



# California Environmental Quality Act Addendum to the Environmental Impact Report

## **Salt River Ecosystem Restoration Project**

SCH# SD2007-06-2030

**Prepared for: Humboldt County Resource Conservation District**

**GHD** | 718 Third Street Eureka California 95501

8410410| 10.6| March 1, 2018



*This page intentionally left blank*



**California Environmental Quality Act**  
**Addendum to the Environmental Impact Report for the**  
**Salt River Ecosystem Restoration Project**

**SCH# SD2007-06-2030**

**Prepared for:**

Humboldt County Resource Conservation District, Lead Agency  
5630 South Broadway  
Eureka, CA 95503

Attention: Jill Demers  
Executive Director  
(707) 832-5594

**Prepared by:**

GHD Inc.  
718 Third Street  
Eureka, CA 95501

Contact: Jeremy Svehla  
Project Manager  
(707) 443-8326

Project Ref#: 8410410

**March 8, 2018**



*This page intentionally left blank*



# Table of Contents

1.	Introduction and Purpose of this Document.....	1
2.	Preparation of an Addendum to the EIR .....	2
3.	Description of Proposed Project Modifications .....	3
3.1	Summary.....	3
3.2	Background.....	4
3.3	Justification for Project Modifications.....	4
3.3.1	New Agricultural Bridge Crossing.....	4
3.3.2	Relocate Existing Culvert Crossing .....	5
3.3.3	Relocate Riparian Planting within Phase 2 .....	5
3.4	Summary of Impacts and Conclusion .....	7
4.	Environmental Consequences of Proposed Project Modifications .....	8
4.1	Hydrology and Water Quality .....	8
4.1.1	New Agricultural Bridge Crossing.....	9
4.1.2	Relocate Existing Culvert Crossing .....	9
4.1.3	Relocate Riparian Planting .....	9
4.2	Geology and Soils .....	10
4.3	Biological Resources: Terrestrial/Upland/Riparian .....	10
4.4	Biological Resources: Aquatic .....	11
4.5	Air Quality.....	12
4.6	Noise .....	12
4.7	Aesthetics.....	13
4.8	Land Use.....	13
4.9	Agricultural Resources.....	14
4.10	Recreation.....	14
4.11	Cultural Resources .....	14
4.12	Transportation.....	15
4.13	Public Services and Utilities.....	15
4.14	Hazards and Hazardous Materials .....	15
4.15	Minor Issues.....	16
4.15.1	Population and Housing .....	16
4.15.2	Mineral Resources.....	16
5.	Conclusion.....	16
6.	References .....	16



## Table Index

Table 1	Anticipated Wetland Fill for Proposed Bridge Crossing1 .....	5
Table 2	Summary of Anticipated Wetland Fill for Original Project Plus Proposed Additions (all units in acres) .....	8

## Appendix Index

Appendix A	Figure 1 – Final Design and Implementation Progress
	Figure 2 – Bridge and Culvert Concept Design
	Figure 3 – Former Salt River Crossing from 1988 Aerial Image
	Figure 4 – Riparian Forest Planting
	Figure 5 – Salt River and Riverside Ranch Restoration Areas: Cottonwood/Spruce Riparian Forest with Freshwater Channel Wetland
	Figure 6 – Salt River and Riverside Ranch Restoration Areas: Spruce/Cottonwood Riparian Forest with Freshwater Channel Wetland
	Figure 7 - Salt River and Riverside Ranch Restoration Areas: Spruce/Cottonwood Riparian Forest with Brackish Marsh and Freshwater Channel Wetland

## Acronyms and Abbreviations

CEQA	California Environmental Quality Act
EIR	Environmental Impact Report



# 1. Introduction and Purpose of this Document

The Final Environmental Impact Report (EIR) for the Salt River Ecosystem Restoration Project (project) near Ferndale, California (State Clearinghouse Number SD2007-06-2030) was certified in February 2011 by the Humboldt County Resource Conservation District (HCRCD). The lead agency is the HCRCD, the decision-making body being the HCRCD Board of Directors. The purpose of this Addendum is to identify minor project changes made to the proposed project since certification of the Final EIR.

The project, as analyzed in the EIR, would include the creation of a new or expanded Salt River channel and the restoration of tidal wetland habitat at Riverside Ranch. The project EIR also described ongoing efforts to reduce sediment contributions in the Wildcat Hills and a long-term adaptive management program post-construction. The proposed project changes and potential impacts are described in Section 2.

The purpose of this proposed Addendum is to consider whether the proposed project modifications (see Section 4 - Environmental Consequences of Proposed Project Modifications) would result in the need for additional analysis under CEQA (Public Resources Code, Section 21166; CEQA Guidelines, Sections 15162, 15164).

There have been three memorandums to file and one EIR addendum since certification of the 2011 EIR. In July 2012 a memo to file was prepared for minor word modifications to Mitigation Measures 3.3.1-7, 3.5.1-1.1, and 3.5.1-1.2. In April 2013 a memo to file was prepared that changed the hours of construction to Saturdays from 7:00 a.m. to 6:00 p.m. and Sundays and Holidays from 9:00 a.m. to 6:00 p.m. In July 2013 a memo to file was prepared for a new mitigation measure (3.3.1-5.1 - Pre-construction removal of dense-flowered cordgrass) for non-native cordgrass (*Spartina densiflora*). In June 2014 an addendum to the 2011 EIR was prepared that described the modification of nesting bird exclusion zones for common species and species of special concern detailed in Mitigation Measure 3.3.1-7 in regard to the second phase of work of the Salt River Ecosystem Restoration Project.

As demonstrated in Section 4 below, the proposed project modifications do not meet any of the criteria listed for preparation of a subsequent EIR as identified in section 15162 of the CEQA Guidelines. This means: (1) the modifications would not result in any new significant environmental effects or a substantial increase in severity of previously evaluated significant effects that result from either a substantial change to the project or changes to the project circumstances; (2) there is no new information of substantial importance since certification of the 2011 EIR that shows the modifications will have new significant effects or more severe previously evaluated effects; and (3) no mitigation measures or alternatives, which were found to be infeasible in the 2011 EIR and which are capable of substantially reducing a significant environmental effect, would now be feasible. Therefore, pursuant to section 15164 of the CEQA Guidelines, the differences between the approved project described in the 2011 EIR and the refined elements of the project as they are currently proposed are considered minor technical changes. For these reasons, an addendum to the 2011 EIR is the appropriate CEQA compliance documentation to address modifications to the project.



## 2. Preparation of an Addendum to the EIR

Under the California Environmental Quality Act (Public Resources Code Section 21000 et. seq., "CEQA") and its implementing Guidelines at California Code of Regulations Title 14, Chapter 3, Section 15164, the preparation of an addendum to an EIR is appropriate when some changes or additions to the EIR are necessary but none of the circumstances enumerated in California Code Regulations Title 14, Chapter 3, Sections 15162 and 15163 exist. Section 15164 states in relevant part:

- (a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

Section 15162(a) requires preparation of a subsequent EIR under the following circumstances:

- (1) Substantial changes are proposed in the project which would require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which would require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
  - (A) The project would have one or more significant effects not discussed in the previous EIR or negative declaration;
  - (B) Significant effects previously examined would be substantially more severe than shown in the previous EIR;
  - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Section 15164 of the CEQA Guidelines states that a lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but





none of the conditions described above in section 15162(a), calling for preparation of a subsequent EIR, have occurred.

CEQA allows lead and subsequent responsible agencies issuing additional discretionary approvals for a project to restrict their review of modifications to a previously approved project to the incremental effects associated with the proposed project modifications, compared against the anticipated effects of the previously approved project at build-out. In other words, if the project under review constitutes a modification of a previously approved project which was subject to prior final environmental review, the “baseline” for purposes of CEQA is adjusted such that the originally approved project is assumed to exist.

The HCRCD is proposing minor modifications to the approved project; these changes are described in Section 3 of this addendum. As demonstrated in detail below, the project modifications do not meet any of the criteria listed in section 15162 (preparation of a subsequent EIR). First, the modifications would not result in any new significant environmental effects or a substantial increase in severity of previously evaluated significant effects that result from either a substantial change to the project or changes to the project circumstances. Second, there is no new information of substantial importance since certification of the 2011 EIR that shows the modifications will have new significant effects or more severe previously evaluated effects. Therefore, pursuant to section 15164 of the CEQA Guidelines, the differences between the approved project described in the 2011 EIR and the refined elements of the project as they are currently proposed are considered minor technical changes. Furthermore, the 2011 EIR and associated mitigation monitoring and reporting program remain valid for mitigating the identified significant impacts that would result from implementation of the project, including the proposed project modifications. For these reasons, an addendum to the 2011 EIR is the appropriate mechanism to address modifications to the project.

### **3. Description of Proposed Project Modifications**

#### **3.1 Summary**

This amendment requests design modifications and project component additions to Phase 2 of the Salt River Ecosystem Restoration Project (project). A description and graphic of the proposed design modifications/additions have been included along with information demonstrating how the minor changes remain consistent with the overall project goals/objectives, the Final Environmental Impact Report (FEIR), the Habitat Mitigation & Monitoring Plan (HMMP) and Project permits. These changes are intended to be incorporated into the final design plans in preparation for construction in 2018.

The applicant, HCRCD, is proposing to modify the original and amended application by adding design features to the Phase 2B project footprint, such as an agricultural bridge, relocating a culvert crossing, as well as relocating riparian planting areas. These design modifications would not result in substantial changes to the overall project design or function. Additionally, the proposed project modifications do not lessen or avoid the intent of any permit condition.



## 3.2 Background

The project is a highly collaborative public-private partnership funded through a combination of federal and state grant funding. On October 6, 2011, HCRCD received a Notice of Intent (NOI) from the California Coastal Commission to issue CDP No. 1-10-032 for the Salt River Ecosystem Restoration Project. The project has been designed, bid, and implemented in phases from downstream to upstream. Construction of 2.5 miles of channel in Phase 1 was completed in 2013 and approximately 2.3 miles of the proposed 4.5 miles of Phase 2 channel was completed in 2014, 2015, and 2017. The remaining Phase 2 channel reaches (Phase 2B) are being designed and constructed subject to available funding and final landowner approvals (Figure 1, Appendix A). Post-construction monitoring of the completed portions of the project has been conducted in accordance with the HMMP and permit conditions.

Since certification of the FEIR in 2011 and issuance of the project permits, some land-ownership has changed within the uncompleted reaches of Phase 2B. The change in ownership has resulted in a change in land management and therefore the final project designs must now accommodate these changes while still meeting the overall project goals and design objectives consistent with the FEIR, project permits, HMMP and funding commitments.

The following components are proposed to be added or modified within the previously permitted and approved 50% Design Plans (Winzler & Kelly 2011a). A description of these components and quantification of impacts/benefits are included for each in the following sections.

1. New agriculture bridge crossing over Salt River near station 239+50
2. Relocate existing culvert crossing to the off-channel alcove near Salt River station 241+00
3. Relocate riparian planting areas within Phase 2

## 3.3 Justification for Project Modifications

### 3.3.1 New Agricultural Bridge Crossing

A bridge crossing over the rehabilitated Salt River (Station 239+50 within Phase 2) has been requested by the landowner for agricultural management purposes and to maintain current access to both sides of the proposed Salt River channel. The bridge would be approximately 40-feet long, 16-feet wide and would span the rehabilitated Salt River active channel (Figure 2, Appendix A). The free-span bridge deck would be supported on concrete abutments protected by rock slope protection (RSP) to prevent scour under and adjacent to the bridge. The final design would be developed in accordance to and approved by the Humboldt County Building Department prior to issuance of the County Building/Grading permit. The proposed bridge crossing will replace a former Salt River crossing that was previously in-place near channel station 230+00. The 1988 historic aerial map depicts the location of former Salt River crossing that has subsequently been abandoned due to sediment aggradation in the area (Figure 3, Appendix A). The proposed bridge will allow continued agricultural land management by the landowner on portions of the ranch that was accessible by crossing the aggraded Salt River channel prior to restoration activities.



### Temporary and Permanent Wetland Impacts

The bridge is proposed to be placed within the channel grading corridor and project limits described on the permitted 50% Design Plans and therefore remaining consistent with the temporary impact extents. The bridge foundation and RSP; however, will result in permanent wetland fill that was neither reported in the 2012 HMMP nor in the permit application. Table 1 presents the description and quantification of the additional wetland fill associated with the proposed bridge crossing.

**Table 3 Anticipated Wetland Fill for Proposed Bridge Crossing<sup>1</sup>**

Project Component Description	Wetland Fill <sup>2</sup> (sf)	Wetland Fill Volume (cy)	Wetland Remaining <sup>3</sup> (sf)	Conversion of Wetlands to Uplands (sf)
Concrete Abutments and RSP (24' x 10') x 2 abutments	480	40	30	450 0.01 (ac)

<sup>1</sup>Areas and volumes presented are approximate and based on preliminary design.

<sup>2</sup>Includes ACOE and CA Coastal Commission Jurisdictional Wetlands (Winzler & Kelly 2011b).

<sup>3</sup>Area within fill footprint that will exhibit wetland and/or vegetative characteristics post-implementation.

#### 3.3.2 Relocate Existing Culvert Crossing

##### Description

An existing access road culvert crossing within the proposed off-channel habitat near Salt River station 241+00 and within Phase 2 has been requested by the landowner to be removed and relocated to a more appropriate location (Figure 1 and Figure 2, Appendix A). The removal and relocation of this crossing was not included in the 50% Design Plans; however, the new culverted crossing (consisting of three 36-inch diameter culverts with a crossing top width of approximately 20-feet) is anticipated to be similar in size and aerial extent to the existing one proposed for removal. The new crossing is intended to provide a more stable crossing for agricultural management purposes, provide water quality improvements over the existing crossing, and provide an opportunity to regulate off-channel inundation. The final hydraulic design would remain consistent with FEIR design objectives to provide fish passage, off-channel juvenile salmonid rearing habitat, and improved drainage.

##### Temporary and Permanent Impacts

As previously stated, the new culvert crossing is anticipated to be similar in size and extent to the existing one proposed for removal and therefore no additional temporary and permanent wetland aerial impacts are anticipated. The final design of the relocated crossing will be presented on the final construction plans.

#### 3.3.3 Relocate Riparian Planting within Phase 2

##### Description

Since adoption of the FEIR and issuance of the project permits, landownership and management has changed on the properties currently encumbered by an NRCS Floodplain Easement. NRCS developed a riparian planting plan utilized in the 50% Design Plans with the former landowner. The



new landowner and NRCS have subsequently requested to reduce previously proposed riparian planting by 12.5 acres on existing agricultural lands in Phase 2A and 2B, as shown on Figure 4 (Appendix A), to support Aleutian Goose habitat and management on the portion of Phase 2B where the NRCS Floodplain Easement is located. The request can be accommodated while still providing the continuous corridor planting critical to habitat/stream function, water quality, and streambank stability while remaining consistent with Figures 6 and 8 of the HMMP. In response, HCRCD is identifying 12.5 acres on previously constructed and planned active benches in Phase 2 as suitable riparian planting locations (Figure 5, Appendix A). Therefore, the total acreage for replanted and projected riparian will remain unchanged. The following sections describe the biological considerations associated with the proposed change.

### **Biological Considerations**

The proposed change in riparian planting locations will provide an equivalent or potential increase in the ecological integrity of the Salt River ecosystem. The planting of the Phase 2A and future Phase 2B active benches will promote a more contiguous riparian corridor extending from the banks of the constructed Salt River to the low flow channel. The planting palette described in the original project (HTH 2012) will be retained and modified only slightly to adjust to site-specific hydrologic conditions in the new planting area.

### **Habitat Continuity**

The proposed riparian planting on Phase 2A active benches will provide a contiguous canopy connection from the outer banks of the Salt River to the low-flow active channel. Currently, the 50' to 60' wide active bench of the Salt River channel in Phase 2A is not planted with riparian species, leaving large areas open and disconnected from strips of established and planted riparian along the channel banks and the active berm adjacent to the low-flow channel. The proposed planting will develop a continuous canopy in the Salt River corridor which will further promote lower water temperatures, provide cover for wildlife species, and suppress invasive species encroachment. Portions of the active benches were designated in the HMMP (HTH 2012) as passive sediment management areas (SMAs) that would be adaptively managed into the future (though sediment removal on passive SMAs is not anticipated) and expected to naturally recruit with riparian vegetation. Actively planting the active benches will accelerate the recruitment process while providing additional morphological diversity in the short-term by designating desired riparian species and densities consistent with the HMMP.

Similarly, the proposed riparian planting on Phase 2B active benches will provide a contiguous canopy connection from the outer banks of the Salt River to the low-flow active channel, reducing the large, open areas of the active bench. The proposed planting will develop a continuous canopy in the Salt River corridor which will further promote lower water temperatures, provide cover for wildlife species, and suppress invasive species encroachment. Portions of the active benches were designated in the HMMP as freshwater channel wetlands that would be expected to naturally recruit with riparian vegetation. Actively planting the active benches will accelerate the recruitment process while providing additional morphological diversity in the short-term by designating desired riparian species and densities consistent with the HMMP.



### Structural Diversity

The active benches in Phase 2 where riparian planting is proposed are bounded by linear strips of riparian (along the banks and active low-flow channel of the Salt River) which are surrounded by working pasture land. The active benches are seasonally inundated floodplains with native herbaceous vegetation (i.e. sedges, rushes and grasses) located within the Salt River corridor. By planting these active benches with riparian vegetation, additional vegetative structure and morphologic diversity will be enhanced throughout the Salt River corridor. The expansion of riparian habitat will provide additional nesting and foraging habitat for resident and migratory bird species, as well as increasing habitat, movement corridors, and cover for other wildlife species such as deer, otters, and other small vertebrate species. The proposed planting will develop a contiguous canopy in the Salt River corridor which will promote lower water temperatures, habitat complexity, and cover for fish as well as a food supply source.

### Temporal Impact

Planting of the previously constructed Phase 2A active bench beginning Winter 2017/2018 as opposed to Phase 2B (2018/2019) will help reduce the temporal impact of the project and accelerate the timeline toward meeting the project success criteria. The planting palette described in the original project (HTH 2012) will be retained and modified only slightly to adjust to site-specific hydrologic conditions in the new planting area.

### Reduce Phase 2B Planting Areas

The reduced riparian planting in agricultural areas in Phase 2B as shown on Figure 4 (Appendix A) will remain in agricultural production, and the increase in equivalent riparian planting in Phase 2 footprint will result in the same project-wide riparian mitigation acreages. The final Phase 2B corridor design will be modified to include riparian planting along the Salt River active channel edges and active benches as shown in Figures 6 and 8 of the HMMP, thus remaining consistent with the overall channel design and habitat restoration intent (i.e. buffer water temperatures, provide structural roosts to migrating birds, produce cover for salmonids, and provide corridors for wildlife movement along the Salt River corridor). While the agricultural areas in Phase 2B will remain in agricultural production, the operations of these large contiguous areas will continue to be consistent with management of short-grass habitat for Aleutian Cackling Goose which remains consistent with the purpose of the NRCS Floodplain Easement.

## 3.4 Summary of Impacts and Conclusion

The wetlands fill described above have been summarized below in Table 2 and compared to the original project wetland fill/creation acreages presented in the permitted HMMP (HTH 2012). Relative to the rounding precision (0.1 acres) presented in the HMMP, the changes are within the calculated rounding error which does not alter the HMMP projected change and therefore mitigation for the proposed project components is not proposed. As such, the project team intends to proceed with finalizing the remaining design and integrating the components described above into the final construction plans.



Table 2 Summary of Anticipated Wetland Fill for Original Project Plus Proposed Additions (all units in acres)

Description	Wetlands Filled	Wetlands Created	Projected Change
Proposed New Agricultural Bridge Crossing	0.01	0	-0.01
<b>Proposed Total</b>	<b>0.01</b>	<b>0</b>	<b>0.01</b>
Original Project Total	0.3	1.6	1.3
<b>Proposed Total + Original Total</b>	<b>0.3</b>	<b>1.6</b>	<b>1.3</b>

<sup>1</sup>From Table 2 in Project HMMP (HTH 2012).

## 4. Environmental Consequences of Proposed Project Modifications

The purpose of the discussion below is to evaluate the environmental issue areas in terms of any “changed condition” (i.e., changed circumstances, project changes, or new information of substantial importance) resulting from the proposed project modifications that may result in a different environmental impact significance conclusion from the certified 2011 EIR. Each resource issue area is addressed below.

### 4.1 Hydrology and Water Quality

The 2011 EIR identified potentially significant impacts related to potential long-term and short-term impacts on water quality associated with construction; degradation of wetland and Eel River Estuary water quality in the future; effects of flows in reconstructed channel on channel erosion; and increase wind-wave generated erosion around restored wetland. These impacts would be reduced to a less than significant impact with implementation of the Hydrology and Water Quality Mitigation Measures found in the Mitigation Monitoring and Reporting Program (MMRP) (February 2011). The 2011 EIR identified a less than significant impact associated with an increase in tidal exchange and salinity in upstream waters will adversely impact river hydrology and hydraulics; dewater shallow groundwater; groundwater quality; increased channel scour due to increased tidal prism; effects of reconstructed channel on off-site flooding; drainage of surrounding dairy lands; increased frequency of flooding at Riverside Ranch; setback berms could impede or redirect flood flows or fail and threaten adjacent properties and structures; effects on water quality and sediment loads from tributary flows to restored channel; effects on water quality and sediment loads from reintroduced flows to the Salt River between Williams and Reas Creeks; inundation by seiche or tsunami; increased scour and erosion at road crossing structures; and sea level rise.

Proposed project modifications would result in the installation of a new agriculture bridge crossing over Salt River, relocation of an existing culvert crossing near Salt River, and relocation of riparian planting areas within Phase 2, which would result in an imperceptible increase in impervious surfaces at the site (bridge and culverts). The amount of grading would be similar to that described and analyzed in the 2011 EIR. The proposed project modifications would result in minor excavation





associated with installation of the bridge and culvert which are further described below as they relate to Hydrology and Water Quality.

#### 4.1.1 New Agricultural Bridge Crossing

The proposed new agricultural bridge, as described above, will span the restored Salt River active channel. The proposed bridge crossing is located within the Eel River FEMA Flood Hazard Floodway (Figure 3.1-3, FEIR) and therefore in accordance to Humboldt County building standards, the bridge will be designed to remain hydrostatically restrained during the 100-year base flood elevation (BFE). Additionally, given the FEMA Floodway designation at the crossing, the HCRCD must demonstrate to the satisfaction of the Humboldt County Floodplain Administer, implementation of the bridge will not reduce the floodway carrying capacity during the FEMA 100-year BFE. Placement of the proposed bridge within the floodway has the potential to reduce the cross-sectional area of the floodway, however the proposed excavation of the Salt River under and adjoining the bridge is greater in cross-sectional area relative to the bridge, therefore a rise in the 100-year BFE is not anticipated. A hydraulic analysis will be conducted to support the final bridge design and no-net rise for County approval. For these reasons, the proposed agricultural bridge crossing would not result in new or more severe hydrology/water quality impacts.

#### 4.1.2 Relocate Existing Culvert Crossing

The proposed relocation of the existing culvert crossing for access across the off-channel habitat is consistent with the FEIR, HMMP, 50% Design Plans, related project goals and California Department of Fish & Wildlife (CDFW) fish passage guidelines. The culvert invert elevations will be set at an elevation equivalent to the restored Salt River channel which will allow flow to backwater into the alcove providing off-channel habitat and flood attenuation. The stage of the alcove will rise and fall equivalently to the stage in the Salt River channel, reducing hydraulic conditions undesirable to fish passage. The proposed culverts will provide suitable flow rates/velocity in- and out of the alcove and create flow attenuation on the rising limb of the hydrograph providing sustained elevated flows for maintaining sediment transport during the recession limb of the hydrograph. For these reasons, the proposed relocation of the existing culvert crossing would not result in new or more severe hydrology/water quality impacts.

#### 4.1.3 Relocate Riparian Planting

The riparian planting is proposed to be relocated to the active bench in areas previously designated as sediment management areas and freshwater channel wetlands. The project does not rely on these previously defined areas for achieving a specific acreage of vegetation/habitat type. These areas were described in the HMMP as a *“highly dynamic interface between the active channel and floodplain”* and *“where natural recruitment of woody vegetation is anticipated.”* The active bench was designed to support, over time, a naturally recruited riparian forest not part of the original riparian mitigation acreage. The hydraulic modeling used to develop the project assumed hydraulic roughness on the bench associated with mature trees and light underbrush. Under current conditions the low vegetation covering the active bench is relatively dense, leading to slower water velocities and higher rates of fine sediment deposition. The establishment of a riparian canopy on the active bench will increase shading and decrease density of low understory vegetation, thus improving conveyance of



overbank flow and fine sediment. Additionally, since release of the FEIR, the active sediment management area (SMA) at the confluence of Francis Creek with Salt River has been constructed and the supporting sediment transport analyses completed by the U.S. Fish & Wildlife Service (USFWS) suggest if maintained, the SMA will effectively capture coarse sediments that would otherwise deposit in the restored downstream reaches, thus extensive sediment removal from the active bench necessitating riparian clearing is not anticipated. For these reasons, the proposed relocation of the riparian plantings would not result in new or more severe hydrology/water quality impacts.

Although unlikely, proposed project modifications could result in potential short-term construction-related soil erosion and water quality impairment. Prior to earth-moving activities, Mitigation Measure 3.1.1-2.1 (Prepare and implement SWPPP) of the EIR would require the preparation of a stormwater pollution prevention plan, and implementation of best management practices to avoid construction-related erosion and water quality impairment. Mitigation Measure 4.3-3 of the 2011 EIR requires in-stream erosion and water quality control measures during channel dredging. Mitigation Measures 3.1.1-3 and 3.1.1-7 require the implementation of a water quality monitoring and maintenance plan and erosion monitoring and maintenance plan. Implementation of each of the Hydrology and Water Quality Mitigation Measures would reduce potential construction-related erosion and water quality impairment resulting from proposed project modifications to a less than significant impact.

## 4.2 Geology and Soils

The 2011 EIR identified less than significant impacts for all resource categories under Geology and Soils. No mitigation measures were required.

The proposed project modifications would not expose structures and people to strong ground shaking, ground failure, or landslides for the same reasons as described in the 2011 EIR. Removal of vegetation to accommodate the bridge and culverts would be minimized. Mitigation Measure 3.1.1-2.1 of the EIR requires preparation of a stormwater pollution prevention plan, and implementation of best management practices to avoid construction-related erosion hazards. Adherence to the other mitigation measures in Hydrology and Water Quality would ensure that potential soil erosion and loss of topsoil impacts would be less than significant. The proposed project modifications would not alter the impact conclusions identified in the 2011 EIR for geology and soils.

## 4.3 Biological Resources: Terrestrial/Upland/Riparian

The 2011 EIR identified potentially significant impacts related to long, short, and medium-term impacts to wetlands, increase in noxious weed populations, special status plants, breeding or nesting birds, bats, and Northern red-legged frogs. These impacts would be reduced to a less than significant impact with implementation of Mitigation Measures 3.3.1-2, 3.3.1-3, 3.3.1-5.1, 3.3.1-5.2, 3.3.1-6, 3.3.1-7, and 3.3.1-12. The 2011 EIR identified less than significant impacts associated with impacts to riparian forest and scrub, operations and maintenance disturbance to nesting birds (medium-and long-term), and impacts to special status bats.

As described above, relative to the rounding precision (0.1 acres) presented in the HMMP, the wetland fill changes are within the calculated rounding error which does not alter the HMMP projected





change and therefore mitigation for the proposed project components is not proposed, and the existing mitigation in the 2011 EIR is still applicable and feasible. Construction activities associated with the proposed project modifications could import noxious weed propagules on construction machinery. However, implementation of Mitigation Measure 3.3.1-5.1 and 3.3.1-5.2 in the Final EIR would reduce the potential increase in noxious weed populations due to the proposed project modifications to a less than significant level.

Construction of the proposed project modifications could result in disturbance of breeding or nesting migratory and/or special status birds. However, disturbance of breeding or nesting migratory and/or special-status birds would be avoided or minimized by implementing Mitigation Measure 3.3.1-7 in the 2011 Final EIR (Final EIR p. 3.3-46).

Impacts to bats associated with construction of the proposed project modifications is anticipated to be less than significant because agricultural grassland is regionally abundant, and because special status bats have only a moderate probability of occurrence in the project area. This is consistent with the 2011 EIR conclusions.

Construction of the proposed project modifications could result in short-term impacts to Northern red-legged frogs (RLFs) through mortality related to construction activity or maintenance activity. Short-term impacts to RLFs would be minimized by the implementation of Mitigation Measure 3.3.1-12 in the 2011 Final EIR (Final EIR p. 3.3-50). There would be no long-term impact to RLFs associated with the proposed project modifications. Implementation of the mitigation measures above would result in no new impacts to biological resources (terrestrial/upland/riparian) from implementation of the proposed project modifications evaluated in this addendum.

#### 4.4 Biological Resources: Aquatic

The 2011 EIR identified potentially significant impacts to aquatic resources from decreased water quality due to construction/dredging activities, and entrainment of fish in areas disconnected from the estuary. These impacts would be reduced to a less than significant impact with implementation of Mitigation Measures 3.4.1-1.2, 3.4.1-1.3, 3.4.1-1.5, 3.4.1-1.6, 3.4.1-1.9, 3.4.1-1.10, and 3.4.1-2. The 2011 EIR identified a less than significant impact associated with impacts related to disturbance of benthic habitats, and the creation of habitat that benefit non-native fish species.

The construction activities associated with the proposed project modifications (i.e., new bridge and culvert crossing) have the potential to dewater existing habitat, and to increase suspended sediments and turbidity, and introduce contaminants (fuel oils, grease) in the vicinity. Salmonids and individuals of other aquatic species could be killed or injured during in-channel construction activities as a result. However, the 2011 Final EIR includes a number of mitigation measures (Final EIR p. 3.4-23 through 3.4-25) to reduce potential impacts to a less than significant level. Those include:

- Mitigation 3.4.1-1.1: Develop a Storm Water Pollution Prevention Plan (SWPPP)
- Mitigation 3.4.1-1.2: Limit initial construction to an extended dry weather season (June 1–October 1)
- Mitigation 3.4.1-1.3: Adhere to site-specific construction plans
- Mitigation 3.4.1-1.4: Divert concentrated runoff and discharge away from channel banks



- Mitigation 3.4.1-1.5: Minimize removal of and damage to native vegetation
- Mitigation 3.4.1-1.6: Install temporary construction fencing to identify work areas
- Mitigation 3.4.1-1.7: Grade and stabilize spoils sites
- Mitigation 3.4.1-1.8: Avoid operating equipment in flowing water
- Mitigation 3.4.1-1.9: Fish relocation

Implementation of the mitigation measures above would result in no new impacts to biological resources (aquatic) from implementation of the proposed project modifications evaluated in this addendum.

## 4.5 Air Quality

The 2011 EIR identified potentially significant impacts related to conflicting with implementation of applicable air quality plans, violating air quality standards through the release of particulate matter during construction, exposing sensitive receptors to substantial pollutant concentrations, cumulatively considerable net increase of any criteria pollutant, exposing workers or the public to hazardous toxic emissions or substantial pollutant concentrations, generation of greenhouse gas emissions that may have a significant impact on the environment, and conflicting with an applicable plan, policy or regulation. As indicated in the 2011 EIR, these impacts would be reduced to a less than significant impact with implementation of Mitigation Measures 3.5.1-1.1 and 3.5.1-1.2 (Final EIR p. 3.5-12). The 2011 EIR identified less than significant impacts associated with creating objectionable odors affecting a substantial number of people, and generating greenhouse gas emissions that may have a significant impact on the environment.

Proposed project modifications (i.e., new bridge over Salt River and relocate culvert crossing) would not result in new or more severe impacts because the proposed project modifications would not substantially add to the emissions levels for the proposed project as analyzed in the 2011 EIR. Construction and installation of the proposed project modifications could increase construction-related emissions of fugitive dust ( $PM_{10}$  and  $PM_{2.5}$ ) and result in exposure of sensitive receptors to fugitive dust emissions during construction-related earth movement activities. However, Mitigation Measure 3.5.1-1.1 of the 2011 EIR would require implementation of applicable BMPs and assure compliance with the North Coast Unified Air Quality Management District (NCUAQMD) rules for particulates. With implementation of Mitigation Measure 3.5.1-1.1, no new or increased substantial construction-related air quality impacts would result from implementation of the proposed project modifications evaluated in this addendum. The proposed addition of up to approximately two (2) construction equipment and worker vehicle trips per day for a two-week period for the new bridge and culvert crossing on Bertelsen Lane, Fulmor Road, and Port Kenyon Road would have an inconsequential impact on traffic, the primary generator of mobile source emissions.

## 4.6 Noise

The 2011 EIR identified potentially significant impacts associated with construction noise. As indicated in the 2011 EIR, these impacts would be reduced to a less than significant impact with implementation of Mitigation Measure 3.6-1.1 (Final EIR p. 3.6-15).



Because of the distance of sensitive receptors from the project sites in this sparsely-populated area, the construction of the new bridge, three culverts, and relocated riparian area would have an inconsequential increase in construction noise compared to what was analyzed in the 2011 EIR. Construction and operation of proposed project modifications would not result in the exposure of persons off-site or result in generation of noise levels in excess of applicable standards. Any noise or vibration produced by construction equipment associated with the proposed project modifications would be minor, of short duration, intermittent, and, consistent with the 2011 EIR conclusions (i.e., less than significant with mitigation). For these reasons, the proposed project modifications would not result in new or more severe noise impacts.

#### 4.7 Aesthetics

The 2011 EIR identified less than significant impacts for short-term construction impacts on visual quality, long-term effects on scenic vistas and scenic resources, and effects on light and glare.

The project site includes broad views of agricultural fields adjacent to the Salt River in all directions. Rural farm roads bisect pasturelands and provide access to dairy operations and rural homes. There are views of the Eel River corridor along the project area and estuary mudflats at the lower end of the project area. In the distance, the vista includes forested hillsides to the north, south and east. The landscape is dotted with livestock, farm complexes, houses, and barns that reflect the area's agricultural heritage. A variety of farm and dairy equipment is visible and agricultural activities can be observed throughout the area. The proposed bridge and culvert crossing would be located south of Bertelsen Lane and only the culvert crossing is anticipated to be visible from Bertelsen Lane, which is a lightly travelled narrow rural roadway. The bridge may be visible from Port Kenyon Road, initially, however following riparian plant establishment, the visibility will be reduced.

Based on the above discussion, there are no new significant effects or substantial changes to the environmental evaluation of aesthetic resources provided in the approved 2011 EIR that would occur with implementation of the proposed project modifications. The project modifications evaluated in this addendum are visually consistent with the project as proposed in the 2011 EIR and would not generate any new significant impacts related to aesthetics.

#### 4.8 Land Use

As discussed in Section 3.8 of the Final EIR (Final EIR, p. 3.8-21), land use and planning impacts would occur if the project would physically divide an established community (e.g., a freeway dividing a populated residential community), if it would conflict with a land use policy adopted for the purpose of avoiding an environmental impact, if it would conflict with an applicable habitat conservation plan or natural community conservation plan, or if it would result in a substantial alteration of the present or planned use of an area. Regarding land use policies, each section of the 2011 EIR addresses the potential for conflicts between the project and relevant plans adopted for the purpose of avoiding environmental impacts.

The project area includes the main stem of the Salt River, three Salt River tributaries in the Wildcat Hills above the town of Ferndale (Williams Creek, Francis Creek, and Reas Creek), and the approximately 400-acre Riverside Ranch, which is contiguous to the Salt River estuary. The upland



areas are primarily forested and agricultural, with a few scattered residences, except for a portion of Francis Creek that flows through Ferndale. The Riverside Ranch is primarily in agricultural use (seasonal livestock grazing), and includes a complex of ranch buildings. Land uses in the Salt River channel area are primarily agricultural, along with a few residences and the wastewater treatment plant of the City of Ferndale. No homes would be affected with the proposed project modifications. The project would, therefore, not divide an established community. There are no habitat conservation plans or natural community conservation plans applicable to the project site; therefore, there would be no conflict with any such plans. The proposed project modifications would not alter the approved land use type or intensity; therefore, similar to the project analyzed in the 2011 EIR, the proposed project modifications would have no impact or a less than significant impact on land use.

#### 4.9 Agricultural Resources

The 2011 EIR identified less than significant impacts or no impacts for the conversion of prime farmland and other agricultural land, conflict with Williamson Act contracts, and changes which could result in the conversion of farmland to non-agricultural use. The proposed project modifications (i.e., new bridge over Salt River, relocated culvert crossing and riparian planting area) would not convert agricultural or forestry uses and would therefore have no project-wide impact on these resources and would result in no change to the 2011 EIR conclusion.

#### 4.10 Recreation

The 2011 EIR identified less than significant impacts for conflicts with established recreational and educational uses of the site, interference with public access, degrading the recreational experience, increasing the use of existing facilities, or long-term disruption to an established recreational area, and new recreational facilities that may have an adverse effect on the environment.

As discussed in Section 3.10 of the Final EIR (Final EIR, p. 3.10-1), there are no hiking trails that bisect or fall within the Salt River riparian zone. The project area is undeveloped for recreational use. In tributary watersheds, public access is on County roads that are surrounded by private lands, and Russ Park and Fireman's Park in the Francis Creek watershed. These two parks provide hiking trails and public parking facilities. The proposed project modifications would not block recreational activities within the project area or result in any increased demand for recreation. Therefore, the proposed project modifications would not affect recreational resources.

#### 4.11 Cultural Resources

The 2011 EIR identified potentially significant impacts associated with the loss of unknown archaeological and historic resources. These impacts would be reduced to a less than significant impact with implementation of Mitigation Measure 3.11.1-1 (Final EIR, pp. 3.11-15 through 3.11-17).

Construction of the proposed project modifications would be limited to areas of disturbance that were analyzed in the 2011 EIR. No new impacts to cultural resources would result from implementation of the proposed project modifications, and Mitigation Measure 3.11.1-1 would still be applicable in the event of discovery of unknown archaeological and historic resources, or the inadvertent discovery of human remains.



#### 4.12 Transportation

The 2011 EIR identified potentially significant impacts due to project-related traffic, and an increase in the potential for accidents or safety concerns on public roads. As indicated in the 2011 EIR, these impacts would be reduced to a less than significant impact with implementation of Mitigation Measure 3.12.1.1 (Final EIR p. 3.12-7). The 2011 EIR identified less than significant impacts associated with impacts on public transit, bicycle or pedestrian facilities, and parking.

Construction activities associated with the proposed project modifications would be minor (involving approximately two (2) trucks and worker commute vehicles per day for two weeks) and would not substantially increase the construction traffic described and analyzed in the 2011 EIR. Mitigation Measure 3.12.1.1 of the EIR required the preparation of a traffic control plan that identified haul routes public notification, required signage/flagging, potential lane/road closers, detour routes, provisions for providing temporary pedestrian access (if applicable), provisions for maintaining access to all parcels, and that the Traffic Control Plan shall be periodically updated throughout the course of the project.

#### 4.13 Public Services and Utilities

The 2011 EIR identified less than significant impacts for all public services and utilities, and no impacts to parks. Proposed project modifications would not block public service vehicles from accessing the site or result in disruption of response times or other public service standards because fire protection/first response and law enforcement staff would still have unimpeded access to the site. Changes to the proposed project since the time of prior environmental review would not result in new or more severe impacts to public services.

As discussed in Section 3.13 of the Final EIR (Final EIR p. 3.14-4), the approved project would not include any wastewater or water facilities and would not create additional wastewater or water need with the exception of small amounts of water to be trucked to the site for use during construction. The approved project would generate only a minimal amount of solid waste during construction and would not generate solid waste after implementation. Solid waste would be sent to an approved landfill in the disposal area. The proposed project modifications would not affect utilities or service systems.

#### 4.14 Hazards and Hazardous Materials

The 2011 EIR identified potentially significant impacts associated with health effects from mosquitoes. As indicated in the 2011 EIR, this impact would be reduced to a less than significant impact with implementation of Mitigation Measure 3.14.1-2.1 (Final EIR p. 3.14-10). The 2011 EIR identified less than significant impacts for effects of soil contamination, and accidental releases of hazardous materials during project construction.

The proposed project modifications would include excavation and construction-related activities within proposed areas of disturbance that were analyzed in the 2011 EIR. Mitigation Measure 3.14.1-2.1 of the EIR requires the application of BMPs and other water controls for mosquito control. The proposed project modifications would not result in soil contamination or accidental releases of hazardous materials during construction than as proposed in the 2011 EIR. Therefore, the proposed project modifications to the project would not result in new or more severe impacts.



## 4.15 Minor Issues

### 4.15.1 Population and Housing

As discussed in Section 3.15.1 of the Final EIR (Final EIR, p. 3.15-1), no elements of the project would alter population growth. The project would not extend urban infrastructure into an unserved area; therefore, it would not induce population growth. Further, no housing would be removed from the project site. The proposed project modifications would not necessitate the construction of replacement housing and would result in no impact related to population and housing.

### 4.15.2 Mineral Resources

As discussed in Section 3.15.2 of the Final EIR (Final EIR, p. 3.15-2), the proposed project would not result in the loss of availability of any known mineral resources, including locally identified mineral resource recovery sites. Therefore, the proposed project modifications are not anticipated to alter the availability of any known mineral resources. As discussed in the 2011 EIR, the project would have a less than significant impact on mineral resources and the project modifications do not alter this conclusion.

## 5. Conclusion

The proposed addition of a new bridge, relocated culvert crossing, and relocation of riparian planting areas would not alter any of the conclusions of the 2011 EIR. No new significant environmental effects or a substantial increase in the severity of previously identified significant effects would result. The additions also would not affect any of the mitigation measures, including their feasibility or implementation. As mentioned above, none of the conditions listed in Section 15162 of the CEQA Guidelines exist for the project modifications described herein. Therefore, pursuant to Section 15164 of the CEQA Guidelines, the differences between the approved project described in the 2011 EIR and the modifications of the project as currently proposed and described in this addendum are minor and this addendum provides sufficient environmental documentation.

## 6. References

H.T. Harvey & Associates (HTH) with Winzler & Kelly, 2012, Salt River Ecosystem Restoration Project Habitat Mitigation and Monitoring Plan. 277 pp.

Winzler & Kelly (currently GHD), 2011a, Salt River Ecosystem Restoration Phase 2 50% Design Plans.

Winzler & Kelly (currently GHD), 2011, Upland Delineation for Salt River Restoration Project.



# Appendices



*This page is intentionally left blank.*



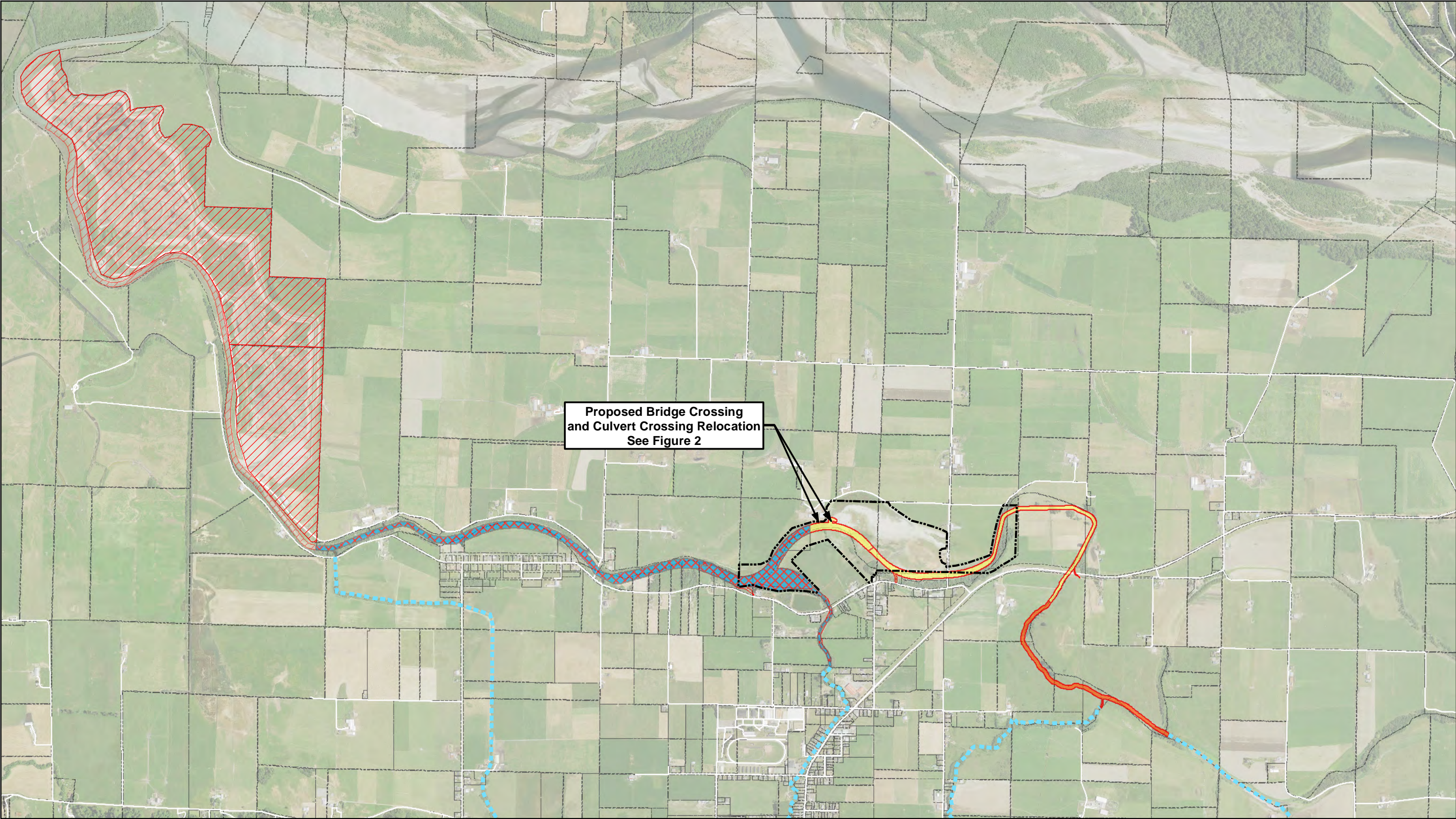


## Appendix A Figures



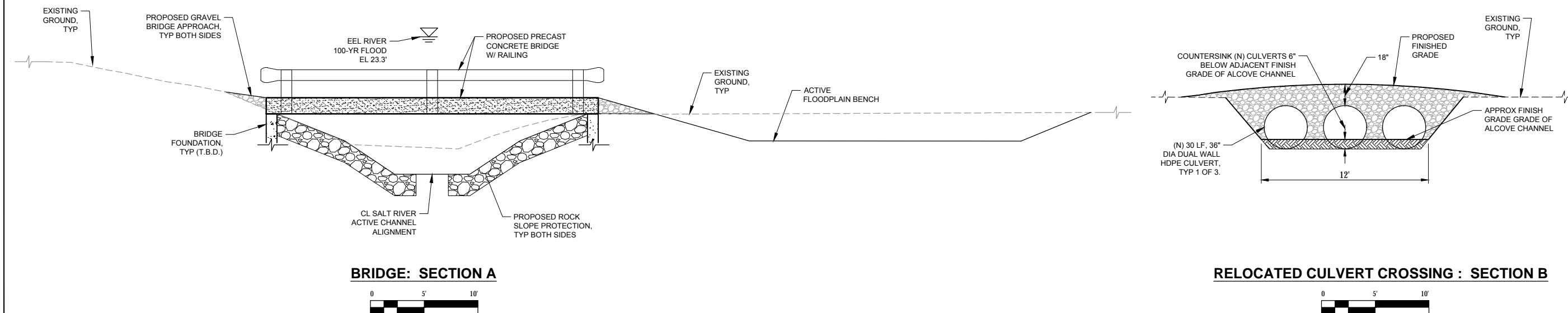
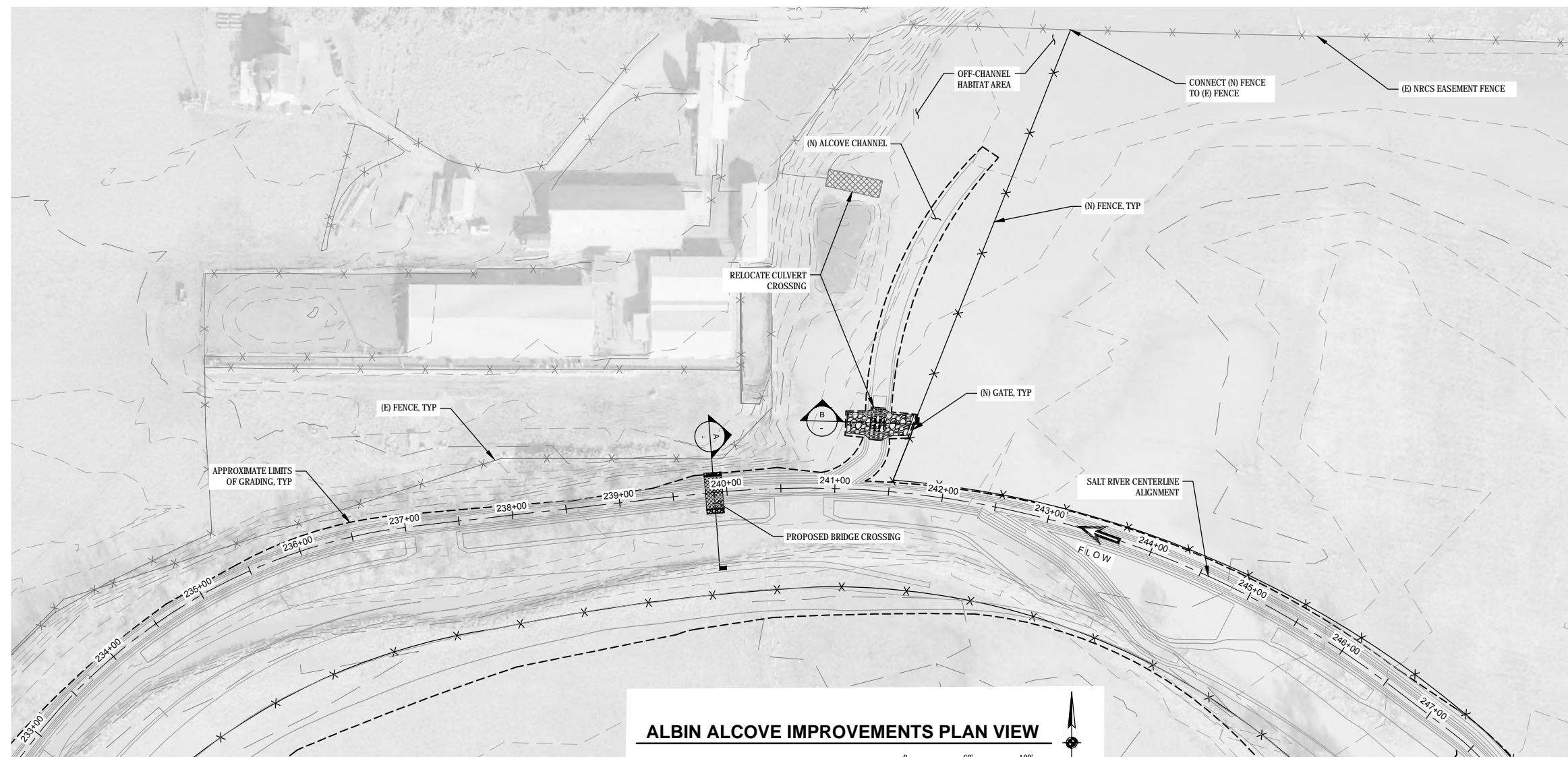
*This page is intentionally left blank.*















**Salt River, Ferndale CA - aerial image dated 1988**

**Current ownership: Albin, Andy & Sarah**

**Previous ownership: Vevoda, John & Kris**

Imagery source: Farm Service Agency  
aerial mosaic



0 250 500 1,000 Feet



Humboldt  
County

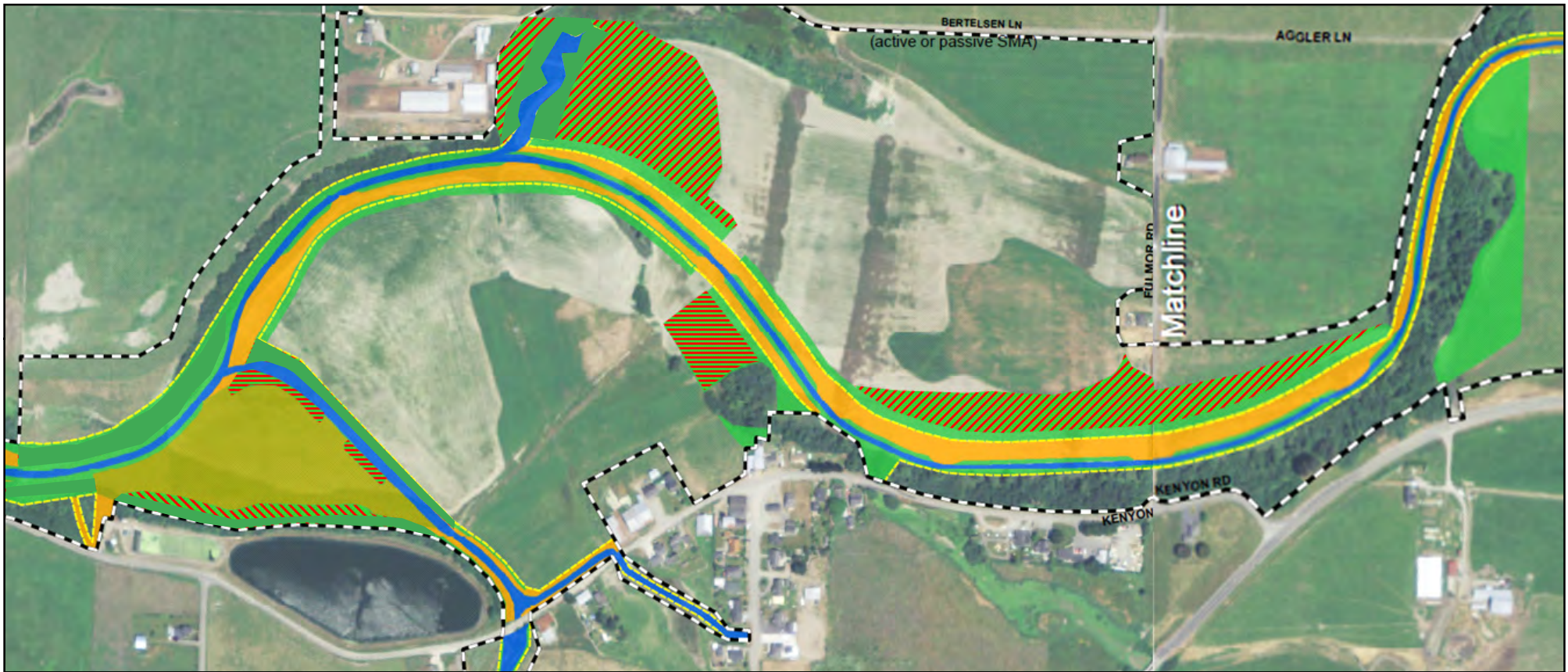


RESOURCE  
CONSERVATION DISTRICT

**Figure 3**







Paper Size ANSI A

#### LEGEND

Project Area

Excavation Footprint

Reduced Riparian Forest  
Planting from 2012 HMMP

#### Restoration Areas

Aquatic

Freshwater Channel Wetland

Cottonwood-Spruce Riparian

Sediment Management Area



Humboldt County Resource Conservation District  
Salt River Ecosystem Restoration Project

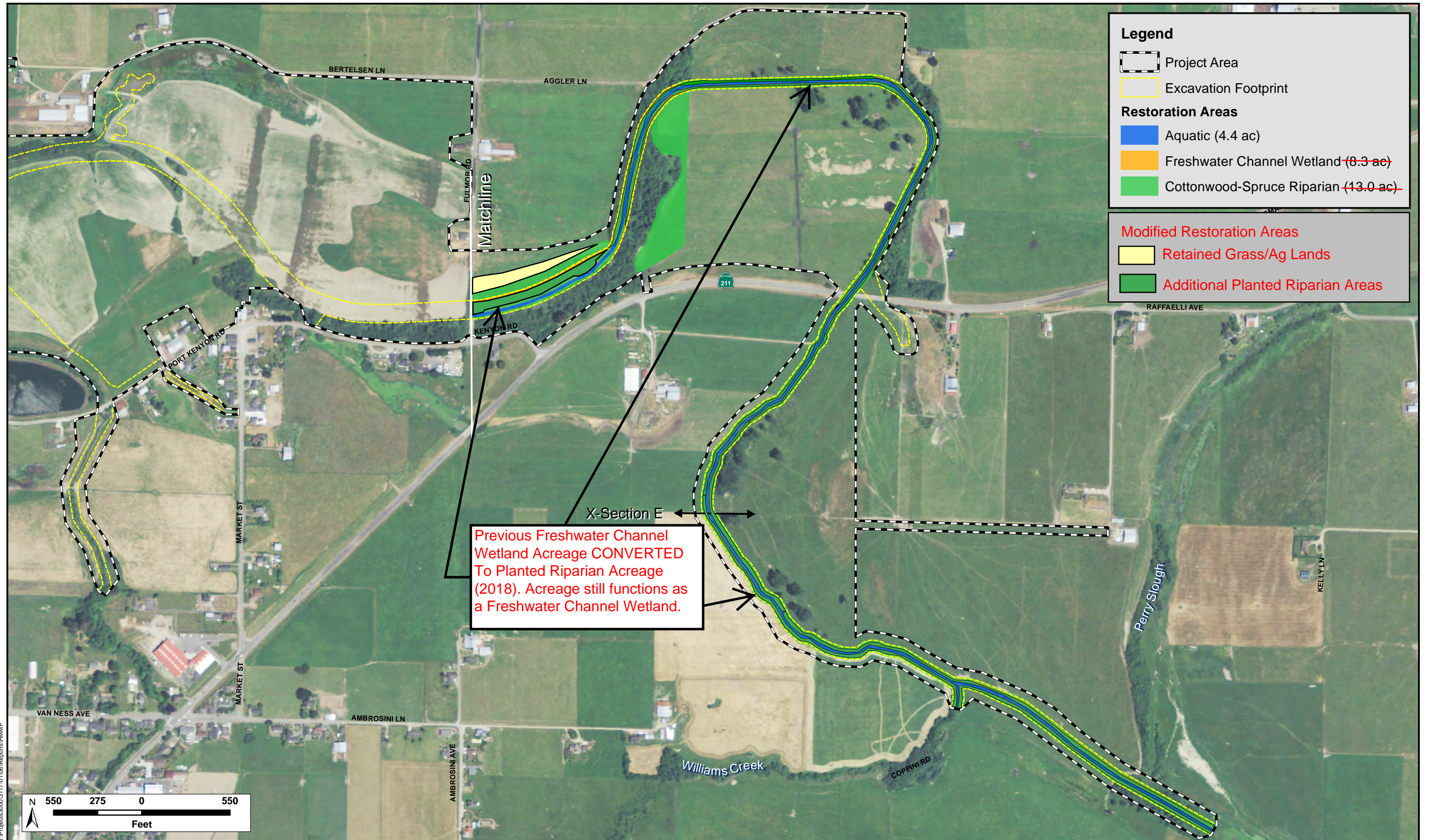
Job Number | 8410410  
Revision | A  
Date | 20 Dec 2016

Riparian Forest Planting

Figure 4







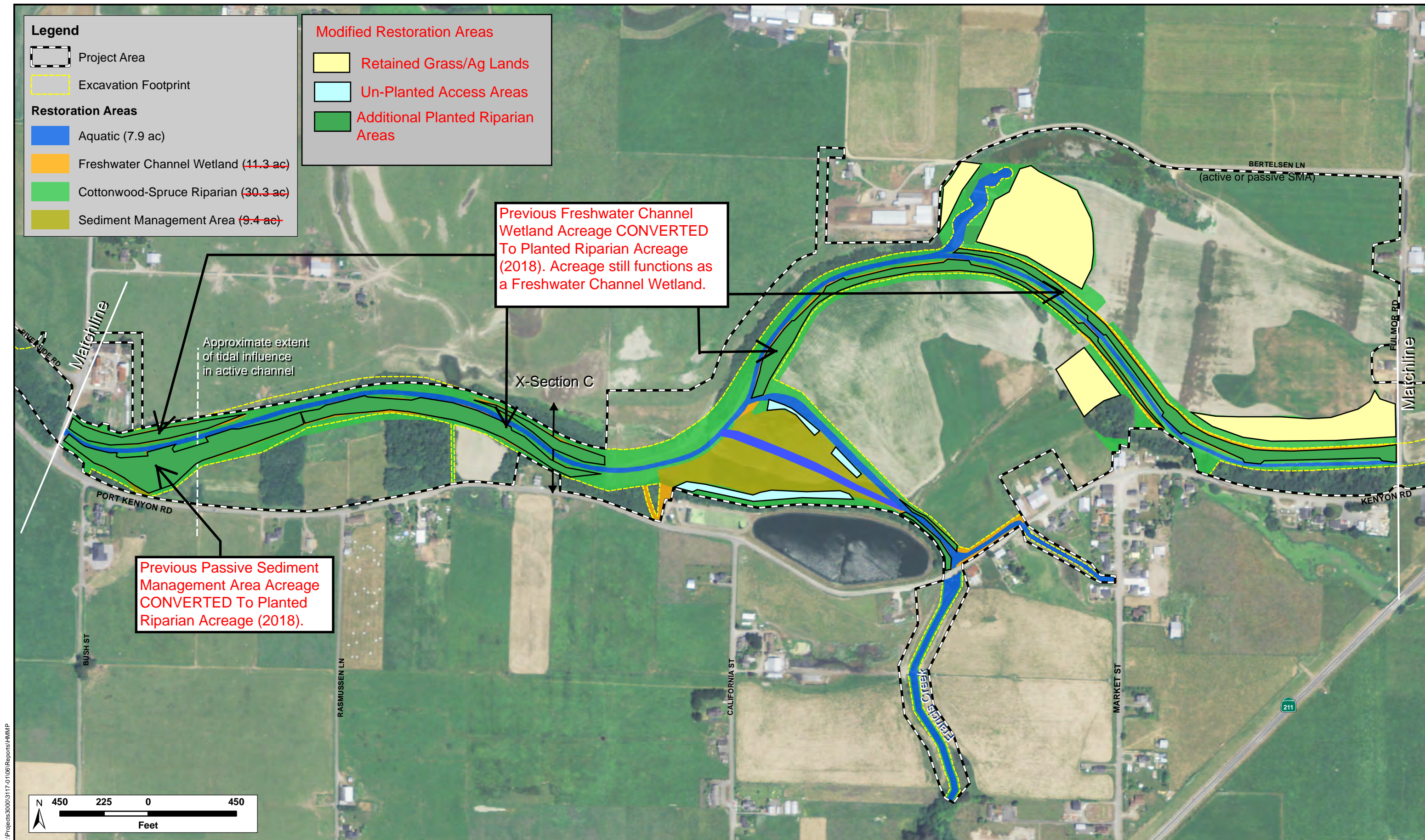
**Revised** Figure 5: Salt River and Riverside Ranch Restoration Areas: Cottonwood/Spruce Riparian Forest with Freshwater Channel Wetland







FIGURE 6

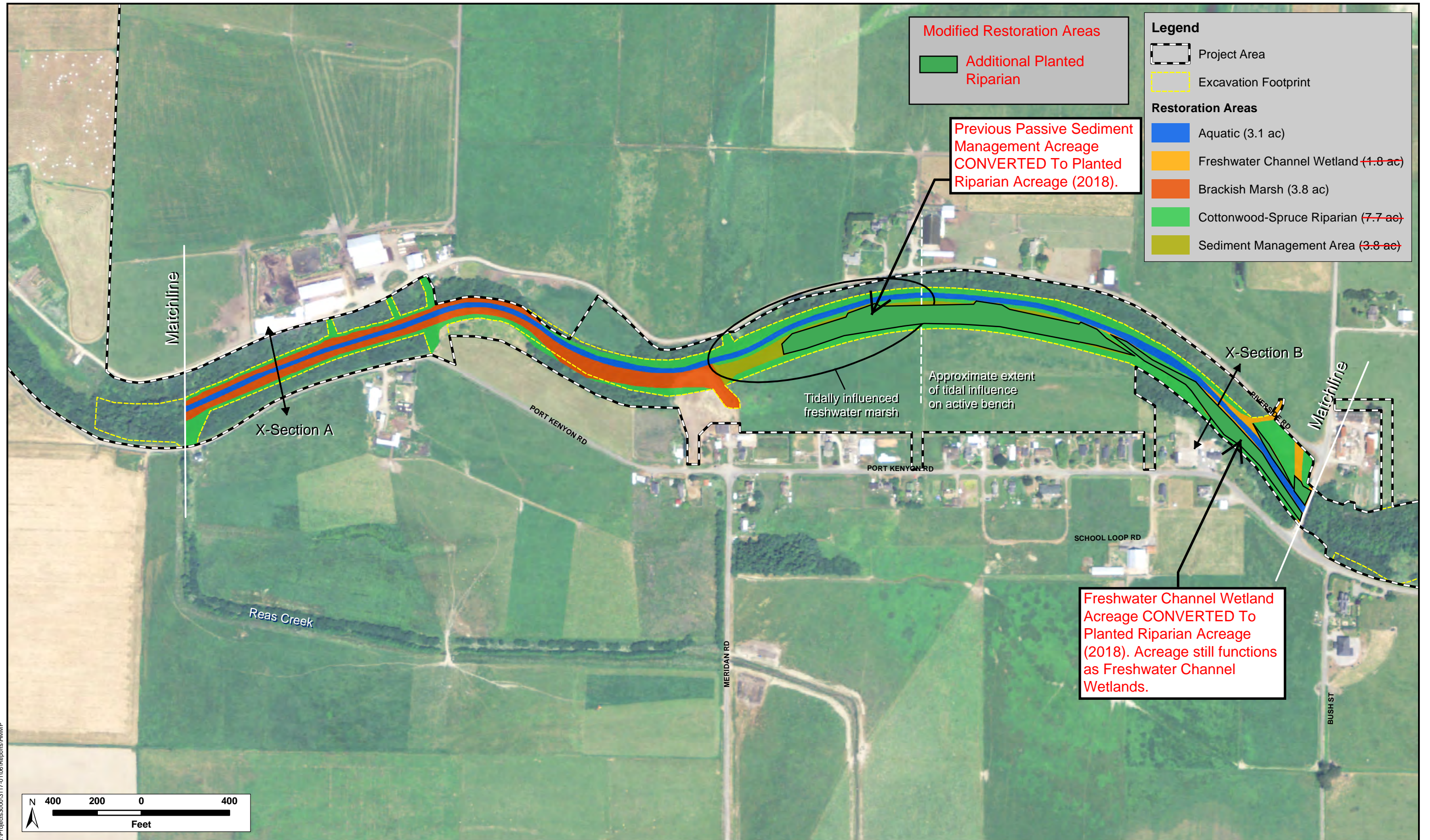


N:\Projects\3000\3117-0106\Reports\HMMP









N:\Projects\3000\3117-0106\Reports\HMMP



