



Public Notice

US Army Corps
of Engineers

Sacramento District
1325 J Street
Sacramento, CA 95814-2922

Public Notice Number: 200000541

Date: May 25, 2001

Comments Due: June 25, 2001

In reply, please refer to the Public Notice Number

TO WHOM IT MAY CONCERN:

SUBJECT: Application for a Department of the Army permit under authority of Section 404 of the Clean Water Act to discharge dredged or fill materials into waters of the United States (waters), including, Lower Dry Creek, Robla Creek, and adjacent wetlands, as shown in the attached drawings.

APPLICANT: F.I. Hodgkins, Executive Director
Sacramento Area Flood Control Agency
1007 7th Street, 5th Floor
Sacramento, California 95814-3407

LOCATION: Sections 9, 10 & 20, Townships 9 & 10 North, Range 5 East, in Sacramento County, California. See attachment 2 for exact location.

PROJECT DESCRIPTION: The Lower Dry Creek and Robla Creek Levee Improvements Mitigation Project is part of a larger flood control program adopted by Sacramento Area Flood Control Agency (SAFCA) in 1993 to protect areas within the Natomas Basin, North Sacramento, Rio Linda, and Elverta. The Stage 1 Project was completed in the summer of 1996. The second stage, Robla Creek South Levee Stage 2 Improvements Project (Stage 2 Project), was designed to reduce the risk of flooding in portions of Natomas and North Sacramento by raising two levees and extending a third levee. Due to local residents concerns regarding worsening of flood conditions as a result of the Stage 2 Project improvements, the California State Reclamation Board amended the permit issued to SAFCA, requiring SAFCA to limit the scale of the project or implement hydraulic mitigation features. As a result, SAFCA constructed a portion of the Stage 2 Improvements during the fall of 1997, but did not construct all levees to the full design height. This project was developed by the applicant to mitigate the hydraulic impacts associated with the Stage 2 Project.

The following is a list of the major project components:

- Widen a portion of Robla Creek east of Dry Creek Road to increase channel capacity and reduce flooding
- Construct levee/flood wall system around ski lakes and Rio Linda airport to provide flood protection for Bell Acqua/Western Acres subdivision

- Fill section of Robla Creek west of Dry Creek Road to accommodate the new levee
- Excavate new Robla Creek channel to provide hydraulic and environmental benefits
- Install underground connection and flap gate to maintain flow from terminus of old Robla channel to the new channel
- Install a quadruple-box culvert under Dry Creek Road and under a private driveway for the new Robla Creek channel
- Remove existing bridge and fill section of existing Robla channel under and immediately east of Dry Creek Road; install a culvert under the road
- Construct a levee on the east side of Dry Creek Road from C Street to a point between Robla Creek and E Street
- Install flap gates and slide gates on existing culverts in old Robla channel to provide for drainage of Bell Acqua/Western Acres subdivision
- Install drainage culverts with flap gate and slide gate at the south end of levee system to provide for overland flow drainage from ski lakes/airport
- Construct a levee section at G Street detention basin, just east of Rio Linda Boulevard local drainage improvements along C Street
- Install an enlarged culvert crossings on E Street
- Raise Dry Creek Road to elevation of 43.3 feet from Magpie Creek Diversion Channel (MCDC) just south of C Street and 42.5 feet from C Street to just north of the existing Robla Creek bridge
- Install new drain inlets and cross culverts along raised Dry Creek Road
- Install short flood wall section along north side of G Street beyond 10th Street
- Raise 10th Street to elevation of 50 feet
- Modify existing school parking lot on 10th Street

The primary component of the project is the construction of a levee/flood wall system around the ski lakes and Rio Linda airport. The levee/floodwall alignment would extend from the intersection of Dry Creek Road and C Street, to the eastern side of the ski lakes, around the southern side of the ski lakes and north along the western boundary of the Rio Linda airport to G Street. Generally, levee segments would be 20 feet wide on top with 3:1 slopes, with a total width of up to 80 feet. A maintenance zone of 10-15 feet would be maintained on each side of the levee. Flood wall segments would be 2 to 6 feet tall

Along the east side of the ski lakes, Robla Creek is currently restricted to a very small corridor that does not provide enough room for construction of the proposed levee between the creek and the ski lakes. This portion of Robla Creek was channelized and realigned to accommodate construction of the ski lakes approximately 20 years ago. This segment of the channel is proposed to be filled and moved to accommodate the levee. The original project design placed the new channel in a straight alignment just east of the levee, but the design was changed when SAFCA opted to take advantage of an open area just west of Dry Creek Road to create a wider, meandering channel with the opportunity to enhance habitat value beyond current conditions.

The new alignment of Robla Creek would diverge from the existing channel just east of Dry Creek Road. The portion of creek immediately upstream of the divergence would be widened by moving back the north bank, and an in-channel shelf up to 40 feet wide would be created two feet above the existing channel bottom. This shelf would be able to accommodate riparian plantings and provides an opportunity to enhance the wildlife value along this segment of the existing channel. The flow of Robla Creek would be diverted into the new channel which would cross

under the intersection of Dry Creek Road and C Street, then meander south and flow into the Magpie Creek Diversion Channel. The new channel would also have shelves that would be vegetated with appropriate riparian plantings. Downstream of the new divergence, the existing Robla channel would be cut off by the levee on the east side of Dry Creek Road. As a result, no flow would occur beyond this point. However, the existing channel west of Dry Creek Road would receive runoff and overflow from the Bell Agua/Western Acres subdivision, which would flow into the new channel through an underground pipeline downstream.

The existing Robla Creek channel would be filled between the underground connection to the new channel and the south end of the middle ski lake (Lake #2). The section between the southeast corner of the ski lakes and the south side of Lake #2 would not be filled to the top of the bank. Along the southern edge of the ski lakes, the levee would be constructed immediately south of the existing channel. It would cross the existing channel and a portion of the historic Robla Creek alignment at the southwestern corner of the ski lakes, then extend up along the western boundary of the Rio Linda airport until terminating at G Street. A portion of the flood control improvement adjacent the airport would be a flood wall.

Several additional flood control structures would be constructed, including a flood wall east of Dry Creek, along the north side of G Street and west side of 10th Street and a levee on the north side of G Street west of Dry Creek. The western G Street levee would be constructed at the western end of a detention basin which was excavated to accommodate over bank flood flows from Dry Creek. This levee would be approximately 60 feet wide with a drainage structure and vehicle turn-a-round extending the total width to approximately 90 feet in two areas.

The remaining smaller components of the project include road raising and minor local drainage improvements such as culvert installation and replacement, flap and slide gate installation, and drain inlet installation. Borrow material for construction of the levees would primarily come from excavation of the new Robla channel. Additional material would be produced by grading of the areas between the new channel and Dry Creek Road. Material could also be supplied by a contingent on-site borrow source between the new channel and Dry Creek Road and existing SAFCA borrow and grading sites.

Creation of the new Robla channel would involve a range of construction activity, including excavation, ripping, and discing. Initially, the top foot of material would be stripped and either stockpiled for levee fill or retained to be put back into the bottom of the new channel. Excavation of the remaining material could require ripping. Once at grade, the bottom would depending on plant establishment needs, be ripped and disced. Excavation of inspection trenches for levee construction would occur in a similar manner. After the material is assessed, the trench would be refilled with the original material, if suitable, or with other appropriate material. Fill material would then be compacted over this for levee construction. The floodwall segments would require excavation of a trench approximately 4 foot deep and 10 foot wide in which to place the footing and stripping several inches of soil within a foot or two of each side.

A total of 10.36 acres of waters of the United States including, vernal pools, seasonal wetlands, and other Waters of the United States are within the project area. Approximately 4.5 acres of waters would be filled, hydrologically altered, or otherwise impacted by the project. This includes 2.291 acres of seasonal wetland, 0.20 acres of vernal pools/swales, 0.069 acre of freshwater marsh, and 1.886 acres of other Waters of the United States.

Some riparian vegetation would also be impacted by the project. Impacts include removal of a total of approximately 0.4 acre in three areas and temporary disturbance to an additional 0.5 acre from construction activity (e.g., trimming, grading, vehicle activity) within 50 feet of riparian habitat. This would result in permanent and temporary impacts to approximately 1 acre of riparian habitat.

Mitigation for unavoidable impacts is proposed to be provided by the applicant through a combination of on-site and off-site components. Impacts to open water habitat from fill of the existing Robla Creek channel are proposed to be mitigated for by creation of the new Robla Creek channel. The channel also provides an opportunity to create freshwater marsh habitat, so impacts to this habitat would be mitigated by creation of the new channel. Additional impacts to wetlands and vernal pool crustacean habitat (i.e., seasonal wetlands and vernal pools) that cannot be mitigated on-site would be mitigated through creation and preservation at mitigation bank(s) approved by U.S. Fish and Wildlife Service (USFWS). The applicant has also provided a draft mitigation monitoring plan.

ADDITIONAL INFORMATION:

Alternatives Analysis The applicant has provided a brief alternatives analysis for Robla Creek South Levee and the associated Hydraulic Mitigation required for each levee alternative. These alternatives are summarized below:

Robla Creek South Levee Alternatives:

No Levee Alternative - Remove existing Robla Creek South Levee and restore to pre-1997 conditions. This alternative would not provide the communities of Robla and North Sacramento with 100-year flood protection.

No Project Alternative - No changes would be made. This alternative would contain the 100-year flood but would not provide portions of Robla and North Sacramento with Federal Emergency Management Agency (FEMA) certified 100-year flood protection since the current levee does not provide adequate freeboard upstream of Rio Linda Boulevard. This alternative was found by the applicant to produce the smallest amount of upstream hydraulic impacts that would require mitigation but resulted in the greatest flood risk to North Sacramento. The applicant has stated this alternative would not provide 500-year flood protection potentially for 3,500 residences and improvements or property valued at approximately \$175 million.

Minimum Robla Creek South Levee Raise Alternative - Levee elevation would remain 42.0 feet with a small amount of upstream structural hydraulic mitigation. This alternative would not provide flood protection, similar to the "No Project" alternative.

Moderate Robla Creek South Levee Raise Alternative - Levee would be raised to 44.4 feet upstream of Rio Linda Boulevard. This alternative would provide 400-year protection and can be certified by FEMA as providing 100-year protection.

Maximum Robla Creek South Levee Raise Alternative - Levee would be raised to approximately 45.0 feet. This alternative would provide 100-year FEMA certification and 500-year protection, but requires the greatest magnitude of upstream hydraulic mitigation.

Structural Hydraulic Mitigation Alternatives:

Criteria involved in limiting the alternatives identified by the applicant included their State Reclamation Board Permit, project objectives, environmental impacts, community and property input, engineering and FEMA requirements.

No Structural Mitigation Alternative - Hydraulic mitigation in the form of non-structural means, primarily flood insurance. The applicant states this alternative would result in the least environmental disturbance, but would fail to meet the State Reclamation Board Permit.

Structural Mitigation Alternative - Four structural alternatives were considered within the applicant's preferred Moderate Robla Creek South Levee Alternative. All four alternatives had similar environmental impacts. The currently proposed project was selected by the applicant as their preferred structural alternative because the other alternatives would not provide land availability for a wide meandering channel.

Endangered or Threatened Species We have initiated consultation for this project with the USFWS and the National Marine Fisheries Service pursuant Section 7 of the Endangered Species Act. We have determined the project may affect species listed by these agencies and/or their critical habitat.

The applicant has indicated that the project area provides habitat for three federally-listed species: giant garter snake [GGS] (*Thamnophis gigas*), vernal pool fairy shrimp (*Branchinecta lynchi*), and vernal pool tadpole shrimp (*Lepidurus packardii*). Marginally suitable habitat for GGS would be permanently affected by fill of portions of Robla Creek and temporarily affected by widening of a portion of Robla Creek and excavation of a very small portion of the north bank of MCDC where the new Robla channel would converge with it. A total of 1.32 acres of aquatic habitat would be permanently affected, and 0.566 acre would be temporarily affected. Vernal pool crustacean surveys in the project area have identified a total of 2.012 acres of suitable habitat. A total of 0.779 acre would be directly affected by levee construction and excavation of the new Robla Creek channel. This includes entire pools of which only a portion would be filled or otherwise directly affected. The remaining 1.233 acres could be indirectly affected, because they are part of the same hydrologic basin as directly affected pools and/or upland habitat within 250 feet that may support the pools would be removed.

The applicant has also provided the following mitigation and minimization measures. Wetlands and endangered species habitat to be avoided will be fenced to minimize the potential for direct impacts. Silt fences and other control measures will be implemented to reduce indirect impacts to these areas from erosion and sedimentation. In addition, construction will be timed to avoid the inactive season for GGS. The design also considered the location of oaks and other native trees, avoiding their removal in most cases; oak trees to be avoided will be fenced to minimize impacts to them from construction activity.

Although the project would result in loss of marginally suitable habitat for GGS, it was designed to result in an overall long-term improvement of habitat quality for aquatic and riparian species, including GGS. When the ski lakes were constructed, the historic Robla Creek was channelized and moved. The resulting channel is nearly devoid of aquatic and riparian vegetation and has limited habitat value. Therefore, construction of a new Robla Creek channel provides the

opportunity to restore the historic value of the creek for a number of wildlife species. Undeveloped portions of the project area east and south of ski lakes and west of the airport are expected to remain undeveloped. As a result, they would continue to provide upland habitat for GGS and preservation of wetlands that would not be impacted by the project. Potential for direct take of GGS will be minimized through implementation of the USFWS standard avoidance and minimization measures for construction activities in GGS habitat, which include; avoidance of construction activity during the inactive period for GGS (October 1 - April 30), dewatering of habitat for at least 15 days prior to fill of habitat, pre-construction surveys 24 hours prior to construction activity, and awareness training for construction personnel. Additional measures deemed necessary by USFWS would also be implemented.

Cultural Resources A cultural resource assessment was conducted by the applicant for their August 1998, Environmental Impact Report for this project. No specific surveys under the National Register of Historic Places, eligibility or effect information has been provided to the Corps for evaluation.

The District Engineer has made these determinations based on information provided by the applicant and on the Corps' preliminary investigation.

Other federal, state, and local permits The applicant applied on April 20, 2001, for Clean Water Act Section 401 water quality certification and a Streambed Alteration Agreement from the California Regional Water Quality Control Board and California Department of Fish and Game, respectively.

Related Documents

- August 1998, Lower Dry Creek and Robla Creek Levee Improvements Mitigation Project Final Subsequent Environmental Impact Report.
- May 1998, Supplement to the Lower Dry Creek and Robla Creek Levee Improvements Mitigation Project Final Subsequent Environmental Impact Report.
- April 1998, Lower Dry Creek and Robla Creek Levee Improvements Mitigation Project Final Draft Subsequent Environmental Impact Report.

Consideration of Comments Interested parties are invited to submit written comments on or before **June 25, 2001**. Any person may request, in writing, within the comment period specified in this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership, and in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

If additional information is required, please contact John Bassett with SAFCA, at (916) 874-7606, his agent Anne King with EDAW Inc., at (916) 414-5800, or Mr. Justin Cutler, at the letterhead address, telephone (916) 557-5258.

Michael J. Walsh
Colonel, Corps of Engineers
District Engineer

Attachments: (6) Drawings