Meeting of the Central Valley Flood Protection Board January 23, 2013

Staff Report

Sacramento Flood Control Agency, North Sacramento Streams Project Request to Initiate Project Review Pursuant to Title 33, USC Section 408

<u>1.0 – ITEM</u>

Consider Central Valley Flood Protection Board (Board) approval of a letter to the U. S. Army Corps of Engineers (USACE) pursuant to federal Title 33, USC Section 408 requesting initiation of, in cooperation with Sacramento Area Flood Control Agency (SAFCA) and other federal agencies, a joint review of possible improvements to levees along Arcade Creek and the Natomas East Main Drainage Canal (Attachment A).

2.0 - PROJECT PROPONENT

Sacramento Area Flood Control Agency (SAFCA)

3.0 - PROJECT LOCATION

The North Sacramento Streams project includes the Natomas East Main Drainage Canal (NEMDC) east levee from Dry Creek downstream to just south of Arcade Creek, and the north and south levees of Arcade Creek from Marysville Road downstream to the NEMDC (Attachment B) in Sacramento County.

4.0 -PROJECT DESCRIPTION

SAFCA is proposing to alter approximately 0.5 miles of the NEMDC east levee, 1.5 miles of the Arcade Creek north levee, and 1.75 miles of the Arcade Creek south levee, Sacramento County, California. Alterations to facilities of the State Plan of Flood Control and the federal flood control project could include construction of landside fill, installation of cutoff walls, installation of relief wells, and/or construction of a landside toe access road. The project has been divided into eight reaches within three levee segments. The deficiencies and possible remediation measures for each reach are shown in the following table:

Deb Biswas Page 1

LEVEE	REACH	APPROX REACH LENGTH (feet)	DEFICIENCY	REMEDIATION MEASURES BEING CONSIDERED
NEMDC East Levee	NEMDC A	1,700	Underseepage	Cutoff wall
NEMDC East Levee	NEMDC B	500	Underseepage and Stability	Relief wells
Arcade Creek South Levee	ACS A	1,300	Underseepage and Stability	Cutoff wall
Arcade Creek South Levee	ACS B	3,727	Underseepage and Stability	Cutoff wall; Levee slope reconstruction
Arcade Creek South Levee	ACS C	4,155	Under- and through-seepage, and Stability	Cutoff wall; Levee slope reconstruction
Arcade Creek North Levee	ACN A	1,000	Under- and through-seepage, and Stability	Cutoff wall; Relief wells
Arcade Creek North Levee	ACN B	3,700	Underseepage and Stability	Cutoff wall
Arcade Creek North Levee	ACN C	3,743	Underseepage and Stability	Cutoff wall; Levee slope reconstruction; Sheet pile wall
· · · · · · · · · · · · · · · · · · ·		19,825 (3.75 miles)		

5.0 – STAFF RECOMMENDATIONS

Staff recommends the Board:

- Approve the draft letter to the USACE (Attachment A); and
- **direct** the Executive Officer to sign and send the letter to the USACE.

<u>6.0 – LIST OF ATTACHMENTS</u>

A. Draft Letter to the USACE

B. Project Location Map

Technical Review: Deb Biswas, PE, Engineer, WR, Planning Branch
Document Review: Nancy Moricz, PE, Senior Engineer, Planning Branch

Eric Butler, PE, Supervising Engineer, Planning Branch

Len Marino, PE, Chief Engineer Nicole Rinke, Board Counsel

Leslie Gallagher, Acting Executive Officer

EDMUND G. BROWN JR., GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD

3310 El Camino Ave., Rm. 151 SACRAMENTO, CA 95821 (916) 574-0609 FAX: (916) 574-0682 PERMITS: (916) 574-0685 FAX: (916) 574-0682



January 23, 2015

Colonel Michael J. Farrell, District Commander U.S. Army Corps of Engineers
Sacramento District
1325 J Street
Sacramento, California 95814

Subject: Request to Initiate Project Review pursuant to Title 33, USC Section 408 for

the Sacramento Area Flood Control Agency's North Sacramento Streams

Project

Dear Colonel Farrell:

Pursuant to Title 33, USC Section 408 (Section 408) as described by the U. S. Army Corps of Engineers (USACE) Engineering Circular 1165-2-216, §7c(2), the Sacramento Area Flood Control Agency (SAFCA) has requested the Central Valley Flood Protection Board (Board) staff to initiate the Section 408 process for the joint review of possible alterations to the North Sacramento Streams Project (hereafter referred to as the NSS Project) to alter approximately 0.5 mile of the Natomas East Main Drainage Canal east levee, 1.5 miles of the Arcade Creek north levee, and 1.75 miles of the Arcade Creek south levee. The purpose of this project is to reduce flood risk by providing protection up to the 200-year flood event. The enclosed documentation describes the project location along with proposed alterations.

Proposed alterations may include construction of landside fill, installation of cutoff walls, installation of relief wells, and/or construction of a landside toe access road. The proposed alterations are also being considered by the USACE as part of the American River Common Features Project. The Board, on behalf of the State of California, anticipates seeking credit for the proposed under Section 221 of the Flood Control Act of 1970. Approval under Section 404 of the Clean Water Act is also anticipated to be required for these proposed alterations. The proposed project will require lands owned by the non-Federal sponsor, and will not require any lands owned by the USACE.

On behalf of SAFCA, the Board requests the USACE, in cooperation with SAFCA and other federal agencies, to initiate a joint review of possible alterations for the NSS Project. The Board, on behalf of SAFCA, will seek approval from the USACE to make necessary alterations to the levee system to achieve the project purpose.

Thank you for your attention to this request. We look forward to working with you, your staff, and the SAFCA staff on this project. If you have any questions regarding this request, please contact Ms. Nancy Moricz of my staff at (916) 574-2381 or by email at mancy.moricz@water.ca.gov.

Sincerely,

Leslie Gallagher, Acting Executive Officer

Enclosure: 33 USC § 408 Request from SAFCA dated October 31, 2014

cc: Mr. Rick Johnson, Executive Director Sacramento Area Flood Control Agency

Ms. Claire Marie Turner, MBK Engineers



October 31, 2014

Ms. Leslie Gallagher, Acting Executive Officer Central Valley Flood Control Board 3310 El Camino Avenue, Room 151 Sacramento, California

Subject: 33 USC § 408 Written Request for the North Sacramento Streams Project

Dear Ms. Gallagher,

The Sacramento Area Flood Control Agency (SAFCA) is seeking permission from the U.S. Army Corps of Engineers (USACE) pursuant to 33 USC § 408 (Section 408) for alteration of the Sacramento River Flood Control Project. We request your assistance in pursuing this permission by reviewing the enclosed documents and forwarding our request to the USACE Sacramento District.

SAFCA is proposing to alter approximately 1.5 miles of the Arcade Creek North Levee, 1.75 miles of the Arcade South Levee, and 0.5 mile of the Natomas East Main Drainage Canal. Alterations could include construction of landside fill, installation of cutoff walls, installation of relief wells, and/or construction of a landside toe access road. Enclosures 1 and 2 provide a more detailed description of the location and potential alterations. Approval under Section 404 of the Clean Water Act is anticipated to be required for the proposed alterations.

The proposed alterations are also being considered by the USACE as part of the American River Common Feature project. Therefore, SAFCA intends to seek credit under Section 221 of the Flood Control Action of 1970. Because we are seeking credit for the proposed alteration, we anticipate USACE Headquarters approval of these alterations.

The proposed project will require the use of lands owned by the non-Federal sponsor. It will not require use of lands owned by the USACE.

Office 916-874-7606 Fax 916-874-8289

33 USC 408 Written Request - North Sacramento Streams Page 2

Questions regarding this request can be made to Mr. Pete Ghelfi at 916-874-8733 or ghelfip@saccounty.net.

Sincerely,

Rick Johnson

Executive Director

Sacramento Area Flood Control Agency

Enclosure 1 - Figure

Enclosure 2 - Preliminary Project Description

CC:

Mr. Tim Kerr, General Manager, American River Flood Control District

Mr. Jon Ericson, Chief, Flood Maintenance Office, Department of Water Resources

Ms. Kelly Fucciolo, Chief, Urban Flood Programs, Department of Water Resources







Preliminary Project Description

The North Sacramento Streams project includes the Natomas East Main Drainage Canal (NEMDC) East Levee from Dry Creek south to slightly south of Arcade Creek, and Arcade Creek North and South Levees from Marysville Road downstream to the NEMDC. The total length is approximately 4 miles. The project has been organized into three levee segments, and eight reaches:

NEMDC East Levee-NEMDC A, NEMDC B

Arcade Creek South Levee- ACS A through C

Arcade Creek North Levee- ACN A - C

Deficiencies and Remediation Measures

The below table presents the deficiencies and potential remediation measures for each of the reaches.

Table 1: Summary of Remediation Measures by North Area Streams Levee Reach

LEVEE	REACH	APPROX REACH LENGTH (feet)	DEFICIENCY	REMEDIATION MEASURES BEING CONSIDERED
NEMDC East Levee	NEMDC A	1,700	Underseepage	Cutoff wall
NEMDC East Levee	NEMDC B	500	Underseepage Stability	Relief wells
Arcade Creek South Levee	ACS A	1,300	Underseepage Stability	Cutoff wall
Arcade Creek South Levee	ACS B	3,727	Underseepage Stability	Cutoff wall; Levee slope reconstruction
Arcade Creek South Levee	ACS C	4,155	Underseepage Through –seepage Stability	Cutoff wall; Levee slope reconstruction
Arcade Creek North Levee	ACN A	1,000	Underseepage Through –seepage Stability	Cutoff wall; Relief wells
Arcade Creek North Levee	ACN B	3,700	Underseepage Stability	Cutoff wall
Arcade Creek North Levee	ACN C	3,743	Underseepage Stability	Cutoff wall; Levee slope reconstruction; Sheet pile wall
		19,825 (3.75 miles)		



LOCATION MAP