



## NOTICE OF PREPARATION

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**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;

2. announce the public scoping meeting to facilitate public input and to be held: November 18, 2009, from 4:30 to 6:30 p.m. at South Natomas Community Center (Activity Room) located at 2921 Truxel Road in Sacramento, California; and
3. solicit input by December 4, 2009, from Federal, state, regional, and local agencies, and from interested organizations and individuals about the content and scope of the EIS/EIR, including the alternatives to be addressed and the potentially significant environmental impacts.

## **INTRODUCTION TO THE PHASE 4b PROJECT**

The Phase 4b Project consists of improvements to a portion of the Natomas Basin's perimeter levee system (see **Exhibits 1, 2, and 3** below) in the City of Sacramento and in Sutter and Sacramento Counties, California, associated landscape and irrigation/drainage infrastructure modifications, and habitat creation and management. A more detailed project description is provided below.

To implement the Phase 4b Project, SAFCA is requesting permission from USACE pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 United States Code [USC] 408, referred to as "Section 408") for alteration of Federal project levees; Section 404 of the Clean Water Act (33 USC 1344) for placement of fill into jurisdictional waters of the United States; and Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) for work performed in, over, or under navigable waters of the United States (such as excavation of material from or deposition of material into navigable waters).

SAFCA may also need to obtain several state, regional, and local approvals or permits to implement the Phase 4b Project in the event that USACE does not receive authorization to construct the Phase 4b Project. These include: CVFPB encroachment permit; California Surface Mining and Reclamation Act permit; Clean Water Act Section 401 water quality certification, Clean Water Act Section 402 National Pollutant Discharge Elimination System permit; California Fish and Game Code Section 2081 incidental take authorization; California Fish and Game Code Section 1602 streambed alteration agreement; encroachment permits from the California Department of Transportation, Sacramento County, Sutter County, and City of Sacramento; and authority to construct authorization from the Sacramento Metropolitan Air Quality Management District and the Feather River Air Quality Management District.

## **RELATIONSHIP TO OTHER U.S. ARMY CORPS OF ENGINEERS PLANNING DOCUMENTS**

The EIS/EIR will support the approval of USACE's Natomas Basin General Re-evaluation Report (GRR) and Natomas PACR. The EIS/EIR will also support the final project phase of the NLIP, the Phase 4b Project.

The Natomas GRR covers the Sacramento Metropolitan Area. The American River drainage basin covers about 2,100 square miles northeast of Sacramento and includes portions of Placer, El Dorado, Sutter, and Sacramento Counties. The Natomas GRR considers flood risk management for the Natomas Basin. The GRR will consider the existing flood risk reduction projects together as a system, with the purpose of developing analysis tools that consider the flood risk reduction system as a whole and identifying a comprehensive plan that will lower the flood risk in Sacramento. Accordingly, USACE, SAFCA, and the California Department of Water Resources (DWR) seek to integrate planning, design, and implementation of enhanced flood risk reduction measures within the Natomas Basin study area.

The Natomas GRR will ultimately be incorporated into a larger and more broadly scoped investigation called the American River Common Features Project (Common Features Project) GRR. The Common Features Project GRR will consider the Sacramento River downstream of the American River to Freeport where Beach Lake levee forms the southern flank of the City of Sacramento's flood defenses. It should be noted that there are three basins in the GRR analysis that will be considered in the future: the American River-North Basin, Natomas Basin, and

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

and early 2010, in advance of Phase 3 Project levee construction. Some vegetation removal also would occur during the non-nesting season for raptors and other bird species. A separate, but related, set of permits for the Phase 3 Project's Sacramento River east levee construction and related pumping plant improvements (termed the Phase 3b Project) is anticipated in late 2009; this work would occur in 2010 and 2011. The potential exists for up to 30% of the Phase 2 Project also to be constructed in 2010, concurrent with Phase 3 Project construction, or even potentially concurrently with the Phase 4a Project, depending on the timing and availability of funding and receipt of all required environmental clearances and permits.

The Phase 4 Project consists of two subphases (4a and 4b) to provide the flexibility to construct this phase over more than one construction season. The Phase 4 Project was analyzed at a program-level in the Phase 2 EIR. Each subphase has its own independent utility, can be accomplished with or without the other subphase, and provides additional flood risk reduction benefits to the Natomas Basin whether implemented individually or collectively. The Phase 4a Project was analyzed at a project-level in the *DEIS/DEIR on the NLIP Phase 4a Landside Improvements Project* (Phase 4a DEIS/DEIR, State Clearinghouse No. 2009032097), which was released for public review on August 28, 2009. Similar to the Phase 3 Project, USACE and SAFCA are preparing a separate FEIS and FEIR, respectively. The SAFCA Board of Directors will consider certification of the EIR and Phase 3 Project approval at its November 13, 2009 Board meeting. Separately, USACE will prepare an FEIS and issue it for a 30-day public review in early 2010. Phase 4a Project construction is planned to begin in 2010 and is anticipated to be completed in 2011, assuming receipt of all required environmental clearances and permits.

## **PROJECT OBJECTIVES OF THE NATOMAS LEVEE IMPROVEMENT PROGRAM**

The following objectives were adopted by SAFCA in connection with the NLIP: (1) provide at least a 100-year level of flood risk reduction (0.01 Annual Exceedance Probability [AEP]) to the Natomas Basin as quickly as possible, (2) provide 200-year flood risk reduction to the Basin over time (0.005 AEP), and (3) avoid any substantial increase in expected annual damages as new development occurs in the Basin. The first two project objectives would reduce the residual risk of flooding sufficiently to meet the minimum requirements of Federal and state law for urban areas like the Natomas Basin. The third project objective is a long-term objective of SAFCA's.

Additional project objectives that have informed SAFCA's project design are to: (1) use flood damage reduction projects in the vicinity of the Sacramento International Airport (Airport) to facilitate management of Airport lands in accordance with the Airport's *Wildlife Hazard Management Plan* (Sacramento County Airport System [SCAS] 2007); and (2) use flood damage reduction projects to increase the extent and connectivity of the lands in the Natomas Basin being managed to provide habitat for giant garter snake, Swainson's hawk, and other special-status species.

## **PROPOSED PHASE 4b PROJECT**

The Phase 4b Project would address underseepage, stability, erosion, penetrations, and levee encroachments along approximately 3.4 miles of the Sacramento River east levee in Reaches 16–20, approximately 6.4 miles of the Natomas East Main Drainage Canal (NEMDC) west levee between Elkhorn Boulevard and Sankey Road, and the windows left in the improvements done by the of previous phases at levee penetrations and road crossings on Natomas Cross Canal (NCC) south levee. The Phase 4b Project would also include relocation of the existing irrigation and drainage canals landside of the levee slopes, relocation and modifications of the pumping stations, bridges, encroachments, and any penetrations of the levee embankment. Removal of the vegetation within the levee right-of-way to address USACE requirements and any environmental mitigation are also included in the Phase 4b Project.

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.

- ▶ **Modifications to City of Sacramento Sump Pumps**—Raise and/or replace the discharge pipes for City Sump 160 (Sacramento River east levee Reach 19B), City Sump 58 (American River north levee), and City Sump 102 (NEMDC west levee at Gardenland Park) to cross the levee above the 0.005 AEP design water surface elevation. Construct new outfall structures, requiring dewatering of portions of the Sacramento River, the low-flow channel of the NEMDC along the waterside of the American River north levee, and the NEMDC. Relocate pump stations as needed to accommodate the proposed levee improvements. Construction would be conducted 24/7.
- ▶ **Borrow Site Excavation and Reclamation**—Excavate earthen material at the borrow sites and then return the sites to preconstruction uses or suitable replacement habitat. For levee improvements along the Sacramento River east levee (Reaches 16–20) and the American River north levee (Reaches 1–4), the South Fisherman’s Lake Borrow Area and the West Lakeside School Site (**Exhibit 2**) are anticipated to be the primary source of soil borrow material. The Triangle Properties Borrow Area (**Exhibit 3**) would be the primary source of borrow material for levee improvements along the PGCC and NEMDC North. The South Fisherman’s Lake Borrow Area, the West Lakeside School Site, and the Triangle Properties Borrow Area Areas will be fully analyzed in the EIS/EIR.

The Fisherman’s Lake Borrow Area, which was fully analyzed in the Phase 4a DEIS/DEIR, could provide additional borrow material for the Phase 4b Project. The Krumenacher borrow site and Twin Rivers Unified School District stockpile site (**Exhibit 2**), which were fully analyzed in the Phase 3 DEIS/DEIR and Phase 4a DEIS/DEIR, would be the source of borrow material for improvements to NEMDC South and back-up sources for NEMDC North.

- ▶ **Habitat Creation and Management**—Enhance connectivity between northern and southern populations of giant garter snake in the Natomas Basin by improving habitat conditions along the West Drainage Canal, and establish woodlands consisting of native riparian and woodland species in or around the Natomas Basin as compensation for woodland impacts along the Sacramento River east levee (Reaches 16–20), American River north levee, and NEMDC west levee.
- ▶ **Infrastructure Relocation and Realignment**—Relocate and realign private irrigation and drainage infrastructure (wells, pumps, canals, and pipes), and relocate utility infrastructure (power poles) as needed to accommodate the levee improvements and canal relocations.
- ▶ **Landside Vegetation Removal**—In Reaches 16–20 of the Sacramento River east levee, in Reaches 1–4 of the American River north levee, and in NEMDC South, clear landside vegetation to prepare for Phase 4b Project levee and canal improvement work.
- ▶ **Waterside Vegetation Removal**—Waterside vegetation would be removed due to modifications to pumping plants along the Sacramento River east levee, NEMDC west levee, and PGCC southwest levee.
- ▶ **Bank Protection: Sacramento River Left Bank**—Because the adjacent levee would be constructed in Sacramento River east levee Reaches 1–20 under the NLIP, no erosion protection is needed along the left bank of the Sacramento River. The distance from the projected levee slope of the new adjacent levee to the current bank location is sufficient to guarantee that bank erosion would not intrude into the projected levee slope in the near future. Bank protection would be constructed along the PGCC and NEMDC South to address the waterside erosion sites noted above.
- ▶ **American River Common Features Project**—Upgrade levees at locations along the American River upstream of Northgate Boulevard, including raising and/or reshaping levee sections and installing cutoff walls.
- ▶ **Right-of-Way Acquisition**—Acquire lands within the Phase 4b Project footprint along the Sacramento River east levee, American River north levee, NEMDC west levee, and at associated borrow sites.

- ▶ **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 toe in Reaches 17–18, up to 250 feet from the adjacent levee landside 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,

and standpipes within the footprint of the project features would be demolished and replaced as needed. Debris from structure demolition, power poles, utility lines, piping, and other materials requiring disposal would be hauled off-site to a suitable landfill. Demolished concrete could be sent to a concrete recycling facility. Wells and septic systems would be abandoned in accordance with the applicable state and county requirements. Drilling and development pumping of replacement wells would be conducted 24/7.

- ▶ **Garden Highway Closures.** Because of space constraints, in Sacramento River east levee Reaches 19B–20, the landside lane of Garden Highway would be closed for up to 6 months to allow for construction of a cutoff wall. In addition, because there would be no room for a two-way haul route at the toe of the existing levee, the waterside lane of Garden Highway would be used by haul trucks delivering materials. This lane would only be open to local traffic, with use of traffic controls. For levee improvements along the American River north levee, the Garden Highway/Arden-Garden Connector would be completely closed for up to 6 months between I-5 and Northgate Boulevard. Through traffic would be detoured to West El Camino Avenue, SR 160, and Richards Boulevard. Garden Highway would be closed at several locations, including City of Sacramento Pump 160 and RD 1000 Pumping Plant Nos. 1A and 1B, to allow for installation of pipes that need to be raised above the 0.005 AEP water surface profile.
- ▶ **Reconstruction of Intersections.** Garden Highway intersections at Natomas Park Drive, Truxel Road, Northgate Boulevard, and four additional ramps at private parcels would require degrading, rebuilding the embankment, and repaving to accommodate the installation of the American River north levee cutoff wall and levee slope flattening. Garden Highway intersections at Orchard Lane, Gateway Oaks Drive, and several additional ramps at private parcels would require degrading, rebuilding the embankment, and repaving to accommodate the installation of the Sacramento River east levee cutoff wall and levee slope flattening. The ramps would be reconstructed to the current general ramp and intersection geometry. The design would meet Sacramento County or City of Sacramento roadway design criteria, depending upon the jurisdiction. Where alternate access to the private properties is available, the private ramps would be removed and not replaced.
- ▶ **West Drainage Canal Realignment.** The proposed new alignment would abandon and reroute approximately 4,700 feet of the West Drainage Canal. The typical cross-section for the modified West Drainage Canal would require a right-of-way of up to 150 feet for approximately 1.2 miles. The realigned section of the canal would have a 30-foot bottom width, stable 3H:1V bank slopes on one or both sides, and a narrow, variable width bench on one side of the canal. A 20-foot-wide maintenance and inspection road would flank each side of the canal and would be slightly elevated above adjacent land to improve an all-weather road condition. Culverts would cross under the patrol road to allow continued drainage into the canal from adjacent fields. The realignment would include rerouting of a small section of the West Drainage Canal (starting at the M10 Drain south of I-5 which leads to RD 1000's Pumping Plant No. 5) to a north-south orientation to improve the management of adjacent agricultural parcels, and to move the canal farther from the Airport Operations Area in the vicinity of the west runway.
- ▶ **Riego Road Canal Relocation.** A portion of an irrigation canal owned by the Natomas Central Mutual Water Company (NCMWC) would be relocated to make room for the proposed improvements to the west levee of NEMDC North. The affected portion includes approximately 4,000 feet of irrigation canal, approximately 250 feet of buried irrigation piping, and three irrigation control turn-out structures. These facilities would be relocated outside of the levee footprint as part of the Phase 4b Project. To prevent disruptions, the NCMWC irrigation system would be replaced with in-kind facilities compatible with the new levee footprint to prevent disruption of irrigation service. The new canal would be a highline canal with 3H:1V side slopes and a maintenance road on each of the embankments. A right-of-way of up to 100-feet beyond the new levee footprint would be required for the new facility.
- ▶ **Natomas Levee Recreational Trail Project.** As part of the Phase 4b Project, a regional Class I (completely separated from traffic) bicycle and pedestrian trail is proposed to be constructed in an approximately 42-mile loop along the Natomas Basin levee perimeter in the northwestern portion of the City and County of

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.

- ▶ **Encroachment Management**—Same as the Proposed Action, *except maximum extent of removal would likely be increased. SAFCA would not be eligible to request a variance and would need to fully comply with USACE's levee vegetation requirements.*

Alternatives that have already been addressed in previous environmental documents for the NLIP will be briefly summarized in the EIS/EIR for the Phase 4b Project and incorporated by reference. These alternatives include the following:

- ▶ Yolo Bypass Improvements;
- ▶ Reduced Natomas Urban Levee Perimeter;
- ▶ Construction of a New Setback Levee;
- ▶ Raise Levee in Place with a 1,000-Foot Levee Setback in the Upper 1.4 Miles along the Sacramento River East Levee;
- ▶ Construct an Adjacent Setback Levee with a 500-Foot Levee Setback in the Upper 1.4 Miles along the Sacramento River East Levee;
- ▶ No SAFCA Levee Improvements—Private Levees in Natomas;
- ▶ Natomas .01 AEP Flood Risk Reduction;
- ▶ No-Action Alternative—Airport Compartment Levee; and
- ▶ Cultural Resources Impact Reduction Alternative.

## **PROBABLE ENVIRONMENTAL IMPACTS OF THE PROPOSED PHASE 4b PROJECT**

The EIS/EIR will describe the direct and indirect significant environmental impacts of the Phase 4b Project. The EIS/EIR will also evaluate the cumulative impacts of the project when considered in conjunction with the other phases of the Landside Improvements Project and other related past, present, and reasonably foreseeable future projects, including other USACE (408 permission) and SAFCA projects.

On the basis of programmatic environmental analyses of the Phase 4b Project in previous NEPA and CEQA documents and relevant environmental analyses of previous project phases, USACE and SAFCA have determined that the probable environmental effects of the Phase 4b Project are as follows:

- ▶ **Agricultural Resources:** Conversion of Important Farmland to nonagricultural use; temporary and permanent effects on agricultural productivity; and conflicts with lands under Williamson Act contracts.
- ▶ **Land Use, Socioeconomics, and Population and Housing:** Inconsistency with adopted land use plans and the Natomas Basin Habitat Conservation Plan; temporary disturbance and division of an existing community and temporary disruption of commercial activities during construction; potential displacement of existing housing, especially affordable housing; potential reduction in local or regional employment; and other potential socioeconomic impacts, the analysis of which is required by NEPA.
- ▶ **Geology, Soils, and Mineral Resources:** Potential soil erosion or loss of topsoil during construction; and potential loss of mineral resources.
- ▶ **Hydrology and Hydraulics:** Minimized flood risk; potential temporary and/or permanent alteration of local drainage patterns; potential effects on groundwater recharge.

- ▶ **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 [CO<sub>2</sub>] 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.

## PUBLIC SCOPING MEETING

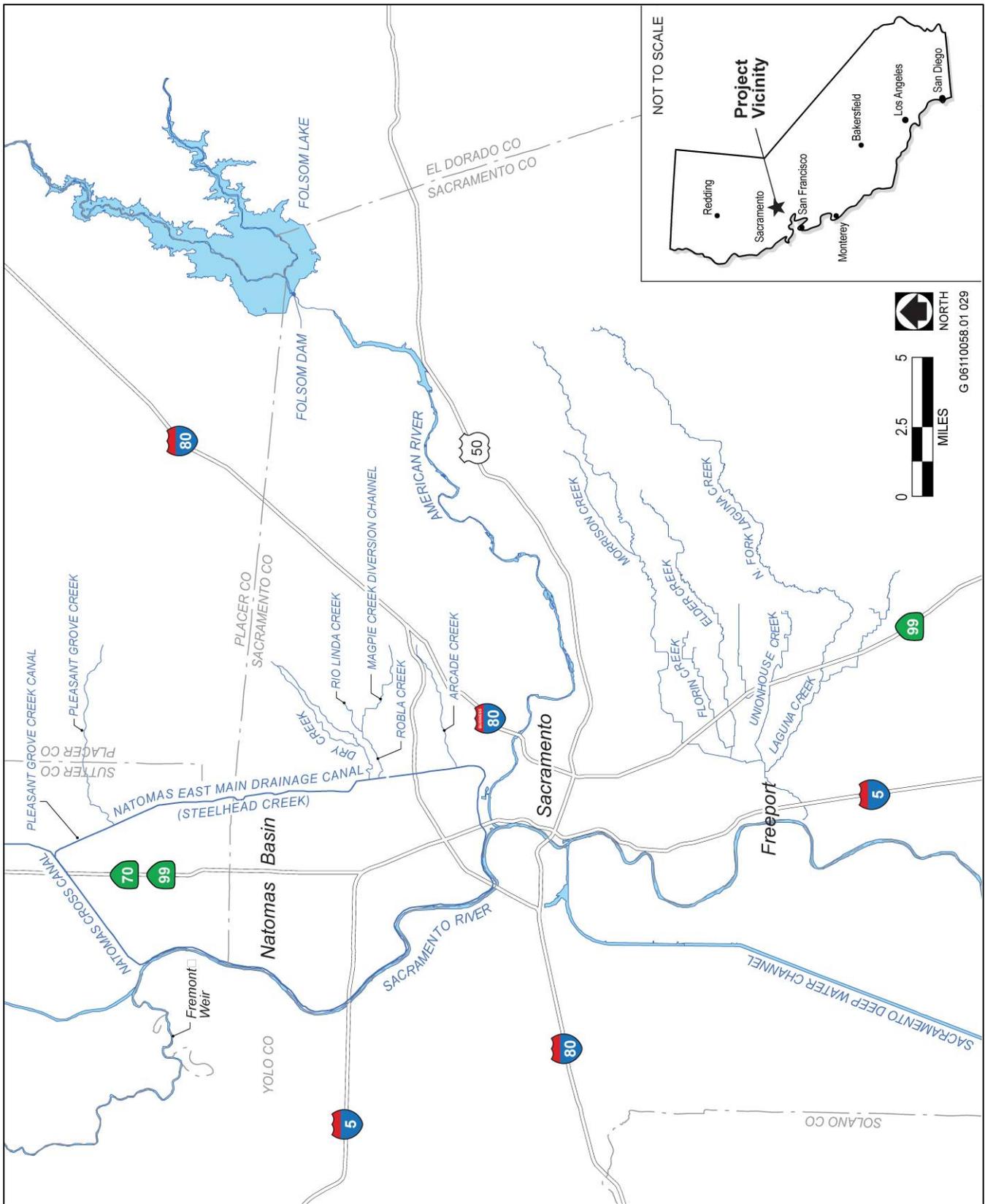
A joint EIS/EIR public scoping meeting, conducted by USACE and SAFCA, will be held during the 30-day NOP public review period to inform interested parties about the proposed project, and to provide agencies and the public with an opportunity to provide comments on the scope and content of the EIS/EIR. The joint scoping meeting will satisfy the meeting requirement for projects of statewide, regional, or areawide significance (see State CEQA Guidelines CCR Section 15082 [c]).

The meeting will be held on November 18, 2009, from 4:30 to 6:30 p.m., at 2921 Truxel Road (South Natomas Community Center) in Sacramento, California and will have an open-house format with multiple stations set up to highlight different aspects of the proposed project and the NEPA/CEQA process. Attendees will have the opportunity to ask questions and discuss the project and the EIS/EIR process with project team members and to provide oral and written comments. The meeting space is accessible to persons with disabilities and a court reporter will be available. Individuals needing special assistive devices will be accommodated to the best of SAFCA's ability. For more information, please contact John Bassett, SAFCA Director of Engineering, at least 48 hours before the meeting (contact information is provided below).

## PROVIDING COMMENTS ON THE NOTICE OF PREPARATION

Interested parties may provide written or oral comments on the proposed content and scope of the EIS/EIR at the public scoping meeting or may provide written comments directly to SAFCA. **Written comments on the NOP must be provided to SAFCA at the earliest possible date, but must be received no later than 5 p.m. on Friday, December 4, 2009.** Agencies that will need to use the EIS/EIR when considering permits or other approvals for the proposed project should provide the name of a contact person. Comments provided by e-mail should include the name and address of the sender and include "Natomas PACR/NLIP Phase 4b Project NOP Scoping Comment" in the subject line. Please send all written and/or e-mail comments on the NOP to:

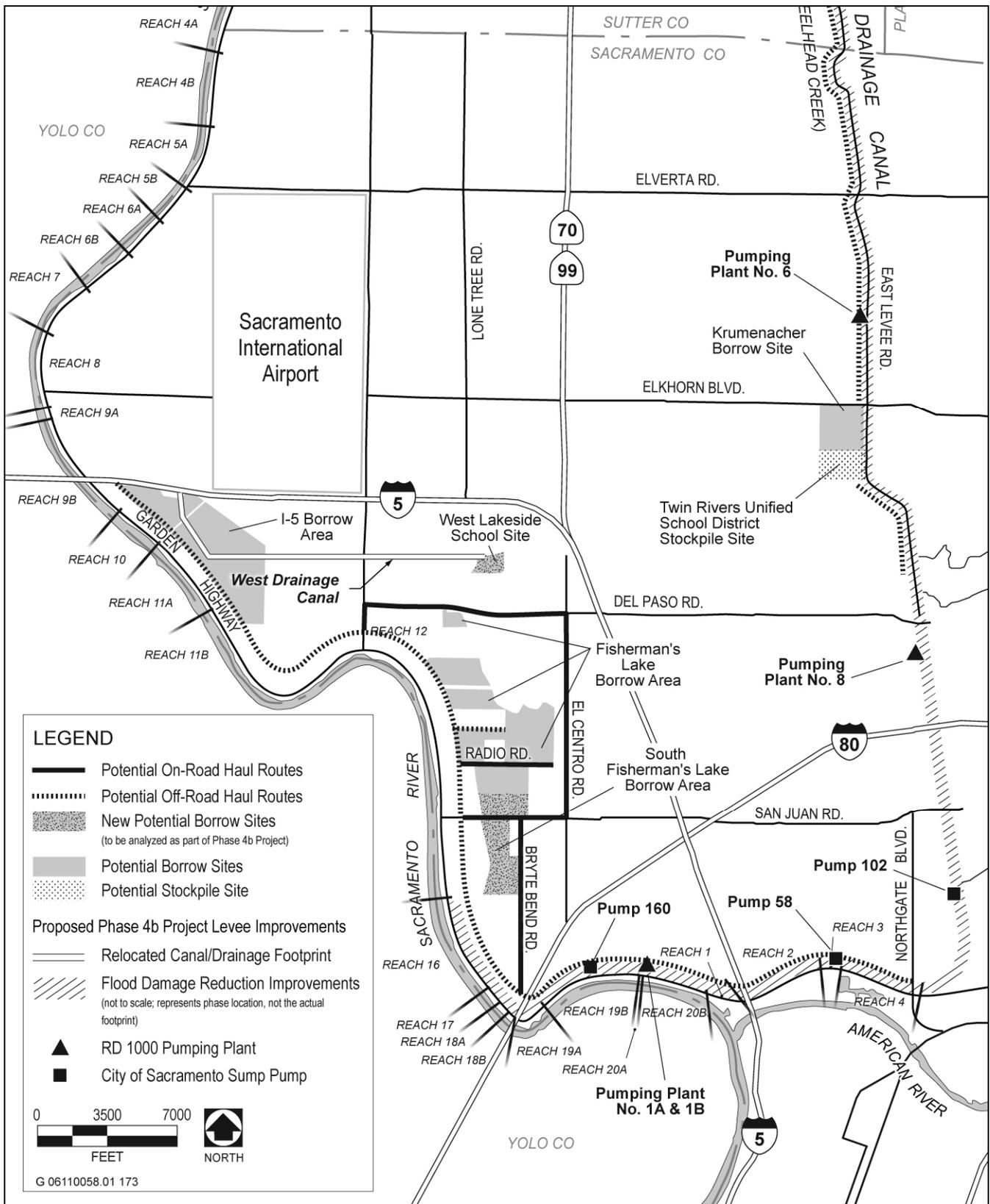
John Bassett, P.E., Director of Engineering  
Sacramento Area Flood Control Agency  
1007 7th Street, 7th Floor  
Sacramento, CA 95814  
Telephone: (916) 874-7606  
Fax: (916) 874-8289  
E-mail: [bassettj@saccounty.net](mailto:bassettj@saccounty.net)



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

## Regional Location

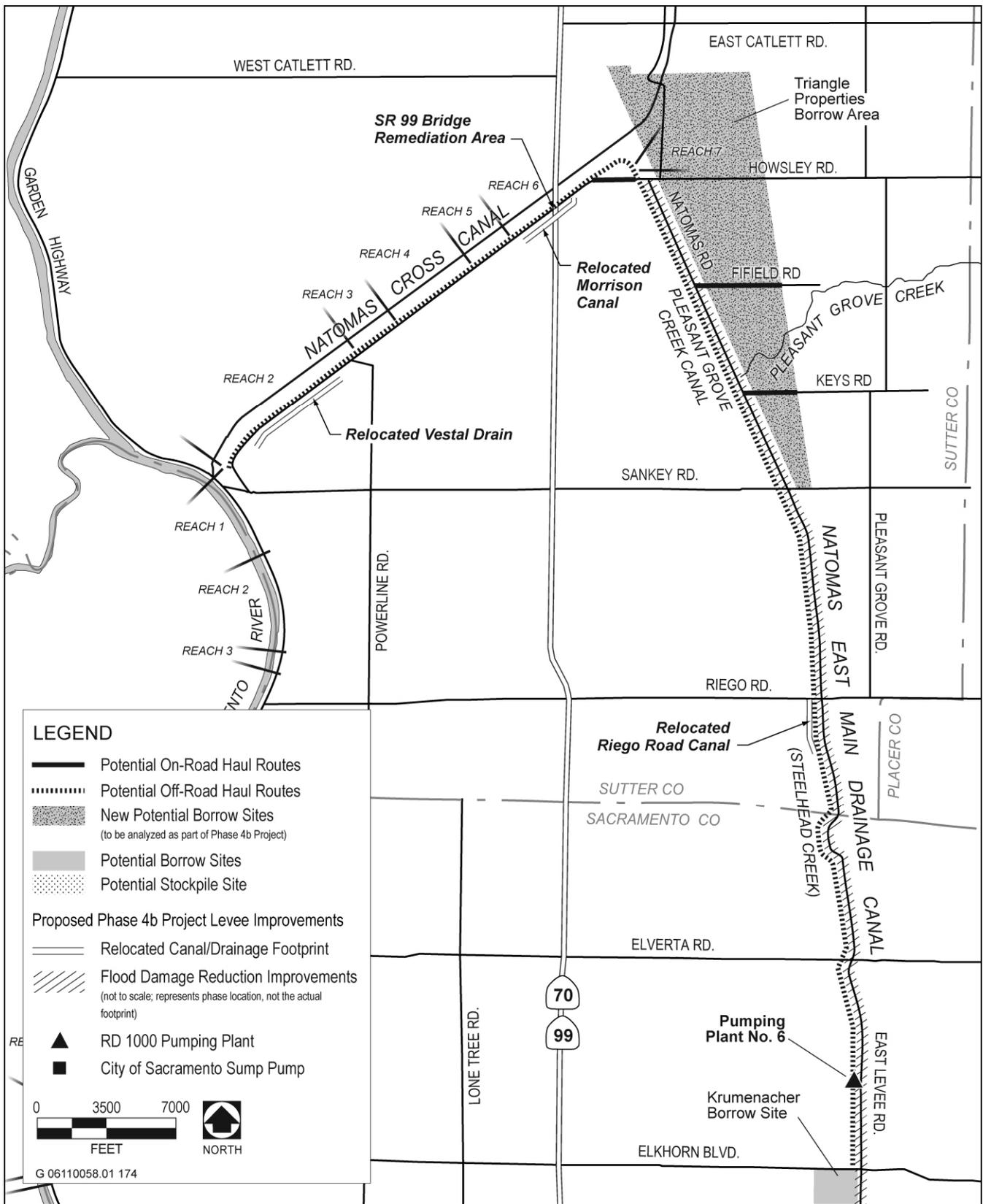
## Exhibit 1



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 (Southern Portion)**

**Exhibit 2**



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**