

## Comments to the US Bureau of Reclamation

From: Mike and Jan McCleery, 5672 Drakes Drive, Discovery Bay, CA 94505

Re: 2-Gates Fish Protection Demonstration Project

### 1. Significant Impact to Boating

We strongly disagree with the cover statement on the FONSI-09-154 report that says "DRAFT FINDING OF NO SIGNIFICANT IMPACT". There is significant impact to boaters and boating. If we are reading it correctly, although there will be an operator on site 24x7 during gate operation periods, for non-emergency recreational boaters, his/her only action is to open that gates mid-way through the 5-hour closing (for Old River only!) March and June if there are boaters present to reduce the wait time to 2-2.5 hours. Page 9 says:

1. ..boaters with ... larger vessels or sailboats ... will have to schedule their trips during times when the gates were open
2. or seek alternate routes
3. will experience delays of no more than 2 to 2.5 hours if waiting for the Old River gate to open.

The document misses the key point that boaters cannot practically schedule their trips around gate openings. Some outings need to leave in the early morning or at particular times. Outings get scheduled far in advance and some cannot be determined on the tides.

Examples:

- We helped a friend move his sailboat a few weeks ago from Discovery Bay to Alameda. We had to leave Discovery Bay at 6 AM on a Saturday on a particular weekend and the Old River site about 7 AM to get to Alameda before nightfall. We needed to complete the trip in one day. We did not feel comfortable or safe navigating to a new area (Alameda) after dark. If the gate were closed for 2 to 2.5 hours, we would not have made Alameda before nightfall.
- The Discovery Bay Yacht Club (DBYC) has outings where many boats need to get from Discovery Bay to distant areas in one day and need to leave early. Or boats returning later after dark. Or boats from other clubs coming to Discovery Bay.
- A significant number of boats travel every weekend during the spring from Discovery Bay to anchor at a favorite anchorage (and only large nearby anchorage), Mildred Island. (Side-note: We are SO glad there are no gates planned between Discovery Bay and Mildred Island!!! In fact we are surprised that the high boating traffic between those two sites was not listed in the informational section about recreation boating in your document. It seems that there was not a thorough analysis of the boating activity, routes, and impacts in the document.) If boats are anchored at Mildred Island and want to return home to Discovery Bay, if the Bacon Island Bridge is broken (which occurs several times each season) or the boater misses closing time, today they go through Connection Slough and down Old River. If Connection Slough Bridge is not open, then they are forced to go all the way up to the San Joaquin River Channel and down Old River, an extra 2-3 hour trip. They cannot "schedule" when they will arrive at the Old River gate.

This is a situation that is clearly a significant impact.

(2) It is also not reasonable to say boaters will have to "seek alternate routes". For large vessels going to/from Discovery Bay, there are NO ALTERNATE ROUTES. The Middle River route has the Bacon Island Bridge which is not open 24 x 7 nor does it have reliable maintenance hours. If

it breaks on a Saturday, maintenance does not come out until Monday at the earliest. So that is not an acceptable solution.

(3) It could well be late if they have traveled from the Mildred Island anchorage first down to the Bacon Island Bridge, find it closed, and have to take the long route up to the channel and down Old River. So it could be 8 or 9 PM before getting to Old River.

- A 2 to 2.5 hour wait at that point would make boats stay out to midnight.
- If the operator deems it “after dark”, then it could be 2 AM (a 5 hour wait) before they get home. What is the “daylight hour” timeframe when operators will open for recreational boaters?

SOLUTION: The gate operator needs to open the gates for recreational boaters with more flexibility, similar to how they will operate for Emergency vessels and how key bridges blocking the main waterway operate (like the Railroad bridge). Like any bridge, boaters should be able to call ahead and the gate should be opened within 5 minutes of their arrival if they give sufficient notice. If there is an issue of safety due to elevation difference on each side of the gates, then it could take longer until safe but otherwise should open as quickly as possible. If necessary, bubble curtains could be added upstream to aid in smelt migration control when gates are required to be opened for boaters.

IN ADDITION: If a physical gate is installed on Old River, the operations of the Bacon Island Bridge need to be adjusted year round to accommodate boaters. That would alleviate many requests for gate openings.

ALTERNATIVELY: Non-physical barriers (bubble curtains with associated lights and sound) should be installed in place of the Old River gate (instead of both gates would be preferred). This would alleviate the impact to boats. And the safety concerns (next topic).

## **2. Boating Safety Concerns**

The document describes the hydraulic effects of adding 700 feet of sheet piles across an 867 foot opening on Old River and that the flow is anticipated to be 4 feet/second during some times of the day. There are numerous concerns about this flow all year when the gates are opened. The document raises several questions and concerns about the safety of boat passage.

4. Could a single screw boat engines (sailboats, houseboats, trawlers) with a maximum speed of six knots safely navigate “upstream” through the gate without losing steerage? Or a disabled boat with engine trouble?
5. When gates are opened for emergency vessels and there could be up to an 18 inch differential, isn't that similar to a class 3 rapid? That seems like it would suck any waiting boats into the gates. And cause turbulence on the sides with boats waiting for haul-out. A risk small fishing boats and any children or animals swimming off the back of waiting boats on a hot day. Has this risk been analyzed?
6. The sides of the butterfly gates (the non-passage areas where water will flow through) have catwalks which appear to be quite low clearance. What would happen if a ski boat or fishing boat were sucked into/under that area. Could boats be capsized or people decapitated? Could larger boats become stuck against the catwalk or capsize during high flow periods?
7. There is a statement that dolphin fenders (steel piles) will be installed to keep commercial vessels from hitting the gates. Can there be protective fenders, less damaging, installed to protect the recreational vessels as well as the gates?
8. And what happens if a boat gets on the wrong side of the dolphin fenders (between the sheet piles and catwalks away from the opening)? With the increased flow on that side by the catwalks, what is the risk that they cannot safely get back up to the passage, particularly boats with smaller engines?

### **3. Operational Questions**

Are there other triggers that will be considered which could increase operations, even potentially year round? If smelt migration is found not to be correlated with turbidity, could the gates be closed for more hours during December to June? Plus are any other triggers going to be considered. In particular, is salinity a trigger? That was not discussed in the document, but if the salinity continues to rise due to excess pumping, will the gates be closed indefinitely to block the salt water from getting to the pumps?

### **4. Water Quality**

#### **4.1 Impacts to Discovery Bay Water Quality**

Discovery Bay waterfront-homeowners have their back yards on the Delta River. These bays are used for recreational swimming and boating and contain each homeowners boat berth(s). Discovery Bay waterfront-homeowners paid a significant premium for water-front lots. The river is their backyard and swimming pool. In addition, the golf-course homes are on lakes fed from Delta water.

1. What impact will the gates have on the quality of the water surrounding the Discovery Bay homes? It appears the high tide height will be 8-10 inches less during gate operations. It seems that will lessen the flow/cleansing action. What will that do to the water quality and will there be an increased risk of invasive species (there has already been some increase due to the excess pumping and the lack of snowfall in the Sierra).
2. Drinking Water: The river quality seeps into the ground and our wells and will affect our drinking water. Are there any concerns that the gates will have any effect on our drinking water?
3. Is there any monitoring planned for community water quality such as Discovery Bay?

#### **4.2 Impacts to Oakley's Water Quality**

Parts of Oakley are also on wells for drinking water. What is the anticipated impact there and at Bethel Island from the gates. On the salinity? Water quality in general. What will be the impacts to the drinking water there. The delta water is required by local ordinance to be used for all ground watering – is there any risk of increased salinity affecting the landscaping?

### **5. Impact to the Ecology**

#### **5.1 Delta Smelt**

There seems to clearly be insufficient scientific evidence that the gates will “protect” the Delta Smelt to support a project with such significant impacts to boaters, recreation, and boater safety. First, the scientists stated during their project reviews that little is known about smelt migration habits and more importantly, that the correlation between smelt migration and turbidity (the basis for the entire Gates project) was only shown in 1 out of 5 years. So is the project based on a 20 percent correlation? That seems like very questionable science.

1. Will the gates keep the Delta smelt from their natural spawning ground since they spawn “upstream”? Could the gates actually pose a risk to their species?
2. The gates are a “temporary” protection. What is the long-term protection? The peripheral canal?

## 5.2 Other Species

What is the impact on other fish and birdlife south of the gates (e.g., Discovery Bay)? What species rely on delta smelt for food? If the smelt are kept away, will that kill bass and other fish? Will they die? Will it impact the ducks, geese, heron and egrets that live here?

## 6. Economic Impacts

1. Between Bethel Island and Discovery Bay: We discussed earlier the impact to boaters needing to schedule events. During the year often boaters go to Bethel Island for brunch or lunch. A 2 to 2.5 hour wait each way if the group only has a short window for lunch won't work. Even a 1-hour wait would potentially stop this kind of traffic. I think that the impact of loss of commerce to Bethel Island and the Discovery Bay Marina needs to be added to the document and evaluated. If there was no impact to recreational Boating (Issue #1 were resolved) then this would not be a problem.
2. Marinas: I do not see any analysis of the effect of the gates on the Marinas. The large number of marinas in the area were documented but no information about where the boaters in those marinas typically go. I believe the boaters in the Holland Cut marina are typically fisherman who a larger percent go to Franks Tract State Park. The Old River gate will impede that activity. But worse, the large number of marinas on Bethel Island berth boats that the owners plan to head to Mildred Island. With the Connection Slough gate closed full-time months in the Spring is there an analysis of the impact to these marina operators? (We own rental berths on Sandmound Slough just south of Bethel Island and our tenants have already raised questions about getting around once the 2-Gates are installed. We may lose that income).
3. House Values: IF the water quality in Discovery Bay is not assured and if boating access is not reliable, what is the estimated negative impact to our home values and what recourse will the homeowners have?

## 7. Funding for Gate Removal, etc.

1. Is the funding for the removal of the gates in five years set aside? With the ongoing state's budget woes, there is no assurance that there will be funds for their removal and since the Delta citizens and boating are not primary considerations, it seems to us that funding for gate removal needs to be secured and guaranteed for the project to go forward. What is the anticipated cost, in today's dollars, for the sheet pile removal?
2. Is complete funding approved for 5-years gate operations?
3. And for the ongoing environmental studies?

## 8. Recommendations

1. Open the gates upon demand and at night when needed for boat passage. Add non-physical barriers if needed to allow keeping the gates open when required for recreational boaters or better still, use multiple non-physical barriers instead of the gates (especially the Old River gate).
2. Keep Bacon Island Bridge open longer and improve maintenance schedules. This will reduce the need for boaters to request gate opening on Old River.
3. Add protection for boats (bumpers, more guides to ensure boats do not get sucked towards the catwalk flow area).
4. Best – replace physical gate plan with non-physical gates. Especially since scientific evidence for use of physical gates has only a 20% correlation and has unknown consequences. Non-physical barriers are more adaptable and flexible.