



Bradford Reclamation District 2059

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April 29, 2014

Water Certification Program
Division of Water Rights
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000
Oscar.Biondi@waterboards.ca.gov

U.S. Army Corps of Engineering
1325 J Street, Room 1350
Sacramento, CA 95814-2922
William.H.Guthrie@usace.army.mil

VIA ELECTRONIC MAIL

Re: *Temporary Salinity Barriers*

Dear Messrs. Biondi and Guthrie:

Reclamation District 2059 (the District) has found itself at the center of the recent controversy surrounding the placement of Temporary Salinity Barriers in the North Delta, specifically, the barrier to be placed across West False River. Although the recent rains have forestalled the construction of the barrier, we have been asked to continue to move forward with our approval of an encroachment permit for such construction.

Representing one of the eight critical western islands, the District understands the importance of managing export pumping while maintaining water quality standards and needs within the Delta; however, we urge you to please weigh the potential adverse impacts to landowners and other Reclamation Districts prior to issuance of permits for such barriers. For example, potential impacts to RD 2059 include increased tidal flows and velocities around the north end of the island and down Fisherman's Cut not only endangering the island's only access by ferry but also the native berms that the Delta Plan is trying to preserve and elimination of the main boating channel to the San Joaquin River from Bethel Island marinas resulting in increased wakes and boat traffic in Fisherman's Cut.

The District stands with other organizations in asking that no construction be commenced until there are executed written agreements between DWR, the North Delta Water Agency, the impacted Reclamation Districts and the impacted landowners setting forth the appropriate operational conditions and terms for mitigation of adverse impacts.

Very truly yours,

CJ Kuhne

CJ Kuhne
President, RD 2059

California Analytica

Analytics for Health



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OB

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Water Quality Certification Program
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STATE WATER RESOURCES
CONTROL BOARD
2014 APR 17 PM 12:53
DIV OF WATER RIGHTS
SACRAMENTO

April 15, 2014

RE: **SPK-2014-00187 - Emergency Drought Barriers project**

Dear Mr. Biondi,

In response to the request for public comment on the application by the California Department of Water Resources to construct barriers in Steamboat and Sutter sloughs, I offer the following comment.

A significant consequence of this action will be to increase stationary surface water in the Delta at a time when mosquito-laying activity is at its peak. This will lead to a substantial increase in the public's risk of exposure to vector-borne diseases, particularly West Nile virus. Yet the proposed action does not include any assessment of this risk nor propose surveillance or mitigation activities.

According to the California Department of Public Health, "The statewide WNV minimum infection rate in mosquitoes and the sentinel chicken sero-conversion rate were higher in 2012 than in any other year since surveillance began for WNV in California in 2000".¹ The number of documented human cases of West Nile Virus in Sacramento, San Joaquin, Solano and Yolo counties has similarly expanded over the last three years. In 2012, 60 human cases of WNV were registered. The prevalence of the virus has now expanded rapidly so that in Sacramento and Yolo counties nearly 50% of all birds tested were positive for WNV. Moreover the season for WNV has expanded. In 2014 positive tests have already been registered in 4 counties. In 2012, the dates from first to last test ranged from March 28 to December 4.² It must therefore be considered that there is practically no "safe period" when WNV is not a threat.

¹ 2012 Annual Report, Vector-borne Disease Section, California Department of Public Health, p 17. Available on line at the CDPH website.

² 2012 Annual Report. Vector-borne Disease Section, California Department of Public Health.

2003-2013 WNV ACTIVITY SUMMARY

Element	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Human cases (fatal)	3 ¹ (0)	779 (29)	880 (19)	278 (7)	380 (21)	445 (15)	112 (4)	111 (6)	158 (9)	479 (20)	372 (14)	3,997 (144)
Horses	1 ²	540	456	58	28	32	18	19	15	22	13	1,202
Dead birds	96	3,232	3,046	1,446	1,396	2,569	515	416	688	1,644	1,251	16,299
Mosquito samples	32	1,136	1,242	832	1,007	2,003	1,063	1,305	2,087	2849	2,528	16,084
Sentinel chickens	70	809	1,053	640	510	585	443	281	391	540	485	5,807
Squirrels	-	49	48	32	26	32	10	24	24	23	8	276

¹ There were 20 imported human cases. ² There were 3 imported horse cases.

Source: The California Department of Public Health West Nile Virus Website

The Mosquito and Vector Control Association of California (MVCAC) has issued an advisory about the rapid increase in West Nile virus throughout the state and has, in addition, identified two new species of mosquito, *Aedes aegyptus* and *Aedes albopictus*. Both of these species are capable of transmitting dengue fever. Empirical models have shown that native cases of dengue fever may occur in California in the next two decades.³ These models do not account for alterations in the landscape that would serve to actually favor the more rapid expansion of these tropical species of mosquitoes, thus shortening the time in which they will appear.

The human population at risk of vector-borne disease are the residents of the farms and towns along the Sacramento River which includes the seasonally high number of agricultural workers in the pear, grape and other crop fields. Farmworkers would potentially have the highest level of exposure.

Expanding the stationary surface water in the Delta will add a significant threat to increased vector-borne diseases. Prior to permitting this project, increased surveillance is called for and efforts to mitigate the expansion of the mosquito population should be developed before any action is taken. These efforts need to be managed by appropriate public health officials with oversight and control to assure that operations do not result in human disease threats.

Sincerely,



Terrence Smith, MD, MPH
Director,
California Analytica

tsmith@calana.org

³ Hales S, deWet N, Woodward A. Potential effect of population and climate changes on global distribution of dengue fever: an empirical model. Lancet. August 2, 2002
<http://image.thelancet.com/extras/01art11175web.pdf>



April 15, 2014

Sent by email to:

Mr. Oscar Biondi
Water Quality Certification Program, Division of Water Rights
State Water Resources Control Board
Oscar.Biondi@Waterboards.ca.gov

Zachary Simmons
USACE, Sacramento Division
Zachary.M.Simmons@usace.army.mil

Paul Marshall
DWR Bay Delta Office
marshall@water.ca.gov

RE: City of Antioch Comments Regarding DWR Proposed Emergency Drought Barriers Project

Dear Mr. Biondi, Mr. Simmons and Mr. Marshall:

The City of Antioch has certain concerns regarding the proposed temporary barriers within the Delta. While the City understands the stated purpose of the barriers during the current drought conditions, Antioch is concerned about potential long term impacts to the City's water supply and about the potential that such barriers could become permanent.¹

The Department of Water Resources (DWR) has in the past proposed various projects involving permanent barriers within the Delta (including False River and Three Mile Slough). All of these previously proposed barrier projects posed potential significant adverse impacts on Antioch's water quality in non-severe drought years. Antioch is also concerned about whether a cumulative impact analysis has been done for the proposed temporary barriers in conjunction with other projects, including proposed projects, to fully understand the scope of potential adverse impacts, including impacts to the City's water supply.

Antioch provides domestic and municipal water supply to a population of over 100,000 persons in Contra Costa County. Its water rights are superior to those of DWR and its contractors. Antioch has a short term water quality compensation agreement with DWR. Antioch's long term water quality and supply could be jeopardized by permanent barriers, and in conjunction with other projects, including the BDCP. The barriers alone, and/or in conjunction with the BDCP

¹ Since around the turn of the prior century, Antioch has relied on the Sacramento River's tributary flow to the San Joaquin via Georgiana and Three Mile Sloughs for its freshwater during late spring through late fall. Interference with such flows adversely impacts Antioch's water quality.

Mr. Biondi, Mr. Simmons and Mr. Marshall

April 16, 2014

Page 2 of 2

project could potentially eliminate Antioch's ability to pump its own supply from the Delta. Further, the increased salinity from any permanent barriers could transform the environment near Antioch, impacting local recreation and aesthetics as well as transforming Antioch's legacy as a freshwater Delta town. Therefore, Antioch requests assurances in writing from DWR:

- That any barriers, relocations, or relaxation of D1641 or other water quality compliance standards will be only temporary, as designated under drought emergency conditions for the current year,
- That any barriers, relocations, or relaxation of D1641 or other water quality compliance standards will not become permanent or long-term under any condition without:
a) discussions with the City in advance to discuss impacts; and b) full mitigation is provided to the City for adverse impacts to water quality and supply.
- That a cumulative impact analysis for the proposed temporary barriers is provided to the City, that incorporates other projects, including proposed projects, to fully understand the scope of potential adverse impacts to the City's water supply.

Thank you for your consideration of the City of Antioch's comments on the proposed Emergency Drought Barriers project. Please feel free to contact me with any questions.

Sincerely,



Ron Bernal, PE
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C: Steve Duran, City Manager
Lynn Tracy-Nerland, City Attorney

April 13, 2014

David Gloski
Engineer
3025 Willow Road West
Bethel Island, CA 94511

Mr. Oscar Biondi
Water Quality Certification Program
Division of Water Rights
State Water Resources Control Board
PO Box 2000
Sacramento, CA 95812-2000

Subject: Comments and Safety Concern Resulting From False River Barrier

Mr. Biondi,

I have had a home on Bethel Island for 15 years and do extensive boating on False River, Fisherman's Cut and Taylor Slough. I also have a Mechanical Engineering Degree from MIT. I attended a meeting a few weeks ago where staff from the State Department of Water Resources presented "information" on their plan to build a barrier across False River to the Bradford Island Reclamation District.

I see on the Corps of Engineers' website that *"The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the described activity on the public interest."*

Among other things, the Corps' website also states that *"All factors which may be relevant to the described activity will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people."*

I have SERIOUS concerns about the issues of Safety, Shoreline Erosion, Environmental, Property Ownership and as a result the Welfare of the People, resulting from a placement of a barrier across False River.

From information that I am able to get access to, it appears that there is a serious lack of understanding about the resulting flow rates that should be expected in Fisherman's Cut and through Dutch and Taylor Slough as a result of a barrier across False River. When questioned at the meeting that I attended, the DWR staff could not state any modeling results that showed what flow

rates could be expected in these alternative flow paths. A member of the Bradford Island Reclamation District Staff cited DWR's own Franks Tract Study of 2009 that indicated a 20% reduction in flow for False River increased the flow in Fisherman's cut five times (5x). This implies a complete barrier across False River will result in massively increased flows. These increased flows around the northwest corner of Bradford Island and through Dutch and Taylor Sloughs could result in serious levee damage and scouring.

Is the state and the Corp of Engineers prepared to make emergency levee repairs? The serpentine nature of Taylor Slough makes the increased flows a serious concern for scouring. Even if somehow the levees are able to handle the flows, what about the long term impacts of the scouring? I believe the nearby island districts should be able to get relief from the additional costs they are going to incur to keep their levees safe over the upcoming years as a result of scouring.

The DRW staff pointed out several times the huge benefit achieved by blocking false river and thereby better handling salinity levels. I could not agree more as False River moves lots of water. However, by addressing one problem I fear that these other very severe problems could also be created. I personally am very uncomfortable that there is a proper understanding of the resulting flow rate effects in Fisherman's Cut and Dutch and Taylor Slough. I don't believe this is complicated modeling and so I wonder why I have not heard any numbers.

No permit should be issued for this barrier until all the neighboring islands and their reclamation districts responsible for the safety of residents understand exactly the additional burden that is going to result on the current levee structures. This can only be done by showing the modeling results of a complete barrier across False River and what the expected flows will be in Fisherman's Cut and Dutch and Taylor sloughs. Without these results, no one can assure the safety of people living on these islands.

Secondarily, while the barrier will reduce salinity levels internal to the delta, it would be nice to see other water quality measures that could be expected such as e.coli concentration and nitrogen levels resulting from less flow in and out of the estuary.

Please do not move toward a permit unless everyone understands and agrees that resulting flows in these other channels are understood and found to be of a level that will assure safety.

Sincerely,

A handwritten signature in blue ink that reads "David M. Gloski". The signature is written in a cursive, flowing style.

David M. Gloski

Engineer and Bethel Island home owner

DANIEL P. WHALEY
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OB
STATE WATER RESOURCES
CONTROL BOARD
2014 MAR 16 PM 12:49
DIV OF WATER RIGHTS
SACRAMENTO

Via email and US mail
Oscar Biondi
Water Quality Certification Program
Division of Water Rights
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812

April 14, 2014

Re Emergency Drought Barriers Project

Dear Mr. Biondi,

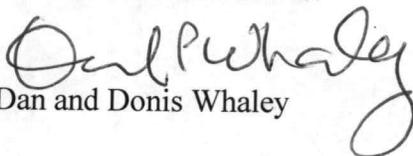
Please deny this application by the California DWR.

The basis for the denial is the following unaddressed significant adverse cumulative impacts and effects:

1. The applicant has failed to demonstrate or provide reliable science that the barriers will significantly prevent salt water intrusion into the Delta. Examining figure 1 on page A-4, the untrained eye can see that even if the barriers did slow some salt water intrusion, they are essentially sacrificing everything southwest of the barriers to save those properties to the north. This decision was not identified or discussed, nor is this a proper use of public funds. The applicant has failed to demonstrate that installing the barriers will not further cause CWA violations.
2. The barriers will immediately affect water quality, not just on the surface of the sloughs, but will have adverse hydrological effects on Sutter Island itself. The applicant's barriers will create stagnant sloughs on 75% of the navigable waterways surrounding Sutter Island. This is unprecedented and unexplored science, with the realistic potentially for long lasting, unavoidable and irreparable damages to Sutter Island. In addition, the potential damages to the subsurface water table have not been analyzed nor has the effect on the levies been determined.

3. The applicant failed to analysis the cumulative effects of erecting these barriers on the environment, including traffic on land and water, as well as the negative impact on the native fish as well as endangered fish species.
4. The applicant foundation for going forward is that because they did this once before in 1977 on one slough, that they can use that data to support closing two sloughs that surround one Island (Sutter Island). Even for a non-scientist, this evaluation seems fatally flawed. The foreseeable damages of slit build up and the damage potential by cutting off water flow without any definite public benefit, makes this 40 million dollars project one you should deny approval/permitting.
5. Looking specifically at the project, the applicant did not consider the cumulative effect of construction of the barriers will have on the communities of Hood and Courtland. The identified rock storage in the town of Hood is a small parcel without access for semi-truck turn around. Trucks must also ingress or egress directly onto State Highway 160 at a near 90 degree turns without visibility. In addition, the traffic, noise, and air pollution effect has not been evaluated. The town of Hood has no sewer system or public restrooms and has only one unopened restaurant. The town of Courtland has a public sewer system, but no public restrooms and only one part-time restaurant. Neither town has a traffic signal light, but merely 4 or 5 stop signs in the entire town. As the landowner adjacent to the Hood rock storage parcel, we do not agree to have a nuisance of rock piles, dirt, dust and traffic, affecting our adjacent property. We have spent thousands of dollars improving our parcels, including approval by the Sacramento County General Plan and Zoning Code to allow wine and beer making and wine and beer tasting. These are not compatible uses with rock storage and removal. In addition the State of California has a Water Testing Facility on this small rock storage parcel that would be compromised by any barge loading or unloading or any pollution into the water.
6. Finally, the applicant has failed to analysis project alternatives, including not building the barriers and instead educating the public on strict water conservation. Lawns and parks are still being watered in Sacramento and though out the Valley. Despite these uses, the State seeks to potentially permanently destroy a 2,500 acre Delta Island to possibly slow some salt water intrusion. In addition the circumstances by which this project was initially designed have changed. The initial emergency basis for this barrier project no longer exists. Some significant rain fall has occurred and the reservoirs and snow pack suggest that with careful management and no pumping water to Southern California, the danger of salt water infusion can be avoided.

Please review and advice.


Dan and Donis Whaley



*PLANNING
PERMITTING
ARCHITECTURE
CIVIL ENGINEERING
PROJECT MANAGEMENT*

Mr. Oscar Biondi
Water Quality Certification Program
Division of Water Rights
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000

Subject: DWR Drought Barriers – 401 Water Quality Certification comments

Dear Mr. Biondi

This letter is to provide the State Water Resources Control Board with the following comments on DWR's proposed Drought Barriers. I am representing both concerned community members as well as Steamboat Resort, located just north of the proposed barrier on Steamboat Slough. Our comments are as follows:

- 1) The potential sedimentation of the channel due to the stagnation of water upstream of the dam barriers.

Due to the lack of scouring flows over the last few years, we have observed a gradual sedimentation within Steamboat Slough near Steamboat Resort. It is possible that any flows coming into the channel upstream of the dam will deposit more sediment as they reach the dam at a faster rate than what has naturally been occurring in these low outflow years. This will reduce the carrying capacity of the channel and increase the likelihood of a flood.

Suggestion:

In order to measure the impacts, the applicant shall perform a bathymetric survey in areas both upstream and downstream of the proposed dams before and after they are installed.

- 2) Erosion control measures for project components on the landside slope of the levee.

The proposed ramps on Steamboat Slough will require the removal of existing vegetation and increase the potential for erosion on the landside slope of the levee. This will not only cause flood control concerns but also could decrease water quality in the immediate area around the barrier.

- 3) Lack of operational criteria to control water quality and water level downstream of the barrier using the culverts.

While water quality/water level monitoring stations are proposed there is no proposed water quality threshold to maintain downstream to operate the culverts. It is important that a proper threshold be determined to ensure that downstream users can irrigate.

Suggestion:

It is suggested that the water quality and water levels are monitored upstream and downstream within the sloughs prior to the installation of the barriers to determine the impacts of the barriers during construction and post-installation.

- 4) Define and justify the 0.75 acres of permanent fill.

The project is considered temporary, however the project description includes 3.15 acres of temporary fill with 0.75 acres of permanent fill. We were informed by DWR that the dam sites would be returned to their original conditions once the dams were no longer needed, this will not be the case if certain components are kept in place. The impacts to hydrology and/or navigability of the proposed permanent fill are unknown, but they will be permanent.

Suggestion:

There should not be a permanent fill because there will be permanent impacts. At a minimum, a description, justification, and assessment of potential impacts of a permanent fill should be included prior to approval of this project.

- 5) Restricted flows, stagnant water, and reduced water levels could create favorable conditions for invasive species such as egeria densa and an infestation of mosquitoes.

Due to the increased sedimentation of the channels and low outflow the last few years, we have observed an increase in the amount of egeria densa growing in shallow areas along the banks of Steamboat Slough. The increase of invasive species, like egeria densa can have negative impacts on native species and recreation. In addition, mosquito populations can increase in stagnant water conditions. West Nile virus is a serious threat in the Delta and mosquito abatement should be considered.

- 6) Reduced access to recreation and marinas located along each slough.

Although a boat ramp is proposed on Steamboat Slough, it is limited to smaller boats. Steamboat Slough is frequently used by large and small boats alike. The barriers will be a deterrent to boaters that use these sloughs to access local marinas. Upon discussion with boaters, the ramps do not solve the problem of navigability. Boaters are concerned about potential damage caused to the hulls of their boats when being ported with a trailer not specific to their boat. As a result, boaters will avoid using the proposed facilities. Recreational facilities and boaters will be negatively impacted with the installation of these barriers.

- 7) Conflicting information regarding the most beneficial placement of the drought barriers.

According to the Delta Drought Emergency Barrier Administrative Draft from 2009, in a year where outflow is 2000 cfs, barriers placed in the South Delta were to provide higher EC reductions than barriers in the North Delta. Also, in 1977 when conditions were seemingly more dire than they currently are, there was only one barrier in the North Delta. There doesn't seem to be conclusive evidence that the proposed project is the best option for repelling salinity in the Delta. The expected benefits of the northern barriers may not outweigh the costs and negative impacts that will have to be mitigated.

Suggestion:

It is suggested that the installation of barriers be staged, starting in the South Delta first. Delta water quality should be monitored after each installation to determine if more are needed.

Thank you for your consideration. Please contact me if you have any questions.

Sincerely,

Emily Pappalardo
Project Manager
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April 2, 2014

SENT BY U.S. MAIL AND EMAIL (Oscar.Biondi@Waterboards.ca.gov)

Mr. Oscar Biondi
Water Quality Certification Program
Division of Water Rights
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000

**RE: DWR Drought Barriers – Preliminary Comments on Proposed
401 Water Quality Certification**

Dear Mr. Biondi:

This firm represents the Delta Watershed Landowners Coalition (“DWLC”), which includes concerned landowners along and downstream of Steamboat and Sutter Sloughs, which the Department of Water Resources (“DWR”) intends to block off with its Drought Barriers project. We have not yet completed our review of the permit application materials, but have several preliminary concerns about the proposed 401 Certification that we would like to bring to your attention. These issues would need to be resolved prior to any action by the State Water Resources Control Board (“SWRCB”) on the proposed water quality certification.

Our preliminary concerns include:

1. The water quality need and water quality impacts associated with the barriers in these locations has not been adequately described or justified, and the environmental costs and benefits of the barriers are unclear.
2. The barriers will intentionally interfere with the exercise of riparian and senior water rights along Sutter and Steamboat Sloughs as well as farther downstream.
3. Compliance with the California Endangered Species Act (Pub. Resources Code, §§ 21000 et seq. (“CEQA”)) is inadequate, and the intended design, operations and mitigation approach of the barriers are not fully disclosed.
4. Fish passage is inadequate and the barriers will impair migration and movement of special status fish species.

1. Inadequate Justification for Barriers

It is unclear from the application materials what the goal of the project is with respect to maintaining water quality. The DWR's 2009 Drought Barriers Report discussed potential locations and provided recommendations regarding the potential placement of several different barriers in the Delta to provide water quality benefits. (See <http://www.water.ca.gov/waterconditions/docs/DWR-EmergencyBarriersDraftReport-Apr2009.pdf>.) While the Sutter and Steamboat Slough barriers are shown to improve water quality at the State Water Project and Central Valley Project South Delta Pumps, worsened water quality is shown for the Sacramento River at Emmaton. (2009 Drought Barriers Report, p. 16.) The application materials submitted for the 401 Certification include *no information* regarding water quality expected within Sutter and Steamboat Sloughs downstream of the barriers or at other water quality compliance points. DWR staff has discussed the issue of water quality with some affected landowners and indicated that water quality may not be appreciably worsened by the barriers, while at the same time stating that their modeling does not match data being collected in the field. A complete and quantitative analysis of expected water quality impacts, however, has yet to be provided.

DWR claims that placement of the barriers will allow retention of water upstream for later use, yet no quantification of the amount of water expected to be retained in storage as a result of the placement of the barriers has been provided. According to the 401 Certification notice the project will "prevent tide-driven saltwater from pushing too deeply into the Delta and allow water managers to retain some water in upstream reservoirs for release later in the year." The State Water Project and Central Valley Project ("the Projects"), via Temporary Urgency Change petitions, have repeatedly requested higher levels of exports from the South Delta than required for health and safety purposes. For instance, the TUCP granted on March 18, 2014, allows more than 1,500 cubic feet per second to be diverted under specified conditions. (March 18, 2014 TUC Order, p. 7.) Just yesterday, higher levels of pumping were announced by the Projects. Should the barriers be placed, it would be entirely inappropriate for the Projects to divert water in the South Delta in excess of health and safety levels while at the same time directly impairing the exercise of senior water rights on the subject sloughs.

Notably, the application materials for the 401 Certification do not propose any specific operational parameters to ensure that the water rights of users along the closed off sloughs would not be affected. Maintaining salinity levels below 1000 EC has been mentioned by DWR; however, normal salinity levels in the Sutter and Steamboat Slough rarely exceed 250 EC. While DWR apparently intends to include four culverts in the bottom of each barrier, no water quality or water level modeling has been provided in the application, nor has a proposed operations plan been prepared. Additionally, though the

provision of replacement pumps and other accommodations to assist diverters along the affected sloughs has been discussed by DWR, there is no written description of plans to ensure irrigation and other uses can continue once the barriers are placed. The Initial Study completed by DWR in 1977, after placement of the Sutter Slough Barrier in September 1976, concluded that full environmental review should be prepared. This has never occurred.

2. Inconsistency with Water Rights System

As mentioned above, the barriers will directly interfere with the exercise of riparian and senior appropriative water rights. They will also directly interfere with DWR's delivery of water pursuant to the North Delta Water Agency's 1981 contract with DWR. DWR has alluded to the operation of the culverts as a means to lessen interference with downstream water diversions, as well as potential modifications to intakes and provision of temporary pumps to ensure that irrigation of crops can occur while the barriers are in place. This information is not contained within the 401 Certification application.

In acting upon a request for water quality certification, the State Water Board considers whether the proposed project complies with "applicable water quality standards and other appropriate requirements," (23 Cal. Code Regs., § 3859, subd. (a)), which is defined as "the applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act (33 U.S.C., §§ 1311, 1312, 1313, 1316, 1317) and any other appropriate requirements of state law. (23 Cal. Code Regs., § 3831, subd. (v).) The State Water Board has plainly stated, "Water quality certification is a determination that a proposed project complies with the applicable provisions of sections 301, 302, 303, 306 and 307 of the Clean Water Act and any other appropriate requirements of state law." (*In the Matter of the Petition of Double Wood Investment, Inc.*, State Water Resources Control Board Order No. WQ2000-09 (2000).) Water rights are a relevant consideration in a 401 Certification proceeding. (*In the Matter of the Request for Stay of Merced Irrigation District*, Water Resources Control Board Order No. WQ 2011-0007 (2011).) DWR does not possess the requisite water right necessary to construct the proposed project that will have the result of directly interfering with senior water rights.

Under California water law, riparian rights and senior appropriators have a right to the natural and ordinary flow of water in the stream without injury or impairment by junior rights. (*Fall River Valley Irrigation Dist. v. Mt. Shasta Power Corp.* (2002) 202 Cal. 56, 65; *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.* (1935) 3 Cal. 2d 489, 546.) Here, the proposed barriers project will literally cut off superior water rights holders from the ordinary and natural flows to which they are entitled. According to SWRCB records, more than 150 such diversions, of which most if not all are riparian

and pre-1914 appropriative rights, will be directly impaired in this manner. (See Exhibit A, from the SWRCB's E-WRIMS system.)

After installation of the barriers, rather than taking the ordinary and natural flow of water of the Sacramento River into Sutter Slough, Steamboat Slough and Miner Slough, these 150+ water rights holders will be forced to rely on water largely derived from the western Delta. Indeed, the express purpose of the proposed project is to sever these sloughs from the natural flow of the Sacramento River. This proposed flow pattern is certainly anything but ordinary and natural, as demonstrated by the fact that the surface levels of these sloughs are predicted to be as much as eighteen inches below present levels at low tide. This dramatic alteration of natural flows will result in many of these 150+ diversion works (both pumps and siphons) becoming inoperative.

In short, it is beyond any reasonable debate that the proposed barriers will directly impair senior water rights for the benefit of a junior appropriator in violation of California law. DWR has made no attempt whatsoever to demonstrate how the proposed project is consistent with the California's longstanding rules of priority. In light of this, no entitlements should be issued by the SWRCB that would facilitate this clear violation of law.

3. Compliance with CEQA has Not Occurred

The 401 Certification application indicates reliance on a statutory or categorical exemption from CEQA "T.B.D. by DWR." (Application, p. 3.) It is impossible to assess the applicability of an exemption, however, without an indication of what exemptions DWR believes will apply. Notably, emergency projects authorized under CEQA Guidelines section 15269, subdivision (c) for actions to prevent or mitigate an emergency do not apply to "long term projects undertaken for the purpose of preventing or mitigating a situation that has a low probability of occurrence in the short term." There is no information in the application indicating that an emergency condition is occurring or is about to occur in the short term. Moreover, categorical exemptions are subject to exceptions (see CEQA Guidelines, § 15300.2). A cursory list of potentially significant impacts from the barriers include: worsening water quality and lowering of water levels that interferes with irrigation of agricultural lands, interference with navigation and recreational boating, interference with movement and migration of special status fish species as well as state listed nesting birds and birds protected under the Migratory Bird Treaty Act, silt buildup around the barriers impacting water quality and interfering with navigation, release of toxic sediments, and air quality and traffic impacts from construction and deconstruction.

Full CEQA review of the barriers prior to installation is necessary, as was determined in 1977. Moreover, the contents of a complete 401 Certification requires both (1) valid CEQA documentation (23 Cal. Code Regs., § 3856, subd. (h)(4)); and (2) a description of steps taken “to avoid, minimize, or compensate for loss of or significant adverse impacts to waters of the state” (23 Cal. Code Regs., § 3856, subd. (h)(6)). The application materials do not include any description of how adverse environmental and other impacts will be mitigated.

4. Effects on Special Status Fish Species

Sutter and Steamboat Sloughs are important corridors for several listed fish species, including sturgeon and salmonids, which will be disrupted by the barriers. Specifically, it is unclear whether such species would or could use the culverts for passage, especially since it appears that only one culvert is slated to be kept open at most times. Water quality impairment may also adversely affect fish species. The issue of predation associated with these structures is also unanalyzed. We anticipate additional review of the Biological Assessments included in Attachment C to further detail these concerns.

* * *

Thank you for considering the information in this letter detailing our preliminary concerns. We would like to meet with SWRCB staff as soon as possible to discuss them further. Should additional information be brought forward, it may be possible that local landowner and other concerns could be addressed. Unless that is done, however, *we respectfully request that the present application for 401 Certification not be acted upon.* Moreover, as there are so many questions regarding the need for the project, as well as the manner in which the project is proposed to be carried out, we request that the Board hold a public hearing regarding the proposed 401 Certification. For the reasons discussed in this letter, it would be appropriate for the full Board to consider and act upon the proposed 401 Certification.

Very truly yours,

SOLURI MESERVE
A Law Corporation

By: 
Osha R. Meserve

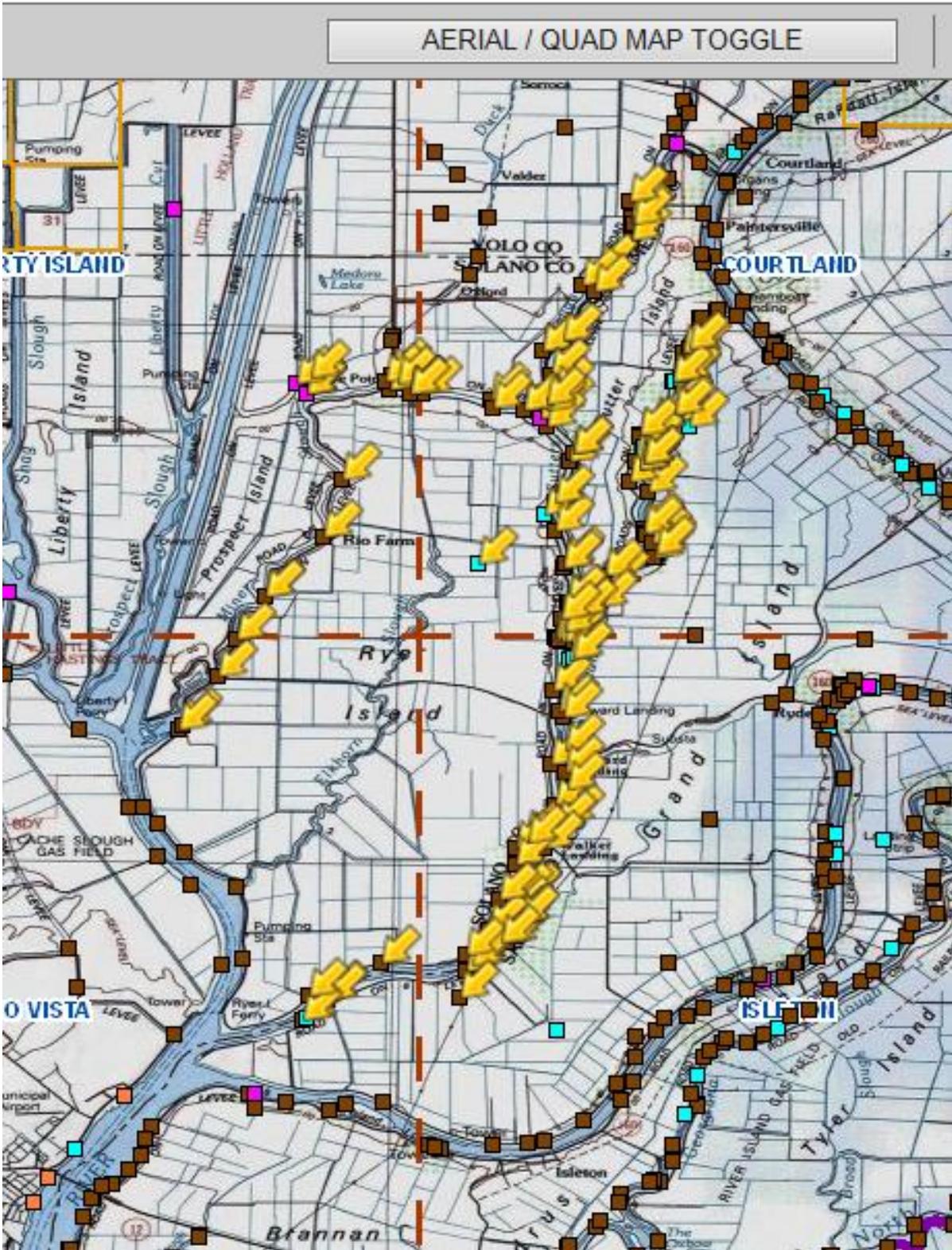
Mr. Biondi
April 2, 2014
Page 6 of 6

401 Certification for DWR
Drought Barriers

Attachment: Exhibit A

cc: Felicia Marcus, Chair, State Water Resources Control Board
(Felicia.Marcus@waterboards.ca.gov)
Frances Spivy-Weber, Vice Chair, State Water Resources Control Board
(Frances.Spivy-Weber@waterboards.ca.gov)
Dorene D'Adamo, Board Member, State Water Resources Control Board
(Dorene.Dadamo@waterboards.ca.gov)
Tam M. Doduc, Board Member, State Water Resources Control Board
(Tam.Doduc@waterboards.ca.gov)
Steven Moore, Board Member, State Water Resources Control Board
(Steven.Moore@waterboards.ca.gov)
Erin Regazzi, Program Manager, Water Quality Certification Program
(Erin.Ragazzi@waterboards.ca.gov)
Craig Wilson, Delta Watermaster
(craig.wilson@waterboards.ca.gov)
Paul Marshall, Department of Water Resources
(Paul.Marshall@water.ca.gov)
Mark Holderman, Department of Water Resources
(mark.holderman@water.ca.gov)
Melinda Terry, North Delta Water Agency
(melinda@northdw.com)
Erik Ringelberg, Local Agencies of the North Delta
(eringelberg@bskinc.com)
Member List, Delta Watershed Landowner Coalition

EXHIBIT A



Water Diversions on SWRCB EWRIMS database, accessed March 25, 2014

From: Robert Moser [REDACTED]
Sent: Monday, April 14, 2014 2:01 PM
To: Biondi, Oscar@Waterboards; [REDACTED]
Subject: Drought Barriers

Robert P. Moser

13409 Grand Island Road
P.O. Box 526
Walnut Grove, CA 95690

Mr. Oscar Biondi
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000

Oscar.Biondi@Waterboards.ca.gov

Re: Public Notice SPK-2014-00187 Emergency Drought Barriers Project

Dear Mr. Biondi,

I am writing to urge you to **deny** these permits for the proposed barriers. Our family farm operates approximately 3 miles downstream from the mouth of Steamboat Slough and, as such, about two miles downstream from the proposed barrier. The existence of our 90 year old heritage Bartlett pear orchard as well as our apple, blueberry and wine grape plantings will all be threatened by the potential effect of this barrier on water quality. The history of our family farm goes back to the 1800s when our property was the location for Steamboat Landing 215, where steamboats stopped to gather produce for market. The barrier will intentionally interfere with our riparian water rights on Steamboat Slough and the effect of restricting the flow of fresh water down Steamboat Slough could easily have catastrophic effects on our crops. Both the quality and the level of the water downstream from the barriers will be affected. In addition, these barriers will impact fish, recreational boaters and the local economy. It is not at all clear that the environmental effects of the proposed barriers has been adequately considered. At best, the location of the proposed barrier on Steamboat Slough is arbitrary and capricious as we were told by the California Department of Water Resources that, due to early protests from one business on Steamboat Slough, the site of the proposed barrier was moved one mile downstream before any public notice was given to any other businesses on Steamboat Slough . **At the very least, I request a public hearing where I might have an opportunity to express my concerns about the proposed barriers. The impact of the proposed barriers on our historic farming property, on water quality and on the environment will be devastating.**

Sincerely,

Summary of State Water Board's Public Comments on the DWR EDB Project

RESOURCE	PUBLIC CONCERN	DESIRED OUTCOME	COMMENTOR
Biology, Recreation, Transportation, Vegetation	Potential impacts to RD 2059 including increased tidal flows and velocities around the north end of the island and down Fisherman's Cut not only endanger the islands only access by ferry but also native berms that the Delta Plan is trying to preserve and elimination of the main boating channel to the San Joaquin River from Bethel Island marinas resulting in increased wakes and boat traffic in Fisherman's Cut.	Executed written agreements between DWR and the North Delta Water Agency, impacted Reclamation Districts and the impacted landowners setting forth the appropriate operational conditions and terms for mitigation of adverse impacts.	Bradford RD 2059
Aesthetics, Recreation, Water Supply (water rights), Water Quality, Cumulative	<p>Cumulative impact analysis needed for the proposed temporary barriers in conjunction with other projects, including the proposed projects to fully understand the scope of potential adverse impacts, including the City of Antioch's ability to pump its own water supply (senior water rights) from the Delta water supply.</p> <p>City of Antioch expressed concerns that past proposed projects involving permanent barriers within the Delta (including False River and Three Mile Slough, posed potential significant on Antioch's water quality in non-severe drought years.</p> <p>Increases salinity from any permanent barriers could transform the environment near Antioch, impacting local recreation and aesthetics as well as transforming Antioch's legacy as a freshwater Delta town.</p>	<p>City of Antioch requests assurances in writing from DWR:</p> <ul style="list-style-type: none"> ▪ Any barriers, relocations, or relaxations of D 1641 or other water quality compliance standards will be only temporary, as designated under drought emergency conditions for the current year, ▪ Any barriers, relocations, or relaxations of D1641 or other water quality compliance standards will not become permanent or long-term under any condition without: a) discussions w/ Antioch in advance to discuss the impacts; and b) full mitigation for adverse impacts to the City's water quality and supply. 	City of Antioch
Water Quality Hydrology and/or navigability Vegetation	<p>(1) Concerned about potential sedimentation of the channel (Steamboat Slough) due to the stagnation of water upstream of the dam barriers.</p> <p>(2) Erosion control measures for project components</p>	See Comment Letter.	DCC Engineering on behalf of Steamboat Resort and various community members

<p>Flood control Biology</p>	<p>on the landside slope of the levee. The proposed ramps on Steamboat Slough will require the removal of existing vegetation and increase the potential for erosion on the landside slope of the levee. This will not only cause flood control concerns but also could decrease water quality in the immediate area around the barrier.</p> <p>(3) Lack of operational criteria to control water quality and water level downstream of the barrier using the culverts.</p> <p>(4) Impacts to hydrology and/or navigability of the proposed 0.75 acres of permanent fill.</p> <p>(5) Impacts to invasive species, like Egeria densa and an infestation of mosquitoes from restricted flows, stagnant water and reduced water levels</p> <p>(6) Reduced access for boats to recreation and marinas located along each slough.</p>		
<p>Vector borne disease</p>	<p>An increase in stationary surface water in the Delta during the time when mosquito-laying activity is at its peak.</p>		<p>California Analytical</p>
<p>Water quality, water supply (water rights/water levels). Cumulative impacts Aesthetics, Vegetation, Biology (plants/aquatic species), Septic Systems Flooding Navigation Alternative barrier</p>	<ul style="list-style-type: none"> ▪Impact to drinking water well. ▪Impact on landscape and trees (effect of brackish water in irrigation system) ▪Impact to septic tanks from higher tides ▪Barriers potential effect on flooding or high water at Snug Harbor. ▪Impact to bench test sites along Steamboat Slough. ▪Need to consider not just the impact of the barrier design the reaction on the entire system. 		<p>Snug harbor Resorts, LLC</p>

locations			
<ul style="list-style-type: none"> ▪Water quality (salinity) within the sloughs and specifically waterways surrounding Sutter Island. ▪Groundwater ▪Air quality ▪Traffic (land and water) ▪Biology (native fish) ▪Cumulative ▪Alternative Development 	<p>Concerned about effect of construction on the communities of Hood and Courtland.</p> <p>DWR failed to analyze project alternatives, including not building the barriers and instead educating the public on strict water conservations.</p>		Daniel and Donis Whaley
<ul style="list-style-type: none"> ▪Water quality ▪Water supply (riparian water rights) ▪Agriculture ▪recreation (boating) ▪ fisheries 			Robert Moser
Salinity Geology/Shoreline Erosion	<p>Increased flows around the northwest corner of Bradford Island and through Dutch and Taylor Sloughs could result in Serious levee damage and scouring.</p> <p>Serpentine nature of Taylor Slough makes increased flows concern for scouring</p>		David Glaski

Water (surface levels, temperature) Recreation	Concerned about repeat of damage that occurred in the 1976-77 drought.	See letter for proposed terms and conditions of permitting	Topper Van Loben Sels
Water quality Water Supply (water rights) Fisheries	<ul style="list-style-type: none"> ▪Barrier locations have not been adequately described or justified. ▪Environmental cost and benefits of barriers are unclear. ▪Compliance with CESA is inadequate. ▪The intended design, operations and mitigation approach of the barriers are not fully disclosed. ▪Fish passage is inadequate and the barriers will impair migration and movement of special status fish species. 		Delta Watershed Landowners Coalition

CAREL D. VAN LÖBEN SELS
P. O. BOX 7
WALNUT GROVE, CA 95690
916-776-1223

OB
STATE WATER RESOURCES
CONTROL BOARD
2014 MAR 16 PM 12:45
DIV OF WATER RIGHTS
SACRAMENTO

DATE: FRIDAY, APRIL 11, 2014

TO: MR. OSCAR BIONDI

FROM: TOPPER VAN LOBEN SELS

RE: STEAMBOAT SLOUGH AND SUTTER SLOUGH ROCK BARRIERS

IF THE STATE WATER RESOURCES CONTROL BOARDS GRANTS A PERMIT TO THE CALIFORNIA DEPARTMENT OF WATER RESOURCES, THE SWRCB MUST REQUIRE THAT THE OPERATION OF THE BARRIERS WILL NOT BE A REPEAT OF THE DISASTER THAT OCCURRED DOWN STREAM OF THE BARRIER INSTALLED IN SUTTER SLOUGH DURING THE 1976-77 DROUGHT BY ATTACHING THE FOLLOWING CONDITIONS:

1. THE WATER SURFACE ELEVATION IN THE SLOUGHS DOWN STREAM OF THE BARRIERS SHALL **NEVER BE BELOW** THE AVERAGE HISTORIC SUMMER WATER SURFACE ELEVATION.
2. THE ELECTRICAL CONDUCTIVITY (SALT) AT RIO VISTA SHALL NEVER EXCEED 0.87 MMHOS FROM APRIL 1 - AUGUST 15. AND FROM AUGUST 15 - BALANCE OF GROWING SEASON SHALL NOT EXCEED THE NORTH DELTA WATER AGENCY 1981 CONTRACT CRITERIA.
3. THE CULVERTS INSTALLED IN THE ROCK BARRIERS SHALL BE OPERABLE AND SHALL BE LARGE ENOUGH TO CORRECT ANY EXCEEDANCES OF THE NORTH DELTA WATER AGENCY 1981 CONTRACT CRITERIA IN 24 HOURS OR LESS.
4. THE ROCK BARRIERS SHALL BE CONSTRUCTED SO AS TO ALLOW RECREATIONAL BOATERS TO **PASS THROUGH** THE BARRIERS DURING DAY LIGHT HOURS.
5. D.W.R. SHALL MONITOR THE WATER TEMPERATURE DOWN STREAM FROM THE BARRIERS AND THE BARRIERS SHALL BE OPERATED SO AS TO MAINTAIN HISTORIC WATER TEMPERATURES IN BOTH STEAMBOAT AND SUTTER SLOUGHS.

THANK YOU FOR TAKING THE TIME TO UNDERSTAND THESE EXTREMELY IMPORTANT ISSUES.

SINCERELY,



TOPPER VAN LOBEN SELS

CC: ERIK VINK, DELTA PROTECTION COMMISSION
JUSTIN VAN LOBEN SELS R.D. #554