



NOTICE OF PREPARATION

To: Agencies and Interested Parties
From: Sacramento Area Flood Control Agency
Date: November 5, 2009
Subject: Announcement of:

- 1) Notice of Preparation of an Environmental Impact Statement/Environmental Impact Report on the Natomas Post-authorization Change Report/Natomas Levee Improvement Program, Phase 4b Landside Improvements Project;
2) Public Scoping Meeting to be held on November 18, 2009; and
3) Scoping Comments due by December 4, 2009

The Sacramento Area Flood Control Agency (SAFCA) and the U.S. Army Corps of Engineers (USACE), Sacramento District, intend to prepare a "joint" environmental impact statement (EIS)/environmental impact report (EIR), consistent with the National Environmental Policy Act (NEPA) (42 United States Code [USC] Section 4321 et seq.) and the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC], Section 21000 et seq.; see also 14 California Code of Regulations [CCR] Sections 15220, 15222 [State CEQA Guidelines]), for the Natomas Post-authorization Change Report (Natomas PACR)/Natomas Levee Improvement Program (NLIP), Phase 4b Landside Improvements Project (Phase 4b Project) in the Natomas Basin in Sacramento and Sutter Counties, California. USACE, Sacramento District, will be the Federal lead agency for purposes of complying with NEPA, and SAFCA will be the state lead agency for compliance with CEQA.

PURPOSE OF THE NOTICE OF PREPARATION

In accordance with the State CEQA Guidelines (CCR Section 15082), SAFCA has prepared this notice of preparation (NOP) to inform responsible and trustee agencies and interested parties that an EIS/EIR will be prepared. The purpose of an NOP is to provide sufficient information about the proposed project and its potential environmental impacts to allow the Governor's Office of Planning and Research (OPR), responsible and trustee agencies, Federal agencies involved in approving or funding a project, and interested parties the opportunity to provide a meaningful response related to the scope and content of the EIS/EIR, including the significant environmental issues, reasonable alternatives, and mitigation measures that the responsible or trustee agency, or the OPR, will need to have explored in the EIS/EIR (State CEQA Guidelines CCR Section 15082[b]).

The project location, description, and probable environmental effects of the proposed project are presented below. An initial study has not been prepared because the EIS/EIR will address all issue areas and it is already known that the proposed project could have a significant effect on the environment. The EIS/EIR will also include feasible mitigation measures, where available, and consideration of a reasonable range of alternatives to avoid or substantially reduce the proposed project's significant adverse environmental impacts.

The purposes of this NOP are to:

- 1. briefly describe the proposed project and the anticipated content of the EIS/EIR to be prepared for the proposed project;

the Greater Sacramento Basin located south of the American River. However, only the Natomas Basin is the subject of this EIS/EIR.

The Natomas GRR schedule has been accelerated due to the risk of levee failure in the Natomas Basin. The accelerated schedule will allow USACE to begin construction in 2011 and reduce the risk of flooding and billions of dollars of property damage in the Natomas Basin.

The EIS/EIR will summarize the NLIP project phases already completed by SAFCA and how the NLIP relates to USACE's Natomas Basin GRR and PACR. The EIS/EIR will be used for Natomas Basin GRR approval, for preparation of the Natomas PACR, and to support implementation of the Phase 4b Project. USACE plans to implement the Phase 4b Project. In the event the Natomas PACR is not approved by Congress, however, the EIS/EIR will support SAFCA's implementation of the Phase 4b Project should SAFCA choose to proceed without Federal participation.

RELATIONSHIP TO THE NATOMAS LEVEE IMPROVEMENT PROGRAM

The Phase 4b Project is a subphase of one of the four project phases of the NLIP Landside Improvements Project. The overall purpose of the NLIP is to bring the entire 42-mile Natomas Basin perimeter levee system into compliance with applicable Federal and state standards for levees protecting urban areas. The NLIP was first evaluated in SAFCA's programmatic *EIR on Local Funding Mechanisms for Comprehensive Flood Control Improvements for the Sacramento Area* (State Clearinghouse No. 2006072098). Volume II of that EIR contained a project-level evaluation of the Natomas Cross Canal South Levee Phase 1 Improvements (Phase 1 Project).

In 2007, SAFCA prepared the *EIR on the NLIP Landside Improvements Project* (Phase 2 EIR, State Clearinghouse No. 2007062016), which covers the three additional phases of "landside" improvements to the levees protecting the Natomas Basin, including the Phase 2 Project, Phase 3 Project, and Phase 4 Project. The Phase 2 Project was analyzed at a project-level and the remainder of the Landside Improvements Project (Phase 3 and 4 Projects) was analyzed at a program-level in the Phase 2 EIR. On November 29, 2007, the SAFCA Board of Directors certified the EIR and approved the Phase 2 Project. Following completion of the Phase 2 EIR, USACE prepared an EIS to meet USACE's NEPA requirements to support USACE's decisions on the permissions and permitting under Sections 408, 404, and 10. A record of decision (ROD) was signed by USACE in January 2009. The Phase 2 EIS also contained a project-level analysis of the Phase 2 Project and a program-level analysis of the Phase 3 and 4 Projects. Since certification of the Phase 2 EIR, SAFCA made modifications and refinements to the design of the Phase 2 Project. A supplemental EIR (SEIR) was prepared by SAFCA to evaluate these modifications, which the SAFCA Board of Directors certified in January 2009, at which time the Board also approved the modifications to the Phase 2 Project.

The Phase 3 Project was analyzed at a project-level in the *DEIS/DEIR on the NLIP Phase 3 Landside Improvements Project* (Phase 3 DEIS/DEIR, State Clearinghouse No. 2008072060), which was released for public review on February 13, 2009. Following public review, SAFCA prepared an FEIR to provide responses to comments on the Phase 3 DEIS/DEIR. The SAFCA Board of Directors certified the FEIR and approved the Phase 3 Project in May 2009. Separately, USACE prepared an FEIS to provide responses to comments received on the Phase 3 DEIS/DEIR; the Phase 3 FEIS was issued for public review in August 2009. After consideration of all comments received, USACE will consider whether to grant Section 408 permission, which will be documented in a ROD, in December 2009/January 2010. To construct the Phase 3 Project with minimal interruption of and conflict with drainage/irrigation services and special-status wildlife habitat (giant garter snake), some Phase 3 Project components (canal work, utility relocation, vegetation removal, and demolition of structures) need to be constructed in late 2009 and early 2010 in advance of the Phase 3 Project's major levee construction, which would begin in 2010. To facilitate this staged construction, a staged permitting approach was implemented for the Phase 3 Project. Specifically, irrigation and drainage infrastructure (termed the Phase 3a Project) was permitted by USACE and the Central Valley Regional Water Quality Control Board (Central Valley RWQCB) under Sections 404 and 401, respectively, of the Clean Water Act, in October 2009; this work would occur in late 2009

The Phase 4b Project includes the following major activities anticipated to begin in spring 2011, which will be analyzed at a project-level in the Phase 4b EIS/EIR:

- ▶ **Sacramento River East Levee Reaches 16–20: Levee widening/rehabilitation and seepage remediation**—Construct an adjacent levee with flattened landside slope and cutoff walls, seepage berms, and relief wells, where required, to reduce potential underseepage and seepage through the levee. Cutoff wall construction would be conducted 24 hours per day, 7 days per week (24/7).
- ▶ **American River North Levee Reaches 1–4: Slope flattening and seepage remediation**—Flatten the slope and install cutoff walls in the American River north levee from just east of Gateway Oaks Drive to Northgate Boulevard. Cutoff wall construction would be conducted 24/7.
- ▶ **NEMDC West Levee—Northern Segment: Levee raising, slope flattening, and seepage remediation**—Raise the levee in place or construct an adjacent levee, flatten slopes, and install cutoff walls from Sankey Road to just south of Elkhorn Boulevard. Cutoff wall construction would be conducted 24/7.
- ▶ **Pleasant Grove Creek Canal (PGCC) and NEMDC South: Levee raising and slope flattening**—Raise the levee in place or construct an adjacent levee and flatten slopes on the PGCC southwest levee and on the NEMDC southwest levee from Elkhorn Boulevard to Northgate Boulevard.
- ▶ **PGCC and NEMDC South: Waterside improvements**—Erosion repair and rock slope protection at locations where erosion around the outfall structures penetrating the levee was observed. Construct additional remediation to protect against damage caused by beavers and burrowing animals.
- ▶ **PGCC Culvert Remediation**—Upgrade or remove five culverts that currently drain the area east of the PGCC by passing water under the canal to canals along the landside of the PGCC southwest levee. Under the culvert removal option, construct detention basins east of the PGCC levee to provide replacement storage for drainage. Depending on the design of the detention basins, pumping stations may be needed to discharge water out of the basins and into the PGCC.
- ▶ **State Route (SR) 99 NCC Bridge Remediation**—Construct a moveable barrier system or a stop log gap at the south end of the SR 99 bridges to be used at high river stages to prevent overflow from reaching the landside of the NCC south levee. Modify the bridge deck connections to the supporting piers and abutments as needed to resist uplift pressure during high water stages. Install additional seepage remediation consisting of seepage cutoff walls where the bridges cross the NCC south levee.
- ▶ **West Drainage Canal**—Realign the West Drainage Canal to shift an approximately 1-mile portion, starting at Interstate 5 (I-5), to an alignment farther south of the Airport Operations Area. Modify the existing canal east of the alignment to reduce bank erosion and sloughing, decrease aquatic weed infiltration, improve Reclamation District (RD) 1000 maintenance access, and enhance giant garter snake habitat connectivity.
- ▶ **Riego Road Canal (Highline Irrigation Canal) Relocation**—Relocate approximately 4,000 feet of irrigation canal, approximately 250 feet of buried irrigation piping, and three irrigation turn-out structures away from the proposed levee footprint for the northern segment of the NEMDC west levee.
- ▶ **NCC South Levee Ditch Relocations**—Relocate the Vestal Drain ditch and Morrison Canal to reduce underseepage potential in Reaches 2, 5, and 6 of the NCC south levee.
- ▶ **Modifications to RD 1000 Pumping Plants**—Raise and/or replace the discharge pipes for Pumping Plant Nos. 1A and 1B along the Sacramento River east levee, and Pumping Plant Nos. 6 and 8 along the NEMDC west levee, to cross the levee above the 0.005 AEP design water surface elevation. Construct new outfall structures for Pumping Plant Nos. 6 and 8, requiring dewatering of portions of the NEMDC. Construction would be conducted 24/7.

- ▶ **Encroachment Management**—Remove encroachments as required to meet the criteria of USACE, CVFPB, and Federal Emergency Management Agency (FEMA). SAFCA would be required to submit a variance request to CVFPB, and then ultimately to USACE, requesting confirmation that SAFCA’s adjacent levee design for the Sacramento River east levee and American River north levee sufficiently addresses USACE’s guidance regarding vegetation on levees, if SAFCA chooses to implement the project without Federal participation.

The following additional project details are associated with the Phase 4b Project.

- ▶ **Cutoff Walls.** Three-foot-wide cutoff walls made of either soil-bentonite (SB), cement bentonite (CB), or soil-cement-bentonite (SCB) would be installed either through the existing levee or along the landside toe of the existing levee. Depending on the construction method used, the top of the cutoff walls would be at least 10 feet above the existing ground surface at the landside toe of the levee (within either the new adjacent setback levee) or in the existing levee, and extend up to a depth of 110 feet below ground surface in some areas. Locations and depths would be determined during final engineering design. The total linear extent would be approximately 17,700 feet along the Sacramento River east levee Reaches 16–20; approximately 9,400 feet along the American River north levee, and 35,700 feet along the NEMDC north west levee. Cutoff wall construction would be conducted 24/7.
- ▶ **Seepage Berms.** Sacramento River east levee seepage berm widths would extend up to 100 feet from the adjacent levee landside levee toe in Reaches 17–18, up to 250 feet from the adjacent levee landside levee toe in Reach 19A, and up to 300 feet from the adjacent levee landside toe in Reach 16. Depending upon the width, maximum thickness would be 6–7 feet. All berms would gradually slope downward to about 4 feet thick at the landside edge, with a 3H:1V slope to ground level. A gravel surface patrol road would be constructed near the outside edge of the seepage berm. Final locations of the seepage berms would be determined during final engineering design.
- ▶ **Relief Wells.** Sacramento River east levee relief wells would be constructed at selected locations where berms cannot be wide enough or walls deep enough to meet the required seepage remediation design parameters. Relief wells would also be constructed along some of the entrance channels to the landside pump stations. Relief wells would be spaced between 60–100 feet apart and would extend to depths of between 60–80 feet below the ground surface.
- ▶ **Measures to Reduce Impacts to Residences, Businesses, and Heritage Oaks.** Where residences, businesses, and heritage oak trees are located, measures would be employed to reduce the project footprint impacts to these resources, to the extent feasible given levee design and seepage remediation performance requirements. These measures could include reducing the width of the adjacent levee, seepage berms, and operations and maintenance access and utility corridors; and strategically using cutoff walls or seepage relief wells.
- ▶ **Power Pole Relocation.** Power poles that currently exist on the landside slope of the levee and at the landside levee toe would need to be relocated and/or rerouted to accommodate the widened levee footprint. To the extent feasible, mainline utility infrastructure, such as power poles, would be relocated beyond the landside levee toe. Some poles may need to be relocated to the waterside of the existing levee. No power poles would be relocated within the new levee prism. Tree pruning would likely be required in some locations to accommodate the power pole relocation and associated wires. SAFCA would conduct the relocations in coordination with the appropriate utility companies and the construction operations.
- ▶ **Removal or Modification of Landside Structures and Other Facilities.** Multiple residential and agricultural structures are located within the footprint of the levee improvements. These structures, and the facilities supporting them, would have to be modified, removed, or relocated out of the project footprint before the start of levee construction in those areas. Irrigation facility conveyance, distribution boxes, wells,

Sacramento and the southern portion of Sutter County. The exact alignment of the recreational trail, in terms of its placement in relation to levees and roadways, would be determined through detailed engineering design. Construction, operation, and maintenance of a recreation trail on the perimeter levee system would require a CVFPB encroachment permit with an endorsement by RD 1000. The proposed recreational trail is intended to provide a bicycle commuter route at the southern and eastern end of the Natomas Basin that would connect to the regional American River trail system.

ALTERNATIVES TO THE PROPOSED PHASE 4b PROJECT

Because the EIS/EIR will be a joint NEPA/CEQA document, it will fully evaluate the environmental impacts of the Phase 4b Project and the following two alternatives at an equal level of detail:

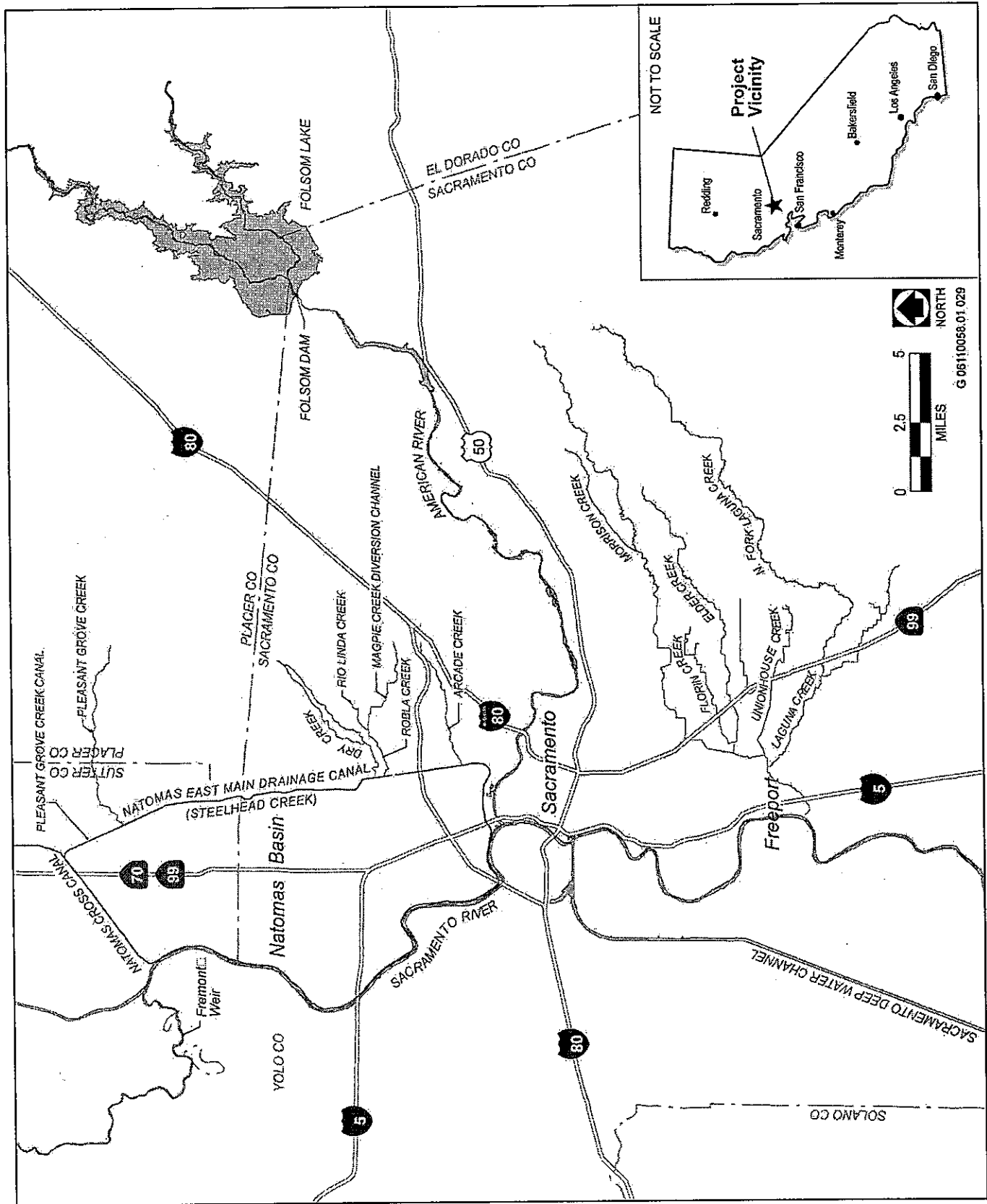
No-Action Alternative (No-Project Alternative for purposes of CEQA)—Under NEPA, the expected future without-project conditions; under CEQA, the existing condition at the time this NOP was published (November 5, 2009), as well as what would be reasonably expected to occur in the foreseeable future if the Phase 4b Project were not approved. The No-Action Alternative consists of two scenarios:

- ▶ **No Project Construction**—The No-Action Alternative consists of the conditions that would likely prevail in the Natomas Basin if no action at all were taken by SAFCA, the State, or USACE to further improve the Basin's perimeter levee system beyond the accomplishments of the Sacramento Urban Levee Reconstruction Project; the North Area Local Project; and the NLIP Phase 1, 2, 3, and 4a Projects. Under this scenario, key segments of this system would continue to provide less than 100-year flood risk reduction, and the entire Natomas Basin would be permanently designated as a special flood hazard area subject to development restrictions and mandatory flood insurance requirements pursuant to the regulations of the National Flood Insurance Program. SAFCA would not provide the Natomas Basin with at least a .01 AEP risk reduction by the end of 2010 and would not be able to facilitate achieving a 0.005 AEP risk reduction by the end of 2012.
- ▶ **Potential Levee Failure**—The same conditions with respect to development within the Natomas Basin as described above for the No Project Construction scenario would exist for the Potential Levee Failure scenario. Without additional improvements to the Natomas Basin perimeter levee system, wind and wave run-up or seepage conditions could cause portions of this system to fail, triggering widespread flooding and extensive damage to the Basin's existing residential, commercial, agricultural, and industrial structures. Extensive damage to utilities, roadways, and other infrastructure systems would also likely occur. The magnitude of the flood damage would depend upon the location of the levee breach, severity of the storm, and river flows at the time of a potential levee failure.

Fix-in-Place Alternative—All elements of the Fix-in-Place Alternative would be the same as described for the Proposed Action, except for the method of raising and rehabilitating the Sacramento River east levee, the extent of levee degradation and road closures required to construct cutoff walls, and the extent of encroachment removal along the levee. Differences from the Proposed Action are shown in italicized text below.

- ▶ **Sacramento River East Levee Reaches 16–20: Levee widening/rehabilitation and seepage remediation**—Upgrade levee in place with cutoff walls, seepage berms, and relief wells, where required, to reduce seepage potential. Cutoff wall construction would be conducted 24/7.
- ▶ **Landside Vegetation Removal**—Same as the Proposed Action, *except maximum extent of removal would likely be reduced.*
- ▶ **Waterside Vegetation Removal**—*In Reaches 16–20 of the Sacramento River east levee and Reaches 1–4 of the American River north levee, clear waterside vegetation to meet USACE vegetation guidance criteria. It is estimated that the numbers of acres of shaded riverine aquatic (SRA) habitat lost would be greater.* Same as Proposed Action for modifications to RD 1000 pump stations.

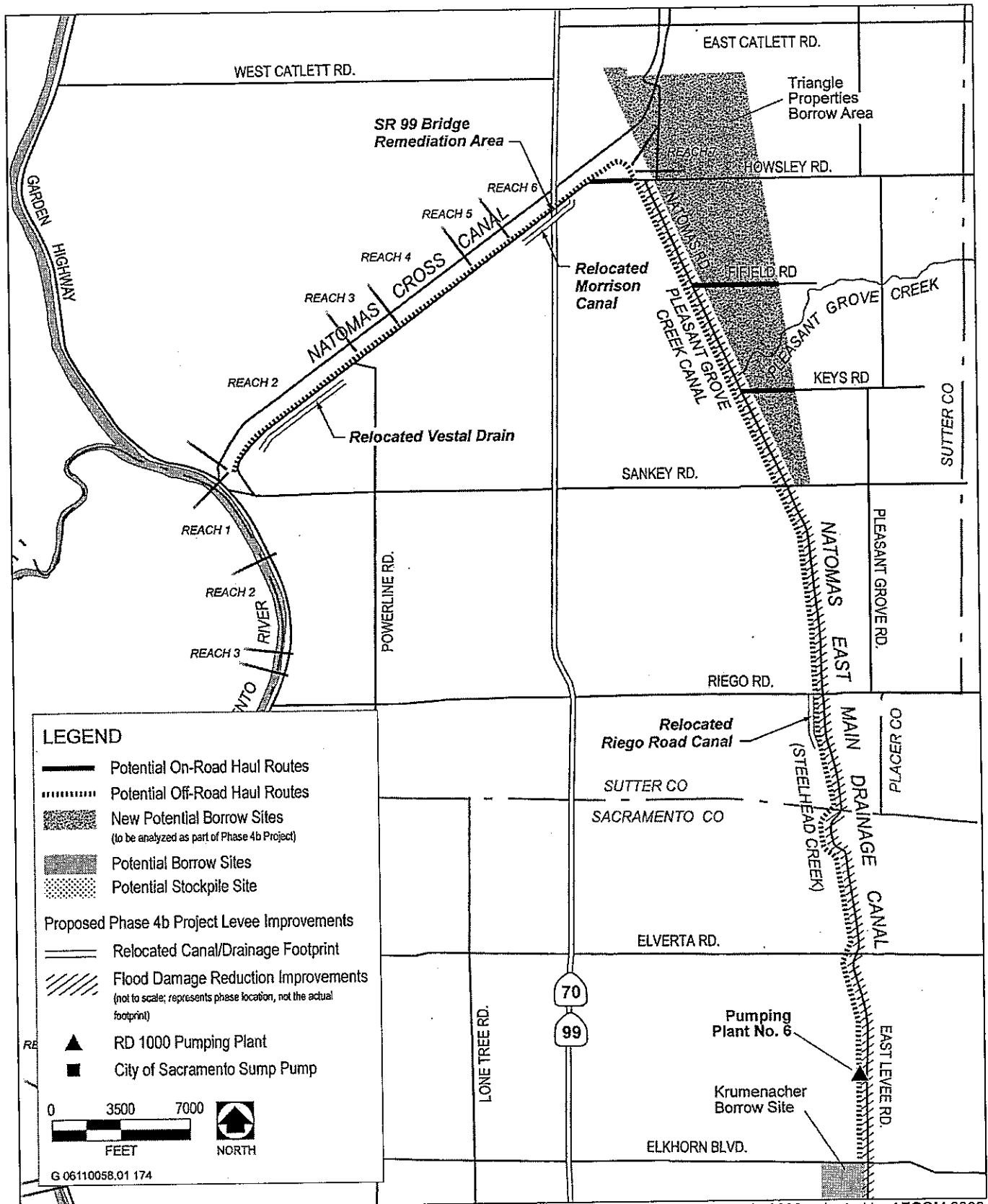
- ▶ **Water Quality:** Temporary effects on water quality during construction.
- ▶ **Biological Resources:** Temporary disturbance or permanent loss of woodland habitats and wildlife corridors; temporary disturbance or permanent loss of jurisdictional waters of the United States; temporary disturbance or permanent loss of special-status plant species; temporary disturbance or permanent loss of special-status species habitats; construction disturbance or take of special-status terrestrial species, especially Swainson's hawk and giant garter snake; loss of fish or aquatic habitat through increased sedimentation and turbidity or release of contaminants during construction; and loss of SRA habitat.
- ▶ **Cultural Resources:** Temporary and/or permanent disturbance of known and unknown historic or archaeological resources.
- ▶ **Paleontological Resources:** Potential disturbance of unknown unique paleontological resources during earthmoving activities.
- ▶ **Transportation and Circulation:** Temporary increase in traffic and traffic hazards on local roadways during construction, including hauling; temporary closure of roadways, including full and partial closure of sections of Garden Highway and connecting ramps throughout the 6-month construction season; and temporary disruption of emergency service response times and access.
- ▶ **Air Quality:** Temporary and short-term increases in pollutant emissions associated with construction activities, including the potential overlap in construction of portions of the Phase 2, 3, and 4a Projects with the Phase 4b Project; and long-term increases in pollutant emissions.
- ▶ **Noise:** Temporary and short-term increases in noise and vibration levels near sensitive receptors during construction, including the need for 24/7 construction for cutoff walls and 24/7 construction associated with relocating wells away from the levee.
- ▶ **Recreation:** Addition of a new recreation trail on the improved Natomas Basin levee perimeter system; and potential construction-related closures of/impacts to recreational facilities in the project area.
- ▶ **Visual Resources:** Temporary and long-term changes in scenic views or visual character of the project area from the construction of project features and tree/vegetation removal and replanting.
- ▶ **Utilities and Service Systems:** Temporary disruption of irrigation supply; potential disruption of utility service from construction activities and from the relocation of power poles.
- ▶ **Hazards and Hazardous Materials:** Potential spills of hazardous materials during construction; potential exposure to hazardous materials at project sites during construction; potential for higher frequency of collisions between aircraft and wildlife at the Airport during construction and as a result of permanent changes in land cover; and increased exposure to wildland fire risk during construction.
- ▶ **Environmental Justice:** Potential for disproportionately high and adverse effects on minority or low income populations, including Tribal populations, the analysis of which is required by NEPA.
- ▶ **Cumulative and Growth-Inducing Impacts:** Potential cumulatively considerable incremental contributions from Phase 4b Project impacts in the areas of agricultural resources, water quality, fisheries, biological resources, cultural resources, air quality (including temporary and short-term generation of greenhouse gas emissions [CO₂] from project construction), noise, and visual resources; potential growth-inducing impacts from construction of the NLIP, including substantial new permanent employment opportunities, substantial short-term employment opportunities, and removal of an obstacle to additional growth and development in the Natomas Basin.



Source: Based on information from CaSil; adapted by AECOM, formerly EDWA in 2007

Regional Location

Exhibit 1



Source: Based on information from CaSil, Sacramento Area Council of Governments in 2006, Mead & Hunt in 2009; adapted by AECOM 2009

Phase 4b Project Construction Areas (Northern Portion)

Exhibit 3