

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 DCC Engineering Co. Inc. 916-205-0770 Emily@dccengineering.net