

**Meeting of the Central Valley Flood Protection Board**

**August 22, 2014**

**Staff Report**

**Feather River Wildlife Area, Abbott Lake Unit**

**Abbott Lake Restoration Project**

**Sutter County**

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**1.0 – ITEM**

Hearing continued from the July 25, 2014 Board meeting to consider approval of Resolution No. 2014-25 and Draft Permit No. 18882.  
(Attachments B and C)

**2.0 – APPLICANT**

California Department of Fish and Wildlife (CDFW)

**3.0 – LOCATION**

The project is located within the Abbott Lake Unit of the Feather River Wildlife Area, approximately 7-miles south of Yuba City and 1.5-miles east from the intersection of Highway 99 and Obanion Road.  
(Feather River, Sutter County, See Attachment A)

**4.0 – PROJECT DESCRIPTION**

The applicant proposes to remove invasive vegetation from 96-acres and plant approximately 17,341 plants to include riparian shrubland, low shrubland, riparian woodland, and grassland, on 150-acres (South Field) of the 439-acre Abbott Lake Unit of the Feather River Wildlife Area on the right (west) overflow bank of the Feather River near River Mile 20.

**5.0 - AUTHORITY OF THE BOARD**

California Water Code § 8534, 8590 – 8610.5, and 8700 - 8710

## California Code of Regulations, Title 23 (Title 23)

- § 6, Need for a Permit
- § 13, Evidentiary Hearings
- § 112, Streams Regulated and Nonpermissible Work Periods
- § 131, Vegetation

### **6.0 – BACKGROUND**

This item was heard at the July 25, 2014 Board meeting. During the hearing, the applicant requested modifications to several conditions. The Board ultimately moved to continue the hearing to the August 22, 2014, meeting, and directed the Executive Officer and Counsel to work with stakeholders and staff to address concerns raised at the hearing.

Following the July 25<sup>th</sup> Board meeting staff, the applicant, representatives of LD1, and staff from the Department of Water Resources met, engaged in further discussion, and ultimately came to a consensus on the permit conditions. The draft permit attached is the result of this extensive negotiation and represents all the parties' best efforts to reach an agreement.

### **7.0 – PROJECT ANALYSIS**

The full project description was provided in the July 25, 2014 staff report (See Attachment I). A key feature of the project was the applicant's assurances that the applicant, or its designee, would plant and maintain the site for the first 3-years. After the initial establishment period however, the applicant was not able to provide adequate assurances that it would maintain the site in perpetuity. Title 23, Section 131 - Vegetation, provides that "Suitable vegetation, if properly maintained, is permitted within an adopted plan of flood control". It is staff's position that the VMP does not provide enough detail on how the site will be properly maintained to ensure that the site does not create an obstruction to flood flows. Special conditions 22, 25, 28, 29, 31, and 37 contained in the permit will ensure that the project is properly maintained.

## **7.1 – Hydraulic Analysis**

The full hydraulic analysis was provided in the July 25, 2014 staff report (See Attachment I).

## **7.2 – Geotechnical Analysis**

The proposed project does not involve any grading or structures so a geotechnical analysis was not required.

## **8.0 – AGENCY COMMENTS AND ENDORSEMENTS**

The comments and endorsements associated with this project from all pertinent agencies are shown below:

- The Department of Water Resources Flood Maintenance Office (FMO)/Sutter Maintenance Yard have endorsed the project with conditions (See Attachment E). Special Conditions 22 and 25 of the permit address the conditions from DWR's Sutter Maintenance Yard.
- LD-1 has endorsed the project with conditions (See Attachment F). Special Conditions 13, 14, 15, 16, 21, 23, 25, 26, 27, 28, 32, 33, 34, and 39 of the permit address the conditions from Levee District No. 1 of Sutter County.
- The U.S. Army Corps of Engineers 208.10 comment letter has been received for this application. The USACE District Engineer has no objection to the project, subject to conditions (See Attachment G). Special Conditions 19, 22, 23, 26, 27, 28, and 31 of the permit address the conditions from the USACE with the exception of item "d" of their letter which has been added to the permit.

## **9.0 – CEQA ANALYSIS**

The CEQA findings are unchanged from the July 25<sup>th</sup> staff report.

**10.0 – SECTION 8610.5 CONSIDERATIONS**

The Section 8610.5 Considerations are unchanged from the July 25<sup>th</sup> staff report.

**11.0 – STAFF RECOMMENDATION**

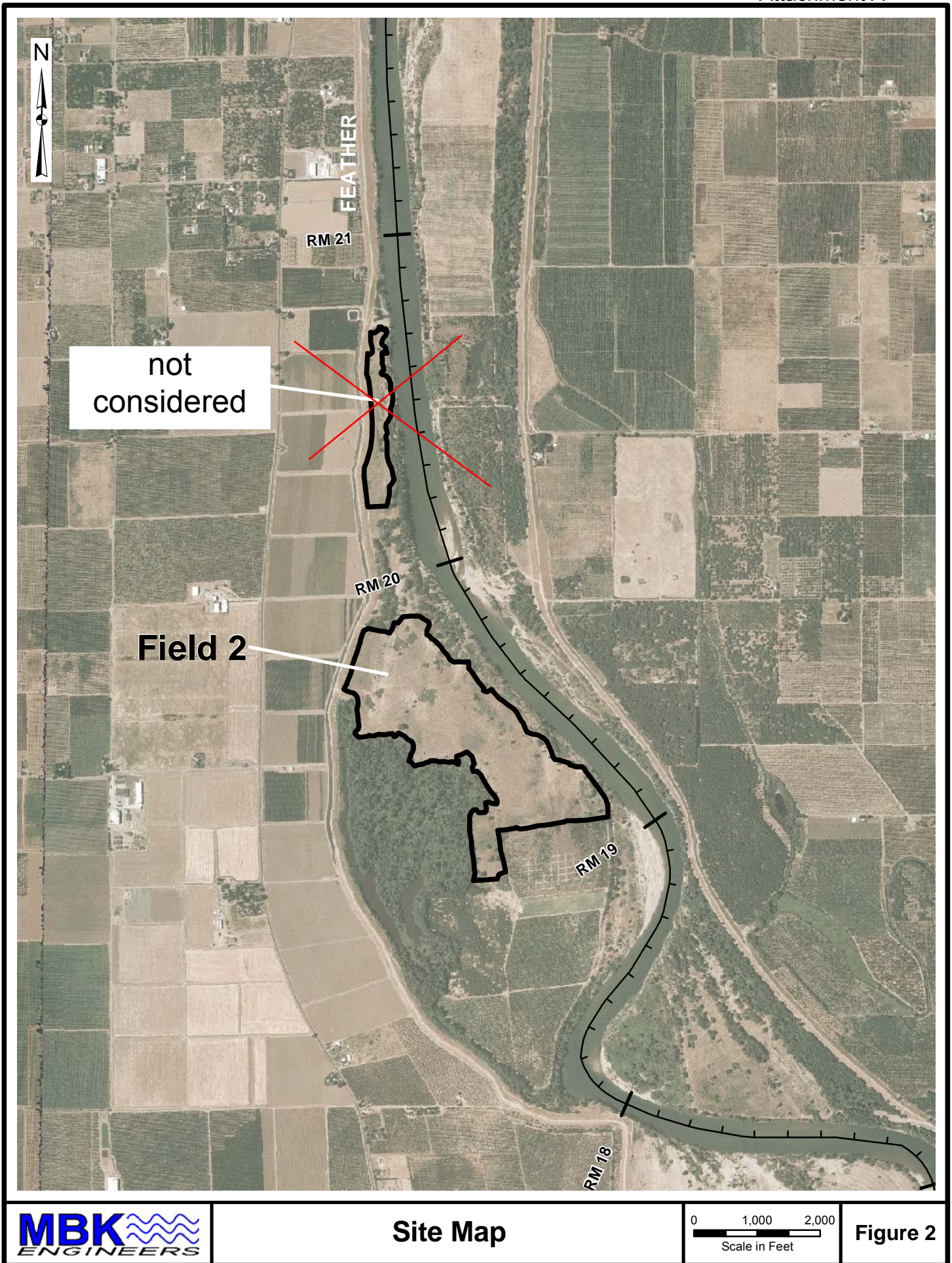
Staff recommends that the Board adopt Resolution No. 2014-25, which constitutes the written findings and decisions in the matter of Permit No. 18882. The resolution contains the CEQA findings; Findings of Fact; and approval of Permit No. 18882; and directs the Executive Officer to take the necessary actions to prepare and execute the permit and related documents and to file a Notice of Determination with the State Clearinghouse.

**12.0 – LIST OF ATTACHMENTS**

- A. Location Maps and Photos
- B. Draft Resolution No. 2014-25
- C. Draft Permit No. 18882
- D. CDFW requests to modify permit conditions as presented at the July 25, 2014 Board meeting and as received from CDFW on August 7, 2014.
- E. DWR/FMO's endorsement conditions
- F. LD-1's endorsement conditions
- G. U.S. Army Corps of Engineers conditions
- H. Safe Harbor Agreement
- I. July 25, 2014 Staff Report

Design Review:	Gary W. Lemon P.E.
Environmental Review:	Andrea Buckley
Document Review:	Mitra Emami P.E.; Len Marino P.E., Chief Engineer; Leslie Gallagher, Chief Counsel





STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
CENTRAL VALLEY FLOOD PROTECTION BOARD  
**Draft** RESOLUTION NO. 2014-25  
FINDINGS AND DECISION AUTHORIZING ISSUANCE OF  
ENCROACHMENT PERMIT NO. 18882  
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

**WHEREAS**, the California Department of Fish and Wildlife (CDFW) proposes to plant native vegetation on approximately 150 acres of the right (west) bank overflow area of the Feather River; and

**WHEREAS**, the CDFW submitted Application No. 18882 to the Central Valley Flood Protection Board on August 28, 2013. The application proposes the planting of trees, shrubs, and native grasses to increase and improve wildlife habitat. The project area will be planted to woodland areas, low shrubland areas and grassland areas. The project will be identified as the Abbott Lake Restoration Area of the Feather River Wildlife Area (Abbott Lake Unit); and

**WHEREAS**, the Abbott Lake Unit provides improved wildlife habitat for recreation, upland game hunting and scenic views; and

**WHEREAS**, the Central Valley Flood Protection Board conducted a hearing on July 25, 2014 whereby the Board reviewed the application, the Report of its staff, the documents and correspondence in its file; and

**WHEREAS**, the Central Valley Flood Protection Board found the conditions in the draft permit to be redundant and confusing with the conditions submitted by Levee District No. 1 of Sutter County, DWR's Sutter Maintenance Yard, and the U.S. Army Corps of Engineers that were attached the draft permit as exhibits; and

**WHEREAS**, the Central Valley Flood Protection Board delayed acting on Application No.18882 and advised staff that as a policy matter, the Board preferred to incorporate all of the relevant conditions of approval into a single document to be considered by the Board at the August 22, 2014 Board Meeting; and

**WHEREAS**, California Department of Fish and Wildlife, as lead agency under the California Environmental Quality Act, Public Resources Code sections 21000 *et seq.* ("CEQA") prepared an Initial Study, Mitigated Negative Declaration (IS/MND) (State Clearinghouse No.: 2013082005, August 2013) and Mitigation Monitoring and Reporting Plan (MMRP) on the Abbott Lake Restoration Project (incorporated herein by reference and available at the Central Valley Flood Protection Board offices or CDFW office); and

**WHEREAS**, CDFW, as lead agency, certified the IS/MND, adopted mitigation measures and a MMRP (incorporated herein by reference and available at the Central Valley Flood Protection Board or at CDFW), approved findings pursuant to CEQA and the CEQA

Guidelines (incorporated herein by reference); and filed a Notice of Determination with the State Clearinghouse on December 17, 2013 approving the Project; and

**WHEREAS**, the Sacramento and San Joaquin Drainage District & Levee District No. 1 of Sutter County holds a clearing easement for the purpose of promoting the free flow of overflow water on 474-acres of the project site; and

**WHEREAS**, the approved Project Plans for Construction of Abbott Lake Restoration Project Feather River Wildlife Area" dated July 18, 2014 is attached to the Permit as Exhibit A; and

**WHEREAS**, the adopted design water surface elevation for the Feather River West Levee Project for the 1-in-200 event shall not be exceeded by the Abbott Lake Restoration Project - Design Water Surface Profiles for the Feather River West Levee Project - Addendum #2, dated December 27, 2013 are attached to the permit as Exhibit B; and

**WHEREAS**, the Vegetation Maintenance Plan (VMP) submitted by CDFW for maintaining the channel is attached to the Permit as Exhibit C; and

**WHEREAS**, the CDFW shall schedule yearly meetings with DWR's Sutter Maintenance Yard and Levee District No. 1 of Sutter County by December 1<sup>st</sup> of each year following the 3-year establishment period to discuss site conditions ; and

**WHEREAS**, CDFW will remove woody vegetation from within the designated grassland areas, within the 60-foot levee buffer zone, and from within the 100-foot hedgerow spacing when determined necessary by the Department of Water Resource's Sutter Maintenance Yard to ensure optimal flood flow conveyance; and

**WHEREAS**, the CDFW will remove all elderberry plants (*Sambucus* species) from the 60-foot levee buffer zone prior to the stems reaching 1 inch in diameter at ground level; and

**WHEREAS**, Levee District No. 1 of Sutter County endorsed the project on August 12, 2013 with conditions that are covered by conditions in the permit; and

**WHEREAS**, the Department of Water Resources' Sutter Maintenance Yard endorsed the project on December 17, 2013 with conditions that are covered by conditions in the permit; and

**WHEREAS**, the U.S. Army Corps of Engineers (USACE) comment letter was received on July 17, 2014 without objection to the proposed project subject to conditions, with all but one being covered by existing permit conditions and the remaining condition being listed in Condition 40 of the permit; and

NOW, THEREFORE, BE IT RESOLVED THAT,

**Findings of Fact.**

1. The Central Valley Flood Protection Board hereby adopts as findings the facts set forth in the Staff Report unless amended by RESOLUTION No. 2014-25.
2. The Board has reviewed the Attachments listed in the July 25, 2014 Staff Report and the August 22, 2014 Staff Report.

**CEQA Findings**

3. The Central Valley Flood Protection Board, as a responsible agency, has independently reviewed the analysis in the IS/MND, MMRP, and the findings prepared by the lead agency, CDFW, and has reached its own conclusions.
4. The Central Valley Flood Protection Board, after consideration of the IS/MND, MMRP, and CDFW findings, adopts the project description, analysis and findings which are relevant to activities authorized by issuance of Encroachment Permit No. 18882 for the Abbott Lake Restoration Project.
5. **Custodian of Record.** The custodian of the CEQA record for the Board is its Acting Executive Officer, Leslie Gallagher, at the Central Valley Flood Protection Board Offices at 3310 El Camino Avenue, Room 151, Sacramento, California 95821.

**Findings pursuant to Water Code section 8610.5**

6. **Evidence Admitted into the Record.** The Board has considered all the evidence presented in this matter, including the original and updated applications, past and present Staff Reports and attachments and the Corps of Engineers recommendations. The Board has also considered all letters and other correspondence received by the Board and in the Board's files related to this matter.
7. **Best Available Science.** In making its findings, the Board has used the best available science relating to the issues presented by all parties.
8. **Effects on State Plan of Flood Control.** This project has no effects on the State Plan of Flood Control as the hydraulic impacts due to the proposed project are considered to be insignificant and it includes conservation habitat for the Abbott Lake Unit.

**Other Findings/Conclusions regarding Issuance of the Permit.**

9. This resolution shall constitute the written decision of the Central Valley Flood Protection Board in the matter of Permit No. 18882.

**Approval of Revised Final Encroachment Permit No. 18882**

10. Based on the foregoing, the Central Valley Flood Protection Board hereby adopts and approves, in substantially the form provided:

- The CEQA findings;
- Resolution No. 2014-25; and
- Permit No. 18882.

11. The Board directs the Executive Officer to take the necessary actions to prepare and execute the permit and related documents and to prepare and file a Notice of Determination pursuant to CEQA and to approve the permit for the CDFW, Abbott Lake Unit Project.

PASSED AND ADOPTED by vote of the Board on \_\_\_\_\_, 2014

\_\_\_\_\_  
William H. Edgar  
President

\_\_\_\_\_  
Jane Dolan  
Secretary

**DRAFT**

STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
**THE CENTRAL VALLEY FLOOD PROTECTION BOARD**

**PERMIT NO. 18882 BD**

**This Permit is issued to:**

California Department of Fish and Wildlife  
1701 Nimbus Road  
Rancho Cordova, California 95670

To remove invasive vegetation from 96-acres and plant approximately 17,341 plants to include shrubland, riparian woodland, and grassland, on 150-acres (South Field) of the 439-acre Abbott Lake Unit of the Feather River Wildlife Area on the right (west) overflow bank of the Feather River near River Mile 20. The project is located approximately 7-miles south of Yuba City and 1.5-miles east from the intersection of Highway 99 and Obanion Road (Section 26 & 35, T14N, R3E, MDB&M, Levee District 1 Sutter, Feather River, Sutter County).

Endorsements: Levee District No.1 of Sutter County – August 12, 2013  
DWR's Sutter Maintenance Yard – December 17, 2013  
U.S. Army Corps of Engineers – July 17, 2014

**NOTE:** Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

**(SEAL)**

Dated: \_\_\_\_\_

\_\_\_\_\_  
Executive Officer

**GENERAL CONDITIONS:**

**ONE:** This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

**TWO:** Only work described in the subject application is authorized hereby.

**THREE:** This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

**FOUR:** The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

**FIVE:** Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

**SIX:** This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

**SEVEN:** It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

**EIGHT:** This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

**NINE:** The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

**TEN:** The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

**ELEVEN:** The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

**TWELVE:** Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

#### **SPECIAL CONDITIONS FOR PERMIT NO. 18882 BD**

**THIRTEEN:** All work approved by this permit shall be in accordance with the submitted "Project Plans for Construction of Abbott Lake Restoration Project Feather River Wildlife Area" dated July 18, 2014 and accepted by Levee District No.1 of Sutter County on July 22, 2014, except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board. The document is attached to this permit as Exhibit A.

**FOURTEEN:** The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board, Levee District No.1 of Sutter County, and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

**FIFTEEN:** The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board, Levee District No.1 of Sutter County, and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

**SIXTEEN:** The Central Valley Flood Protection Board, Department of Water Resources, and Levee District No.1 of Sutter County shall not be held liable for any damages to the permitted

encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

SEVENTEEN: The Abbott Lake Restoration Project shall be subordinate to the purpose of the Sacramento River Flood Control Project and to the flowage easements held by the Sacramento and San Joaquin Drainage District (i.e. The Central Valley Flood Protection Board) and Levee District No.1 of Sutter County.

EIGHTEEN: Upon receipt of a signed copy of the issued permit the permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

NINETEEN: No construction work of any kind shall be done during the flood season from November 1st to April 15th without prior approval of the Central Valley Flood Protection Board.

TWENTY: No material stockpiles, temporary buildings, or equipment shall remain in the floodway during the flood season from November 1st to April 15th.

TWENTY-ONE: The permittee shall be responsible for repair of any damages to the project levee and other flood control facilities due to construction, operation, or maintenance of the proposed project.

TWENTY-TWO: Cleared trees and brush (or prunings therefrom) shall be burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1st to April 15th.

TWENTY-THREE: Trees shall not be planted within 100-feet of the levee toe.

TWENTY-FOUR: The irrigation system shall be removed from the floodway upon completion of the three year establishment period.

TWENTY-FIVE: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources or any other agency responsible for maintenance.

TWENTY-SIX: The project shall not increase the adopted 1-in-200 design water surface elevation of the Feather River West Levee Project along the west bank of the Feather River as documented in the Technical Memorandum titled - Design Water Surface Profiles for the Feather River West Levee Project - Addendum #2, dated December 27, 2013, which is attached to this permit as Exhibit B

TWENTY-SEVEN: The submitted Vegetation Maintenance Plan shall be attached to this permit as Exhibit C and shall be a fully enforceable condition of this permit. Any material changes to the plan after the date of issuance of this permit, shall be submitted to the Central Valley Flood Protection Board for approval.

TWENTY-EIGHT: The permittee shall remove all new woody vegetation from within the designated grassland areas, within the 60-foot levee buffer zone, and from within the 100-foot hedgerow spacing for the low shrub community when reasonably determined as necessary by the Department of Water Resources' Sutter Maintenance Yard or Levee District No.1 of Sutter County to ensure optimal flood

flow conveyance.

TWENTY-NINE: The permittee shall remove all new elderberry plant growth (*Sambucus* species) from the 60-foot levee buffer zone prior to stems reaching one (1) inch in diameter at ground level. Prior to initial construction activities, the permittee shall provide a survey of the existing elderberry plants located within the 60-foot levee buffer zone, if any.

THIRTY: Areas where plantings are lost to erosion shall not be replanted.

THIRTY-ONE: After each period of high water, debris that accumulates at the site shall be removed from the floodway when reasonably determined as necessary by the Department of Water Resources' Sutter Maintenance Yard or Levee District No.1 of Sutter County.

THIRTY-TWO: The permittee shall restore the project site to the initial as-constructed approved project conditions if the Central Valley Flood Protection Board determines that the project is having a negative impact on flood conveyance and/or flood capacities in the Feather River.

THIRTY-THREE: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

THIRTY-FOUR: If the project land is to be sold the transfer of interest shall not occur without written approval from the Central Valley Flood Protection Board.

THIRTY-FIVE: The permittee will be responsible for securing any necessary permits incidental to habitat manipulation and restoration work completed in the flood control project, and will provide any biological surveying, monitoring, and reporting needed to satisfy those permits.

THIRTY-SIX: The permittee agrees to incur all costs associated with acquiring any local, state, or federal permitting that may be necessary to resolve conflicts that may occur between the conditions contained in this permit and any of the terms and conditions that these agencies might impose under the laws and regulations they administer and enforce.

THIRTY-SEVEN: The permittee shall schedule yearly meetings with DWR's Sutter Maintenance Yard and Levee District No.1 of Sutter County by December 1<sup>st</sup> of each year, following the three (3) year establishment period, to discuss site conditions. Monitoring and maintenance reports for Abbott Lake shall be provided at this meeting. Electronic copies of the reports shall be sent to the Central Valley Flood Protection Board.

THIRTY-EIGHT: Levee District No. 1 of Sutter County shall be notified five (5) working days prior to the commencement of initial construction activities.

THIRTY-NINE: Upon completion of the project, the permittee shall submit a final planting plan to: Department of Water Resources, Flood Project Inspection Section, 3310 El Camino Avenue, Suite 256, Sacramento, California 95821.

FORTY: The permittee shall comply with the following condition set forth by the U.S. Army Corps of Engineers that is not covered by the previous conditions:

- That the sponsor shall ensure an effective rodent control program is in place.

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**CDFW Suggested Changes to Draft Permit No. 18882**

**Condition 22:** Cleared trees and brush (or prunings therefrom) shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1st to April 15th.

**Suggested change from meeting transcripts:** And what we would like it to say, it reads that "Cleared trees brush (or prunings therefrom) shall be completely burned or removed from the floodway...". In that sentence right after the, "(or prunings therefrom)", we would like to add, "...that can be reasonably expected to impact conveyance". So for number 22, we'd like the Board to consider that it say, "Cleared trees and brush(or prunings therefrom) that can reasonably be expected to impact conveyance shall be completely burned or removed from the floodway...".

**Suggested change from cross-out document:**

TWENTY-TWO: Cleared trees and brush (or prunings therefrom)<sup>that are expected to impact conveyance</sup> shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1st to April 15th.  
c22: modify condition to include above language

**Staff Response:** Per Title 23, Section 131, items b, c, g(4), h(2) and h(3) removal of debris from the floodway is required to prevent a possible obstruction of the floodway. Accumulated debris within a floodway can diminish the floodway capacity, increase floodflow stages and velocities, and misdirect floodflows against channel banks or levees. It is recommended that Condition No. 22 remain as written.

**Condition 28:** The permitte shall remove all woody species greater than three (3) inches in diameter from the designated grassland areas, from the 60-foot levee buffer zone, and from the 100-foot hedgerow spacing for the low shrub community.

**Suggested change from meeting transcripts:** We asked that that's removed, because in the management plan, as Gary mentioned, we say that anytime we see this kind of growth or it doesn't even have to be us, if the Sutter Yard or LD 1 sees it, that will trigger consultation. And then we'll use the best science available to determine if that's actually an impact that can be demonstrates, if there's really an issue there. And if so, we'll take the responsibility of modifying that potential impact. But to just go out and be on the hook for any three inch

diameter woody material throughout the whole 150 acres would be overburdensome for us. So we ask that 28 be removed for those reasons.

**Suggested change from cross-out document:**

~~TWENTY EIGHT: The permittee shall remove all woody species greater than three (3) inches in diameter from the designated grassland areas, from the 60-foot levee buffer zone, and from the 100-foot hedgerow spacing for the low shrub community.~~  
 c28: covered by veg maintenance plan - remove condition

**Staff Response:** The proposed restoration project was designed and modeled with open areas to enhance floodwater conveyance. Removal of woody vegetation from these open areas will ensure that the project will function as designed. Waiting until a hydraulic impact can be demonstrated places the burden of proof on the maintaining agencies. Staff recommends that the condition remain as written with exception to the greater than 3-inches in diameter designation which has been increased to greater than 4-inches in diameter to conform with ...

**Condition 29:** The permittee shall remove all elderberry plants (*Sambucus* species) from the 60- foot levee buffer zone prior to the stems reaching one (1) inch in diameter at ground level.

**Suggested change from meeting transcripts:** We ask that that be removed as well. That's talking about elderberry plants removed from the buffer zone. And we ask that that's removed for a few reasons. The main one being that we have a safe harbor agreement with the federal government for elderberries out here at this area, that includes the Department of Water Resources, our local area partners, right next to us. So what that means is if we have spillover, we have the ability to remove elderberries if it's needed and maintain a baseline level. And the baseline level is approximately 1,200 plants, and we don't -- you know, we're not trying to propagate more anywhere near the levees. This would be out in the center towards the shrub areas mainly. So we ask that 29 be removed as well for those reasons.

**Suggested change from cross-out document:**

~~TWENTY NINE: The permittee shall remove all elderberry plants (*Sambucus* species) from the 60-foot levee buffer zone prior to the stems reaching one (1) inch in diameter at ground level.~~  
 c29: covered by Safe Harbor Agreement - remove condition

**Staff Response:** Propagation of elderberry plants may or may not extend to the 60-foot levee buffer zone. However, with a Safe Harbor Agreement removal of the plants in this area would not be problematic for CDFW. CDFW should be

willing to guarantee that LMA maintenance costs will not increase as a result of the project. Therefore staff recommends that this condition remain as written.

**Condition 31:** After each period of high water, debris that accumulates at the site shall be completely removed from the floodway.

**Suggested change from meeting transcripts:** "After each period of high water, debris that accumulates at the site shall be completely removed from the floodway". Again, at the end of this sentence, we would like to add the words, "...if it could be reasonably expected to impact conveyance".

**Suggested change from cross-out document:**

THIRTY-ONE: After each period of high water, debris that accumulates at the site shall be completely removed from the floodway. if they are expected to impact conveyance  
c31: remove crosshatched word and add above language to end of sentence

**Staff Response:** Per Title 23, Section 131, items b, c, g(4), h(2) and h(3) removal of debris from the floodway is required to prevent a possible obstruction of the floodway. Accumulated debris within a floodway can diminish the floodway capacity, increase floodflow stages and velocities, and misdirect floodflows against channel banks or levees. It is recommended that Condition No. 31 remain as written.

**Condition 38:** The permittee shall comply with all conditions set forth by DWR's Sutter Maintenance Yard which are attached to this permit as Exhibit B and is incorporated by reference.

**Suggested change from meeting transcripts:** Thirty-eight talks about the permittee shall comply with all the conditions at DWR's Sutter Maintenance Yard. Again, it's just the same idea. We mentioned this before. It's very, very related to Item 22. That item from the Sutter Maintenance Board, they're asking that any orchard prunings or brush piles be removed from the area completely. And these piles are actually -- you know, if they're small and they're not impacting conveyance, they're great habitat for upland game species, including huntable species such as pheasant and quail. So we'd like those to persist if they're not causing any conveyance issues.

**Suggested change from cross-out document:**

~~THIRTY-EIGHT: The permittee shall comply with all conditions set forth by DWR's Sutter Maintenance Yard which are attached to this permit as Exhibit B and is incorporated by reference.~~  
c38: remove per Board's direction - incorporate any needed elements\* into main encroachment permit directly  
\*see additional comment(s) below (inserted directly on endorsement)

**Staff Response:** Exhibit B has been removed from the permit. Special conditions 22 and 25 addresses the two endorsement conditions from DWR's Sutter Maintenance Yard.

**Condition 39:** The permittee shall comply with all conditions set forth by Levee District No.1 of Sutter County which are attached to this permit as Exhibit C and is incorporated by reference.

**Suggested change from meeting transcripts:** This involves the special conditions set forth by LD 1. And we would like to ask for modification of some of those as well -- that the Board consider modification of those. The other option, of course, is that the Board just adopt your own special conditions and remove the other conditions, or we can modify them, whichever you think is more appropriate.

**Suggested change from cross-out document:**

~~THIRTY-NINE: The permittee shall comply with all conditions set forth by Levee District No.1 of Sutter County which are attached to this permit as Exhibit C and is incorporated by reference.~~  
c39: remove per Board's direction - incorporate any needed elements\* into main encroachment permit directly  
 \*see additional comment(s) below (inserted directly on endorsement)

**Staff Response:** Exhibit C has been removed from the permit. Special Conditions 13, 14, 15, 16, 21, 25, 26, 32, 33, 34, and 41 in the permit addresses LD-1's endorsement conditions.

**Condition 40:** The permittee shall comply with all conditions set forth in the letter from the Department of the Army (U.S. Army Corps of Engineers, Sacramento District) dated July XX, 2014, which is attached to this permit as Exhibit D and is incorporated by reference.

**Suggested change from meeting transcripts:** none

**Suggested change from cross-out document:**

~~FORTY: The permittee shall comply with all conditions set forth in the letter from the Department of the Army (U.S. Army Corps of Engineers, Sacramento District) dated July XX, 2014, which is attached to this permit as Exhibit D and is incorporated by reference.~~  
c40: remove per Board's direction - incorporate any needed elements into main encroachment permit directly

**Staff Response:** Exhibit D has been removed from the permit. The one Corps condition that is not covered by the permit conditions has been added.

APPLICATION FOR A CENTRAL VALLEY FLOOD PROTECTION BOARD  
ENCROACHMENT PERMITApplication No. \_\_\_\_\_  
(For Office Use Only)

1. Description of proposed work being specific to include all items that will be covered under the issued permit.

The project will plant approximately 17,000 native riparian plants (tree, shrub and herbaceous species) on 150 of 439 acres located on a benched flood plain known as the Abbott Lake Unit of the Feather River Wildlife Area in Sutter County, Ca. See Exhibit 1 (Description of Proposed Work) and Exhibit 2 (Figures and Photos) for more details.

## 2. Project

Location: Feather River WLA, Abbot Lake Unit, Sutter County, in Section 35Township: 14(N) (N) (S), Range: 3(E) (E) (W), M. D. B. & M.

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

Stream: \_\_\_\_\_, Levee: \_\_\_\_\_ Designated Floodway: \_\_\_\_\_

APN: \_\_\_\_\_

3. California Department of Fish and Wildlife of 1701 Nimbus Rd.  
Name of Applicant / Land Owner AddressRancho Cordova CA 95670 916-358-2900  
City State Zip Code Telephone Number

E-mail \_\_\_\_\_

4. Jason Holley of CA Fish and Wildlife  
Name of Applicant's Representative CompanyRancho Cordova CA 95670 916-358-2868  
City State Zip Code Telephone Numberjason.holley@wildlife.ca.gov  
E-mail

5. Endorsement of the proposed project from the Local Maintaining Agency (LMA):

We, the Trustees of Dept of Water Resources - Sutter Yard approve this plan, subject to the following conditions:  
Name of LMA☐ Conditions listed on back of this form☒ Conditions Attached☐ No Conditions

Jason Holley 12/17/13  
Trustee Date

\_\_\_\_\_  
Trustee Date

Conditions for Encroachment Application – Abbot Lake, CFWS – 12/17/13

- 1. Maintenance of the project will be the responsibility of California Fish and Wildlife Service or permittee in perpetuity, in accordance with CVFPB, and USACE requirements.
- 2. No orchard prunings or brush piles will be placed on the levee slope or left in the flood channel. All pruning debris will be the responsibility of the permittee to dispose of prior to the start of flood season.

State of California

DEPARTMENT OF WATER RESOURCES  
CENTRAL VALLEY FLOOD PROTECTION BOARD

California Natural Resources Agency

APPLICATION FOR A CENTRAL VALLEY FLOOD PROTECTION BOARD  
ENCROACHMENT PERMITApplication No. \_\_\_\_\_  
(For Office Use Only)

## 1. Description of proposed work:

The project will plant approximately 17,000 native riparian plants (tree, shrub and herbaceous species) on 150 acres of flood-prone land on the 439-acre Abbott Lake Unit of the Feather River Wildlife Area in Sutter County, California. See Exhibit 1 (Description of Proposed Work) and Exhibit 2 (Figures and Photographs) for more details.

2. Location: Feather River WA, Abbot Lake, Sutter County, in Section 35,  
(N)  
Township: 14 (N) (S), Range 3 (E) (W), M. D. B. & M.

3. California Department of Fish and Wildlife of 1701 Nimbus Rd.  
Name of Applicant Address

Rancho Cordova  
City

CA  
State

95670  
Zip Code

(916) 358-2900  
Telephone Number

(916) 358-2912  
Fax Number

## 4. Endorsement: (of Reclamation District)

We, the Trustees of Levee District 1, Sutter County  
Name and District Number

approve this plan, subject to the following conditions:

☐ Conditions listed on back of this form

☒ Conditions Attached

☐ No Conditions

Francis Silva 8/12/13  
Trustee Date Trustee Date  
[Signature] 8/12/13

5. Names and addresses of adjacent property owners sharing a common boundary with the land upon which the contents of this application apply. If additional space is required, list names and addresses on back of the application form or an attached sheet.

Billy Bains  
Name

4247 Fortuna Street, Yuba City, CA  
Address

95993  
Zip Code

Sierra Gold Nursery

5320 Garden Highway, Yuba City, CA

95991

Levee District No. 1 has the following conditions to be included on the Central Valley Flood Protection Board Encroachment Permit for the Department of Fish and Wildlife Abbott Lake habitat planting project. The conditions below are the minimum conditions:

1. All improvements endorsed by this permit shall be in accordance with the submitted drawings. The improvement plans shall include an acknowledgement title block on each sheet for Levee District No. 1 signature. No further improvements, other than approved by this permit, shall be done in the area without prior endorsement of Levee District No. 1;
2. The proposed project shall not increase, as determined by the U.S. Corps of Engineers and the California Central Valley Flood Protection Board, the 1-in-100 and 1-in-200 water surface elevation or the velocity on the east or west bank of the Feather River. A copy of the hydraulic report and computer modeling (HEC –RAS) approved by SBFCA, USACE, and CVFPB shall be provided to Levee District No. 1 prior to construction;
3. The encroachment permit and license agreement shall include a provision that the permittee shall be required to remove or alter all or any part of the herein permitted project if removal or alteration is necessary as part of or in conjunction with any present or future flood control plan or project, or if damaged by any cause. If the permittee or successor does not comply, Levee District No. 1, SBFCA, USACE, and/or the CVFPB may remove or modify the herein permitted project at the permittee's or successor's sole cost and expense;
4. The permitted/licensed encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation and maintenance of the flood control project to interfere, the permittee shall be required, at permittee's or successor's sole cost and expense, to modify or remove the permitted encroachment(s).
5. If the project or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project, at the permittee's or successor's sole cost and expense.
6. The California Department of Fish and Wildlife shall indemnify Levee District No. 1 from any and all liability associated with the endorsement of the project;
7. Grading or Tree/Shrub Plantings shall be designed not to direct water towards the existing levee or the diversion (training) levees. Grading or plantings shall not affect the hydraulic characteristics of the river in a negative manner;
8. Appropriate operation and maintenance shall be performed by the project owners to prevent any adverse impacts on the floodway and levee systems. A Vegetation Management Plan (VPM) shall be provided to Levee District No. 1 for review and approval. No work shall occur until approval of VMP by Levee District No. 1, SBFCA, CVFPB, and USACE;
9. A set of As-Built Mylar plans shall be provided to Levee District No. 1 upon completion of the work;
10. A copy of the Board approved Central Valley Flood Protection Board Permit shall be provided to Levee District No. 1 prior to any work;
11. Levee District No. 1 shall be notified five (5) working days prior to any construction activities;
12. Levee District No. 1 shall be notified five (5) working days prior to the Central Valley Flood Protection Board meeting which shall include approval of the encroachment permit.



DEPARTMENT OF THE ARMY  
U.S. Army Engineer District, Sacramento  
Corps of Engineers  
1325 J Street  
Sacramento, California 95814-2922

REPLY TO  
ATTENTION OF

Flood Protection and Navigation Section (18882)

JUL 17 2014

Leslie M. Gallagher, Acting Executive Officer  
Central Valley Flood Protection Board  
3310 El Camino Avenue, Room 151  
Sacramento, California 95821

Dear Ms. Gallagher:

We have reviewed a permit application by the California Department of Fish and Wildlife (application number 18882). These plans include removing invasive vegetation from 96 acres and planting approximately 19,411 plants to include riparian shrubland, low shrubland, riparian woodland and grassland on 150 acres (South Field) of the 439 acre Abbot Lake Unit of the Feather River Wildlife Area on the right (west) overflow bank of the Feather River near River Mile 20. The project is located approximately 7 miles south of Yuba City and 1.5 miles east from the intersection of Highway 99 and Obanion Road, at 39.0275°N 121.6049°W NAD83, Sutter County, California.

The District Engineer has no objection to approval of this application by your Board from a flood control standpoint, subject to the following conditions:

- a. That the proposed work shall not be performed during the flood season of November 1 to April 15, unless otherwise approved in writing by your Board.
- b. That an operation and maintenance plan shall be developed and provided to the Central Valley Flood Protection Board, prior to planting, for approval (with a copy to USACE). The plan shall address how the proposed plantings will be maintained and will not impact the hydraulic conditions of the flood risk management project.
- c. That the applicant shall remove all buildup of debris or underbrush from the plantings, outside the limits of the project right-of-way, prior to the beginning of the flood season, November 1, and after each high water event.
- d. That the proposed work shall not interfere with the integrity or hydraulic capacity of the flood risk management project; easement access; or maintenance, inspection, and flood fighting procedures.
- e. That the sponsor shall ensure an effective rodent control program is in place.

- 2 -

f. That the proposed work shall not change the streamflow velocity in such a way that might cause damage to the existing waterside levee slope or reduce the channel flow velocity.

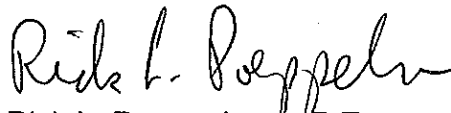
g. That the removed invasive vegetation shall be properly disposed of by either complete burning or complete removal outside the limits of the project right-of-way.

h. That the proposed plantings shall be located at least 15 feet from the waterside levee toe.

Based upon the information provided, no Section 10 or Section 404 permit is needed.

A copy of this letter is being furnished to Mr. Don Rasmussen, Chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite 200, Sacramento, CA, 95821.

Sincerely,

A handwritten signature in black ink, appearing to read "Rick L. Poeppelman". The signature is fluid and cursive, with the first name "Rick" and last name "Poeppelman" clearly distinguishable.

Rick L. Poeppelman, P.E.  
Chief, Engineering Division



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825-1846



In reply refer to:  
TE-20044B-0

**MAR 13 2014**

Mr. Jason Holley  
California Department of Fish and Wildlife  
North Central Region – Wildlife Program Supervisor  
1701 Nimbus Road, Suite A  
Rancho Cordova, California 95670

Subject: Safe Harbor Agreement for the Restoration of Riparian Habitat at the Abbott Lake Unit of the Feather River Wildlife Area in Sutter County, California

Dear Mr. Holley:

It is my pleasure to provide you with the fully executed Safe Harbor Agreement for the Restoration of Riparian Habitat at the Abbott Lake Unit of the Feather River Wildlife Area in Sutter County, California (Safe Harbor Agreement) between the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. This Safe Harbor Agreement will provide high quality habitat for the federally-threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) within the Feather River Wildlife Area. In addition, we are providing you with an Enhancement of Survival Permit (Permit) under Section 10(a)(1)(A) of the Endangered Species Act.

If you have any questions regarding this Safe Harbor Agreement, please contact Rick Kuyper, the Safe Harbor Program Coordinator for the Sacramento Fish and Wildlife Office, at (916) 414-6600.

Sincerely,

Jennifer M. Norris  
Field Supervisor

# SAFE HARBOR AGREEMENT FOR THE RESTORATION OF RIPARIAN HABITAT AT THE ABBOTT LAKE UNIT OF THE FEATHER RIVER WILDLIFE AREA IN SUTTER COUNTY, CALIFORNIA

## 1. Introduction

This Safe Harbor Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (Service); hereinafter collectively called the “Parties.” This Agreement follows the Service’s Safe Harbor Agreement policy (FR 64:32717) and regulations (FR 64:32706), both of which implement section 10(a)(1)(A) of the Endangered Species Act (Act). The primary purpose of this Agreement is to provide a net conservation benefit for the federally-threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (beetle) through voluntary ecosystem restoration, enhancement and management of native riparian habitats at the Feather River Wildlife Area (Enrolled Property) in Sutter County, California, while giving assurances to the CDFW that no additional future regulatory restrictions will be imposed as a result of their conservation actions. The Enrolled Property is the Abbott Lake Unit of the Feather River Wildlife Area. This unit is managed for the benefit of fish and wildlife species, including the beetle. Figure 1 provides a map of the Enrolled Property.

The CDFW has proposed to hold a 10(a)(1)(A) Enhancement of Survival Permit under the Agreement, which authorizes the incidental taking of the valley elderberry longhorn beetle during activities associated with conservation management of this species’ habitat, other lawful uses of the Enrolled Property (as described in Section 5 of this Agreement), and the potential future return of the Enrolled Property to pre-Agreement conditions (baseline) within the period during which the Enhancement of Survival Permit is in effect.

It is the intent of the CDFW to restore all units within the Feather River Wildlife Area to self-sustaining, high-quality native riparian habitat. Plans are currently under way to restore the Abbott Lake unit. Further information for this unit is provided in Sections 3, 4, and 5 of this Agreement. While the CDFW manages the Feather River Wildlife Area to protect the integrity of fish and wildlife habitats in perpetuity, the CDFW also works closely with flood managers at the Federal, State, and local level to ensure the integrity of floodwater conveyance capacity of the Feather River channel, the Sutter bypass, and related floodplain. Therefore, it is also the intent of this Agreement that the Service, the CDFW, and flood management agencies work collaboratively to address issues related to species recovery and public safety in a balanced fashion.

## 2. Biology and current status of the Valley Elderberry Longhorn Beetle

The beetle was listed as a threatened species in 1980 (Service 1980). The beetle is a medium sized (0.8 inch long) beetle that is endemic to the Central Valley of California. The beetle is found only in association with its host plant, elderberry shrubs (*Sambucus* sp.). Adult beetles are sexually dimorphic with females having dark metallic green to black wing covers with a bright red border and males having predominantly red wing covers with four dark spots. Adults feed

on the foliage and perhaps flowers of elderberry and are present from March through early June. During this period the beetles mate, and females lay eggs on living elderberry plants. The larvae bore to the center of elderberry stems where they develop for one to two years feeding on the inside of the stem. After one to two years the larvae metamorphose into pupae and then into adults when they emerge between mid-March and June (Barr 1991).

At the time of its listing in 1980, the beetle was known from less than 10 locations on the American River, Putah Creek and the Merced River in the Central Valley of California (Service 1980). The beetle is now known to occur in the Central Valley from southern Shasta County south to Fresno County in the San Joaquin Valley (Barr 1991). There are currently over 190 occurrences listed in the California Natural Diversity Database (Service 2012).

At the time of listing, habitat destruction was identified as one of the most significant threats to the beetle based on the 90 percent loss of riparian habitat in the Central Valley (Barr 1991). Riparian habitat loss has resulted in fragmented and isolated remnants of valley elderberry longhorn beetle habitat. Sub-populations of the animal confined to small habitat areas are likely vulnerable to extirpation from random, unpredictable environmental, genetic, and demographic events (Schonewald-Cox *et al.* 1983). The distances between subpopulations and the beetles' limited dispersal ability may make recolonization difficult if local extirpation occurs (Collinge *et al.* 2001; Talley 2005; Service 2006).

### **3. Description of Enrolled Land**

The Abbott Lake Unit is approximately 439 acres in size and is located on land owned by the State of California and managed by the CDFW. The project area is on the waterside of the western levee of the Feather River; approximately seven miles south of Yuba City, Sutter County, California. The Enrolled Property is approximately one mile north of Star Bend Road, between river miles 20 and 21.5. The Enrolled Property is currently managed as a conservation area, with recreation such as fishing, bird watching, and hunting being the primary uses. Adjacent land use is primarily agricultural. Routine maintenance and possible flood control activities that may occur within this site are described in section 5 of this agreement.

### **4. Baseline**

For the Enrolled Property, the baseline survey for the beetle documented the number and location of elderberry shrubs having one or more stems that are 1-inch or greater in diameter at the base of the shrub. Baseline has been set at 172 elderberry shrubs with stems equal to or greater than 1 inch in diameter at base level. CDFW has proposed to increase baseline by at least 5 percent every year beyond site restoration for a period of 20 years. Baseline will be managed to ensure that elderberry shrubs are in diverse areas of the floodplain (varying floodplain heights, varying surrounding habitat types, etc.).

Through this Agreement, the CDFW has the ability to "shift" baseline once the riparian restoration and planting of additional elderberry shrubs above baseline level is complete. In other words, the subject unit must maintain the baseline number of elderberry shrubs described below; however, if a shrub originally counted as baseline needs to be transplanted or removed

because it impedes flood management operations, another elderberry shrub that is planted during restoration activities may replace the original shrub and become part of the baseline. The purpose for allowing a shifting baseline is to provide maximum flexibility to the various agencies that are approved by the CDFW to maintain flood control structures, conveyance channel conditions and capacity and conduct emergency flood fighting activities on the Enrolled Properties. Should a flood management agency wish to shift baseline, the CDFW will obtain approval from the Service in writing. The CDFW will provide a map of the revised baseline to the Service as part of the annual monitoring report, as described in Section 6 of this Agreement.

## **5. Management Activities**

### **Riparian Restoration**

Restoring riparian habitat is one of the key management objectives of the CDFW within the Feather River Wildlife Area. The restoration project on the Abbott Lake Unit will restore and enhance riparian habitat, which will decrease habitat fragmentation by increasing the connectivity of new habitat to existing riparian habitat in the Feather River Wildlife Area. The following are goals of the restoration project:

1. Establish self-sustaining native plant communities;
2. Utilize a diversity of plant species, which create vegetative structural diversity and enhance habitat for a broad range of wildlife species;
3. Provide valley elderberry longhorn beetle habitat; and,
4. Minimize disturbance to wildlife and riparian habitat during levee maintenance and channel conveyance maintenance activities.

The CDFW has contracted with River Partners, a 501(c)3 nonprofit corporation, to conduct riparian vegetation and enhancement activities on 265 acres of riverside floodplain that are part of the 439-acre Abbott Lake Unit. This restoration project is expected to begin in the Fall of 2013. The project area consists of three distinct activity areas: the North Field (19 acres), the South Field (150 acres), and the Enhancement Area (96 acres). All restoration planting activities would occur in the North Field and the South Field. Existing riparian habitat occurs on the remaining Enhancement Area and this area is targeted for eradication of invasive plants. Four different plant communities will be planted in the project area: riparian shrubland, low shrubland, riparian woodland, and grassland. Shrub and tree planting densities and species compositions would vary within the North and South Fields, with an average density of 115 shrubs/trees per acre. Approximately 19,500 native riparian shrubs and trees will be planted, along with an herbaceous understory of native forbs and grasses. Approximately 1,500 elderberry shrubs would be planted as part of the restoration project.

### **Maintenance of Riparian Habitat Conducted by the CDFW**

The Enhancement of Survival Permit authorizes Take of the beetle during routine maintenance of riparian, grassland, and other wildlife friendly habitat. The primary riparian maintenance activity will likely include removal of invasive species such as Himalayan blackberry (*Rubus armeniacus*), black locust (*Robinia pseudoacacia*), or tree of heaven (*Ailanthus altissima*). If

non-native vegetation is removed, the CDFW intends to remove these invasive species by mowing and use of hand held equipment. The CDFW does anticipate using herbicides to remove non-native vegetation. However, the Permit authorizes Take of the beetle as a result of herbicide use, should it be deemed necessary in the future by the CDFW to remove invasive species within the Abbott Lake Unit of the Feather River Wildlife Area. Following is a list of avoidance measures that the CDFW will utilize should they conduct non-native vegetation removal activities.

1. Elderberry shrubs within 20 feet of sites to be mowed will be clearly marked with flagging tape prior to mowing. Mowing within 5 feet of driplines will be performed with hand held equipment only.
2. If non-native vegetation removal is needed, CDFW Biological Monitors will be present to provide onsite technical avoidance guidance.
3. Should herbicide use be deemed necessary, no herbicide applications will be made within 100 feet of elderberry shrub driplines when winds exceed 5 mph in the direction of shrubs.

#### Maintenance of Flood Control Structures and Emergency Flood Fighting

Periodic maintenance is conducted within the Enrolled Property by DWR and the Central Valley Flood Protection Board. The Enhancement of Survival permit associated with this Agreement provides authorized Take of the beetle during routine and ongoing flood control activities on the Enrolled Property. Routine and ongoing maintenance activities that could occur at Abbott Lake in the flood-plain waterside of the levee are defined as work performed regularly (approximately every one to five years) and is limited to the following: removing or modifying debris, sediment, vegetation, rubbish, downed trees, and other material that could obstruct the natural flow of water. Less-frequent routine maintenance tasks which may occur within the wildlife area floodplain may include making repairs to stabilize banks and control erosion; maintaining fire breaks; conducting minor geotechnical sampling; and repairing gates, barricades, or small existing structures. Other minor activities not listed above that are necessary to maintain waterways and flood control structures may be approved by the CDFW and the Service on a case-by-case basis.

On the Abbott Lake Unit within the Feather River Wildlife Area, the CDFW will ensure that the following measures will be taken by flood control agencies to minimize adverse effects to the valley elderberry longhorn beetle during routine maintenance of flood control project features:

1. Prior to beginning maintenance work within 100 feet of elderberry shrubs, flood control and maintenance supervisors and crews will be trained by a qualified biologist to identify and avoid harm to the species and its habitat.
2. Elderberry shrubs within 100 feet of flood risk management activities will be clearly marked with flagging tape prior to implementation of the activities.

3. If vegetation control through selective herbicide use is deemed necessary, the type of herbicide used will be approved by a CDFW Herbicide Specialist. Herbicides will not be applied within 100 feet of elderberry shrub driplines when winds exceed 5 mph in the direction of shrubs.
4. Vegetation control using mowers will not occur within 5 feet of the dripline of elderberry shrubs.
5. Vegetation control within 5 feet of the dripline of elderberry shrubs will be performed with hand-held equipment only. Within 5 feet of the dripline of elderberry shrubs, vegetation control for flood risk management will only occur July 1 through March 1, when adult beetles are not likely to be present.
6. Heavy equipment work will be restricted to periods of dry weather, and the CDFW will ensure that the flood control agencies suspend any ongoing maintenance work and would implement erosion control measures prior to any storm event to avoid adverse effects to elderberry shrubs.
7. Elderberry shrubs will be transplanted if they are located within areas that need to be free of woody vegetation to improve the hydraulic capacity of the area; or if the shrub interferes with flow and sediment transport, or flood control maintenance practices. Elderberry shrubs will also be transplanted if the floodwater conveyance capacity of the site falls below the minimum specified in the U.S. Army Corps of Engineers' *Operation and Maintenance Manual*.
8. If transplanting an elderberry shrub becomes necessary because it is an impediment to flood control and/or maintenance activities, flood control agencies will notify the CDFW and the Service and transplant the shrub(s) between November 1 and February 14. If removal of the shrub is required outside of these dates, it will be done in a manner to optimize survivorship of the shrub in consultation with the CDFW and the Service and avoid the period when adult valley elderberry longhorn beetles are outside of the elderberry shrub (mid-March to mid-June). In order to create dispersal corridors for the beetle, elderberry shrubs will be transplanted to a location that is within 65 to 165 feet of another elderberry shrub with stems measuring greater than 1.0 inch in diameter at ground level and has been designated as an area suitable for transplants in coordination with the Service and the CDFW.

The CDFW will ensure that all agencies that conduct flood control activities on the Enrolled Property comply with this Agreement and the associated Permit and will educate these agencies on what is necessary for compliance with the Agreement and Permit. In addition, the CDFW will ensure that the flood control agencies are in compliance with the *Memorandum of Understanding between the Department of Fish and Wildlife and the Division of Flood Management of the Department of Water Resources for Maintenance of Flood Control Projects in the Sacramento River and Feather River Wildlife Area* (Attachment 1).

## **6. Monitoring and Reporting Requirements:**

The CDFW will:

1. Ensure that annual monitoring is conducted (see Attachment 2 for the monitoring template to be used). Monitoring will be completed by the CDFW or a qualified entity approved by the CDFW and the Service. Monitoring will accomplish the following: assess the condition of the habitat being managed under the Agreement and determine if conservation activities could be modified to improve success; and ensure that baseline is maintained and that the CDFW is following the terms and conditions of the Agreement. Reports will be provided to the Service by December 31<sup>st</sup> of each year that the 10(a)(1)(A) Enhancement of Survival Permit and this Agreement are in effect.
2. Notify the Service of any living individuals or dead specimens of valley elderberry longhorn beetles on the Enrolled Property.
3. Notify the Service 30 days prior to any planned activity that the CDFW reasonably anticipates will result in Take of the beetle on the Enrolled Property, and/or result in the transplantation of elderberry shrubs.
4. Notify the Service immediately, or as soon as possible, in the event of emergency flood fighting activities if these activities decreased elderberry shrub numbers below baseline conditions.

## **7. Net Conservation Benefits to the Valley Elderberry Longhorn Beetle**

The Service has determined that the CDFW's management activities, as described in this Agreement, will be reasonably expected to result in the establishment of a significant amount of habitat for the beetle that will be of long-term benefit to this species. This Agreement supports recovery objective number 5 listed in the Recovery Plan for the Valley Elderberry Longhorn Beetle (Service 1984) by restoring and maintaining habitat within the presumed historical range, managing habitat conditions by removing exotic species, and protecting the habitat restoration sites for the duration of this Agreement. These restored habitats will increase connectivity of riparian habitat and provide opportunities for the beetle to colonize new habitat. Additionally, monitoring activities will support more extensive documentation of extant populations.

In addition, the Service has determined that any impacts resulting from routine flood risk management activities are likely to be temporary and relatively minor in nature. In non-emergency situations, elderberry shrubs will be transplanted, in which case the amount of available habitat for the beetle will not be reduced if the shrub survives transplantation. Emergency flood fighting activities within the Enrolled Property could result in more extensive damage to elderberry shrubs and existing valley elderberry longhorn beetle populations. However, emergency flood fighting activities are expected to occur infrequently, if at all, and the net conservation benefit provided to the beetle throughout the duration of the Agreement will far outweigh potential impacts from emergency flood fighting activities.

## **8. Neighboring Landowner Agreements**

The purpose of this section is to enable neighboring landowners to receive certain regulatory assurances if lands adjacent to theirs are enrolled and attract listed species that may disperse onto their property. Landowners who own land that abuts and is immediately adjacent to an Enrolled Property may, without committing to undertake any management activities described in this Agreement, secure the incidental take authority conferred by the Enhancement of Survival Permit issued by the Service to the landowner, provided: (1) the adjoining landowner enters into a written agreement with the Service; (2) the written agreement specifies the baseline conditions on the adjoining property; and, (3) activities resulting in incidental take on the adjoining property are consistent with maintaining the baseline conditions on the original Enrolled Property and do not negate the net conservation benefit of this original Agreement.

## **9. Agreement and Take Authorization Duration**

The Agreement becomes effective upon issuance of the 10(a)(1)(A) Enhancement of Survival Permit by the Service, which will be in effect for 20 years. Authorization of take of the beetle begins upon initiation of the riparian restoration project on the Abbott Lake Unit. This Agreement and the 10(a)(1)(A) permit may be extended by mutual consent of the Parties. The CDFW may opt out of this Agreement at any time without penalty (see the Modifications Section of this Agreement).

## **10. Assurances Regarding Take**

Provided that Take is consistent with maintaining the baseline conditions identified for the Enrolled Property, the CDFW is authorized to Take the valley elderberry longhorn beetle incidental to otherwise lawful activities (as described in Section 5, Management Activities) in the following circumstances:

1. Implementing the beneficial activities (identified in Section 5, Management Activities) on the Enrolled Property.
2. Conducting routine management activities (identified in Section 5, Management Activities) on the Enrolled Property including: maintenance of riparian, grassland, and other wildlife friendly habitat; and routine maintenance of flood control project features and emergency flood fighting activities.
3. Returning the Enrolled Property to baseline conditions.

## **11. Modifications**

A. Modification of the Agreement. Either party may propose amendments to this Agreement by providing written notice to, and obtaining the written concurrence of, the other Party. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. The Parties will respond to proposed modifications within 60 days of receipt of such notice. Proposed modifications will become effective upon the other Parties' written concurrence.

**B. Termination of the Agreement.**

Termination of the Agreement by the CDFW: The CDFW may terminate this Agreement for any circumstances by giving written notice not less than 30 days in advance to the Service. In such circumstances, the CDFW may return the Enrolled Property to baseline conditions, without penalties or disincentives for withdrawing participation, even if the conservation management activities identified in Section 5 of this Agreement have not been fully implemented.

Take Authorization Suspension or Revocation by the Service: The Service may suspend or revoke the Take authorization for cause in accordance with the laws and regulations in force at the time of such suspension or revocation. The Service shall give not less than 90 days advance notice of the suspension or revocation, and give the CDFW an opportunity to cure any defaults.

**C. Baseline Adjustment.** The baseline condition for the Enrolled Property may, by mutual agreement of the Parties, be adjusted if, during the term of the Agreement and for reasons beyond the control of the CDFW (e.g., floods or fires) or as an unintended result of properly-implemented restoration and management activities, the baseline conditions are reduced from what they were at the time the Agreement was negotiated. Such a modification shall follow the procedures described in Section 11.A above.

**D. New Listings of Species.** In the event that a species not authorized for Take in association with this Agreement is subsequently listed as candidate or threatened or endangered under the Act, the Parties may consider amending the Agreement to add the newly-listed species as a covered species. The amendment of the Agreement shall determine the baseline conditions for the subsequently listed species in a manner agreed upon by the Service and the CDFW.

**12. Other Measures**

**A. Remedies.** No party shall be liable in monetary damages for any breach of this Agreement, any performance or failure to perform an obligation under this Agreement or any other cause of action arising from this Agreement.

**B. Dispute Resolution.** The Parties agree to work together in good faith to resolve any disputes. Modifications to the Agreement shall follow the procedures detailed in Section 11.A above. For disputes other than modifications, the Parties agree to meet and confer within 30 days of a request by any Party. If necessary, the Parties agree that a mutually agreed upon arbitrator may be used to solve the dispute.

**C. Succession and Transfer.** If the CDFW transfers their interest in the Enrolled Property to another non-Federal entity, the Service will regard the new owner or manager as having the same rights and responsibilities with respect to the Enrolled Property as the CDFW, if the new owner or manager wishes to enter into a new safe harbor agreement with the Service.

**D. Availability of Funds.** Implementation of this Agreement is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this Agreement

will be construed by the Parties to require the obligation, appropriation, or expenditure of any funds from the U.S. Treasury. The Parties acknowledge that the Service will not be required under this Agreement to expend any Federal appropriated funds unless and until an authorized official of that agency affirmatively acts to commit to such expenditures as evidenced in writing.

E. No Third-Party Beneficiaries. This Agreement does not create any new right or interest in any member of the public as a third-party beneficiary, nor shall it authorize anyone not a party to this Agreement to maintain a suit for personal injuries or damages pursuant to the provisions of this Agreement. The duties, obligations, and responsibilities of the Parties to this Agreement with respect to third parties shall remain as imposed under existing law.

F. Other Laws. This Agreement and activities conducted under it are subject to all applicable Federal, State, and local laws and regulations.

G. Notices and Reports. Any notices and reports, including monitoring and annual reports will be delivered to:

Safe Harbor Program Coordinator  
U.S. Fish and Wildlife Service  
2800 Cottage Way  
Room W-2605  
Sacramento, California 95825

Flood and Waterway Planning Branch  
U.S. Fish and Wildlife Service  
2800 Cottage Way  
Room W-2605  
Sacramento, California 95825

IN WITNESS WHEREOF, THE PARTIES HERETO have executed this Safe Harbor Agreement to be in effect as of the date that the Service issues the Enhancement of Survival permit.



Regional Manager, North Central Region  
California Department of Fish and Wildlife

2/27/2014  
Date



Field Supervisor, Sacramento Field Office  
U.S. Fish and Wildlife Service

3/12/2014  
Date

## Literature Cited

- Barr, C.B. 1991. The distribution, habitat, and status of the valley elderberry longhorn beetle *Desmocerus californicus dimorphus* Fisher (Insecta: Coleoptera: Cerambycidae). U.S. Fish and Wildlife Service, Sacramento, California. 134 pp.
- Collinge, S.K., M. Holyoak, C.B. Barr, and J.T. Marty. 2001. Riparian habitat fragmentation and population persistence of the threatened valley elderberry longhorn beetle in central California. *Biological Conservation* 100:103-113.
- Halstead, J. A., and J. A. Oldham. 1990. Revision of the Nearctic *Desmocerus* Audinet-Serville with emphasis on the federally threatened valley elderberry longhorn beetle (Coleoptera: Cerambycidae). Environmental Section Staff Report, Kings River Conservation District, Fresno, California.
- Schonewald-Cox, C.M., S.M. Chambers, B. McBryde, and L. Thomas (eds.). 1983 *Genetics and Conservation*. Benjamin/Cummings, Menlo Park, California.
- Talley, T.S. 2005. Spatial ecology and conservation of the Valley elderberry longhorn beetle. Ph.D. dissertation. University of California, Davis, California.
- Talley, T. S., D. A. Piechnik, and M. Holyoak. 2006. The effects of dust on the federally threatened Valley elderberry longhorn beetle. *Environmental Management* 37: 647-658.
- U.S. Fish and Wildlife Service (Service). 1980. Listing the valley elderberry longhorn beetle as a threatened species with critical habitat. **Federal Register** 45: 52803-52807.
- \_\_\_\_\_. 1984. Valley elderberry longhorn beetle recovery plan. Portland, Oregon. 62 pp.
- \_\_\_\_\_. 2006. Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) 5-year review: summary and evaluation. Sacramento Fish and Wildlife Office.
- \_\_\_\_\_. 2012. Endangered and threatened wildlife and plants; removal of the valley elderberry longhorn beetle from the federal list of endangered and threatened wildlife; proposed rule. **Federal Register** 77: 60238-60276.

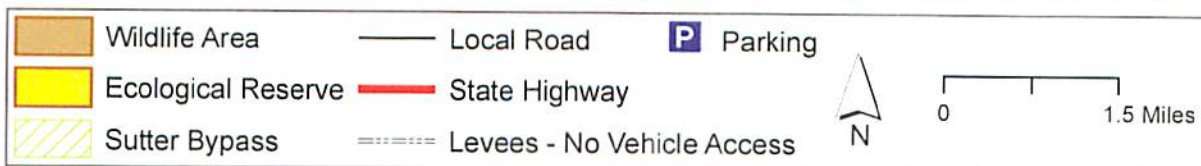
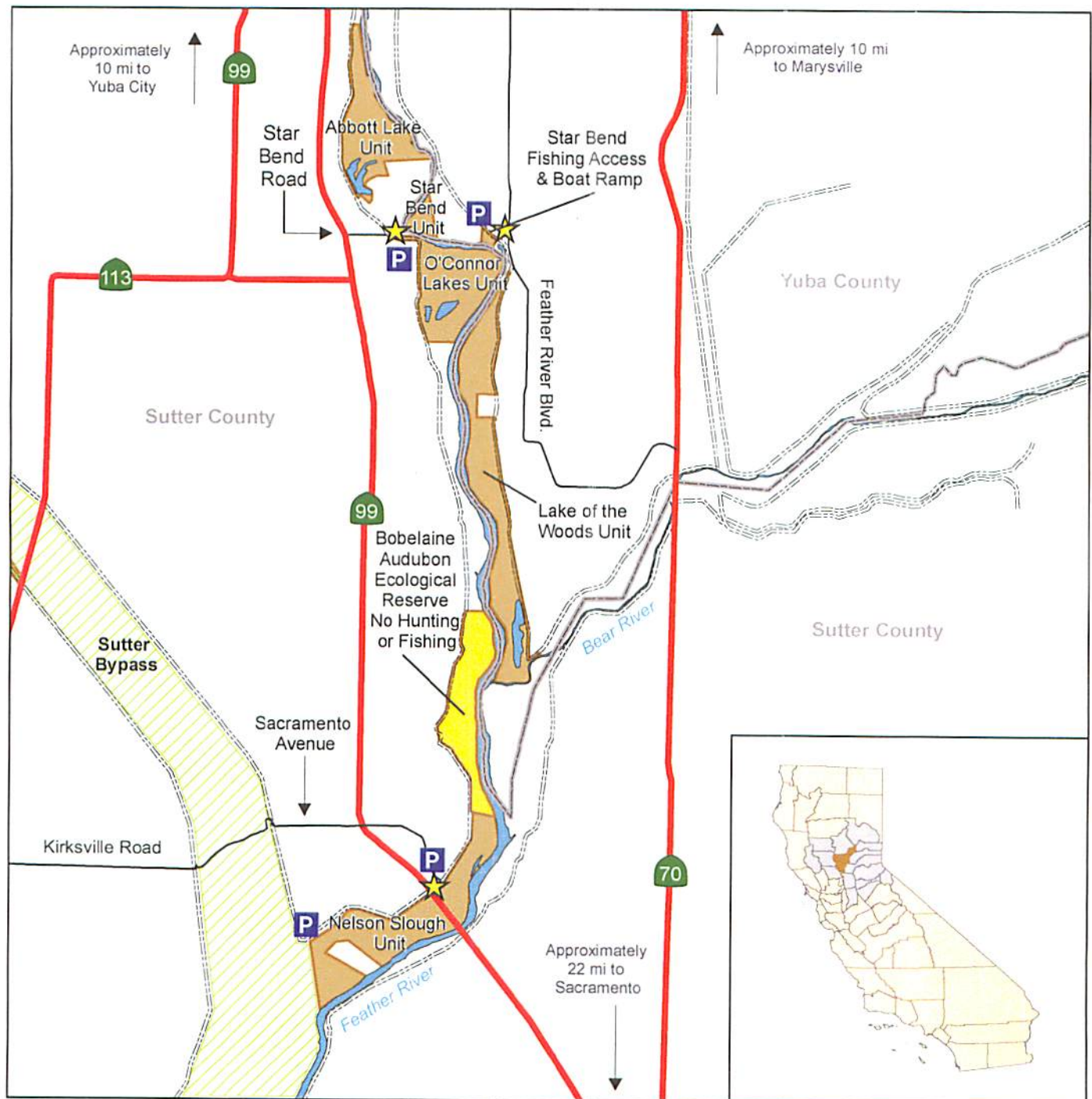
**Figure 1: Map of Enrolled Property**

# California Department of Fish and Game

## North Central Region

### FEATHER RIVER WILDLIFE AREA

#### Sutter, Yuba Counties



***ATTACHMENT 1: Memorandum of Understanding between the Department of Fish and Wildlife and the Division of Flood Management of the Department of Water Resources for Maintenance of Flood Control Projects in the Sacramento River and Feather River Wildlife Area***

MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE DEPARTMENT OF FISH AND GAME  
AND  
THE DIVISION OF FLOOD MANAGEMENT OF THE DEPARTMENT OF  
WATER RESOURCES  
FOR MAINTENANCE OF FLOOD CONTROL PROJECTS IN THE  
SACRAMENTO RIVER AND FEATHER RIVER WILDLIFE AREAS

This Memorandum of Understanding ("MOU") is entered into between the Department of Fish and Game ("DFG") and the Division of Flood Management of the Department of Water Resources ("DWR").

WHEREAS, DFG is the trustee for fish and wildlife resources of the State of California; and

WHEREAS, DWR is a state governmental agency responsible for maintaining and operating the flood control projects described below (flood control project"); and

WHEREAS, DFG is party to a Memorandum of Understanding ("2004 MOU") among the U.S. Fish and Wildlife Service ("USFWS") regarding the Sacramento River National Wildlife Refuge, the California Department of Fish and Game regarding the Sacramento River Wildlife Area and the Feather River Wildlife Area, and the California Department of Parks and Recreation ("Parks"), Northern Buttes District, regarding the Sacramento River State Parks for the purpose of riparian restoration and management in Glenn, Tehama, Butte, and Colusa Counties, California; and

WHEREAS, DFG and DWR entered into an earlier memorandum of understanding effective January 17, 1986, entitled "Memorandum of Understanding Between the Department of Fish and Game and Department of Water Resources Regarding Streambed Alteration Notification and Maintenance Activities Under Fish and Game Code section 1601" ("1986 MOU"), which established a process to allow DFG to annually review the maintenance work on flood control projects to ensure that the work was not adversely affecting fish and wildlife resources; and

WHEREAS, DFG and DWR entered into a current memorandum of understanding effective March 24, 2003, entitled "Memorandum of Understanding for Dispute Resolution Between the Department of Fish and Game and The Division of Flood Management of the Department of Water Resources regarding Fish and Game Code Section 1601"; and

WHEREAS, DFG and DWR entered into a current memorandum of understanding effective June 06, 2003, entitled "Memorandum of Understanding Between the Department of Fish and Game and The Division of Flood Management of the Department of Water Resources For Routine Maintenance Activities Of Flood

*DFG & DWR 2005 MOU*

Control Projects By The Sacramento and Sutter Maintenance Yards" ("2003 MOU"), which established a process to allow DFG to annually review the maintenance work on flood control projects to ensure that the work was not adversely affecting fish and wildlife resources; and

WHEREAS, DWR agrees to perform its maintenance work in a manner that minimizes adverse impacts to fish and wildlife resources and water quality, consistent with the MOU; and

NOW, THEREFORE, DFG and DWR mutually agree the MOU, like the 2003 MOU, satisfies the requirements of former Fish and Game Code section 1601, which is now sections 1602 and 1603, and mutually agree further as follows:

I. DESCRIPTION OF FLOOD CONTROL PROJECT

This MOU regards land management issues at the DFG Abbott Lake, O Connor Lakes, Lake of the Woods, and Star Bend Units, of the Feather River Wildlife Area (see figure 1). The purpose of the MOU is to formally document an agreement to mutually manage, monitor, restore, and enhance lands managed for fish, wildlife, and plants along the Feather River; to prevent loss of human life and reduce property damage caused by floods; and to enhance communication between the agencies to prevent duplicating or prescribing conflicting land management efforts.

II. FLOOD CONTROL OPERATION AND MAINTENANCE REQUIREMENTS

DWR may perform the maintenance work to satisfy requirements of the U.S. Army Corps of Engineers, and to maintain design conveyance capacity. DWR will limit the work to the flood control projects and work areas specified above, and complete the work in accordance with the terms and conditions specified by permits obtained by DFG.

III. ROUTINE FLOOD CONTROL MAINTENANCE PROCEDURES

DWR shall complete routine maintenance in accordance with the 2003 MOU except as described by DWR and DFG in Exhibit A, Description of Maintenance and Flood Control Activities within the Feather River Wildlife Area.

IV. PERMIT REQUIREMENTS

DWR shall act as the lead agency under CEQA for the maintenance work covered by the 2003 MOU and secure any permits required for flood control

## DFG &amp; DWR 2005 MOU

operation and maintenance.

USFWS issued a Biological Opinion and Incidental Take Statement dated September 9, 2005, covering valley elderberry longhorn beetles and elderberry shrubs affected by or resulting from restoration and work carried out pursuant to the 2004 MOU, including within the Feather River Wildlife Area ("Elderberry BO"). The Elderberry BO covers signatories to the 2004 MOU including DFG and its agents. As recognized in the Elderberry BO, DWR shall act as an agent of DFG while performing flood maintenance activities within the Feather River Wildlife Area. The Elderberry BO states that within one year of Elderberry BO termination or reinitiation, or 2004 MOU termination or modification, DWR shall have the right to restore the site to a baseline elderberry population reflective of pre-project conditions (i.e. 130 elderberry shrubs that do not interfere with flood conveyance and capacity will be identified and allowed to remain). Therefore, DFG agrees to provide written notification to DWR within ten (10) days of any party's notice of an intent to terminate, reinitiate consultation on, or modify, either the 2004 MOU, or to the associated Elderberry BO.

DFG will be responsible for securing any necessary permits incidental to habitat manipulation and restoration work completed in the flood control project, and will provide any biological surveying, monitoring, and reporting needed to satisfy those permits.

DWR and DFG will coordinate all permits and resolve conflicts between any of the terms and conditions of the MOU and those that another local, state, or federal governmental agency might impose under the laws and regulations it administers and enforces.

V. AMENDMENT

- A. The MOU may be amended or modified at any time, provided that it is by a written agreement duly executed by DFG and DWR. Any proposal for amendment or modifications must be delivered for review and approval by the Regional Manager or the official designated by the Regional Manager, unless otherwise specified.
- B. Notwithstanding paragraph A above, upon review and written approval by a DFG staff person in the Lake and Streambed Alteration Program, DWR may add other locations, as well as modify descriptions of maintenance and flood control activities after the effective date of the MOU, in which case all provisions of the MOU shall apply to them.
- C. DFG and DWR shall meet in January each year or at some other mutually agreed to time to discuss the maintenance activities. Both parties should be prepared at that meeting to propose any amendments to the MOU.

*DFG & DWR 2005 MOU*

VI. DISPUTE RESOLUTION

Any disagreement between DFG and DWR regarding the MOU or the performance of any maintenance work covered by the MOU shall be resolved in accordance with the "Memorandum of Understanding for Dispute Resolution Between the Department of Fish and Game and Department of Water Resources Regarding Fish and Game Code section 1601," dated January 2003, which for reference is attached hereto as Attachment A.

VII. TERMINATION

The MOU shall remain in effect until it is terminated in writing by either party. Termination shall become effective 30 days after receipt of the termination notice by the other party. In the event the MOU is terminated, DWR may complete any maintenance work that DFG approved prior to the date of the termination notice.

DFG & DWR 2005 MOU

VIII. SIGNATURE AND EFFECTIVE DATE

This agreement shall become effective on the date of DFG's signature, which shall be after DWR's signature.

DEPARTMENT OF WATER RESOURCES

Rodney G. Mayer  
~~Los Harder, Chief~~ Rodney Mayer, Acting Chief  
Division of Flood Management

Date: 5/18/06

Approved as to legal form and sufficiency:

By David A. Sandino  
David A. Sandino  
Acting Chief Counsel

Date: 5/16/06

DEPARTMENT OF FISH AND GAME

Sandy Morey  
Sandy Morey, Regional Manager  
Sacramento Valley - Central Sierra Region

Date: 5/23/06

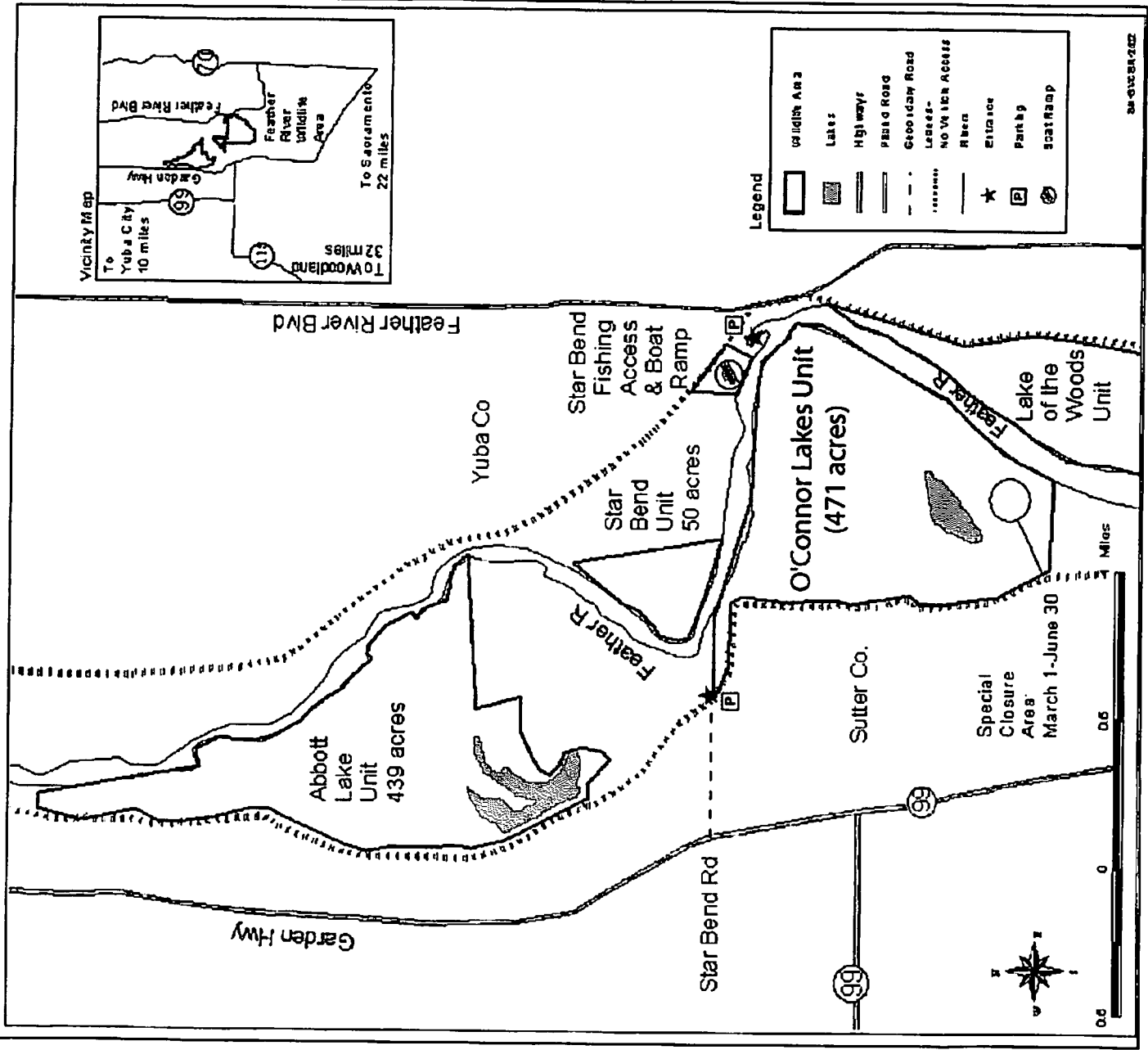
Approved as to legal form and sufficiency:

By Ann Malcolm  
Ann Malcolm  
General Counsel

Date: 7/24/06

Figure 1.

California Department of Fish and Game  
Sacramento Valley Central Sierra Region  
ABBOTT LAKE, O'CONNOR LAKES and STAR BEND UNITS  
FEATHER RIVER WILDLIFE AREA  
Sutter and Yuba Counties



**ATTACHMENT 2****Monitoring Report from California Department of Fish and Wildlife  
to the U.S. Fish and Wildlife Service**

The Monitoring Report will be completed by the CDFW or another agreed upon entity and will be due to the Service annually by December 31<sup>st</sup> of each year that the Agreement and Enhancement of Survival Permit are in effect. Monitoring on the Abbott Lake Unit will accomplish the following: (1) assess the condition of the habitat being managed under the Agreement and determine if conservation activities could be modified to improve success; and, (2) ensure that baseline is maintained and that the CDFW is following the terms and conditions of the Agreement. In addition, the report will provide the following information:

1. Approximate number of elderberry shrubs. Number with stem diameter of  $\geq 1$  inch.
2. Health of elderberry shrubs? Poor, moderate, good?
3. Discussion of mortality of shrubs and recruitment.
4. Evidence of valley elderberry longhorn beetles? Exit holes? Individuals observed?
5. Describe conservation actions to benefit the beetle that occurred over the past year.
6. Describe management and operation activities that occurred over the past year.
7. Did any of these management activities result in take of the beetle?
8. Were there any significant changes in management or operation over the last year, and if so, what were they?
9. Threats to the beetle and elderberry shrub habitat (such as description of invasive vegetation on the property: is it decreasing, increasing, or stable?). Argentine ants or European earwigs observed?
10. Other relevant information



DEPARTMENT OF THE INTERIOR  
U.S. FISH AND WILDLIFE SERVICE

## FEDERAL FISH AND WILDLIFE PERMIT

### 1. PERMITTEE

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
1701 NIMBUS ROAD  
RANCHO CORDOVA, CA 95670  
U.S.A.

2. AUTHORITY-STATUTES  
16 USC 1533(d)

REGULATIONS  
50 CFR 17.32

50 CFR 13

3. NUMBER  
**TE20044B-0**

4. RENEWABLE  
☐ YES  
☐ NO

5. MAY COPY  
☐ YES  
☐ NO

6. EFFECTIVE

**3-12-14**

7. EXPIRES

**3-12-34**

8. NAME AND TITLE OF PRINCIPAL OFFICER (If #1 is a business)

TINA BARTLETT  
REGIONAL MANAGER

9. TYPE OF PERMIT

NATIVE THREATENED SP. SAFE HARBOR - T WILDLIFE

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED

Feather River Wildlife Area, Abbott Lake Unit. The Abbott Lake Unit is 439 acres in size and is located on the waterside of the western levee of the Feather River; approximately seven miles south of Yuba City, Sutter County, between river miles 20 and 21.5.

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL, TRIBAL, OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

☐ ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS

ISSUED BY

*[Signature]*

TITLE

FIELD OFFICE SUPERVISOR

DATE

**3/12/14**

**U.S. Fish and Wildlife Service, Sacramento, California  
Special Terms and Conditions for Permit TE 20044B-0**

1. All sections of Title 50 Code of Federal Regulations, §§ 13 and 17.22 are conditions of this permit (Attachment 1). If any such regulations are modified, any future action taken with respect to this permit shall be in accordance with such regulations in existence at the time such action is taken, except as specifically otherwise provided for by law.
2. The authorization granted by this permit is subject to full and complete compliance with the Safe Harbor Agreement for the Abbott Lake Unit of the Feather River Wildlife Area in Sutter County, California (Agreement), which is hereby incorporated by reference into this permit.
3. The California Department of Fish and Wildlife (CDFW) shall be responsible for ensuring compliance with the Agreement by any authorized officer, employee, contractor, or agent while conducting covered activities. All applicable provisions of this permit must be presented and clearly explained to all authorized officers, employees, contractors, or agents of the CDFW while conducting covered activities.
4. The CDFW and their authorized officers, employees, contractors and agents, are authorized pursuant to section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended, to incidentally take the federally-threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (beetle) on the enrolled property, in accordance with the Agreement, as a result of otherwise lawful covered activities. The Service anticipates incidental take of the beetle from implementing management activities identified in the Agreement. The Service also authorizes the take of the beetle on the enrolled property as a result of returning to baseline.
5. The CDFW shall notify the Service of any transfer of ownership so that the Service can attempt to contact the new owner, explain the baseline responsibilities applicable to the enrolled property, and seek to interest the new owner in signing the existing Agreement or a new one to benefit listed species on the enrolled property.
6. The CDFW shall allow reasonable access by the Service or another agreed-upon party onto the enrolled property for the purposes related to this Agreement, including the capture and relocation of the Covered Species.

Attachment

**§ 12.42**

(g) If the Solicitor decides that relief should not be granted, the Solicitor shall so notify the petitioner in writing, stating in the notification the reasons for denying relief. The petitioner may then file a supplemental petition, but no supplemental petition shall be considered unless it is received within 60 days from the date of the Solicitor's notification denying the original petition.

[45 FR 17864, Mar. 19, 1980, as amended at 47 FR 56861, Dec. 21, 1982]

**§ 12.42 Recovery of certain storage costs.**

If any wildlife, plant, or evidentiary item is seized and forfeited under the Endangered Species Act, 16 U.S.C. 1531 *et seq.*, any person whose act or omission was the basis for the seizure may be charged a reasonable fee for expenses to the United States connected with the transfer, board, handling, or storage of such property. If any fish, wildlife or plant is seized in connection with a violation of the Lacey Act Amendments of 1981, 16 U.S.C. 3371, *et seq.*, any person convicted thereof, or assessed a civil penalty therefor, may be assessed a reasonable fee for expenses of the United States connected with the storage, care and maintenance of such property. Within a reasonable time after forfeiture, the Service shall send to such person by registered or certified mail, return receipt requested, a bill for such fee. The bill shall contain an itemized statement of the applicable costs, together with instructions on the time and manner of payment. Payment shall be made in accordance with the bill. The recipient of any assessment of costs under this section who has an objection to the reasonableness of the costs described in the bill may, within 30 days of the date on which he received the bill, file written objections with the Regional Director of the Fish and Wildlife Service for the Region in which the seizure occurred. Upon receipt of the written objections, the appropriate Regional Director will promptly review them and within 30 days mail his final decision to the party who filed objections. In all cases, the Regional Director's decision

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shall constitute final administrative action on the matter.

[47 FR 56861, Dec. 21, 1982]

**Subpart F—Return of Property****§ 12.51 Return procedure.**

If, at the conclusion of the appropriate proceedings, seized property is to be returned to the owner or consignee, the Solicitor or Service shall issue a letter or other document authorizing its return. This letter or other document shall be delivered personally or sent by registered or certified mail, return receipt requested, and shall identify the owner or consignee, the seized property, and, if appropriate, the bailee of the seized property. It shall also provide that upon presentation of the letter or other document and proper identification, and the signing of a receipt provided by the Service, the seized property is authorized to be released, provided it is properly marked in accordance with applicable State or Federal requirements.

**PART 13—GENERAL PERMIT PROCEDURES****Subpart A—Introduction****Sec.**

- 13.1 General.
- 13.2 Purpose of regulations.
- 13.3 Scope of regulations.
- 13.4 Emergency variation from requirements.
- 13.5 Information collection requirements.

**Subpart B—Application for Permits**

- 13.11 Application procedures.
- 13.12 General information requirements on applications for permits.

**Subpart C—Permit Administration**

- 13.21 Issuance of permits.
- 13.22 Renewal of permits.
- 13.23 Amendment of permits.
- 13.24 Right of successor by certain persons.
- 13.25 Transfer of permits and scope of permit authorization.
- 13.26 Discontinuance of permit activity.
- 13.27 Permit suspension.
- 13.28 Permit revocation.
- 13.29 Review procedures.

**Subpart D—Conditions**

- 13.41 Humane conditions.

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- 13.42 Permits are specific.
- 13.43 Alteration of permits.
- 13.44 Display of permit.
- 13.45 Filing of reports.
- 13.46 Maintenance of records.
- 13.47 Inspection requirement.
- 13.48 Compliance with conditions of permit.
- 13.49 Surrender of permit.
- 13.50 Acceptance of liability.

AUTHORITY: 16 U.S.C. 668a, 704, 712, 742(j)-l, 1374(g), 1382, 1538(d), 1539, 1540(f), 3374, 4501-4916; 18 U.S.C. 42; 19 U.S.C. 1202; 31 U.S.C. 9701.

SOURCE: 39 FR 1161, Jan. 4, 1974, unless otherwise noted.

## Subpart A—Introduction

## § 13.1 General.

Each person intending to engage in an activity for which a permit is required by this subchapter B shall, before commencing such activity, obtain a valid permit authorizing such activity. Each person who desires to obtain the permit privileges authorized by this subchapter must make application for such permit in accordance with the requirements of this part 13 and the other regulations in this subchapter which set forth the additional requirements for the specific permits desired. If the activity for which permission is sought is covered by the requirements of more than one part of this subchapter, the requirements of each part must be met. If the information required for each specific permitted activity is included, one application will be accepted for all permits required, and a single permit will be issued.

## § 13.2 Purpose of regulations.

The regulations contained in this part provide uniform rules, conditions, and procedures for the application for and the issuance, denial, suspension, revocation, and general administration of all permits issued pursuant to this subchapter B.

[54 FR 38147, Sept. 14, 1989]

## § 13.3 Scope of regulations.

The provisions in this part are in addition to, and are not in lieu of, other permit regulations of this subchapter and apply to all permits issued thereunder, including "Importation, Exportation and Transportation of Wildlife"

(part 14), "Wild Bird Conservation Act" (part 15), "Injurious Wildlife" (part 16), "Endangered and Threatened Wildlife and Plants" (part 17), "Marine Mammals" (part 18), "Migratory Bird Permits" (part 21), "Eagle Permits" (part 22), and "Endangered Species Convention" (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) (part 23). As used in this part 13, the term "permit" will refer to a license, permit, certificate, letter of authorization, or other document as the context may require, and to all such documents issued by the Service or other authorized U.S. or foreign government agencies.

[70 FR 18317, Apr. 11, 2005]

## § 13.4 Emergency variation from requirements.

The Director may approve variations from the requirements of this part when he finds that an emergency exists and that the proposed variations will not hinder effective administration of this subchapter B, and will not be unlawful.

## § 13.5 Information collection requirements.

(a) The Office of Management and Budget approved the information collection requirements contained in this part 13 under 44 U.S.C. and assigned OMB Control Number 1018-0092. The Service may not conduct or sponsor, and you are not required to respond, to a collection of information unless it displays a currently valid OMB control number. We are collecting this information to provide information necessary to evaluate permit applications. We will use this information to review permit applications and make decisions, according to criteria established in various Federal wildlife conservation statutes and regulations, on the issuance, suspension, revocation, or denial permits. You must respond to obtain or retain a permit.

(b) We estimate the public reporting burden for these reporting requirements to vary from 15 minutes to 4 hours per response, with an average of 0.603 hours per response, including time for reviewing instructions, gathering and maintaining data, and completing

## § 13.11

and reviewing the forms. Direct comments regarding the burden estimate or any other aspect of these reporting requirements to the Service Information Collection Control Officer, MS-222 ARLSQ, U.S. Fish and Wildlife Service, Washington, DC 20240, or the Office of Management and Budget, Paperwork Reduction Project (1018-0092), Washington, DC 20503.

[63 FR 52634, Oct. 1, 1998]

### Subpart B—Application for Permits

#### § 13.11 Application procedures.

The Service may not issue a permit for any activity authorized by this subchapter B unless you have filed an application under the following procedures:

(a) *Forms.* Applications must be submitted in writing on a Federal Fish and Wildlife License/Permit Application (Form 3-200) or as otherwise specifically directed by the Service.

(b) *Forwarding Instructions.* Applications for permits in the following categories should be forwarded to the issuing office indicated below.

(1) You may obtain applications for migratory bird banding permits (50 CFR 21.22) by writing to: Bird Banding Laboratory, USGS Patuxent Wildlife Research Center, 12100 Beech Forest Road, Laurel, Maryland 20708-4037. Submit completed permit applications to the same address.

(2) You may obtain applications for designated port exception permits and import/export licenses (50 CFR 14) by writing to the Special Agent in Charge (SAC) of the Region in which you reside (see 50 CFR 2.2 or the Service Web site, <http://www.fws.gov>, for addresses and boundaries of the Regions). Submit completed permit applications to the same address.

(3) You may obtain applications for Wild Bird Conservation Act permits (50 CFR 15); injurious wildlife permits (50 CFR 16); captive-bred wildlife registrations (50 CFR 17); permits authorizing import, export, or foreign commerce of endangered and threatened species, and interstate commerce of non-native endangered or threatened species (50 CFR 17); marine mammal permits (50 CFR 18); and permits and certificates for im-

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port, export, and reexport of species listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (50 CFR 23) from: U.S. Fish and Wildlife Service, Division of Management Authority, 4401 N. Fairfax Drive, Room 700, Arlington, Virginia 22203-1610. Submit completed permit applications to the same address.

(4) You may obtain Endangered Species Act permit applications (50 CFR 17) for activities involving native endangered and threatened species, including incidental take, scientific purposes, enhancement of propagation or survival (i.e., recovery), and enhancement of survival by writing to the Regional Director (Attention: Endangered Species Permits) of the Region where the activity is to take place (see 50 CFR 2.2 or the Service Web site, <http://www.fws.gov>, for addresses and boundaries of the Regions). Submit completed applications to the same address (the Regional office covering the area where the activity will take place). Permit applications for interstate commerce for native endangered and threatened species should be obtained by writing to the Regional Director (Attention: Endangered Species Permits) of the Region that has the lead for the particular species, rather than the Region where the activity will take place. You can obtain information on the lead Region via the Service's Endangered Species Program Web page (<http://endangered.fws.gov/wildlife.html>)

by entering the common or scientific name of the listed species in the Regulatory Profile query box. Send interstate commerce permit applications for native listed species to the same Regional Office that has the lead for that species. Endangered Species Act permit applications for the import or export of native endangered and threatened species may be obtained from the Division of Management Authority in accordance with paragraph (b)(3) of this section.

(5) You may obtain applications for bald and golden eagle permits (50 CFR 22) and migratory bird permits (50 CFR 21), except for banding and marking permits, by writing to the Migratory Bird Permit Program Office in the Region in which you reside. For mailing

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addresses for the Migratory Bird Regional Permit Offices, see below, or go to: <http://permits.fws.gov/mbpermits/addresses.html>. Send completed applications to the same address. The mailing addresses for the Regional Migratory Bird Permit Offices are as follows:

Region 1 (CA, HI, ID, NV, OR, WA): U.S. Fish and Wildlife Service, Migratory Bird Permit Office, 911 N.E. 11th Avenue, Portland, OR 97232-4181.

Region 2 (AZ, NM, OK, TX): U.S. Fish and Wildlife Service, Migratory Bird Permit Office, P.O. Box 709, Albuquerque, NM 87103.

Region 3 (IA, IL, IN, MN, MO, MI, OH, WI): U.S. Fish and Wildlife Service, Migratory Bird Permit Office, One Federal Drive, Fort Snelling, MN 55111.

Region 4 (AR, FL, GA, KY, LA, MS, NC, SC, TN, PR, VI): U.S. Fish and Wildlife Service, Migratory Bird Permit Office, P.O. Box 49238, Atlanta, GA 30359.

Region 5 (CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VA, VT, WV): U.S. Fish and Wildlife Service, Migratory Bird Permit Office, P.O. Box 779, Hadley, MA 01035-0779.

Region 6 (CO, KS, MT, ND, NE, SD, UT, WY): U.S. Fish and Wildlife Service, Migratory Bird Permit Office, P.O. Box 25486, DFC (60130), Denver, CO 80225-0486.

Region 7 (AK): U.S. Fish and Wildlife Service, Migratory Bird Permit Office (MS-201), 1011 E. Tudor Road, Anchorage, AK 99503.

(c) *Time notice.* The Service will process all applications as quickly as possible. However, we cannot guarantee final action within the time limit you request. You should ensure that applications for permits for marine mammals and/or endangered and threatened species are postmarked at least 90 calendar days prior to the requested effective date. The time we require for processing of endangered and threatened species incidental take permits will vary according to the project scope and significance of effects. Submit applications for all other permits to the issuing/reviewing office and ensure they are postmarked at least 60 calendar days prior to the requested effective date. Our processing time may be increased by the procedural require-

ments of the National Environmental Policy Act (NEPA), the requirement to publish a notice in the FEDERAL REGISTER requesting a 30-day public comment period when we receive certain types of permit applications, and/or the time required for extensive consultation within the Service, with other Federal agencies, and/or State or foreign governments. When applicable, we may require permit applicants to provide additional information on the proposal and on its environmental effects as may be necessary to satisfy the procedural requirements of NEPA.

(d) *Fees.* (1) Unless otherwise exempted under this subsection, you must pay the required permit processing fee at the time that you apply for issuance or amendment of a permit. You must pay by check or money order made payable to the "U.S. Fish and Wildlife Service." The Service will not refund any application fee under any circumstances if we have processed the application. However, we may return the application fee if you withdraw the application before we have significantly processed it.

(2) If regulations in this subchapter require more than one type of permit for an activity and the permits are issued by the same office, the issuing office may issue one consolidated permit authorizing the activity in accordance with §13.1. You may submit a single application in such cases, provided that the single application contains all the information required by the separate applications for each permitted activity. Where more than one permitted activity is consolidated into one permit, the issuing office will charge the highest single fee for the activity permitted.

(3) Circumstances under which we will not charge a permit application fee are as follows:

(i) We will not charge a permit application fee to any Federal, tribal, State, or local government agency or to any individual or institution acting on behalf of such agency. Except as otherwise authorized or waived, if you fail to submit evidence of such status with your application, we will require the submission of all processing fees prior to the acceptance of the application for processing.

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(ii) As noted in paragraph (d)(4) of this section.

(iii) We may waive the fee on a case-by-case basis for extraordinary extenuating circumstances provided that the issuing permit office and a Regional or Assistant Director approves the waiver.

(4) *User fees.* The following table identifies specific fees for each permit ap-

plication or amendment to a current permit. If no fee is identified under the Amendment Fee column, this particular permit either cannot be amended and a new application, and application fee, would need to be submitted or no fee will be charged for amending the permit (please contact the issuing office for further information).

Type of permit	CFR citation	Fee	Amendment fee
<b>Migratory Bird Treaty Act</b>			
Migratory Bird Import/Export .....	50 CFR 21	\$75	
Migratory Bird Banding or Marking .....	50 CFR 21		
Migratory Bird Scientific Collecting .....	50 CFR 21	100	\$50
Migratory Bird Taxidermy .....	50 CFR 21	100	
Waterfowl, Gulls and Disposal .....	50 CFR 21	75	
Special Canada Geese .....	50 CFR 21		
Migratory Bird Special Purpose/Education .....	50 CFR 21	75	
Migratory Bird Special Purpose/Salvage .....	50 CFR 21	75	
Migratory Bird Special Purpose/Game Bird Propagation .....	50 CFR 21	75	
Migratory Bird Special Purpose/Maceianus .....	50 CFR 21	100	
Falconry .....	50 CFR 21	100	
Raptor Propagation .....	50 CFR 21	100	
Migratory Bird Rehabilitation .....	50 CFR 21	50	
Migratory Bird Depredation .....	50 CFR 21	100	50
Migratory Bird Depredation/Homeowner .....	50 CFR 21	60	
<b>Bald and Golden Eagle Protection Act</b>			
Eagle Scientific Collecting .....	50 CFR 22	100	50
Eagle Exhibition .....	50 CFR 22	75	
Eagle Falconry .....	50 CFR 22	100	
Eagle—Native American Religion .....	50 CFR 22		
Eagle Depredation .....	50 CFR 22	100	50
Golden Eagle Nest Take .....	50 CFR 22	100	50
Eagle Transport—Scientific or Exhibition .....	50 CFR 22	75	
Eagle Transport—Native American Religious Purposes .....	50 CFR 22	(*)	(*)
<b>Endangered Species Act/CITES/Lacey Act</b>			
ESA Recovery .....	50 CFR 17	100	50
ESA Interstate Commerce .....	50 CFR 17	100	50
ESA Enhancement of Survival (Safe Harbor Agreement) .....	50 CFR 17	50	25
ESA Enhancement of Survival (Card data Conservation Agreement with Assurance) .....	50 CFR 17	50	25
ESA Incidental Take (Habitat Conservation Plan) .....	50 CFR 17	100	50
ESA and CITES Import/Export and Foreign Commerce .....	50 CFR 17	100	50
ESA and CITES Museum Exchange .....	50 CFR 17	100	50
ESA Captive-bred Wildlife Registration .....	50 CFR 17	200	100
—Renewal of Captive-bred wildlife registration .....	50 CFR 17	100	
CITES Import (including trophies under ESA and MMPA) .....	50 CFR 17, 18, 23	100	50
CITES Export .....	50 CFR 23	100	50
CITES Pre-Convention .....	50 CFR 23	75	40
CITES Certificate of Origin .....	50 CFR 23	75	40
CITES Re-Export .....	50 CFR 23	75	40
CITES Personal Effects and Pet Export/Re-Export .....	50 CFR 23	50	
CITES Appendix II Export (native turkeys and alligators—excluding live animals) .....	50 CFR 23	100	50
CITES Master File (includes files for artificial propagation, biomedical, etc. and covers import, export, and re-export documents) .....	50 CFR 23	200	100
—Renewal of CITES Master File .....	50 CFR 23	100	
—Single-use permits issued on Master File .....	50 CFR 23	75	
CITES Annual Program File .....	50 CFR 23	50	
—Single-use permits issued under Annual Program .....	50 CFR 23	75	
CITES replacement documents (lost, stolen, or damaged documents) .....	50 CFR 23	50	50
CITES Passport for Traveling Exhibitions and Pets .....	50 CFR 23	75	
CITES/ESA Passport for Traveling Exhibitions .....	50 CFR 23	100	
Import/Export License .....	50 CFR 14	100	50
Designated Port Exception .....	50 CFR 14	100	50

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Type of permit	CFR citation	Fee	Amendment fee
Injurious Wildlife Permit	50 CFR 16	100	50
—Transport Authorization for Injurious Wildlife	50 CFR 16	25	
<b>Wild Bird Conservation Act (WBCA)</b>			
Personal Pet Import	50 CFR 15	50	
WBCA Scientific Research, Zoological Breeding or Display, Cooperative Breeding	50 CFR 15	100	50
WBCA Approval of Cooperative Breeding Programs	50 CFR 15	200	100
—Renewal of a WBCA Cooperative Breeding Program	50 CFR 15	50	
WBCA Approval of a Foreign Breeding Facility	50 CFR 15	*250	
<b>Marine Mammal Protection Act</b>			
Marine Mammal Public Display	50 CFR 18	300	150
Marine Mammal Scientific Research/Enhancement/Registered Agent or Tannery	50 CFR 18	150	75
—Renewal of Marine Mammal Scientific Research/Enhancement/Registered Agent or Tannery	50 CFR 18	75	

\* No fee.

\* Each.

\* Per animal.

\* Per species.

(5) We will charge a fee for substantive amendments made to permits within the time period that the permit is still valid. The fee is generally half the original fee assessed at the time that the permit is processed; see paragraph (d)(4) of this section for the exact amount. Substantive amendments are those that pertain to the purpose and conditions of the permit and are not purely administrative. Administrative changes, such as updating name and address information, are required under 13.23(c), and we will not charge a fee for such amendments.

(6) Except as specifically noted in paragraph (d)(4) of this section, a permit renewal is an issuance of a new permit, and applicants for permit renewal must pay the appropriate fee listed in paragraph (d)(4) of this section.

(e) *Abandoned or incomplete applications.* If we receive an incomplete or improperly executed application, or if you do not submit the proper fees, the issuing office will notify you of the deficiency. If you fail to supply the correct information to complete the application or to pay the required fees within 45 calendar days of the date of notification, we will consider the application abandoned. We will not refund any fees for an abandoned application.

[70 FR 18317, Apr. 11, 2005]

#### § 13.12 General information requirements on applications for permits.

(a) General information required for all applications. All applications must contain the following information:

(1) Applicant's full name, mailing address, telephone number(s), and,

(i) If the applicant is an individual, the date of birth, height, weight, hair color, eye color, sex, and any business or institutional affiliation of the applicant related to the requested permitted activity; or

(ii) If the applicant is a corporation, firm, partnership, association, institution, or public or private agency, the name and address of the president or principal officer and of the registered agent for the service of process;

(2) Location where the requested permitted activity is to occur or be conducted;

(3) Reference to the part(s) and section(s) of this subchapter B as listed in paragraph (b) of this section under which the application is made for a permit or permits, together with any additional justification, including supporting documentation as required by the referenced part(s) and section(s);

(4) If the requested permitted activity involves the import or re-export of wildlife or plants from or to any foreign country, and the country of origin, or the country of export or re-export restricts the taking, possession, transportation, exportation, or sale of

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wildlife or plants, documentation as indicated in § 14.52(c) of this subchapter B:

(5) Certification in the following language:

I hereby certify that I have read and am familiar with the regulations contained in title 50, part 13, of the Code of Federal Regulations and the other applicable parts in subchapter B of chapter I of title 50, Code of Federal Regulations, and I further certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to suspension or revocation of this permit and to the criminal penalties of 18 U.S.C. 1001.

(6) Desired effective date of permit except where issuance date is fixed by the part under which the permit is issued;

(7) Date;

(8) Signature of the applicant; and

(9) Such other information as the Director determines relevant to the processing of the application, including, but not limited to, information on the environmental effects of the activity consistent with 40 CFR 1506.5 and Departmental procedures at 516 DM 6, Appendix 1.3A.

(b) *Additional information required on permit applications.* As stated in paragraph (a)(3) of this section certain additional information is required on all applications. These additional requirements may be found by referring to the section of this subchapter B cited after the type of permit for which application is being made:

Type of permit	Section
Importation at nondesignated ports:	
Scientific .....	14.31
Detention, prevention .....	14.32
Economic hardship .....	14.33
Marking of package or container:	
Symbol marking .....	14.83
Import/export license .....	14.93
Feather import quota: Importation or entry .....	15.21
Injurious wildlife: Importation or shipment .....	15.22
Endangered wildlife and plant permits:	
Similarity of appearance .....	17.52
Scientific, enhancement of propagation or survival, incidental taking for wildlife .....	17.22
Scientific, propagation, or survival for plants .....	17.52
Economic hardship for wildlife .....	17.23
Economic hardship for plants .....	17.53
Threatened wildlife and plant permits:	
Similarity of appearance .....	17.52
General for wildlife .....	17.32
American alligator-buyer or tanner .....	17.42(a)
General for plants .....	17.72

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Type of permit	Section
Mammal permits:	
Scientific research .....	18.31
Public display .....	18.31
Migratory bird permits:	
Banding or marking .....	21.22
Scientific collecting .....	21.23
Taxidermist .....	21.24
Waterfowl sale and disposal .....	21.25
Special aviculturist .....	21.26
Special purpose .....	21.27
Falconry .....	21.28
Raptor propagation permit .....	21.30
Depredation control .....	21.41
Eagle permits:	
Scientific or exhibition .....	22.21
Indian religious use .....	22.22
Depredation control .....	22.23
Falconry purposes .....	22.24
Take of golden eagle nests .....	22.25
Endangered Species Convention permits .....	23.15

[39 FR 1161, Jan. 4, 1974, as amended at 42 FR 10465, Feb. 22, 1977; 42 FR 32377, June 24, 1977; 44 FR 54006, Sept. 17, 1979; 44 FR 59083, Oct. 12, 1979; 45 FR 56673, Aug. 25, 1980; 45 FR 78154, Nov. 23, 1980; 46 FR 42680, Aug. 24, 1981; 48 FR 31607, July 8, 1983; 48 FR 57300, Dec. 29, 1983; 50 FR 38687, Sept. 30, 1985; 50 FR 45408, Oct. 31, 1985; 54 FR 38147, Sept. 14, 1989; 70 FR 18319, Apr. 11, 2005.]

### Subpart C—Permit Administration

#### § 13.21 Issuance of permits.

(a) No permit may be issued prior to the receipt of a written application therefor, unless a written variation from the requirements, as authorized by § 13.4, is inserted into the official file of the Bureau. An oral or written representation of an employee or agent of the United States Government, or an action of such employee or agent, shall not be construed as a permit unless it meets the requirements of a permit as defined in 50 CFR 10.12.

(b) Upon receipt of a properly executed application for a permit, the Director shall issue the appropriate permit unless:

(1) The applicant has been assessed a civil penalty or convicted of any criminal provision of any statute or regulation relating to the activity for which the application is filed, if such assessment or conviction evidences a lack of responsibility.

(2) The applicant has failed to disclose material information required, or has made false statements as to any material fact, in connection with his application;

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(3) The applicant has failed to demonstrate a valid justification for the permit and a showing of responsibility;

(4) The authorization requested potentially threatens a wildlife or plant population, or

(5) The Director finds through further inquiry or investigation, or otherwise, that the applicant is not qualified.

(c) *Disqualifying factors.* Any one of the following will disqualify a person from receiving permits issued under this part.

(1) A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Director in response to a written petition.

(2) The revocation of a permit for reasons found in § 13.28 (a)(1) or (a)(2) disqualifies any such person from receiving or exercising the privileges of a similar permit for a period of five years from the date of the final agency decision on such revocation.

(3) The failure to pay any required fees or assessed costs and penalties, whether or not reduced to judgment disqualifies such person from receiving or exercising the privileges of a permit as long as such moneys are owed to the United States. This requirement shall not apply to any civil penalty presently subject to administrative or judicial appeal; provided that the pendency of a collection action brought by the United States or its assignees shall not constitute an appeal within the meaning of this subsection.

(4) The failure to submit timely, accurate, or valid reports as required may disqualify such person from receiving or exercising the privileges of a permit as long as the deficiency exists.

(d) *Use of supplemental information.* The issuing officer, in making a determination under this subsection, may use any information available that is relevant to the issue. This may include any prior conviction, or entry of a plea of guilty or nolo contendere, or assessment of civil or criminal penalty for a violation of any Federal or State law

or regulation governing the permitted activity. It may also include any prior permit revocations or suspensions, or any reports of State or local officials. The issuing officer shall consider all relevant facts or information available, and may make independent inquiry or investigation to verify information or substantiate qualifications asserted by the applicant.

(e) *Conditions of issuance and acceptance.* (1) *Conditions of issuance and acceptance.* Any permit automatically incorporates within its terms the conditions and requirements of subpart D of this part and of any part(s) or section(s) specifically authorizing or governing the activity for which the permit is issued, as well as any other conditions deemed appropriate and included on the face of the permit at the discretion of the Director.

(2) Any person accepting and holding a permit under this subchapter B acknowledges the necessity for close regulation and monitoring of the permitted activity by the Government. By accepting such permit, the permittee consents to and shall allow entry by agents or employees of the Service upon premises where the permitted activity is conducted at any reasonable hour. Service agents or employees may enter such premises to inspect the location; any books, records, or permits required to be kept by this subchapter B; and any wildlife or plants kept under authority of the permit.

(f) *Term of permit.* Unless otherwise modified, a permit is valid during the period specified on the face of the permit. Such period shall include the effective date and the date of expiration.

(g) *Denial.* The issuing officer may deny a permit to any applicant who fails to meet the issuance criteria set forth in this section or in the part(s) or section(s) specifically governing the activity for which the permit is requested.

[39 FR 1161, Jan. 4, 1974, as amended at 42 FR 32377, June 24, 1977; 47 FR 30785, July 15, 1982; 54 FR 38148, Sept. 14, 1989; 70 FR 18319, Apr. 11, 2005]

#### § 13.22 Renewal of permits.

(a) *Application for renewal.* Applicants for renewal of a permit must submit a written application at least 30 days

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prior to the expiration date of the permit. Applicants must certify in the form required by § 13.12(a)(5) that all statements and information in the original application remain current and correct, unless previously changed or corrected. If such information is no longer current or correct, the applicant must provide corrected information.

(b) *Renewal criteria.* The Service shall issue a renewal of a permit if the applicant meets the criteria for issuance in § 13.21(b) and is not disqualified under § 13.21(c).

(c) *Continuation of permitted activity.* Any person holding a valid, renewable permit, who has complied with this section, may continue the activities authorized by the expired permit until the Service has acted on such person's application for renewal.

(d) *Denial.* The issuing officer may deny renewal of a permit to any applicant who fails to meet the issuance criteria set forth in § 13.21 of this part, or in the part(s) or section(s) specifically governing the activity for which the renewal is requested.

[54 FR 38148, Sept. 14, 1989]

**§ 13.23 Amendment of permits.**

(a) *Permittee's request.* Where circumstances have changed so that a permittee desires to have any condition of his permit modified, such permittee must submit a full written justification and supporting information in conformity with this part and the part under which the permit was issued.

(b) The Service reserves the right to amend any permit for just cause at any time during its term, upon written finding of necessity, provided that any such amendment of a permit issued under § 17.22(b) through (d) or § 17.32(b) through (d) of this subchapter shall be consistent with the requirements of § 17.22(b)(5), (c)(5) and (d)(5) or § 17.32(b)(5), (c)(5) and (d)(5) of this subchapter, respectively.

(c) *Change of name or address.* A permittee is not required to obtain a new permit if there is a change in the legal individual or business name, or in the mailing address of the permittee. A permittee is required to notify the issuing office within 10 calendar days of such change. This provision does not authorize any change in location of the

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conduct of the permitted activity when approval of the location is a qualifying condition of the permit.

[54 FR 38148, Sept. 14, 1989, as amended at 64 FR 32711, June 17, 1999]

**§ 13.24 Right of succession by certain persons.**

(a) Certain persons other than the permittee are authorized to carry on a permitted activity for the remainder of the term of a current permit, provided they comply with the provisions of paragraph (b) of this section. Such persons are the following:

(1) The surviving spouse, child, executor, administrator, or other legal representative of a deceased permittee; or

(2) A receiver or trustee in bankruptcy or a court designated assignee for the benefit of creditors.

(b) In order to qualify for the authorization provided in this section, the person or persons desiring to continue the activity shall furnish the permit to the issuing officer for endorsement within 90 days from the date the successor begins to carry on the activity.

(c) In the case of permits issued under § 17.22(b) through (d) or § 17.32(b) through (d) of this subchapter B, the successor's authorization under the permit is also subject to a determination by the Service that:

(1) The successor meets all of the qualifications under this part for holding a permit;

(2) The successor has provided adequate written assurances that it will provide sufficient funding for the conservation plan or Agreement and will implement the relevant terms and conditions of the permit, including any outstanding minimization and mitigation requirements; and

(3) The successor has provided such other information as the Service determines is relevant to the processing of the request.

[64 FR 32711, June 17, 1999]

**§ 13.25 Transfer of permits and scope of permit authorization.**

(a) Except as otherwise provided for in this section, permits issued under this part are not transferable or assignable.

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(b) Permits issued under § 17.22(b) or § 17.32(b) of this subchapter B may be transferred in whole or in part through a joint submission by the permittee and the proposed transferee or in the case of a deceased permittee, the deceased permittee's legal representative and the proposed transferee, provided the Service determines that:

(1) The proposed transferee meets all of the qualifications under this part for holding a permit;

(2) The proposed transferee has provided adequate written assurances that it will provide sufficient funding for the conservation plan or Agreement and will implement the relevant terms and conditions of the permit, including any outstanding minimization and mitigation requirements; and

(3) The proposed transferee has provided such other information as the Service determines is relevant to the processing of the submission.

(c) In the case of the transfer of lands subject to an agreement and permit issued under § 17.22(c) or (d) or § 17.32 (c) or (d) of this subchapter B, the Service will transfer the permit to the new owner if the new owner agrees in writing to become a party to the original agreement and permit.

(d) Except as otherwise stated on the face of the permit, any person who is under the direct control of the permittee, or who is employed by or under contract to the permittee for purposes authorized by the permit, may carry out the activity authorized by the permit.

(e) In the case of permits issued under § 17.22(b)-(d) or § 17.32(b)-(d) of this subchapter to a State or local governmental entity, a person is under the direct control of the permittee where:

(1) The person is under the jurisdiction of the permittee and the permit provides that such person(s) may carry out the authorized activity; or

(2) The person has been issued a permit by the governmental entity or has executed a written instrument with the governmental entity, pursuant to the terms of the implementing agreement.

[64 FR 32711, June 17, 1999, as amended at 64 FR 52676, Sept. 30, 1999; 69 FR 24092, May 3, 2004]

#### § 13.28 Discontinuance of permit activity.

When a permittee, or any successor to a permittee as provided for by § 13.24, discontinues activities authorized by a permit, the permittee shall within 30 calendar days of the discontinuance return the permit to the issuing office together with a written statement surrendering the permit for cancellation. The permit shall be deemed void and cancelled upon its receipt by the issuing office. No refund of any fees paid for issuance of the permit or for any other fees or costs associated with a permitted activity shall be made when a permit is surrendered for cancellation for any reason prior to the expiration date stated on the face of the permit.

[64 FR 38149, Sept. 14, 1999]

#### § 13.27 Permit suspension.

(a) *Criteria for suspension.* The privileges of exercising some or all of the permit authority may be suspended at any time if the permittee is not in compliance with the conditions of the permit, or with any applicable laws or regulations governing the conduct of the permitted activity. The issuing officer may also suspend all or part of the privileges authorized by a permit if the permittee fails to pay any fees, penalties or costs owed to the Government. Such suspension shall remain in effect until the issuing officer determines that the permittee has corrected the deficiencies.

(b) *Procedure for suspension.* (1) When the issuing officer believes there are valid grounds for suspending a permit the permittee shall be notified in writing of the proposed suspension by certified or registered mail. This notice shall identify the permit to be suspended, the reason(s) for such suspension, the actions necessary to correct the deficiencies, and inform the permittee of the right to object to the proposed suspension. The issuing officer may amend any notice of suspension at any time.

(2) Upon receipt of a notice of proposed suspension the permittee may file a written objection to the proposed action. Such objection must be in writing, must be filed within 45 calendar

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days of the date of the notice of proposal, must state the reasons why the permittee objects to the proposed suspension, and may include supporting documentation.

(3) A decision on the suspension shall be made within 45 days after the end of the objection period. The issuing officer shall notify the permittee in writing of the Service's decision and the reasons therefore. The issuing officer shall also provide the applicant with the information concerning the right to request reconsideration of the decision under § 13.29 of this part and the procedures for requesting reconsideration.

[64 FR 38149, Sept. 14, 1999]

**§ 13.28 Permit revocation.**

(a) *Criteria for revocation.* A permit may be revoked for any of the following reasons:

(1) The permittee willfully violates any Federal or State statute or regulation, or any Indian tribal law or regulation, or any law or regulation of any foreign country, which involves a violation of the conditions of the permit or of the laws or regulations governing the permitted activity; or

(2) The permittee fails within 60 days to correct deficiencies that were the cause of a permit suspension; or

(3) The permittee becomes disqualified under § 13.21(c) of this part; or

(4) A change occurs in the statute or regulation authorizing the permit that prohibits the continuation of a permit issued by the Service; or

(5) Except for permits issued under § 17.22(b) through (d) or § 17.32(b) through (d) of this subchapter, the population(s) of the wildlife or plant that is the subject of the permit declines to the extent that continuation of the permitted activity would be detrimental to maintenance or recovery of the affected population.

(b) *Procedure for revocation.* (1) When the issuing officer believes there are valid grounds for revoking a permit, the permittee shall be notified in writing of the proposed revocation by certified or registered mail. This notice shall identify the permit to be revoked, the reason(s) for such revocation, the proposed disposition of the wildlife, if any, and inform the permittee of the

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right to object to the proposed revocation. The issuing officer may amend any notice of revocation at any time.

(2) Upon receipt of a notice of proposed revocation the permittee may file a written objection to the proposed action. Such objection must be in writing, must be filed within 45 calendar days of the date of the notice of proposal, must state the reasons why the permittee objects to the proposed revocation, and may include supporting documentation.

(3) A decision on the revocation shall be made within 45 days after the end of the objection period. The issuing officer shall notify the permittee in writing of the Service's decision and the reasons therefore, together with the information concerning the right to request and the procedures for requesting reconsideration.

(4) Unless a permittee files a timely request for reconsideration, any wildlife held under authority of a permit that is revoked must be disposed of in accordance with instructions of the issuing officer. If a permittee files a timely request for reconsideration of a proposed revocation, such permittee may retain possession of any wildlife held under authority of the permit until final disposition of the appeal process.

[64 FR 38149, Sept. 14, 1999, as amended at 64 FR 32711, June 17, 1999]

**§ 13.29 Review procedures.**

(a) *Request for reconsideration.* Any person may request reconsideration of an action under this part if that person is one of the following:

(1) An applicant for a permit who has received written notice of denial;

(2) An applicant for renewal who has received written notice that a renewal is denied;

(3) A permittee who has a permit amended, suspended, or revoked, except for those actions which are required by changes in statutes or regulations, or are emergency changes of limited applicability for which an expiration date is set within 90 days of the permit change; or

(4) A permittee who has a permit issued or renewed but has not been

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granted authority by the permit to perform all activities requested in the application, except when the activity requested is one for which there is no lawful authority to issue a permit.

(b) *Method of requesting reconsideration.* Any person requesting reconsideration of an action under this part must comply with the following criteria:

(1) Any request for reconsideration must be in writing, signed by the person requesting reconsideration or by the legal representative of that person, and must be submitted to the issuing officer.

(2) The request for reconsideration must be received by the issuing officer within 45 calendar days of the date of notification of the decision for which reconsideration is being requested.

(3) The request for reconsideration shall state the decision for which reconsideration is being requested and shall state the reason(s) for the reconsideration, including presenting any new information or facts pertinent to the issue(s) raised by the request for reconsideration.

(4) The request for reconsideration shall contain a certification in substantially the same form as that provided by § 13.12(a)(5). If a request for reconsideration does not contain such certification, but is otherwise timely and appropriate, it shall be held and the person submitting the request shall be given written notice of the need to submit the certification within 15 calendar days. Failure to submit certification shall result in the request being rejected as insufficient in form and content.

(c) *Inquiry by the Service.* The Service may institute a separate inquiry into the matter under consideration.

(d) *Determination of grant or denial of a request for reconsideration.* The issuing officer shall notify the permittee of the Service's decision within 45 days of the receipt of the request for reconsideration. This notification shall be in writing, shall state the reasons for the decision, and shall contain a description of the evidence which was relied upon by the issuing officer. The notification shall also provide information concerning the right to appeal, the official to whom an appeal may be ad-

resseded, and the procedures for making an appeal.

(e) *Appeal.* A person who has received an adverse decision following submission of a request for reconsideration may submit a written appeal to the Regional Director for the region in which the issuing office is located, or to the Director for offices which report directly to the Director. An appeal must be submitted within 45 days of the date of the notification of the decision on the request for reconsideration. The appeal shall state the reason(s) and issue(s) upon which the appeal is based and may contain any additional evidence or arguments to support the appeal.

(f) *Decision on appeal.* (1) Before a decision is made concerning the appeal the appellant may present oral arguments before the Regional Director or the Director, as appropriate, if such official judges oral arguments are necessary to clarify issues raised in the written record.

(2) The Service shall notify the appellant in writing of its decision within 45 calendar days of receipt of the appeal, unless extended for good cause and the appellant notified of the extension.

(3) The decision of the Regional Director or the Director shall constitute the final administrative decision of the Department of the Interior.

[54 FR 38149, Sept. 14, 1989]

## Subpart D—Conditions

## § 13.41 Humane conditions.

Any live wildlife possessed under a permit must be maintained under humane and healthful conditions.

[54 FR 38150, Sept. 14, 1989]

## § 13.42 Permits are specific.

The authorizations on the face of a permit that set forth specific times, dates, places, methods of taking or carrying out the permitted activities, numbers and kinds of wildlife or plants, location of activity, and associated activities that must be carried out; describe certain circumscribed transactions; or otherwise allow a specifically limited matter, are to be strictly interpreted and will not be interpreted to permit similar or related

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matters outside the scope of strict construction.

[70 FR 18320, Apr. 11, 2005]

**§ 13.43 Alteration of permits.**

Permits shall not be altered, erased, or mutilated, and any permit which has been altered, erased, or mutilated shall immediately become invalid. Unless specifically permitted on the face thereof, no permit shall be copied, nor shall any copy of a permit issued pursuant to this subchapter B be displayed, offered for inspection, or otherwise used for any official purpose for which the permit was issued.

**§ 13.44 Display of permit.**

Any permit issued under this part shall be displayed for inspection upon request to the Director or his agent, or to any other person relying upon its existence.

**§ 13.45 Filing of reports.**

Permittees may be required to file reports of the activities conducted under the permit. Any such reports shall be filed not later than March 31 for the preceding calendar year ending December 31, or any portion thereof, during which a permit was in force, unless the regulations of this subchapter B or the provisions of the permit set forth other reporting requirements.

**§ 13.46 Maintenance of records.**

From the date of issuance of the permit, the permittee shall maintain complete and accurate records of any taking, possession, transportation, sale, purchase, barter, exportation, or importation of plants obtained from the wild (excluding seeds) or wildlife pursuant to such permit. Such records shall be kept current and shall include names and addresses of persons with whom any plant obtained from the wild (excluding seeds) or wildlife has been purchased, sold, bartered, or otherwise transferred, and the date of such transaction, and such other information as may be required or appropriate. Such records shall be legibly written or reproducible in English and shall be

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maintained for five years from the date of expiration of the permit.

[39 FR 1161, Jan. 4, 1974, as amended at 42 FR 32377, June 24, 1977; 54 FR 38150, Sept. 14, 1989]

**§ 13.47 Inspection requirement.**

Any person holding a permit under this subchapter B shall allow the Director's agent to enter his premises at any reasonable hour to inspect any wildlife or plant held or to inspect, audit, or copy any permits, books, or records required to be kept by regulations of this subchapter B.

[39 FR 1161, Jan. 4, 1974, as amended at 42 FR 32377, June 24, 1977]

**§ 13.48 Compliance with conditions of permit.**

Any person holding a permit under subchapter B and any person acting under authority of such permit must comply with all conditions of the permit and with all applicable laws and regulations governing the permitted activity.

[54 FR 38150, Sept. 14, 1989]

**§ 13.49 Surrender of permit.**

Any person holding a permit under subchapter B shall surrender such permit to the issuing officer upon notification that the permit has been suspended or revoked by the Service, and all appeal procedures have been exhausted.

[54 FR 38150, Sept. 14, 1989]

**§ 13.50 Acceptance of liability.**

Except as otherwise limited in the case of permits described in § 13.25(d), any person holding a permit under this subchapter B assumes all liability and responsibility for the conduct of any activity conducted under the authority of such permit.

[64 FR 32711, June 17, 1999]

## **PART 14—IMPORTATION, EXPORTATION, AND TRANSPORTATION OF WILDLIFE**

### **Subpart A—Introduction**

#### **Sec.**

14.1 Purpose of regulations.

14.2 Scope of regulations.

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limited taking, and an import permit is issued under § 17.22;

(v) Any permanent exports of such specimens meet the requirements of paragraph (g)(4) of this section; and

(vi) Each person claiming the benefit of the exception in paragraph (g)(1) of this section must maintain accurate written records of activities, including births, deaths and transfers of specimens, and make those records accessible to Service agents for inspection at reasonable hours as set forth in §§ 13.46 and 13.47.

[40 FR 44415, Sept. 26, 1975, as amended at 40 FR 53400, Nov. 18, 1975; 41 FR 19226, May 11, 1976; 44 FR 31580, May 31, 1979; 44 FR 54007, Sept. 17, 1979; 58 FR 68325, Dec. 27, 1993; 63 FR 48640, Sept. 11, 1998; 68 FR 2919, Jan. 22, 2003; 68 FR 61136, Oct. 27, 2003]

EFFECTIVE DATE NOTE: At 70 FR 52318, Sept. 2, 2005, § 17.21 was amended by adding paragraph (h), effective Oct. 3, 2005. For the convenience of the user the added text is set forth as follows:

**§ 17.21 Prohibitions.**

\* \* \* \* \*

(h) *U.S. captive-bred scimitar-horned oryx, addax, and dama gazelle.* Notwithstanding paragraphs (b), (c), (e), and (f) of this section, any person subject to the jurisdiction of the United States may take; export or re-import; deliver, receive, carry, transport or ship in interstate or foreign commerce, in the course of a commercial activity; or sell or offer for sale in interstate or foreign commerce live wildlife, including embryos and gametes, and sport-hunted trophies of scimitar-horned oryx (*Oryx dammah*), addax (*Addax nasomaculatus*), and dama gazelle (*Gazella dama*) provided:

(1) The purpose of such activity is associated with the management or transfer of live wildlife, including embryos and gametes, or sport hunting in a manner that contributes to increasing or sustaining captive numbers or to potential reintroduction to range countries;

(2) The specimen was captive-bred, in accordance with § 17.3, within the United States;

(3) All live specimens of that species held by the captive-breeding operation are managed in a manner that prevents hybridization of the species or subspecies.

(4) All live specimens of that species held by the captive-breeding operation are managed in a manner that maintains genetic diversity.

(5) Any export of or foreign commerce in a specimen meets the requirements of para-

graph (g)(4) of this section, as well as parts 13, 14, and 23 of this chapter;

(6) Each specimen to be re-imported is uniquely identified by a tattoo or other means that is reported on the documentation required under paragraph (h)(5) of this section; and

(7) Each person claiming the benefit of the exception of this paragraph (h) must maintain accurate written records of activities, including births, deaths, and transfers of specimens, and make those records accessible to Service officials for inspection at reasonable hours set forth in §§ 13.46 and 13.47 of this chapter.

(8) The sport-hunted trophy consists of raw or tanned parts, such as bones, hair, head, hide, hooves, horns, meat, skull, rug, taxidermied head, shoulder, or full body mount, of a specimen that was taken by the hunter during a sport hunt for personal use. It does not include articles made from a trophy, such as worked, manufactured, or hand-crafted items for use as clothing, curios, ornamentation, jewelry, or other utilitarian items for commercial purposes.

**§ 17.22 Permits for scientific purposes, enhancement of propagation or survival, or for incidental taking.**

Upon receipt of a complete application, the Director may issue a permit authorizing any activity otherwise prohibited by § 17.21, in accordance with the issuance criteria of this section, for scientific purposes, for enhancing the propagation or survival, or for the incidental taking of endangered wildlife. Such permits may authorize a single transaction, a series of transactions, or a number of activities over a specific period of time. (See § 17.32 for permits for threatened species.) The Director shall publish notice in the FEDERAL REGISTER of each application for a permit that is made under this section. Each notice shall invite the submission from interested parties, within 30 days after the date of the notice, of written data, views, or arguments with respect to the application. The 30-day period may be waived by the Director in an emergency situation where the life or health of an endangered animal is threatened and no reasonable alternative is available to the applicant. Notice of any such waiver shall be published in the FEDERAL REGISTER within 10 days following issuance of the permit.

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(a)(1) *Application requirements for permits for scientific purposes or for the enhancement of propagation or survival.* A person wishing to get a permit for an activity prohibited by §17.21 submits an application for activities under this paragraph. The Service provides Form 3-200 for the application to which all of the following must be attained:

(i) The common and scientific names of the species sought to be covered by the permit, as well as the number, age, and sex of such species, and the activity sought to be authorized (such as taking, exporting, selling in interstate commerce);

(ii) A statement as to whether, at the time of application, the wildlife sought to be covered by the permit (A) is still in the wild, (B) has already been removed from the wild, or (C) was born in captivity;

(iii) A resume of the applicant's attempts to obtain the wildlife sought to be covered by the permit in a manner which would not cause the death or removal from the wild of such wildlife;

(iv) If the wildlife sought to be covered by the permit has already been removed from the wild, the country and place where such removal occurred; if the wildlife sought to be covered by the permit was born in captivity, the country and place where such wildlife was born;

(v) A complete description and address of the institution or other facility where the wildlife sought to be covered by the permit will be used, displayed, or maintained;

(vi) If the applicant seeks to have live wildlife covered by the permit, a complete description, including photographs or diagrams, of the facilities to house and/or care for the wildlife and a resume of the experience of those person who will be caring for the wildlife;

(vii) A full statement of the reasons why the applicant is justified in obtaining a permit including the details of the activities sought to be authorized by the permit;

(viii) If the application is for the purpose of enhancement of propagation, a statement of the applicant's willingness to participate in a cooperative breeding program and to maintain or contribute data to a studbook;

(2) *Issuance criteria.* Upon receiving an application completed in accordance with paragraph (a)(1) of this section, the Director will decide whether or not a permit should be issued. In making this decision, the Director shall consider, in addition to the general criteria in §13.21(b) of this subchapter, the following factors:

(i) Whether the purpose for which the permit is required is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit;

(ii) The probable direct and indirect effect which issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit;

(iii) Whether the permit, if issued, would in any way, directly or indirectly, conflict with any known program intended to enhance the survival probabilities of the population from which the wildlife sought to be covered by the permit was or would be removed;

(iv) Whether the purpose for which the permit is required would be likely to reduce the threat of extinction facing the species of wildlife sought to be covered by the permit;

(v) The opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application; and

(vi) Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application.

(3) *Permit conditions.* In addition to the general conditions set forth in part 13 of this subchapter, every permit issued under this paragraph shall be subject to the special condition that the escape of living wildlife covered by the permit shall be immediately reported to the Service office designated in the permit.

(4) *Duration of permits.* The duration of permits issued under this paragraph shall be designated on the face of the permit.

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(b)(1) *Application requirements for permits for incidental taking.* A person wishing to get a permit for an activity prohibited by § 17.21(c) submits an application for activities under this paragraph. The Service provides Form 3-200 for the application to which all of the following must be attached:

(i) A complete description of the activity sought to be authorized;

(ii) The common and scientific names of the species sought to be covered by the permit, as well as the number, age, and sex of such species, if known;

(iii) A conservation plan that specifies:

(A) The impact that will likely result from such taking;

(B) What steps the applicant will take to monitor, minimize, and mitigate such impacts, the funding that will be available to implement such steps, and the procedures to be used to deal with unforeseen circumstances;

(C) What alternative actions to such taking the applicant considered and the reasons why such alternatives are not proposed to be utilized; and

(D) Such other measures that the Director may require as being necessary or appropriate for purposes of the plan;

(2) *Issuance criteria.* (i) Upon receiving an application completed in accordance with paragraph (b)(1) of this section, the Director will decide whether or not a permit should be issued. The Director shall consider the general issuance criteria in § 13.21(b) of this subchapter, except for § 13.21(b)(4), and shall issue the permit if he or she finds that:

(A) The taking will be incidental;

(B) The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such takings;

(C) The applicant will ensure that adequate funding for the conservation plan and procedures to deal with unforeseen circumstances will be provided;

(D) The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild;

(E) The measures, if any, required under paragraph (b)(1)(iii)(D) of this section will be met; and

(F) He or she has received such other assurances as he or she may require that the plan will be implemented.

(ii) In making his or her decision, the Director shall also consider the anticipated duration and geographic scope of the applicant's planned activities, including the amount of listed species habitat that is involved and the degree to which listed species and their habitats are affected.

(3) *Permit conditions.* In addition to the general conditions set forth in part 13 of this subchapter, every permit issued under this paragraph shall contain such terms and conditions as the Director deems necessary or appropriate to carry out the purposes of the permit and the conservation plan including, but not limited to, monitoring and reporting requirements deemed necessary for determining whether such terms and conditions are being complied with. The Director shall rely upon existing reporting requirements to the maximum extent practicable.

(4) *Duration of permits.* The duration of permits issued under this paragraph shall be sufficient to provide adequate assurances to the permittee to commit funding necessary for the activities authorized by the permit, including conservation activities and land use restrictions. In determining the duration of a permit, the Director shall consider the duration of the planned activities, as well as the possible positive and negative effects associated with permits of the proposed duration on listed species, including the extent to which the conservation plan will enhance the habitat of listed species and increase the long-term survivability of such species.

(5) *Assurances provided to permittee in case of changed or unforeseen circumstances.* The assurances in this paragraph (b)(5) apply only to incidental take permits issued in accordance with paragraph (b)(2) of this section where the conservation plan is being properly implemented, and apply only with respect to species adequately covered by the conservation plan. These assurances cannot be provided to Federal agencies. This rule does not apply to incidental take permits issued prior to March 25, 1998. The assurances provided in incidental take permits issued prior to March 25, 1998 remain in effect, and those permits will not be revised as a result of this rulemaking.

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(i) *Changed circumstances provided for in the plan.* If additional conservation and mitigation measures are deemed necessary to respond to changed circumstances and were provided for in the plan's operating conservation program, the permittee will implement the measures specified in the plan.

(ii) *Changed circumstances not provided for in the plan.* If additional conservation and mitigation measures are deemed necessary to respond to changed circumstances and such measures were not provided for in the plan's operating conservation program, the Director will not require any conservation and mitigation measures in addition to those provided for in the plan without the consent of the permittee, provided the plan is being properly implemented.

(iii) *Unforeseen circumstances.* (A) In negotiating unforeseen circumstances, the Director will not require the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources beyond the level otherwise agreed upon for the species covered by the conservation plan without the consent of the permittee.

(B) If additional conservation and mitigation measures are deemed necessary to respond to unforeseen circumstances, the Director may require additional measures of the permittee where the conservation plan is being properly implemented, but only if such measures are limited to modifications within conserved habitat areas, if any, or to the conservation plan's operating conservation program for the affected species, and maintain the original terms of the conservation plan to the maximum extent possible. Additional conservation and mitigation measures will not involve the commitment of additional land, water or financial compensation or additional restrictions on the use of land, water, or other natural resources otherwise available for development or use under the original terms of the conservation plan without the consent of the permittee.

(C) The Director will have the burden of demonstrating that unforeseen circumstances exist, using the best scientific and commercial data available. These findings must be clearly docu-

mented and based upon reliable technical information regarding the status and habitat requirements of the affected species. The Director will consider, but not be limited to, the following factors:

(1) Size of the current range of the affected species;

(2) Percentage of range adversely affected by the conservation plan;

(3) Percentage of range conserved by the conservation plan;

(4) Ecological significance of that portion of the range affected by the conservation plan;

(5) Level of knowledge about the affected species and the degree of specificity of the species' conservation program under the conservation plan; and

(6) Whether failure to adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of the affected species in the wild.

(6) Nothing in this rule will be construed to limit or constrain the Director, any Federal, State, local, or Tribal government agency, or a private entity, from taking additional actions at its own expense to protect or conserve a species included in a conservation plan.

(7) *Discontinuance of permit activity.* Notwithstanding the provisions of §13.26 of this subchapter, a permittee under this paragraph (b) remains responsible for any outstanding minimization and mitigation measures required under the terms of the permit for take that occurs prior to surrender of the permit and such minimization and mitigation measures as may be required pursuant to the termination provisions of an implementing agreement, habitat conservation plan, or permit even after surrendering the permit to the Service pursuant to §13.26 of this subchapter. The permit shall be deemed canceled only upon a determination by the Service that such minimization and mitigation measures have been implemented. Upon surrender of the permit, no further take shall be authorized under the terms of the surrendered permit.

(8) *Criteria for revocation.* A permit issued under paragraph (b) of this section may not be revoked for any reason except those set forth in §13.28(a)(1)

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through (4) of this subchapter or unless continuation of the permitted activity would be inconsistent with the criterion set forth in 16 U.S.C. 1539(a)(2)(B)(iv) and the inconsistency has not been remedied.

(c)(1) *Application requirements for permits for the enhancement of survival through Safe Harbor Agreements.* The applicant must submit an application for a permit under this paragraph (c) to the appropriate Regional Director, U.S. Fish and Wildlife Service, for the Region where the applicant resides or where the proposed activity is to occur (for appropriate addresses, see 50 CFR 10.22), if the applicant wishes to engage in any activity prohibited by § 17.21. The applicant must submit an official Service application form (3-200.54) that includes the following information:

(i) The common and scientific names of the listed species for which the applicant requests incidental take authorization;

(ii) A description of how incidental take of the listed species pursuant to the Safe Harbor Agreement is likely to occur, both as a result of management activities and as a result of the return to baseline; and

(iii) A Safe Harbor Agreement that complies with the requirements of the Safe Harbor policy available from the Service.

(2) *Issuance criteria.* Upon receiving an application completed in accordance with paragraph (c)(1) of this section, the Director will decide whether or not to issue a permit. The Director shall consider the general issuance criteria in § 13.21(b) of this subchapter, except for § 13.21(b)(4), and may issue the permit if he or she finds:

(i) The take will be incidental to an otherwise lawful activity and will be in accordance with the terms of the Safe Harbor Agreement;

(ii) The implementation of the terms of the Safe Harbor Agreement is reasonably expected to provide a net conservation benefit to the affected listed species by contributing to the recovery of listed species included in the permit, and the Safe Harbor Agreement otherwise complies with the Safe Harbor policy available from the Service;

(iii) The probable direct and indirect effects of any authorized take will not

appreciably reduce the likelihood of survival and recovery in the wild of any listed species;

(iv) Implementation of the terms of the Safe Harbor Agreement is consistent with applicable Federal, State, and Tribal laws and regulations;

(v) Implementation of the terms of the Safe Harbor Agreement will not be in conflict with any ongoing conservation or recovery programs for listed species covered by the permit; and

(vi) The applicant has shown capability for and commitment to implementing all of the terms of the Safe Harbor Agreement.

(3) *Permit conditions.* In addition to any applicable general permit conditions set forth in part 13 of this subchapter, every permit issued under this paragraph (c) is subject to the following special conditions:

(i) A requirement for the participating property owner to notify the Service of any transfer of lands subject to a Safe Harbor Agreement;

(ii) When appropriate, a requirement for the permittee to give the Service reasonable advance notice (generally at least 30 days) of when he or she expects to incidentally take any listed species covered under the permit. Such notification will provide the Service with an opportunity to relocate affected individuals of the species, if possible and appropriate; and

(iii) Any additional requirements or conditions the Director deems necessary or appropriate to carry out the purposes of the permit and the Safe Harbor Agreement.

(4) *Permit effective date.* Permits issued under this paragraph (c) become effective the day of issuance for species covered by the Safe Harbor Agreement.

(5) *Assurances provided to permittee.* (i) The assurances in paragraph (c)(5) (ii) of this section (c)(5) apply only to Safe Harbor permits issued in accordance with paragraph (c)(2) of this section where the Safe Harbor Agreement is being properly implemented, and apply only with respect to species covered by the Agreement and permit. These assurances cannot be provided to Federal agencies. The assurances provided in this section apply only to Safe Harbor permits issued after July 19, 1999.

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(11) The Director and the permittee may agree to revise or modify the management measures set forth in a Safe Harbor Agreement if the Director determines that such revisions or modifications do not change the Director's prior determination that the Safe Harbor Agreement is reasonably expected to provide a net conservation benefit to the listed species. However, the Director may not require additional or different management activities to be undertaken by a permittee without the consent of the permittee.

(6) *Additional actions.* Nothing in this rule will be construed to limit or constrain the Director, any Federal, State, local or Tribal government agency, or a private entity, from taking additional actions at its own expense to protect or conserve a species included in a Safe Harbor Agreement.

(7) *Criteria for revocation.* The Director may not revoke a permit issued under paragraph (c) of this section except as provided in this paragraph. The Director may revoke a permit for any reason set forth in § 13.29(a)(1) through (4) of this subchapter. The Director may revoke a permit if continuation of the permitted activity would either appreciably reduce the likelihood of survival and recovery in the wild of any listed species or directly or indirectly alter designated critical habitat such that it appreciably diminishes the value of that critical habitat for both the survival and recovery of a listed species. Before revoking a permit for either of the latter two reasons, the Director, with the consent of the permittee, will pursue all appropriate options to avoid permit revocation. These options may include, but are not limited to: extending or modifying the existing permit, capturing and relocating the species, compensating the landowner to forgo the activity, purchasing an easement or fee simple interest in the property, or arranging for a third-party acquisition of an interest in the property.

(8) *Duration of permits.* The duration of permits issued under this paragraph (c) must be sufficient to provide a net conservation benefit to species covered in the enhancement of survival permit. In determining the duration of a permit, the Director will consider the du-

ration of the planned activities, as well as the positive and negative effects associated with permits of the proposed duration on covered species, including the extent to which the conservation activities included in the Safe Harbor Agreement will enhance the survival and contribute to the recovery of listed species included in the permit.

(d)(1) *Application requirements for permits for the enhancement of survival through Candidate Conservation Agreements with Assurances.* The applicant must submit an application for a permit under this paragraph (d) to the appropriate Regional Director, U.S. Fish and Wildlife Service, for the Region where the applicant resides or where the proposed activity is to occur (for appropriate addresses, see 50 CFR 10.22). When a species covered by a Candidate Conservation Agreement with Assurances is listed as endangered and the applicant wishes to engage in activities identified in the Agreement and otherwise prohibited by § 17.31, the applicant must apply for an enhancement of survival permit for species covered by the Agreement. The permit will become valid if and when covered proposed, candidate or other unlisted species is listed as an endangered species. The applicant must submit an official Service application form (3-200.54) that includes the following information:

(i) The common and scientific names of the species for which the applicant requests incidental take authorization;

(ii) A description of the land use or water management activity for which the applicant requests incidental take authorization; and

(iii) A Candidate Conservation Agreement that complies with the requirements of the Candidate Conservation Agreement with Assurances policy available from the Service.

(2) *Issuance criteria.* Upon receiving an application completed in accordance with paragraph (d)(1) of this section, the Director will decide whether or not to issue a permit. The Director shall consider the general issuance criteria in § 13.21(b) of this subchapter, except for § 13.21(b)(4), and may issue the permit if he or she finds:

(i) The take will be incidental to an otherwise lawful activity and will be in

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accordance with the terms of the Candidate Conservation Agreement;

(ii) The Candidate Conservation Agreement complies with the requirements of the Candidate Conservation Agreement with Assurances policy available from the Service;

(iii) The probable direct and indirect effects of any authorized take will not appreciably reduce the likelihood of survival and recovery in the wild of any species;

(iv) Implementation of the terms of the Candidate Conservation Agreement is consistent with applicable Federal, State, and Tribal laws and regulations;

(v) Implementation of the terms of the Candidate Conservation Agreement will not be in conflict with any ongoing conservation programs for species covered by the permit; and

(vi) The applicant has shown capability for and commitment to implementing all of the terms of the Candidate Conservation Agreement.

(3) *Permit conditions.* In addition to any applicable general permit conditions set forth in part 13 of this subchapter, every permit issued under this paragraph (d) is subject to the following special conditions:

(i) A requirement for the property owner to notify the Service of any transfer of lands subject to a Candidate Conservation Agreement;

(ii) When appropriate, a requirement for the permittee to give the Service reasonable advance notice (generally at least 30 days) of when he or she expects to incidentally take any listed species covered under the permit. Such notification will provide the Service with an opportunity to relocate affected individuals of the species, if possible and appropriate; and

(iii) Any additional requirements or conditions the Director deems necessary or appropriate to carry out the purposes of the permit and the Candidate Conservation Agreement.

(4) *Permit effective date.* Permits issued under this paragraph (d) become effective for a species covered by a Candidate Conservation Agreement on the effective date of a final rule that lists a covered species as endangered.

(5) *Assurances provided to permittee in case of changed or unforeseen circumstances.* The assurances in this

paragraph (d)(5) apply only to permits issued in accordance with paragraph (d)(2) where the Candidate Conservation with Assurances Agreement is being properly implemented, and apply only with respect to species adequately covered by the Candidate Conservation with Assurances Agreement. These assurances cannot be provided to Federal agencies.

(i) *Changed circumstances provided for in the Agreement.* If the Director determines that additional conservation measures are necessary to respond to changed circumstances and these measures were set forth in the Agreement, the permittee will implement the measures specified in the Agreement.

(ii) *Changed circumstances not provided for in the Agreement.* If the Director determines that additional conservation measures not provided for in the Agreement are necessary to respond to changed circumstances, the Director will not require any conservation measures in addition to those provided for in the Agreement without the consent of the permittee, provided the Agreement is being properly implemented.

(iii) *Unforeseen circumstances.* (A) In negotiating unforeseen circumstances, the Director will not require the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources beyond the level otherwise agreed upon for the species covered by the Agreement without the consent of the permittee.

(B) If the Director determines additional conservation measures are necessary to respond to unforeseen circumstances, the Director may require additional measures of the permittee where the Agreement is being properly implemented, but only if such measures maintain the original terms of the Agreement to the maximum extent possible. Additional conservation measures will not involve the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources otherwise available for development or use under the original terms of the Agreement without the consent of the permittee.

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(C) The Director will have the burden of demonstrating that unforeseen circumstances exist, using the best scientific and commercial data available. These findings must be clearly documented and based upon reliable technical information regarding the status and habitat requirements of the affected species. The Director will consider, but not be limited to, the following factors:

(1) Size of the current range of the affected species;

(2) Percentage of range adversely affected by the Agreement;

(3) Percentage of range conserved by the Agreement;

(4) Ecological significance of that portion of the range affected by the Agreement;

(5) Level of knowledge about the affected species and the degree of specificity of the species' conservation program under the Agreement; and

(6) Whether failure to adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of the affected species in the wild.

(6) *Additional actions.* Nothing in this rule will be construed to limit or constrain the Director, any Federal, State, local or Tribal government agency, or a private entity, from taking additional actions at its own expense to protect or conserve a species included in a Candidate Conservation with Assurances Agreement.

(7) *Criteria for revocation.* The Director may not revoke a permit issued under paragraph (d) of this section except as provided in this paragraph. The Director may revoke a permit for any reason set forth in §13.28(a)(1) through (4) of this subchapter. The Director may revoke a permit if continuation of the permitted activity would either appreciably reduce the likelihood of survival and recovery in the wild of any listed species or directly or indirectly alter designated critical habitat such that it appreciably diminishes the value of that critical habitat for both the survival and recovery of a listed species. Before revoking a permit for either of the latter two reasons, the Director, with the consent of the permittee, will pursue all appropriate options to avoid permit revocation. These

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options may include, but are not limited to: extending or modifying the existing permit, capturing and relocating the species, compensating the landowner to forgo the activity, purchasing an easement or fee simple interest in the property, or arranging for a third-party acquisition of an interest in the property.

(8) *Duration of the Candidate Conservation Agreement.* The duration of a Candidate Conservation Agreement covered by a permit issued under this paragraph (d) must be sufficient to enable the Director to determine that the benefits of the conservation measures in the Agreement, when combined with those benefits that would be achieved if it is assumed that the conservation measures would also be implemented on other necessary properties, would preclude or remove any need to list the species covered by the Agreement.

(e) *Objection to permit issuance.* (1) In regard to any notice of a permit application published in the FEDERAL REGISTER, any interested party that objects to the issuance of a permit, in whole or in part, may, during the comment period specified in the notice, request notification of the final action to be taken on the application. A separate written request shall be made for each permit application. Such a request shall specify the Service's permit application number and state the reasons why that party believes the applicant does not meet the issuance criteria contained in §§13.21 and 17.22 of this subchapter or other reasons why the permit should not be issued.

(2) If the Service decides to issue a permit contrary to objections received pursuant to paragraph (c)(1) of this section, then the Service shall, at least ten days prior to issuance of the permit, make reasonable efforts to contact by telephone or other expedient means, any party who has made a request pursuant to paragraph (c)(1) of this section and inform that party of the issuance of the permit. However, the Service may reduce the time period or dispense with such notice if it determines that time is of the essence and that delay in issuance of the permit would: (i) Harm the specimen or population involved; or (ii) unduly hinder

## U.S. Fish and Wildlife Serv., Interior

## § 17.23

the actions authorized under the permit.

(3) The Service will notify any party filing an objection and request for notice under paragraph (c)(1) of this section of the final action taken on the application, in writing. If the Service has reduced or dispensed with the notice period referred to in paragraph (c)(2) of this section, it will include its reasons therefore in such written notice.

[50 FR 39687, Sept. 30, 1985, as amended at 63 FR 8871, Feb. 23, 1998; 63 FR 52635, Oct. 1, 1998; 64 FR 32711, June 17, 1999; 64 FR 52676, Sept. 30, 1999; 69 FR 24092, May 3, 2004; 69 FR 29670, May 25, 2004; 69 FR 71731, Dec. 10, 2004]

#### § 17.23 Economic hardship permits.

Upon receipt of a complete application, the Director may issue a permit authorizing any activity otherwise prohibited by § 17.21, in accordance with the issuance criteria of this section in order to prevent undue economic hardship. The Director shall publish notice in the FEDERAL REGISTER of each application for a permit that is made under this section. Each notice shall invite the submission from interested parties, within 30 days after the date of the notice, of written data, views, or arguments with respect to the application. The 30-day period may be waived by the Director in an emergency situation where the life or health of an endangered animal is threatened and no reasonable alternative is available to the applicant. Notice of any such waiver shall be published in the FEDERAL REGISTER within 10 days following issuance of the permit.

(a) *Application requirements.* Applications for permits under this section must be submitted to the Director by the person allegedly suffering undue economic hardship because his desired activity is prohibited by § 17.21. Each application must be submitted on an official application form (Form 3-200) provided by the Service, and must include, as an attachment, all of the information required in § 17.22 plus the following additional information:

(1) The possible legal, economic or subsistence alternatives to the activity sought to be authorized by the permit;

(2) A full statement, accompanied by copies of all relevant contracts and

correspondence, showing the applicant's involvement with the wildlife sought to be covered by the permit (as well as his involvement with similar wildlife), including, where applicable, that portion of applicant's income derived from the taking of such wildlife, or the subsistence use of such wildlife, during the calendar year immediately preceding either the notice in the FEDERAL REGISTER of review of the status of the species or of the proposal to list such wildlife as endangered, whichever is earliest;

(3) Where applicable, proof of a contract or other binding legal obligation which:

(i) Deals specifically with the wildlife sought to be covered by the permit;

(ii) Became binding prior to the date when the notice of a review of the status of the species or the notice of proposed rulemaking proposing to list such wildlife as endangered was published in the FEDERAL REGISTER, whichever is earlier; and

(iii) Will cause monetary loss of a given dollar amount if the permit sought under this section is not granted.

(b) *Issuance criteria.* Upon receiving an application completed in accordance with paragraph (a) of this section, the Director will decide whether or not a permit should be issued under any of the three categories of economic hardship, as defined in section 10(b)(2) of the Act. In making his decisions, the Director shall consider, in addition to the general criteria in § 13.21(b) of this subchapter, the following factors:

(1) Whether the purpose for which the permit is being requested is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit;

(2) The probable direct and indirect effect which issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit;

(3) The economic, legal, subsistence, or other alternatives or relief available to the applicant;

(4) The amount of evidence that the applicant was in fact party to a contract or other binding legal obligation which;

**Meeting of the Central Valley Flood Protection Board  
July 25, 2014**

**Staff Report**

**Feather River Wildlife Area, Abbott Lake Unit  
Abbott Lake Restoration Project  
Yolo County**

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**1.0 – ITEM**

Consider approval of Resolution No. 14-25 and Draft Permit No. 18882.  
(Attachments B and C)

**2.0 – APPLICANT**

California Department of Fish and Wildlife (CDFW)

**3.0 – LOCATION**

The project is located within the Abbott Lake Unit of the Feather River Wildlife Area, approximately 7-miles south of Yuba City and 1.5-miles east from the intersection of Highway 99 and Obanion Road.  
(Feather River, Yolo County, See Attachment A)

**4.0 – PROJECT DESCRIPTION**

The applicant proposes to remove invasive vegetation from 96-acres and plant approximately 17,341 plants to include riparian shrubland, low shrubland, riparian woodland, and grassland, on 150-acres (South Field) of the 439-acre Abbott Lake Unit of the Feather River Wildlife Area on the right (west) overflow bank of the Feather River near River Mile 20.

**5.0 - AUTHORITY OF THE BOARD**

California Water Code § 8534, 8590 – 8610.5, and 8700 - 8710

## California Code of Regulations, Title 23 (Title 23)

- § 6, Need for a Permit
- § 13, Evidentiary Hearings
- § 112, Streams Regulated and Nonpermissible Work Periods
- § 131, Vegetation

**6.0 – BACKGROUND**

On February 26, 2010 the Central Valley Flood Protection Board (Board) conditionally approved Permit No. 18531 for the restoration of 169-acres of the Abbott Lake Unit of the Feather River Wildlife Area (Abbott Lake). The proposed restoration project included a 19-acre field at the northern end of Abbott Lake and a 150-acre field at the southern end of Abbott Lake. As a condition of approval the plantings on the 19-acre field were limited to native grasses due to modeling results that showed a significant change in water surface elevation when vegetation other than grass was planted on this field. The local maintaining agency (LMA) for levee maintenance on the left (east) bank levee, RD-784, endorsed the project with conditions. The LMA for the right (west) bank levee, Levee District No. 1 of Sutter County (LD-1), choose not to endorse the project for the following reasons:

- Potential increases in water surface elevations due to the proposed project would negate benefits gained from recent levee setback projects in the area.
- The validity of the CEQA findings that resulted in a Notice of Exemption for the “minor alteration of land”.
- Concerns that maintenance funding would be insufficient and LD-1’s maintenance costs would increase as a result.

Approval of the Permit No. 18531 was also contingent on Board staff receiving the following:

- 1) A letter from the Corps stating they had No-Objection to the project;
- 2) An executed Memorandum of Understanding between the Department of Fish and Game (now known as the California Department of Fish and Wildlife) and the

Division of Flood Management of the Department of Water Resources for Maintenance of Flood Control Projects in the Sacramento River and Feather River Wildlife Areas; and

- 3) A photo record of the project site, including associated descriptions, native plant species counts, and floodway conditions.

None of these items were ever received by Board staff.

On June 10, 2010 the Department of Fish and Game wrote a letter to the Board's Executive Officer requesting that Permit No. 18531 be rescinded "In light of the ongoing discussions with LD-1 and the lack of consensus on a solution,...". On August 28, 2013 CDFW submitted an encroachment permit application for the proposed restoration of the southern 150-acre field of Abbott Lake.

## **7.0 – PROJECT ANALYSIS**

The project area lies within the 439-acre Abbott Lake Unit of the Feather River Wildlife Area (Abbott Lake) on the right bank of the Feather River in Sutter County, California. The 150-acre restoration site (southern field) consists of abandoned agricultural lands on the waterside of the levee that have failed to regenerate to riparian forest. A 19-acre restoration site located just north of the 150-acre south field is scheduled to be restored in the future when funding becomes available, the 19-acre field not a component of this application.

Abbott Lake is surrounded by state and private ownership and is located directly across the river from the Three Rives Levee Improvement Authority's (TRLIA) Setback Levee Improvement Project that was completed in 2009-2010. In addition Abbott Lake is located approximately 0.3 miles upstream of the Star Bend Setback Levee Improvement Project. The Abbott Lake project in conjunction with restoration at the nearby O'Connor Lakes Unit will result in nearly 400-acres of new habitat on the right (west) bank of the Feather River between river miles 18 and 22.

River Partners has worked closely with CDFW in developing the restoration plan for the south field. Invasive vegetation will be removed and three plant communities will be planted. Valley Foothill Riparian woodland will be planted on approximately 44-acres at a density of 65 trees per acre. The low shrubland community will be planted on approximately 78-acres at an overall plant density of 121 plants per acre. Native grasslands will be planted on approximately 28-acres to reduce erosion and improve flood water conveyance.

To create a more open design and thereby enhance floodwater conveyance, the low shrubland community will be planted in hedgerows with spaces of 100-feet between every five rows. Rows will be oriented to flood flows (generally a curve oriented from north to south) in order to maintain the flood conveyance patterns across the site. A herbaceous understory will be planted between all rows and hedgerows to improve habitat quality and to limit the emergence of invasive species. Open areas are a major component of the restoration design and will be planted with native grasses and forbs to reduce erosion and improve flood water conveyance. A 60' buffer from the levee toe will be established to allow access for maintenance practices. There will be no trees planted in the first planting row from the levee (See Attachment D).

There will be a three year establishment period of the restoration site that will include watering and monitoring of the vegetation by River Partners. The purpose of the establishment period is to ensure that the restoration project results in at least 70% plant survival rate. Monitoring results will be recorded that include; monthly field reports, end of season monitoring, annual photo points, annual end of season memos, and a final report. River Partners will remove all farm equipment from the site during the flood season. In the event of a flood, flood debris will be cleared from the site following the flood season. Throughout three year establishment River Partners will periodically mow between rows and planting clusters, and along the perimeter of project areas, to reduce potential fire hazards. A drip irrigation system will be used to water the plants during the establishment period.

CDFW will be responsible for maintaining the site following the three year establishment period. A Vegetation Maintenance Plan (VMP) has been submitted but Board staff has concluded that the VMP lacks sufficient "action" details (See Attachment E). CDFW is proposing to perform maintenance only when "...action is demonstrated as necessary to ensure conveyance." The submitted planting scheme for the project includes 35-acres of grassland areas and 100-foot wide separating strips aligned parallel to flow to better convey flood flows. A hydraulic analysis was done using the submitted planting design configuration and results confirm that hydraulic impacts due to the planting design are negligible. To ensure that the site continues to convey flood flows as-designed the open areas must be kept clear of woody vegetation. Therefore, Special Condition 28 of Permit No. 18882 requires CDFW to remove all woody vegetation in these open areas prior to vegetation reaching a diameter of 3-inches. In addition, the agreed to 60-foot buffer area along the levee must be actively maintained to ensure levee access is maintained and vegetation does not spread onto the levee slope thereby increasing the maintenance costs of LD-1. Furthermore, Special Condition 29 requires the applicant to actively maintain the 60-foot levee buffer zone to prevent elderberry plants from spreading onto the levee thereby preventing possible mitigation costs to LD-1.

## **7.1 – Hydraulic Analysis**

A 2-D hydraulic simulation model was used to calculate water surface elevations and velocities for the base and project conditions for both the 19-acre north field and the 150-acre south field. The hydraulic model used was the RMA 2 model developed by MBK Engineers for the basis of design of the Feather River Setback Levee Project. The model includes the Feather from river mile (RM) 8.0 to RM 28.7. It also includes the Bear River from RM 5.0 to the confluence with the Feather River. The simulations were performed in a steady state flow condition.

Water surface elevation difference was calculated and mapped for the 1-in-100 event (281,000-cfs) and 1-in-200 AEP event (353,000-cfs). The Corps' 1957 Sacramento River Flood Control Project design flow for this section of the Feather River is 300,000-cfs. The hydraulic analysis results indicate that the proposed Abbott Lake Restoration Project will have a less than significant impact upon the water surface elevation and velocity in the Feather River at the project site. Results show a localized increase in water surface elevation of approximately 0.15 feet for both the 1-in-100 and 1-in-200 AEP events, with most of the impact coming from the north field. The water surface impacts dampen out to less than 0.05 feet upstream and downstream of the project area. There would be no significant increase in velocity for both the 1-in-100 and 1-in-200 AEP events (See Attachment F).

## **7.2 – Geotechnical Analysis**

The proposed project does not involve any grading or structures so a geotechnical analysis was not required.

## **8.0 – AGENCY COMMENTS AND ENDORSEMENTS**

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- The Department of Water Resources Flood Maintenance Office (FMO)/Sutter Maintenance Yard has endorsed the project with conditions; the conditions will be incorporated into the permit as Exhibit B.
- LD-1 has endorsed the project with conditions; the conditions will be incorporated into the permit as Exhibit C.

- The U.S. Army Corps of Engineers draft 208.10 comment letter has been received for this application. The USACE District Engineer has no objection to the project, subject to conditions. The final letter will be incorporated into the permit as Exhibit D.

## **9.0 – CEQA ANALYSIS**

Board staff has prepared the following CEQA findings:

The Board, as a responsible agency under CEQA, has reviewed the Initial Study/Mitigated Negative Declaration (IS/MND) (SCH Number: 2013082005, August 2013) and Mitigation Measures for the Abbott Lake Restoration Project prepared by the lead agency, the California Department of Fish and Wildlife. These documents, including project design, may be viewed or downloaded from the Central Valley Flood Protection Board website at <http://www.cvfpb.ca.gov/meetings/2014/07-25-2014.cfm> under a link for this agenda item. These documents are also available for review in hard copy at the Board and the CDFW offices.

CDFW determined that the project would not have a significant effect on the environment on December 16, 2013 and filed a Notice of Determination on December 17, 2013 with the State Clearinghouse. Board staff finds that although the proposed project could have a potentially significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. The project proponent has incorporated mandatory mitigation measures into the project plans to avoid identified impacts or to mitigate such impacts to a point where no significant impacts will occur. These mitigation measures are included in the project proponent's IS/MND and address impacts to air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality. The description of the mitigation measures are further described in the adopted IS/MND.

## **10.0 – SECTION 8610.5 CONSIDERATIONS**

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the entire State Plan of Flood Control, and consistency of the proposed project with the Central Valley Flood Protection Plan as adopted by Board Resolution 2012-25 on June 29, 2012:

There will be no adverse effect to the entire State Plan of Flood Control as the hydrologic impacts from the proposed project are considered to be insignificant. The project site will be managed by the California Department of Fish and Wildlife for both habitat benefits and to ensure that there are no negative hydraulic impacts due to the proposed project. The proposed project is compatible with the Central Valley Flood Protection Plan as it will promote ecosystem functions which are a supporting goal of the Central Valley Flood Protection Plan.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

There will be minimal impacts to the proposed vegetation from reasonable projected future events.

### **11.0 – STAFF RECOMMENDATION**

Staff recommends that the Board adopt Resolution No. 14-25, which constitutes the written findings and decisions in the matter of Permit No. 18882. The resolution contains the CEQA findings; Findings of Fact; and approval of Permit No. 18882; and directs the Executive Officer to take the necessary actions to prepare and execute the permit and related documents and to file a Notice of Determination with the State Clearinghouse.

**12.0 – LIST OF ATTACHMENTS**

- A. Location Maps and Photos
- B. Draft Resolution No. 14-25
- C. Draft Permit No. 18882
- D. Draft planting plan
- E. Vegetation Management Plan
- F. Hydraulic Report

Design Review:

Gary W. Lemon P.E.

Environmental Review:

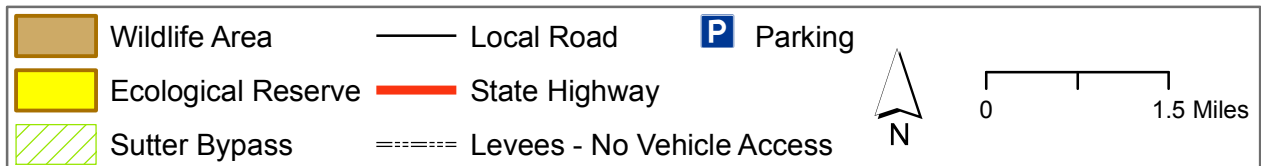
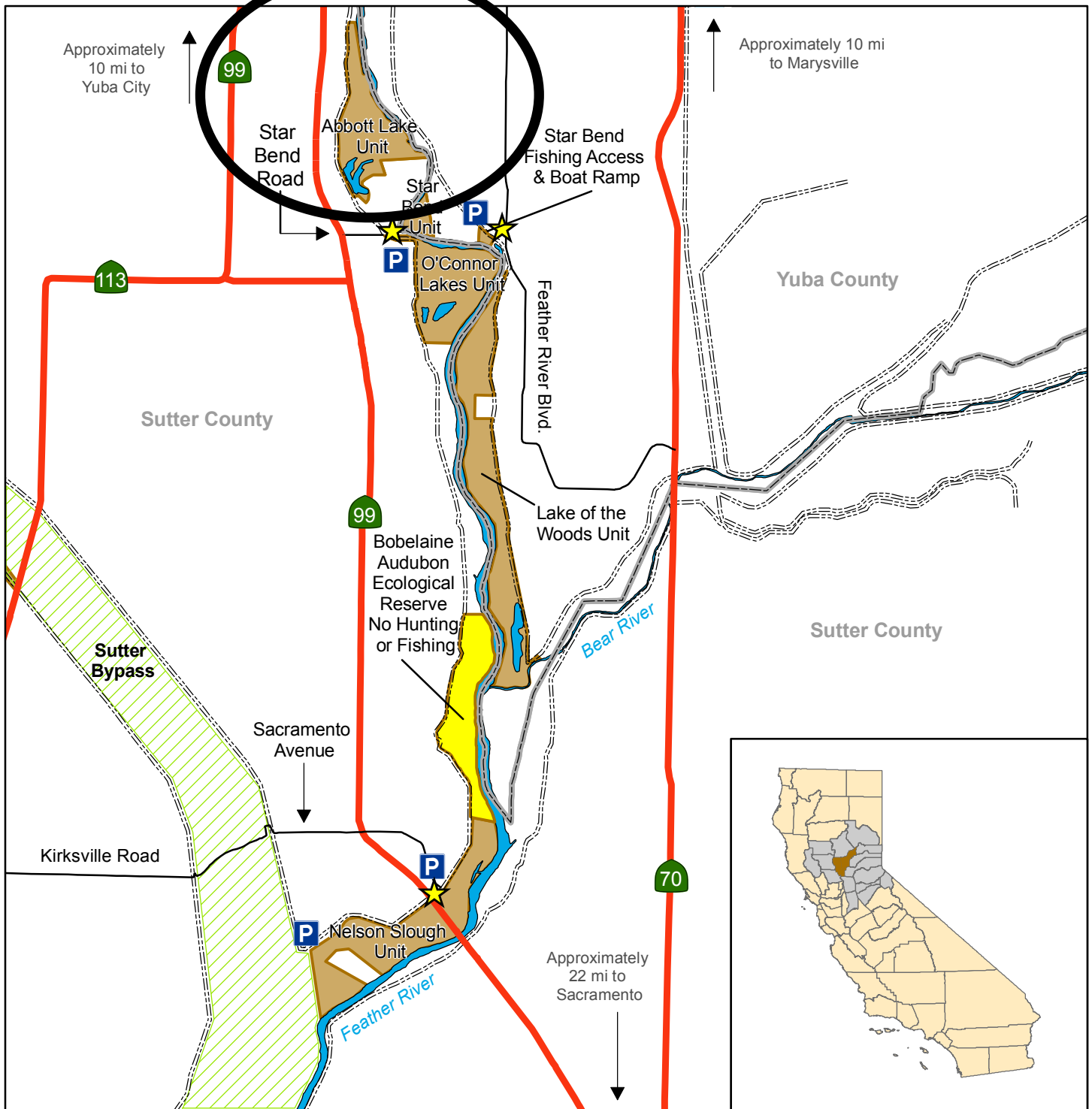
Andrea Buckley

Document Review:

Mitra Emami P.E., Len Marino P.E., Chief Counsel Leslie Gallagher

August 22, 2014 Attachment I  
**California Department of Fish and Game**  
**North Central Region**  
**FEATHER RIVER WILDLIFE AREA**  
**Sutter, Yuba Counties**

Attachment A



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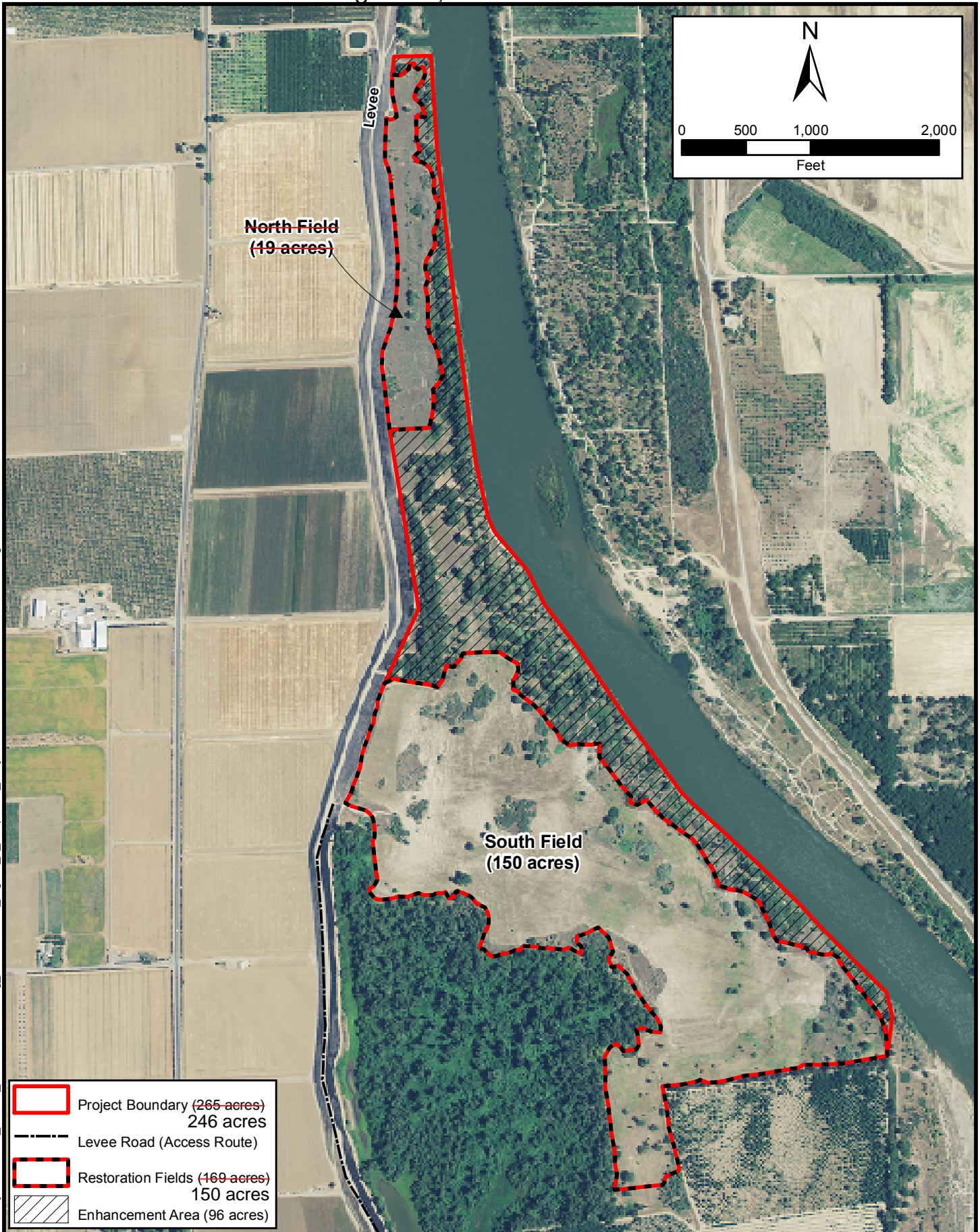


Photo point E:



Photo point E (cont.)      Near river on current access road.



Photo point F:      Central portion of the south field.



Photo point G:      Looking north from the southern property line.



Photo point H:      Looking north from northwest corner of field .



## Appendix VI. Photo point location descriptions and photos for the Abbott Lake Riparian Restoration Project

Photo Point Descriptions	
Site: Abbott Lake	Date: 3/26/2008
Subunit/Area: North and South Fields	Observers: Nick Pacini
	Camera Info: Nikon digital D40x

Photo point	Location/Notes (triangulation, landmark, direction, distance, or GPS coordinates)
A	<del>North Field. Near the pump station on the north end of the site. ~50 yards due east of the levee and ~100 yards due south of the pump station. 20 yards southeast of the stand of 3 large cottonwoods and elderberries.</del> UTM: N 4322471 E 620344
B	<del>North Field. On levee road. ~1/4 mile south of the northern access ramp to the north field. ~100 yards southeast of telephone pole and small pump in the field on the dry side of the levee.</del> UTM: N 4322204 E 620263
C	<del>North Field. On the approximate southeast corner of the field. ~100 yards east of the levee along the stand of remnant vegetation bordering the river.</del> UTM: N 4321645 E 620390
D	<del>South Field. On the south access ramp from levee. Along the access road ~40 yards east of the junction with the levee road.</del> UTM: N 4320742 E 620217
E	South Field. Near river on the current access road. ~1/4 mile due east of access ramp. Well is to the northwest (332 degrees) ~50 yards. South of telephone line ~50 yards. UTM: N 4320786 E 620721
F	South Field. The central portion of the field near the upper corner of the remnant area that extends furthest into the field. South of Point E ~1/2 mile and ~1/4 mile north of southern property boundary (orchard). On the western edge of the field. UTM: N 4320444 E 620834
G	South Field. Along southern property boundary (orchard). ~1/4 mile west of river and ~200 yards east of the northwest corner of the orchard. UTM: N 4320110 E 621226
H	South Field. At the northwest corner of the private orchard south of the site. ~15 yards north of a wooden fence post on the boundary. ~25 yards northwest of the last eucalyptus on the property boundary. UTM: N 4320074 E 620949

STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
CENTRAL VALLEY FLOOD PROTECTION BOARD  
Draft RESOLUTION NO. 14-25  
FINDINGS AND DECISION AUTHORIZING ISSUANCE OF  
ENCROACHMENT PERMIT NO. 18882  
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

**WHEREAS**, the California Department of Fish and Wildlife (CDFW) proposes to plant native vegetation on approximately 150 acres of the right (west) bank overflow area of the Feather River; and

**WHEREAS**, the CDFW submitted Application No. 18882 to the Central Valley Flood Protection Board on August 28, 2013. The application proposes the planting of trees, shrubs, and native grasses to increase and improve wildlife habitat. The project area will be planted to woodland areas, low shrubland areas and grassland areas. The project will be identified as the Abbott Lake Restoration Area of the Feather River Wildlife Area (Abbott Lake Unit); and

**WHEREAS**, the Abbott Lake Unit provides improved wildlife habitat for recreation, upland game hunting and scenic views; and

**WHEREAS**, the Central Valley Flood Protection Board has conducted a hearing on July 25, 2014 and has reviewed the application, the Report of its staff, the documents and correspondence in its file; and

**WHEREAS**, California Department of Fish and Wildlife, as lead agency under the California Environmental Quality Act, Public Resources Code sections 21000 *et seq.* ("CEQA") prepared an Initial Study, Mitigated Negative Declaration (IS/MND) (State Clearinghouse No.: 2013082005, August 2013) and Mitigation Monitoring and Reporting Plan (MMRP) on the Abbott Lake Restoration Project (incorporated herein by reference and available at the Central Valley Flood Protection Board offices or CDFW office); and

**WHEREAS**, CDFW, as lead agency, certified the IS/MND, adopted mitigation measures and a MMRP (incorporated herein by reference and available at the Central Valley Flood Protection Board or at CDFW), approved findings pursuant to CEQA and the CEQA Guidelines (incorporated herein by reference); and filed a Notice of Determination with the State Clearinghouse on December 17, 2013 approving the Project; and

**WHEREAS**, the Sacramento and San Joaquin Drainage District & Levee District No. 1 of Sutter County holds a clearing easement for the purpose of promoting the free flow of overflow water on 474-acres of the project site; and

**WHEREAS**, the CDFW has developed a Vegetation Maintenance Plan (VMP) that will be followed by CDFW staff for maintaining the channel, and that the VMP is incorporated into the Permit as Exhibit A; and

**WHEREAS**, the CDFW, by Special Condition No. TWENTY-EIGHT, will remove woody vegetation greater than 3-inches in diameter from the designated grassland areas, the 60-foot levee buffer zone, and from the 100-foot hedgerow spacing to maintain the roughness coefficients that were used in the hydraulic modeling done for the project; and

**WHEREAS**, the CDFW, by Special Condition No. TWENTY-NINE, will remove all elderberry plants (*Sambucus* species) from the 60-foot levee buffer zone prior to the stems reaching 1 inch in diameter at ground level; and

**WHEREAS**, the Department of Water Resources Sutter Maintenance Yard has endorsed the proposed project subject to conditions, and that the letter has been incorporated into the Permit as Exhibit B; and

**WHEREAS**, the Levee District No. 1 of Sutter County has endorsed the proposed project subject to conditions, and that the letter has been incorporated into the Permit as Exhibit C; and

**WHEREAS**, the U.S. Army Corps of Engineers (USACE) comment letter was received on July xx, 2014 without objection to the proposed project subject to conditions, and that the letter has been incorporated into the Permit as Exhibit D; and

NOW, THEREFORE, BE IT RESOLVED THAT,

**Findings of Fact.**

1. The Central Valley Flood Protection Board hereby adopts as findings the facts set forth in the Staff Report unless amended by RESOLUTION No. 14-25.
2. The Board has reviewed the Attachments listed in the Staff Report.

**CEQA Findings**

3. The Central Valley Flood Protection Board, as a responsible agency, has independently reviewed the analysis in the IS/MND, MMRP, and the findings prepared by the lead agency, CDFW, and has reached its own conclusions.
4. The Central Valley Flood Protection Board, after consideration of the IS/MND, MMRP, and CDFW findings, adopts the project description, analysis and findings which are relevant to activities authorized by issuance of Encroachment Permit No. 18882 for the Abbott Lake Restoration Project.
5. **Custodian of Record.** The custodian of the CEQA record for the Board is its Acting Executive Officer, Leslie Gallagher, at the Central Valley Flood Protection Board Offices at 3310 El Camino Avenue, Room 151, Sacramento, California 95821.

**Findings pursuant to Water Code section 8610.5**

6. **Evidence Admitted into the Record.** The Board has considered all the evidence presented in this matter, including the original and updated applications, past and present Staff Reports and attachments and the Corps of Engineers recommendations. The Board has also considered all letters and other correspondence received by the Board and in the Board's files related to this matter.
7. **Best Available Science.** In making its findings, the Board has used the best available science relating to the issues presented by all parties.
8. **Effects on State Plan of Flood Control.** This project has no effects on the State Plan of Flood Control as the hydraulic impacts due to the proposed project are considered to be insignificant and it includes conservation habitat for the Abbott Lake Unit.

**Other Findings/Conclusions regarding Issuance of the Permit.**

9. This resolution shall constitute the written decision of the Central Valley Flood Protection Board in the matter of Permit No. 18882.

**Approval of Revised Final Encroachment Permit No. 18882**

10. Based on the foregoing, the Central Valley Flood Protection Board hereby adopts and approves, in substantially the form provided:

- The CEQA findings;
- Resolution No. 2014-25; and
- Permit No. 18882.

11. The Board directs the Executive Officer to take the necessary actions to prepare and execute the permit and related documents and to prepare and file a Notice of Determination pursuant to CEQA and to approve the permit for the CDFW, Abbott Lake Unit Project.

PASSED AND ADOPTED by vote of the Board on \_\_\_\_\_, 2014

\_\_\_\_\_  
William H. Edgar  
President

\_\_\_\_\_  
Jane Dolan  
Secretary

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**DRAFT**

STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
**THE CENTRAL VALLEY FLOOD PROTECTION BOARD**

**PERMIT NO. 18882 BD****This Permit is issued to:**

California Department of Fish and Wildlife  
1701 Nimbus Road  
Rancho Cordova, California 95670

To remove invasive vegetation from 96-acres and plant approximately 17,341 plants to include shrubland, riparian woodland, and grassland, on 150-acres (South Field) of the 439-acre Abbott Lake Unit of the Feather River Wildlife Area on the right (west) overflow bank of the Feather River near River Mile 20. The project is located approximately 7-miles south of Yuba City and 1.5-miles east from the intersection of Highway 99 and Obanion Road (Section 26 & 35, T14N, R3E, MDB&M, Levee District 1 Sutter, Feather River, Sutter County).

**NOTE:** Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

**(SEAL)**

Dated: \_\_\_\_\_

\_\_\_\_\_  
Executive Officer**GENERAL CONDITIONS:**

**ONE:** This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

**TWO:** Only work described in the subject application is authorized hereby.

**THREE:** This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

**FOUR:** The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

**FIVE:** Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection

Board.

**SIX:** This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

**SEVEN:** It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

**EIGHT:** This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

**NINE:** The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

**TEN:** The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

**ELEVEN:** The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

**TWELVE:** Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

#### **SPECIAL CONDITIONS FOR PERMIT NO. 18882 BD**

**THIRTEEN:** The permittee should contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

**FOURTEEN:** All work approved by this permit shall be in accordance with the submitted "Project Plans for Construction of Abbott Lake Restoration Project Feather River Wildlife Area" dated July 03, 2014 except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

**FIFTEEN:** The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

**SIXTEEN:** The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

SEVENTEEN: The Central Valley Flood Protection Board, Department of Water Resources, and Levee District No.1 of Sutter County shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

EIGHTEEN: The Abbott Lake Restoration Project shall be subordinate to the purpose of the Sacramento River Flood Control Project and to the flowage easements held by the Sacramento and San Joaquin Drainage District (i.e. The Central Valley Flood Protection Board) and Levee District No.1 of Sutter County.

NINETEEN: Upon receipt of a signed copy of the issued permit the permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

TWENTY: No construction work of any kind shall be done during the flood season from November 1st to April 15th without prior approval of the Central Valley Flood Protection Board.

TWENTY-ONE: No material stockpiles, temporary buildings, or equipment shall remain in the floodway during the flood season from November 1st to April 15th.

TWENTY-TWO: Cleared trees and brush (or prunings therefrom) shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1st to April 15th.

TWENTY-THREE: Trees shall not be planted within 100-feet of the levee toe.

TWENTY-FOUR: The permittee shall be responsible for repair of any damages to the project levee and other flood control facilities due to construction, operation, or maintenance of the proposed project.

TWENTY-FIVE: The irrigation system shall be removed from the floodway upon completion of the three year establishment period.

TWENTY-SIX: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources or any other agency responsible for maintenance.

TWENTY-SEVEN: The submitted Vegetation Maintenance Plan shall be attached to this permit as Exhibit A and shall be a fully enforceable condition of this permit. Any material changes to the plan after the date of issuance of this permit, shall be submitted to the Central Valley Flood Protection Board for approval.

TWENTY-EIGHT: The permittee shall remove all woody species greater than three (3) inches in diameter from the designated grassland areas, from the 60-foot levee buffer zone, and from the 100-foot hedgerow spacing for the low shrub community.

TWENTY-NINE: The permittee shall remove all elderberry plants (*Sambucus* species) from the 60-

foot levee buffer zone prior to the stems reaching one (1) inch in diameter at ground level.

THIRTY: The Central Valley Flood Protection Board may require the clearing and/or pruning of trees planted within the floodway in order to minimize obstruction to floodflows.

THIRTY-ONE: After each period of high water, debris that accumulates at the site shall be completely removed from the floodway.

THIRTY-TWO: Areas where plantings are lost to erosion shall not be replanted.

THIRTY-THREE: The permittee shall restore the project site to the initial as-constructed approved project conditions if the Central Valley Flood Protection Board determines that the project is having a negative impact on flood conveyance and/or flood capacities in the Feather River.

THIRTY-FOUR: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

THIRTY-FIVE: The permittee will be responsible for securing any necessary permits incidental to habitat manipulation and restoration work completed in the flood control project, and will provide any biological surveying, monitoring, and reporting needed to satisfy those permits.

THIRTY-SIX: The permittee agrees to incur all costs for compliance with local, state and federal permitting and resolve conflicts between any of the terms and conditions that agencies might impose under the laws and regulations it administers and enforces.

THIRTY-SEVEN: All maintenance and monitoring reports will be provided to DWR's Sutter Maintenance Yard, Levee District No.1 of Sutter County, and the Central Valley Flood Project Board.

THIRTY-EIGHT: The permittee shall comply with all conditions set forth by DWR's Sutter Maintenance Yard which are attached to this permit as Exhibit B and is incorporated by reference.

THIRTY-NINE: The permittee shall comply with all conditions set forth by Levee District No.1 of Sutter County which are attached to this permit as Exhibit C and is incorporated by reference.

FORTY: The permittee shall comply with all conditions set forth in the letter from the Department of the Army (U.S. Army Corps of Engineers, Sacramento District) dated July XX, 2014, which is attached to this permit as Exhibit D and is incorporated by reference.

FORTY-ONE: Upon completion of the project, the permittee shall submit a final planting plan to: Department of Water Resources, Flood Project Inspection Section, 3310 El Camino Avenue, Suite 256, Sacramento, California 95821.

APPLICATION FOR A CENTRAL VALLEY FLOOD PROTECTION BOARD  
ENCROACHMENT PERMITApplication No. \_\_\_\_\_  
(For Office Use Only)

1. Description of proposed work being specific to include all items that will be covered under the issued permit.

The project will plant approximately 17,000 native riparian plants (tree, shrub and herbaceous species) on 150 of 439 acres located on a benched flood plain known as the Abbott Lake Unit of the Feather River Wildlife Area in Sutter County, Ca. See Exhibit 1 (Description of Proposed Work) and Exhibit 2 (Figures and Photos) for more details.

## 2. Project

Location: Feather River WLA, Abbot Lake Unit, Sutter County, in Section 35Township: 14(N) (N) (S), Range: 3(E) (E) (W), M. D. B. & M.

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

Stream: \_\_\_\_\_, Levee: \_\_\_\_\_ Designated Floodway: \_\_\_\_\_

APN: \_\_\_\_\_

3. California Department of Fish and Wildlife of 1701 Nimbus Rd.  
Name of Applicant / Land Owner AddressRancho Cordova CA 95670 916-358-2900  
City State Zip Code Telephone Number

E-mail \_\_\_\_\_

4. Jason Holley of CA Fish and Wildlife  
Name of Applicant's Representative CompanyRancho Cordova CA 95670 916-358-2868  
City State Zip Code Telephone Numberjason.holley@wildlife.ca.gov  
E-mail

5. Endorsement of the proposed project from the Local Maintaining Agency (LMA):

We, the Trustees of Dept of Water Resources - Sutter Yard approve this plan, subject to the following conditions:  
Name of LMA☐ Conditions listed on back of this form☒ Conditions Attached☐ No Conditions

Kevin Hull 12/17/13  
Trustee Date

\_\_\_\_\_  
Trustee Date

Conditions for Encroachment Application – Abbot Lake, CFWS – 12/17/13

- 1. Maintenance of the project will be the responsibility of California Fish and Wildlife Service or permittee in perpetuity, in accordance with CVFPB, and USACE requirements.
- 2. No orchard prunings or brush piles will be placed on the levee slope or left in the flood channel. All pruning debris will be the responsibility of the permittee to dispose of prior to the start of flood season.

State of California

DEPARTMENT OF WATER RESOURCES  
CENTRAL VALLEY FLOOD PROTECTION BOARD

California Natural Resources Agency

APPLICATION FOR A CENTRAL VALLEY FLOOD PROTECTION BOARD  
ENCROACHMENT PERMITApplication No. \_\_\_\_\_  
(For Office Use Only)

## 1. Description of proposed work:

The project will plant approximately 17,000 native riparian plants (tree, shrub and herbaceous species) on 150 acres of flood-prone land on the 439-acre Abbott Lake Unit of the Feather River Wildlife Area in Sutter County, California. See Exhibit 1 (Description of Proposed Work) and Exhibit 2 (Figures and Photographs) for more details.

2. Location: Feather River WA, Abbot Lake, Sutter County, in Section 35,  
(N)  
Township: 14 (N) (S), Range 3 (E) (W), M. D. B. & M.

3. California Department of Fish and Wildlife of 1701 Nimbus Rd.  
Name of Applicant Address

Rancho Cordova  
City

CA  
State

95670  
Zip Code

(916) 358-2900  
Telephone Number

(916) 358-2912  
Fax Number

## 4. Endorsement: (of Reclamation District)

We, the Trustees of Levee District 1, Sutter County  
Name and District Number

approve this plan, subject to the following conditions:

☐ Conditions listed on back of this form

☒ Conditions Attached

☐ No Conditions

Francis Silva  
Trustee

8/12/13  
Date

\_\_\_\_\_  
Trustee

\_\_\_\_\_  
Date

5. Names and addresses of adjacent property owners sharing a common boundary with the land upon which the contents of this application apply. If additional space is required, list names and addresses on back of the application form or an attached sheet.

Billy Bains  
Name

4247 Fortuna Street, Yuba City, CA  
Address

95993  
Zip Code

Sierra Gold Nursery

5320 Garden Highway, Yuba City, CA

95991

Levee District No. 1 has the following conditions to be included on the Central Valley Flood Protection Board Encroachment Permit for the Department of Fish and Wildlife Abbott Lake habitat planting project. The conditions below are the minimum conditions:

1. All improvements endorsed by this permit shall be in accordance with the submitted drawings. The improvement plans shall include an acknowledgement title block on each sheet for Levee District No. 1 signature. No further improvements, other than approved by this permit, shall be done in the area without prior endorsement of Levee District No. 1;
2. The proposed project shall not increase, as determined by the U.S. Corps of Engineers and the California Central Valley Flood Protection Board, the 1-in-100 and 1-in-200 water surface elevation or the velocity on the east or west bank of the Feather River. A copy of the hydraulic report and computer modeling (HEC –RAS) approved by SBFCA, USACE, and CVFPB shall be provided to Levee District No. 1 prior to construction;
3. The encroachment permit and license agreement shall include a provision that the permittee shall be required to remove or alter all or any part of the herein permitted project if removal or alteration is necessary as part of or in conjunction with any present or future flood control plan or project, or if damaged by any cause. If the permittee or successor does not comply, Levee District No. 1, SBFCA, USACE, and/or the CVFPB may remove or modify the herein permitted project at the permittee's or successor's sole cost and expense;
4. The permitted/licensed encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation and maintenance of the flood control project to interfere, the permittee shall be required, at permittee's or successor's sole cost and expense, to modify or remove the permitted encroachment(s).
5. If the project or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project, at the permittee's or successor's sole cost and expense.
6. The California Department of Fish and Wildlife shall indemnify Levee District No. 1 from any and all liability associated with the endorsement of the project;
7. Grading or Tree/Shrub Plantings shall be designed not to direct water towards the existing levee or the diversion (training) levees. Grading or plantings shall not affect the hydraulic characteristics of the river in a negative manner;
8. Appropriate operation and maintenance shall be performed by the project owners to prevent any adverse impacts on the floodway and levee systems. A Vegetation Management Plan (VPM) shall be provided to Levee District No. 1 for review and approval. No work shall occur until approval of VMP by Levee District No. 1, SBFCA, CVFPB, and USACE;
9. A set of As-Built Mylar plans shall be provided to Levee District No. 1 upon completion of the work;
10. A copy of the Board approved Central Valley Flood Protection Board Permit shall be provided to Levee District No. 1 prior to any work;
11. Levee District No. 1 shall be notified five (5) working days prior to any construction activities;
12. Levee District No. 1 shall be notified five (5) working days prior to the Central Valley Flood Protection Board meeting which shall include approval of the encroachment permit.

August 22, 2014 Attachment I

REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U.S. Army Engineer District, Sacramento  
Corps of Engineers  
1325 J Street  
Sacramento, California 95814-2922

Flood Protection and Navigation Section (18882)

Leslie M. Gallagher, Acting Executive Officer  
Central Valley Flood Protection Board  
3310 El Camino Avenue, Room 151  
Sacramento, California 95821

Dear Ms. Gallagher:

We have reviewed a permit application by the California Department of Fish and Wildlife (application number 18882). These plans include removing invasive vegetation from 96 acres and planting approximately 19,411 plants to include riparian shrubland, low shrubland, riparian woodland and grassland on 150 acres (South Field) of the 439 acre Abbot Lake Unit of the Feather River Wildlife Area on the right (west) overflow bank of the Feather River near River Mile 20. The project is located approximately 7 miles south of Yuba City and 1.5 miles east from the intersection of Highway 99 and Obanion Road, at 39.0275°N 121.6049°W NAD83, Sutter County, California.

The District Engineer has no objection to approval of this application by your Board from a flood control standpoint, subject to the following conditions:

- a. That the proposed work shall not be performed during the flood season of November 1 to April 15, unless otherwise approved in writing by your Board.
- b. That an operation and maintenance plan shall be developed and provided to the Central Valley Flood Protection Board, prior to planting, for approval (with a copy to USACE). The plan shall address how the proposed plantings will be maintained and will not impact the hydraulic conditions of the flood risk management project.
- c. That the applicant shall remove all buildup of debris or underbrush from the plantings, outside the limits of the project right-of-way, prior to the beginning of the flood season, November 1, and after each high water event.
- d. That the proposed work shall not interfere with the integrity or hydraulic capacity of the flood risk management project; easement access; or maintenance, inspection, and flood fighting procedures.
- e. That the sponsor shall ensure an effective rodent control program is in place.

- 2 -

f. That the proposed work shall not change the streamflow velocity in such a way that might cause damage to the existing waterside levee slope or reduce the channel flow velocity.

g. That the removed invasive vegetation shall be properly disposed of by either complete burning or complete removal outside the limits of the project right-of-way.

h. That the proposed plantings shall be located at least 15 feet from the waterside levee toe.

Based upon the information provided, no Section 10 or Section 404 permit is needed.

A copy of this letter is being furnished to Mr. Don Rasmussen, Chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite 200, Sacramento, CA, 95821.

Sincerely,

Rick L. Poeppelman, P.E.  
Chief, Engineering Division

PROJECT PLANS FOR CONSTRUCTION OF  
ABBOTT LAKE RESTORATION PROJECT  
FEATHER RIVER WILDLIFE AREA

PROJECT OVERVIEW

PAGE

DRAWING

INDEX

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2	L2	Abbott Lake Planting Area Plan
3	L3	Planting Legend
4	R1	Pre-existing Abbott Lake Area Plan
5	R2	Pre-existing Abbott Lake Cross Section
6	R3	Existing Abbott Lake w/ Setback Levee Area Plan
7	R4	Existing Abbott Lake w/ Setback Levee Cross Section
8	R5	Abbott Lake Restoration Area Plan
9	R6	Abbott Lake Restoration Area Cross Section
10	R7	Abbott Lake Enlarged Area Plan
11	R8A	Abbott Lake Woodland Planting Tile Layout - Oak
12	R8B	Abbott Lake Woodland Planting Tile Layout - Sycamore
13	R8C	Abbott Lake Woodland Planting Tile Layout - Cottonwood
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16	R9A	Abbott Lake Shrubland Planting Tile Layout - A
17	R9B	Abbott Lake Shrubland Planting Tile Layout - B

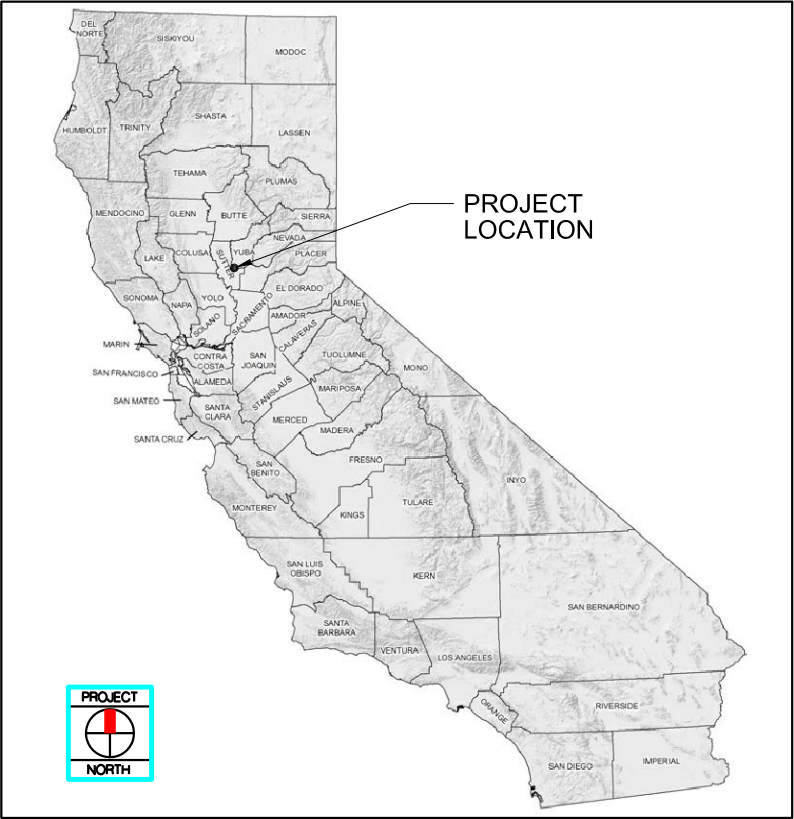
PREPARED FOR:

California Department of Fish and Wildlife  
1701 Nimbus Road  
Rancho Cordova, CA 95670  
(916) 874-7606  
Contact: Jason Holley,  
North Central Region-Wildlife Program Supervisor

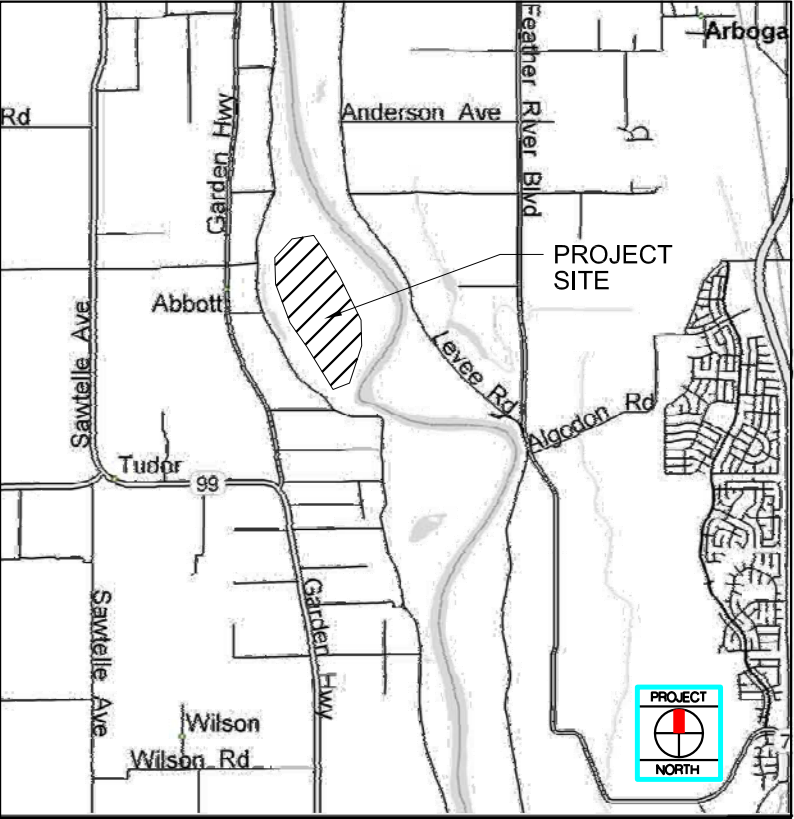
Levee District 1  
250 Second Street  
Yuba City, CA 95991

Central Valley Flood Protection Board  
3310 El Camino Avenue  
Room 151  
Sacramento, CA 95821

VICINITY MAP



LOCATION MAP



Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_

Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_

Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_

580 Vallombrosa Avenue  
Chico, CA 95926  
(530) 894-5401 Off.  
(530) 894-2970 Fax  
www.RiverPartners.org



California Department  
of Fish and Wildlife  
1701 Nimbus Road  
Rancho Cordova, CA 95670



ABBOTT LAKE RESTORATION

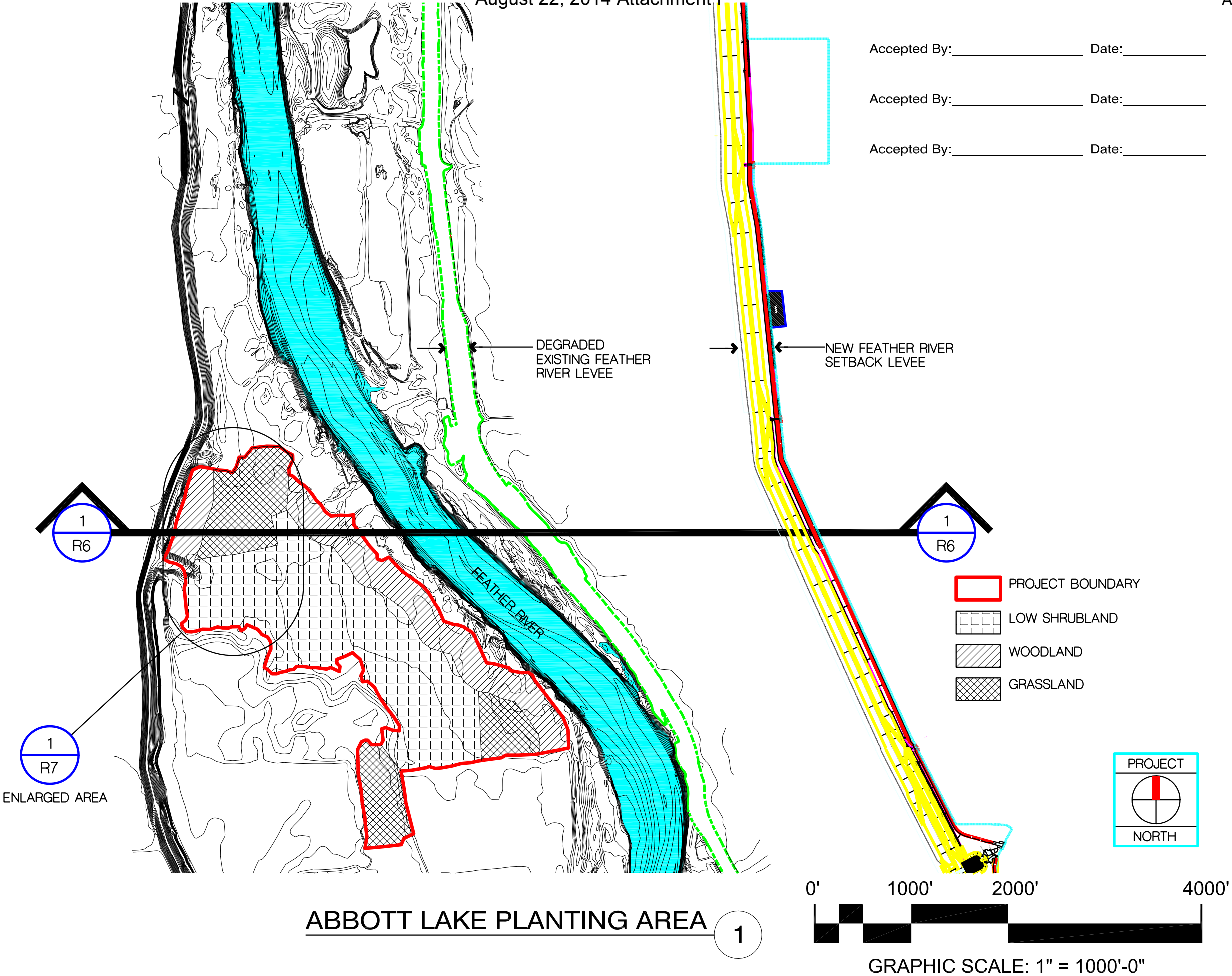
Sutter County, California

COVER  
SHEET

FIGURE

L1

DATE: 07-03-14



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California Department  
of Fish and Wildlife  
1701 Nimbus Road  
Rancho Cordova, CA 95670



ABBOTT LAKE RESTORATION  
Sutter County, California

PLANTING AREA PLAN

FIGURE

L2

DATE: 07-03-14

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of Fish and Wildlife  
1701 Nimbus Road  
Rancho Cordova, CA 95670



ABBOTT LAKE RESTORATION  
Sutter County, California

PLANTING  
LEGEND

FIGURE

L3

DATE: 07-03-14

Symbol	Treatment	Details	Key	Botanical Name	Common Name	Plant Size	Quantity	Plant Spacing
	Low Shrubland <sup>1</sup>	SHEETS R9A-B	BU	<i>Cephalanthus occidentalis</i>	Buttonbush	Deepot	570	10' x 20' Hedgerows
			BB	<i>Rubus ursinus</i> Chain. & Schldl.	California blackberry	Deepot	2,542	10' x 20' Hedgerows
			CB	<i>Baccharis pilularis</i> DC.	Coyote bush	Deepot	1,593	10' x 20' Hedgerows
			PI	<i>Aristolochia californica</i>	Dutchman's pipevine	Deepot	570	10' x 20' Hedgerows
			EB	<i>Sambucus mexicanas</i>	Elderberry	Deepot	760	10' x 20' Hedgerows
			MF	<i>Baccharis salicifolia</i>	Mule fat	Cutting	380	10' x 20' Hedgerows
			OK	<i>Quercus lobata</i> Nee	Valley oak	Acorn	235	10' x 20' Hedgerows
			RO	<i>Rosa californica</i> Cham. & Schldl.	Wild rose	Deepot	2,185	10' x 20' Hedgerows
			AW	<i>Salix lasiolepis</i> Benth.	Arroyo willow	Cutting	665	10' x 20' Hedgerows
	Woodland <sup>1</sup>	SHEETS R8A-E	BB	<i>Acer negundo</i> L.	Box elder	Deepot	788	10' x 20'
			BU	<i>Cephalanthus occidentalis</i>	Buttonbush	Deepot	473	10' x 20'
			BB	<i>Rubus ursinus</i> Chain. & Schldl.	California blackberry	Deepot	1,103	10' x 20'
			CB	<i>Baccharis pilularis</i> DC.	Coyote bush	Deepot	1,260	10' x 20'
			EB	<i>Sambucus mexicanas</i>	Elderberry	Deepot	473	10' x 20'
			CO	<i>Populus fremontii</i> S.Watson ssp. fremontii	Fremont cottonwood	Cutting	36	10' x 20'
			MF	<i>Baccharis salicifolia</i>	Mule fat	Cutting	315	10' x 20'
			AS	<i>Fraxinus latifolia</i> Benth	Oregon ash	Deepot	945	10' x 20'
			OK	<i>Quercus lobata</i> Nee	Valley oak	Acorn	36	10' x 20'
			SY	<i>Platanus racemosa</i> Nutt.	Western sycamore	Deepot	36	10' x 20'
			RO	<i>Rosa californica</i> Cham. & Schldl.	Wild rose	Deepot	1,260	10' x 20'
			AW	<i>Salix lasiolepis</i> Benth.	Arroyo willow	Cutting	236	10' x 20'
			BW	<i>Salix goodingii</i> C.R. Ball	Gooding's black willow	Cutting	945	10' x 20'
	Grassland			<i>Elymus triticoides</i>	Creeping wildrye	Seed	5 lbs/acre	NA
				<i>Elymus glaucus</i>	Blue wildrye	Seed	5 lbs/acre	NA

<sup>1</sup>Ground cover in the Low Shrubland and Woodland will consists of the following herbaceous species:

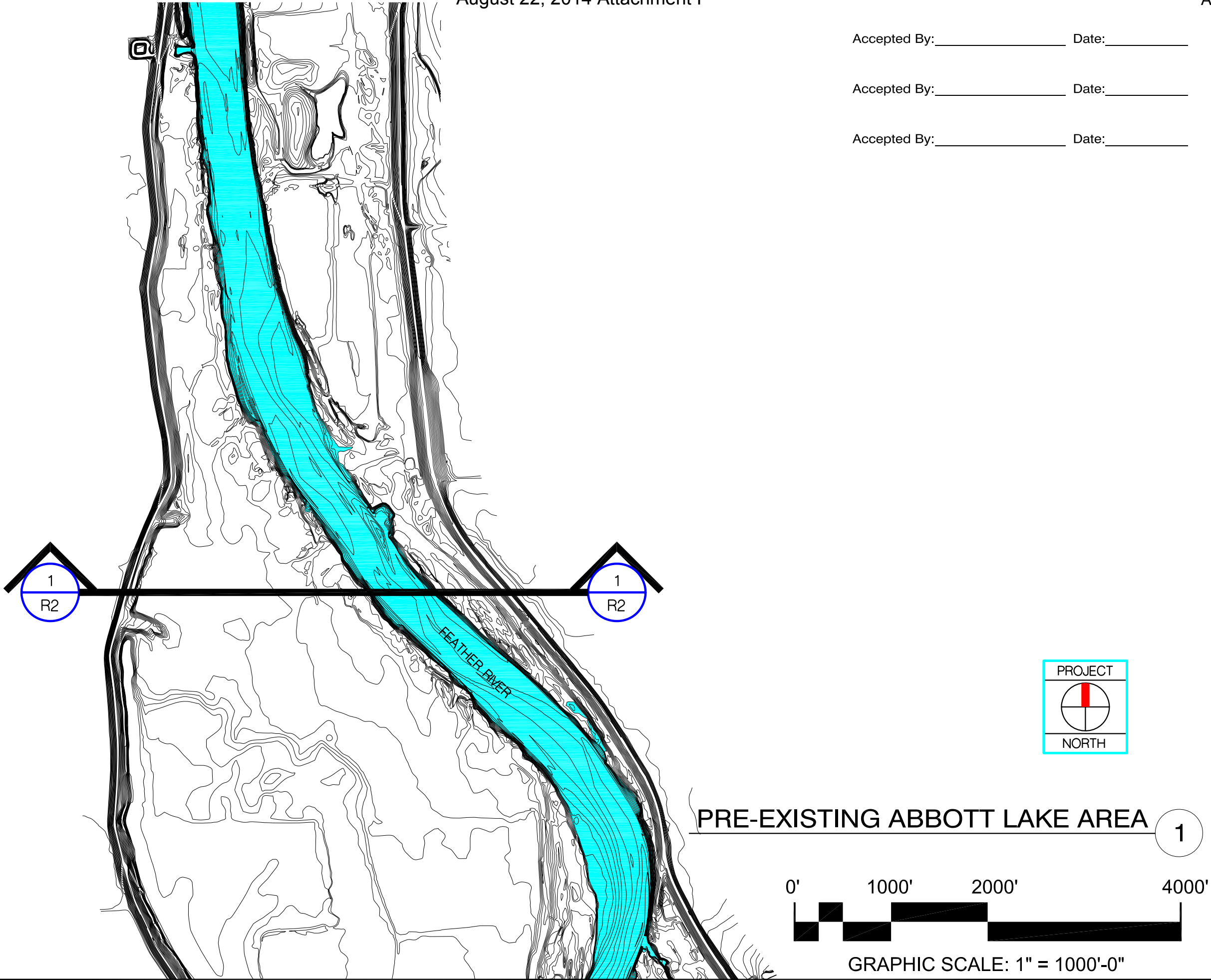
Botanical Name	Common Name	Plant Size	Quantity
<i>Artemisia douglasiana</i>	Mugwort	Seed	2 lbs/acre
<i>Grindelia camporum</i>	Gumplant	Seed	2 lbs/acre
<i>Heterotheca grandiflora</i>	Telegraph weed	Seed	2 lbs/acre
<i>Carex barbarae</i>	Santa Barbara sedge	Plug	1878*

\*6 plugs planted at each Valley oak

Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_

Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_

Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_



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Chico, CA 95926  
(530) 894-5401 Off.  
(530) 894-2970 Fax  
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California Department  
of Fish and Wildlife  
1701 Nimbus Road  
Rancho Cordova, CA 95670



FEATHER RIVER RESTORATION

Sutter County, California

PRE-EXISTING  
ABBOTT LAKE  
AREA PLAN

FIGURE

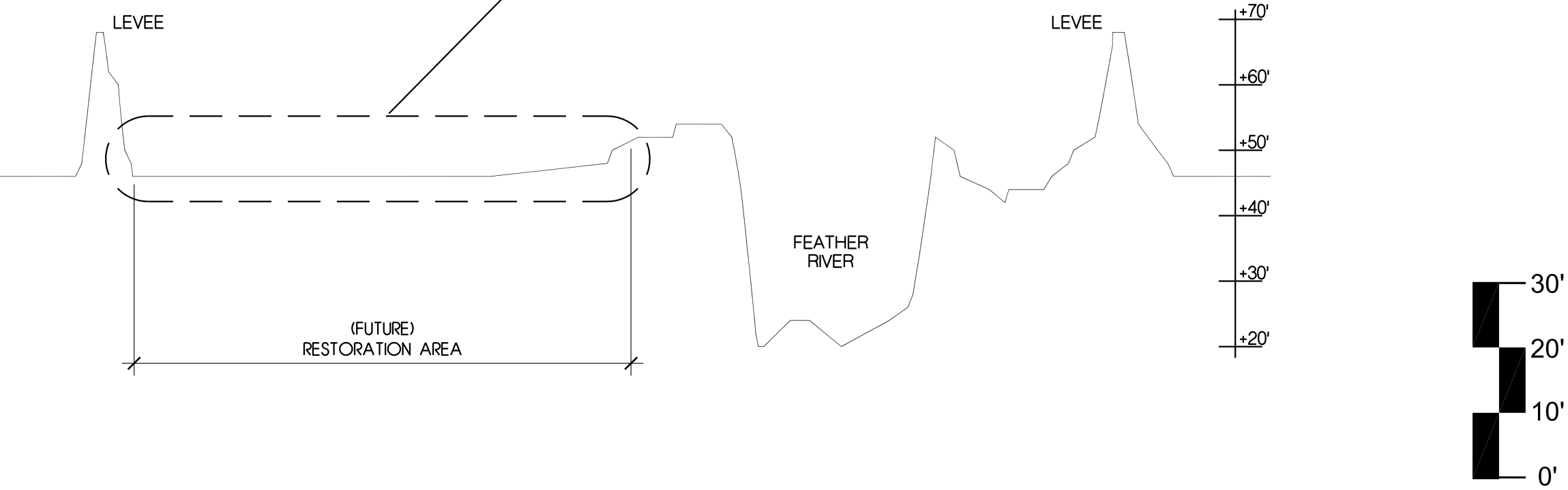
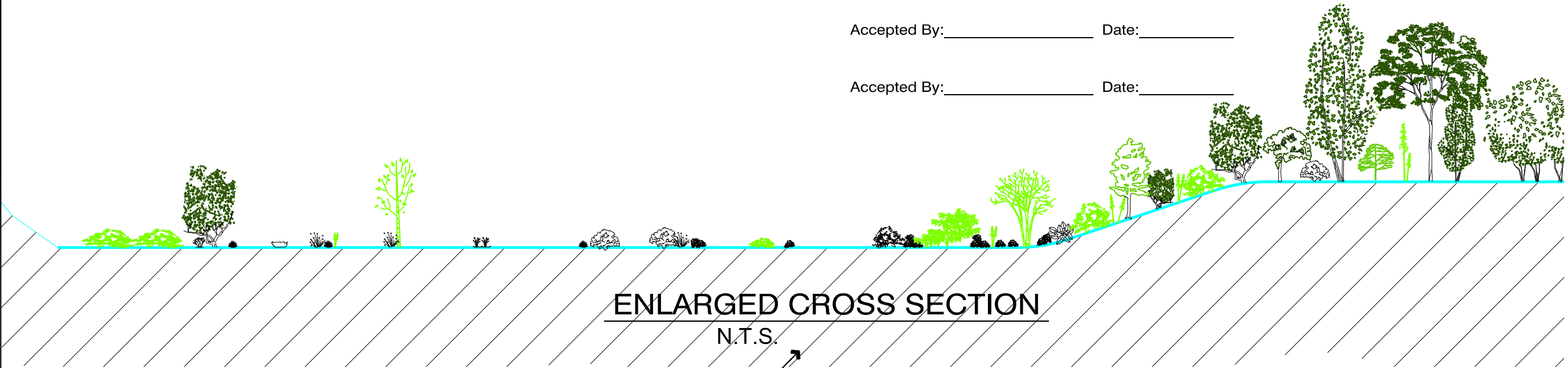
R1

DATE: 07-03-14

Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_

Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_

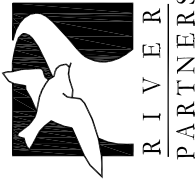
Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_



PRE-EXISTING CROSS SECTION @ ABBOTT LAKE AREA

GRAPHIC SCALE: 1" = 500' (HORIZ.) - 1" = 20' (VERT.)

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California Department  
of Fish and Wildlife  
1701 Nimbus Road  
Rancho Cordova, CA 95670



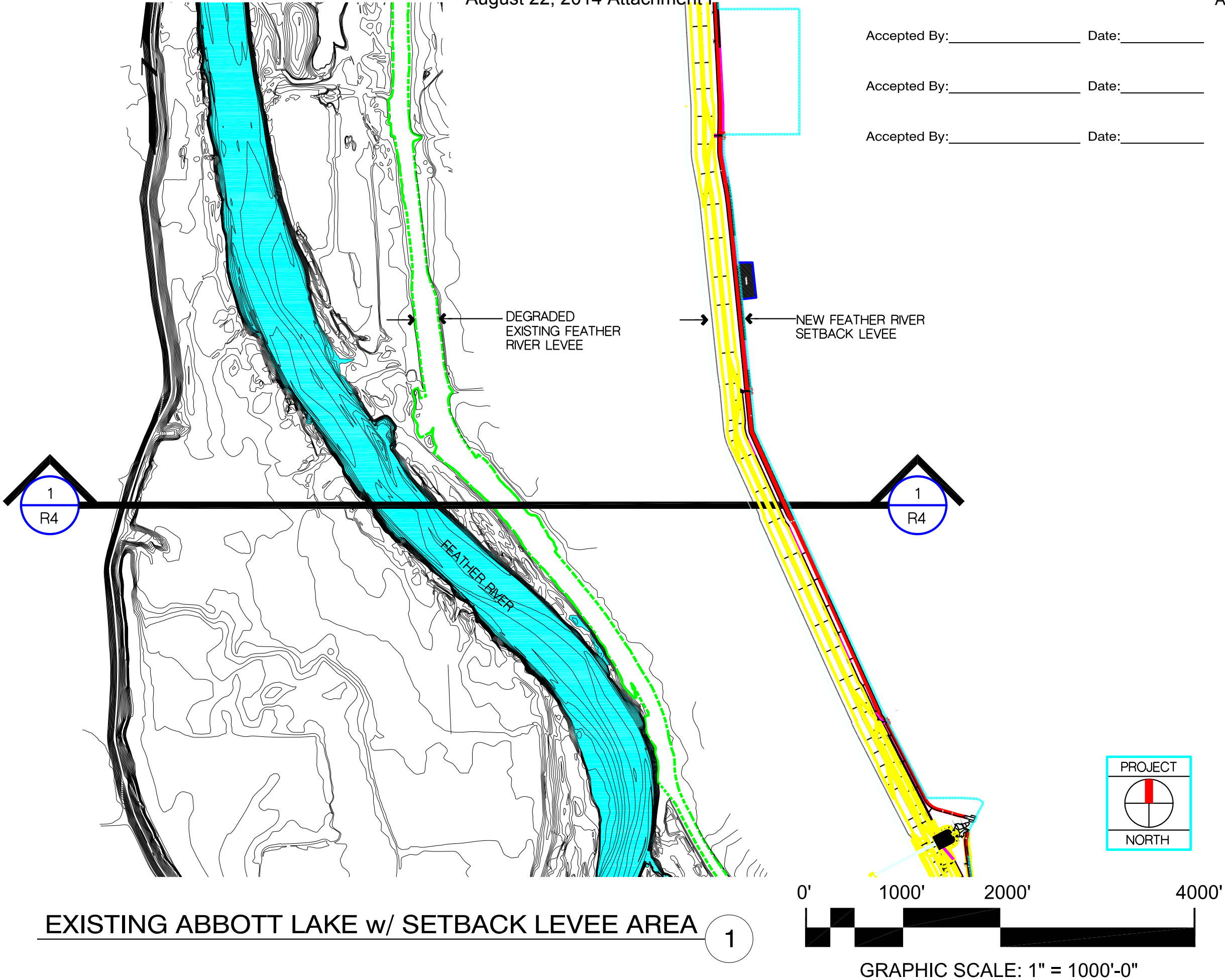
FEATHER RIVER RESTORATION  
Sutter County, California

PRE-EXISTING  
ABBOTT LAKE  
CROSS SECTION

FIGURE

R2

DATE: 07-03-14



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California Department  
of Fish and Wildlife  
1701 Nimbus Road  
Rancho Cordova, CA 95670



FEATHER RIVER RESTORATION

Sutter County, California

EXISTING  
ABBOTT LAKE w/ SETBACK  
LEVEE AREA PLAN

FIGURE

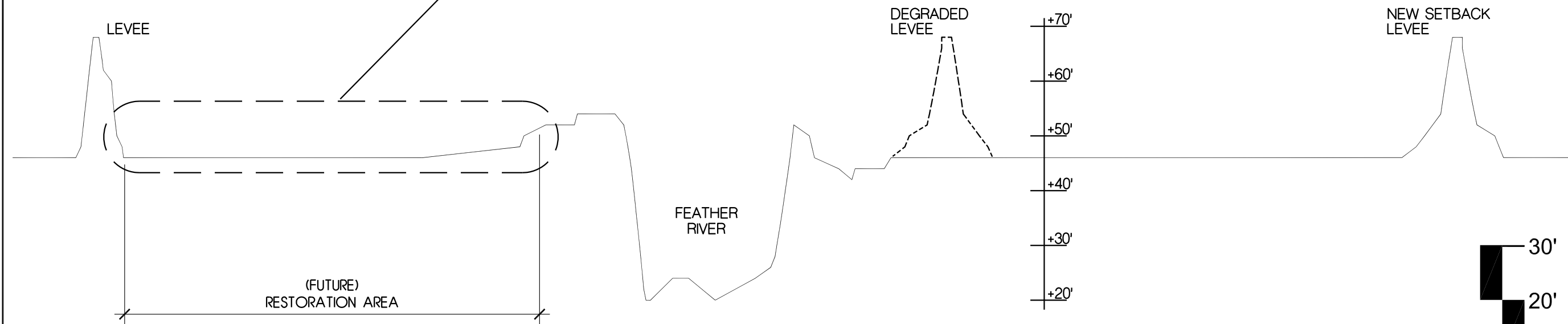
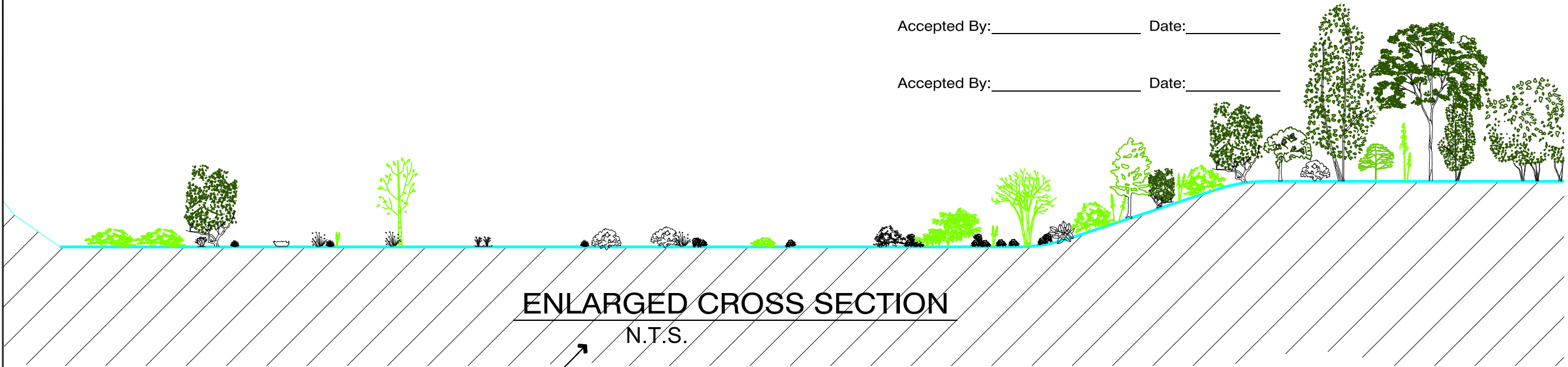
**R3**

DATE: 07-03-14

Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_

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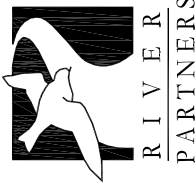


**EXISTING  
CROSS SECTION @ ABBOTT LAKE w/ SETBACK LEVEE AREA**

1

GRAPHIC SCALE: 1" = 500' (HORIZ.) - 1" = 20' (VERT.)

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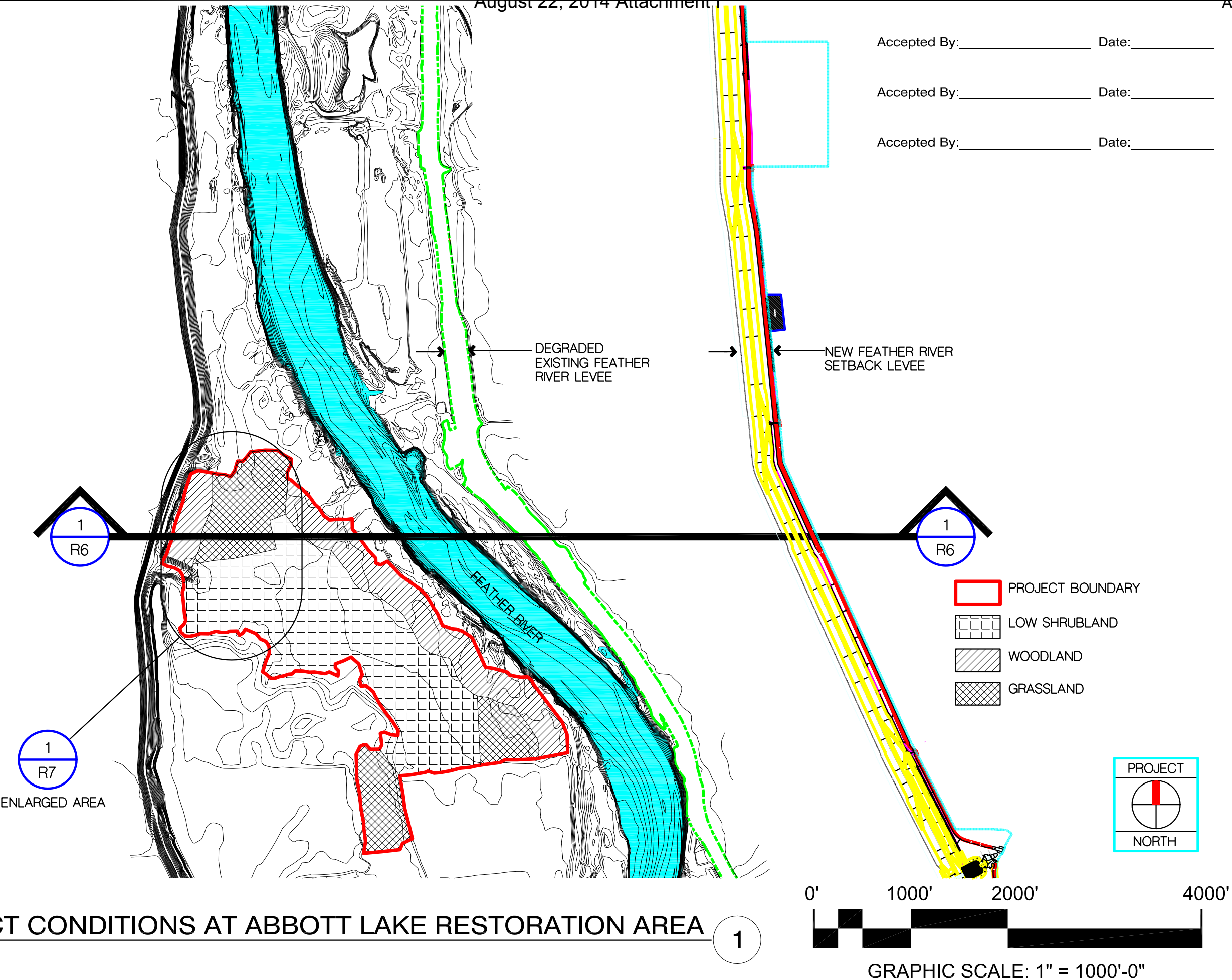
FEATHER RIVER RESTORATION  
Sutter County, California

ABBOTT LAKE w/ SETBACK  
LEVEE CROSS SECTION

FIGURE

**R4**

DATE: 07-03-14



PROJECT CONDITIONS AT ABBOTT LAKE RESTORATION AREA

1

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FEATHER RIVER RESTORATION  
Sutter County, California

ABBOTT LAKE  
RESTORATION AREA PLAN

FIGURE

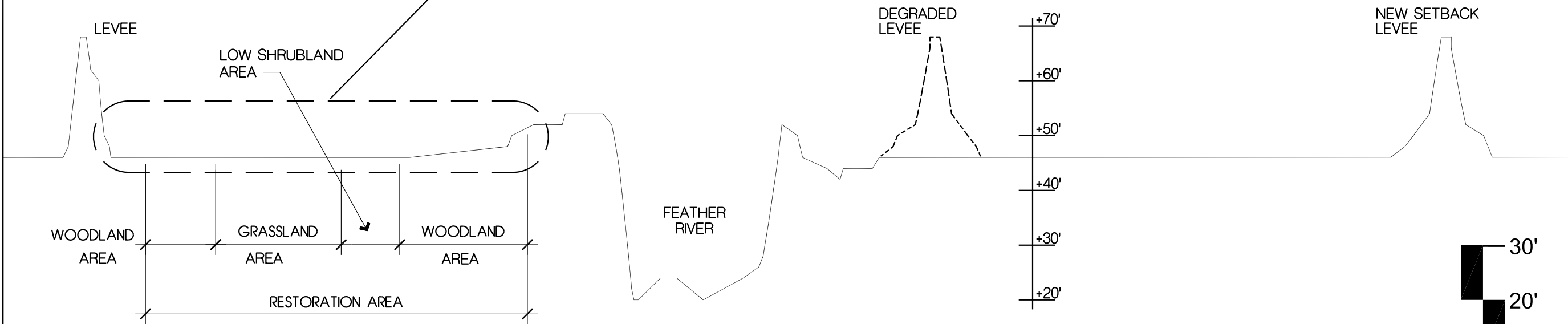
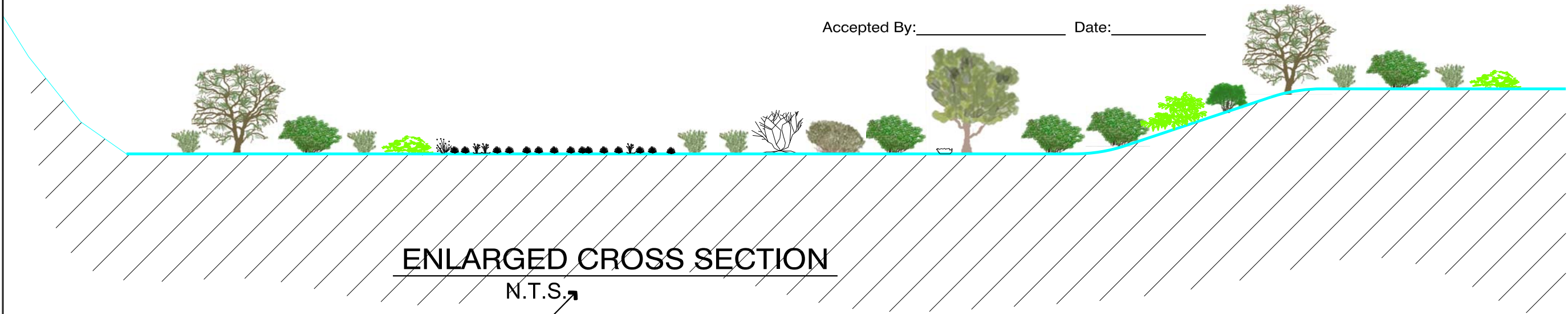
R5

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Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_



PROJECT CONDITIONS  
CROSS SECTION @ ABBOTT LAKE RESTORATION AREA

1

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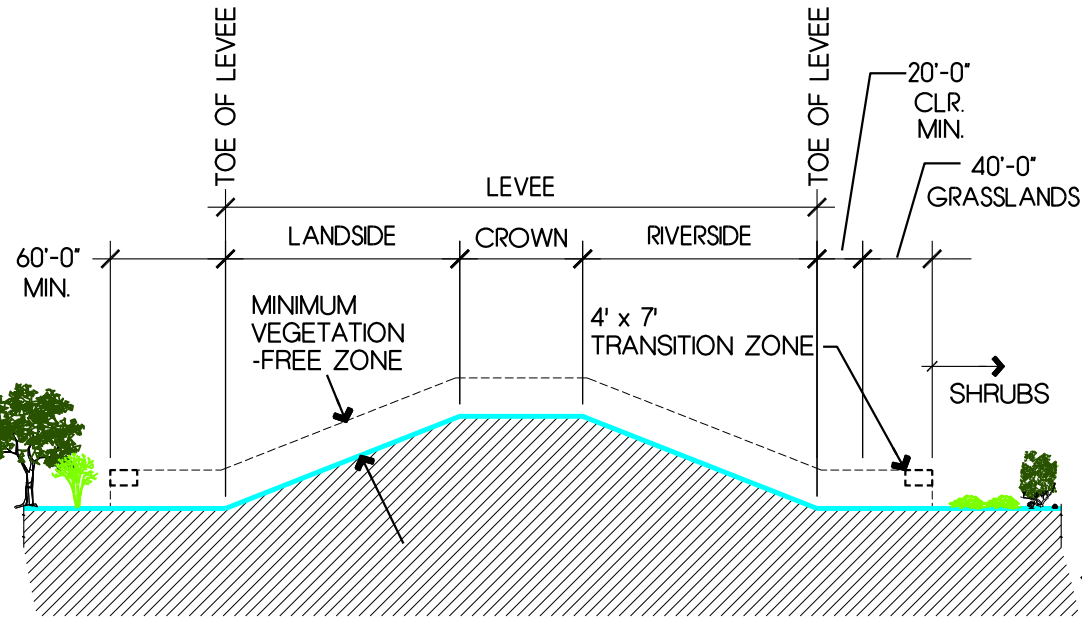
FEATHER RIVER RESTORATION  
Sutter County, California

ABBOTT LAKE  
RESTORATION AREA  
CROSS SECTION

FIGURE

R6

DATE: 07-03-14



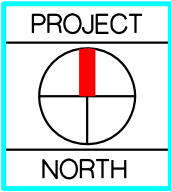
**LEVEE CROSS SECTION**  
N.T.S. 2

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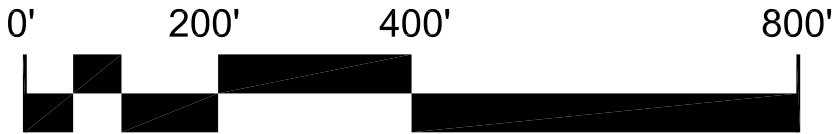
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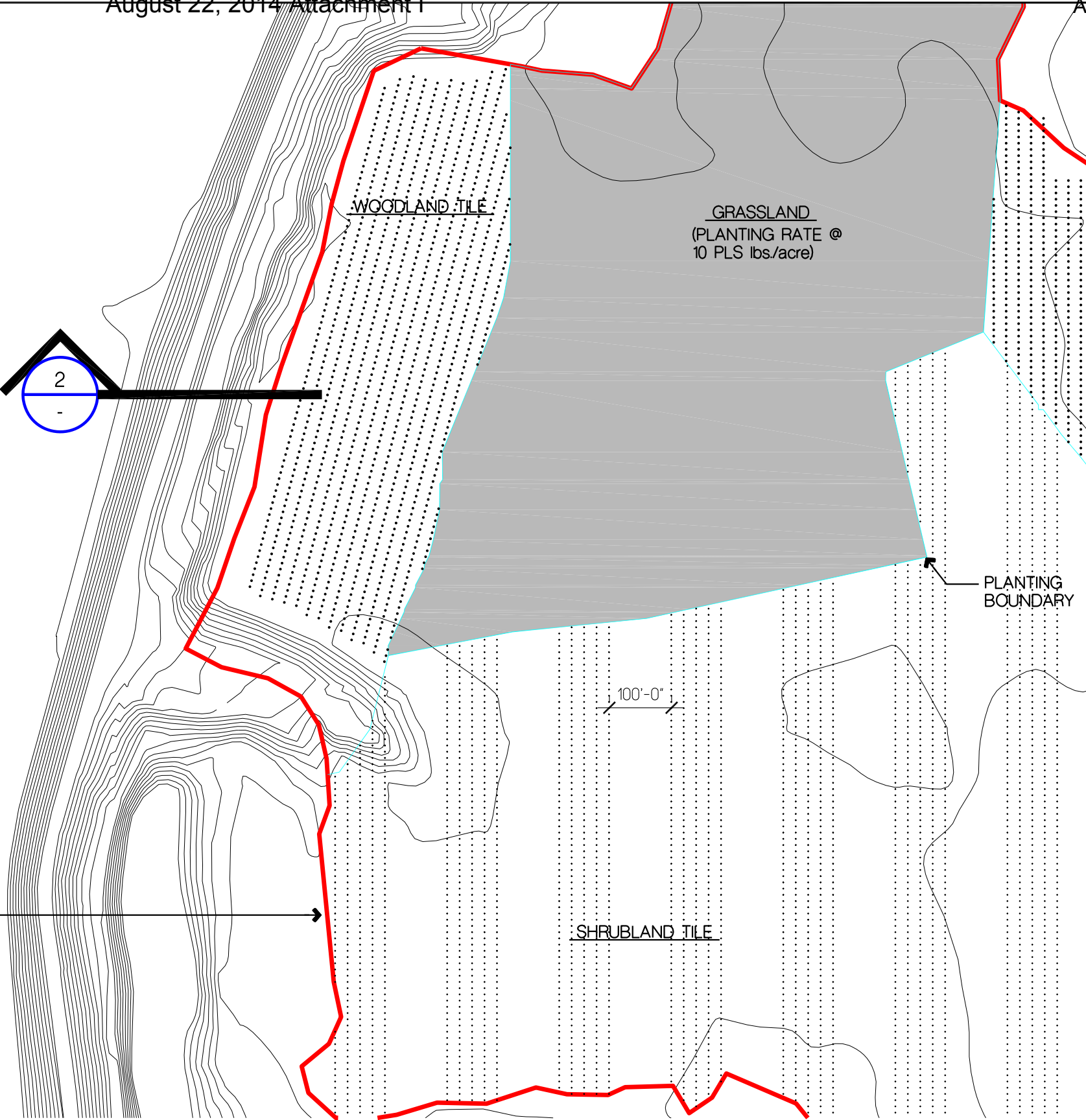
PROJECT  
BOUNDARY



**ENLARGED AREA PLAN** 1



GRAPHIC SCALE: 1" = 200'-0"



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FEATHER RIVER RESTORATION

Sutter County, California

ABBOTT LAKE  
ENLARGED AREA PLAN

FIGURE

**R7**

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FEATHER RIVER RESTORATION

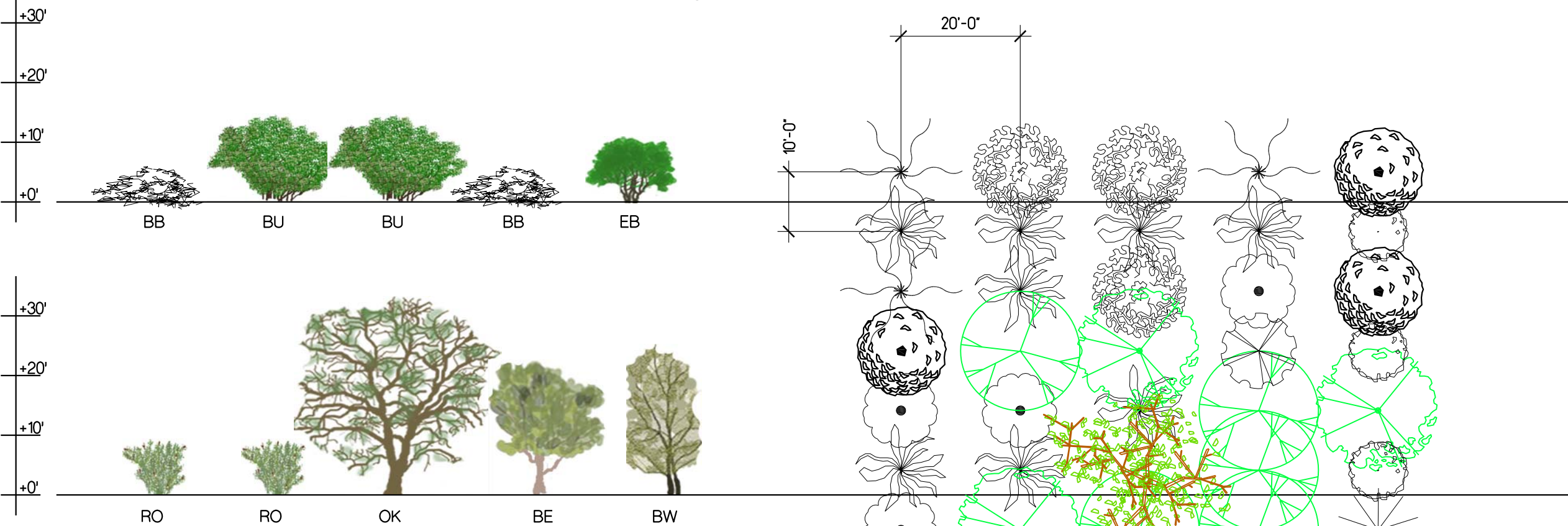
Sutter County, California

ABBOTT LAKE  
WOODLAND PLANTING  
TILE LAYOUT -OAK

FIGURE

R8A

DATE: 07-03-14



PLANTING LEGEND

KEY COMMON NAME SYMBOLS

TREES

AS OREGON ASH  
BE BOX ELDER  
BW BLACK WILLOW  
OK VALLEY OAK

SHRUBS

AW ARROYO WILLOW  
BB CALIFORNIA BLACKBERRY  
BU BUTTONBUSH  
CB COYOTE BRUSH  
EB BLUE ELDERBERRY  
MF MULE FAT  
RO CALIFORNIA ROSE

WOODLAND TILE - OAK

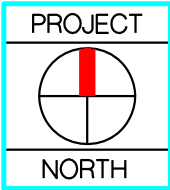
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100'-0"	OK	OK	OK	Q OAK
100'-0"	SY	SY	SY	Q SYCAMORE
100'-0"	CO	CO	CO	Q COTTONWOOD
	NT	NT	NT	

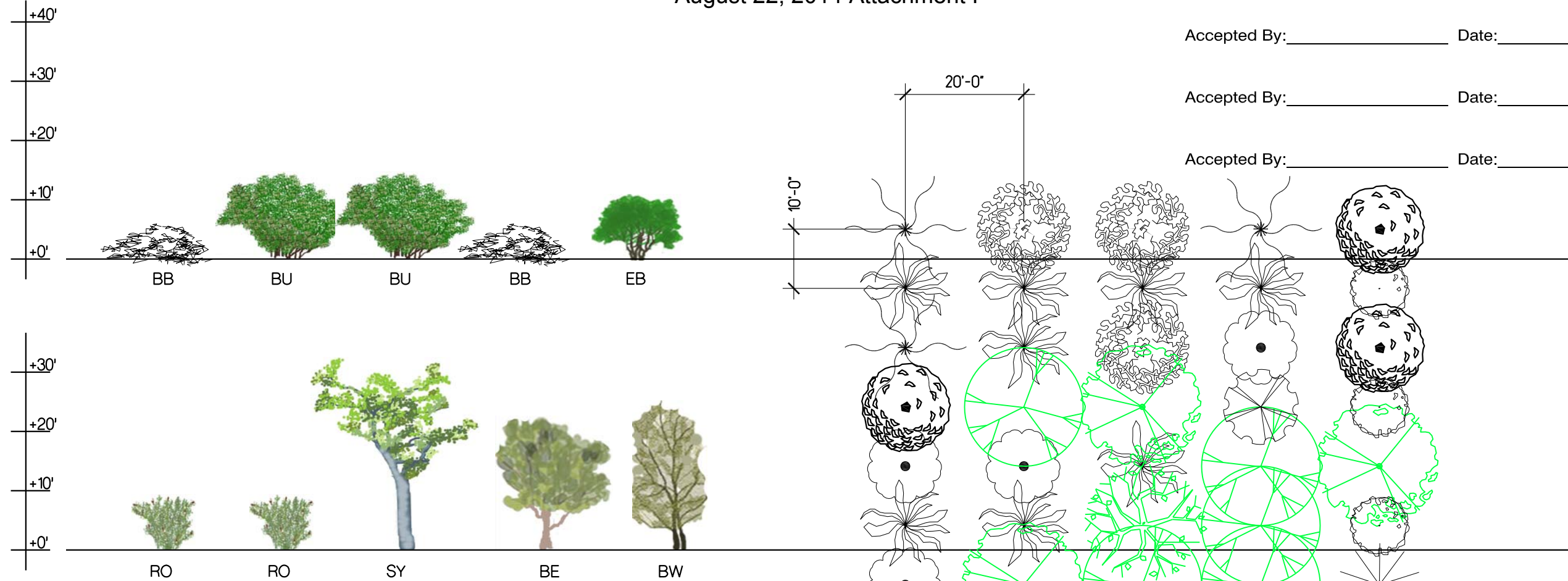
WOODLAND TILE LAYOUTS  
OK = OAK TILE, SY = SYCAMORE TILE  
CO = COTTONWOOD TILE, NT = NO LARGE TREE TILE

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Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_

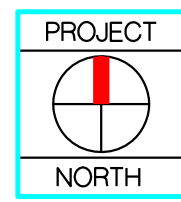
Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_





PLANTING LEGEND		
KEY	COMMON NAME	SYMBOLS
TREES		
AS	OREGON ASH	
BE	BOX ELDER	
BW	BLACK WILLOW	
SY	WESTERN SYCAMORE	
SHRUBS		
AW	ARROYO WILLOW	
BB	CALIFORNIA BLACKBERRY	
BU	BUTTONBUSH	
CB	COYOTE BRUSH	
EB	BLUE ELDERBERRY	
MF	MULE FAT	
RO	CALIFORNIA ROSE	

WOODLAND TILE - SYCAMORE



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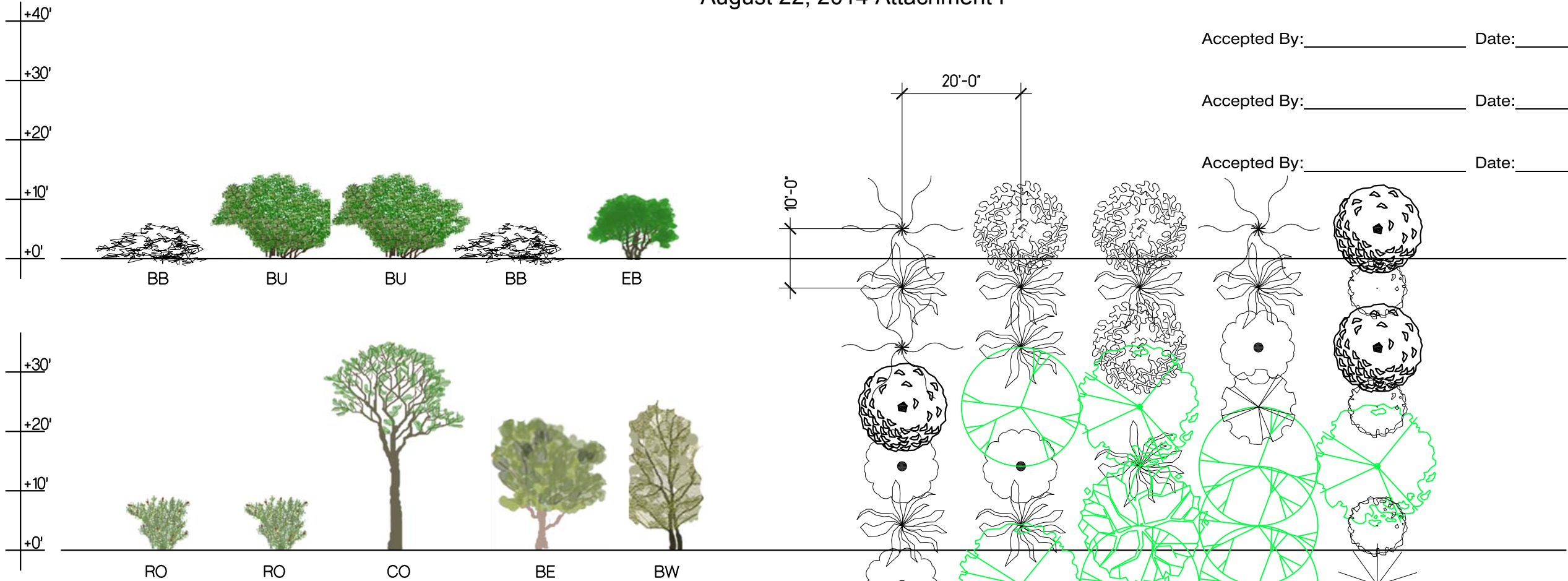
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Sutter County, California

ABBOTT LAKE  
WOODLAND PLANTING  
TILE LAYOUT-SYCAMORE

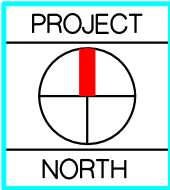
FIGURE  
**R8B**  
DATE: 07-03-14



PLANTING LEGEND

KEY	COMMON NAME	SYMBOLS
TREES		
AS	OREGON ASH	
BE	BOX ELDER	
BW	BLACK WILLOW	
CO	FREMONT COTTONWOOD	
SHRUBS		
AW	ARROYO WILLOW	
BB	CALIFORNIA BLACKBERRY	
BU	BUTTONBUSH	
CB	COYOTE BRUSH	
EB	BLUE ELDERBERRY	
MF	MULE FAT	
RO	CALIFORNIA ROSE	

WOODLAND TILE - COTTONWOOD



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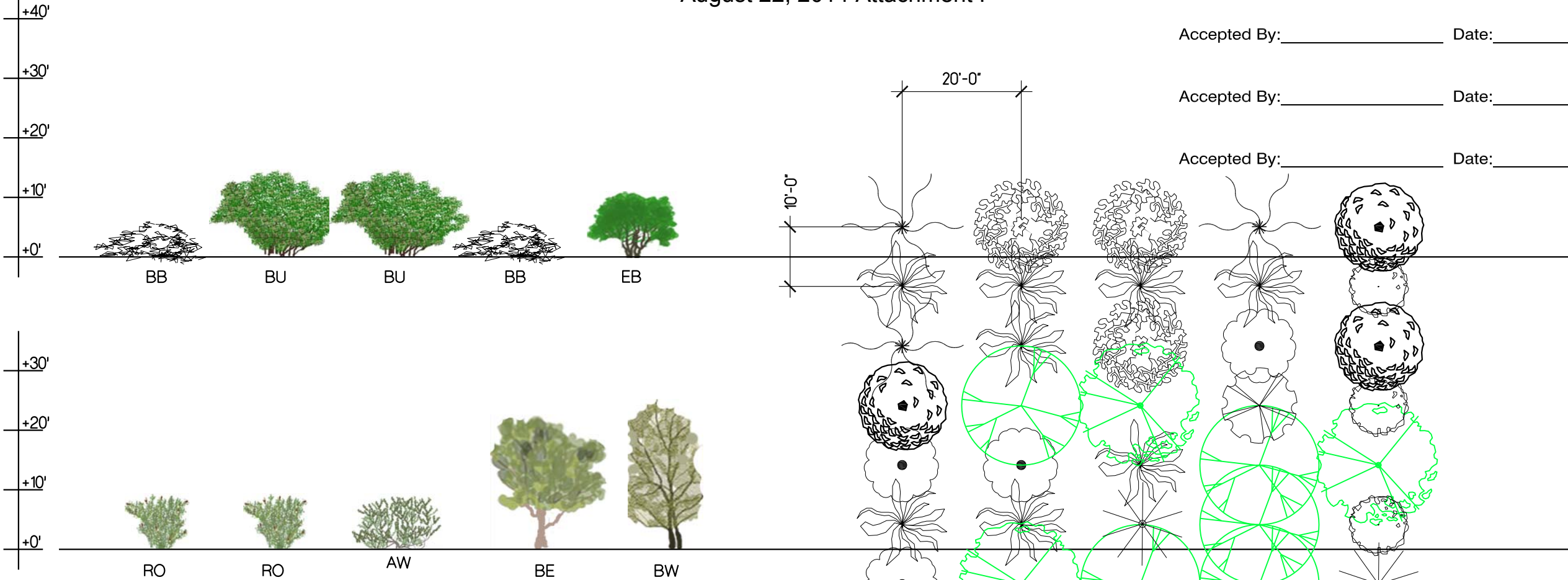
FEATHER RIVER RESTORATION  
Sutter County, California

ABBOTT LAKE  
WOODLAND PLANTING  
TILE LAYOUT-COTTONWOOD

FIGURE

R8C

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FEATHER RIVER RESTORATION

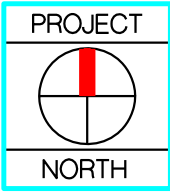
Sutter County, California

ABBOTT LAKE  
WOODLAND PLANTING  
TILE LAYOUT  
NO LARGE TREES

FIGURE

R8D

DATE: 07-03-14



PLANTING LEGEND

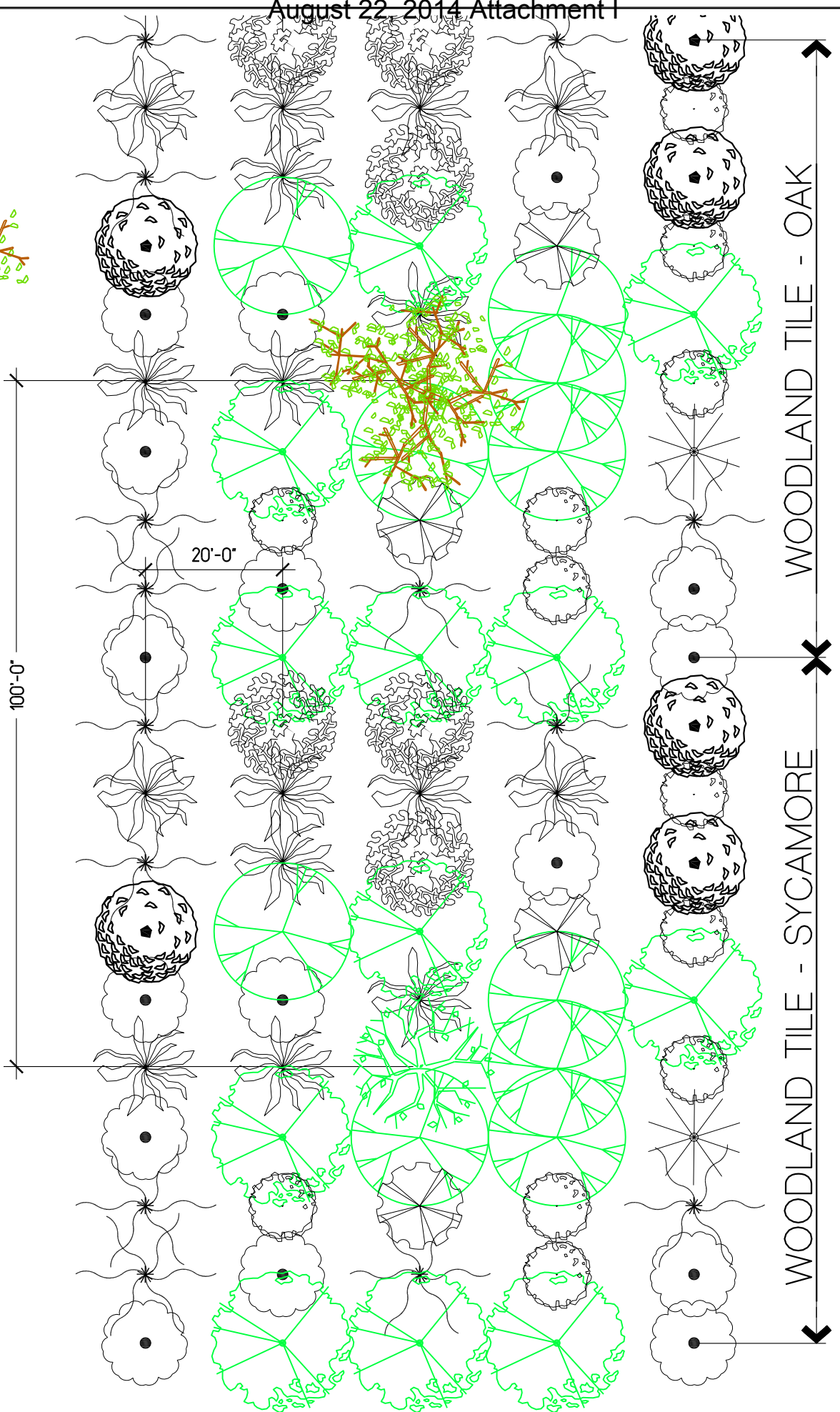
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TREES		
AS	OREGON ASH	
BE	BOX ELDER	
BW	BLACK WILLOW	
OK	VALLEY OAK	
SY	WESTERN SYCAMORE	

SHRUBS		
AW	ARROYO WILLOW	
BB	CALIFORNIA BLACKBERRY	
BU	BUTTONBUSH	
CB	COYOTE BRUSH	
EB	BLUE ELDERBERRY	
MF	MULE FAT	
RO	CALIFORNIA ROSE	

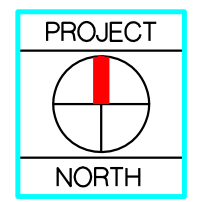
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100'-0"	OK	OK	OK	⊕ OAK
100'-0"	SY	SY	SY	⊕ SYCAMORE
	CO	CO	CO	⊕ COTTONWOOD
	NT	NT	NT	

WOODLAND TILE LAYOUTS

OK = OAK TILE, SY = SYCAMORE TILE  
CO = COTTONWOOD TILE, NT = NO LARGE TREE TILE



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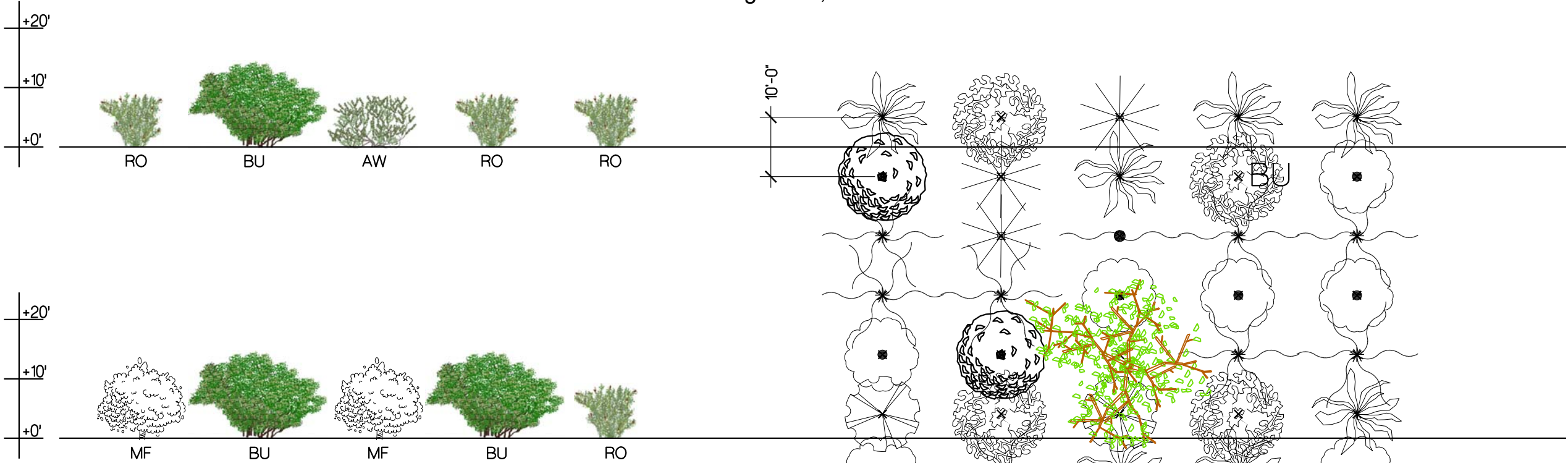
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FEATHER RIVER RESTORATION  
Sutter County, California

ABBOTT LAKE  
WOODLAND PLANTING  
TILE LAYOUTS

FIGURE  
**R8E**  
DATE: 07-03-14



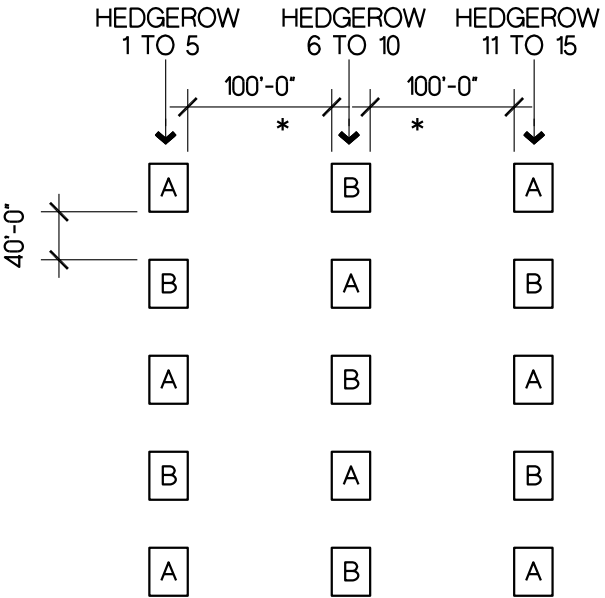
PLANTING LEGEND

KEY	COMMON NAME	SYMBOLS
TREES		
OK	VALLEY OAK	
SHRUBS		
AW	ARROYO WILLOW	
BB	CALIFORNIA BLACKBERRY	
BU	BUTTONBUSH	
CB	COYOTE BRUSH	
EB	BLUE ELDERBERRY	
MF	MULE FAT	
RO	CALIFORNIA ROSE	
VINES		
PI	DUTCHMAN'S PIPEVINE	

PROVIDE 100' BETWEEN SHRUBLAND HEDGEROWS

SHRUBLAND TILE - A

PROVIDE 100' BETWEEN SHRUBLAND HEDGEROWS



SHRUBLAND TILE LAYOUT

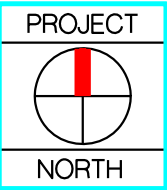
\* 50/50 MIX MW & GP - BTWN. TILES

(@ 4 PLS lbs/acre)

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FEATHER RIVER RESTORATION

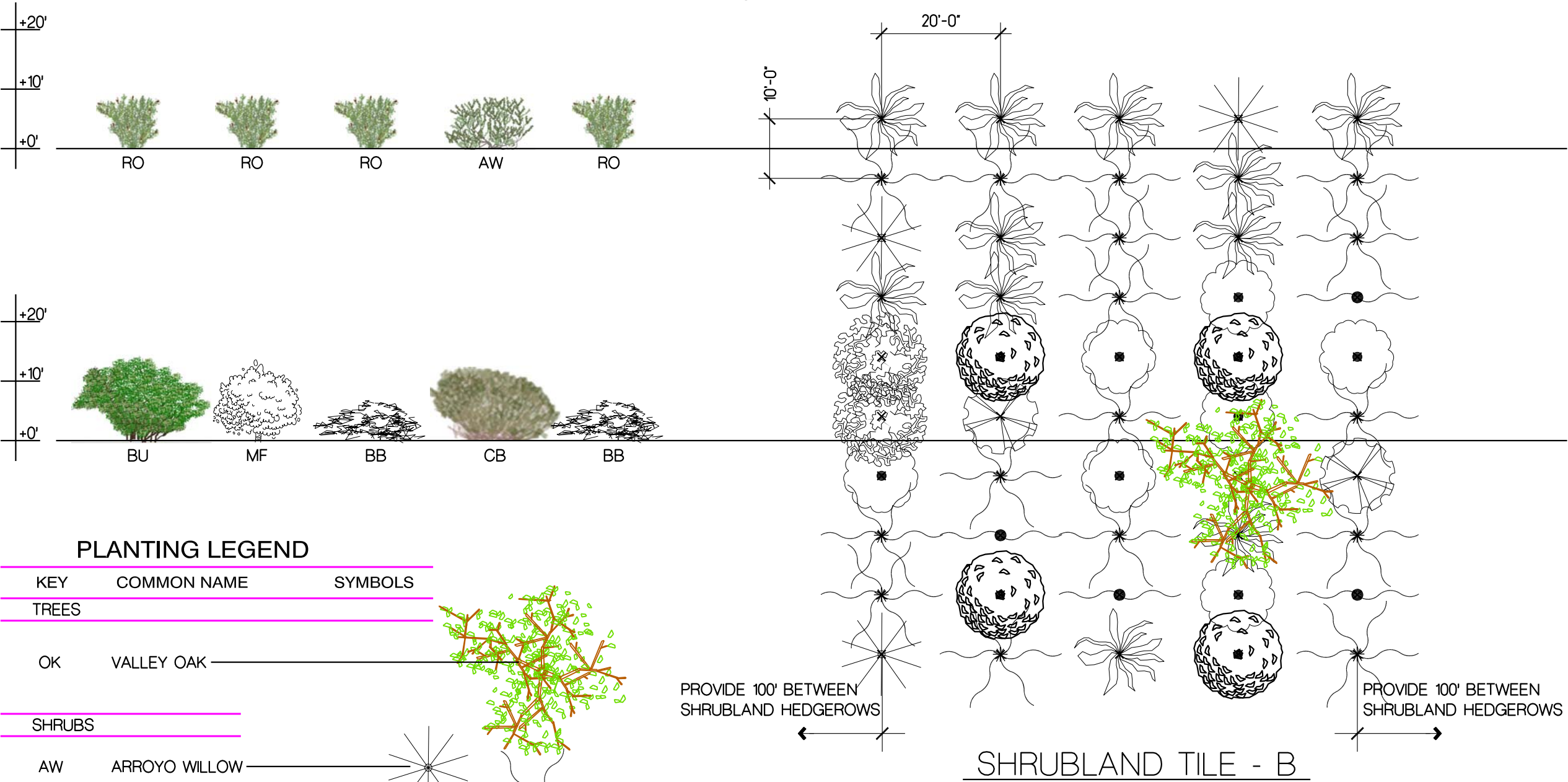
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ABBOTT LAKE  
SHRUBLAND PLANTING  
TILE LAYOUT

FIGURE

R9A

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FEATHER RIVER RESTORATION  
Sutter County, California

ABBOTT LAKE  
SHRUBLAND PLANTING  
TILE LAYOUT

FIGURE

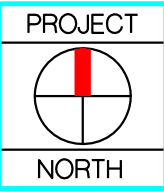
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## **VEGETATION MAINTENANCE PLAN – Abbott Lake Restoration Site**

This Vegetation Maintenance Plan describes each of the desirable outcomes for native plant vegetation structure in the Abbott Lake restoration area, and provides guidance for California Department of Fish & Wildlife (CDFW) staff members who are responsible for maintaining the channel.

### **Property Owner Responsible**

CDFW will maintain the Abbott Lake restoration site in consultation with River Partners, Levee District 1, and the Department of Water Resources (Sutter Maintenance Yard).

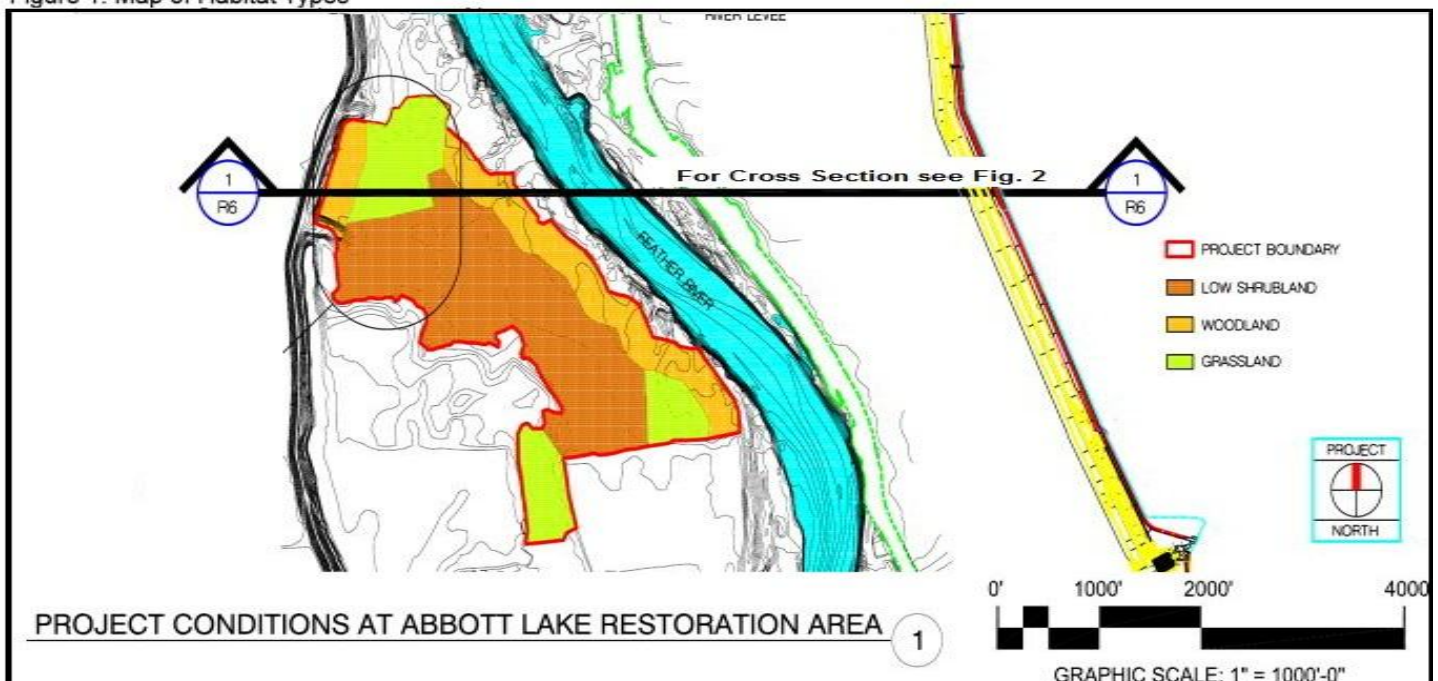
### **Funding**

The budget for this work is built into the existing project grant for the first three years. Thereafter, maintenance allocations will derive from the CDFW regional *Non-staffed wildlife area fund* for maintaining regional wildlife areas and is expected to remain at minimum of \$200,000 per year for the foreseeable future.

### **Self-Maintaining Design and Project Modelling**

The Abbott Lake project incorporated many best practice design concepts including planting hedgerows parallel to river flow and an open, savannah-style center allowing for greater natural river flow across the entire site (**Figure 1**). This work compliments at least 17 other restoration or enhancement efforts included in the Department of Water Resources – Division of Flood Management’s Lower Feather River Corridor Management Plan (LFRCMP). The LFRCMP calls for reducing existing maintenance schedules throughout the area (e.g. the LFRCMP proposes to cease routine vegetation clearing on a mile-long corridor in the Lake of the Woods Unit of the Feather River Wildlife Area, near the location of the Bear River setback area. This change in maintenance practices would facilitate natural regrowth and maturation of approximately 100 acres of riparian vegetation. The entire Lower Feather River from Marysville to the Sutter Bypass was extensively modelled to measure the hydraulic and hydrological impact from all of these projects combined (full vegetative build-out at all restoration projects was assumed). The model showed these habitat restoration efforts (including Abbott Lake) to pose no significant effect to channel flow, capacity, and levee freeboard. Although the models showed no significant impacts to conveyance or freeboard, CDFW provides the following maintenance plan and monitoring activities for the 150-acre Abbott Lake site:

Figure 1. Map of Habitat Types



### Three Year Initial Maintenance Schedule (completed by River Partners)

Various methods will be used to control invasive weed species depending on the phase of the project. Once the woody species are planted, the berms will be sprayed with **nonselective herbicides targeting all weeds**. All habitat types will be subject to weed control throughout the life of the project. The row centers will undergo one season of general weed control before understory species are planted, which will **include mowing** at appropriate stages of weed growth followed by spraying non-selective herbicides. Once understory species are planted, selective herbicides will be used. In the case of this project, the understory consists entirely of broadleaf species. Herbicides such as Poast® (sethoxydim) will be used to target non-native grasses. **Early season mowing** will also take place to help control fast-growing annual grasses and broadleaf species and favor the establishment of the perennial understory. Weed control in the native grasslands will consist of early season mowing to target annuals. Selective herbicide applications, such as 2,4-D, will be used to target broadleaf weeds. **Non-native woody species will be the primary target** in enhanced areas. Removal of species such as Himalayan blackberry, tree-of heaven and black locust trees will be followed up with applications of Garlon® (triclopyr) on resprouts. Telar® (chlorosulfuron), which targets perennial species, will be used to control pepperweed populations that do not occur within any of the planted areas. Giant reed patches will be mowed and sprayed immediately with Round-up® (glyphosate). **Ongoing resprout control** will take place throughout the life of the project.

### General Maintenance Schedule

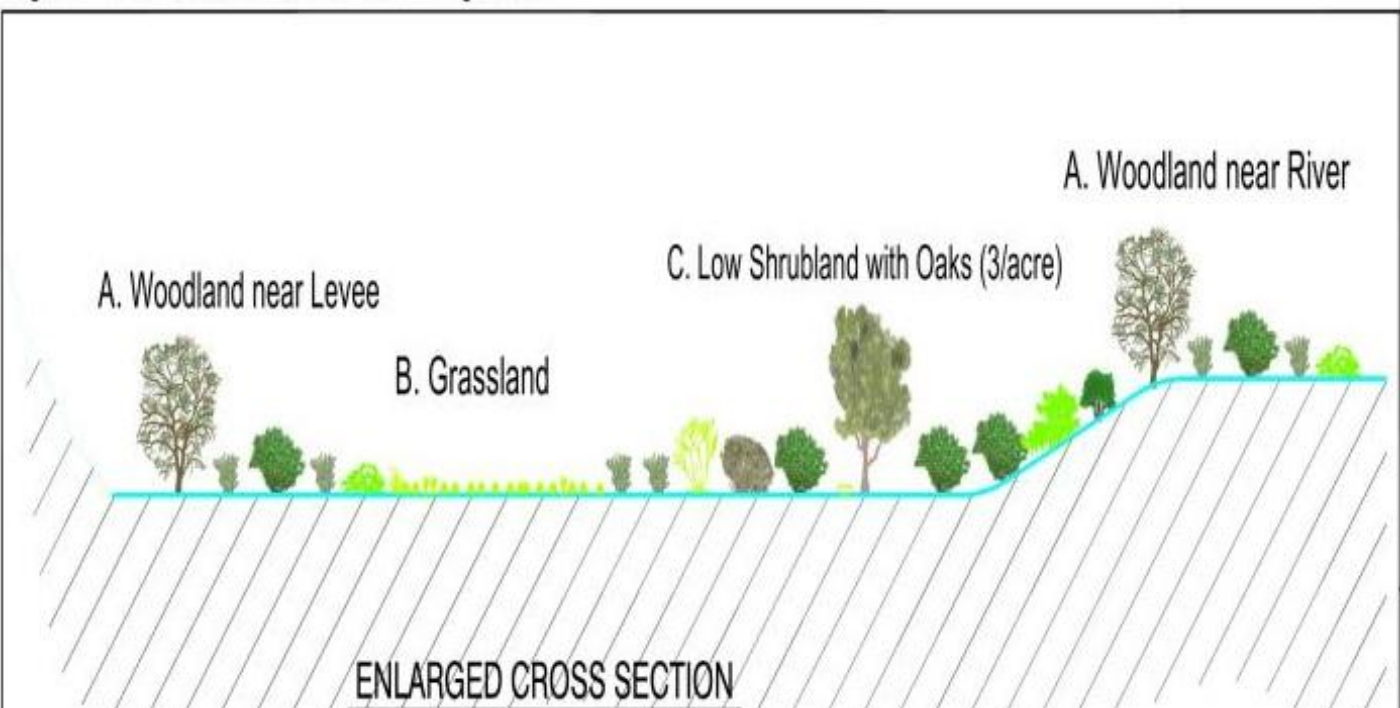
#### *Inspection, Coordination, Weed Treatment, and/or Pruning as Needed*

The restoration area will be inspected, at a minimum, in the early Spring and early Fall. Additional inspections will be opportunity-based and include input from Levee District and DWR maintenance yard observations. CDFW will meet at least annually with local partners to discuss site condition, receive feedback, and assess need for treatment. Invasive weed spraying and tree pruning to 48" will be conducted, as needed, by response crews and generally on foot. Invasive weeds will be treated in the Spring and early Summer. Tree pruning activities will take place, as needed, in the Fall or Winter. Monitoring will take place across all habitat types and include photo-stations with annual photo-updates. The accumulation of sedimentation or natural growth of rigid tree species (oak, sycamore, cottonwood, etc.) greater than 3" diameter in the Low Shrubland and/or Grassland will trigger consultation with local maintenance offices. CDFW will be responsible for removing such trees and/or sedimentation when such action is demonstrated as necessary to ensure conveyance. To improve overall habitat condition, Excess Vegetation Permits (involving livestock grazing) and controlled burns will also be pursued as appropriate.

### Maintenance Components

The vegetation plantings throughout the project are similar in structure within each of the habitat types. **Figure 2** displays a cross-section of the 3 habitat types within the restoration work (levee on the left, river on the right).

Figure 2. Cross section of restoration vegetation



**A. Woodland** (prune-able trees): a **36-acre** habitat split between two parallel strips (in light orange on **Fig1**); woodland will consist of a mix of native trees and shrubs planted in rows parallel to river flow. Primary maintenance concerns in this area include invasive species and possible pruning needs. The primary invasive plant threats in this habitat type include: Yellow star thistle, Himalaya blackberry, tree of heaven, and black locust tree. Active removal of invasive species and pruning to 48" will commence as needed according to general maintenance schedule (above).

**B. Grassland:** approximately **35 acres** are split in three main areas across the project (in bright green on **Fig1**); grassland will consist mainly of wild rye grass species and create open habitat sections between wooded areas at the north and south ends of the site. Primary maintenance concerns in this area include invasive plant species. The primary invasive threats in this habitat type include: Yellow star thistle, Himalaya blackberry, and giant reed. Active removal of invasive species will commence as needed according to general maintenance schedule (above).

**C. Low Shrubland:** This habitat type is our largest (**79 acres**) and consists of mixed shrub species (mainly native blackberry and coyote brush). Our Low Shrubland plant design also calls for dispersed oaks which compliment an open-savannah like habitat complex. Primary maintenance concerns in this area include invasive plant species. The primary invasive threats in this habitat type include: Yellow star thistle, Himalaya blackberry, and giant reed. Active removal of invasive species will commence as needed according to general maintenance schedule (above).

**Other Maintenance Considerations throughout the habitat zones:** CDFW staff will also monitor, collect information, and take action regarding inappropriate use and vandalism of the area. Trash dumping, marijuana cultivation, squatting, and other general misuse will be reported to our Law Enforcement Division for Game Warden response. Additional maintenance options (such as grazing and controlled burns) will also be considered for these habitat zones using local partner input and CDFW resources. Maintenance and monitoring reports will be available upon request on an annual basis.

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For reporting maintenance concerns at this area, please contact the California Department of Fish and Wildlife, North Central Region Wildlife Management Program at 916-358-2882. *All figures contained herein modified from River Partner originals.*

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TECHNICAL REPORT

HYDRAULIC ANALYSIS OF ABBOTT LAKES  
RESTORATION PROJECT



January 2009

Prepared for

River Partners  
580 Vallombrosa Ave  
Chico, California 95926

Prepared By

**MBK**   
**ENGINEERS**  
2450 Alhambra Boulevard, Second Floor  
Sacramento, California 95817



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Condition 1-in-200 AEP

## **1. PURPOSE**

River Partners proposes to perform habitat enhancement on the right bank of the Feather River just upstream of Star Bend. The habitat enhancement project consists of planting approximately 23,000 native riparian plants within the designated floodway. MBK Engineers has performed hydraulic analysis to determine potential impacts to water surface elevation and velocities within the floodway.

## **2. PROJECT SETTING**

The proposed project consists of habitat enhancement of approximately 169 acres within the 439 acre Abbott Lake Unit of the Feather River Wildlife Area. The project is located on the right bank of the Feather River in Sutter County, California (Figure 1). The 169 acre restoration area currently consists of abandoned agricultural lands that have failed to regenerate to riparian forests.

The project site is comprised of two separate fields. A 19 acre field (Field 1) lies along the north end of the unit immediately adjacent to the levee (Figure 2). The second field (Field 2) is to the south of Field 1 located on the wide overbank floodplain of the Feather River (Figure 2). The second field is approximately 150 acres. Both fields are currently fairly open fields with various native and non-native herbaceous species as well as native wood species scattered throughout.

## **3. ENHANCEMENT PLAN**

The proposed enhancement plan consists of planting Fields 1 and 2 with plantings to create a diverse plant community. Five distinct plant communities are proposed. Following is a list of the plant communities and a list of some of species in each:

1. Valley Foothill Riparian Woodland – Arroyo willow, box elder, cottonwood, valley oak, wild rose, and buttonbush.
2. Low Shrub Community – California blackberry, California rose and wild grape, coyote brush, arroyo willow.
3. Riparian Shrubland - Coyote brush, buttonbush, mule fat, deergrass, dogbane, arroyo willow and sandbar willow.
4. Native Grasslands – Blue and creeping wildrye.
5. Herbaceous Understory – Mugwort, gumplant, forb mix.

A detailed description of the plant communities, plant species, and number of plants can be found in Appendix A.

### **3.1. Planting Spacing and Layout**

For Field 1, Riparian Shrubland plant species are proposed to be planted (Figure 3). In Field 2, the Valley Foothill Riparian Woodland would be planted on the outer north and eastern edge of the field (Figure 3). The remaining portions of the field would be planted with the Low Shrub and Native Grassland plant species.

Trees and shrubs will be planted in rows for the Riparian Shrubland in Field 1 and the Valley Foothill Riparian Woodland in Field 2. The row spacing will be 20 feet apart and plants will be planted 10 feet apart in each row. Between the rows, the Herbaceous Understory consisting of Mugwort will be planted to limit the extent of weed invasion.

In Field 2 for the Low Shrub Community, plants will be planted in hedgerows (Figure 4). Each hedgerow consists of five planting rows which are spaced 20 feet apart. The plant spacing within each of the rows is 10 feet apart. Between each of the rows in the hedgerow, Herbaceous Understory will be planted. Field 2 will be comprised of many hedgerows which will be oriented north south and will generally follow flow lines as much as possible. The spacing between the hedgerows will be 100 feet apart and will be planted with Herbaceous Understory. It's anticipated that 50% of Field 2 will consist of the Low Shrub Community and 50% of the area will be Herbaceous Understory.

There are three areas within Field 2 which will be planted with the Native Grassland (Figure 3). Those three areas encompass approximately 28 acres.

## **4. ANALYSIS**

### **4.1. Methodology and Model Development**

The methodology used to determine the hydraulic impacts associated with the proposed project was to develop a base condition model and compare the results with a project condition model. Output from the model simulations was used to determine if there are any impacts to water surface elevation and velocity.

A 2-D hydraulic simulation model was used to calculate water surface elevations and velocities for the base and project conditions. The hydraulic model used was the RMA 2 model developed by MBK Engineers for the basis of design of the Feather River Setback Levee Project currently under construction by the Three Rivers Levee Improvement Authority (TRLIA). The model development, calibration and design simulations are documented in MBK (2008). The model includes the Feather from river mile (RM) 8.0 to RM 28.7. It also includes the Bear River from RM 5.0 to the confluence with the Feather River. The simulations were performed in a steady-state flow condition.

### **4.2. Base Condition**

A base condition assumption was developed for the model simulations since significant geometric changes in the Feather-Yuba River system have occurred or are ongoing. Work on the Abbott Lake restoration project is anticipated to begin in 2009. The hydraulic model was calibrated to hydraulic conditions as of January 1997 therefore it was necessary to update the model to reflect the hydraulic conditions expected at the time of construction of the restoration project. Since January 1997, the Bear River north levee setback has been constructed. In addition, the Feather River east levee setback from RM 17 to 24 was added to the model as it has been authorized by TRLIA and is currently under construction (Figure 1). The Feather River

east levee setback is expected to be completed at the time work begins on the Abbott Lakes restoration project.

Another project under design is the Star Bend setback levee (Figure 1) proposed by Levee District No. 1 (LD1). This project was added to the base condition model as it is anticipated that construction work on the LD 1 setback levee would begin 2009 or 2010.

#### 4.3. Project Condition

The base condition model was then modified to reflect the project condition. To simulate the proposed plantings, the Manning's roughness coefficient in the model mesh was modified to reflect the long term vegetation at each of the fields. Modifications were not made to the field elevations as the proposed planting plan does not include any re-grading of the project site.

A Manning's  $n$  value of 0.07 was used in the model for the Riparian Shrubland in Field 1. For Field 2 with the Low Shrub Community, a composite Manning's  $n$  value of 0.053 was assigned. The composite value is based on 50% of the area planted with shrubs ( $n=0.07$ ) and 50% of the area planted with Herbaceous Understory ( $n=0.035$ ). The Valley Foothill Riparian Woodland areas in Field 2 were simulated using a Manning's  $n$  value of 0.08. A Manning's  $n$  value of 0.035 was used in Field 2 where Grasslands will be planted. Selection of Manning's  $n$  value was based on reference tables in Chow (1959). Figure 5 show the assignment of Manning's  $n$  value for the project condition simulations. The Manning's  $n$  value for Fields 1 and 2 under the Base Condition range from 0.040 to 0.052, see Figure 6.

#### 4.4. Hydrology

The base and project condition models were simulated using peak flows for the 1-in-100 and 1-in-200 Annual Exceedence Probability (AEP) flood events. The boundary conditions used in the RMA2 model for the 1-in-100 AEP and 1-in-200 AEP are shown in Table 1. Results from the MBK Feather-Yuba HEC-RAS model were used to develop these boundary conditions.

**Table 1. Boundary Condition for RMA-2 Model**

<b>Boundary Condition Location</b>	<b>1-in-100 AEP</b>	<b>1-in-200 AEP</b>
Feather River at RM 28.7	127,182 cfs	157,704 cfs
Yuba River at RM 1.2	153,937 cfs	195,697 cfs
Bear River at RM 3.95	40,213 cfs	45,723 cfs
Feather River at Nicolaus RM 8	46.7 ft-NGVD	49.0 ft-NGVD

## **5. RESULTS**

Plots and maps were prepared to map the impact areas. Water surface elevation difference was calculated and mapped for the 1-in-100 and 1-in-200 AEP events. The plots were generated by subtracting the base condition water surface elevation from the project condition water surface elevation. Positive values indicate an increase in water surface due to the project and a negative value indicates a decrease in water surface. Figure 7 and 8 shows the water surface impact for the 1-in-100 and 1-in-200 AEP, respectively.

The velocity difference was also mapped for the 1-in-100 and 1-in-200 AEP event. Figure 9 and 10 show the velocity difference for each flood event. As with the water surface difference, positive values indicate an increase in velocity due to the project and a negative value indicates a decrease in velocity.

Velocity contours under the Base Condition for the 1-in-100 and 1-in-200 AEP events are shown in Figures 11 to 12.

The maximum water surface elevation profile along the Feather River east and west levee were plotted versus the top of levee for the 1-in-100 and 1-in-200 AEP events. Figure 13 to 16 plot the maximum water surface elevation for the Base and Project Condition.

## **6. DISCUSSION**

The proposed habitat enhancement project will have a less than significant impact upon the water surface elevation and velocity in the Feather River. Figure 7 and 8 shows only a localized increase in water surface elevation of approximately 0.15 feet for both the 1-in-100 and 1-in-200 AEP events. The water surface impacts dampen out to less than 0.05 feet upstream and downstream of the project area. Plots of the velocity difference (Figure 9 and 10) indicate that there would be no significant increase in velocity for both the 1-in-100 and 1-in-200 AEP event. The maximum increase in velocity is along the east levee of the Feather River and is on the order of 0.5 fps.

Review of Figures 13 to 16 show that for under the proposed project there is greater than 6 feet of freeboard on the east and west levees for the 1-in-100 AEP event and 3 feet of freeboard on the 1-in-200 AEP event. The minimum freeboard requirement in this reach of the Feather River is 3 feet on the 1957 Sacramento River Flood Control Project design flow (300,000 cfs). The 1-in-100 AEP flow simulated in this reach is 281,000 cfs and the 1-in-200 AEP flow is 353,000 cfs. The increase in water surface elevation does not have a significant impact of the freeboard along the east and west levee for the 1-in-100 and 1-in-200 AEP event.

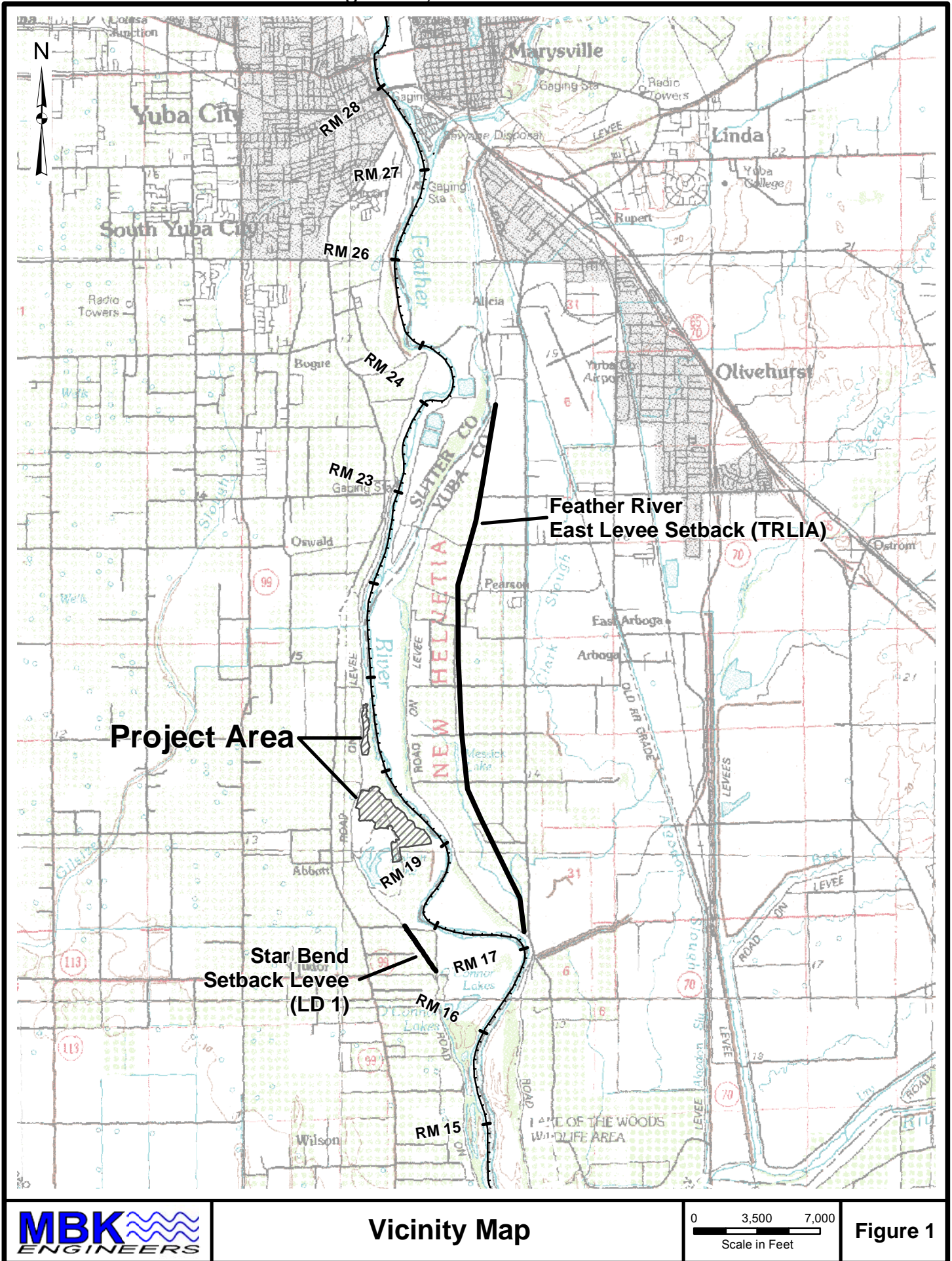
The proposed enhancement project is anticipated to be planted during fall of 2009 with full plant maturity within 5 to 10 years. The construction of the Feather River east setback levee is anticipated to be completed during Fall 2009 and construction of the LD1 setback levee completed in 2010. Based on the simulation results, the water surface and velocity impacts associated are less than significant and would not have a significant hydraulic impact to the water surface elevation, velocity in the Feather River or performance of the Sacramento River Flood Control Project in the vicinity of the project.

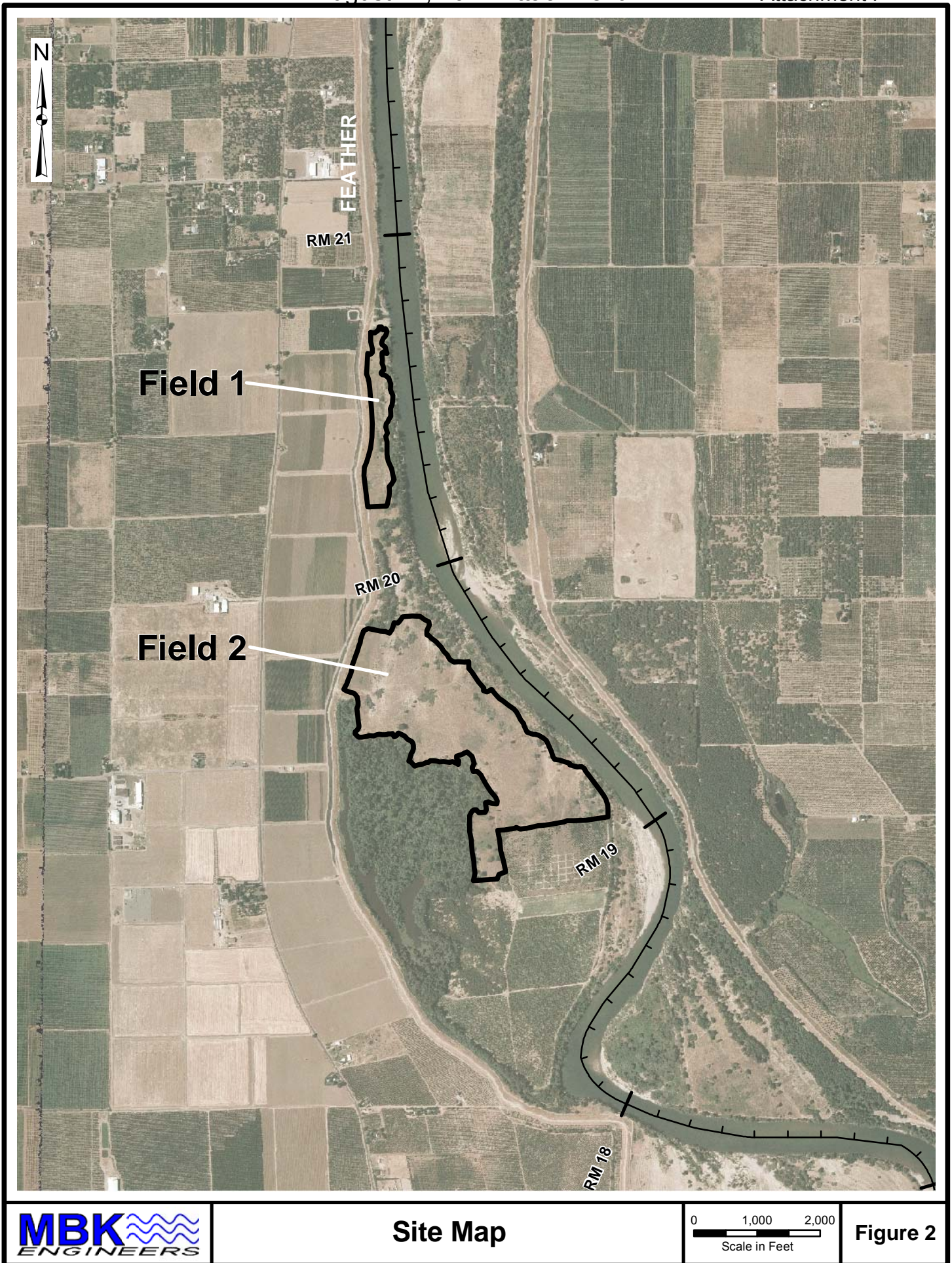
## **7. REFERENCES**

Chow, *Open Channel Hydraulics*, McGraw Hill Book Company Inc, 1959.

MBK Engineers, *Hydrologic and Hydraulic Analysis of the Three River's Levee Authority Phase IV Project, Basis of Design for Feather River Setback Levee Project*, January 2008.

## FIGURES





Site Map

0 1,000 2,000  
Scale in Feet

Figure 2

Conceptual Design  
Abbott Lake Restoration Project  
(Feather River Mile 20-22 R)  
Sutter County, California

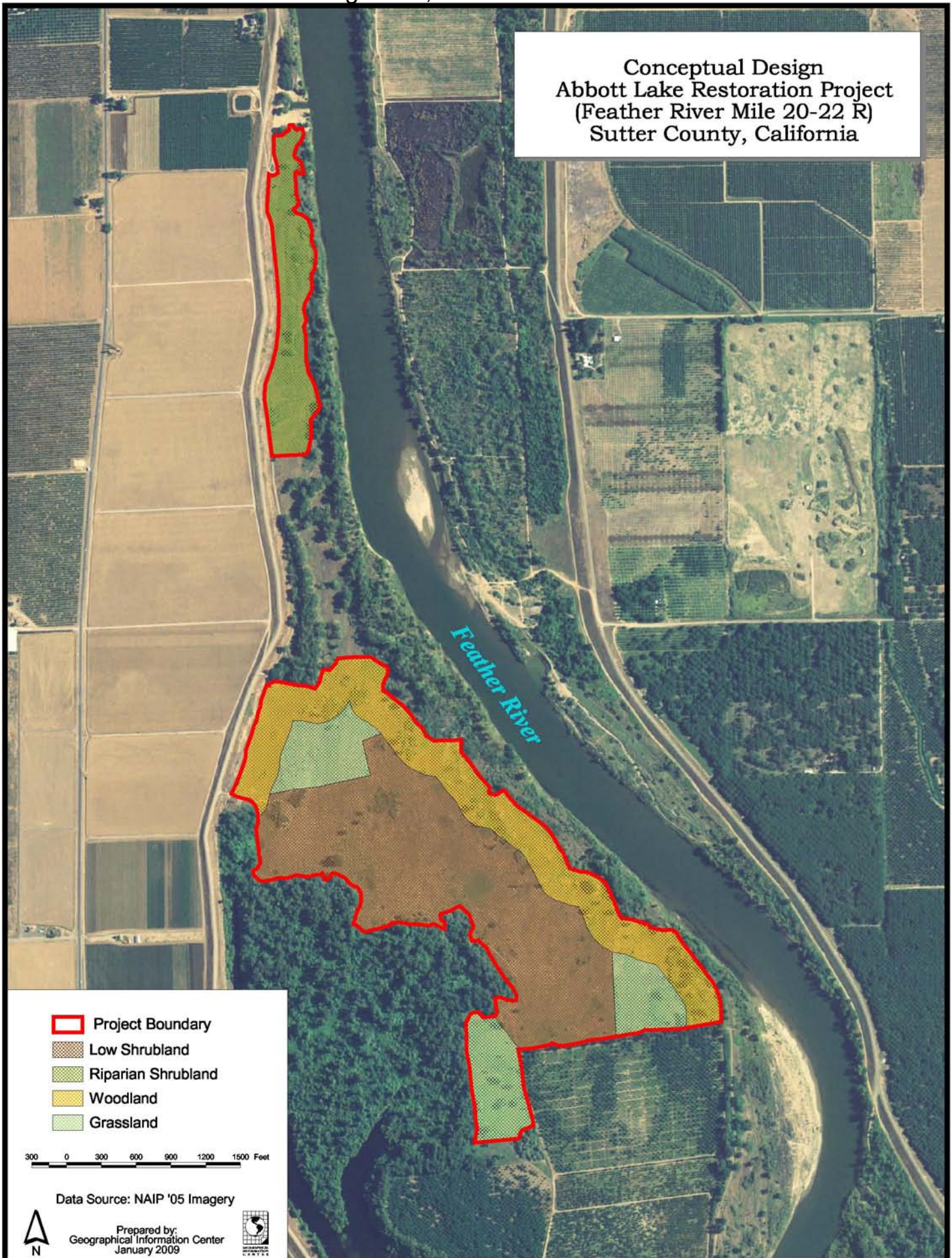
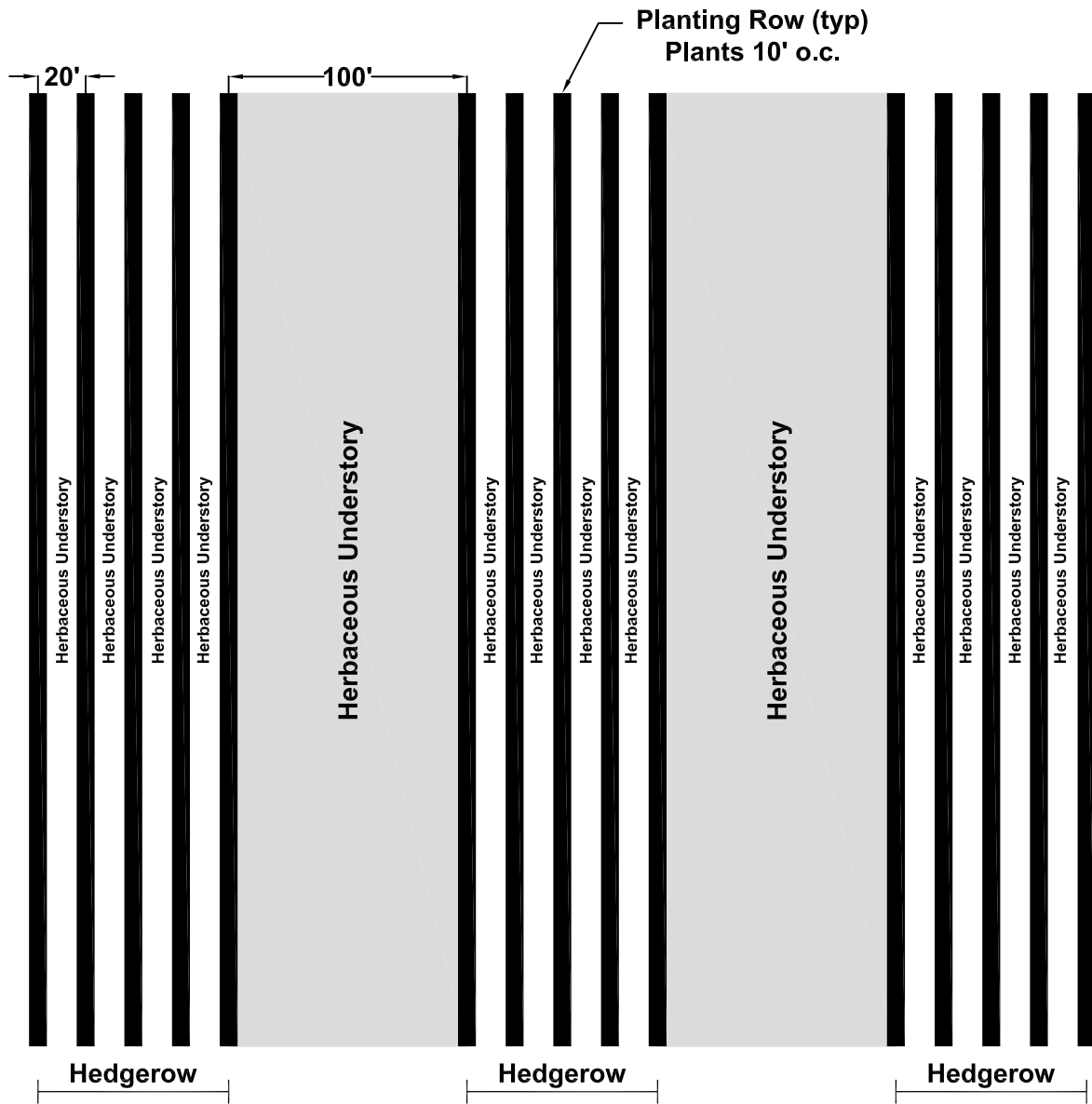
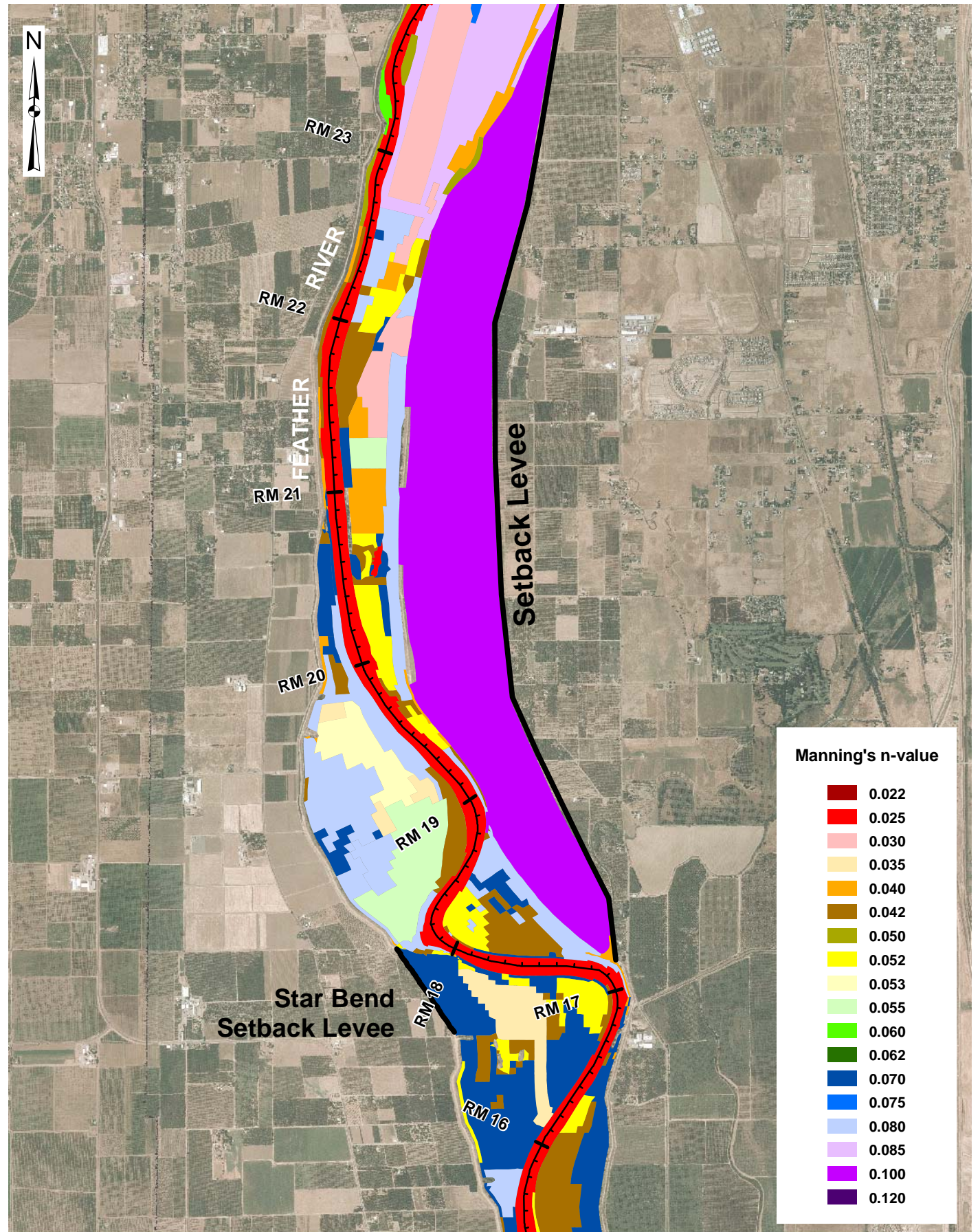
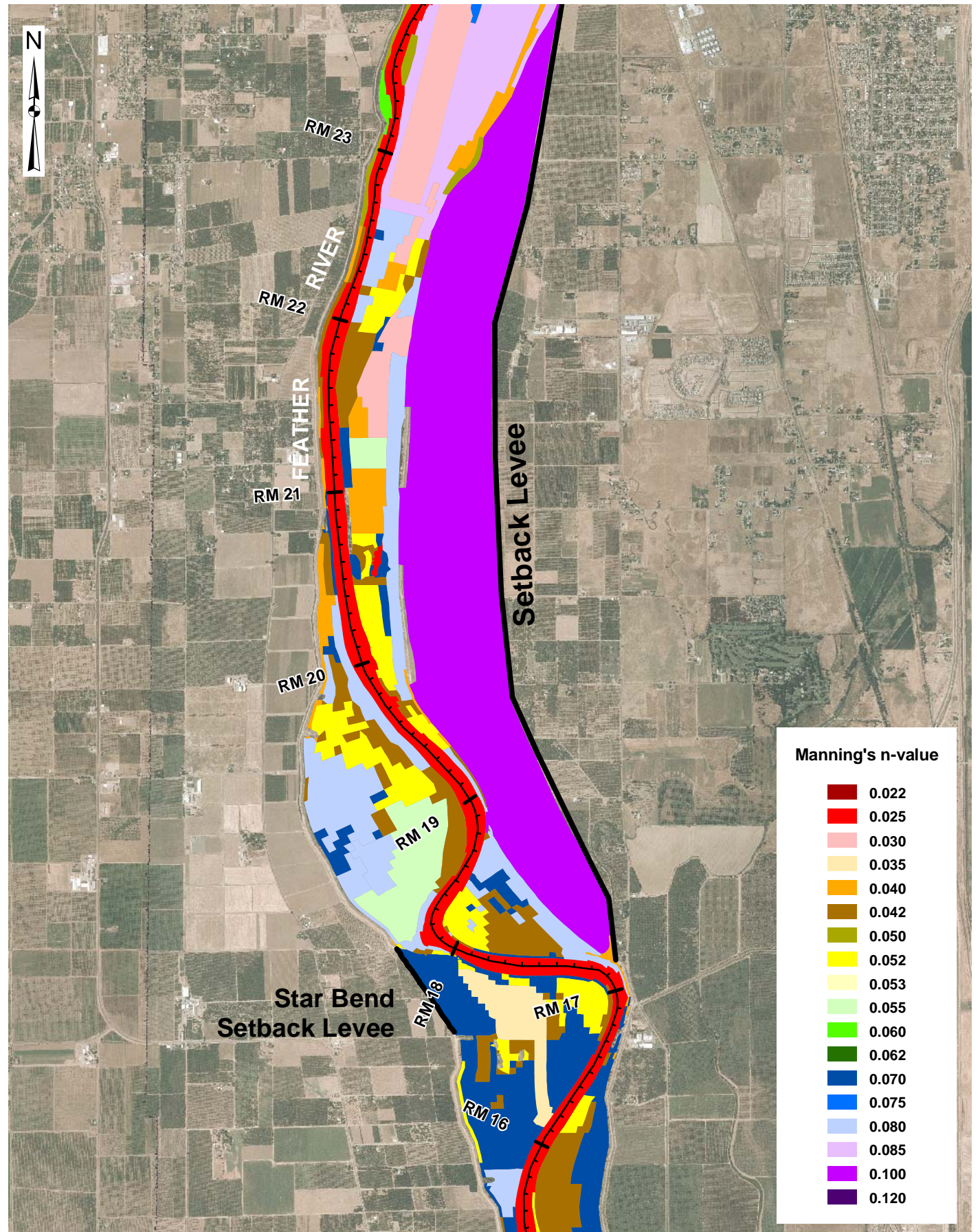
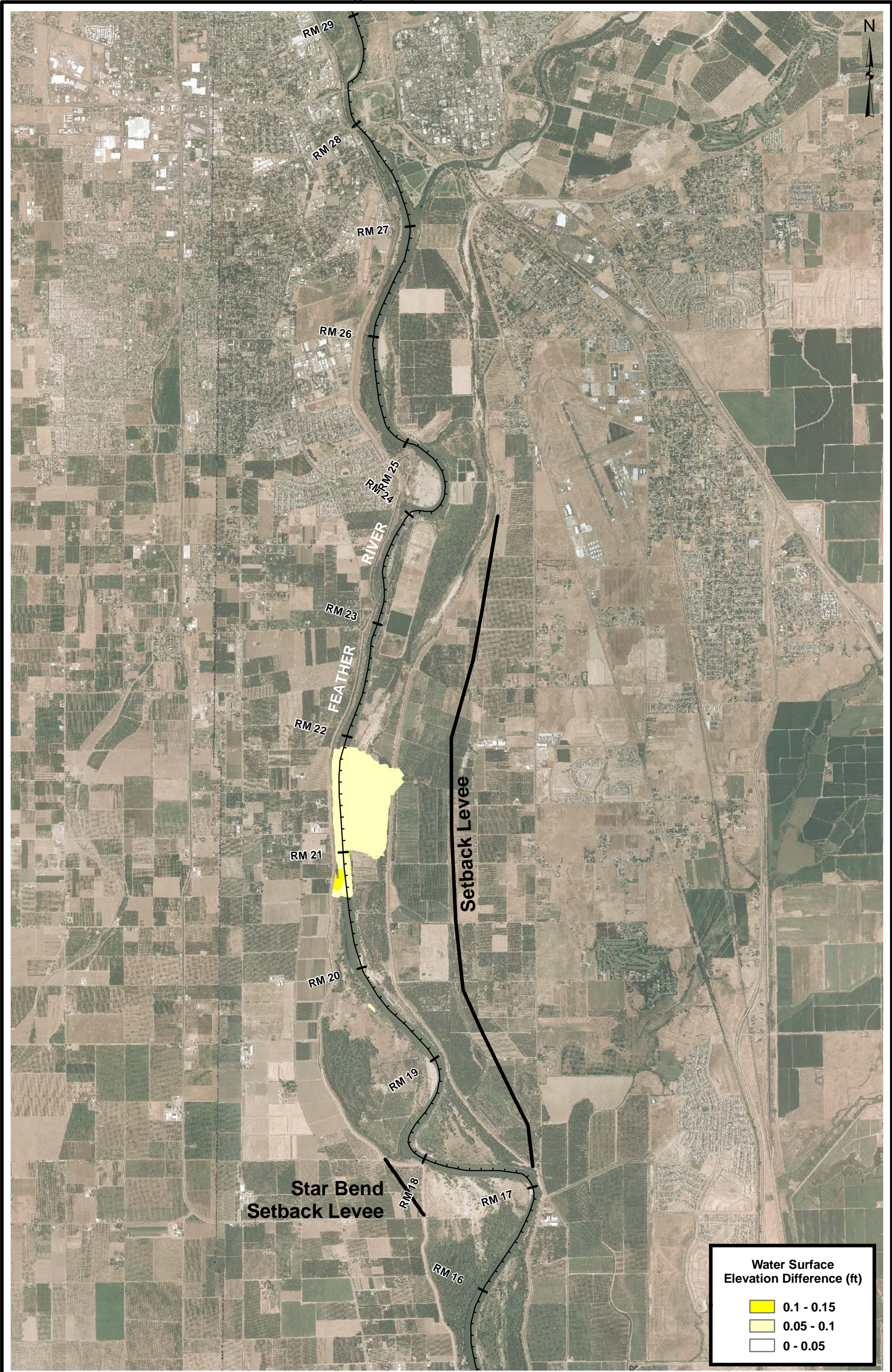


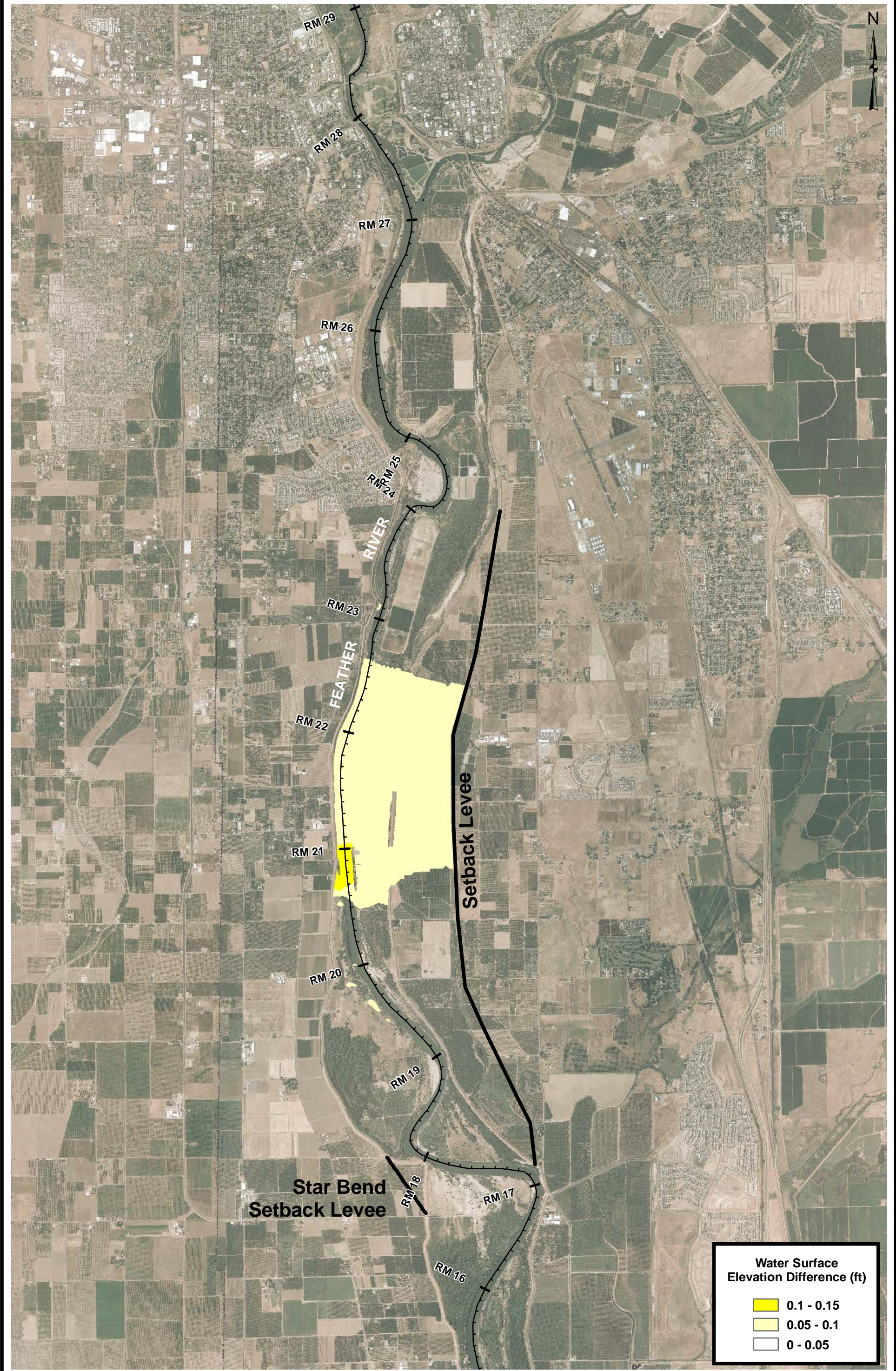
Figure 3

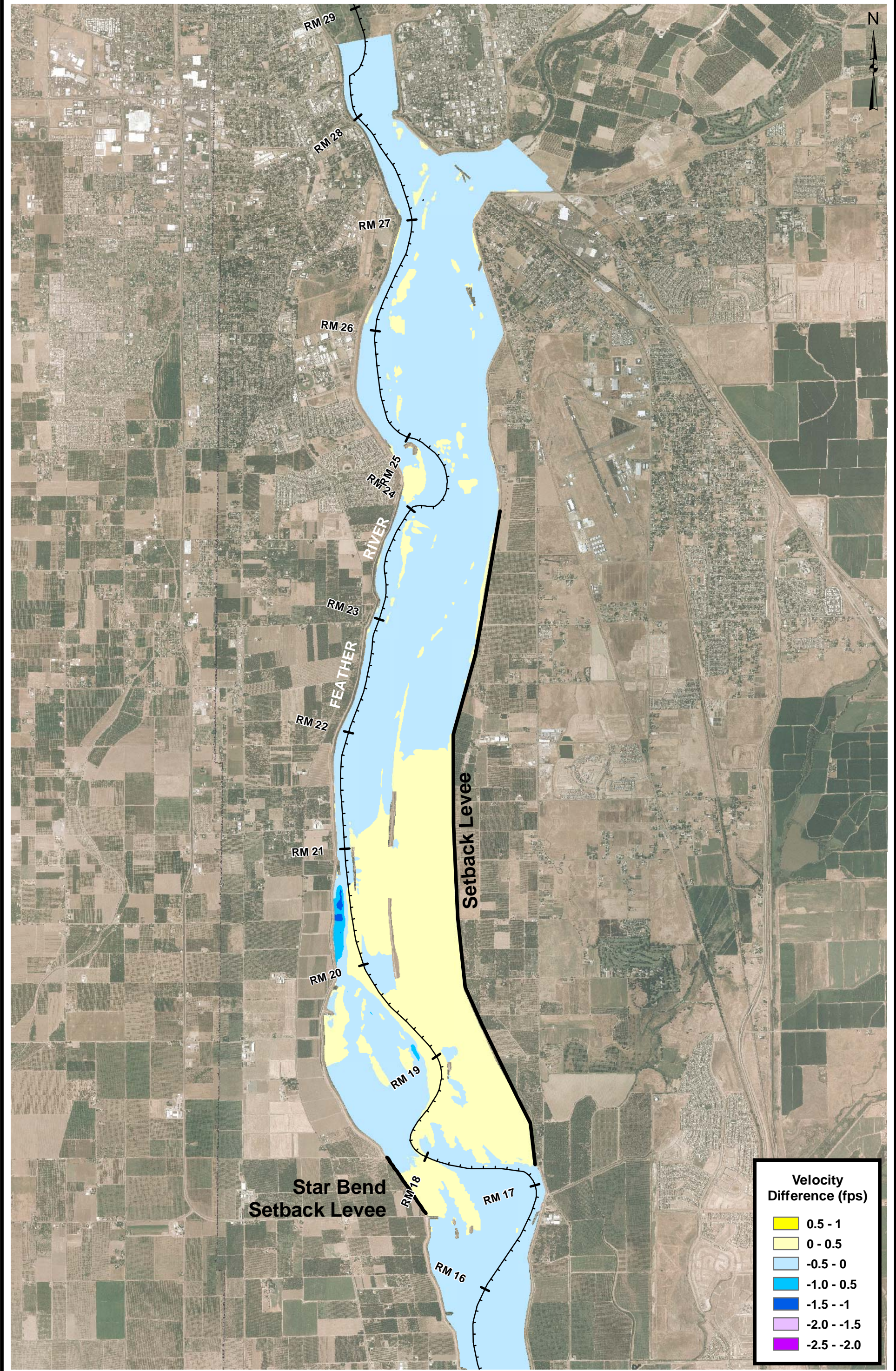


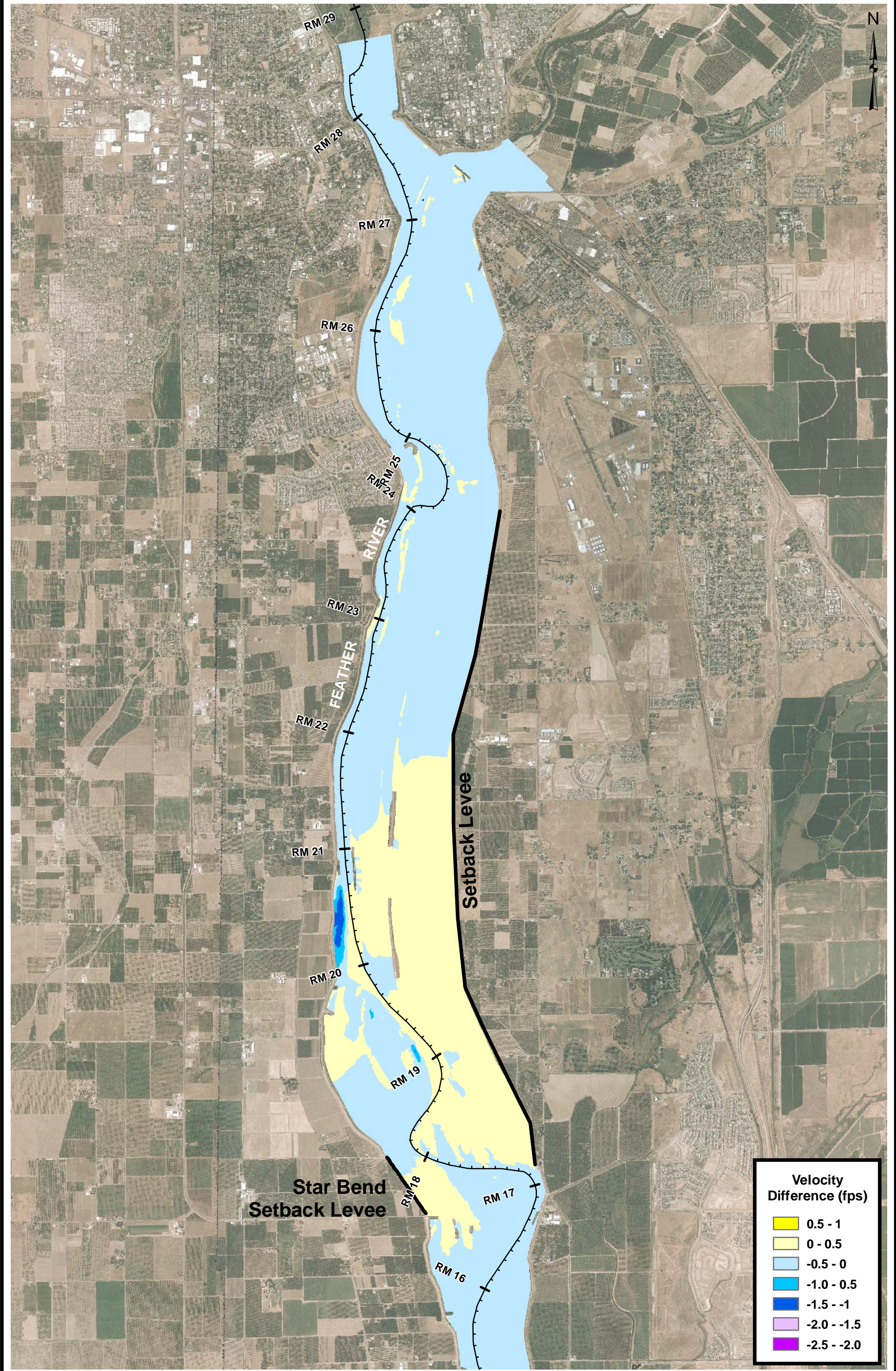


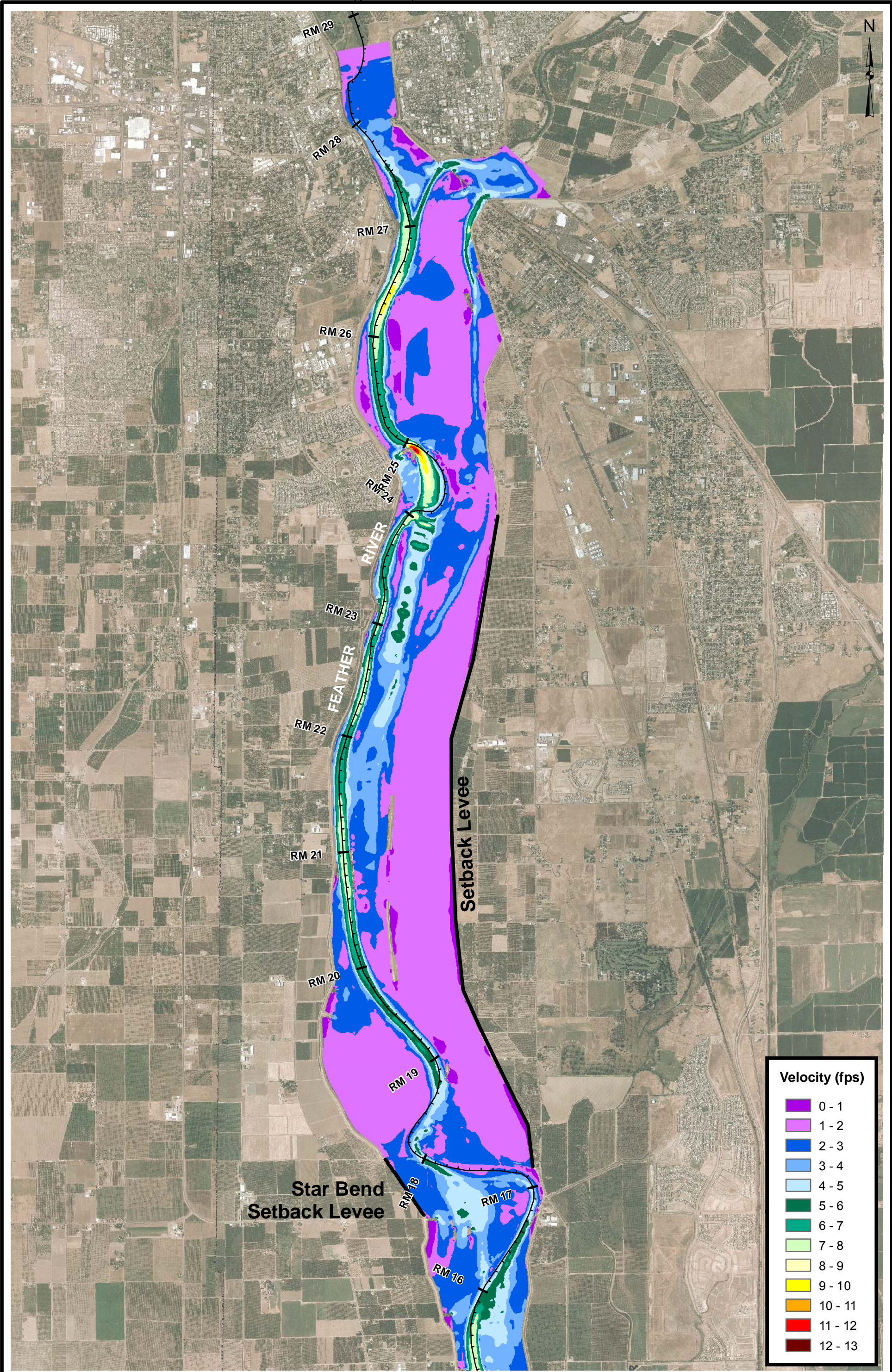


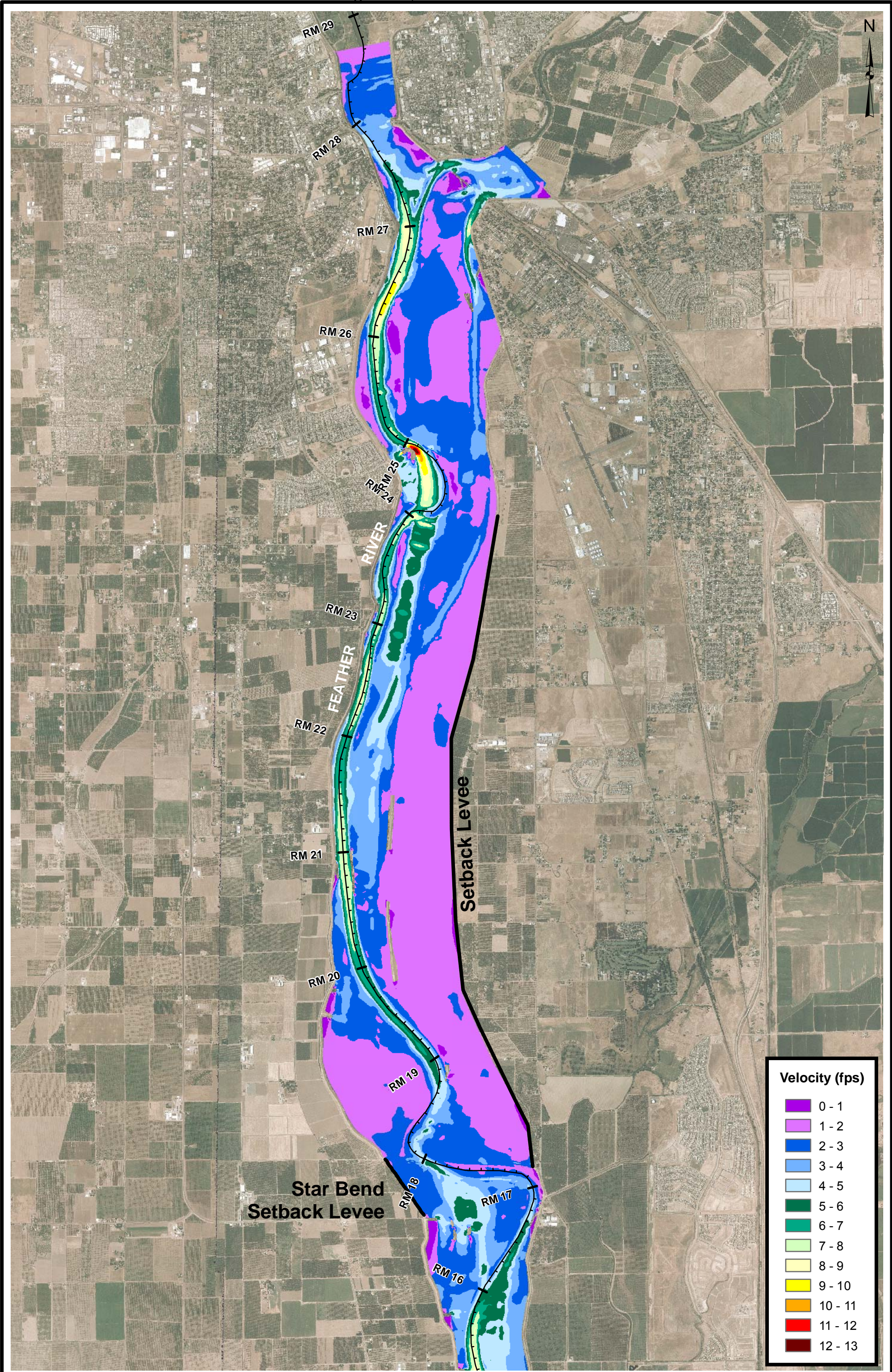




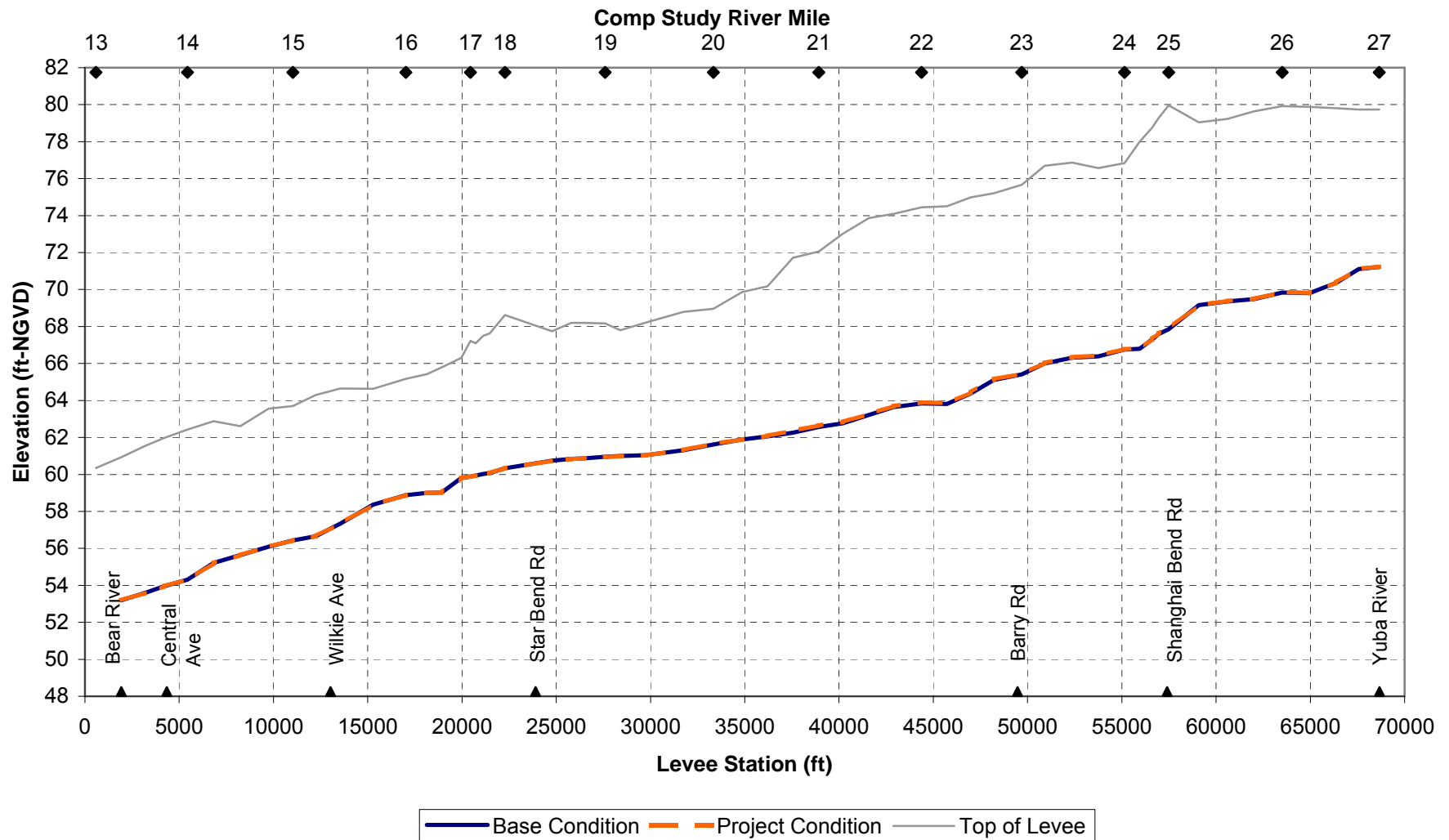




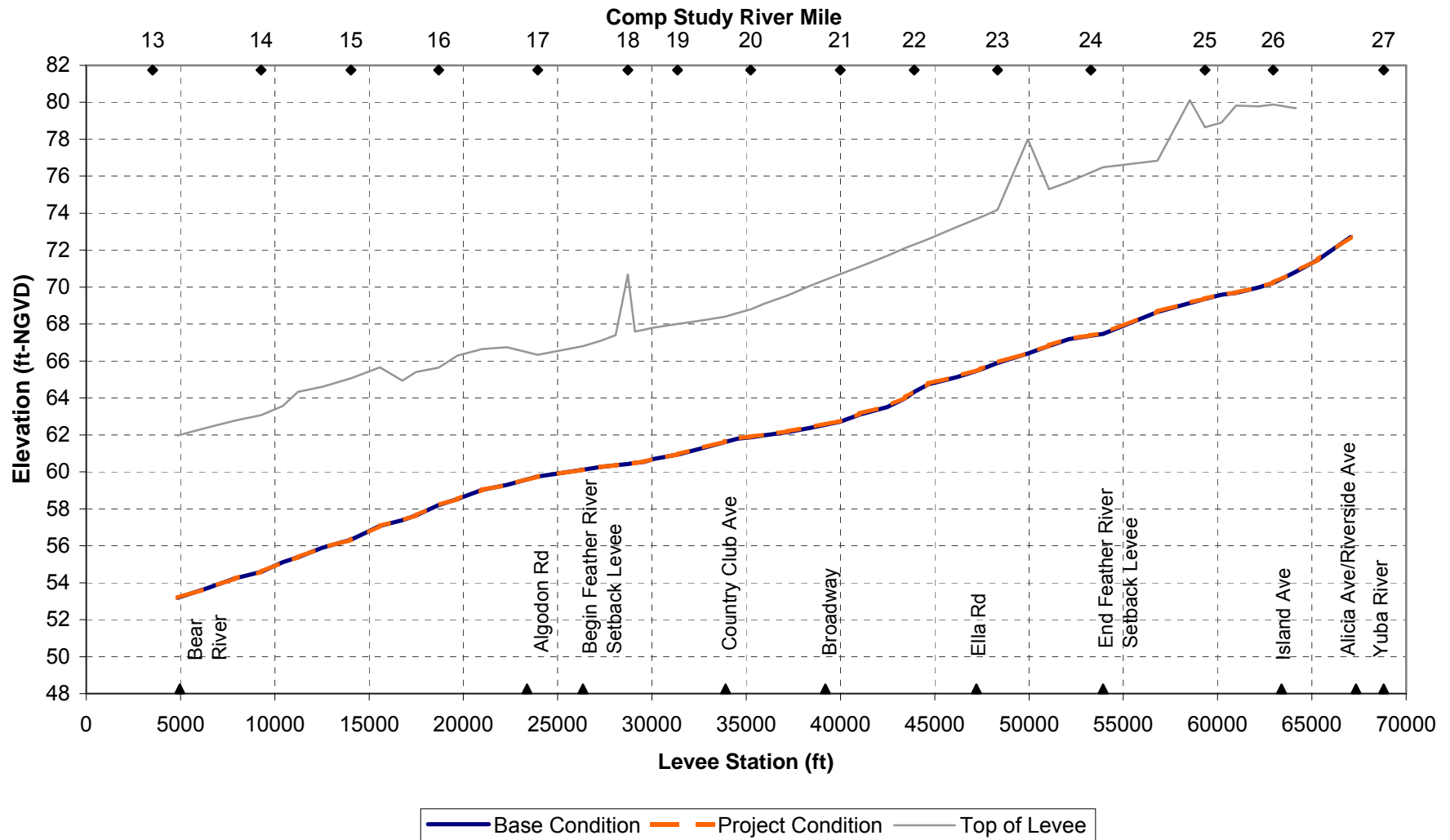




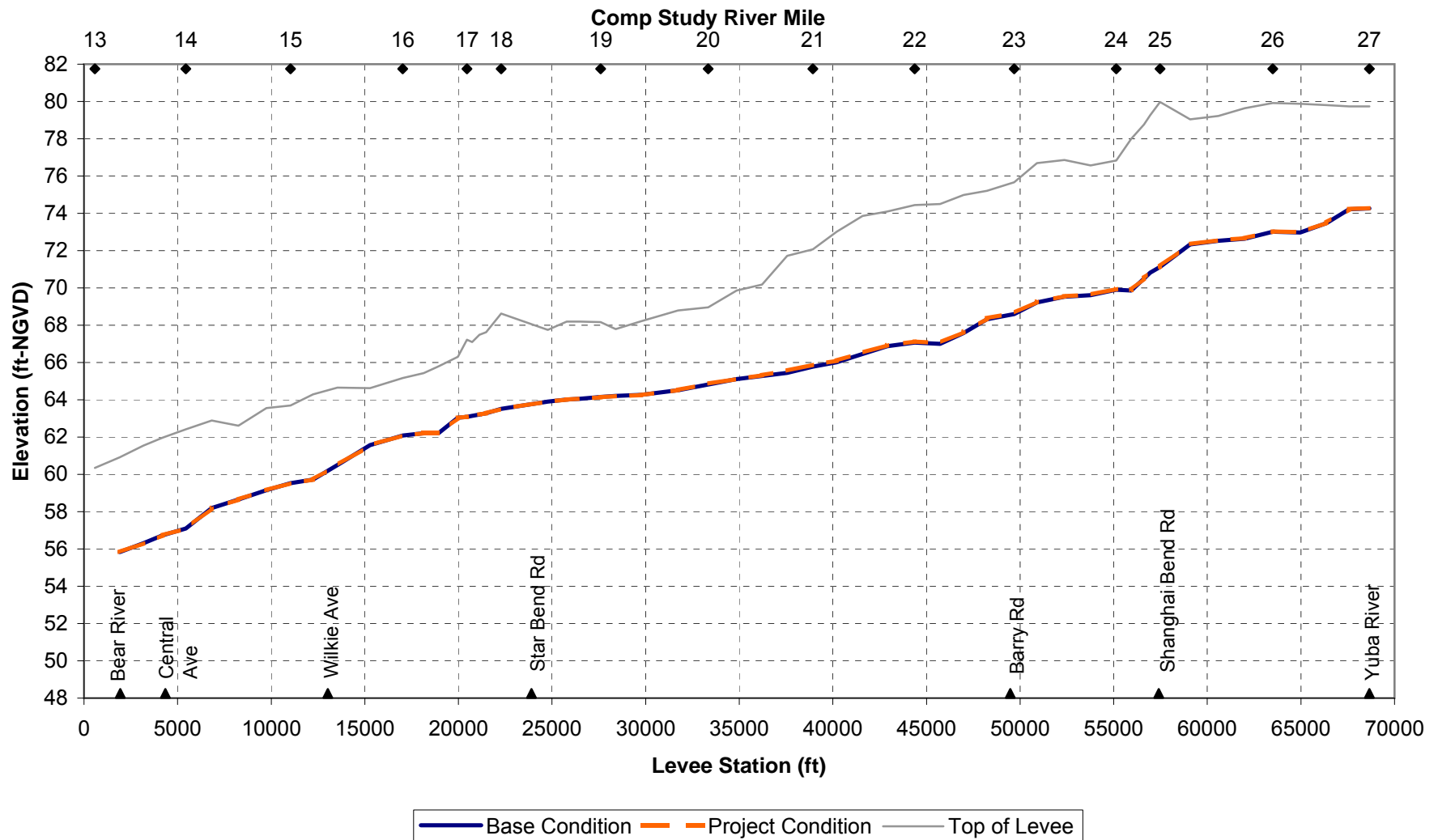
**Figure 13**  
**Feather River West Levee**  
**Maximum Water Surface Profile**  
**Base and Project Condition**  
**1-in-100 AEP**



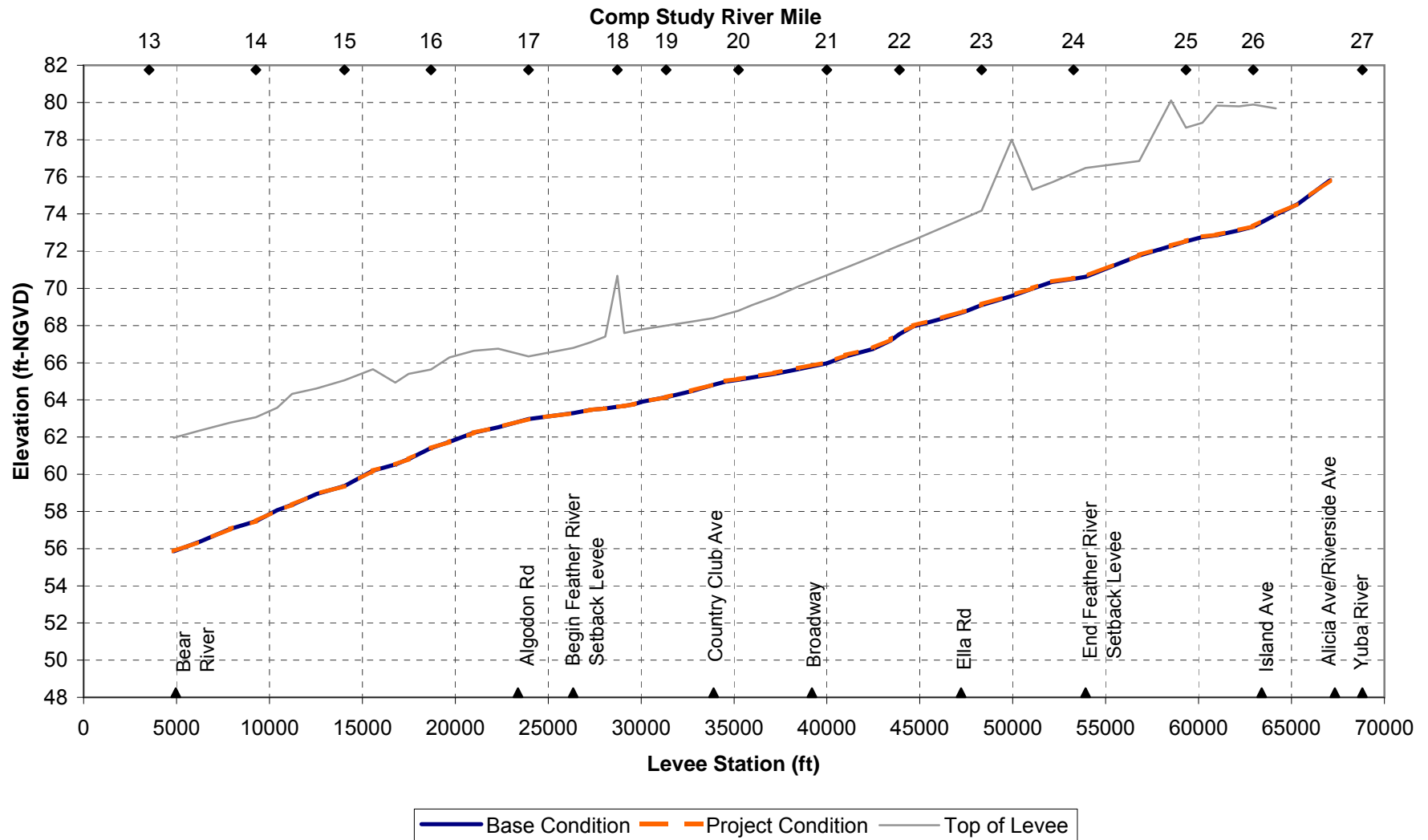
**Figure 14**  
**Feather River East Levee**  
**Maximum Water Surface Profile**  
**Base and Project Condition**  
**1-in-100 AEP**



**Figure 15**  
**Feather River West Levee**  
**Maximum Water Surface Profile**  
**Base and Project Condition**  
**1-in-200 AEP**



**Figure 16**  
**Feather River East Levee**  
**Maximum Water Surface Profile**  
**Base and Project Condition**  
**1-in-200 AEP**



## APPENDIX A

**Abbott Lake Riparian Restoration Planting Design Description**  
**January 29, 2009**

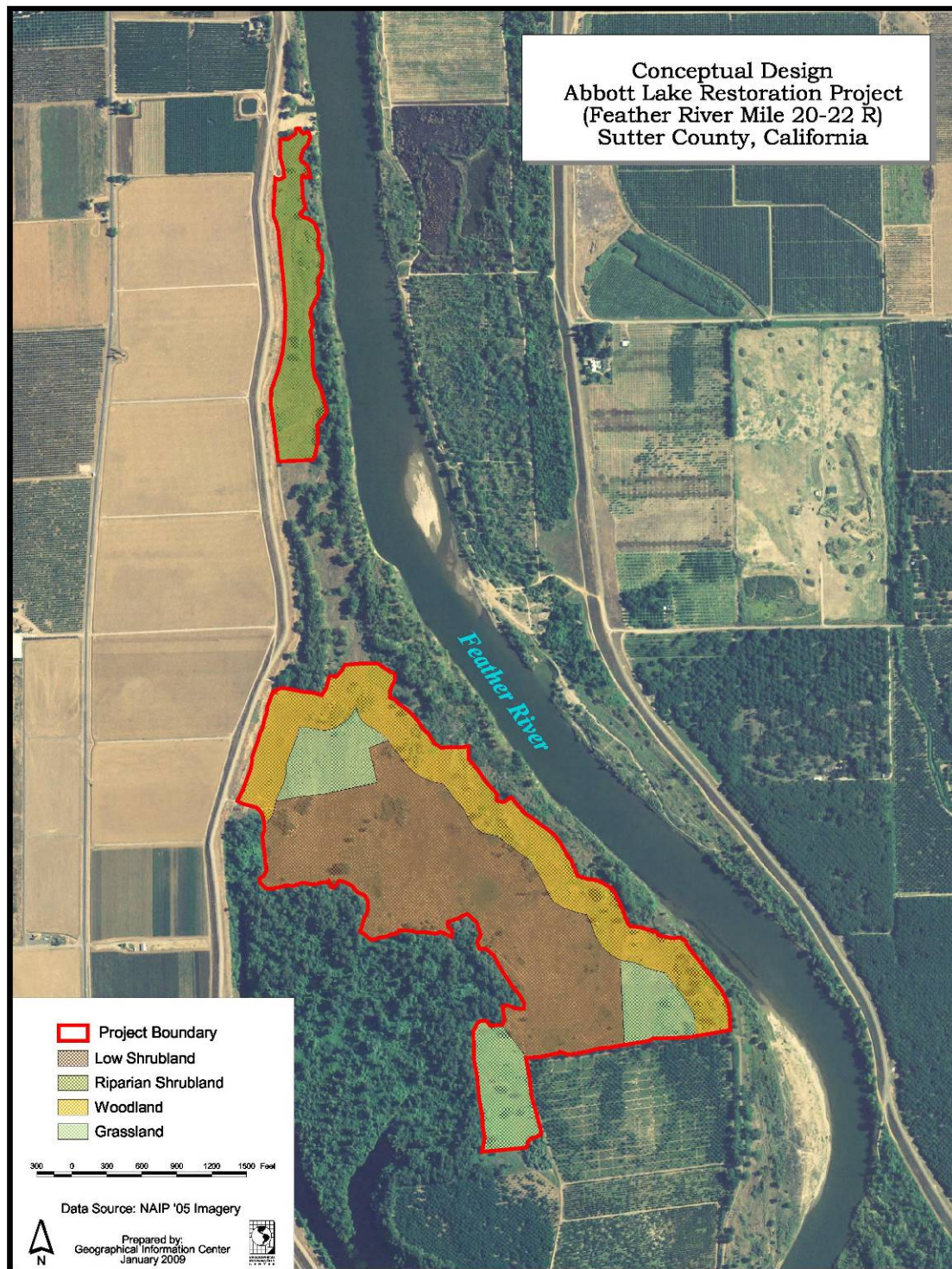
**A. Composition and Location of Plant Communities**

Four different plant communities are proposed for the site based on the varying hydrological and biological conditions of the site: riparian shrubland, low shrubland, Valley Foothill Riparian woodland, low shrubland and native grasslands (Table 1, Figure 1). Tree and shrub densities and compositions (Tables 2-6) will vary across the site. Relatively open areas will be planted with a shrub community. An integral component of the design is a native understory, which will be included in all communities.

**Table 1. Summary of Overall Proposed Plant Species at the Abbott Lake Restoration Project.**

<b>Total Acres:</b>		<b>169</b>		
<b>Common name</b>	<b>Scientific name</b>	<b>Species composition (%)</b>	<b>Density (plant/acre)</b>	<b>Total Number</b>
<b>Tree Species</b>				
Arroyo willow	<i>Salix lasiolepis</i> Benth.	5.1	7.0	1,187
Box elder	<i>Acer negundo</i> L.	1.7	2.3	384
Elderberry	<i>Sambucus mexicana</i>	3.3	4.5	759
Fremont cottonwood	<i>Populus fremontii</i> S.Watson ssp. <i>fremontii</i>	0.8	1.1	192
Gooding's black willow	<i>Salix gooddingii</i> C.R. Ball	1.7	2.3	384
Oregon ash	<i>Fraxinus latifolia</i> Benth	1.7	2.3	384
Sandbar willow	<i>Salix exigua</i> Nutt.	1.1	1.5	248
Valley oak	<i>Quercus lobata</i> Nee	4.5	6.2	1,051
Western sycamore	<i>Platanus racemosa</i> Nutt.	1.7	2.3	384
White Alder	<i>Alnus rhombifolia</i>	1.7	2.3	384
<b>Total Trees</b>		<b>23.3</b>	<b>31.8</b>	<b>5,357</b>
<b>Shrub Species</b>				
Buttonbush	<i>Cephalanthus occidentalis</i>	8.8	12.1	2,053
California blackberry	<i>Rubus ursinus</i> Chain. & Schldl.	10.2	14.0	2,372
Clematis	<i>Clematis ligusticifolia</i>	3.5	4.9	825
Coyote brush	<i>Baccharis pilularis</i> DC.	10.4	14.3	2,418
Dutchman's pipevine	<i>Aristolochia californica</i>	3.5	4.9	825
Mule fat	<i>Baccharis salicifolia</i>	5.5	7.6	1,287
Poison oak	<i>Toxicodendron diversilobum</i>	5.1	7.0	1,190
Wild grape	<i>Vitis californica</i>	2.9	3.9	664
Wild rose	<i>Rosa californica</i> Cham. & Schldl.	23.3	32.0	5,412
<b>Total Shrubs</b>		<b>73.2</b>	<b>100.7</b>	<b>17,046</b>
<b>Herbaceous Species</b>				
Dogbane	<i>Apocynum cannabinum</i>	2.1	2.9	497
Deergrass	<i>Muhlenbergia rigens</i>	1.4	2.0	331
<b>Total Herbaceous</b>		<b>3.5</b>	<b>4.9</b>	<b>828</b>
<b>TOTAL</b>		<b>100</b>	<b>137.4</b>	<b>23,231</b>

**Figure 1. Planting communities on the Abbott Lake Riparian Restoration Project, Feather River Wildlife Area, Sutter County, California.**



## B. North Field

### 1. Riparian Shrubland

The 19-acre north field is located at a spot where the levees are narrow and will potentially constrict floodwaters. In order to maintain flood neutrality, the north field will be planted with flexible-stemmed shrub and tree species in a riparian shrubland community (Table 2). Like the shrub communities of the south field, willows are included to provide habitat structure. Herbaceous species such as dogbane (*Apocynum cannabinum*) and deergrass (*Muhlenbergia rigens*) are included in the tile design to help facilitate flood conveyance and provide structure as well. Unlike the low shrub communities described below, the riparian shrubland will not be planted in hedgerows, making for a denser shrub habitat and increased diversity across the site as a whole. An herbaceous understory of mugwort will be planted between the rows.

**Table 2. Composition of the riparian shrubland community at the Abbott Lake Restoration Project.**

<b>Total Acres:</b>		<b>19.0</b>		
Common name	Scientific name	Species comp. (%)	Density (plant/acre)	Total Number
<b>Tree Species</b>				
Arroyo willow	<i>Salix lasiolepis</i> Benth.	8	17	331
Sandbar willow	<i>Salix exigua</i>	6	13	248
<b>Total Trees</b>		<b>14</b>	<b>30</b>	<b>579</b>
<b>Shrub Species</b>				
Buttonbush	<i>Cephalanthus occidentalis</i>	8	17	331
Clematis	<i>Clematis ligusticifolia</i>	6	13	248
Coyote brush	<i>Baccharis pilularis</i> DC.	10	22	414
Dutchman's pipevine	<i>Aristolochia californica</i>	6	13	248
Mule fat	<i>Baccharis salicifolia</i>	8	17	331
Poison oak	<i>Toxicodendron diversilobum</i>	8	17	331
Wild rose	<i>Rosa californica</i> Cham. & Schldl.	20	44	828
<b>Total Shrubs</b>		<b>66</b>	<b>143</b>	<b>2,731</b>
<b>Herbaceous Species</b>				
Deergrass	<i>Muhlenbergia rigens</i>	8	17	331
Dogbane	<i>Apocynum cannabinum</i>	12	26	497
<b>Total Herbaceous</b>		<b>20</b>	<b>43</b>	<b>828</b>
<b>TOTAL</b>		<b>100</b>	<b>216</b>	<b>4,138</b>

## 2. South Field

### a) Low Shrubland

The majority of the south field will be planted into one of two low shrub communities, low shrub A (Table 3) and low shrub B (Table 4). The low shrub communities will be comprised primarily of lower-stature, flexible-stemmed species such as California blackberry (*Rubus ursinus*), California rose (*Rosa*

*californica*) and wild grape (*Vitis californica*). Larger shrubs and small trees such as coyote brush (*Baccharis pilularis*) and arroyo willow (*Salix lasiolepis*) are incorporated into the design in order to provide structural diversity. The main difference between the two shrub communities is that low shrub B has a higher percentage of California blackberry and California rose.

The low shrub communities will be grouped into hedgerows across the site. The spacing between the hedgerows will be 100 feet. Between the rows within the hedgerows an understory of Spanish clover (*Lotus purshianus*) will be planted and is intended to be a high-quality food source for California quail (*Callipepla californica*) and other wildlife. Between the hedgerows an understory of mugwort (*Artemisia douglasiana*) and gumplant (*Grindelia camporum*) will be planted. These two species provide cover for wildlife and are aggressive competitors against herbaceous weed species.

**Table 3. Plant composition of the Low Shrub 'A' community at the Abbott Lake Riparian Restoration Project, Feather River Wildlife Area, Sutter County, California.**

Total Acres:		39.2			
Common name		Scientific name	Species comp. (%)	Density (plant/acre)	Total Number
Tree Species					
Arroyo willow		Salix lasiolepis Benth.	10	12	474
Valley oak		Quercus lobata Nee	6	7	285
Total Trees			16	19	759
Shrub Species					
Buttonbush		Cephalanthus occidentalis	6	7	285
California blackberry		Rubus ursinus Chain. & Schldl.	20	24	949
Coyote brush		Baccharis pilularis DC.	8	10	379
Elderberry		Sambucus mexicana	10	12	474
Mule fat		Baccharis salicifolia	8	10	379
Poison oak		Toxicodendron diversilobum	10	12	474
Wild rose		Rosa californica Cham. & Schldl.	18	22	854
Wild grape		Vitis californica	4	5	190
Total Shrubs			84	102	3,984
TOTAL			100	121	4,743

**Table 4. Plant composition of the Low Shrub 'B' community at the Abbott Lake Riparian Restoration Project, Feather River Wildlife Area, Sutter County, California.**

<b>Total Acres:</b>		<b>39.2</b>		
Common name	Scientific name	Species comp. (%)	Density (plant/acre)	Total Number
<b>Tree Species</b>				
Arroyo willow	<i>Salix lasiolepis</i> Benth.	4	5	190
Valley oak	<i>Quercus lobata</i> Nee	4	5	190
<b>Total Trees</b>		<b>8</b>	<b>10</b>	<b>380</b>
<b>Shrub Species</b>				
Buttonbush	<i>Cephalanthus occidentalis</i>	6	7	285
	<i>Rubus ursinus</i> Chain. & Schldl.	30	36	1,423
California blackberry		14	17	664
Coyote brush	<i>Baccharis pilularis</i> DC.	6	7	285
Elderberry	<i>Sambucus mexicana</i>			
	<i>Rosa californica</i> Cham. & Schldl.	26	31	1,233
Wild rose		10	12	474
Wild grape	<i>Vitis californica</i>			
<b>Total Shrubs</b>		<b>92</b>	<b>110</b>	<b>4,364</b>
<b>TOTAL</b>		<b>100</b>	<b>120</b>	<b>4,744</b>

#### **b) Valley Foothill Riparian woodland**

The Valley Foothill Riparian woodland (Table 5) will be planted along the northern and eastern edge of the project area in the south field, as well as throughout the north field. This community will be comprised of a mixture of fast-growing species, such as Fremont cottonwood (*Populus fremontii*) and slow-growing species such as western sycamore (*Platanus racemosa*) and valley oak (*Quercus lobata*), and will provide short- and long-term wildlife habitat. A diverse mix of shrub species such as coyote brush and California rose are included to provide structural diversity, especially in the lower canopy. An understory of mugwort and telegraph weed (*Heterotheca grandiflora*) will be planted between planting rows in order to provide cover for wildlife and to aggressively compete with herbaceous weeds.

**Table 5. Composition of Valley Foothill Riparian Woodland Association at the Abbott Lake Restoration Project.**

<b>Total Acres:</b>		<b>44.1</b>		
Common name	Scientific name	Species comp. (%)	Density (plant/acre)	Total Number
<b>Tree Species</b>				
Arroyo willow	<i>Salix lasiolepis</i> Benth.	2	4	192
Box elder	<i>Acer negundo</i> L.	4	9	384
Fremont cottonwood	<i>Populus fremontii</i> S.Watson			
	ssp. <i>fremontii</i>	2	4	192
Gooding's black willow	<i>Salix gooddingii</i> C.R. Ball	4	9	384
Oregon ash	<i>Fraxinus latifolia</i> Benth	4	9	384
Valley oak	<i>Quercus lobata</i> Nee	6	13	576
Western sycamore	<i>Platanus racemosa</i> Nutt.	4	9	384
White alder	<i>Alnus rhombifolia</i>	4	9	384
<b>Total Trees</b>		<b>30</b>	<b>65.4</b>	<b>2,880</b>
<b>Shrub Species</b>				
Buttonbush	<i>Cephalanthus occidentalis</i>	12	26	1,153
Clematis	<i>Clematis ligusticifolia</i>	6	13	576
Coyote brush	<i>Baccharis pilularis</i> DC.	10	22	960
Dutchman's pipevine	<i>Aristolochia californica</i>	6	13	576
Mule fat	<i>Baccharis salicifolia</i>	6	13	576
Poison oak	<i>Toxicodendron diversilobum</i>	4	9	384
Wild rose	<i>Rosa californica</i> Cham. & Schldl.	26	57	2,497
<b>Total Shrubs</b>		<b>70</b>	<b>152.5</b>	<b>6,722</b>
<b>TOTAL</b>		<b>100</b>	<b>217.9</b>	<b>9,602</b>

**c) Native Grasslands**

The planting of native grass minimizes the invasion of non-native species, enhances wildlife habitat, limits erosion and provides less hazardous fire conditions. Two areas in the north and the south of the site will be planted with native grasses, for a total of approximately 28 acres. These grasslands will provide foraging habitat for various raptor species including Swainson's hawk, a state-listed Threatened species that has been known to occur on the site (Whitmore, personal communication). Two species, blue wildrye (*Elymus glaucus*) and creeping wildrye (*Leymus triticoides*), will be planted (Table 6). These are perennial species that will do well in sandy soils and will out-compete non-native species, thus reducing long-term maintenance costs.

Seed will be purchased from stock collected from the same ecoregion as the restoration project and will be planted with a no-till drill at a rate of 10 lbs/acre pure live seed (PLS) (5 lbs. PLS of each species). Seed will be applied in late-fall, likely October or November, before the first rains.

**Table 6. Summary of native grass species to be seeded at the Abbott Lake Restoration Project.**

Common Name	Scientific Name	Rate (lbs. PLS/acre)	Est. Total lbs.
Blue wildrye	<i>Elymus glaucus</i>	5	140
Creeping wildrye	<i>Leymus triticoides</i>	5	140
<b>Total</b>		10	280

### 3. Herbaceous Understory

To prevent establishment and limit the extent of weed invasions, a dense, aggressive understory will be planted throughout the restoration. Incorporation of herbaceous plants will provide important wildlife habitat, produce native plant seed sources, and inhibit the establishment of invasive, exotic species. Mugwort is an especially important component of riparian communities and appears to be good competitor against invasive non-native species. Mugwort will be broadcasted between planting rows at a rate of 2 lbs/acre PLS. Seeds of local ecotypes will be collected or purchased for this restoration project.