5. Impacts On Navigation, Locke Historic District, And Historic Vernacular Landscapes.

a. Impacts at intakes.

There are significant multi-year (permanent) impacts to recreational boating due to construction activities at the intakes. The SDEIS describes construction-related cofferdams sticking out 60 feet into the Sacramento River at three locations over about four miles on the east bank of the River between Elk Slough and Snodgrass Slough. The SDEIS states that "warning signs and buoys would be posted upstream, downstream of, and at the construction sites" for the intakes. It also describes barge traffic servicing the intake construction sites. It is reasonably foreseeable that multiple barges with construction equipment and supplies will be anchored throughout this stretch of the river. Safety concerns will likely result in a five mile per hour zone along this entire stretch of river. Prudent boaters will feel compelled to slow to five miles per hour or avoid the area in any event.

This massive construction activity turns a four-mile stretch of the Sacramento River into a multi-year five mile per hour summer-season construction zone. The SDEIS states that in-water construction activity will be limited to the period between June 1 and October 31 each season in order to minimize impacts to fish species. However, that limitation concentrates construction activities in the prime summer boating season, which is when recreational boat traffic is intense and impacts on boating are the greatest.

If the three large intakes proposed in Alternative 4A are to be constructed, this effect is adverse and unavoidable. The only way to avoid this impact is to consider alternatives that do not involve three large intakes at this location. For example, an alternative with one 3,000 cfs intake would lessen the impact.

The SDEIS describes the cofferdams being replaced by permanent rock embankments when construction is completed. The drawings and description are very vague as to how far from the existing levees the permanent rock embankments will stick out and whether the rock embankments are underwater or rise to and above the surface. It is unknown whether promised "state of the art fish screens" will necessitate a five mile per hour zone. There is not enough information for the applicant to show that permanent impacts to recreational boating will not be adverse; its claims to the contrary are unsupported.

The intakes and associated industrial facilities, including gantry cranes looming over the river, scenic Highway 160, and the entire landscape, and forebays that look like sewage treatment plants (despite the applicant's best efforts to render them in a flattering light), alter a historic vernacular landscape by placing multiple large industrial facilities on an extensive stretch of peaceful boating and farming landscape. *See* Design Construction Enterprise, *Intake Design Review* (Attachment Eleven) (gantry cranes at page MWD004398).

The intakes and associated industrial facilities are also in close proximity to the town of Locke and the Locke Historic District, which preserves the cultural and aesthetic history of Chinese immigrants to the Delta. The Locke Historic District is "the largest, most complete example of a rural, agricultural Chinese American community in the United States." National Park Service, *Locke Historic District, available at*

http://www.nps.gov/nr/travel/Asian_American_and_Pacific_Islander_Heritage/Locke-Historic-District.htm, last visited November 7, 2015. The historic district exists in the context of the largely unaltered late nineteenth century landscape surrounding it. It is now, for the most part, as it was when the immigrants first settled here. The industrial forebay shown on sheet 6 of the figures attached to the Notice, as well as the dumping sites shown on sheet 6, are in very close proximity to the town of Locke. There are historic homes on the banks of the Sacrament River close to the intakes. Perhaps the only remaining example of a levee-side historic farmhouse is near one of the intakes. The nearby town of Hood is an iconic example of the Delta-as place. The intake facilities change the character of the entire area and present an unavoidable adverse effect on the historic values of the area. The intake structures are existentially incompatible with maintaining the historical sense of the area.

Within Alternative 4A, this is an adverse unavoidable aesthetic impact to boaters, users of scenic Highway 160, and the entire historic vernacular landscape that emanates from the Locke Historic District and the historically preserved character of the area. A Programmatic Agreement under Section 106 cannot mitigate or avoid these impacts after permits are issued because only an alternative plan for the project can avoid or lessen these impacts. One 3,000 cfs intake is likely the most that can be placed in this area without destroying the aesthetics and cultural significance of this Delta landscape. A better alternative, from the historic perspective, would be to avoid the area entirely because the applicant has chosen the most scenic and historically significant point in the Delta for its project.

b. Adverse effects and cumulative adverse effects of gate on Old River.

The new gate at Old River impacts recreational navigation. The presence of existing temporary seasonal barriers in this area does not lessen the impact (as claimed by the applicant); rather it increases the cumulative impact of barriers to navigation. The South Delta Temporary Barriers Project already blocks recreational boating on four waterways. These blockades are seasonal. Making the blockade at the head of Old River a permanent structure (gate) has a cumulative adverse effect. Multiple barrier and gate projects are being planned all over the Delta and present reasonably foreseeable additional cumulative impacts. For example, DWR erected a rock barrier at False River in the summer of 2015 and plans to continue to place rock barriers at False River to control salinity and allow exports to continue during times of drought. Gates are proposed at Three Mile Slough, and the SWRCB is encouraging the installation of other gates. Gates are planned or contemplated to address water quality issues in the San Joaquin River at Stockton. The "gating of the Delta" is one project and piecemeal approval of the head of Old River gate should only be made in the context of a cumulative impacts analysis for all reasonably foreseeable Delta gates or in the context of a Delta-wide programmatic EIS for gates.

An essential characteristic of boating in the Delta and the Delta-as-place is that it is free. Boaters enjoy the freedom of being able to travel by water through the maze of sloughs without blockage. The Old River barrier and its cumulative counterparts invade that sense of wonder and freedom. These cumulative impacts are adverse and

unavoidable. They should be analyzed. An alternative to the Old River gate, and the gate approach in general, should be considered.

Although of long duration, the Temporary Barriers Project does not represent a permanent infrastructural commitment. Likely, the applicant will want to replace the other seasonal barriers in the Temporary Barriers Project with permanent gate structures as well. This "gate creep" is alarming to boaters and should be the subject of a programmatic EIS, or at the minimum, a thorough cumulative impacts analysis.