

APPENDIX F: POST CONSTRUCTION RESTORATION PLAN

**Adams Pond Restoration Project
CEQA Initial Study / Mitigated Negative Declaration**

Adams Pond Restoration Project
Post Construction Restoration Plan - draft

Project Summary

The Adams Pond Restoration project will restore approximately 80,000 cubic yards of aquatic habitat (submerged), and riparian canopy and emergent vegetation along the OHWM that has been lost to post-fire sedimentation. Temporary impacts to Waters of the US and Water of the State associated the sediment transport and disposal will be stabilized and revegetated to a native upland vegetation community. This project will result in improved drought resilience of otherwise seasonally isolated aquatic species.

Impact Summary

This project will result in direct impacts (excavate) to 3.2 acres of Waters of the United States (WOTUS) aquatic resources, resulting in the restoration of 80,000 cubic yards of aquatic resource (pond) volume. An additional direct impact to 0.025 ac. (360 LF x 3-ft width) of a Water of the State (WOTS) that is not a WOTUS. The total estimated fill to a WOTUS is 26.5 yds³ (712 ft³). This channel will be re-established in the same general horizontal alignment at a higher elevation. A third area of WOTS/WOTUS will be impacted by a temporary haul road crossing. This area is 0.003 ac. (20LF x 8ft width) and will be temporarily impacted and restored to pre-project condition after use.

All impacts will be restored on site within the project area at least a 1:1 ratio. This project would not cause a net loss in the overall abundance, diversity, and condition of the aquatic resources at hand because the current state of the ephemeral drainage for permanent impacts contains steep eroding sidewalls that currently pose a sediment erosion threat. The project and compensatory mitigation will offer a net gain in Waters of the State, while simultaneously creating better slope stability with the project at hand. In addition, in lieu fee credits will be purchased at Sacramento District California In-Lieu Fee Program.

Restoration Objectives

The objective of the restoration efforts include

1. Achieving 75% cover with native plant species within 5 years;
2. Stabilization of all slopes greater than 4:1, and stream channels; and
3. Restoring Adams Pond capacity to at least 75% of pre fire capacity.

Restoration of the State Regulated Drainage Area

Prior to the placement of soil within the state regulated drainage, the first few inches of topsoil will be removed from the disposal limits and stockpiled for reuse as a part of the restoration effort and/or seed will be collected from the site for sowing within the restoration area.

Sediment removed from the pond will then be placed within the drainage and the area will be contoured to the grades shown on the attached plans. Changes to the contours may be made in the field upon approval by the RCDTC and Wetland Scientist.

The stockpiled topsoil removed from drainage will then be placed as cover within the channel restoration area and the area will be compacted using a roller.

After soils have been compacted, the restoration area will be hand seeded with a native erosion control seed mix at a rate specified in the Erosion Control Seed Mix Table.

Planting Palette

Erosion Control Seed Mix Table

The following erosion control seed mix shall be applied at rate of 24 lbs/acre and consist of the following species.

Species	Approx. % by weight
Yellow Sweet Clover	5%
Streambank Wheatgrass	5%
Ladino Clover	5%
Birdsfoot Trefoil	5%
Western Wheatgrass	8%
Crested Wheatgrass	10%
California Bromegrass	10%
Dahurian Wildrye	10%
Palute Orchardgrass	12%
Slender Wheatgrass	15%
Rush Intermediate Wheatgrass	15%
Wildflowers (Per landowners preference)	(Per landowners preference)

Seeding shall be completed in October before the start of the rainy season.

To ensure good seed-soil contact, the soil shall be harrowed immediately after sowing using a rake or chain harrow.

A layer of wood mulch or weed free straw will be installed within the restoration area.

The restoration area will then be watered weekly for at least two weeks or as directed by the wetland scientist. Watering will continue as needed until the first rainfall measuring at least 1 inch with a 24-hour period has occurred.

Restoration of the Pond Margins

Impacted pond margins will be planted with live willow and alder stakes harvested from the site.

Prior to the start of work, native willow and alder cuttings measuring 6 feet long and 1-2 inches in diameter will be harvested from the margins of Adams Pond and stored in a shaded, wet area until sediment removal work has been completed.

After sediment has been removed from the pond, the pond banks will be recontoured to pre-construction conditions and planted with live willow and alder stakes.

Live stakes shall be installed by excavating a hole 3 feet deep. Stakes shall then be inserted into the hole at a slight angle and the hole shall be back filled with native soil material. Stakes shall be buried at least half of their length with 2 to 3 rows of buds exposed above ground.

Stakes shall be planted in a staggered pattern along the bank and spaced 4 feet apart.

Newly installed stakes shall be watered weekly for at least two weeks or as directed by the wetland scientist with watering continuing as needed until the first rainfall measuring at least 1 inch with a 24-hour period has occurred during the rainy season. Once the pond has reached capacity, watering can be suspended. Watering the following Spring/Summer shall occur as needed.

Temporary Stream Crossing

Upon completion of construction, once the equipment has been removed from the project limits, the temporary stream crossing will be removed, and the stream channel will be recontoured and restored to original conditions.

The area will be seeded with a native erosion control seed mix at a rate specified in the attached Erosion Control Seed Mix Table.

To ensure good seed soil contact, the soil shall be harrowed immediately after sowing using a rake or chain harrow followed by a layer of weed free rice straw.

The restoration area will then be watered weekly for at least two weeks or as directed by the wetland scientist with watering continuing as needed until the first rainfall measuring at least 1 inch with a 24-hour period has occurred during the rainy season.

Construction Staging Area

Upon completion of construction, once the equipment has been removed from the project limits, the construction staging area shall will be seeded with a native erosion control seed mix at a rate specified in the attached Erosion Control Seed Mix Table.

To ensure good seed soil contact, the soil shall be harrowed immediately after sowing using a rake or chain harrow followed by a layer of weed free rice straw.

The restoration area will then be watered weekly for at least two weeks or as directed by the wetland scientist with watering continuing as needed until the first rainfall measuring at least 1 inch with a 24-hour period has occurred during the rainy season.

Invasive Species Management Plan

To control the spread of invasive plant species, particularly starthistle, all equipment and vehicles will be washed and free of weed seed prior to entering the site.

Yearly Inspections

During the first Spring, the restoration area will be inspected for the presence of nonnative invasive species. If non-native invasive species are identified within the restoration area, the wetland scientist will determine the best course of action which could include herbicide application, pulling by hand, or removal by mechanical means.

Restoration Success Criteria

The restoration areas shall be considered successful once the restoration area has achieved 75% cover by native plant species and erosion has been controlled.

Erosion controls will be adjusted as necessary after inspections per the direction of the wetland scientist and areas will be reseeded as necessary.