

**From:** Bradbury, Mike@DWR  
**Sent:** Monday, November 02, 2015 2:18 PM  
**To:** Ragazzi, Erin@Waterboards  
**Cc:** Biondi, Oscar@Waterboards; Wetzel, Jeff@Waterboards; Barnes, Peter@Waterboards; Bogdan, Kenneth M.@DWR; Enos, Cassandra@DWR  
**Subject:** Supplemental 401 application information

Erin,  
Per your clarification questions on the California WaterFix 401 application, please see the information provided below.  
Thank you,  
Mike

## **Reply to Information Request from State Water Resources Control Board**

### General

- Any mitigation measures identified to protect water quality in the EIR that are proposed to be included as part of the project should be cross-referenced in the application. The DWR EIR/EIS team is creating a document with information which will identify the water quality mitigation included in the environmental documents, which will be forthcoming.
- If DWR has submitted a 1600 application, please include as part of the 401 application. DWR is currently developing the draft 1600 application in coordination with the Bay Delta Region, Stockton Office staff, including Jim Starr and Annee Ferranti. It is expected that the final application will be submitted in Spring 2016.

### Water Impacts

- Linear feet impacts. Are those included as acreage impacts?  
Yes, those impacts are included in the impact acreage calculations. The linear impacts were measured and reported as additional information for features such as the intakes, barge landings, operable barriers, and overflow structures that occur along tidal channels.
- Application should quantify the impacts to waters of the U.S. and waters of the State. See Block 8 of the Continuation sheet: The delineation of waters and wetlands within the project area was conducted using the Preliminary Jurisdictional Determination (PJD) process with the Corps of Engineers whereby all aquatic features are mapped and assumed to be federally jurisdictional. Therefore, this process has also identified all waters of the state. Impact tables are in Table 1 of Block 8 and in a spreadsheet in TAB C, Table of Impacts.
- The application should include or reference the plan of the total estimated quantity of waters to be created, restored, enhanced, purchased, or protected. The Conceptual Mitigation Plan developed for USACE is scheduled to be completed in December of this year and the Final Mitigation Plan is scheduled to be completed in April 2016.

- Usually compensatory mitigation credits are purchased within the same watershed. Are there enough credits available?  
DWR's current plan is to mitigate most wetland impacts through restoration, not purchase of mitigation credits at an existing bank. The only wetland type likely to be mitigated through purchase of bank credits is vernal pool, and there are enough credits in the affected watershed to meet that need.

#### Regional Board

- Application should include information on the method of disposal of water from dredged material.  
Please see attached material from EIR/EIS that describes best management practices, including addressing disposal of water from dredge material.
- Characterization of discharge needed for other RB5 water quantity permits. RB5 contact Nichole Morgan.  
Please see attached material from EIR/EIS that describes best management practices, including addressing water quality permits. DWR will coordinate with the Regional Board on the RB5 permits as facility and construction designs are refined (currently only at about 5% design completion).

#### Acreage Clarification

- Pages 8 and 9 of continuation sheet. Clifton Court Forebay (CCF) has surface area of 2,215 ac will be expanded by 590 ac. 2,805 ac total. Same paragraph then says new forebay sections (NCCF and SCCF) will have surface areas of 822 ac and 1,756 ac respectively (2,578 ac total). Is this because of the embankments and coffer dam?  
Yes, that is the primary discrepancy. Additionally, the engineering calculations are divided into various facilities that don't translate well to water surface area. The GIS layer that was provided is helpful in identifying the size of those facilities, including forebay dredging area, forebay embankment, pumping plant shaft location, and siphon.
- Page 9. New forebay sections (NCCF and SCCF) will have surface areas of 822 ac and 1,756 ac respectively (2,578 ac total). Figure ES-1 of conceptual engineering report shows 806 ac. For NCCF and 1,691 ac for SCCF.  
Per the description above, the CER measures the Clifton Court Forebay components in a manner that does not translate well to water surface area. Additionally, the numbers from the CER in this case are derived from an earlier project description, which is not consistent with the engineering GIS layer for Revision 5a of the construction plan. Please consider the following numbers from direct measurements and the provided GIS layer in calculating the new surface areas of the existing, and new North and South Clifton Court sections:  
Existing CCF - measured from aerial, not GIS layer – 2215 acres  
North CCF section – 822 acres (does not include new banks)  
South CCF section (existing) – 1109 acres  
South CCF section (expansion area) – 558 acres  
New embankments and divider (sloped, will be partially submerged) – 344 acres

The new total water surface of the combination of the NCCF and SCCF would be 2489 acres + a portion of the 344 acres of new embankments and divider. The estimate for resulting water surface area was calculated to be 2578 acres. The estimate for the entire new forebay area would include all of the new embankments and divider, for a total area of 2833 acres.

- Impacts spreadsheet shows 2,188 ac total impacts for CCF.  
Impacts at CCF include 258 acres of permanent impact due to the construction of forebay embankments and other structures and 1931 acres of temporary impact due to dredging.
- Page 11. Total project size = 9,838 ac. Conceptual engineering report (pages ES-11 and 23-5) show 9,056 ac.  
Footprint acreage discrepancy of 782 acres: The CER footprint calculation is 9056 acres; a list of features not included in that calculation can be found on page 23-4. The 9,838 acre footprint reported in the application was calculated from the Hybrid Constructability feature class in GIS and includes transmission lines (776 acres) and the Head of Old River Barrier (5 acres).  $9838-781=9057$ ; slight total difference is due to rounding.
- Page 12. Lake/reservoir water body impacts. The impacts spreadsheet does not show permanent/temporary breakdown.  
All project impacts to waters of the state are treated as permanent except for 1930.95 acres of impact due to dredging CCF. Those impacts are found at CCF-3 and CCF-8 in the spreadsheet. The project includes other impacts to sites that will eventually be restored to pre-project conditions; however, because the impacts are expected to last more than one year, they are treated as permanent.
- Page 13. Total impacts: 774 ac permanent, 1,931 ac temporary. Not defined in engineering report or impacts spreadsheet.  
All impacts to waters of the state are considered permanent except for temporary impacts due to dredging at CCF which totals 1930.95 acres at CCF-3 and CCF-8. The project includes other impacts to sites that will eventually be restored to pre-project conditions; however, because the impacts are expected to last more than one year, they are treated as permanent.
- Page 14. Linear impacts along channels = 25,356 ft. Are these impacts (includes barrier and overflow structures) separate from the total project impacts?  
No, those impacts are included in the impact acreage calculations. The linear impacts were measured and reported as additional information for features such as the intakes, barge landings, operable barriers, and overflow structures that occur along tidal channels.
- Page 18. Largest single permanent impact for CCF = 258 ac. Spreadsheet shows larger areas (e.g., 1,107.99 at CCF-8, 821.68 ac at CCF-3)  
Permanent impacts at CCF are due to construction of forebay embankments, canals, etc. The impacts at CCF-8 and CCF-3 are due to dredging and are considered temporary.

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