

Memorandum

Date: September 21, 1999

To: Lester Snow
Steve Ritchie

From: Jo Turner

Subject: Status of the Tolay Creek Restoration Project (97-N19)

The Tolay Creek Restoration Project is a joint effort with Ducks Unlimited, U.S. Fish and Wildlife Service, and California Department of Fish and Game to restore and enhance 435 acres of saline emergent wetlands in the Tolay Creek floodplain. The project is located within the San Pablo Bay National Wildlife Refuge and the Tolay Creek Unit of the Napa/Sonoma State Wildlife Management Area. The project was designed to allow tidal flows to move from San Pablo Bay up Tolay Creek by widening and deepening parts of the old river channel and moving an existing levee to allow broader tidal influence. CALFED has funded approximately one third (\$283,000) of the cost for project construction and project management.

The project construction was completed and the levee breeched in December of 1998. The biological benefits were almost immediate, with benefits accruing to all the intended special status species except the salt marsh harvest mouse. A short-term impact was expected, with long-term benefits over time as the tidal shift caused vegetation shifts in the restored areas.

Although all concerned agree the biological benefits of the project are already being exhibited, there have been unexpected third party impacts. The original land elevation surveys for the project were inaccurate and the land elevation at the site is approximately two feet lower than that stated in the survey. Additionally, project engineers incorrectly used a report stating that the elevation of nearby houses was plus four feet on the first floor as their basis for the lowest level of the house when they should have used the elevation of the foundation. The result of these inaccuracies is additional seepage through the levees caused by tidal waters remaining in the project area continually and not receding with the low tide as planned. The increased hydraulic pressure against the levees is causing the increased seepage. There are essentially five areas of impact:

- Part of an area of a farm owned by Fred Dixon is flooded and he has incurred farming losses;
- Potential impacts to highway 37 at the north end of the project--the initial survey said the highway was at 12' and in actuality the crown is 7' at its lowest point;
- Seven homes along the west levee near highway 37 have been affected--some have flooded foundations, some septic systems are tidally flooded, and there is a waste oil tank (not in use) on the site;
- Vallejo Sanitation District lies to the east of the project levee and has experienced increased seepage;
- and the salt marsh harvest house were expected to return to some habitats as the tides receded and they are not utilizing parts of their habitat.

In February Ducks Unlimited dredged a channel through a Department of Fish and Game pond to facilitate draining of the upper portion of the project. This facilitates draining, but does not alleviate the seepage problem.

CALFED received letters in April 1999 from property owners or interested parties discussing the damage. A meeting involving several agencies and public groups was set up on Friday April 16, 1999 in response to these developments. Participants included USFWS, DU, EPA, DFG, NRCS/SSCRD, Marin MAD, Save San Francisco Bay, The Bay Institute, NFWF, and Tom Roth who is staff to Congresswoman Woolsey. After outlining the concerns it became apparent that various representatives had received conflicting information. They agreed to set up a file, develop some public outreach to discuss the problems/potential solutions, and meet separately with homeowners and landowners affected by the project. No definitive action was taken and everyone was going to get more complete information and meet again.

CALFED, through NFWF, has been pressing Ducks Unlimited to update us on the status of the project. They were reluctant at first. We found out at our recent meeting they had hoped to find a solution quickly and then report to CALFED.

CALFED met with USFWS, DU, Save the Bay, and ECORP Consulting on August 19, 1999 to get an update on the status of the project. The most immediate concerns are the affected homes and the farm owned by Fred Dixon. CALTRANS is investigating to see if there is a potential problem. Vallejo Sanitation is investigating their problem (they received \$80,000 from the project proponents to implement levee improvements to compensate for the expected additional hydraulic pressure, but may not have reinforced the real problem areas).

There are two potential primary solutions being considered to address the most immediate concerns:

- Purchase the homes from willing sellers. The three most affected homes have willing sellers and Ducks Unlimited/USFWS has been negotiating possible purchase. However, they would need funding to complete the purchase. The project partners would rather pursue this option than the next option, which is a "short-term" engineering fix. The partners would like to pursue purchasing more of the adjacent properties so they can leave the project as is and create a much larger, contiguous area for tidal marsh/upland restoration. Purchase of some properties would not "fix" the problem with the flooded farmland or Vallejo Sanitation.
- Put in a short-term (less than five years) engineering fix based on a barrier with either a series of culverts or a neckton gate to reduce tidal flows to those expected for the project. All of the partners were very concerned that a temporary fix would be for five years, and if another solution not found probably made permanent. USFWS could receive up to \$300,000 in emergency funding for the engineering fix. Based on concerns about the engineering fix, USFWS and the partners will investigate obtaining enough additional funds and using the emergency funds for land acquisition.

Based on the results of our meeting and a meeting the next day with regulating agencies, it was determined that there was no way they would be able to implement the engineering "fix" in a timely manner. I talked with Holly Andree of Duck's unlimited on September 1, 1999 and here is the most recent information. The USFWS emergency money, along with whatever additional funding source can be identified, will be used to fix Fred Dixon's levee at a cost of approximately \$400,000. A low dike will be constructed on the landside of the levee where the affected homes are located to capture the waters and stop the houses from flooding. Ducks Unlimited and the partners will pursue purchase of the houses as soon as possible. Two other options for the Dixon property which are being discussed, but are not firm, are potential purchase by the Wildlife Conservation Board (no money to do it yet), or purchase from the company Zintner and Zintner Associates as mitigation for one of their projects.