

3.4 CULTURAL RESOURCES

This section evaluates potential impacts of the proposed modifications to the Phase 2 Project on cultural resources. Cultural resources include archaeological traces such as Native American occupation sites and artifacts, historic-era buildings and structures, and places used for traditional Native American practices or other properties with special cultural significance. The modifications evaluated include slight changes to anticipated impacts and mitigation for some identified resources. This section also identifies new resources and the management status of these resources, which were discovered after the certification of the 2007 Landside EIR.

As a result of proposed modifications to the Phase 2 Project, two resources, Reclamation District (RD) 1000 (a historic landscape district) and CA-SAC-485/H (a prehistoric site), would be subject to slightly different impacts and mitigation than previously described. Two newly identified prehistoric resources, identified as Natomas Levee Improvement Program (NLIP) 7 and NLIP-22, would require further management as discussed below in Impact 3.4-c. Several newly identified historic and prehistoric resources (NLIP-8, NLIP-9, NLIP-10, NLIP-11, and NLIP-21) are evaluated by SAFCA in this SEIR. SAFCA recommends that these resources are ineligible for listing on the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). These resources will also be documented and evaluated in inventory reports as required under the Programmatic Agreement (PA) executed as part of Section 106 and the reports will be sent to the U.S. Army Corps of Engineers (USACE) and State Historic Preservation Officer (SHPO) for concurrence.

3.4.1 REGULATORY SETTING

The 2007 Landside EIR provides a complete regulatory setting, which is hereby incorporated by reference. This section describes the PA executed for the NLIP.

3.4.1.1 FEDERAL

Management Framework for Historic Properties: The Programmatic Agreement

The NLIP is subject to the requirements of Section 106 of the National Historic Preservation Act (NHPA) as described in the 2007 Landside EIR (DEIR, page 3.8-2). Section 106 is triggered because USACE must provide permits for SAFCA to fill jurisdictional waters under the Clean Water Act and authorization for SAFCA to modify levees and to construct any structure in or over any navigable water of the United States under Section 408 of the Rivers and Harbors Act.

Normally, the Section 106 process is performed as four sequential steps. In this process, the federal agency responsible for satisfying Section 106 initiates consultation with the SHPO, identifies historic properties, assesses effects, and then resolves adverse effects, if any. These steps are defined at Title 36 of the Code of Federal Regulations (CFR), Part 800 et seq. However, because the proposed project involves large areas of land that require inventory and evaluation of historic properties in phases, USACE and SAFCA, in consultation with the SHPO and other consulting parties, developed and executed a PA (Appendix C), which establishes an alternative, expedited process that replaces the process provided in Part 800, while incorporating relevant standards and definitions from Part 800 by reference. The process in the PA fulfills the requirements of Section 106 of the NHPA.

The PA requires SAFCA to define the area of potential effects (APE) and complete an inventory of cultural resources before each phase of project construction begins, subject to review and written approval by USACE and SHPO (Stipulations III[C] and IV[A]). The inventory will include a map of the APE for each project phase (Stipulation III[C]). Identified resources will be evaluated for National Register of Historic Places (NRHP) eligibility, and SAFCA will make a finding of effect, in consultation with USACE and the SHPO (Stipulation IV[A]). If historic properties are identified, either in the Stipulation V(A) inventory or during construction, that would be adversely affected by the NLIP Landside Project, SAFCA must prepare an HPTP per Stipulation V(A)

of the PA. The HPTP specifies actions SAFCA will take to resolve adverse effects on a historic property or a set of historic properties (Stipulation V[A]). The PA also requires SAFCA to prepare and obtain the approval of USACE, before construction begins, a plan to respond to inadvertent discoveries (Stipulation V[B][1]). EDAW has prepared a construction monitoring and inadvertent discovery plan, and SAFCA will submit this document to USACE as part of pending inventory reports. The plan describes the protocols and methods for monitoring construction and the protection of cultural resources discovered during construction. Relevant sections include stipulations for preconstruction training of equipment operators, locations subject to monitoring, treatment of inadvertent discoveries, and treatment of inadvertently discovered human remains. Together, the PA and the monitoring and inadvertent discovery plan provide part of the management framework for historic properties that may be affected by the proposed project. Identified resources will also be evaluated for eligibility for listing on the California Register of Historical Resources (CRHR).

While SAFCA is a signatory to the PA, Section 106 requires consultation between the federal signatory to the PA and other consulting parties. USACE and the SHPO must concur on major management decisions such as how adverse effects will be resolved (Stipulation V), and USACE has the ultimate responsibility for satisfying Section 106 (36 CFR Part 800.1[a]). Therefore while this section of the SEIR identifies what SAFCA believes are all feasible methods of mitigating impacts on cultural resources, USACE and the other consulting parties under Section 106 must agree to SAFCA's mitigation plan.

3.4.2 ENVIRONMENTAL SETTING

The environmental (cultural resource) setting, including the environmental characteristics and prehistoric historic human use of the region, is provided in the 2007 Landside EIR (DEIR, pages 3.8-4 to 3.8-11) and is hereby incorporated by reference. That setting describes the results of record searches conducted for the entire Natomas Basin at the North Central and the Northeast Information Centers of the California Historical Resources Information System (DEIR, pages 3.8-12 to 3.8-28). Section 3.4.3.1 below provides information on resources that may be affected by the proposed modifications to the Phase 2 Project, or which were identified after certification of the 2007 Landside EIR.

3.4.3 METHODOLOGY

EDAW consulted with Native American individuals and organizations included on a list provided by the California Native American Heritage Commission and conducted a pedestrian survey of the project area in 2007 as described in the 2007 Landside EIR (DEIR, pages 3.8-11 and 3.8-16). The field investigation included limited shovel testing (DEIR, page 3.8-16). The discussion in this SEIR focuses on investigations that are relevant to proposed project modifications that drive the need for preparation and circulation of this SEIR.

Phase 2 Project fieldwork in 2008 focused on completing a cultural resource inventory of the Phase 2 Project footprint and an evaluation of identified resources. The inventory effort included pedestrian surveys of the project footprint and shovel testing. Shovel testing provided an important means of identifying resources that were not visible or were only slightly visible on the surface. Shovel testing was conducted along the levee toe at 30 meter intervals, and at the same interval 30 meters east of the levee toe. Shovel test pits measured approximately 0.5 meters on a side and were excavated to a depth of 1.0 meters on average. To increase the depth of the sample, cultural resources specialists also conducted hand auger investigations in the same units, sampling at the same interval described above. Hand auger units reached on average approximately 2 meters (6.5 feet) in depth. Because this sample interval (30 meters) is smaller than the average size of identified archaeological deposits in the region, it provides a very good proxy for the presence or absence of cultural resources under the adjacent levee down to a depth of approximately 6 feet. This inventory has been completed for the majority of the reaches along the Sacramento River east levee (Reaches 2 through 4A), where there is the highest probability of encountering archaeological deposits. Pedestrian surveys have also been completed along the NCC where deep cutoff walls will be constructed in Reaches 4 through 7. The remaining portion of the Phase 2 Project footprint that requires inventory (approximately 5%) will be completed prior to construction. The additional inventory stipulated in

Mitigation Measure 3.8-d from the 2007 Landside EIR (DEIR, page 3.8-31) is incorporated by reference under Impact 3.4-d below. Additional resources that may be identified, if any, would be subject to Mitigation Measure 3.4-c below.

At identified prehistoric sites that suggest the potential to be eligible for listing on the NRHP or CRHR, such as NLIP-22, a prehistoric resource located along the Sacramento River east levee, EDAW also conducted canine forensic investigations. During this process, dogs that are trained to alert upon detection of buried human remains were used to inspect the site. This investigation failed to reveal interred human remains at NLIP-22.

Evaluation of the deposits identified in field work focused on collecting additional data and applying NRHP and CRHR listing criteria.

3.4.3.1 IDENTIFIED RESOURCES

This section identifies the resources that are located in the footprint associated with the proposed project modifications to the Phase 2 Project, or resources that may be subject to a greater degree of impact because of these modifications (see Table 3.4-1).

Table 3.4-1 Identified Cultural Resources In the Phase 2 Project Modification Footprint			
Trinomial or P- Number	Temporary Designation or Common Name	Resource Type	Eligibility Recommendation or Management Status
	RD 1000	Historic Landscape District	Previously recommended eligible, may require updates, see 2007 Landside EIR at 3.8-8
P-51-000135	NLIP-1	Historic resource	Recommended ineligible, see 2007 Landside EIR at page 3.8-29*
	NLIP-2	Historic resource	Recommended ineligible, see 2007 Landside EIR at page 3.8-29*
P-51000136/ CA-SUT-136H	NLIP-3	Historic resource	Recommended ineligible, see 2007 Landside EIR at page 3.8-29*
P-51000137/ CA-SUT-137H	NLIP-4	Historic resource	Recommended ineligible, see 2007 Landside EIR at page 3.8-29*
P-51-000138/ CA-SUT-138H	NLIP-5	Historic resource	Recommended ineligible, see 2007 Landside EIR at page 3.8-29*
P-51-000139/ CA-SUT-139H	NLIP-6	Historic resource	Recommended ineligible, see 2007 Landside EIR at page 3.8-29*
	NLIP-7	Prehistoric site, buried	Requires testing/evaluation
	NLIP-8	Prehistoric resource	Recommended ineligible
	NLIP-9	Prehistoric resource	Recommended ineligible
P-61-000153	NLIP-10	Historic concrete feature	Recommended ineligible
	NLIP-11	Debris, non-cultural	Recommended ineligible
	NLIP-21	Historic site, partially buried	Recommended ineligible
	NLIP-22	Buried prehistoric site	Requires testing/evaluation
CA-SAC-485/H			Recommended eligible
Notes: NLIP = Natomas Levee Improvement Program; RD = Reclamation District.			
*Documented in pending 2008 <i>Draft Historic Era Cultural Resources Eligibility Assessment Report</i> , not discussed in site descriptions below. All eligibility and ineligibility recommendations are subject to USACE and the SHPO concurrence. For all eligible or listed resources, SAFCA will determine the effect of the undertaking, subject to USACE and the SHPO review. If adverse effects are found, SAFCA would prepare and implement an HPTP in consultation with USACE and the SHPO.			
Source: Data compiled by EDAW in 2008			

CA-SAC-485/H

Investigations during summer 2008 focused on characterizing the boundaries and nature of the deposit at CA-SAC-485/H. This investigation was conducted through excavation of control units with limited use of a backhoe at the edges of the site and beyond the site boundaries (to confirm the site boundaries). Based on the records and investigation to date, it appears that CA-SAC-485/H was a habitation site with structures and numerous interments. The assemblage on-site contains a rich deposit of flaked stone, faunal bone, skeletal remains and grave goods, hearth features, and utilitarian artifacts. Test excavation in 2008 recovered numerous burials, grave goods, and other cultural constituents from the assemblage.

This site will be recommended eligible in an inventory report prepared by SAFCA and submitted to USACE and the SHPO, as required in the PA. This report will also make a finding of effect, which is anticipated to be adverse (subject to treatment to minimize impacts). Further consultation with SAFCA, USACE, the SHPO, and Native American individuals and organizations is required to define appropriate treatment. Through this consultation process, SAFCA will prepare an HPTP that defines how impacts on the site will be minimized. SAFCA is currently consulting with these entities to determine whether placement of a wide seepage berm over the site will meet the combined goals of reducing flood risks and minimizing adverse effects. The most likely descendant (MLD), designated pursuant to California Public Resources Code Section 5097.98, has also expressed the desire to reinter all removed human skeletal remains without analysis.

Newly Identified Prehistoric Resources Recommended as Ineligible: NLIP-8, NLIP-9, and NLIP-11

These prehistoric resources consist of sparse manifestations of burned soil and clay, with charcoal and occasional instances of cultural debris such as debitage. During 2008 fieldwork, EDAW tested excavations of these resources to determine if the deposits contain any substantial deposits that could offer useful data for prehistoric research questions. The sites contain only the sparsest manifestation of cultural debris with no features, human interments, or rich assemblages that could be used for important research questions. Because these resources offer no important data for prehistoric research, SAFCA will recommend that NLIP-8, NLIP-9 and NLIP-11 are ineligible for listing on the NRHP and CRHR. SAFCA will submit these findings and recommendations to USACE and the SHPO for review and consultation. If USACE and the SHPO concur in this recommendation, no further management is required.

Newly Identified Historic Resources Recommended as Ineligible: NLIP-10 and NLIP-21

The resource NLIP-10 consists of a concrete structure built parallel to the northern slope of the NCC, with a central poured concrete abutment and flanking concrete wings with broken edges and top. This concrete structure is entirely unremarkable and lacks integrity because the original pump that the structure supported is gone. SAFCA will recommend that NLIP-10 is ineligible for listing on the NRHP and the CRHR.

NLIP-21 contains a sparse scatter of historic trash that has largely been burned and intermingled with surrounding soil matrix. Any discernible association with a larger deposit or structure is gone. The incineration of the debris also has reduced any data potential for historical research. Because the feature lacks both integrity and identifiable association with significant historic themes, SAFCA will recommend that NLIP-21 is ineligible for listing on the CRHR and the NRHP.

Newly Identified Prehistoric Resources that Require Further Management: NLIP-7 and NLIP-22

These resources consist of prehistoric deposits that offer no surface manifestation but instead are buried beneath the current A-horizon of soil. Identified deposits include debitage, burnt clay, and midden. Further investigation is required to make recommendations regarding the eligibility of these resources for listing on the NRHP or CRHR.

NLIP-7 consists of a prehistoric cultural deposit identified in core bores at a depth of approximately 10 to 12 feet underground. Core bores revealed soil consistent with prehistoric midden, charcoal, and spiral fractured faunal bone.

NLIP-22 consists of a prehistoric site that contains midden, charcoal, baked clay, and debitage, occurring at least 2 feet underground.

3.4.4 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

3.4.4.1 SIGNIFICANCE CRITERIA

The thresholds for determining the significance of impacts for this analysis are based on the environmental checklist in Appendix G of the California Environmental Quality Act Guidelines (State CEQA Guidelines) and Section 106 of the NHPA. The proposed project was determined to result in a significant effect on cultural resources if it would:

- ▶ cause a substantial adverse change in the significance of a unique archaeological resource as defined in California Public Resources Code Section 21083.2(g) or a historical resource as defined in California Public Resources Code Section 21084.1 (see also Section 15064.5 of the State CEQA Guidelines);
- ▶ disturb any human remains, including those interred outside of formal cemeteries; or
- ▶ result in an adverse effect, after treatment, to a historic property, subject to Section 106 of the NHPA, as defined at 36 CFR Part 800.5(a)(1).

A substantial adverse change in the significance of a historical resource means “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired” (State CEQA Guidelines Section 15064.5[b][1]). An adverse effect under Section 106 means that the project would “alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association” (36 CFR Part 800.5[a][1]).

Modified Phase 2 Project impacts on undiscovered cultural resources and undiscovered interred human remains are anticipated to be the same as the impacts identified in the 2007 Landside EIR (DEIR, pages 3.8-31 and 3.8-32). If such resources are discovered during construction, and management other than avoidance is required, such management would occur, in part, under HPTPs as described in Section 3.4.1.1 above. Discoveries of human remains are subject to the notifications required under State law identified in the 2007 Landside EIR (DEIR, pages 3.8-32 and 3.-33). These impacts are not discussed further in this SEIR.

3.4.4.2 IMPACT ANALYSIS

Project construction would involve a range of soil-disturbing impacts in a region that is highly sensitive for cultural resources, particularly prehistoric archaeological sites and would alter structures and landscapes associated with RD 1000.

IMPACT Changes to Elements of RD 1000, which Consists of a Rural Historic Landscape District That is Eligible for Listing on the NRHP. *This district consists of the levees, drainage features, roads, and large-scale patterns of land use that form a distinct rural landscape surrounding and including the physical features of RD 1000 flood control infrastructure. Activities associated with several of the Phase 2 Project modifications, including construction of drainage infrastructure under Garden Highway and expansion of a seepage berm in Reach 4B of the Sacramento River east levee, could disturb contributing elements of RD 1000. These impacts would be significant.*

As described in the 2007 Landside EIR (DEIR, pages 3.8-8 to 3.8-11), RD 1000 was evaluated both to determine the NRHP eligibility of the district and to evaluate whether flood control projects (levee modifications) planned and subsequently implemented by USACE as part of the American River Watershed Project (DEIR, page 3.8-8) would significantly affect the district. That analysis is hereby incorporated by reference. RD 1000 was identified as eligible for inclusion in the NRHP as a Rural Historic Landscape District. The “determination of effects” statement concluded that the USACE projects would adversely affect both contributing and noncontributing elements of RD 1000 by allowing for greater development to occur in the region. As a result, mitigation measures were adopted and incorporated into USACE’s project. These consisted of Historic American Engineering Record (HAER) documentation, which was prepared by Peak & Associates (1997); videotapes of historic properties; and a list of repositories where copies of the information would be made available to the public (DEIR, page 3.8-8).

Activities associated with several of the Phase 2 Project modifications, including construction of drainage infrastructure under Garden Highway and expansion of a seepage berm in Reach 4B of the Sacramento River east levee, could disturb contributing elements of RD 1000. These modifications may be consistent with the current land use pattern and the long-term operation of a levee system and rural irrigation and drainage system. As such, project features would be consistent with the character-defining elements of the district. It is also possible that changes to the setting, including urban development, may have diminished the integrity of the elements of the district affected by the proposed project. If the contributing elements in the project footprint no longer retain integrity, no further management is required. If affected elements retain integrity and still can convey their significance, then activities associated with the proposed modifications to the Phase 2 Project might diminish this integrity. These impacts would be **significant**.

Mitigation Measure 3.4-a: Incorporate Mitigation Measures to Documents Regarding Any Elements Contributing to RD 1000 and Distribute the Information to the Appropriate Repositories.

Mitigation Measure 3.8-a from the 2007 Landside EIR has been updated as follows:

The management of the cultural resources that constitute the contributing elements of RD 1000 are governed by the PA (Appendix C). Because the elements of the RD 1000 historic landscape district have already been recorded, a new inventory of these resources is not required under Stipulation IV(A) of the PA. After an APE has been determined per Stipulation III(C), a qualified architectural historian shall determine if contributing elements of the district are present in the APE. If contributing elements are present, the architectural historian shall update records for these resources and evaluate those elements to determine if they still retain integrity. Because much of the Natomas Basin has been developed, it is possible that changes to the setting have diminished the integrity and thus eligibility of contributing elements in the APE. If the elements in the APE retain eligibility, the architectural historian shall make a finding of effect.

If there is an adverse effect to a contributing element (under Section 106) or a significant impact on the resource’s integrity as an historical resource (under CEQA) the architectural historian shall review existing HAER documentation and determine whether any augmentation of this documentation is needed. The original documentation for the American River Watershed Project, completed in 1997 contemplated changes to the setting of the district and thus provided comprehensive documentation to record the district before urbanization (Peak & Associates 1997). It is possible that this original documentation adequately recorded and preserved records of the elements that may be affected. If this documentation is not sufficient for adversely affected and contributing

elements, SAFCA will prepare an HPTP stipulating additional HAER documentation, or other similar treatment as required under Stipulation V(A). After consultation with USACE and the SHPO, SAFCA shall implement the required documentation. Any additional documentation that is needed shall be prepared and distributed to appropriate public repositories.

Implementing Mitigation Measure 3.4-a would reduce the impact on contributing elements of RD 1000 to a **less-than-significant** level, as discussed in the 2007 Landside EIR.

IMPACT 3.4-b **Potential Construction Impacts on CA-SAC-485/H.** *This prehistoric resource consists of an extremely rich deposit that contains midden, features, debitage, faunal bone and bone tools, habitation structures, and numerous human interments. The site occurs just east of the Sacramento River east levee Reach 4B. This reach has an existing, serious risk of underseepage and levee failure. SAFCA proposes construction of a seepage berm that could abut the Sacramento River east levee and would cover this resource. The width of this berm has been expanded compared to the original design; therefore, the impact of placing the berm on CA-SAC-485/H was not analyzed in the 2007 Landside EIR. This impact would be **significant**.*

As described above, EDAW has conducted an extensive program of testing at CA-SAC-485/H. Although the first 16 inches of this deposit have been disturbed by agricultural operations, the site contains an extremely rich assemblage below 16 inches. The 2007 Landside EIR identified the potential for construction of the Giant Garter Snake (GGS)/Drainage Canal and Elkhorn Main Irrigation Canal to affect this resource (DEIR, page 3.8-29) and evaluated these impacts. After preparation of the 2007 Landside EIR, SAFCA re-evaluated the options available for addressing seepage remediation along the adjacent reach of the Sacramento River east levee. These options include relief wells, cutoff walls, and seepage berms. As a result of investigations in 2008, EDAW identified the boundaries of the deposit at CA-SAC-485/H and determined that an extremely rich and significant deposit remains at the site. SAFCA then determined that construction of cutoff walls alone was infeasible due to the depth of the clay layer in the foundation soils under the levee and construction of a partially penetrating cutoff wall or a seepage berm in combination with relief wells along the adjacent Sacramento River east levee could potentially intrude into the site and adversely affect the resource. This disturbance would affect both the utility of the deposit for archaeological research and the cultural and religious values for Native Americans.

To minimize the risk of direct impacts on this resource, SAFCA is proposing to replace all relief wells and cutoff walls with a 500-foot-wide seepage berm for the portion of Reach 4B that abuts CA-SAC-485/H. This wider berm would address the risk of underseepage while minimizing or avoiding direct intrusion into the site. Nonetheless, using heavy equipment to construct the seepage berm could crush some remaining portions of the assemblage at CA-SAC-485/H because of the weight of the machinery typically utilized in construction. Furthermore the weight of the berm itself could compress the site, which could damage the remaining assemblage. The potential for this kind of impact on CA-SAC-485/H was not analyzed in the 2007 Landside EIR; thus, it is analyzed here. This impact would be **significant**.

Mitigation Measure 3.4-b: Avoid Ground Disturbance near Known Prehistoric Archaeological Site CA-Sac-485/H to the Extent Feasible and Prepare and Implement a Historic Properties Treatment Plan.

SAFCA shall implement the following measures required by the PA (Appendix C) to address potential significant impacts on CA-SAC-485/H associated with Phase 2 Project construction impacts:

- ▶ Prior to start of construction, SAFCA shall prepare an HPTP as required under the PA (Stipulation V[A]).
- ▶ The HPTP shall address the effect of construction of a seepage berm on CA-SAC-485/H, including the effects of operating heavy equipment on the site during construction and of the placement of a seepage berm over the resource.

- ▶ To the extent possible, SAFCA shall minimize or avoid direct impacts on the site by carefully selecting equipment with consideration given to the pressure the construction equipment will place on the site and the capability of the assemblage to withstand these impacts. SAFCA shall also minimize the impact of the weight of the berm on the site through engineering and design to the maximum extent possible.
- ▶ The HPTP shall recommend an appropriate program of research and analysis for any portion of the assemblage removed from the site during test excavations. SAFCA shall then consult with USACE, the SHPO, and appropriate Native American individuals and entities regarding the recommendations of the HPTP.
- ▶ Upon concurrence from USACE and the SHPO, SAFCA shall implement the HPTP. The HPTP shall account for and incorporate the concerns of all consulting parties, to the extent possible, given project goals, as required under Section 106.
- ▶ During construction, SAFCA shall monitor construction at this location and within an appropriate radius. This monitoring shall be governed by a plan for monitoring and response to inadvertent discoveries that has been approved by USACE, as required in the PA (Stipulation V[B]).

The construction of a wide seepage berm and preparation and execution of an HPTP shall minimize impacts on this resource by avoiding or reducing disturbance and conducting research on the excavated portions of the assemblage. The HPTP shall minimize these impacts to the maximum extent possible and disclose the projected magnitude of these impacts. Nonetheless, construction of a seepage berm may affect the site through operation of equipment and construction of a massive feature over the site. Therefore, this impact would be **significant and unavoidable** with implementation of mitigation.

IMPACT **Damage to or Destruction of Other Identified Prehistoric Cultural Resources.** *Two prehistoric resources, NLIP-7 and NLIP-22, were identified within the project footprint after preparation of the 2007 Landside EIR. Construction of the seepage berm in Reaches 4A and 4B has the potential to affect these resources. This potential impact would be **potentially significant**.*

Prehistoric resources NLIP-7 and NLIP-22 are located in the footprint of the proposed seepage berm along the Sacramento River east levee in Reaches 4B and 4A, respectively. These resources were not identified as being within the project footprint until after preparation of the 2007 Landside EIR. These resources require further test investigations and evaluation to determine whether they are eligible for listing in the NRHP or CRHR. The evaluation of eligibility and determination of effects on all recommended eligible sites would be made in consultation with USACE and the SHPO. These sites may be significant both for their data potential and their importance to local Native American groups and may have the integrity to convey this significance.

It is possible that construction of the seepage berm over these resources in the Phase 2 Project may, absent mitigation or treatment, directly affect these resources. Impacts could include excavation required to prepare the landform for the berm and crushing of the prehistoric deposit caused by operation of heavy machinery during berm construction and the weight of the berm itself. This impact is considered **potentially significant**.

Mitigation Measure 3.4-c: Evaluate NLIP-7 and NLIP-22. If the Resources are Eligible, Avoid Disturbance to the Extent Feasible, and Prepare and Implement a Historic Properties Treatment Plan.

The following mitigation measure addresses potentially significant impacts on NLIP-7 and NLIP-22, which are two new resources found after certification of the 2007 Landside EIR.

SAFCA shall implement the following measures prior to start of construction:

- ▶ Complete an evaluation of NLIP-7 and NLIP-22 resources, and determine the effect of Phase 2 work on all eligible or listed resources in accordance with Stipulation IV(A) of the PA.
- ▶ Consult with USACE, the SHPO, and other consulting parties such as Native American individuals and organizations, to develop appropriate treatment or mitigation in an HPTP, as required by Stipulation V(A) of the PA, if the project would result in adverse effects on eligible resources.
- ▶ If the resources are deemed to be eligible, document the sites and avoid or reduce adverse effects by minimizing disturbance from construction of the berm. Where physical impacts cannot be avoided and such physical impacts could damage the data these sites may contain, further excavation would be required. Such excavation would be required to support of documentation of the resource as required under Section 110(b) of the NHPA, or data recovery excavations to retrieve those values and mortuary assemblages that contain significance for archaeology and Native American culture after consultation with and the agreement of the Native American MLD tribe.
- ▶ Monitor all construction in the vicinity of documented and eligible resources, as required under the pending construction monitoring and inadvertent discovery plan.

Implementation of these management steps would lead to a determination as to the eligibility of these resources, and if eligible, minimize impacts on qualities that make these resources significant. While data recovery excavation is usually performed in instances where significant resources may be affected by a project, consultation under Section 106 may require alternate treatment, such as minimal investigation other than documentation. Minimization of any disturbance is an expressed desire of the Native American individuals and organizations that were consulted. To the extent possible, SAFCA shall minimize the impact of operating equipment over the resources and the impact caused by placement of a berm on these sites, through engineering and equipment selection. Nonetheless, it may not be possible to avoid all impacts to the deposits at these resources. Therefore, these impacts would be **significant and unavoidable**.

IMPACT **Damage to or Destruction of Previously Undiscovered Cultural Resources.** *Previously unknown cultural resources could be present in areas that would be subject to construction disturbance and could be damaged or destroyed by project construction. This potential impact would be **potentially significant**.*

This impact was previously analyzed in the 2007 Landside EIR as Impact 3.8-d, Mitigation Measure 3.8-d was adopted by the SAFCA Board and incorporated into the project, and the significance conclusion is unchanged. As described in the 2007 Landside EIR and summarized herein, construction of improvements such as deep cutoff walls and associated inspection trenches has the potential to impact previously undiscovered cultural resources (DEIR at 3.8-32). The proposed modifications to the Phase 2 Project include construction of deep cutoff walls in Reach 2 and Reach 3 of the Sacramento River east levee. Seepage berms are proposed for Reach 4A and Reach 4B of the Sacramento River east levee. These features (cutoff walls and seepage berms) will also require excavation of an inspection trench adjacent to the levee toe, underneath the existing levee prism. Thus during construction the existing stability berm will be removed, and contractors will excavate an approximately six feet deep inspection trench to prepare the underlying strata to provide a suitable base for the proposed improvements. Both of these activities have the potential to damage or destroy previously undiscovered resources. This impact remains **potentially significant**; however, SAFCA has identified an additional, feasible mitigation measure.

As described above, SAFCA has performed both pedestrian surveys and subsurface testing along the majority of the Sacramento River east levee reaches where Phase 2 construction will take place. The land along and under the Sacramento River east levee may contain buried and previously unidentified cultural resources. Although the surface and subsurface investigations conducted to date provide a good proxy for surface and near-surface resources that extend under or occur under the existing levee, these investigations are less useful for identifying buried sites below a depth of six feet.

Mitigation Measure 3.4-d: Conduct Additional Backhoe and Canine Forensic Investigations As Appropriate

To increase the data set for identifying buried sites under the existing levee, SAFCA shall recommend that the following additional mitigation measures be adopted by USACE during Section 106 consultation:

- Additional inventory should be conducted at appropriate intervals along the Sacramento River east levee for the Phase 2 Project, using a backhoe excavator, to increase the sample of information at depths below six feet, which cannot be reached with conventional shovel test methods.
- Where this process or additional inventory efforts reveal other resources, SAFCA recommends the use of canine forensic investigations as a way of identifying interred human remains with minimal disturbance, and for further refinement of and understanding of the constituents of identified resources.
- If previously undiscovered resources are encountered during excavation of the inspection trench they will be treated in accordance with Mitigation Measure 3.4-c.

Because SAFCA does not control the final selection of inventory and treatment methods under Section 106, SAFCA can only suggest these methods to USACE and other consulting parties to the Section 106 process. Furthermore, because these methods will result in a sample data set rather than an exhaustive excavation of the entire footprint of ground disturbing work, the possibility remains that previously undiscovered cultural resources will be inadvertently damaged or destroyed during construction. Therefore, this impact remains potentially **significant and unavoidable**.

IMPACT **Damage to or Destruction of Previously Undiscovered Interred Human Remains.** *Previously*
3.4-e *undiscovered interred human remains could be present in areas that would be subject to construction*
disturbance and could be damaged or destroyed by project construction. This impact would be significant.

This impact was previously analyzed in the 2007 Landside EIR as Impact 3.8-e (DEIR, page 3.8-32). Mitigation Measure 3.8-e was adopted by the SAFCA Board and incorporated into the project, and the significance conclusion is unchanged. Prehistoric human remains have been found at several prehistoric sites in the project area. Previously unknown buried human remains located beyond the depth of practical archeological excavation may be unearthed, damaged, or destroyed during excavation activities associated with construction of cutoff walls. Damage to or destruction of human remains would be a **significant impact**.

SAFCA will implement Mitigation Measure 3.8-e as described in the 2007 Landside EIR, and recited below, if such remains are encountered during construction (DEIR at 3.8-32). Furthermore SAFCA is recommending the additional efforts to identify these remains and associated archaeological deposits described above in Mitigation Measure 3.4-d. Despite these efforts the potential will remain that previously undiscovered interred human remains could be inadvertently damaged or destroyed during construction. Therefore, this impact is **potentially significant and unavoidable**.

Mitigation Measure 3.4-e: Halt Work Within 50 Feet of the Find, Notify the County Coroner and Most Likely Descendant, and Implement Appropriate Treatment of Remains

Mitigation Measure 3.8-e from the 2007 Landside EIR, which remains unchanged, is copied below.

SAFCA and its primary construction contractors shall ensure that the following measures are implemented to address the potential discovery of human remains during construction.

- ▶ If human remains are uncovered during ground-disturbing activities, all ground-disturbing activities shall cease within a 50-foot radius of the find, and SAFCA or its designated representative shall be notified. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-

disturbing activities, SAFCA and/or the contractor shall notify the county coroner of the county in which the remains are uncovered (Sutter or Sacramento) and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The NAHC will designate a Most Likely Descendant (MLD) to dispose of the remains with appropriate dignity.

- ▶ After a determination that the remains are of prehistoric Native American origin, SAFCA shall coordinate with the MLD for reburial of the remains and associated grave goods in an appropriate location. If the MLD fails to make a recommendation or reinter the remains, further treatment will conform to PRC Section 5097 et seq. and other appropriate authorities.
- ▶ The discovery of prehistoric burials often reveals locations sensitive for the occurrence of additional archaeological material. After the initial discovery and management of human remains, a professional archaeologist working on behalf of SAFCA shall record the site with the NAHC and the appropriate Information Center and, if possible, use project features to protect the site from future disturbance.

Even though measures would be implemented to avoid human remains or, if found, to dispose of the remains with appropriate dignity, future disturbance to additional archaeological material at the site could still occur after the initial discovery and management of human remains. Therefore, this potential impact would remain **significant and unavoidable** with implementation of mitigation.