary to address impacts from the proposed mechanical harvesting.

In short, SJAFCA has simply not provided the Council with adequate information demonstrating that its yet-to-be developed invasive species management plan is “equally or more effective” than Delta Plan MM 4-1. Far from being “based on best available science” as required by MM 4-1, the only thing that we know about this plan, namely the 20 percent “visual” cover trigger, is that it is not based on any identifiable science. There is no evidence showing how this plan will “ensure” that water hyacinth is kept below baseline conditions. It is not even identified as an enforceable mitigation measure. Further, there is no evidence that SJAFCA consulted with any entity in developing this plan—which, again, has not actually been developed yet. Finally, this yet-to-be developed plan does not include any of the “elements” listed in MM 4-1.

References Submitted:

1. Exhibit A, BSK Associates, Biological Resources Review, Smith Gate Canal Project, Stockton, California (2015)
2. Exhibit B, Sierra Ecosystem Associates, Integrated Management Plan for Aquatic Weeds for the Tahoe Keys Lagoon (2016)

B. SJAFCA Failed to Include Mitigation Required By MM 4-2 and MM 4-3 to Prevent Harm to Special-Status Fish Species

As discussed in detail below, SJAFCA failed to fully consider whether altered water flows, the result of constricting Atherton Cove’s opening, would enhance habitat of a predation by striped bass and other invasive predators of salmon, steelhead, delta smelt and splittail. Substantial evidence in the record demonstrated this potential Project impact (see Exhibit K, ICF International, Comment on Hydrodynamic Modeling Draft Report, p. 2), and yet SJAFCA failed to investigate or analyze the extent of this impact.

Delta Plan mitigation measure MM 4-2 includes extensive protections for special-status species and their habitats, going so far as to require project elements be redesigned to avoid impacts on such species. When impacts to special-status species are unavoidable, agencies must restore or preserve in-kind suitable habitat or purchase restoration or preservation credits. Similarly, Delta Plan mitigation measure MM 4-3 requires covered actions “[t]o the maximum extent practicable, design project elements to avoid effects that would lead to a substantial loss of fish and wildlife habitat.” If no such design is practicable, then agencies must “[r]eplace, restore, or enhance habitats . . . that

would be lost” and “[w]here substantial loss of habitat . . . is unavoidable, compensate for impacts by preserving in-kind habitat.”

SJAFCA has failed to demonstrate that the Project includes any mitigation measures equal to or more effective than MM 4-2 or MM 4-3, because SJAFCA never considered the Project’s facilitation of Striped Bass predation. The only mitigation measures for aquatic habitat SJAFCA included are construction related and have no relation to the Project’s design or operation. (See Smith Canal Mitigation Consistency, p. 9.) The Project was not designed with consideration of increased predation of special-status fish species, despite the presence of multiple special-status fish species in the Project area. (EIR, p. 3.8-3.) By increasing striped bass predation, the Project would impact special-status species and habitat, and SJAFCA has failed to include any mitigation to prevent it. Therefore, SJAFCA has failed to meet its burden to demonstrate the Project include mitigation equal to or more effective than MM 4-2 and MM 4-3.

References Submitted:

1. Exhibit K, ICF International, Comment on Hydrodynamic Modeling Draft Report (May 30, 2014)

Policy G Pl(b)(3): Best Available Science

The Delta Plan defines best available science as the “best scientific information and data for informing management and policy decisions.” (Cal. Code Regs., tit. 23, § 5001(f).) The Delta Plan further defines best available science with six criteria: relevance, inclusiveness, objectivity, transparency and openness, timeliness, and peer review. (Cal. Code Regs., tit. 23, § 5002, subd. (b)(3), Appen. 1A, p. 1A-2.) SJAFCA fails to demonstrate use of best available science in its evaluation of impacts to invasive species, water quality and biological impacts in Atherton Cove.

A. Improper Reliance on Residence Time to Analyze Water Quality Impacts

SJAFCA relies exclusively on a hydrologic study of residence time within Atherton Cove as a substitute for meaningful analysis of invasive species and water quality. However, exclusive reliance on residence time is inadequate, as explained by the firm that prepared the residence time analysis:

Water quality is affected by a wide range of variables including salinity, flow exchange, water temperature, oxygen levels, and concentrations of nutrients in the water column. *It is not within the scope of the present*

modeling effort to provide a description of the full range of variables attributing to water quality, but the two dimensional modeling effort does provide insight into two of the primary variables affecting water quality related to flow dynamics, which are flow velocities and flow exchange.

(EIR, Appen. B, p. 66 [Moffat & Nichol, Smith Canal Gate Hydrodynamic Modeling Alignment and Gate Width Evaluation Final Report] (emphasis added).)

Thus, SJAFCAs own consultant concedes that a study of only residence time does not “provide a full range of variables attributing to water quality.” The BSK Report provides much greater detail about why SJAFCAs exclusive reliance on residence time is inadequate to analyze Project impacts from water hyacinth as well as dissolved oxygen and methylmercury. (Exhibit A, BSK Report, pp. 5–10.) Put simply, the hydrologic study’s exclusive reliance on residence time admittedly fails to consider other important factors affecting water quality. (*Ibid.*) Moreover, the residence time analysis actually performed for the Project is inadequate for Atherton Cove, as BSK explains:

The provided analysis is simply describing global averaged, mid-channel conditions. In other words, the best-case scenario. It is not the average of the sample locations (15 averaged for the whole project), but the effects of the worst case backwater that influence water quality, for example, at lowest velocity locations at edges of the model field that have the worst circulation. An evaluation that looks at those points (such as the head of Atherton Cove and the proximal point of Dad’s instead of mid-channel locations in the highest velocity fields) and compares them pre-and post-project would give a more accurate representation.

(Exhibit A, BSK Report, p. 9.)

In short, BSK agrees with Moffat & Nichols that its purely hydrologic study, focused solely on averaged, mid-channel residence time, is not the “best available science” to study the Project’s impact on water quality. SJAFCAs failure to consider additional, relevant factors in its water quality analysis conflicts with the Delta Plan’s relevancy and inclusiveness criteria for best available science.

References Submitted:

1. Exhibit A, BSK Associates, Biological Resources Review, Smith Gate Canal Project, Stockton, California (2015)

B. Failure to Analyze Cyanobacteria Proliferation

SJAFCA failed to use any science, much less best available science, to analyze the Project's impact on cyanobacteria. Though record evidence demonstrates that the Project may cause biological impacts by encouraging proliferation of cyanobacteria (Exhibit A, BSK Report, pp. 10-12), SJAFCA never adequately disclosed or analyzed this risk.

Present in the Delta since the 1990s, cyanobacteria blooms and their associated toxins increase as water flows decrease. (Exhibit A, BSK Report, p. 2; see also Exhibit C, Berg & Sutula, 2015; Exhibit D, Brutemark, 2015; Exhibit E, Lehman, 2005.) By constricting the mouth to Atherton Cove by 92 percent, the Project would likely result in localized decreases in water flow, trapping organic material and elevating nutrient levels, thereby creating conditions known to significantly exacerbate cyanobacterial blooms. (Exhibit A, BSK Report, pp. 4, 6; see also Exhibit F, Toft, 2003; Exhibit L, Boyer & Sutula 2015; Exhibit M, Cohen & Moyle 2004.) The blooms reduce dissolved oxygen in the water and block sunlight needed by other living organisms. (Exhibit A, BSK Report, p. 2; see also Exhibit C, Berg & Sutula, 2015; Exhibit N, Tsui 2010.) Additionally, toxins released during these blooms are absorbed by fish, birds, and mammals and can be lethal at concentrations as low as a few micrograms per liter. (Exhibit A, BSK Report, pp. 2-3.) These toxins can also harm species that consume the infected organism. (*Id.* at 3; see also Exhibit O, Cogliano 2010.)

Incredibly, the EIR never disclosed the Project's risk of increasing these destructive blooms, or describes their potential biological impacts. An expert microbiologist with algal experience (Exhibit A, BSK Report, pp. 13-19), discussed the failure of the EIR to address the "potential for the project to create or exacerbate impacts to human health and the environment from blue-green algae (cyanobacteria) and their toxins, microcystins," citing to a raft of supporting studies and documentation, most of which pertained directly to the Delta (*Id.* at 2-3, 10-11).

In response to this expert evidence, SJAFCA's EIR project manager¹ made two remarkable oral representations. She first claimed that cyanobacteria does not exist in the Project area. (Exhibit G, SJAFCA Board Meeting Transcript, November 19, 2015, p. 47.) To support that assertion, the consultant referred the public to the "environmental setting" sections of both the "water quality" and "vegetation and wetlands" chapters of the EIR. (*Ibid.*) The referenced sections of the EIR, however, do not support this assertion because the pages never mention cyanobacteria, much less discuss its presence

¹ The EIR Project Manager has a J.D. with a B.A. in English. (EIR, p. 7-1.) No qualifications are provided that would suggest this project manager is qualified to offer expert testimony regarding cyanobacteria.

in the Project area. (EIR, pp. 3.2-1 to 3.2-6 [water quality]; 3.7-1 to 3.7-10[vegetation and wetland]).)

The consultant's representation is demonstrably false. It is well established in the scientific literature that cyanobacteria (not necessarily in "bloom") is pervasive throughout the Delta. (Exhibit C, Berg & Sutula, 2015; Exhibit H, Kurobe, 2013; Exhibit I, Ksander & Spenser, 2005; Exhibit E, Lehman, 2005; see also Exhibit J, Sabalow, 2015.) To the extent there is no evidence in the EIR regarding the presence of cyanobacteria, that is the direct result of SJAFCA's failure to investigate. The failure to even consider the presence of cyanobacteria and the reliance on non-expert opinions conflict with the relevancy and inclusivity criteria for best available science.

The fact that SJAFCA and its Project Manager made this argument at all demonstrates SJAFCA's lack of understanding of the very serious threat of cyanobacteria blooms in the Delta. It is not the mere presence of cyanobacteria, but the conditions that lead to algal blooms, that was described as the concern with permanently making the opening to Atherton Cove smaller and "constricting flows," causing "reduced circulation and longer retention times at the margins and at dead ends." (See Exhibit A, BSK Report, p. 2.) Further reinforcing the absence of any "investigation" or "survey" is the lack of any disclosed methodology to identify the presence of this microscopic bacteria through the alleged surveys.

SJAFCA's EIR project manager additionally asserted that the Project would not cause the proliferation of blue-green algae. (Exhibit G, SJAFCA Board Meeting Transcript, November 19, 2015, p. 47.) To the contrary, the record contains ample evidence regarding the creation of conditions that cause cyanobacteria proliferation/blooms by the Project. These conditions include: increased water temperature (Exhibit A, BSK Report, p. 2), and the EIR's acknowledgement that the Project will cause localized reductions in water velocity (EIR, p. 3.7-22).

Struggling for support, SJAFCA focuses on hydrodynamic modeling allegedly showing the Project would not reduce flows into Atherton Cove. Again, however, the BSK Report explains that reliance on a purely hydrologic report cannot possibly be used to analyze the Project's impact on cyanobacteria proliferation. As explained in the BSK Report co-authored by a hydrologist, the Moffat & Nicol analysis failed to consider flow effects on the entire water channel (Exhibit A, BSK Report, p. 9), meaning slower moving parts of the channel where blooms are most likely to occur were not taken into account. In addition, SJAFCA ignores the fact that the Moffat & Nicol report itself states that it was not intended to, and in fact does not, address all variables contributing to water quality. (See EIR, Appen. B, p. 66.)

In short, SJAFCA cannot identify evidence in the record establishing that it used best available science in its evaluation of the Project's impact on cyanobacteria proliferation in Atherton Cove.

References Submitted:

1. Exhibit A, BSK Associates, Biological Resources Review, Smith Gate Canal Project, Stockton, California (2015)
2. Exhibit C, Berg & Sutula, Factors Affecting Growth of Cyanobacteria With Special Emphasis on the Sacramento-San Joaquin Delta (August 2015) Southern California Coastal Water Research Project
3. Exhibit D, Brutemark et al., Growth, Toxicity, and Oxidative Stress of a Cultured Cyanobacterium (*Dolichospermum* sp.) under different CO₂/pH and Temperature Conditions (2015) 63 Phycological Research 56-63
4. Exhibit E, Lehman et al., *Microcystis* Biomass and Toxicity, 2005 Pelagic Organism Decline Program Progress Report
5. Exhibit F, Toft et al., The Effects of Introduced Water Hyacinth on Habitat Structure, Invertebrate Assemblages, and Fish Diets, Estuaries Vol. 26, 3:746 (2003)
6. Exhibit G, SJAFCA Board Meeting Transcript, November 19, 2015
7. Exhibit H, Kurobe, Identification of Harmful Cyanobacteria the Sacramento San Joaquin Delta and Clear Lake California by DNA Barcoding SpringerPlus 491 (2013)
8. Exhibit I, Ksander & Spencer, Seasonal Growth of Water hyacinth in the Sacramento/San Joaquin Delta California (2005) 43 Aquatic Plant Manage 91-94
9. Exhibit J, Sabalow, Unusual Delta Algae Bloom Worries Researchers, Sacramento Bee (2015)
10. Exhibit L, Boyer & Sutula, Factors Controlling Submersed and Floating Macrophytes in the Sacramento-San Joaquin Delta (2015) Southern California Coastal Water Research Project

11. Exhibit M, Cohen & Moyle, Summary of Data and Analyses Indicating that Exotic Species Have Impaired the Beneficial Uses of Certain California Waters (2004)
12. Exhibit N, Tsui et al., In Situ Production of Methylmercury within a Stream Channel in Northern California (2010) 44 Environ. Sci. Technol. 6998-7004
13. Exhibit O, Cogliano, Ingested Nitrate and Nitrite, and Cyanobacterial Peptide Toxins (2010) 94 International Agency for Research on Cancer Monographs, p. 412

Policy G P1(b)(4): Adaptive Management Program

SJAFCA claims that the requirement for an adaptive management program is inapplicable to the Project. SJAFCA argues, “The Project purpose is to provide flood protection,” and so the project “would not include water management.” In other words, SJAFCA is redefining the phrase “water management” projects to only include “water supply” projects. This cramped definition of “water management” is not supported in the Delta Reform Act, the Delta Plan Policies, or any other guidance. Nor is that cramped interpretation supported by the facts where, as here, a “flood control” project will admittedly alter water flows, hydrology, invasive species and other factors affecting aquatic habitat in the Delta. Indeed, it is noteworthy that the Council did not take this cramped view of the scope of “water management” projects when it commented on the Project’s EIR (EIR, p. 9-11). In that comment letter, the Council plainly stated:

We recommend that adaptive management for this project incorporate a monitoring, evaluation and reporting program that evaluates whether the project is successfully achieving its goals and objectives and whether the proposed mitigation measures achieve their purpose of preventing and redressing impacts to water quality, vegetation, and fish and wildlife.

(EIR, p. 9-11.)

The Council’s recommendation was later reiterated by BSK Associates, which explained in detail the need for an adaptive management plan:

The Water Quality Maintenance is not itself an effective control tool for Water hyacinth, since it arbitrarily picks a 20% threshold, which has no basis in science and would still provide a massive seed source. The Water Quality Maintenance program should be fully developed to look at multiple species, not just water hyacinth, that could be worsened by the project and

include an adaptive management program. The adaptive management program should include the full range of terrestrial and aquatic weed species and their associated habitat which would be promoted as a result of the project; it should use scientific metrics for implementation, and those metrics should be tracked over [time], and if the environmental impacts are greater than expected, the mitigation actions should be modified to compensate; and this adaptive management program should be part of the [MMRP].

(Exhibit A, BSK Report, pp. 6–7.)

SJAFCA’s purely legal interpretation of the Delta Reform Act and the Council’s regulations are legal error and afforded no deference by reviewing courts. SJAFCA’s legal position is not a surprise, however, since SJAFCA failed to use adaptive management for the Project as previously recommended by the Council and BSK Associates. As established above, the yet-to-be developed water hyacinth harvesting plan includes no adaptive management elements. While that plan purports to include a trigger of 20 percent water hyacinth cover to commence mechanical harvesting for water hyacinth, that trigger “is not biologically based” and, in any event, “visual coverage assessment is not meaningful as it related to ecological impacts.” (Exhibit A, BSK Report, p. 9.) Thus, there is no mechanism to modify the water hyacinth management plan if the 20 percent visual coverage trigger ultimately results in increased water temperature, increased cyanobacteria blooms, increased methylmercury or reduced dissolved oxygen in Atherton Cove, all of which are consequences of water hyacinth. (*Id.* at 8–9.) Of course, it would be impossible to identify such changes because the Project includes no ongoing testing within Atherton Cove.

In conclusion, the Project is inconsistent with the Delta Plan’s requirement to provide for continued adaptive management, and SJAFCA’s *post hoc* legal rationalization to avoid the implications of this deficiency is without merit.

References Submitted:

1. Exhibit A, BSK Associates, Biological Resources Review, Smith Gate Canal Project, Stockton, California (2015)

Policy ER P5: Invasive Nonnative Species

Delta Plan Policy ER P5 provides in relevant part, “The potential for new introductions of or improved habitat conditions for nonnative invasive species, striped bass, or bass must be fully considered and avoided or mitigated in a way that

appropriately protects the ecosystem.” The Project is inconsistent with this policy in two ways. First, SJAFCA failed to fully consider, avoid and mitigate the Project’s operational impact on water hyacinth within Atherton Cove. Second, SJAFCA failed to fully consider, avoid and mitigate the Project’s operational impact of improving habitat for striped bass and other nonnative species that prey on salmon, steelhead delta smelt and splittail.

A. Increased Presence of Water Hyacinth

It is beyond debate that the Project will increase the presence of water hyacinth within Atherton Cove by trapping water hyacinth mats behind the fixed wall. (EIR, p. 3.2-11.) Presently, water hyacinth mats simply drift in and out of Atherton Cove into the San Joaquin River with the tides. The Project would virtually eliminate that existing natural flushing process because water hyacinth mats, which grow to more than two acres in size, would be trapped behind the fixed wall due to the constricted opening. (EIR, p. 3.2-16 (“[W]ithout maintenance there could be a significant accumulation of hyacinth behind the walls in areas that are currently open water, as the walls may reduce water velocity in spots and prevent hyacinth from washing back into the San Joaquin River”).) This significant contribution to water hyacinth proliferation behind the fixed dam would, in turn, significantly degrade water quality in Atherton Cove through increased methylmercury, reduced dissolved oxygen as well as increased predation on special status fish species. (Exhibit A, BSK Report, pp. 8-9.)

But that is the end of SJAFCA’s analysis. As explained above, SJAFCA failed to assess how much water hyacinth proliferation would occur without mitigation, did not support its proposed mitigation strategy with any science, and certainly did not consider whether the consequential impact of this increased water hyacinth on dissolved oxygen, water temperature, methylmercury or cyanobacteria blooms. Thus, SJAFCA has not “fully considered” or “mitigated” the Project’s impact on water hyacinth in Atherton Cove.

Nor did SJAFCA “mitigate” the Project’s water hyacinth impact to Atherton Cove. While water hyacinth removal is “plainly” mitigation under *Lotus, supra*, 223 Cal.App.4th at 656, fn. 8, SJAFCA failed to make water hyacinth removal an enforceable mitigation measure for the Project. (CEQA Guidelines, § 15126.4.) Even if this procedural flaw is ignored, the yet-to-be developed water hyacinth removal plan is inadequate mitigation because it is impermissibly deferred and there is no evidence of its effectiveness. (*Sierra Club v. County of San Diego* (2014) 231 Cal.App.4th 1152, 1168.) SJAFCA likely misconstrued the water hyacinth removal plan as a design feature and not a mitigation measure specifically to avoid these questions regarding its deferral and effectiveness.

Nor did SJAFCA “avoid” the Project’s impact to Atherton Cove. As explained above, a redesigned alternative would avoid the Project’s impact on Atherton Cove by constructing the floodwall within the existing levees thereby avoiding altogether the need to constrict the mouth of Atherton Cove by 92 percent. By not properly acknowledging the Project’s indefinite operational impact to water hyacinth in Atherton Cove, SJAFCA failed to adequately consider whether this project alternative would feasibly avoid the impact under Delta Plan Policy ER P5.

References Submitted:

1. Exhibit A, BSK Associates, Biological Resources Review, Smith Gate Canal Project, Stockton, California (2015)

B. Improved Habitat Conditions for Striped Bass and Other Invasive Predators

SJAFCA failed to fully consider whether altered water flows resulting from the constricted opening to Atherton Cove would enhance habitat and predation by striped bass and other invasive predators of salmon, steelhead, delta smelt and splittail. SJAFCA was alerted to this issue by its own consultant in an internal memo dated May 30, 2014, stating in relevant part:

Characterization of with-project flow velocities: the concentration of flow through the gate opening is likely to attract predators (e.g., striped bass, pikeminnow, largemouth bass). We would like to see the report characterize these velocity differences a bit more, as the flow comparison doesn’t seem to capture this difference. The velocity patterns shown for flood and ebb appear to show the velocity shear zones that predators might like.

(Exhibit K, ICF International, Comment on Hydrodynamic Modeling Draft Report, p. 2.)

Despite being alerted to the issue more than a year before the Draft EIR was released, all that SJAFCA did was generally acknowledge the issue with a single sentence: “Turbulence from water passing over dams and other structures may disorient juvenile Chinook salmon and steelhead, increasing their vulnerability to predators.” (EIR, p. 3.8-11.) While acknowledging this general proposition, SJAFCA failed to analyze whether increased water flows through the Project’s 50-foot gate would increase predation in the area.

The Draft EIR's deficiency was noted by commenters, including the California State Lands Commission (EIR, p. 9-27), BSK Associates (Exhibit A, BSK Report, p. 9), and even the Council (EIR, p. 9-10.) The Council stated:

In-water structures, like sheet pilings, can potentially provide shelter for nonnative fish like striped bass that may predate on native listed fish like Chinook salmon and operation of the gates could influence movement of aquatic plant. In the final EIR, please describe how the project will avoid or mitigate these types of impacts.

(EIR, p. 9-10.) Similarly, as the BSK Report explained:

Increased fish predation on both listed and game species is commonly attributed to projects that change the channel margin, and in particularly those that create in-water structure and restrictions Yet predation known to be an issue in the local area, as well as associated with structures, similar to the proposed project is simply ignored.

(Exhibit A, BSK Report, p. 8.)

Thus, SJAFCA cannot point to any evidence in the record establishing that it "fully considered" whether increased flow velocities at the Project's 50-foot wide gate would improve habitat for striped bass and other invasive predators.

References Submitted:

1. Exhibit A, BSK Associates, Biological Resources Review, Smith Gate Canal Project, Stockton, California (2015)
2. Exhibit K, ICF International, Comment on Hydrodynamic Modeling Draft Report (May 30, 2014)

Inclusion of Exhibits into the Council's Record

The Council's Appeals Procedures make clear that information that was before the agency when it made its determination should be included in the record. (See Appeals Procedures, § 4, subd. (b) ["the record that was before the . . . agency at the time it made its certification"], § 10 ["[t]he council . . . may supplement the record . . . if [it] determines that additional information was part of the record before the agency, but was not included in the agency's submission to the council"], § 14 ["[t]he council shall make its decision on the appeal . . . based on . . . the record before the . . . agency that filed the

certification”].) The Council may also take official notice of generally accepted technical or scientific matter within its jurisdiction, as well as any fact that may be judicially noticed by courts. (Appeals Procedures, § 29.) Under Evidence Code sections 451 through 453, courts may take judicial notice of various official public documents. Specifically, judicial notice may be taken of official acts of legislative, executive, and judicial departments of both the Federal and State Government. (Evid. Code, § 452, subd. (c).) In addition, under Water Code section 85225.10, the Council may include information it deems relevant to a consistency appeal.

Each exhibit provided here by ACPOA is proper for inclusion in the record under either Appeals Procedures sections 10 and 29 and because the exhibits are relevant to the Council’s determination.

Exhibit A, the BSK Report, and Exhibit B, the Tahoe Keys IWMP, were a part of the CEQA administrative record for the Project at trial, as it was attached to ACPOA’s comment letter on the Project EIR. (See Attachment 1, Index to Administrative Record of Proceedings, SJAFCA Smith Control Gate CEQA Cases.) Exhibits C–F, H–J, and L–Q are all citations made in the BSK Report, and are offered here to support the Report’s claims. Each of these exhibits are proper for inclusion in the record under Appeals Procedures section 10, because they were before the agency prior to the Certification of Consistency filing. Moreover, each of these exhibits are proper for official notice under Procedures section 29, because they relate to the Council’s scientific and technical expertise.

Exhibits G and K were also part of the CEQA administrative record. (See Attachment 1, Index to Administrative Record of Proceedings, SJAFCA Smith Control Gate CEQA Cases.) Exhibit G is the transcript of SJAFCA’s own hearing approving the Project. Exhibit K is a comment letter on Appendix B of the Project EIR, solicited by SJAFCA. Both of these documents were also before the SJAFCA prior to its Certification of Consistency, and are therefore proper for inclusion in the record under Appeals Procedures section 10. Exhibit G is also proper for official notice under Appeals Procedures section 29 because it is evidence of an official act by a government agency, and “not reasonably subject to dispute and are capable of immediate and accurate determination[.]” (Evid. Code, § 452, subds. (c), (h).)

Conclusion

The Project as currently designed is inconsistent with the Council's adopted regulatory policies, yet alternatives are available that could make the Project consistent. Granting the appeal will encourage SJAFCA to seek design alternatives that are more consistent, or at the very least impose mitigation measures for the Project's indefinite operational impacts for water quality and critical habitat.

Very truly yours,

SOLURI MESERVE
A Law Corporation

By: 
Patrick M. Soluri

PMS/mre

Attachment:

Attachment 1, Index to Administrative Record of Proceedings, SJAFCA Smith Control Gate CEQA Cases

References Submitted:

Exhibit A, BSK Associates, Biological Resources Review, Smith Gate Canal Project, Stockton, California (2015)

Exhibit B, Sierra Ecosystem Associates, Integrated Management Plan for Aquatic Weeds for the Tahoe Keys Lagoon (2016)

Exhibit C, Berg & Sutula, Factors Affecting Growth of Cyanobacteria With Special Emphasis on the Sacramento-San Joaquin Delta, Southern California Coastal Water Research Project (August 2015)

Exhibit D, Brutemark et al., Growth, Toxicity, and Oxidative Stress of a Cultured Cyanobacterium (*Dolichospermum* sp.) under different CO₂/pH and Temperature Conditions, Phycological Research 63:56-63 (2015)

Exhibit E, Lehman et al., *Microcystis* Biomass and Toxicity, 2005 Pelagic Organism Decline Program Progress Report

Exhibit F, Toft et al., The Effects of Introduced Water Hyacinth on Habitat Structure, Invertebrate Assemblages, and Fish Diets, Estuaries Vol. 26, 3:746 (2003)

Exhibit G, SJAFCA Board Meeting Transcript (November 19, 2015)

Exhibit H, Kurobe, Identification of Harmful Cyanobacteria the Sacramento San Joaquin Delta and Clear Lake California by DNA Barcoding SpringerPlus 491 (2013)

Exhibit I, Ksander & Spencer, Seasonal Growth of Water hyacinth in the Sacramento/San Joaquin Delta California, Aquat. Plant Manage 43:91-94 (2005)

Exhibit J, Sabalow, Unusual Delta Algae Bloom Worries Researchers, Sacramento Bee (2015)

Exhibit K, ICF International, Comment on Hydrodynamic Modeling Draft Report (May 30, 2014)

Exhibit L, Boyer & Sutula, Factors Controlling Submersed and Floating Macrophytes in the Sacramento-San Joaquin Delta (2015) Southern California Coastal Water Research Project

Exhibit M, Cohen & Moyle, Summary of Data and Analyses Indicating that Exotic Species Have Impaired the Beneficial Uses of Certain California Waters (2004)

Exhibit N, Tsui et al., In Situ Production of Methylmercury within a Stream Channel in Northern California (2010) 44 Environ. Sci. Technol. 6998-7004

Exhibit O, Coglianò, Ingested Nitrate and Nitrite, and Cyanobacterial Peptide Toxins (2010) 94 International Agency for Research on Cancer Monographs, p. 412

ATTACHMENT 1

INDEX TO ADMINISTRATIVE RECORD OF PROCEEDINGS

SJAFCA Smith Control Gate CEQA Cases

APCOA v. SJAFCA, San Joaquin County Case No. STK-CV-UWM-2015-0011847
Gulli v. SJAFCA, San Joaquin County Case No. STK-CV-UWM-2015-0011880

| Volume No. | Tab No. | Date | Description | Bates Range |
|------------|---------|------------|--|---|
| | | | Exhibit 1: November 18, 2015 Report from BSK Associates, Inc. | SJA-CEQ-02008 - SJA-CEQ-02032 |
| | | | Exhibit 2: Excerpts from the Integrated Management Weed Plan for the Tahoe Keys Lagoons Public Review Draft | SJA-CEQ-02033 - SJA-CEQ-02038 |
| Volume 06 | 0013 | 11/19/2015 | Agenda Item 4.1 GME Presentation | SJA-CEQ-02039 - SJA-CEQ-02043 |
| | | | TRANSCRIPTS AND MINUTES | |
| Volume 07 | 0014 | 11/19/2015 | November 19, 2015 Meeting Minutes | SJA-CEQ-02044 - SJA-CEQ-02050 |
| Volume 07 | 0015 | 11/19/2015 | November 19, 2015 Meeting Transcript | SJA-CEQ-02051 - SJA-CEQ-02115 |
| | | | REMAINDER OF ADMINISTRATIVE RECORD | |
| Volume 07 | 0016 | 2/2/2016 | Email exchange between J. Neira and E. Martinez (DWR) re: project status | SJA-CEQ-02116 - SJA-CEQ-02116 |
| | | 3/5/2015 | Attachment: Letter from SJAFCA to USACE requesting federal credit under section 221 of the Flood Control Act of 1970 | SJA-CEQ-02117 - SJA-CEQ-02121 |
| | | 1/30/2010 | Attachment: 30 % design engineering drawings | SJA-CEQ-02122 - SJA-CEQ-02149 |
| Volume 07 | 0017 | 11/20/2015 | Email exchange between SJAFCA and PBI re: rainfall in Smith Canal | SJA-CEQ-02150 - SJA-CEQ-02150 |
| Volume 07 | 0018 | 11/19/2015 | Resolution No. SJAFCA 15-17 | SJA-CEQ-02151 - SJA-CEQ-02153 |
| Volume 07 | 0019 | 11/19/2015 | Resolution No. SJAFCA 15-20 | SJA-CEQ-02154 - SJA-CEQ-02154 |
| Volume 07 | 0020 | 11/19/2015 | Email exchange among SJAFCA, consultants, and FEMA re: Smith Canal | SJA-CEQ-02155 - SJA-CEQ-02159 |
| Volume 07 | 0021 | 11/19/2015 | SJAFCA staff notes re: Smith Canal approval | SJA-CEQ-02160 - SJA-CEQ-02161 |
| Volume 07 | 0022 | 11/19/2015 | Submission by D. Gulli (Green Mountain Engineering) at 11/19/2015 SJAFCA Board Meeting | SJA-CEQ-02162 - SJA-CEQ-02166 |
| Volume 07 | 0023 | 11/19/2015 | Submission by P. Soluri at 11/19/2015 SJAFCA Board Meeting | SJA-CEQ-02167 - SJA-CEQ-02208 |
| Volume 07 | 0024 | 11/19/2015 | Power Point Presentation for SJAFCA Board Meeting re: FEIR | SJA-CEQ-02209 - SJA-CEQ-02223 |
| Volume 07 | 0025 | 11/19/2015 | Power Point Presentation for SJAFCA Board Meeting re: Contract Amendment and Task Order | SJA-CEQ-02224 - SJA-CEQ-02230 |
| Volume 07 | 0026 | 11/18/2015 | Email exchange among SJAFCA, consultants, and FEMA re: Smith Canal | SJA-CEQ-02231 - SJA-CEQ-02234 |
| Volume 07 | 0027 | 11/18/2015 | Email exchange between J. Giottonini and M. Ward re: SB 1278 | SJA-CEQ-02235 - SJA-CEQ-02235 |

INDEX TO ADMINISTRATIVE RECORD OF PROCEEDINGS

SJAFCA Smith Control Gate CEQA Cases

APCOA v. SJAFCA, San Joaquin County Case No. STK-CV-UWM-2015-0011847
Gulli v. SJAFCA, San Joaquin County Case No. STK-CV-UWM-2015-0011880

| Volume No. | Tab No. | Date | Description | Bates Range |
|------------|---------|------------|--|---|
| | | | Exhibit 1: November 18, 2015 Report from BSK Associates, Inc. | SJA-CEQ-02008 - SJA-CEQ-02032 |
| | | | Exhibit 2: Excerpts from the Integrated Management Weed Plan for the Tahoe Keys Lagoons Public Review Draft | SJA-CEQ-02033 - SJA-CEQ-02038 |
| Volume 06 | 0013 | 11/19/2015 | Agenda Item 4.1 GME Presentation | SJA-CEQ-02039 - SJA-CEQ-02043 |
| | | | TRANSCRIPTS AND MINUTES | |
| Volume 07 | 0014 | 11/19/2015 | November 19, 2015 Meeting Minutes | SJA-CEQ-02044 - SJA-CEQ-02050 |
| Volume 07 | 0015 | 11/19/2015 | November 19, 2015 Meeting Transcript | SJA-CEQ-02051 - SJA-CEQ-02115 |
| | | | REMAINDER OF ADMINISTRATIVE RECORD | |
| Volume 07 | 0016 | 2/2/2016 | Email exchange between J. Neira and E. Martinez (DWR) re: project status | SJA-CEQ-02116 - SJA-CEQ-02116 |
| | | 3/5/2015 | Attachment: Letter from SJAFCA to USACE requesting federal credit under section 221 of the Flood Control Act of 1970 | SJA-CEQ-02117 - SJA-CEQ-02121 |
| | | 1/30/2010 | Attachment: 30 % design engineering drawings | SJA-CEQ-02122 - SJA-CEQ-02149 |
| Volume 07 | 0017 | 11/20/2015 | Email exchange between SJAFCA and PBI re: rainfall in Smith Canal | SJA-CEQ-02150 - SJA-CEQ-02150 |
| Volume 07 | 0018 | 11/19/2015 | Resolution No. SJAFCA 15-17 | SJA-CEQ-02151 - SJA-CEQ-02153 |
| Volume 07 | 0019 | 11/19/2015 | Resolution No. SJAFCA 15-20 | SJA-CEQ-02154 - SJA-CEQ-02154 |
| Volume 07 | 0020 | 11/19/2015 | Email exchange among SJAFCA, consultants, and FEMA re: Smith Canal | SJA-CEQ-02155 - SJA-CEQ-02159 |
| Volume 07 | 0021 | 11/19/2015 | SJAFCA staff notes re: Smith Canal approval | SJA-CEQ-02160 - SJA-CEQ-02161 |
| Volume 07 | 0022 | 11/19/2015 | Submission by D. Gulli (Green Mountain Engineering) at 11/19/2015 SJAFCA Board Meeting | SJA-CEQ-02162 - SJA-CEQ-02166 |
| Volume 07 | 0023 | 11/19/2015 | Submission by P. Soluri at 11/19/2015 SJAFCA Board Meeting | SJA-CEQ-02167 - SJA-CEQ-02208 |
| Volume 07 | 0024 | 11/19/2015 | Power Point Presentation for SJAFCA Board Meeting re: FEIR | SJA-CEQ-02209 - SJA-CEQ-02223 |
| Volume 07 | 0025 | 11/19/2015 | Power Point Presentation for SJAFCA Board Meeting re: Contract Amendment and Task Order | SJA-CEQ-02224 - SJA-CEQ-02230 |
| Volume 07 | 0026 | 11/18/2015 | Email exchange among SJAFCA, consultants, and FEMA re: Smith Canal | SJA-CEQ-02231 - SJA-CEQ-02234 |
| Volume 07 | 0027 | 11/18/2015 | Email exchange between J. Giottonini and M. Ward re: SB 1278 | SJA-CEQ-02235 - SJA-CEQ-02235 |