



APPROVED
BY THE CITY COUNCIL

OCT 25 1994

OFFICE OF THE
CITY CLERK

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DEPARTMENT OF
UTILITIES
ENGINEERING SERVICES

CITY OF SACRAMENTO
CALIFORNIA

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October 18, 1994

City Council
Sacramento, California

Honorable members in Session:

SUBJECT: MAGPIE CREEK FLOOD CONTROL FEASIBILITY STUDY (PN:WD16)

LOCATION AND COUNCIL DISTRICT: District 2

RECOMMENDATION:

Staff recommends that the City Council approve the attached resolution supporting a proposed plan for levee and channel improvements on Magpie Creek as the locally preferred project, and requesting SAFCA to incorporate the project into its work plan and budget.

CONTACT PERSON: Gary Reents, Acting Division Manager, 433-6633

FOR COUNCIL MEETING OF: October 25, 1994

SUMMARY:

Magpie Creek Diversion Channel and Historic Magpie Creek are located in the northeastern portion of the City, west of McClellan Air Force Base and east of the Natomas East Main Drainage Canal. Magpie Creek and the Magpie Diversion Channel provide less than a 100-year level of flood protection. This results in a threat to public health and safety, and imposes flood insurance requirements on existing owners and building restrictions on new development. The Corps of Engineers (Corps) has recently completed a draft Feasibility Report which has been submitted for approval to the office of the Chief of Engineers in

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Washington D.C. Six feasible alternatives were evaluated in the Feasibility Report; two of the alternatives provide the highest benefit to cost ratio and were found to provide flood protection that is economically justified and technically feasible. These two alternatives are: 1) levee and channelization improvement and 2) detention and channelization.

The levee and channelization improvement plan, which would provide a 500-year level of flood protection, is estimated to cost approximately \$8,798,000. The levee and channelization plan also has the highest net benefits and will likely be the National Economic Development (NED) plan selected and recommended by the Corps. As such, staff recommends that Council support this project as the locally preferred plan, and formally request that SAFCA include the project in its work plan and budget.

COMMITTEE/COMMISSION ACTION:

None.

BACKGROUND INFORMATION:

The Magpie Creek Diversion Channel and Historic Magpie Creek are located in the northeastern portion of the City, west of McClellan Air Force Base and east of the Natomas East Main Drainage Canal. After the February 1986 flood event, it was evident that Magpie Creek and the Magpie Diversion Channel provided less than a 100-year level of flood protection. This results in a threat to public health and safety, and imposes a flood insurance requirement on exiting owners and building restrictions on new development.

In 1989, the City of Sacramento and McClellan Air Force Base were proceeding to design improvements to Magpie Creek. The improvements included realigning approximately 700 linear feet of Magpie Creek extending from Patrol Road on McClellan Air Force Base to the Magpie Creek Diversion. It was believed at the time that the partial realignment project would contain the 100-year flood. Funding for construction of the project would have been shared approximately one-third each by the City, McClellan Air Force Base, and the Robla Viejo Assessment District (RVAD). The City cost was estimated to be approximately \$1 million. During the design phase it was discovered that the stream flows being used were underestimated by about 50 percent. The flow being used was 1,800 cubic feet per second (cfs), while the revised flow was estimated at 2,800 cfs based on 1986 data. To contain the revised flow within the existing diversion channel would have required improvements costing an estimated \$13 million. The funds identified in the cost sharing agreement between the three agencies (the City, McClellan Air Force Base, and RVAD) were no longer

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adequate to proceed with the project. In view of the fact that the Corps had originally designed and constructed the diversion channel, the assistance of the Corps was requested to investigate the potential for a federal flood control project.

At the City's request, the Corps initiated a Reconnaissance Report, which was completed in December 1991. The report identified a cost effective project estimated to cost \$10 million and recommended preparation of a Feasibility Report, with cost sharing by a local sponsor. SAFCA and the State Reclamation Board were requested to sponsor the feasibility report in view of the several agencies involved; however, SAFCA responded that they did not have the necessary resources available at that time to manage the project and recommended the City proceed as sponsor. The Reclamation Board responded that their authority did not permit them to sponsor small flood control projects under the Section 205 authority. The American River Flood Control District (ARFCD), the maintenance agency for the Magpie Creek Diversion Channel, agreed to share the non-federal costs with the City, each paying 50 percent. McClellan Air Force Base agreed to cost share in the work done on the Air Force Base. SAFCA agreed to consider the project for funding once the feasibility report was completed.

On February 25, 1992, the City Council approved Resolution No. 92-132, which supported the study. Subsequently, the City and the Corps entered into a cost sharing agreement to fund the preparation of a Feasibility Report, which was initiated in June 1992 at an estimated total cost of \$946,000 of which half was paid by the Corps. In accordance with the same Resolution, the City staff executed a cost sharing agreement (Resolution No. 92-031) with the American River Flood Control District to share the non-federal cost of the Feasibility Report equally in cash or by providing in-kind services up to \$118,200.

The Corps has recently completed a draft of the Feasibility Report. The draft report has been submitted to the South Pacific Division for review, and then approval by the Chief Engineer in Washington, D.C. The report will be released for agency and public review in January 1995. A public hearing is scheduled for February 1995.

In the Feasibility Report, six feasible alternatives were evaluated; two of the alternatives provide the highest benefit to cost ratio and were found to provide flood protection that is economically justified and technically feasible. These two alternatives are:

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A. Levee and Channelization Improvement:

This alternative provides a 500-year level of flood protection by levee and channel improvements from the western side of McClellan Air Force Base to the junction of Magpie Creek Diversion Channel and Robla Creek, near Dry Creek Road or;

B. Detention and Channelization:

This alternative provided 100-year level flood protection by construction of a detention basin on the western side of McClellan Air Force Base together with limited levee and channel improvements from the detention basin to about 250 feet downstream from the Vinci Avenue Bridge.

Under either alternative, no flood flows would go into the Historic Magpie Creek channel and therefore, the underlying AE flood zones on Historic Magpie Creek would be removed along with the flood plain development restrictions.

City, Air Force, and American River Flood Control District staff favor the levee and channelization plan for 500-year level protection. McClellan Air Force Base has budgeted funds for the portion of the work on McClellan Air Force Base and will be responsible for such construction. SAFCA and the State Reclamation Board are the likely sponsors for the levee and channelization work downstream of McClellan Air Force Base in accordance with the cost sharing provisions of the Water Resources Development Act of 1986 (HR86). If authorized, construction could be initiated in 1996 and completed in 1998. Accordingly, staff recommends that Council support this project as the locally preferred plan and requests SAFCA to include the project in its work plan and budget.

ENVIRONMENTAL DETERMINATION:

The Corps drafted an EIS/EIR during the feasibility investigation with assistance from the City's Environmental Division and the U.S. Fish and Wildlife Service. The EIS/EIR identified potential impacts to vernal pools and wetlands, but indicates that the levee and channel improvements project would have fewer environmental impacts and require less mitigation than the detention project. However, compliance with federal and state environmental laws will be the responsibility of the Corps and the local Sponsor, in this case SAFCA. Since the City's action does not formally adopt a project, provisions of the California Environmental Privacy Act are not applicable.

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FINANCIAL CONSIDERATIONS:

Prior to submitting the final Feasibility report for authorization, a Letter of Intent will be required from a non-federal sponsor indicating a willingness to cost share the design and construction costs. Before the project would be authorized and funded for construction a project cost sharing agreement would have to be executed. Currently, the non-Federal share of those costs for the 500-year channel improvement protection plan is estimated to be:

(a)	Lands, easements, and rights-of-way	\$1,802,000
(b)	Relocations	1,322,000
(c)	Fish & Wildlife Facilities	499,000
(d)	Cash Contribution	<u>440,000</u>
	Total	\$4,063,000

Because the original Magpie Creek Diversion Channel is a federal channel and levee project constructed on lands provided by the Reclamation Board, the above costs for lands, easements, rights-of-way, and relocations may be subject to partial reimbursement by the Reclamation Board. The Reclamation Board could likely provide seventy-five (75) percent of the funding for items (a) and (b) above. The remainder would require funding by SAFCA.

POLICY CONSIDERATIONS:

Support of the levee and channelization project is consistent with Council Resolution No. 93-696 requiring 100-year flood protection as a minimum, and at least 200-year protection where feasible. Requesting the SAFCA Board to include the proposed project in their work plan and budget, and to provide the necessary cost sharing assurances to the Corps for design and construction of the project, is consistent with current City policy on flood control projects.

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MBE/WBE EFFORTS:

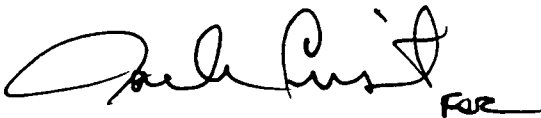
Not applicable as no goods or services are being purchased at this time.

Respectfully submitted,



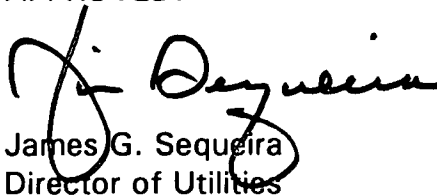
Gary A. Reents
Acting Engineering Services Manager

RECOMMENDATION APPROVED:



William H. Edgar
City Manager

APPROVED:



James G. Sequeira
Director of Utilities

APPROVED
BY THE CITY COUNCIL

MAY 25 1991

RESOLUTION NO. 94-629

ADOPTED BY THE SACRAMENTO CITY COUNCIL

OFFICE OF THE
CITY CLERK

ON DATE OF _____

RESOLUTION TO SUPPORT SELECTION OF THE LEVEE AND CHANNEL IMPROVEMENT PLAN ON MAGPIE CREEK THAT WOULD PROVIDE THE HIGHEST DEGREE OF FLOOD PROTECTION THAT IS ECONOMICALLY JUSTIFIED AS THE LOCALLY PREFERRED PROJECT; AND TO REQUEST THE SACRAMENTO AREA FLOOD CONTROL AGENCY (SAFCA) BOARD OF DIRECTORS TO INCLUDE THIS PROJECT IN ITS WORK PLAN AND BUDGET AND TO PROVIDE THE NECESSARY COST-SHARING ASSURANCES TO THE CORPS OF ENGINEERS

BE IT RESOLVED BY THE SACRAMENTO CITY COUNCIL THAT:

1. The City Council hereby supports selection of the levee and channel improvement plan on Magpie Creek as the locally preferred project and will cooperate with SAFCA and the Reclamation Board in prosecuting the project.
2. The City Council formally requests that the SAFCA Board of Directors formally adopt the levee and channel improvement plan on Magpie Creek, include the project in their work plan and budget, and provide the necessary cost sharing assurances to the Corps of Engineers for design and construction of the project.

MAYOR

ATTEST:

CITY CLERK

FOR CITY CLERK USE ONLY

RESOLUTION NO. _____

DATE ADOPTED: _____