



Contra
Costa
County

To: Flood Control District Board of Supv
From: Transportation, Water and Infrastructure Committee
Date: January 15, 2013

Subject: Authorize the Flood Control District to explore removal of lowest 2.5 miles from Army Corps of Engineers' "Walnut Creek Project." Project #7520-6F8280

RECOMMENDATION(S):

AUTHORIZE the Chief Engineer, Contra Costa County Flood Control & Water Conservation District (Flood Control District), or designee, to explore removal of the lowest 2.5 miles of Lower Walnut Creek from the US Army Corps of Engineers (Corps) program and return it to local control and oversight; and to REPORT to the Transportation, Water and Infrastructure Committee on an as-needed basis for guidance on this process, Martinez area. (100% Flood Control Zone 3B funds)

FISCAL IMPACT:

The project costs, estimated to be \$150,000, will be funded by Flood Control Zone 3B (fund 252000)

BACKGROUND:

Introduction

The conflict between the Corps' maintenance requirements and sustainable preservation of habitat in Lower Walnut Creek is well documented. The basic concept is that the Corps requires the lowest portion to be dredged to return it to its 1965, unsustainable design, while regulatory agencies (including the Corps Regulatory Branch) have all but prohibited such an action because of its

APPROVE

OTHER

RECOMMENDATION OF CNTY
ADMINISTRATOR

RECOMMENDATION OF BOARD
COMMITTEE

Action of Board On: **01/15/2013** APPROVED AS
RECOMMENDED

OTHER

Clerks Notes:

VOTE OF SUPERVISORS

AYE: John Gioia, District I Supervisor
Candace Andersen, District II
Supervisor
Mary N. Piepho, District III
Supervisor
Karen Mitchoff, District IV
Supervisor
Federal D. Glover, District V
Supervisor

I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the Board of Supervisors on the date shown.

ATTESTED: January 15, 2013

David J. Twa, County Administrator and Clerk of the Board of Supervisors

By: STACEY M. BOYD, Deputy

Contact: Paul Detjens (925)
313-2394

BACKGROUND: (CONT'D)

environmental impacts. Currently, the lowest portion of the channel (from the mouth up to the BNSF Railroad Crossing) features quality habitat and is home to a number of rare and endangered species, such as the salt marsh harvest mouse. The Corps-required dredge would remove all ecological value from the channel.

A decade ago, Congress authorized the Lower Walnut Creek General Reauthorization Report (GRR) specifically to address this issue and to implement a better solution. Unfortunately, with the political shift in Congress away from earmark funding of projects and with the Corps' inability to complete the GRR with a reasonable level of effort, the GRR process has run out of federal funds and has effectively coasted to a stop. It will be up to the Flood Control District to plan, design, and implement any change to Lower Walnut Creek. Of course, the Corps Operations Section will have to approve any modification to the as-built project, but the overall process will be 100% locally driven.

PL 84-99 Disaster Assistance Program

In the aftermath of Hurricane Katrina, the Corps performed a nationwide evaluation of flood control systems and identified systems with known deficiencies. In early 2007, the Corps released its nationwide findings from this study and included Lower Walnut Creek in the deficient category. The Corps required repairs within one year in order to remain eligible for the Corps disaster assistance program designated as the "PL 84-99 program." The Flood Control District quickly mapped out a project that would satisfy the Corps while avoiding work in the area of highest biological significance. The award-winning, \$5 million Interim Protection Measures Project was successfully implemented on-schedule and on-budget in late 2007. The approved project designated the lowest 2.5 miles of the channel as having the highest biological value, and the Corps agreed to temporarily suspend oversight of this area while the GRR project proceeded to implement a long-term solution. This suspension of Corps oversight allowed the habitat in the lowest reach to temporarily remain, while preserving the eligibility of the other 20 miles of channel for the PL 84-99 disaster assistance program.

The PL 84-99 program is an important disaster relief mechanism in that it provides federal funding to repair flood control facilities built by the Corps (such as channels, dams, or levees) that are damaged by large storms. The PL 84-99 program does not provide assistance for other public or private property damaged by storms; it only covers the flood control facilities. The Corps inspects all federally-constructed facilities annually to ensure that the facilities remain in good repair and are maintained to Corps standards. These annual inspections provide only three ratings: Acceptable, Minimally Acceptable, or Unacceptable. In order to remain eligible for PL 84-99 damage assistance, the federal project needs to receive an Acceptable or Minimally Acceptable rating. If any part of a project receives an Unacceptable rating, the project is put on probation, and if it receives another Unacceptable rating the second year, it is placed on "inactive" status and is ineligible for the PL 84-99 program until the problem is fixed. The Corps effectively uses the PL 84-99 program (and the promise of disaster assistance) as the tool to enforce compliance with their policies and maintenance requirements.

Unfortunately, the Corps policies are not always founded on the best science and often conflict with the requirements of other regulatory agencies. An example of this is the Corps' Levee Vegetation Policy, which requires removal of all trees from levees. This would remove nearly all of the remaining riparian habitat in the delta and has met with significant resistance. This policy is currently being litigated in California.

Another flaw in the Corps inspection practice is that each federal project, no matter how large, receives only one overall rating. The Walnut Creek project, for example, contains 22 miles of Corps-constructed channels and is a mix of wide, tidal, earthen channels, drop structures, rock lined channels, and many miles of rectangular earthen channels. This all-or-nothing approach means that a structural defect on the Pine Creek channel in Concord (resulting in a system-wide overall unacceptable rating) would prevent PL 84-99 program assistance for the unrelated earth-lined channel by Buchanan Field. This approach also means that excessive sediment in the lowest reach of Walnut Creek would prevent PL 84-99 program assistance for the concrete-lined San Ramon Bypass Channel ten miles upstream in downtown Walnut Creek. The sites are only connected by the federal funds used to construct them; problems in one location do not mean problems in the other. Unfortunately, the Corps inspection process does not make exceptions for large projects like Walnut Creek.

The accumulated sediment in the lowest 2.5 miles of Walnut Creek (mouth to BNSF Railroad) has no effect on the upper reaches of the system, and when the Corps rated the lowest portion as Unacceptable, it also meant that the entire 22-mile system would be rated Unacceptable, even though it does not share the same issues. More troubling is that the entire system would become ineligible for assistance through the PL 84 99 program.

In 2007, as part of the Interim Protection Measures project, the Flood Control District petitioned the Corps for special consideration to temporarily suspend the Corps oversight over the lowest 2.5 miles of the project, thus preserving an Acceptable rating and keeping the remaining portion of the 22-mile project in the PL 84-99 program. This special consideration was granted in part because the Corps was working on a long-term solution under a GRR project. However, with the demise of the GRR project, another approach is needed. If no action is taken, the Corps will again evaluate the lowest reach of the project, rate it unacceptable, and remove the entire 22-mile Corps project (not just the deficient 2.5 mile-long portion) from the PL 84-99 disaster assistance program.

Options for Proceeding Forward

There are a number of practical options that can be implemented to solve this issue. One is to continue to lobby for federal funding to restart and complete the Corps' GRR project. Another is to proceed with a locally-controlled Section 408 Program and seek Corps approval of the locally preferred plan. A final, and preferred option, would be to pursue a "Selective Deauthorization" to permanently remove the lowest 2.5 miles from the larger 22-mile federal project.

Wait for Funds to Restart the GRR Project

In the last few years, the preferred path forward has been to continue to lobby Congress for an earmarked appropriation to fund the Corps' participation of their General Reevaluation Report (GRR) for Lower Walnut Creek. This had been moderately successful in the past, but with Congress' self-imposed ban on earmarks, it is increasingly likely that no federal funds will be forthcoming in the foreseeable future. In 2007, the Corps approved the temporary suspension of federal oversight of the lowest 2.5 miles to give another branch of the Corps time to develop the ultimate solution through the GRR project. However, with the GRR project at an indefinite pause, it is highly likely that the Corps will resume oversight and rate the entire system as Unacceptable.

The main benefit of waiting for the restart of the GRR project is that the construction of any such project is cost shared with the federal government. Currently, the split is 65% federal, 35% local for construction. Even if Congress resumed earmark funding, the competition for Federal funds for construction remains intense. Projects that deliver high benefits compete better for construction funding. Work by the Corps so far on the GRR project has focused on quantifying the benefits of a federal project for Lower Walnut Creek. However, because the area surrounding the lowest 2.5 miles of channel has low damages from flooding, preliminary benefit calculations have not been favorable.

Additionally, there is no guarantee that the level of federal construction funding (currently at 65%) will continue. Assuming that it takes another fifteen to twenty years to secure planning funding and complete the GRR planning, it is likely that the federal rules will change in that time. It is highly unlikely that federal match will ever be more favorable than it is now.

In summary, further waiting for federal funds is not likely to be successful, and even if earmarked funding for planning did materialize, the GRR project is not likely to be competitive for construction funding.

Section 408 Program

The Corps has previously suggested that the Flood Control District continue the GRR project planning process under the Corps' Section 408 program. This would require that the Flood Control District prepare all needed studies — such as geotechnical, environmental, and hydraulics — and be able to demonstrate that a locally preferred plan would preserve the federal investment, especially in terms of the design level of flood protection. Once the Flood Control District receives the Corps' approval, construction would be 100% locally funded without a federal match. The Corps would also need to review and approve a revised Operations and Maintenance (O&M) manual covering the new work. Previous estimates of this in-channel work range from \$25–35 million, depending on scope and level of habitat

restoration and mitigation included.

Fortunately, the GRR has prepared — or at least started — many of the baseline studies that would be needed for a 408 submittal. However, the path to Corps approval is not expected to be smooth, easy, or inexpensive. The Corps has repeatedly stressed the flood risk reduction benefits of the original project. While they privately acknowledge the fact that the residual risk of the area protected by Lower Walnut Creek is very low, they officially insist that the entire area needs full protection from the 1% chance event (also known as the “100-year storm”), even when the areas protected are degraded wetlands that will never be developed and could benefit from some infrequent inundation. Overcoming this fundamental issue through the 408 process may prove to be especially challenging.

The main benefit of proceeding through the Corps 408 program is that the ultimate project would remain part of the federal system and, as long as it continued to be rated as Acceptable, or Minimally Acceptable, the entire system would remain in the PL 84-99 program. Typical damage covered under the PL 84-99 program is bank or structure failure by erosion. Because the lowest 2.5 miles of Walnut Creek is flat and creek velocities are low, erosion is not much of a concern, so the PL 84-99 benefit here is less than in other sections of the creek.

Selective Deauthorization

Another alternative that is worthy of consideration is the concept of “Selective Deauthorization.” Simply put, this is a congressional action that removes a portion of a previously built federal project from further federal oversight and management. The Corps has 22 miles of federal facilities in the Walnut Creek Project. A Selective Deauthorization (SD) would effectively remove the 2.5-mile portion from the mouth to the BNSF Railroad from the federal system, leaving the status of the remaining 19.5 miles of the system unchanged. The primary benefit to SD would be that it allows the remaining 19.5 miles of the system to remain in the PL 84 99 program and to be managed differently than the lower 2.5 miles. The portion being considered for deauthorization is the exact same reach that was temporarily excluded from Federal oversight in the 2007 Interim Protection Measures project.

Selective Deauthorizations are typically instigated with the local Corps office and ultimately result in congressional approval. Often times, the direction to the Corps comes directly from Congress, using language similar to:

“Unless the Secretary of the Army determines, by not later than 30 days after the date of enactment of this Act, that the removal the lowest 2.5 miles from the Lower Walnut Creek, CA, federal project would be injurious to the public interest, the Secretary is hereby ordered to revise the Operation and Maintenance Agreement to remove the lowest 2.5 miles of Lower Walnut Creek, CA, from the federal project.”

A commonly used bill for this purpose is the biennial Water Resources Development Act (WRDA), but the direction can be in any bill.

Preliminary discussions with the Corps on this matter have been encouraging and supportive. Corps staff has indicated that while this is an infrequently used option in the Bay Area, it has been successfully used in other Corps districts.

The primary advantage of SD is that the management of the facility is 100% locally controlled, and the Flood Control District, as directed by the Board of Supervisors, can balance the provided level of flood protection with the environmental considerations. Such balanced, sustainable solutions may take the form of purchasing flowage easements over areas (such as marshlands owned by others) that would not be damaged from flooding. Another part of this solution may be to lower or partially remove some of the levees to encourage higher flows to periodically inundate adjacent marshlands. The cost to implement such a solution is significantly less than the estimated \$25–35 million to implement a GRR or 408 solution. Another big advantage to SD is that it allows the remainder of the 22 miles of the federal project to remain in good standing in the PL 84-99 program.

The primary disadvantage of SD is that the portion removed from the federal project would no longer be eligible for PL 84-99 disaster assistance in the event of storm damage in the lowest reach. Because the stream in this lowest reach is flat and slow moving, the risk of storm damage to the channel itself is expected to be low.

East Bay Regional Park District

Another driver for developing a long-term solution for Lower Walnut Creek is the desire of the East Bay Regional Park District (Park District) to extend the Ironhorse Trail northerly along this section of channel. Currently, the trail stops at Marsh Drive and cannot be extended until a permanent plan is implemented for the lower reach. The Park District wisely does not wish to invest in a permanent trail on a levee that may be relocated or otherwise may have to be reworked.

Having patiently waited a decade already, the Park District may be unwilling to wait another decade or two until the GRR or a 408 project is ready to be implemented. Likewise, the Park District may or may not support the selective deauthorization process, especially if it results in lowering levees so that they would be overtopped more often. Further coordination with the Park District will be needed if the selective deauthorization is ultimately chosen.

CONSEQUENCE OF NEGATIVE ACTION:

Failure to explore other means would result in the lowest portion of the Walnut Creek Channel receiving an unacceptable rating from the Corps and jeopardizing future federal assistance for the remaining 20 miles of channel in the watershed.

CHILDREN'S IMPACT STATEMENT:

Not applicable.