

DRAFT PROGRAMMATIC AGREEMENT

APPENDIX C

LOWER CACHE CREEK FEASIBILITY STUDY

Yolo County, CA

December 2019

**United States Army Corps of Engineers
Sacramento District**





DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95814-2922

OCT 02 2019

Environmental Resources Branch

Subject: Continuing Section 106 Consultation for the Lower Cache Creek Feasibility Study in Yolo County, California regarding the Programmatic Agreement (COE020207A).

Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Dear Ms. Polanco:

The U.S. Army Corps of Engineers, Sacramento District (Corps) is writing you to continue consultation on the Cache Creek feasibility study (Study), Yolo County, California (COE020207A). The Corps is undertaking this Study under the Flood Control Act of 1962 (Public Law 87-874). The study has been ongoing since 1995, and a Tentatively Selected Plan (TSP), was identified in 2015 from a range of alternative plans. The TSP would improve existing levees and construct a new levee that would prevent floodwaters from Lower Cache Creek from entering the built-up area of the City of Woodland and town of Yolo. In accordance with Section 106 of the National Historic Preservation Act (NHPA), the Corps is requesting your comments on the draft Programmatic Agreement (PA) (Enclosure). The PA guides implementation of, and adherence to, the Section 106 process and defines the roles of the different project proponents (36 CFR § 800.14[b][3]).

On March 27, 2019, the Corps sent out consultation letters regarding the Area of Potential Effects (APE) and the development a PA for the Study. In a letter dated May 13, 2019, the SHPO concurred with the Corps delineation of the APE and agreed to participate in the development of a PA to guide the Corps section 106 compliance for the Study. On March 27, 2019, a letter was sent to the Advisory Council on Historic Preservation (ACHP) requesting their participation in the PA. The ACHP did not respond within 15 days with a decision regarding participation, but did request that the Corps file the final PA and related documentation with the ACHP at the conclusion of the consultation process. The filing of the PA and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the NHPA.

On April 23, 2019, the Corps received a letter from Yocha Dehe Wintun Nation (Yocha Dehe) requesting to initiate formal consultation and set up a meeting with the Corps. They also requested that the Corps provide their Cultural Resources Department with a project timeline, detailed project information and the latest feasibility study. The Corps responded by email on May 23, 2019, stating that project description and timelines were still being finalized. The Corps also provided Yocha Dehe with a map of the revised APE and asked if the Tribe had any knowledge of locations of archaeological sites, traditional cultural properties, or areas of traditional cultural value or concern in or near this project's APE. The Corps received a phone call from Yocha Dehe on September 12, 2019, requesting the latest revised APE map and will provide any known sites within the APE for the Corps identification efforts.

We respectfully request any written comments you may have on the draft PA within 30 days of receipt of this letter. Please send comments or questions to Robert Gudiño, Archaeologist, U.S. Army Corps of Engineers, Sacramento District, 1325 J St. Sacramento, CA, 95814-2922, or by phone at (916) 557-5104 and by email at Robert.Gudino@usace.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark T. Ziminske", followed by a long horizontal line extending to the right.

Mark T. Ziminske
Chief, Environmental Resources Branch

Enclosure

**PROGRAMMATIC AGREEMENT BETWEEN THE U.S. ARMY CORPS OF
ENGINEERS AND THE CALIFORNIA STATE HISTORIC PRESERVATION
OFFICER REGARDING THE LOWER CACHE CREEK FEASIBILITY
STUDY PROJECT, YOLO COUNTY, CALIFORNIA**

WHEREAS, the U.S. Army Corps of Engineers (Corps) has been conducting a study of flood protection systems on the Lower Cache Creek in the vicinity of Woodland and Yolo, in Yolo County, California in accordance with Section 209 of the Flood Control Act of 1962 (Public Law 87-874); and

WHEREAS, the purpose of the study was to determine if there is Federal interest in providing increased flood protection that is adaptable to future physical and environmental conditions and in implementing any necessary flood protection improvements in the study areas as soon as possible; and

WHEREAS, the study has identified a set of construction and management measures that when approved and implemented (the Project, described at **Attachment 1**), would provide sufficient flood protection meeting Federal requirements for taking part in the Project, such measures including modifications to existing levees and the Cache Creek Settling Basin; adding new levees, drainage features and gates; improving interior drainage; raising roadways and installing culverts; and addressing residual floodplain effects; and

WHEREAS, the Project area is along the Lower Cache Creek north and east of the city of Woodland, Yolo County, and maps of the Project's Area of Potential Effects (APE) are included as Attachment 1, Figure 1 to this Programmatic Agreement (Agreement); and

WHEREAS, the Corps is proceeding with the Project and has determined that the Project, when approved, will constitute an Undertaking as defined in the Advisory Council on Historic Preservation Procedures, 36 CFR § 800.16(y) and therefore is subject to Section 106 of the National Historic Preservation Act of 1966, 54 U.S.C. § 306108 (NHPA); and

WHEREAS, the Corps has determined that effects on properties that are either included in, or are eligible for inclusion in the National Register of Historic Places (NRHP) cannot be fully determined prior to final approval of the Project; and

WHEREAS, pursuant to 36 C.F.R. § 800.4(b) (2), the Corps may implement the Project in phases as funding is available and construction authority is provided and, as a result, efforts to identify and evaluate Historic Properties and the determination of effects pursuant to 36 C.F.R. § 800.14(b) (1) (ii); for all phases and segments of the Project may be deferred until more specific information for each project phase is known; and

WHEREAS, a determination of effect and, if necessary, an Historic Properties Treatment

Plan (HPTP), cannot be developed until after approval and execution of this Agreement because the specific project designs that may alter the levees and their appurtenances will not be developed until after the Project has been approved for design; and

WHEREAS, this Agreement will establish the processes the Corps will follow for compliance with 54 U.S.C. § 306108 (formerly 16 U.S.C. § 470f, referred to hereinafter as "Section 106"), taking into consideration the views of the Signatory and Concurring Parties; and

WHEREAS, a total of 10 recorded potentially historic resources are known to be present adjacent to or within levee footprints in a portion of the Project study area, and although archaeological inventories have been completed within parts of the Project study area through other projects, substantial portions of the Project study area have not been inventoried; and

WHEREAS, alluvial deposition, levees and other built environment features have obscured historic properties and a full assessment of archaeological sites cannot be made in advance of construction, and there is a high probability for buried potentially historic resources that may not be identified prior to construction and that also may be eligible for inclusion in the NRHP, and therefore this Agreement documents a framework for managing post-review discoveries per 36 C.F.R. § 800.13(a)(1) as necessary; and

WHEREAS, the Corps has consulted with the California State Historic Preservation Officer (SHPO) pursuant to Section 106 and the implementing regulations described under 36 CFR Part 800; and

WHEREAS, the Corps has consulted with the Yolo County Flood Control and Water Conservation District and the State of California Central Valley Flood Protection Board and has invited them to participate as Concurring Parties; and

WHEREAS, in accordance with 36 C.F.R. §§ 800.2(c)(2)(ii)(A), 800.3(t)(2), and 800.14(b)(2)(i), the Corps has consulted with and invited the Yocha Dehe Wintun Nation to be a Concurring Party to this agreement and will continue to consult with them on its implementation; and

WHEREAS, the Corps will make the terms and conditions of this Agreement part of the conditions of any contracts issued by the Corps for this Project; and

WHEREAS, in accordance with 36 C.F.R. § 800.14(b)(3), the Corps notified and invited the Advisory Council on Historic Preservation (ACHP) on April 4, 2019, per 36 C.F.R. § 800.6(a)(1)(C) to participate in consultation to resolve potential adverse effects of the Project, including development of this Agreement, and the ACHP has declined to participate in a letter dated June 14, 2019; and

WHEREAS, in accordance with 36 C.F.R. § 800.6(a)(4) and 36 C.F.R. § 800.14(b)(2)(ii), the Corps has notified the public of the Project and provided an opportunity for members of the public to comment during the National Environmental Policy Act (NEPA) public review (public review comment period ended on **DATE**) on the Project and the Section 106 process as outlined in this Agreement;

NOW, THEREFORE, the Signatories agree that the Undertaking will be implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties and to satisfy the Corps' Section 106 responsibilities for all individual aspects of the Undertaking.

The Corps will ensure that the following measures are carried out:

STIPULATIONS

I. REVIEW PROCEDURES AND TIME FRAMES

For all documents and deliverables produced in accordance with the stipulations of this Agreement, the Corps shall provide a draft document to the SHPO, Concurring Parties, and Native American interested parties and Tribes for review. Any written comments provided by the SHPO, Concurring Parties, and Native American interested parties and Tribes, within thirty (30) calendar days from the date of receipt, shall be considered in the revision of the document or deliverable. The Corps shall document and report the written comments received for the document or deliverable and how comments were addressed. The Corps shall provide a revised final document or deliverable to the SHPO for concurrence. The SHPO shall have fifteen (15) calendar days to respond. The Corps will also provide a revised final document or deliverable to Concurring Parties, and Native American interested parties and Tribes for their project record.

Failure of the SHPO, Concurring Parties, and Native American interested parties and Tribes to respond within the timeframes specified above shall not preclude Corps from moving to the next step in this Agreement.

If the SHPO offers a comment that is an object or initiates a dispute, the SHPO and the Corps shall proceed in accordance with **Stipulation XV** below. The timeframe to consult to resolve a disagreement or objection may be extended by mutual consent of the Corps and the SHPO.

II. QUALIFICATIONS

A. Professional Qualifications: All technical work required for historic preservation activities implemented pursuant to this Agreement will be carried out by or under the direct supervision of a person or persons meeting, at a minimum, the Secretary of Interior's Professional Qualifications Standards for archaeology, architectural history, or history, as appropriate (48 FR 44739). "Technical work" here means all efforts to inventory, evaluate, and perform subsequent treatment of potential Historic Properties that is required under this Agreement. This stipulation will not be construed to limit peer review, guidance, or editing of documents by SHPO and associated Project consultants.

B. Historic Preservation Standards: Historic preservation activities carried out pursuant to this Agreement will meet the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716-44740), as well as standards and guidelines for historic preservation activities established by the SHPO. The Corps will ensure that all reports prepared pursuant to this Agreement will be provided to the Signatories, Concurring Parties, and Native American interested parties and Tribes and are distributed in accordance with **Stipulation XIV**, and meet published standards of the California Office of Historic Preservation, specifically, Preservation Planning Bulletin Number 4(a), "Archaeological Resources Management Reports (ARMR): Recommended Contents and Format" (December 1989).

A. Archaeological Monitor Standards: The Archaeological Monitor must individually meet the Secretary of the Interior's Professional Qualifications Standards for Archaeology and additional qualifications as follows: A graduate degree in archaeology, anthropology, or closely related field plus:

1. At least one year of full-time professional archaeological experience;
2. At least four months of supervised field and analytic experience in general North American archaeology;
3. Demonstrated ability to carry research to completion;
4. Demonstrated ability to complete National Register of Historic Places (NRHP) evaluations for cultural resources;
5. Demonstrated ability to identify and assess subsurface and surface archaeological deposits

III. AREA OF POTENTIAL EFFECTS

An overall APE map for the Project is included as **Attachment 1**, Figure 2. Because the Project will occur in phases, each phase APE will be consulted on separately. Prior to activities under **Stipulation V**, the Corps will submit to the SHPO, Concurring Parties, and Native American interested parties and Tribes a map of the revised phase APE for the current phase and a description of the Project activities occurring for that phase, in accordance with **Stipulation I**. Revision of the APE will not necessitate modifications to this Agreement.

A. For purposes of this Agreement, the APE for each phase will include the levee segment and a corridor extending not less than 300 meters to either side of the centerline of the levee and will take into account the likelihood of direct and indirect effects to Historic Properties resulting from the Project.

B. The APE for each phase also will include:

1. The extent of all Project construction and excavation activity required to construct flood control facilities and to modify irrigation and drainage infrastructure; and
2. The additional right-of-way/easements obtained by the Corps as part of the Project's features; and
3. All areas used for excavation of borrow material and habitat creation (environmental mitigation); and
4. All construction staging areas, access routes, spoil areas, and stockpiling areas; and

C. After a revised APE has been defined and consulted on in accordance with **this stipulation**, construction or other Project activities may require revisions to the APE. If an APE is revised, the Corps will consult on each revision in accordance with **Stipulation I**, and the Corps will determine the potential for Project activities in a revised APE to affect potential Historic Properties, in accordance with **Stipulation V**.

IV. HISTORIC PROPERTIES MANAGEMENT PLANNING

A. Historic Property Management Plan: The Corps, in consultation with the SHPO, Concurring Parties, and Native American interested parties and Tribes, shall develop a Historic Property Management Plan (HPMP). HPMP requirements are listed in **Attachment 3**. The HPMP shall be appended to this Agreement (**Attachment 4**) and will form the basis for any Historic Property Treatment Plans (HPTPs) that may be required for one or more phases of the Project. The HPMP shall be developed after execution of the Agreement, but before construction commences. For the overall Project and individual phases, the HPMP shall be the means for the Corps to comply with 36 C.F.R. § 800.6 and provide standardized methods for dealing with unanticipated discoveries in accordance with 36 C.F.R. § 800.13(a).

B. Historic Property Treatment Plans: The Corps will consult the SHPO, pursuant to 36 C.F.R. § 800.5, when the Corps has determined that a Project activity will result in adverse effects to a Historic Property. The Corps will prepare a HPTP specific to the phase of the Project or a particular Historic Property to describe how the Corps intends to resolve adverse effects. HPTP requirements are listed in **Attachment 3**. The HPTP(s) may be appended to the HPMP.

1. **Historic Context, Recording, Evaluation and Treatment of Levees:** No known - NRHP-eligible levees are within the Project APE. Only the Cache Creek Levee has been recorded, but has yet to be evaluated for its eligibility for listing in the NRHP. However, no overall historic context, identification or evaluation of the levee system has been developed. In order to document the levees for evaluation, the Corps will develop an historic context

and evaluation plan for recording of the Lower Cache Creek levees as historic structures within the Project APE to support evaluation of Project effects. If an historic context and/or evaluation plan for the levees within a Project APE is subsequently developed, the Corps may incorporate it as needed. The Evaluation Plan shall consider the levees in the context of the entire Lower Cache Creek levee system. Additionally, the evaluation plan shall require the development of clear and specific criteria for determining: (1) recording guidelines for the levees within the APE; (2) contributing and non-contributing elements of the levee system; (3) thresholds of adverse effect; and (4) general planning for treatment of adverse effects. The evaluation plan shall be developed after execution of the Agreement and before construction commences. The Corps shall submit the evaluation plan for review, in accordance with **Stipulation I**.

2. Review: HPTPs will be submitted and reviewed in accordance with **Stipulation I**, except for those HPTPs developed for Historic Properties discovered during construction activities, which will follow the review timeframes identified in **Stipulation VIII**. Circulation of an HPTP will not include a recirculation of the HPMP.

3. Amendments/Addendums/Revisions: If an Historic Property type that is not covered by an existing HPTP is discovered within the APE subsequent to an initial inventory effort for a phase, or if there are previously unexpected effects to an Historic Property, and the Corps and SHPO agree that the Project may adversely affect the Historic Property, the Corps will submit an addendum to the HPTP or a new HPTP to the SHPO, Concurring Parties and Native American interested parties and Tribes for review and comment, and will follow the provisions of **Stipulation VIII**. The HPTP may cover multiple discoveries for the same property type.

4. Final Phase Report Documenting Implementation of the Historic Properties

Treatment Plan(s): Within one year after the completion of all work for each phase of the Project, the Corps will submit to the SHPO, Signatory Parties, Concurring Parties, and Native American interested parties and Tribes, a Final Phase Report documenting the results of all work prepared for that phase under the HPTPs, and the information learned from each of the Historic Properties.. The submittal of the Final Phase Report shall be in accordance with **Stipulation I**.

V. IDENTIFICATION AND EVALUATION BEFORE HPMP APPROVAL

Should the HPMP not be finalized at the time that a phase of the Project may be proceeding to design and construction, the Corps will comply with **Stipulation V A, B, and C** and, as necessary, **Stipulation VI** until the HPMP is finalized following the procedures in **Stipulation I**, at which time the Corps will follow the HPMP. The Corps will complete any identification and evaluation, and as necessary, any assessment of effects to Historic Properties prior to proceeding with construction and review will be in accordance with **Stipulation I**.

A. Identification of Potential Historic Properties: The Corps will initiate an inventory of Historic Properties within the APE, consistent with the Secretary of Interior's Standards and

Guidelines for Archeology and Historic Preservation (48 FR 44716-44740) for the Project, or for individual phases of the Project, as construction details become available.

1. The Corps will acquire a current and complete records and literature search from the Northwest California Information Center at Sonoma State University, prior to conducting archaeological surveys of the APE. Records and literature searches will be considered complete and current if they occurred five years or less prior to construction.
2. The Corps will maintain ongoing consultation with Native American Tribes and individuals, as described in **Stipulation XI**, to identify properties that are of religious and cultural significance to them and that may be eligible for the NRHP. Traditional Cultural Properties will be inventoried and evaluated in accordance with the guidance presented in *National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties* and consistent with the ACHP guidance documents *Native American Traditional Cultural Landscapes and the Section 106 Review Process: Questions and Answers* and *Native American Traditional Cultural Landscapes Action Plan*.
3. The Corps will complete and report the results of all required potential Historic Properties inventories of the Undertaking's APE in a manner consistent with the "Secretary of the Interior's Standards and Guidelines for Identification" (48 FR 44720-23) and take into account the National Park Service's publication, "The Archeological Survey: Methods and Uses" (1978: GPO stock #024-016-00091). Inventories will include archaeological surveys and inventories of historic buildings, structures, districts, and landscapes. The Corps will include a geoarchaeological investigation of the APE in its survey and will undertake subsurface reconnaissance as needed. Surveys will include areas not previously surveyed and those where the Corps, in consultation with SHPO, deems previous surveys to be inadequate, e.g. areas with changes in landscape due to fire, erosion, flooding episodes which may have exposed previously unknown potential Historic Properties. The Corps will also include additional areas that may be affected by changes in the project design, borrow areas, haul roads, staging areas, extra work space, mitigation sites, and other ancillary areas related to the Undertaking. If identified potential Historic Properties can be evaluated for the NRHP based on the results of survey, context statements, and historic documentation, then the Corps may request SHPO concurrence with those eligibility determinations without further study.
4. The Corps will include in its site recording documents all unrecorded archaeological sites, linear features, and isolates encountered in the course of the survey. The Corps will prepare updated records of previously recorded sites if there has not been an update in the past two years. The Corps' survey will record all prehistoric sites and all historical sites, structures, buildings, and engineering features greater than forty-five (45) years of age. Historic sites to be recorded will include, but not be limited to: commercial, residential, and ecclesiastical buildings, roads, trails, railways, bridges, levees, culverts, and agricultural features, including ditches.

5. The Corps will use the California Department of Parks and Recreation (DPR) Form 523 to record all newly discovered historic or prehistoric archaeological sites and isolates, previously recorded archaeological sites, and where necessary, will create updated site records using the DPR 523 Form. Isolates will be numbered sequentially, plotted on a map, and recorded on a single table within the report. The Corps will examine non-linear sites that extend outside of the APE in their entirety unless access to land is prohibited or the scale of the resource makes doing so prohibitive. In the event access cannot be gained, the Corps will consult with SHPO regarding appropriate means of evaluating a given site.

B. Property Types Exempt from Evaluation: Attachment 5 to this Agreement lists the property types that the Signatories agree will be exempt from evaluation as determined by the Corps in consultation with the SHPO. The Corps will evaluate all other identified properties in accordance with **Stipulation V C**.

C. Evaluation of Potential Historic Properties: The Corps, in consultation with SHPO, other parties to the Agreement, and Native American Tribes, as appropriate, will ensure that determinations of eligibility are made for all potential Historic Properties within Project APE (**Stipulation III**) Potential Historic Properties will be evaluated by a qualified professional, per **Stipulation II**, for their eligibility for listing in the NRHP consistent with the Secretary of Interior's Standards for Evaluation, 36 C.F.R. § 60.4. In accordance with **Stipulation I**, the Corps will submit a completed inventory and evaluation for each phase of Project work.

1. Eligibility Determination: After completing evaluations on Potential Historic Properties, if the Corps and the SHPO cannot agree on the eligibility of a property for the NRHP, the Corps will obtain a determination from the Secretary of the Interior in accordance with 36 CFR Part 63. The determination of the Secretary will be final for purposes of this Agreement. Any other disputes will be settled following the procedure set forth under **Stipulation XV**.

VI. ASSESSMENT OF EFFECTS

Avoidance of adverse effects to Historic Properties is the preferred treatment approach. The Corps will consider redesign of Project elements in order to avoid Historic Properties and Project effects that may be adverse. However, it may not be possible to redesign the Project in order to avoid adverse effects to Historic Properties.

The Corps will apply the criteria of adverse effect by project phase, pursuant to 36 C.F.R. § 800.5 (a)(1), to all Historic Properties within the APE. The Corps will submit findings of effects in accordance with **Stipulation I**.

If effects to Historic Properties are found to be adverse, the Corps will follow provisions at **Stipulation IV B**.

VII. NOTICES TO PROCEED WITH CONSTRUCTION

The Corps may issue Notices to Proceed for individual construction segments or phases, defined

by the Corps in its construction specifications, after an Historic Properties inventory including that segment has been completed (per **Stipulation IV** or **Stipulation V**), and before treatment of adverse effects on Historic Properties within the phase APE provided that:

- A.** The Corps has prepared a plan to respond to inadvertent archaeological discoveries for that phase of the Project, reviewed in accordance with the provisions **Stipulation I**, and approved by the SHPO; and
- B.** Project actions do not encroach within 30 meters (100 feet) of the known boundaries of any potential Historic Property as determined from archaeological site record forms, other documentation, or as otherwise defined in consultation with the SHPO, Concurring Parties, and Native American interested parties and Tribes, as appropriate; and
- C.** A monitor meeting the professional qualifications as described in **Stipulation II**, will be present when any new ground disturbance occurs. For the purpose of Archaeological Monitoring, new ground disturbing activities include clearing, grubbing, stripping, vegetation removal, levee degrade, cutoff wall excavation, utility relocation or installation work deeper than 6 inches into the soil, equipment and materials staging, site preparation, or other activities with potential to disturb soil beyond preconstruction conditions reasonably visible to archaeologists.

Multiple concurrent construction operations in discontinuous areas require one Archaeological Monitor present on-site at each active construction area. Any new ground disturbing activities are prohibited if an Archaeological Monitor(s) is not present.

VIII. GEOTECHNICAL INVESTIGATIONS

For the purposes of gathering engineering data for Project planning and design, it may be necessary for the Corps to conduct limited geotechnical investigations at areas within the Project before all inventory and evaluation of Historic Properties within the Project is completed.

A. The Corps may conduct geotechnical investigations (e.g., borings, potholing, or trenches) for planning and exploratory efforts. The Corps will follow **Stipulation VIII (A1)** and **(2)**, or may follow **Stipulation VIII (A) (3)** if unable to follow **Stipulation VIII (A1)** and **(2)**:

- 1.** A records and literature search and consultation with Native Americans has been conducted and there is a determination that no known potential Historic Properties are within 50 feet of the areas identified for geotechnical investigations, and an archaeological field survey of the areas identified for geotechnical investigations has been conducted and there is a determination that no known potential Historic Properties are present;
- 2.** A potential Historic Property is identified during the records and literature search or field survey and consultation process as being within an area where geotechnical investigation will occur, and the geotechnical investigation is relocated at least 50 feet outside the site boundaries; or
- 3.** Provisions for an archaeological monitor meeting the qualifications described in

Stipulation II C are included in the contract specifications for the geotechnical investigations. As appropriate, or when geotechnical activities may occur in sensitive areas, an archaeological monitor will be present for all ground disturbing activities.

- B.** If potential Historic Properties are discovered during geotechnical investigations, the Corps will follow **Stipulation IX**.
- C.** The Corps will prepare a Memorandum for Record (MFR) for each phase of geotechnical investigations. The MFR of documenting the results of the records and literature search, the archaeological field survey, any decisions to relocate geotechnical investigation areas, the determination for inclusion of an archaeological monitor for ground disturbing activities, and a record of communication with Native American interested parties and Tribes, as appropriate.

IX. DISCOVERY OF UNKNOWN POTENTIAL HISTORIC PROPERTIES

The Corps is responsible for complying with 36 C.F.R. § 800.13(a) in the event of inadvertent discoveries of potential Historic Properties at any time during implementation of the Project. The HPMP will provide compliance procedures for post review and inadvertent discoveries of potential Historic Properties. If the Corps authorizes work before the HPMP is finalized and there is a discovery of a previously unknown potential Historic Property, the Corps will follow 36 C.F.R. § 800.13(b). Additionally, the Corps will apply the following procedures:

A. Workforce Training: During implementation of Project activities, the Corps, or archaeologists meeting the professional qualifications as described in **Stipulation II**, will provide training to all construction personnel, before they begin work, regarding proper procedures and conduct in the event that archaeological materials are encountered during construction.

B. Human Remains: Treatment of human remains is governed by **Stipulation XII**.

X. CURATION

There are no Federal lands within the Project. The Project must acquire real estate rights from the underlying landowners sufficient to allow construction, including rights sufficient to manage potential Historic Properties that may be affected by construction, operation and maintenance of the project. The rights to be taken will not convey ownership of artifacts or other materials to the Federal government, but will provide for Federal custody of such artifacts and materials until analyses specified in planning documents called for in the stipulations of this Agreement are completed. Federal custody during that time will be in accordance with the provisions at 36 C.F.R. § 79. At the end of the studies, as agreed upon by consultation among the Parties to this Agreement, the Corps will relinquish custody of the artifacts and other materials to the owner.

The Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. § 3001 *et seq.*) does not apply to this Project as there is no Federal land but this Agreement incorporates by reference the definitions for "human remains" and "funerary objects" set forth in 43 C.F.R § 10.2(d), which will apply to actions under this Agreement. Further treatment of Human remains is addressed in **Stipulation XII**.

Although artifacts and other materials will not be Federal property, all original data and records concerning those items are Federal property and will be archived in accordance with 36 C.F.R. § 79 and other Federal regulations. To assure that the objectives of Federal preservation law may be met, copies of all information specific to a discrete collection of artifacts and other materials will be provided to an owner when Federal custody of the artifacts and other materials is extinguished. If a collection from a single site is relinquished among multiple owners, owners will be provided with only the information that pertains to their portion of the collection.

XI. TRIBAL INVOLVEMENT

A. In consultation with Native American interested parties and Tribes the Corps will make a reasonable and good-faith effort to identify historic properties of religious and cultural significance to Indian tribes. The Corps will ensure that consultation with Native American Tribes is initiated early with respect to the Project and continues throughout the Section 106 process.

B. In accordance with the guidance provided in National Register Bulletin 38 and Preservation Brief 36, the Corps will seek comments from all potentially interested Native American interested parties and Tribes in making determinations of NRHP eligibility for any Traditional Cultural Properties.

C. TCPs and Cultural Landscapes will be defined in accordance with Bulletin 38 and Preservation Brief 36, and in accordance with guidance in *Native American Traditional Cultural Landscapes and the Section 106 Review Process: Questions and Answers* and *Native American Traditional Cultural Landscapes Action Plan*. Review of documentation will be consistent with **Stipulation I**.

D. Pursuant to 36 C.F.R. § 800.6(c)(2)-(3), the Corps will consider requests by Native American Tribes to become Concurring Parties to this Agreement. In accordance with **Stipulation XV**, Concurring Parties to this Agreement will receive documents produced under this Agreement, as appropriate.

E. Native American Tribes may choose not to sign this Agreement as a Concurring Party. Native American Tribes and individuals not acting as Concurring Parties to the Agreement will be contacted when the Corps identifies potential interest in a specific phase or action of the project or is contacted by a Native American individual or Native American Tribe expressing interest in the Project. The Corps will make a good faith effort to identify any Native American organizations and individuals with interest in the proposed treatment of Historic Properties. The Corps will contact each identified organization and individual by mail, inviting them to consult about the specific treatment of Historic Properties. If interest from the contacted parties is received by the Corps, the Corps will proceed to consult in accordance with **Stipulation XI**. Further consultation may also be carried out through either letters of notification, public meetings, site visits, and/or other method requested by a Native American interested party and Tribe. Where consultation is carried out outside of the normal Section 106 process, the Corps will

clearly state to the Tribes that the NEPA process includes compliance with Section 106. Failure of any contacted group to comment within thirty (30) calendar days will not preclude the Corps from proceeding with the Project.

F. The Corps will make a reasonable and good-faith effort to ensure that Native American Tribes, acting as either Concurring Parties or those expressing interest in the project, will be invited to participate in the development and implementation of the terms of this Agreement, including, but not limited to, the identification and definition of the APE, identification of potential Historic Properties, determinations of eligibility, findings of effect, the resolution of adverse effect for those Historic Properties and consultation on confidentiality issues under **Stipulation XV**. Review periods will be consistent with **Stipulation I** except in situations involving unanticipated discoveries and treatment, which will follow the review schedules of **Stipulation IX**. The Corps will ensure that all interested Native American reviewers will receive copies of all final survey and evaluation reports

XII. TRIBAL CONSULTATION AND TREATMENT OF HUMAN REMAINS

There is no federally owned property within the designated APE, therefore NAGPRA would not apply. The CVFPB and landowner shall ensure that Native American human remains and grave goods encountered during the Undertaking that are located on state or private land are treated in accordance with the requirements in California State Health and Safety Code, Section 7050.5 and Public Resources Code 5097.98. If Native American human remains are encountered within the context of a National Register eligible archaeological site, a clear means of identifying those remains and grave goods will be described in the HPMP. Any procedures described in the HPTP regarding the handling or treatment of human remains will be coordinated with the landowner to ensure that they are consistent with Public Resources Code 5097.98. In the event that any Native American human remains or associated funerary items are identified, the Most Likely Descendant (MLD), as identified by the Native American Heritage Commission, shall be invited to advise the Yolo County Flood Control and Water Conservation and landowner in the treatment of any Native American human remains and items associated with Native American burials.

XIII. PUBLIC CONSULTATION AND PUBLIC NOTICE

A. Pursuant to 36 C.F.R. § 800.6(c) (2)-(3), the Corps will consider requests by interested parties to become Concurring Parties to this Agreement.

B. The Corps will invite the interested public to provide input on the identification, evaluation, and proposed treatment of Historic Properties. This may be carried out through either letters of notification, public meetings, and/or site visits. Where consultation is carried out outside of the normal Section 106 process, the Corps will clearly state to the public that the NEPA process includes compliance with Section 106. The Corps will ensure that any comments received from members of the public are taken under consideration and incorporated where appropriate. Review periods will be consistent with **Stipulation I**. In seeking input from the interested public, locations of Historic Properties will be handled in accordance with **Stipulation XV**. .

XIV. REPORTING AND CONFIDENTIALITY

The Corps will distribute technical reports and data pertaining to the inventory, evaluation, and treatment of effects on Historic Properties to SHPO, Concurring Parties to this Agreement, Native American Tribes, and other members of the public unless parties have indicated through consultation that they do not want to receive a report or data. Information regarding the nature and location of the archaeological sites and any other potential Historic Properties discussed in this Agreement will be kept confidential and limited to appropriate Corps personnel, Corps contractors, Native American tribes, the SHPO, and those parties involved in planning, reviewing and implementing this Agreement to the extent allowed by Section 304 of the NHPA (54 U.S.C. § 307103).

XV. DISPUTE RESOLUTION

Should any Signatory Party to this Agreement object in writing to any action proposed or carried out pursuant to this Agreement, the Corps will immediately notify the SHPO and the Concurring Parties of the objection, invite their participation, and proceed to consult with the objecting party for a period of time, not to exceed thirty (30) calendar days, to resolve the objection. If the objection is resolved through consultation, the Corps may authorize the disputed action to proceed in accordance with the terms of such resolution. If the Corps determines that the objection cannot be resolved, the Corps will notify Signatory and Concurring Parties and forward all documentation relevant to the dispute to the ACHP. Within forty-five calendar days after receipt of all pertinent documentation, the ACHP will either:

1. Advise the Corps that the ACHP concurs in the Corps' proposed response to the objection, whereupon the Corps will respond to the objection accordingly; or
2. Provide the Corps with recommendations, which the Corps will consider in reaching a final decision regarding the objection; or
3. Notify the Corps that the ACHP will comment in accordance with the requirements of Section 106 of the NHPA, and proceed to comment. Any ACHP comment provided in response will be considered by the Corps, pursuant to the requirements of Section 106 of the NHPA.

A. Should the ACHP not exercise one of the options under **Stipulation XV A** within forty-five (45) calendar days after receipt of all submitted pertinent documentation, the Corps' responsibilities under Section 106 of the NHPA are fulfilled upon implementation of the proposed response to the objection.

B. The Corps will consider any ACHP recommendation or comment and any comments from the SHPO to this Agreement provided in accordance with this stipulation with reference only to the subject of the objection; the Corps' responsibility to carry out all actions under this Agreement that are not the subjects of the objection will remain unchanged.

C. The Corps will provide the Signatories and Concurring Parties with a written copy of its final

decision regarding any objection addressed pursuant to **Stipulation XV A**.

D. At any time during implementation of the measures stipulated in this Agreement should an objection pertaining to the Agreement be raised by a Concurring Party, Native American Tribe, or a member of the public, the Corps will notify the Signatory and Concurring Parties and take the objection under consideration, consulting with the objecting party and, should the objecting party request, any of the Signatory and Concurring Parties to this Agreement, for no longer than fifteen (15) calendar days. The Corps will consider the objection, and in reaching its decision, will consider all comments provided by the other parties. Within fifteen (15) calendar days following closure of the comment period, the Corps will render a decision regarding the objection and respond to the objecting party. The Corps will promptly notify the other parties of its decision in writing, including a copy of the response to the objecting party. The Corps' decision regarding resolution of the objection will be final. Following issuance of its final decision, the Corps may authorize the action that was the subject of the dispute to proceed in accordance with the terms of that decision. The Corps' responsibility to carry out all other actions under this Agreement will remain unchanged.

XVI. NOTICES

A. All notices, demands, requests, consents, approvals or communications from all parties to this Agreement to other parties to this Agreement will be personally delivered, sent by United States Mail, or emailed. For communications sent by United States Mail, all parties will be considered in receipt of the materials five (5) calendar days after deposit in the United States mail, certified and postage prepaid, return receipt requested. For communications sent by electronic mail, all parties will be considered in receipt of the materials the day after sending.

B. Signatory and Concurring Parties agree to accept facsimiles or copies of signed documents and agree to rely upon such facsimiles or copies as if they bore original signatures.

XVII. AMENDMENT, REVIEW, TERMINATION AND DURATION

A. Amendment: Any Signatory Party to this Agreement may propose that the Agreement be amended, including but not limited to extending the duration of the Agreement, whereupon the Signatories will consult for 30 days to consider such amendment. The Agreement may be amended only upon written concurrence of all Signatories.

All attachments to this Agreement, and other instruments prepared pursuant to this agreement including, but not limited to, the Project's description, initial inventory report and maps of the APE, the HPMP, HPTPs, and monitoring and discovery plans, may be individually revised or updated through consultation consistent with **Stipulation I** and agreement in writing of the Signatories without requiring amendment of this Agreement, unless the Signatories through such consultation decide otherwise. In accordance with **Stipulations X and XII**, the Concurring Parties, interested Native American Tribes, and interested members of the public, will receive amendments to the Project's description, initial inventory report and maps of the APE, the HPMP,

HPTPs, and monitoring and discovery plans, as appropriate, and copies of any amendment(s) to the Agreement.

B. Termination: Only the Signatories may terminate this Agreement. If this Agreement is not amended as provided for in **Stipulation XVII A**, or if any Signatory proposes termination of this Agreement for other reasons, the Signatory proposing termination will notify the other Signatory in writing, explain the reasons for proposing termination, and consult with the other Signatory to seek alternatives to termination, within thirty (30) calendar days of the notification.

Should such consultation result in an agreement on an alternative to termination, the Signatories will proceed in accordance with that agreement.

Should such consultation fail, the Signatory proposing termination may terminate this Agreement by promptly notifying the other Signatory and Concurring Parties in writing.

Beginning with the date of termination, the Corps will ensure that until and unless a new agreement is executed for the actions covered by this Agreement, such undertakings will be reviewed individually in accordance with 36 C.F.R. § 800.4-800.6.

C. Duration: This Agreement will remain in effect for five (5) years from the date of execution unless amended in accordance with **Stipulation XVII**.

XVIII. ANNUAL REPORTING

At the end of every calendar year following the execution of this Agreement, the Corps shall provide all parties to this Agreement a summary report detailing work carried out pursuant to its terms, if any. Such report shall describe progress made implementing the terms of the Agreement as well as include any scheduling changes proposed, any problems encountered, and any disputes and objections received in the Corps' efforts to carry out the terms of this Agreement. Any Signatory party may request to meet with the other Signatories to discuss implementation of this Agreement.

XIX. EFFECTIVE DATE

This Agreement will take effect on the date that it has been fully executed by the Corps and the SHPO.

EXECUTION of this Agreement by the Corps and the SHPO, its transmittal to the ACHP, and subsequent implementation of its terms evidence that the Corps has afforded the ACHP an opportunity to comment on the undertaking and its effects on Historic Properties, that the Corps has taken into account the effects of the undertaking on Historic Properties, and that the Corps has satisfied its responsibilities under Section 106 of the NHPA and applicable implementing regulations for all aspects of the undertaking.

**PROGRAMMATIC AGREEMENT BETWEEN THE U.S. ARMY CORPS
OF ENGINEERS AND THE CALIFORNIA STATE HISTORIC
PRESERVATION OFFICER REGARDING THE LOWER CACHE
CREEK FEASIBILITY STUDY PROJECT, YOLO COUNTY,
CALIFORNIA**

SIGNATORIES TO THIS AGREEMENT:

U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT

BY: _____ DATE : _____
James J. Handura, Colonel, U.S. Army Corps of Engineers, District Commander

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

BY: _____ DATE: _____
Julianne Polanco, State Historic Preservation Officer

**PROGRAMMATIC AGREEMENT BETWEEN THE U.S. ARMY CORPS
OF ENGINEERS AND THE CALIFORNIA STATE HISTORIC
PRESERVATION OFFICER REGARDING THE LOWER CACHE
CREEK FEASIBILITY STUDY PROJECT, YOLO COUNTY,
CALIFORNIA**

CONCURRING PARTY:

THE CENTRAL VALLEY FLOOD PROTECTION BOARD

BY _____ DATE _____

DRAFT

**PROGRAMMATIC AGREEMENT BETWEEN THE U.S. ARMY CORPS
OF ENGINEERS AND THE CALIFORNIA STATE HISTORIC
PRESERVATION OFFICER REGARDING THE LOWER CACHE
CREEK FEASIBILITY STUDY PROJECT, YOLO COUNTY,
CALIFORNIA**

CONCURRING PARTY:

YOLO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

BY _____ DATE _____

DRAFT

**PROGRAMMATIC AGREEMENT BETWEEN THE U.S. ARMY CORPS
OF ENGINEERS AND THE CALIFORNIA STATE HISTORIC
PRESERVATION OFFICER REGARDING THE LOWER CACHE
CREEK FEASIBILITY STUDY PROJECT, YOLO COUNTY,
CALIFORNIA**

CONCURRING PARTY:

YOCHA DEHE WINTUN NATION

BY _____ DATE _____

DRAFT

ATTACHMENT 1

PROJECT DESCRIPTION: MEASURES AND AREAS

Introduction

This Programmatic Agreement (Agreement) is designed to support a Federal action as described in the following paragraphs, specifically an undertaking that has been formulated by a multi-year feasibility study as described below. When authorized and funded, the undertaking would modify flood control structures. The actions comprising the undertaking are described as of August 15, 2019.

Background

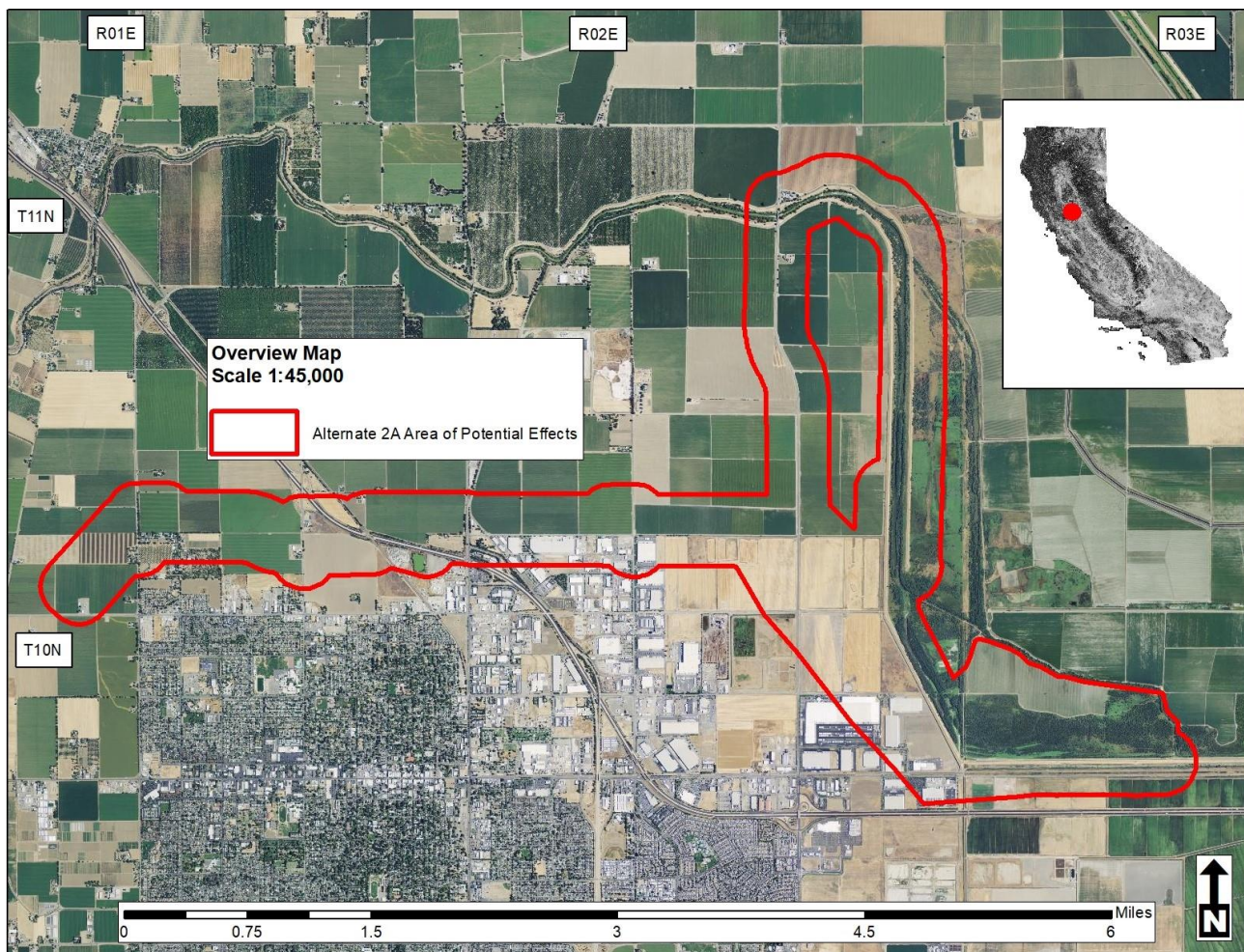
Cache Creek originates in Northern California's Coastal Range before flowing into the state's Central Valley and discharging into the Sacramento River. The creek meanders through highly productive farmland and passes just north of the City of Woodland (pop. 56,000) and south of the town of Yolo (pop. 450). An extensive flood risk management system exists in the study area, including 19 miles of levees along the banks of Lower Cache Creek; the Yolo Bypass, which routes water from the Sacramento River away from the City of Sacramento; the Cache Creek Settling Basin, built to prevent sediment from impacting the hydraulic capacity of the Yolo Bypass; the Colusa Basin Drain; and numerous other Federal and non-Federal levees.

Lower Cache Creek has a history of flooding. Four major flood periods have been documented for the Cache Creek basin during the last half of the 20th century, and 20 severe floods have occurred since 1900. The existing Lower Cache Creek levees were built as one part of a basin-wide flood protection system that was to include the construction of an upstream reservoir, Wilson Valley Dam. The dam, however, was not constructed due to seismic and sedimentation concerns. In the absence of the dam that would have provided upstream flood regulation, the existing levee system leaves the City of Woodland, town of Yolo, and surrounding areas at risk of flood. The flooding that results from the overtopping or upstream flanking of the levees poses a risk to human life and safety in the City of Woodland, town of Yolo, and surrounding areas. Flooding also poses significant risk of economic damage to property. Interstate 5, a major economic artery and an evacuation route, passes through the Lower Cache Creek floodplain near the City of Woodland.

Project Location

The project is located in Yolo County, California, on the Lower Cache Creek floodplain west of the Yolo Bypass. Parts of the project are in GLO-platted lands in Township 10 North (T10N), Range 1 East (R1E), Section 25; T10N, R2E, Sections 13, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 35, and 36; and T10N, R2E, Sections 30, 31 and 32, Mt. Diablo Meridian. However, most of the project is in land within the Rancho Rio Jesus Maria Mexican land grant area of 1843.

Figure 1. Area of Potential Effects, with Construction Element Footprints.



General

Alternative 2A consists, overall, of improving existing levees and constructing a new levee north of the city of Woodland (City) in order to protect the City from flooding emanating from Lower Cache Creek. The United States Army Corps of Engineers (USACE) determined the necessary height of the levee embankment north of the City and the capacity of the project features by modeling a range of flood flow magnitudes/return frequencies, and then estimating the cost and benefits for four incremental heights.

Modifications to Existing Levees / Cache Creek Settling Basin

Alternative 2A would rehabilitate a portion of the southern levee (Reach N) of the Cache Creek Settling Basin (CCSB) by constructing a 60-foot-deep cutoff wall through the levee (Figure 2) and the southwest levee (Reach O) of the CCSB by constructing a 45-foot-deep cutoff wall. Along with this cutoff wall installation, a 3,000-foot-long section of the west levee of the settling basin would be degraded to an elevation of 43 feet to accommodate a concrete weir with a height of approximately nine feet above existing adjacent grade (Figure 3). The weir would serve to accept floodwater emanating from Cache Creek west of the CCSB, and would prevent backflow from the CCSB to the west during smaller, more frequent flood events. Additionally, the southernmost 3,000-foot portion of the CCSB training levee would be degraded in order to improve the distribution of sediment within the basin before construction begins.¹ The existing outlet weir on the east side of the CCSB would remain unchanged. Please note that all elevations are given in the North American Vertical Datum of 1988 (NAVD 88).

New Levees and Other Proposed Project Features

A new levee with a 20-foot-wide crest and a 30-foot-wide landside seepage berm would begin near the intersection of County Road 20 and County Road 98 and extend east to the CCSB. The alignment of the levee would generally follow the northern city limit line west of State Route 113 (SR 113) and Churchill Downs Avenue east of SR 113. The height of the new levee would vary from six feet near County Road 98 to 14 feet at its intersection with the existing west levee of the CCSB. Rock slope protection is proposed on the waterside slope of the new levee from County Road 101 east to the southern end of the proposed inlet weir near County Road 20.

A trapezoidal drainage channel with a design capacity of approximately 350 cubic feet per second (cfs) would be constructed north (waterward) of the new levee in Reaches P through S in order to capture smaller, more frequent events and discharge them to the CCSB, and also to provide the necessary fill material for the project. This drainage channel may vary in width during subsequent design phases in order to create a balanced earthwork for the project.

A total of four closure structures (gates that are assembled by operations and maintenance (OandM) personnel prior to the flood) would be constructed where the embankment crosses the Union Pacific Railroad (UPRR) tracks near Interstate 5 (I-5), the UPRR tracks west of SR 113, SR 113, and the UPRR tracks east of SR 113. Due to the limited distance between the closure structures, short sections of floodwall would be constructed to connect the closure structure at the I-5 crossing to the existing roadway embankment and to connect the closure structures at the SR 113 crossing and the adjacent UPRR crossing to the west.

Internal Drainage

Water impounded by the proposed levee and the west levee of the CCSB would be drained via proposed culverts into the CCSB and to the City's interior drainage system. A detention basin would be located at the downstream end of the proposed drainage channel along Reach P. The detention basin would include an east outlet and a south outlet. The east outlet would provide for gravity drainage into the CCSB and consist of three 60-inch diameter culverts fitted with flap gates. This would allow gravity flow from the detention basin into the CCSB after stages subside below the weir elevation, with reverse flow from the CCSB into the detention basin being prevented by the flap gates. The south outlet would consist of a set of three 60-inch diameter culverts fitted with sluice gates. The culverts would discharge to an existing ditch that terminates at a pump station owned and operated by the City. The sluice gates would control the discharge flow to the pump station until capacity was available to discharge the flows to the Yolo Bypass. The design and operation of these systems has not been fully developed yet, and will be optimized during later phases of the project.

Roadway improvements

The new levee would require the raising of County Road 98, County Road 99, County Road 101, and County Road 102. Culverts would be installed at each of these raised crossings, as well as under SR 113 and the two UPRR crossings along the alignment. An existing railroad underpass at I-5 would be used to convey flood waters under the interstate. In order to prevent erosion due to high velocities in this area, those portions of the area found to have velocities of over five feet per second (fps) would be lined with concrete. This protection would be installed across the entire project footprint area where flood flows velocities exceed the five fps limit. This area includes the existing slopes of the I-5 roadway embankment, the slopes of the proposed Reach R and Reach S levees, the proposed channel (both bottom and slope), and the existing UPRR railway. See Figure 5 for a graphical representation of the approximate extents.

Summary of Improvements

Table 1 (below) summarizes the features and improvements discussed previously.

Table 1 – Project Feature Summary			
Feature	Improvement Description	Applicable Reaches	Quantity
New Levee	New Levee with Seepage Berm	Q (Partial), R, S	3.9 Miles
New Levee with RSP	New Levee with Seepage Berm and Rock Slope Protection	P, Q (Partial)	1.7 Miles
Improve Existing Levee	Improve existing levee with cutoff wall	N, O	2.3 Miles
Drainage Channel	New drainage channel and culverts. Also serves as borrow source for levee fill.	P, Q, R, S	5.6 Miles
Elevated Roadways	Elevate Roadway over levee at CR98, CR99, CR101, and CR102	P, Q, R, S	4
Gated Roadway Closure Structure	Gate at SR 113	Q, R	1
Gated Railroad Closure Structures	Gate for Railroad at I-5, West of SR 113, East of SR 113	Q, R, S	3
Cache Creek Settling Basin Inlet Weir	Concrete Inlet Weir	CCSB Inlet Weir	3,000 Feet
Degrade Training Levee	Degrade 3,000 feet of Existing Cache Creek Settling Basin Training Levee	Training Levee	3,000 Feet
Detention Basin and Outlets	New Detention Basin and Outlets	P	1
Improve Existing Drainage Ditch	Utilize Existing drainage ditch from Detention Basin to City of Woodland Pump Station.	O	1 Mile

Footprint / ROW Needs

A fee title will be obtained for areas beneath the physical project features (i.e. embankment, seepage berm, drainage channel, etc.) and for the area fifteen feet beyond the toe of waterside features and twenty feet beyond the toe of landside features. A summary of the land uses impacted by the proposed project footprint and easements is included on Table 2 below.

Table 2 – Estimated ROW Needs	
Land Use Type	Estimated Acreage
Agricultural	283.0
City's Jurisdiction	1.4
Agricultural/Residential Low Density	3.6
Agricultural/Residential Medium Density	18.1
Other Public / ROW / Roadway	12.9
Total	319.0

Existing trees and encroachments will be removed to the extent necessary to facilitate construction of the project and to support long-term operation and maintenance.

It may be the case that some trees and other encroachments are not removed from the rights-of-way. These encroachments will be addressed on a case-by-case basis during final design of the project.

Residual Floodplain

The preliminary analysis performed by MBK Engineers, Inc. (MBK) for Alternative 2A in 2016 demonstrated that this alternative is estimated to increase the depth of flooding north of the proposed levee, east of SR 113 by as much as 6.5 feet for the 1/100 or 1% annual chance exceedance (ACE) flood event, and will increase the depth of flooding west of SR 113 by as much as two feet. Additionally, this alternative increases the flood depth on approximately 14 structures during a 1% ACE flood event. It is noted that the duration of residual flooding was not evaluated for this option.

Attachment 2

Recorded Resources within the Area of Potential Effects

A records and literature search was conducted on September 5, 2019 at the Northwest Information Center at Sonoma State University. Ten resources were located within a quarter mile of the area of potential effects (APE). The Cache Creek Levee, site CA-YOL-246H, is located on the north bank of Cache Creek. The levee segment is 11.81 miles long and is named Unit 1 of "Unit No. 126" in the 1961 Supplemental O and M Manual. The levee is approximately 10 feet high, 12 feet wide at the crown, and about 50 feet wide at the base. Both the water and landside of the levee is covered in riparian vegetation. The levee was constructed prior to 1938 and later modified to bring it up to USACE Flood Control Levee specifications. It was incorporated into the USACE Sacramento River Flood Control Project in 1943.

Site P-57-000751 is the Dinsdale Ranch located at the southwestern end of the APE. The Dinsdale Ranch was owned by John Dinsdale and Sofi Wallace Dinsdale. It was built c.1890s and operated as a 160+ acre beet sugar field. The Dinsdale Ranch sold its crops to the Spreckles processing plant in Yolo County. The ranch included all of the NE¹/₄ of Sec. 35 and was sold in pieces beginning in 1978. The buyers included RC Collett and Carl Panatoni and Buzz Oats. RC Collett was a road construction firm, which used the ranch-proper for its office and equipment yard. The south side of the property, south of I-5, is part of the Bronze Star Retail Center, east of CR 102. Directly behind the Collett property are a motel and a fitness center. Directly across from the ranch was the grade for the Northern Electric RR, currently operating as the Sierra Northern RR (SERA). To the east of the Collett property is Mazda parts warehouse and the Walgreens Distribution Center, which was built over alkaline soil. The barn (still standing) and the home (razed c.late-1960s) were built in c.1890s.

Site P-57-000764 consists of the Woodland Racetrack, which is no longer in existence, was located on Kentucky Ave (previously named Racetrack Road). The entrance to the track was on the north side of then-Racetrack Road, at the intersection with College Street. When the racetrack closed and the SP tracks were relocated to East Street; the street was renamed Kentucky.

Site P-57-000847 consists of Adams Grain #1, a rice mill started c.1920s. It is located on the north side of the SERA RR tracks, bordering East Main Street at the northwest corner of CR 102.

Site P-57-000920 is the Pacific Rice Mill, a multi-dryer/silo facility, with both truck and train access. It is located just west of the California Northern RR tracks, at the northwest corner of Kentucky Avenue and North East Street.

Site P-57-000970 consists of the California-Pacific RR Route through Yolo County. The original route of the California-Pacific RR coursed through Yolo County, from Davisville (Davis) to Knight's Landing, with a spur running from Knight's Landing northeast to a currently defunct sugar beet farm. The tracks through Woodland were removed in 1872 and replaced on East Street, where they are currently owned and operated by the California-Northern RR.

Site P-57-000977 consists of the Central-Pacific RR Route thru Yolo County. The

original route of the Central-Pacific RR coursed through Yolo County, from Davisville (Davis) to Woodland, with a spur running to Knight's Landing and another spur running northeast to a currently defunct sugar-beet farm. The original tracks through Woodland were removed in 1872 and replaced on East Street, where they are currently owned and operated by the California-Northern RR, under a long-term lease with the Union Pacific RR. A second set of rails went northwest from near the intersection of current-day Kentucky Avenue (CR 20 back in the 1800s and Racecourse Avenue near the early 1900s); across Kentucky Avenue; then across present-day I-5 (built c.1974). The line travels on the northwest side of old Hwy. 99 west towards the Yolo/Colusa County Line, just north of Dunnigan, CA. The line passes through the towns of Yolo and Zamora.

Site P-57-000986 consists of a wooden 19th Century "A" frame barn. The barn has a center door, flanked by an additional door and the upper overhang once held a boom. An ad for a Yuba City (Sutter County) water well drilling company covers the loft door. The barn is located on the west side of CR-98; north of West Kentucky Avenue/CR-20.

Site P-57-001095 consists of the Aoki Farm Fields. George Aoki and his family have farmed these fields since the 1950s. George was born April 11, 1925 and passed away July 1, 2008. The fields are located west of CR 16 between West Kentucky Ave and West Main Street.

Site P-57-001272 consists of the Northern Electric Railway Route. The Northern Electric Railway started at the Woodland Depot, located on the southwest corner of the intersection of 2nd Street and Main Street in c.1912. It remained operational until Halloween 1940. The building remained vacant until c.1960 when it was razed. In 1986, local businessman and County Supervisor Tom Stallard rebuilt a replica depot using the original blueprints. The tracks were moved c.1960 to a point just east of East and Main Streets, where the tracks are still operational. The Northern Electric was replaced by the Sacramento Northern in 1940. Sacramento Northern continued to haul passengers and freight to Sacramento until c.1960. The line was sold to Western Pacific, then to Union Pacific. In 1991, the Yolo Shortline restarted freight serve to West Sacramento. They also started the Sacramento River Train. In 2012, the Yolo Shortline merged with the Sierra Railroad and was renamed the SERA. The line still travels approximately 16-miles from Woodland to West Sacramento, but on an as needed basis.

Because virtually none of the study area has been systematically examined for historic or prehistoric resources due to real estate constraints, and because many of the structures have not been evaluated for the NRHP, a this Programmatic Agreement stipulates the steps that would be taken to be in compliance with Section 106 of the NHPA and 36 CFR 800.

Attachment 3 Standards and Guidelines for Historic Property Management Planning Documents

A. Historic Property Management Plan

At a minimum, the HPMP or its supporting materials will contain the following:

- Documentation of the APE and its segments, and description of how APE segments were determined.
- A Research Design that provides an historic context for property evaluation for eligibility to the National Register of Historic Places (NRHP). The Research Design will define research domains or historic themes applicable to the area, define characteristics of property types associated with historic themes, identify data gaps, and identify data requirements to address important research questions. The Research Design will consider the needs of Historic Property Treatment Plans (HPTP) and Evaluation Plans (EP) and should be readily adaptable for use in those documents without extensive adaptation.
- A summary of significant past investigation and management activities, and a list of associated products.
- A list of known properties, with their NRHP eligibility status indicated.
- A list of potential property types.
- Information about historic property types present or likely to be present.
- Discussion of the nature and source of how the Project affects resources.
- Further actions needed to identify, evaluate, and manage historic properties. General long term priorities will be identified.
- A process for integrating investigations of Traditional Cultural Properties, Historic Properties of Religious and Cultural Significance to Indian Tribes, and Traditional Cultural Landscapes with the archaeological and historical site identification and evaluation activities.
- Inventory and evaluation strategies for all potential historic property types. If the timing is right, the HPMP may include actual Inventory and Evaluation Plans.
- Historic property management and treatment strategies that might be used, consistent with the treatment/recovery plan principles described below. If the timing is right, the HPMP may include actual HPTPs.
- A plan to address the requirements of **Stipulation IX**.
- A plan to address how emergency management actions (such as responses during floods and follow-on levee rehabilitation) within the Project will be managed during the life of the Project.
- A process to update records to reflect new data developed during the course of the

Project.

- Any Standard Protection Plans or measures that will be employed to ensure effects to historic properties are avoided or minimized.
- A process for determining when and how to conduct peer review of Project investigation reports or educational products.
- A process for public outreach and education.
- General standards for field work, analysis, reporting, and site treatment.
- For a version of the HPMP that will be reviewed and approved by Corps higher authority, a complete and detailed cost estimate with proper funding allocations for all of the compliance actions proposed, including a schedule for implementation.

B. Historic Property Treatment Plans

HPTPs will be consistent with the HPMP and may incorporate by reference historic contexts, methods, procedures, and research designs from the HPMP, as appropriate. When incorporating portions of the HPMP by reference, the HPTP will at a minimum include the date of the HPMP and where the HPMP is available to be viewed. HPTPs will address, at a minimum:

- The historic properties, portions of historic properties, or multiple properties where treatment will be implemented;
- Any historic properties or portions of historic properties that will be destroyed or altered without treatment;
- If the property or properties are eligible under criteria A-D, a mitigation plan other than data recovery may be considered. These may include, but are not limited to HABS/HAER recording, oral history, historic markers, exhibits, interpretive brochures or publications.
- The methods to be used for managing and disseminating data, including a schedule;
- The proposed disposition and archiving of materials and records from data recovery and other methods, in accordance with **Stipulation X**;
- Proposed methods for disseminating results of all treatment work to cultural resources professionals and separately to the interested public;
- Specifications (including content and number of copies) for publication of brochures, pamphlets, reports, or other products;
- Proposed methods by which interested Native American Tribes and individuals, local governments, and other interested persons will be kept informed about the

implementation of the HPTP and afforded an opportunity to comment;

- A proposed schedule for submission of progress reports to the Corps, SHPO, Concurring Parties, Native American Tribes, and the ACHP, consistent with the Agreement;
- Methods and procedures for the recovery, analysis, treatment, and disposition of human remains, associated grave goods, and objects of cultural patrimony that reflect any concerns and/or conditions identified as a result of consultations between the Corps, State agency and any affected Native American Group (see **Stipulation XII**);
- Qualifications of consultants employed to undertake the implementation of the HPTP, will meet, at minimum, those standards described in **Stipulation II**.

If the property or properties are eligible under criterion (D) and data recovery is selected, a Research Design must be prepared. Content would include, but not be limited to:

- A list and discussion of the property, or properties, or portions of properties where data recovery is to be carried out;
- A list and discussion of any property, or properties or portions of properties that will be destroyed with data recovery;
- The research questions to be addressed through data recovery, with an explanation of their relevance and importance;
- The field methods to be used, with an explanation of their relevance to the research questions;
- Identification of appropriate groups that may contribute to the analysis, such as Native American Tribes, other ethnic groups, or historic societies;
 - o
- Consistent with the "Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites" (ACHP, May 18, 1999) and 36 C.F.R. § 800.6(b)
- All other HPTP content required above.

Avoidance of adverse effects on historic properties is the preferred treatment approach. The HPTP will discuss and justify the chosen approaches to the treatment of project historic properties and those treatment options considered, but rejected. If preservation of part or all of any historic properties is proposed, the treatment plan will include discussion of the following:

- Description of the area or portions of the historic properties to be preserved in-place, and an explanation of why those areas or portions of sites were chosen;
- Explanation of how the historic properties will be preserved in-place, including both legal and physical mechanism for such preservation;
- A plan for monitoring and assessing the effectiveness of mechanisms to preserve

the historic properties; and

- A plan for minimizing or mitigating future adverse effects on the historic properties, if preservation in-place mechanisms prove to be ineffective.

C. Standard Protection Plan

A Standard Protection Plan will include (but not be limited to):

- A clear description of the class or classes of resources covered; and
- The specific actions that the Corps will take to avoid or address adverse effects to those resources.

D. Evaluation Plan

An Evaluation Plan will include (but not be limited to):

- A historic context and Research Design (addressing relevant topics identified in specification **B** preceding), if the elements of the Research Design provided in the HPMP are not sufficient;
- Discussion of the categories of potentially eligible historic properties to which the plan will apply;
- Methods and techniques that would be used to determine the boundaries and data potential of the site;
- For archaeological testing, discussion of the sampling intensity, and rationale for exceeding four (4) cubic meters of soil or five percent (5%) of the surface of the site, along with a request for SHPO concurrence;
- Discussion of disposition of artifacts and materials retained for the study, in accordance with **Stipulation X**; and
- Analysis and reporting requirements and schedules.

Attachment 4
Historic Property Management Plan

(to be attached)

DRAFT

Attachment 5

Property Types Exempt from Evaluation

This attachment defines categories of properties that do not warrant evaluation pursuant to **Stipulation V B** of this Agreement. Only individuals meeting the Secretary of the Interior's Professional Qualification Standards pursuant to **Stipulation II** of this agreement are authorized to determine whether properties meet the requirements of this attachment and are therefore exempt from evaluation and consultation with SHPO. Exempted properties may be documented, if documentation is warranted, at a level commensurate with the nature of the property (e.g., DPR 523 Primary Form, Location Map, memo). The Corps Cultural Resources staff will make any final determinations on level of documentation required under this agreement.

Exempt Property Type 1: Archaeological Property Types and Features

- Isolated prehistoric finds consisting of fewer than three items per 100 m²
- Isolated historic finds consisting of fewer than three artifacts per 100 m² (several fragments from a single glass bottle, and similar vessels are to be counted as one artifact)
- Refuse scatters less than 50 years old; this includes scatters containing no material that can be dated with certainty as older than 50 years old
- Features less than 50 years old (those known to be less than 50 years old through map research, inscribed dates, etc.)
- Isolated refuse dumps and scatters over 50 years old that lack specific associations
- Isolated mining prospect pits
- Placer mining features with no associated structural remains or archaeological deposits
- Foundations and mapped locations of buildings or structures more than 50 years old with few or no associated artifacts or ecofacts, and with no potential for subsurface archaeological deposits

Exempt Property Type 2: Minor, Ubiquitous, or Fragmentary Infrastructure Elements

The following list does not apply to properties 50 years old or older that have been determined eligible for the NRHP. The list does not apply to properties determined to be contributing elements of larger historic properties such as districts or cultural landscapes.

Water Conveyance and Control Features

- Natural bodies of water providing a water source, conveyance, or drainage
- Modified natural waterways
- Concrete-lined canals less than 50 years old and fragments of abandoned canals

- Roadside drainage ditches and secondary agricultural ditches
- Small drainage tunnels
- Flood storage basins
- Reservoirs and artificial ponds
- Levees and weirs
- Gates, valves, pumps, and other flow control devices
- Pipelines and associated control devices
- Water supply and waste disposal systems
- Rip-rap

Recent Transportation or Pedestrian Facilities

- Railroad grades converted to other uses, such as roads, levees, or bike paths
- Bus shelters and benches
- Vista points and rest stops
- Bike paths, off-road vehicle trails, equestrian trails, and hiking trails
- Parking lots and driveways

Highway and Roadside Features

- Isolated segments of bypassed or abandoned roads
- Retaining walls
- Highway fencing, sound walls, guard rails, and barriers
- Drains and culverts, excluding culverts assigned a Caltrans bridge number
- Cattle crossing guards
- Roadside landscaping and associated irrigation systems
- Signs and reflectors
- Telecommunications services, including towers, poles, dishes, antennas, boxes, lines, cables, transformers, and transmission facilities
- Utility services, including towers, poles, boxes, pipes, lines, cables, and transformers
- Oil and gas pipelines and associated control devices

Adjacent Features

- Fences, walls, gates, and gateposts

- Isolated rock walls and stone fences
- Telephone booths, call boxes, mailboxes, and newspaper receptacles
- Fire hydrants and alarms
- Markers, monuments, signs, and billboards
- Fragments of bypassed or demolished bridges
- Temporary roadside structures, such as seasonal vendors' stands
- Pastures, fields, crops, and orchards
- Corrals, animal pens, and dog runs
- Open space, including parks and recreational facilities
- Building and structure ruins and foundations less than 50 years old

Movable or Minor Objects

- Movable vehicles
- Stationary vehicles less than 50 years old or moved within the last 50 years
- Agricultural, industrial and commercial equipment and machinery
- Sculpture, statuary, and decorative elements less than 50 years old or moved within the last 50 years