Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Rm 113, Sacramento, CA 95814

☒ County Clerk
County of: Lassen
Address: 220 South Lassen St. No. 5
Susanville, CA 96130

From:

Public Agency: Honey Lake Valley RCD
Address: 170 Russell Ave.
Susanville, CA 96130
Contact: Ian Sims
Phone: (775) 313-1222

ENDORSED
FILED
APR 11 2019
JULIE BUSTAMANTE
LASSEN COUNTY CLERK
By _____ Deputy

Lead Agency (if different from above):
Address:
Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse):

Project Title: Confluence Meadow Restoration Project

Project Applicant: Honey Lake Valley Resource Conservation District

Project Location (include county): T32N, R9E, Sec. 4, 5; T32N, R9E, Sec. 33 MD Meridian

Project Description:
The project is habitat and stream restoration along a 4,000 foot channelized segment Pine Creek on USDA Lassen National Forest Service lands. The project will fill the existing channel using borrow material from adjacent terrace to restore habitat and natural stream pattern, dimension and function. Elevation of the adjacent terrace will be lowered and transition either to grassland or wet meadow habitat. Existing remnant channels and the sinuous valley topographic low point will be utilized to define the new streambed location. Native vegetation and harvested sod will be used to reestablish riparian vegetation and stabilize the new streambed location and filled channel.

This is to advise that the Honey Lake Valley Resource Conservation District (☒ Lead Agency or ☐ Responsible Agency) has approved the above described project on 3/28/19 (date) and has made the following determinations regarding the above described project.

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☐ was ☒ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:
Honey Lake Valley Resource Conservation District, 170 Russell Ave., Susanville, CA 96130

Signature (Public Agency): _____ Title: District Manager

Date: 04/11/19 Date Received for filing at OPR: Governor's Office of Planning & Research

JUNE 10 2019

STATE CLEARINGHOUSE

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2011

State of California - Department of Fish and Wildlife

2019 ENVIRONMENTAL FILING FEE CASH RECEIPT

DFW 753.5a (REV. 12/01/18) Previously DFG 753.5a

Print | Finalize&Email

RECEIPT NUMBER:
18 — 04/11/201 — 01

STATE CLEARINGHOUSE NUMBER *(If applicable)*

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY	LEAD AGENCY EMAIL	DATE
Honey Lake Valley Resource Conservation District	isims@honeylakevalleyrcd.us	04/11/2019

COUNTY/STATE AGENCY OF FILING	DOCUMENT NUMBER
Lassen	2019-01

PROJECT TITLE

Confluence Meadow Restoration Project

PROJECT APPLICANT NAME	PROJECT APPLICANT EMAIL	PHONE NUMBER
Honey Lake Valley Resource Conservation District		(775) 313-1222

PROJECT APPLICANT ADDRESS	CITY	STATE	ZIP CODE
170 Russell Ave	Susanville	CA	96130

PROJECT APPLICANT *(Check appropriate box)*

☑ Local Public Agency ☐ School District ☐ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

☐ Environmental Impact Report (EIR)	$3,271.00	$	0.00
☑ Mitigated/Negative Declaration (MND)(ND)	$2,354.75	$	2,354.75
☐ Certified Regulatory Program (CRP) document - payment due directly to CDFW	$1,112.00	$	0.00

☐ Exempt from fee
- ☐ Notice of Exemption (attach)
- ☐ CDFW No Effect Determination (attach)

☐ Fee previously paid (attach previously issued cash receipt copy)

☐ Water Right Application or Petition Fee (State Water Resources Control Board only)	$850.00	$	0.00
☑ County documentary handling fee		$	50.00
☐ Other		$	

PAYMENT METHOD:

☐ Cash ☐ Credit ☑ Check ☐ Other **TOTAL RECEIVED** $ 2,404.75

SIGNATURE	AGENCY OF FILING PRINTED NAME AND TITLE
X	Ian Sims

Governor's Office of Planning & Research

JUNE 10 2019

STATE CLEARINGHOUSE

ORIGINAL - PROJECT APPLICANT | COPY - CDFW/ASB | COPY - LEAD AGENCY | COPY - COUNTY CLERK | DFW 753.5a (Rev. 12012018)

ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Confluence Meadow Restoration Project

2. **Lead Agency Name and Address:** Honey Lake Valley Resource Conservation District, 170 Russel Ave. Susanville, CA 96130

3. **Contact Person and Phone Number:** Ian Sims (775)313-1222

4. **Project Location:** Township (T) 32 North (N), Range (R) 9 East (E), Sections (S) 4-5; T33N, R9E, S33 of the Mount Diablo Meridian. This project is on lands managed by the U.S. Forest Service. (Also see Project Description).

5. **Project Sponsor's Name and Address:** Same as Lead Agency.

6. **General Plan Designation:** None. Project site is Federal Land

7. **Zoning:** None.

8. **Description of Project:** see attached

9. **Surrounding Land Uses and Setting:** The surrounding land is pine forest, sagebrush scrub, and meadow habitat. Lands are managed by the Lassen National Forest, Eagle Lake Ranger District.

10. **Other agencies whose approval is required (e.g., permits, financing approval, or participation agreements):**
California Dept. of Fish & Wildlife – 1603 Agreement, possible Prop1 Watershed Restoration grant
California Regional Water Quality Control Board – 401 Certification
Army Corps of Engineers – Notification for NWP 27

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 3 for additional information.

☐	Aesthetics	☐	Agriculture and Forestry	☐	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Geology/Soils
☐	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials	☐	Hydrology/Water Quality
☐	Land Use/Planning	☐	Mineral Resources	☐	Noise
☐	Population/Housing	☐	Public Services	☐	Recreation
☐	Transportation/Traffic	☐	Tribal Cultural Resources	☐	Utilities/Service Systems
☐	Mandatory Findings of Significance				

DETERMINATION:

On the basis of this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a 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. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature:	**Date:**
Printed Name:	**For:**

Confluence Meadow Restoration Project
PROJECT DESCRIPTION

December 07, 2018

Background

The Eagle Lake Ranger District (ELRD) of the Lassen National Forest (LNF) initiated an assessment of meadow and stream conditions along Pine Creek from its headwaters to Eagle Lake in 2013. This effort intended to expand upon many previous years of habitat improvement projects in the Pine Creek subwatershed that were planned and carried out by the US Forest Service and multiple partners as part of the Pine Creek Coordinated Resource Management Planning (CRMP) Group. In 2013, working with the CRMP, project partners secured funds through a proposal submitted by American Rivers to conduct a trend analysis of meadow and stream conditions, prioritize meadows for restoration potential, and prepare restoration alternatives for three meadow systems (Logan Springs, Bogard Springs, and Confluence Meadow). In 2015, project partners, again working through the CRMP, secured funding through a proposal lead by Trout Unlimited to prepare a restoration design plan for Confluence Meadow and conduct necessary compliance and permitting processes for future implementation.

Ownership

Confluence Meadow is owned by the U.S. Department of Agriculture and managed by the U.S. Forest Service, Lesson National Forest.

Location

Pine Creek and Little Harvey Creek join in the southwestern portion of a meadow system referred to herein as Confluence Meadow (Figure 1). Both Little Harvey Creek and Pine Creek were channelized prior to the oldest available aerial photographs (i.e. 1941). Confluence Meadow is located on the United States Geologic Survey (USGS) 7.5 minute Champs Flat, CA quadrangle. Specific legal description is portions of Township (T) 32 North (N), Range (R) 9 East (E), Sections (S) 4-5; T33N, R9E, S33 of the Mount Diablo Meridian.

channelization and subsequent incision and lateral erosion have resulted in an “oversized” Pine Creek.

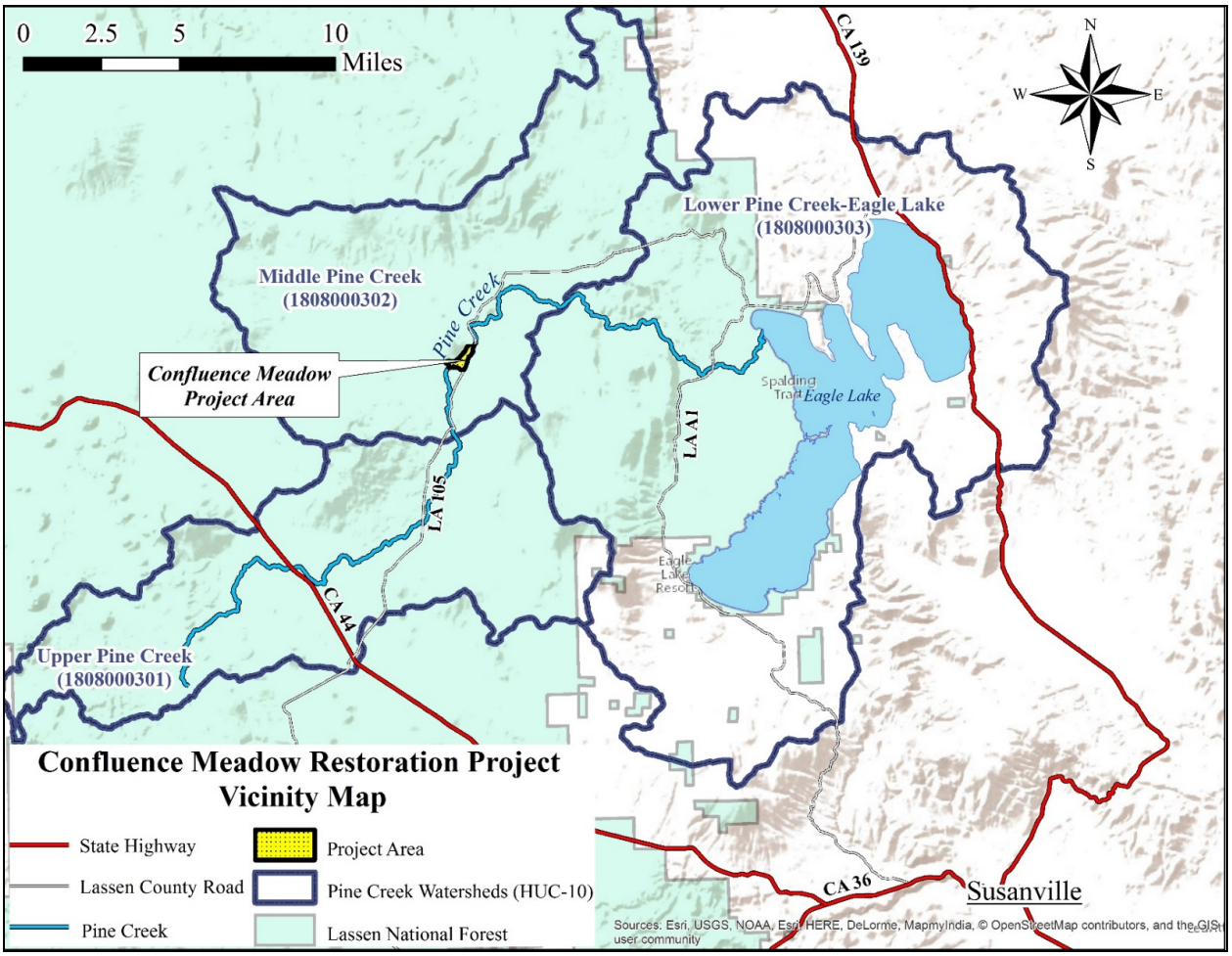

Figure 1. Confluence Meadow. Pine Creek enters from the south to join Little Harvey Creek.

Description of the Project Area, Site History, Existing Land Use and Conditions

As mentioned earlier, Pine Creek has incised into the meadow and is severely entrenched. Channelization certainly resulted in negative hydraulic and hydrologic function, and other factors such as the development of linear floodplain features from trails (both human and livestock), combined with disturbed floodplain vegetation from historic overgrazing, also likely resulted in the degraded condition. Both channelization and the development of surface flow paths that are more straight (i.e. less sinuous) increase the slope of the creek, and directly affect shear stress on its bed and banks. As described in the "Trends Report," the incision and subsequent lateral erosion progress through a well-supported series of changes to the creek and floodplain, referred to as the channel evolution model. Pine Creek within Confluence Meadow has nearly reached the "end state" of this model, whereby the creek develops a functional floodplain at a lower base elevation and no more lateral erosion is present. While this is not the case for Pine Creek yet as lateral erosion is still prominent, the creek bed and adjacent

floodplain is nearly stable (i.e. continuity of riffles and floodplain), creating a false sense of functionality compared to pre-disturbance conditions.

Pine Creek has changed little within Confluence Meadow since 1984 when Platts and Jensen evaluated the site (cite). They described the meadow as severely entrenched and placed it in a similar stream state (i.e. one of the states within the channel evolution model) as was identified during investigations in 2015 (see Trend Report). The USFS has documented improvements in riparian vegetation within the entrenched channel since an exclosure was established between 1990-1995. While these improvements are a positive trend in stream condition, the overall functionality of the stream and it's floodplain has been lost because the base elevation of the new channel is significantly lower than the pre-disturbance elevation. This lowered elevation not only serves to drain the site each year, it also limits the degree which flood flows access it and rehydrate the alluvium. The former floodplain vegetation has been greatly altered and reduced in size and extent within Confluence Meadow. Annual grasses and sagebrush has replaced more mesic perennial grasses, sedges, rushes, and forbs. These areas will convert back to predisturbance conditions unless the objective of this project can be met.

In recent geologic times (i.e. past 1000 years), Pine Creek was a multi-threaded channel system, flowing in both the western and eastern flow paths within Confluence Meadow. Although these flow paths are mostly separated by a terrace, flood flows have worked through the terrace in two locations between the top and bottom end of the meadow system. Both of these paths trend in a north and easterly direction, indicating that the majority of Pine Creek flow, at least in recent times, was within the western flow path. Cross section data also support these views. Floodplain elevations are nearly the same within the western and eastern flow paths, with the western being slightly lower in the upper and lower portions of the meadow.

While Pine Creek flow historically occurred in both flow paths, channel and floodplain characteristics between the two appear to have been very different. The western flow path is currently a complex and diverse network of small channels, with regular and deep pools within the channel features. Floodplain conditions adjacent to these channels consist of dense sedges, rushes, and mesic grasses and forbs. Even with limited flow for many years, this channel network and floodplain conditions has remained intact, and has minor channel issues. The eastern flow path is different. The existing channel size and shape is the result of incision and widening, and has widened so much that floodplain features have mostly been consumed by the process. However, a small historic remnant channel is still present in some locations. This single remnant channel in the eastern floodway is not as well vegetated compared to the channels in the western floodway.

Expected Post-Project Conditions

Implementation of this project will restore the natural form and enhance hydrologic and biological function of Pine Creek in this reach and the surrounding riparian ecosystem along a 4000' reach immediately upstream of the confluence with Little Harvey Creek.

Project Objectives

- Restore a more natural and aesthetic stream pattern and dimension through the reach.
- Enhance the stream habitat and function as refugia for juvenile native rainbow trout.
- Reduce the sediment transport capacity of the channelized Little Harvey and Pine Creek reach.
- Restore the tendency for peak flows to spread across a broad floodplain surface.
- Enhance the capacity of the lower acreage to filter sediment during peak runoff.
- Restore the wetland habitat and vegetative vigor across the lower 200 acres.
- Manage cattle grazing within the Confluence project area using a combination of rest, timing, duration, and cattle numbers to allow sod forming sedges and other plants to establish.

Site Access

Primary Access to the Project Area is adjacent to Forest Service Road 105. This road runs along the eastern boundary for the project area. Access to the upper most portion of the Project area is also available via Forest Service spur road that is not numbed.

Proposed Project

Reconnecting Pine Creek to the floodplain is a sound restoration approach to achieve the objectives described above. Above and below Confluence meadow are basalt and andesite bedrock-dominated stream reaches that provide a natural grade control for this meadow, which decreases the risk for the proposed restoration activities.

Information from The Confluence Meadow Restoration Design Report (Todd Sloat Biological Consulting, Inc., WATERWAYS Consulting, Inc., and Kiesse, 2017, herein after referred to as the "Design Report") was used to develop the proposed action and is hereby incorporated by reference. Proposed actions (Figures 2 and 3) for the two objectives of the project area are described in the following sections.

Meadow Restoration**:** In order to restore Confluence meadow, Pine Creek would be reconnected to its historic floodplain. This involves filling approximately 1.2 miles of the existing incised channel and 0.37 miles of the Little Harvey Creek ditch, allowing stream flows to enter historic remnant channels within the meadow, thereby increasing the base elevation for Pine

Creek. When Pine Creek enters Confluence meadow the slope is reduced and the valley bottom widens greatly reducing stream energy and erosive forces that increase sedimentation. A phased approach would be used to first implement the restoration activities and allow the area to heal, and second to allow Pine Creek to adjust and evolve through time in both the western and eastern flow paths. An existing network of historic remnant channels provide good continuity of low flow paths and the floodplain, minimizing the need to construct any new channels. The Design Report prepared for this project describes the methodology and restoration proposal in detail, which is summarized in the following sections.

Fill Areas: The existing incised channel of Pine Creek and Little Harvey Creek ditch would be filled using nearby earthen material borrowed from higher elevation terraces located within the project area, shown as borrow areas 1 through 13 in Figure 2. If necessary, additional fill would be purchased and imported from a local commercial site on non-Forest Service lands. Approximately 69,000 cubic yards of fill material would be needed. Prior to filling the channel, an excavator would salvage all sod and topsoil from within the channel and the terraces used for borrow. This material would be placed adjacent to the channel or terraces and the sod would be watered to keep vegetation alive prior to transplanting. Prior to revegetating the filled channel and terraces used for borrow, these areas would be disced or ripped to a depth no greater than one foot.

Western Flood Path: Once the existing incised channel of Pine Creek has been filled, flows would be redirected into a remnant channel within what is known as the western flow path. Based on surveys and cross sections collected from LiDAR data, there is good continuity of grade control along this flow path. This continuity would result in flood flows accessing the floodplain and other channels in a consistent manner so that water within the floodplain can enter and exit the channel at similar elevational differences, preventing potential new incision and knickpoints during high flow events. Two reaches within the western flow path, referred to as Reach A and Reach B in the Design Report, have riffle elevations that lack continuity with the floodplain that would be addressed. In these reaches, riffles would be hardened using rock with set elevations at similar distances between their crest and floodplain as other higher riffles in these areas.

A temporary earthen berm or water filled coffer dam would be constructed so that water is directed down the western floodway of the new proposed channel of Pine Creek. This berm would regulate the amount of flow entering the eastern floodway, which could potentially erode the proposed fill areas of the existing incised Pine Creek channel. The berm/barrier would be removed once vegetation along the filled channel and recontoured surface flow paths in the eastern floodway has become vegetated, approximately two-to-four years after implementation.

Eastern Flood Path: There is an historic remnant channel located in what is described in this document as the eastern flood path. This remnant channel would be maintained, with some additional channel creation of similar size and capacity to the existing remnant channel where necessary. This flow path crosses the channel proposed to be filled at three locations. In these areas, a broad flat swale would be created across the filled channel and low berms would be constructed to restrict flow from following the filled existing incised channel of Pine Creek. Salvaged sod from the existing entrenched channel would be used to create this swale, and additional sod imported if needed. The sod would be placed and watered on two or three occasions if construction occurs during the growing season so that roots can become established and to keep the sod alive before it goes dormant.

Small Plugs and Rock Riffle: Several small areas within the project require special attention to prevent erosion. A small earthen plug is proposed near the eastern low flow channel alignment. This plug would reduce the risk of flows from this channel eroding the newly filled areas of the existing entrenched Pine Creek. The second area is near the stock pond in the western floodway where a rock riffle would be placed. Water flowing out of the pond has incised a channel feature that flows into the proposed western low flow alignment. Rock averaging one foot in diameter would be imported to aggrade a riffle, stabilize the channel, and keep it from further eroding and contributing increased sediment to Pine Creek. It would also arrest the potential for the channel to work upstream through the pond and erode into the western floodway. Finally, irregular edges along the filled areas would be created so that flood flows do not concentrate at the seam of new filled areas and adjacent floodplain. These would consist of small earthen or sod barbs of approximately eight inches in height and two-to-three feet wide that would redirect concentrated flow paths away from the seam of the fill area and floodplain, leaving backwatered areas between the barbs.

Meadow Revegetation**:** Revegetation of disturbed areas is an important component of the restoration design, particularly in areas receiving future flood flows. Flow has the potential to erode the filled channel. Establishing the previously described eastern flood path would be the primary feature to minimize this potential effect, as it would ensure flood flows concentrate within this channel rather than on the newly filled areas. The extent of riparian vegetation would increase following restoration activities and vegetative communities would evolve to a community representing the changed hydrology. A combination of passive and active revegetation would be used to ensure that meadow communities recover in response to a changing physical template (hydrologic base elevation). Passive revegetation would occur when the surrounding plant sources expand and recolonize the newly created or reformed surfaces through seeds and tillers. Active revegetation involves planting seeds, plugs, and plants in areas that need high plant density within the first year and accelerate revegetation since passive revegetation can take longer to successfully establish. The salvaged topsoil and sod from the

newly filled channel and terraces provide a combination of upland, mesic, and hydric vegetation and a mix from both sources would be used where transplanting would occur.

Revegetation of the newly filled channels would consist of spreading salvaged topsoil upon filled areas, transplanting salvaged sod, and purchased sod plugs. The new elevation for the lowered terraces would be slightly above the floodplain elevation and have high shallow groundwater levels, promoting the establishment of more mesic vegetation compared to existing vegetation. Therefore, revegetation of lowered terrace areas consists of two approaches, one for areas near floodplain elevations, and the second for transitional-slope areas. First, the salvaged topsoil and sod would be transplanted onto the shaved terraces. Transitional-slope areas would also receive this topsoil, but additional native seed, plugs, and potted plants would be planted that mimic similar species and cover as existing areas that are not disturbed. Additional plantings would occur if monitoring indicates that vegetation is not successfully establishing. A revegetation plan would be developed detailing these actions.

Meadow Protection/Grazing Management**:** Following restoration activities, sufficient rest would be needed to allow plants to establish and grow. The project area is located in two active allotments but would be managed as one pasture, incorporating riparian focused management to accomplish objectives (Figure 3). The 1.7 miles of interior fence line and east end for the existing exclosure around the incised channel would be removed. Approximately 1.9 miles of new fences would be constructed by project collaborators on the south, west, and northwest ends of the project area and tied into existing boundary fences. Fences would then be repaired and maintained as needed by term grazing permit holders. Timing, duration, and intensity of grazing would be more effectively controlled in an enclosed pasture than in large pastures, providing an easier way to make grazing compatible with riparian objectives. In addition, the new fence location would enable control to allow sufficient rest and recovery. Livestock use would not be permitted within the restoration area until vegetative communities have successfully established on the filled channel and shaved terraces. Revegetation communities would vary according to soil types, topography, and depth to ground water. Revegetation would be considered successful when vegetation within the disturbed areas supports non-noxious plants that are similar in forb, graminoid, and woody plant density and cover to those growing on adjacent lands undisturbed by the proposed project activities. In general in areas with wet-to-mesic hydrologic conditions aerial cover for perennial forbs and graminoid species would be greater than 65%. In areas that are mesic-to-dry, aerial cover would be greater than 50%.

Construction Sequence

The beginning of construction should be scheduled to start between August 1 and September 1. This time period typically allows for dry site conditions. It also ensures that vegetation has reached maturity, and potential effects on nesting birds is absent or minimized. The project has been scoped to be constructed using scrappers as the primary machinery to acquire and place fill. This is the most cost effective approach for this type of project, and the same approach has been successfully used at several locations, most notably the Ash Creek Wildlife Area Restoration Project where over 27 miles of degraded stream channels were filled with over 1,000,000 CY. The construction sequence includes: a) salvaging sod and topsoil; b) acquiring, placing, and compacting fill; c) transplanting sod and replacing topsoil; d) planting potted plugs of species for revegetating disturbed areas; and e) watering transplanted sod until the plants become dormant.

The construction time period is estimated to last twenty to twenty-five days. The first few days consist of flagging project elements, mobilizing equipment, and salvaging sod. The average amount of fill placed and compacted is estimated to be 3,000 CY/day. The final phase of replanting disturbed sites is estimated to be one week.

Table 1 Schedule of implementation components.

Project Tasks	Construction Sequence by Week				
Salvage sod and topsoil for disturbance areas					
Acquire fill, transport, place, and compact in channel					
Replace sod and topsoil in disturbed areas; revegetate					
Seed and mulch (native wetland species) key areas					

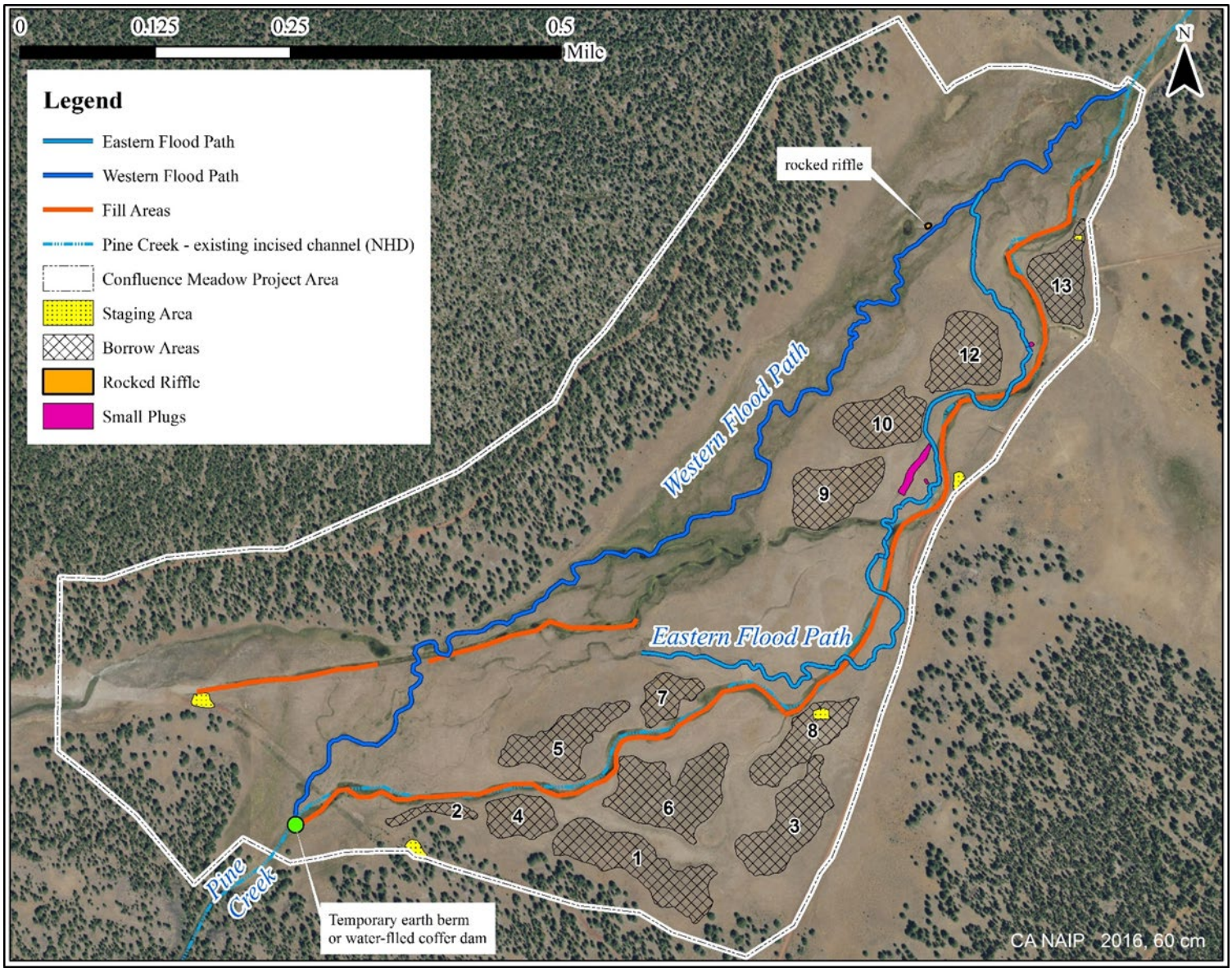

Figure 2. Confluence Meadow Project Design Map

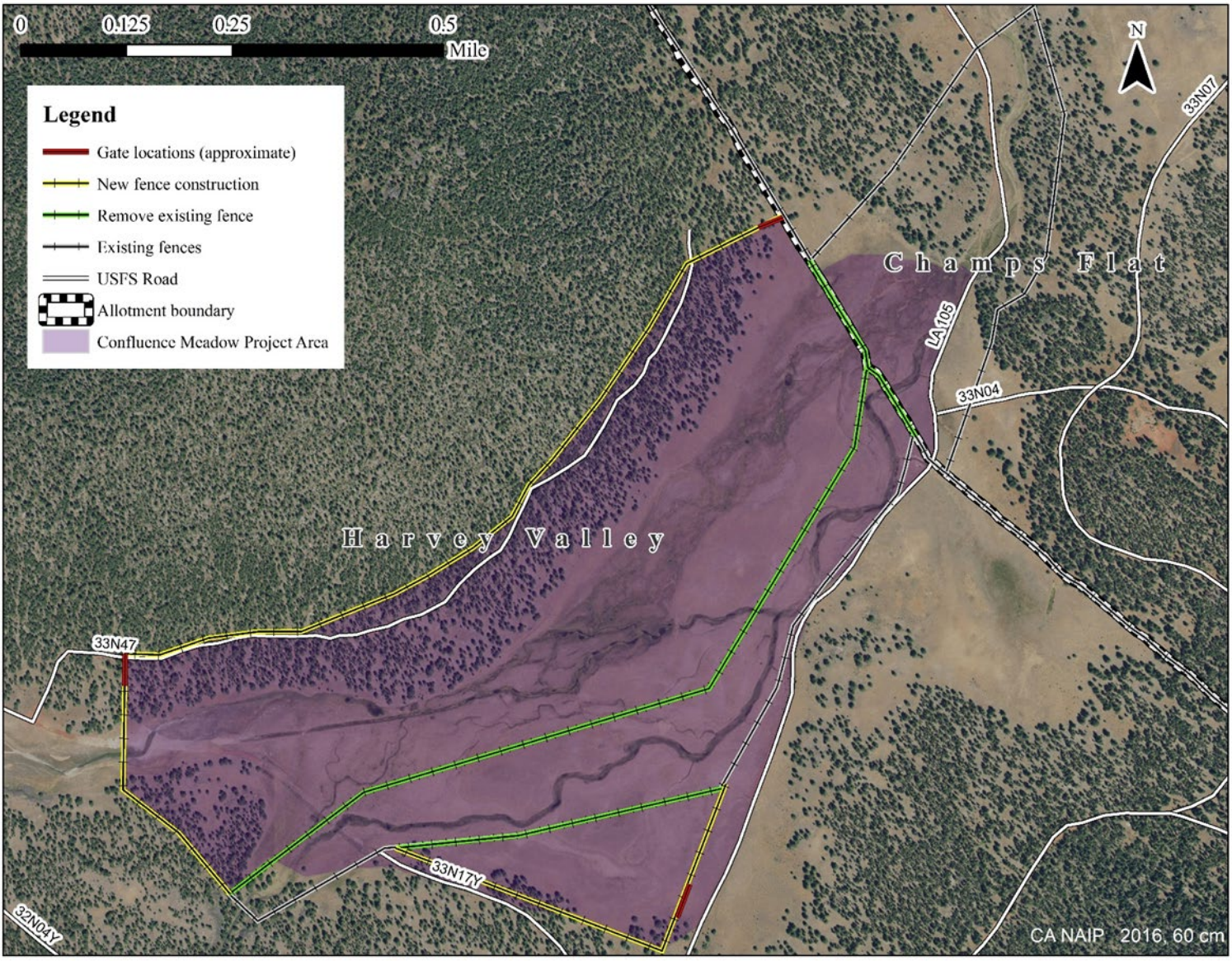

Figure 3. Overview of proposed fences for meadow protection and grazing management.

Resource Protection Measures

To prevent/minimize potential project-related impacts to biological and cultural resources, the Project Plan will implement the following Best Management Practices (BMPs) and species-specific protection measures.

Erosion control

Design channel construction activities will occur under dry conditions prior to redirecting flow. Borrow area excavation and fill of the existing channel will occur under dry conditions. Transport of fill material will primarily occur on channel fill areas to minimize any disturbance to the floodplain. Access routers will be decompacted and reseeded. All construction activities are short term.

Water Quality/Discharge

No activities will be conducted during flow periods. Any remaining water in channels will not be hydrologically connected to downstream areas and will only consist of shallow ground water pools.

Hazardous substances

The following BMPs will be implemented to prevent spills or releases of hazardous substances into waterways and/or wet meadow habitats.

- Hazardous waste products such as grease cartridges and oil absorbents will be placed in proper containers and transported from the work site to an authorized Hazardous Waste Collection Site.
- No fuel storage containers will be placed on the site.
- No fueling or equipment service will be performed within 100' of any channel fill areas, remnant or design channel or active water course.
- All fuel transport to equipment will occur via pickup truck transfer tanks.
- Stationary equipment containing lubricating oils and fuel (e.g., portable generators) will be placed within a secondary containment.
- Heavy-duty pressure washing and/or steam cleaning of heavy machinery will be done off-site. All machinery will be maintained in a leak-free condition.

To prevent spread of invasive species, all tracked construction equipment and other heavy machinery will be washed (high-pressure washing) before transport to the site. All field gear, such as boots, waders, etc., will be washed, sanitized, and/or completely dried before entering the existing and newly constructed waterways. During the post construction phase, all disturbed areas will be seeded and mulched with native species.

Wildlife Resources

Prior to conducting pre-project wildlife surveys, the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB) (2015) query was conducted for the nine surrounding USGS quads and U.S. Forest Service Sensitive Species occurrences were reviewed. Wildlife surveys of the project area were conducted spring and early summer of 2015-2017.

Terrestrial wildlife – Todd Sloat Biological Consulting, Inc.; U.S. Forest Service
Botany – Overlin Biological Consulting, LLC; U.S. Forest Service
Aquatic wildlife – U.S. Forest Service; Trout Unlimited

The CNDDB query, US Forest Service records, and wildlife surveys identified the following special status species either observed or likely to occur on the project area:

Greater Sandhill Crane

Gray wolf

Impact Assessment and Mitigation Measures to Reduce Potentially Significant Impacts to Less Than Significant Levels

Based on the expected project activities, known occurrences of special-status species, or likelihood of occurrence of those species, the following assessment was made for potential impacts. Potential impacts could occur to nesting greater sandhill crane if construction activities are conducted during the nesting season and those activities result in the mortality of nesting individuals (i.e. adults and/or young) from displacement or direct contact (e.g. breaking of eggs). These potential impacts would be considered significant. In order to reduce these potential impacts to a less-than significant level, pre-construction surveys should be conducted to determine the presence of them if those activities are proposed during the nesting season (May 1 through August 1st). If no nesting individuals are found, then no impacts would result from construction activities. If nesting individuals are found, then construction activities should be delayed until nesting is completed and young have fledged and can avoid direct affects from construction.

Gray wolf are known to occur within Lassen National Forest (CDFW pers. comm. 2018). The nearest denning locations is approximately 10 miles south of the project area. Potential impacts could occur to denning individuals if they were to be denning in or near the project area. These potential impacts would be considered significant. In order to reduce these potential impacts to a less-than significant level, pre-construction surveys should be conducted to determine the presence of gray wolf during the denning season (March 1 through August 15). If no dens or pup rendezvous sites are found within the project site or within one mile, then no impacts would result from construction activities. If denning or pup rendezvous individuals are found, then construction activities should be delayed until individuals have dispersed and the family until is no longer using the area for denning during the rearing season.

Wildlife Resources Mitigations Summary

Project design features incorporate wildlife mitigation measures described above to result in no potential significant adverse significant impacts. To facilitate agricultural lease utilization (i.e. grazing) and provide project operating conditions of no stream flow and late season soil moisture conditions the project implementation schedule will occur late in the summer and early fall period (September-October).

This implementation period avoids the breeding season of avian special status species and gray wolf associated with the projects area . **(Mitigation Measure #1 – Implement the project between August 1 and October 15)**

Botanical Resources

U.S. Forest Service staff conducted a plant surveys in June 2016 to determine the presence of threatened, endangered (TES), or other sensitive species within the proposed project.

Pre-field activities included review of results of previous TES surveys in the project vicinity, records of the occurrence of TES and other species of interest maintained by the California Department of Fish and Wildlife (CDFW), the California Native Plant Society, and the California Natural Diversity Database. No special status species were observed during the conducted surveys. (U.S. Forest Service 2018)

Cultural Resources

A cultural resources inventory was conducted by U.S. Forest Service staff to evaluate any historic properties that may be disturbed by the project. This inventory was conducted to fulfill the requirements of the National Environmental Policy Act (NEPA) of 1969, Section 106 of the National Historic Preservation Act of 1966 (as amended August 5, 2004), and the California Environmental Quality Act (CEQA) of 1970.

One prehistoric and two historic sites were located within the project Study Area. Project elements were relocated to avoid the prehistoric site and the historic sites were granted approval to be altered by project activities. All sites near construction activities to be avoided will be flagged and protected during construction.

If any cultural artifacts are uncovered during project implementation, all project activities will cease in the area until the artifacts can be examined by an archaeologist. If human remains are encountered compliance with CA Health and Safety Code Section 7050.5 will occur.

Permitting and Agency Approvals

This project description is prepared to accompany a California Environmental Quality Act (CEQA) Mitigated Negative Declaration (Title 14 CCR, Chapter 3, Article 6, Sections 15070-15075). The Honey Lake Valley Resource Conservation is Lead Agency. Lead Agency contact person is Ian Sims, District Manager, Honey Lake Valley Resource Conservation District (775)313-1222 The primary permit for this project is the CDFW Lake and Streambed Alteration Agreement, (Fish and Game Code, Section 1600).

Other permits and certifications required for the project are:

U.S. Army Corps of Engineers, Clean Water Act Section 404 Permit
U.S. Fish and Wildlife Service, Informal Consultation, (Section 7 Endangered Species Act)
Regional Water Quality Control Board, 401 Certification of Waste Discharge Requirement
Environmental Protection Agency, National Historic Preservation Act, Section 106

Document Preparation

This Project Description and the Draft Initial Study / Mitigated Negative Declaration Environmental Checklist were prepared by Todd Sloat, Forest Creek Restoration, Inc. (consultant).

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Literature Cited

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ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

a) The project area is not within or along a designated scenic area or highway. The project conforms to current land uses, maintaining agricultural uses. The project objectives of restoring the functionality of the floodplain and productivity of the meadow will enhance agricultural and scenic qualities.

b and c) By restoring the historic hydrology and attendant vegetative communities, the project is expected to have a demonstrable positive aesthetic effect.

d) The only glare associated with this restoration project, would be more sunlight reflecting off of water retained in wet meadow areas or in the ponds.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

a-d) The project area is located on lands managed by the U.S. Forest Service. This project is consistent with the Lassen National Forest Land and Resource Management Plan (1992). Agriculture is a common land use in the immediately vicinity of the project in the form of grazing.

e) Some potential loss of agricultural use acreage may occur depending on future management of the project area. Approximately 100 acres of currently grazed area will have modified hydrology and vegetation post project. Modified grazing practices could continue on much of this acreage following project stabilization depending on management objectives and monitoring results. This project has been initiated by the Pine Creek Coordinated Resource Management Group with consideration and acceptance of the potential loss of acreage available for grazing by lease members.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

a-e) The Project proposes no new structures or activities (short or long-term) that would impact air quality. Heavy equipment will be used temporally for project implementation. The use of heavy equipment to complete these activities is common to the rural Lassen County area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

a) A query of the California Natural Diversity Database (CNDDB) was carried out by Forest Creek Restoration, Inc. in December 2018. The following United States Geological Survey (USGS) 7.5-minute topographic quadrangles (quads) were queried: Champs Flat, Straylor Lake, Bullard Lake, Sheepshead, Harvey Mountain, Spalding Tract, Pine Creek Valley, Antelope Mountain, Pikes Point (9-quad search). Additionally, surveys were conducted for rare plants, terrestrial wildlife and aquatic species by U.S. Forest Service staff and consultants.

The following special status species have either been observed or are likely to occur on the project area:

Greater sandhill crane (*Grus canadensis tabida)*
Gray wolf (*Canis lupus*)

Potential impacts could occur to nesting greater sandhill crane if construction activities are conducted during the nesting season and those activities result in the mortality of nesting individuals (i.e. adults and/or young) from displacement or direct contact (e.g. breaking of eggs). These potential impacts would be considered significant. In order to reduce these potential impacts to a less-than significant level, pre-construction surveys should be conducted to determine the presence of them if those activities are proposed during the nesting season (May through August 1st). If no nesting individuals are found, then no impacts would result from construction activities. If nesting individuals are found, then construction activities should be delayed until nesting is completed and young have fledged and can avoid direct affects from construction.

Gray wolf are known to occur within Lassen National Forest (CDFW pers. comm. 2018). The nearest denning locations is approximately 10 miles south of the project area. Potential impacts could occur to denning individuals if they were to be

denning in or near the project area. These potential impacts would be considered significant. In order to reduce these potential impacts to a less-than significant level, pre-construction surveys should be conducted to determine the presence of gray wolf during the denning season (May 1 through August 1st). If no dens are found within the project site or within ½ mile, then no impacts would result from construction activities. If denning individuals are found, then construction activities should be delayed until individuals have dispersed and the family until is no longer using the area for denning during the rearing season.

Mitigation Measure #1 - Implement the project between August 1 and October 15 – The project implementation period is limited to late summer and early fall (September-October) as described in the above Project Description. This period is best suited for implementation in consideration of seasonal ground water conditions, irrigation requirements and cattle management, but also functions as a de facto limited operating period to avoid impacts during the breeding periods of special status avian species and potentially denning wolves. This period is past the breeding period of all identified special status species. No potential significant adverse impacts would occur.

b and c) The project will not have a substantial adverse long-term effect on any wetlands, riparian areas, or riverine habitats. Implementation of the project will result in a net increase of these habitats.

d) Short term disturbances will be limited to the project area as addressed with Mitigation Measure #2. Movement of native resident or migratory fish and wildlife through corridors, or nursery site is an objective of this project and is expected to be enhanced. Impacts are anticipated to be less than significant.

e and f) There will no conflict with local policies or ordinances, Habitat Conservation Plans or Natural Community Conservation Plans.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

a – d) No impact. A Cultural resources survey was conducted within the project area and potential access routes by U.S. Forest Service staff. The confidential Archaeological Survey Report for the Project is referenced here although not provided for public review; it is available by request for authorized agency review.

One prehistoric and two historic sites were located within the project Study Area. Project elements have been altered to avoid the prehistoric site. The historic sites have been approved to be altered by project activities. All of the sites to be avoided will be flagged and protected during construction.

AB 52 Compliance – Letters were sent to the Pit River Tribe and Susanville Rancheria on 12/18/18 notifying the tribes of AB 52 consultation opportunity. Letters are attached at the end of this document.

If any cultural artifacts are uncovered during project implementation, all project activities will cease in the area until the artifacts can be examined by an archaeologist. If human remains are encountered compliance with CA Health and Safety Code Section 7050.5 will occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

a, c, d and e) No impacts.

b) All project work will be completed in and around the Pine Creek channel. These areas include instream, riparian, natural pasture (potential wetland), and flood plain. Surface soils will be disturbed during fil source borrow area excavation, channel filling, remnant channel connections, sod and riparian vegetation harvesting and replacement involving the use of heavy equipment. To minimize soil erosion and impacts, bare soil stabilization with harvested sod and mulch, seeding and native plant restoration will facilitate design channel stabilization and eliminate the deterioration and erosion of pre-project channelized stream bank and levee failure of the current channelized stream levee structure during high flow events by restoration of flood plain access.

Project activities related potential soil and stream bank erosion will implement BMPs and standard protocols listed above and in related documents to minimize soil erosion (during operations with long-term reductions). The basic hydrologic objective of the project design is to minimize and reduce existing and potential erosion and sediment related problems in the project area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS -- Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

a) The proposed project would generate short term greenhouse gas emissions from the exhaust of vehicles and heavy equipment used to transport crews, equipment and materials. The exhaust gases are not expected to violate the applicable standard in the area.

b) No impacts.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

a – g) No impacts. There is no risk of accidental explosion or release of hazardous substances associated with this project, other than those normally associated with use of any equipment with an internal combustion engine. Re-fueling and equipment maintenance will be conducted in designated areas outside of the riparian area.

h) The project area is managed for cattle grazing, and will remain in that use resulting in no change in fire hazard as a result of the project. Project construction will be in moist channel areas where there is little fire hazard. Water pumping equipment will be on site during construction for incidental fire suppression.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

The project is a stream channel and meadow restoration activity. One of the objectives of the project is to improve absorption rates, drainage patterns and the rate and amount of runoff. Absorption rates would be improved by elevating the stream channel out of its current gullied depth, back onto the meadow elevation. This, in turn, is expected to reverse the vegetative trend from the current plant associations developed over time from grazing management to a vigorous community of wet meadow and emergent wetland species. The root system of this community, as well as the restored function of the floodplain, is expected to increase absorption rates, thereby attenuating flood flows, and increasing summer base flows. This improved timing of the drainage pattern, and the rate and amount of runoff, is another project objective. No significant change from historic drainage patterns location is expected. Flows will be returned to historic remnant channels on the surface of the meadow.

This project is expected to improve water quality parameters of temperature, dissolved oxygen, sediment and turbidity. The poor water quality attribute of high summer temperatures should be improved by augmented summer flows. The

increased volume of summer flows, a narrow and more sinuous channel and expected improvement of riparian vegetation (shade) should lower summer temperatures. Decreased temperature and increased hyporheic exchange with the floodplain will result in higher dissolved oxygen levels.

a, b, e, f, g, I and j) No impacts

c, d and h) This project may slightly increase the area of surface water in the Pine Creek drainage. Use of borrow areas will result in filling of most of the current straightened channel, with the fill (plug) material coming from digging borrow material from higher elevation terrace areas nearby. The borrow areas will become meadow as they will be lowered to elevations of similar meadow areas. Flows would no longer route through the straight channel, but would go through a series of remnant channel connections. High surface water flows will sheet overland at low velocities at only a few inches to one foot in depth, while normal discharges will flow into existing remnant channels. This is apt to decrease the magnitude of flood flows downstream during the high runoff periods in winter and early spring. It is projected that increased absorption rates in the meadow will result in greater groundwater recharge and increased summer base flows.

Historic flows through the project area (as in most meadow systems) were dynamic, with channels regularly being created, filled and abandoned over geologic time. The oversized Pine Creek channel has disrupted this natural dynamic, creating a single entrenched channel that acts like a flume, directing flood flows at high velocities downstream. The project seeks to restore the floodplain function by reconnecting flows to remnant channels at the original meadow elevation, attenuating flood flows.

By increasing filtration in the floodplain meadow, this project is expected to increase groundwater recharge during high winter flows for slower release throughout the drier summer. The groundwater table is expected to rise toward the meadow surface throughout the project area, particularly within the confluence area creating areas of open water and emergent vegetation areas. The resulting increase of ground water holding capacity will reduce seasonal fluctuations in water levels while providing for late winter/spring saturation of the wetlands and meadow area.

This project is not expected to change the direction of groundwater flow, but is expected to slow down the rate of groundwater flow. Through restoring the floodplain function and increasing absorption rates in the meadow, the rate of groundwater release is expected to slow down. Resulting probable benefits long-term are increased summer base flows and improved timing of drainage patterns.

This project is expected to improve groundwater quality by enhancing the exchange of water between surface and subsurface sources and filtering precipitation recharge through a more vigorous vegetation layer.

This project will not negatively change the amount of water available for private or public water supplies. Long term this project is anticipated to improve the timing of drainage patterns, improving the availability of water supplies late in the season.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a – c) No impacts.

The project area is currently managed by the Lassen National forest and is not subject to local zoning ordinances. The project is consistent with the Lassen National Forest Land Resource and Management Plan. This Plan protects and enhances natural resources within LNF. Agricultural uses will be maintained and enhanced by the project objectives of restoring the functionality of the floodplain and productivity of the meadow. Grazing management within the project area will be based on coordinated collaboration between the private landowner (i.e. lease) and LNF.

The existing land use is agricultural livestock production. Temporary (2-3 years) grazing deferment post-project will occur, with prescribed grazing following the non-use.

The project is compatible with existing and adjacent agricultural and timber operations. Actual affects are expected to be beneficial to agricultural resources through the restoration of meadow productivity and improved grazing management.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

a – b) No impacts. The project work does not entail the extraction of mineral resources. As a result, this project will not result in the loss of mineral resources or the availability of a locally important mineral resource recovery site.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a Project within the vicinity of a private airstrip, will the Project expose people residing or working in the Project Area to excessive noise levels?	☐	☐	☐	☒

c, e and f) No impacts. The project area is located in a remote area of Lassen County. Noise generated by the project will be limited to noise created during construction. Once work has been completed, noise levels will return to ambient levels.

a, b and d) The project will use heavy equipment for construction. The duration of the noise created by heavy equipment will be limited (short-term) in duration to the time it takes to complete the individual components of the project. All Project components will be completed during daylight hours. Noise levels or ground borne disturbances are not anticipated to exceed any applicable local, state, or federal noise level standards.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a – c) The project Area is within a remote area of Lassen County on federally managed lands. Project work will occur within or immediately adjacent to the Pine Creek stream channel and will not impact development or population growth with the vicinity of the Project Area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

a) The project is located in a remote area of Lassen County. There are no residential developed areas, parks or other public services or facilities in the immediate vicinity that could be impacted.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

a and b) Limited public recreation occurs at the project area from occasional hikers and/or bird watching. The project may slightly increase this level of activity, but given the remote location of the site, it is not expected to result in any substantial impacts or require the construction or expansion of recreational facilities. There are currently no public facilities on-site or nearby.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

a) Construction access will be from FS Road 105 and an unnumbered spur road to the southwest. Construction crew traffic will increase utilization of these roads curing the construction phase (ca. 4-6 weeks). However, the roads will remain open to the public and no altarations in public access are necessary as project work will be within the meadow and along the fill areas where the public currently does not have access.
b – f) No impacts related to Transportation or Traffic are anticipated. All project work will occur in remote Lassen County off FS Road 105.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

a – c and e – g) The project will not create a wastewater discharge, require or result in the construction of new water or wastewater treatment facilities, or require or result in the construction of new storm water drainage facilities.

d) Salvaged sod will require occasional watering will it is staged for replanting. This may require filling tanks to transport water to the site to water the sod. The water source for this effort has been identified as the draw site near Bogard. The amount of water needed is minimal (< 500 gallons) and will not require expansion of existing entitlements or reduce these to minimum levels.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

a) The objectives of the project are listed below and consistent with the Proposed Action and Purpose and Need for the Project:
Objective 1: Improve the meadow function and increase duration of flows by reconnecting the portion of Pine Creek flowing through Confluence meadow with its historic floodplain.

Objective 2: Manage cattle grazing within the Confluence project area using a combination of rest, timing, duration, and cattle numbers to restore and maintain sod riparian and meadow vegetation.

Pine Creek and Little Harvey Creek channel though the project area had been straightened and/or modified with a levee by the U.S. Forest Service without apparent consideration of stream and meadow morphological principles. This is the principle conditions that the project is designed to address. Specifically, by improving the quality of the environment, it is expected to increase habitat for, and subsequent populations and communities of, fish and wildlife species. Project components with mitigations to enhance wildlife habitat and protect archeological resources have been incorporated into the project design. Wildlife surveys and assessments conducted in 2017 contributed to a limited operating period mitigation to avoid potential adverse impact to special status avian and mammal species. An 2017 archaeological survey and assessment identified cultural resources that will be flagged and avoided during project implementation. In the event that an archeological resource is uncovered during construction activities, there would be a temporary halt to the activity until a determination is made by a qualified archeologist on how to proceed.

Acquiring fill and placing this material to treat oversized channels is a long term, sustainable solution to degradation-related problems. The technique addresses the root problem – loss of channel access to the floodplain, and the subsequent de-watering of the historic meadow and confluence area. By eliminating the straighten channel and restoring the natural functionality of the system, the ecosystem will be able to maintain its environmental integrity over the long term. Long term benefits expected from this project include: vegetation transition to a community of wet meadow species; increased absorption rates and groundwater levels; improved timing of drainage patterns, resulting in attenuated flood flows, and increased summer base flows. In addition, improved grazing management is planned to protect restored riparian conditions.

b) This project will support and implement numerous goals and actions identified in the Lassen National Forest Land and

Resource Management Plan (1992) and 1993 *Record of Decision* (ROD) as amended by the *Sierra Nevada Forest Plan Amendment* (SNFPA) FSEIS and ROD (2004). Examples of these goals and associated actions include:

- maintain and restore the hydrologic connectivity of streams, meadows, wetlands and other special aquatic features by identifying roads and trails that intercept, divert, or disrupt natural surface and subsurface water flow paths,
- maintain and restore spatial and temporal connectivity for aquatic and riparian species within and between watersheds to provide physically, chemically, and biologically unobstructed movement for their survival, migration, and reproduction,
- maintain and restore the physical structure and condition of stream banks and shorelines to minimize erosion and sustain desired habitat diversity, and
- maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows, wetlands, and other special aquatic features.

Management direction for the LNF LRMP includes the following:

- Improve riparian conditions along Pine Creek. Consider fencing, grazing management and improvement projects (4-130).
- Emphasize Watershed Restoration and Improvement, Fish Habitat management practices in Riparian/Fish Prescription areas (4-50).

The objectives are also aligned with both the Region 5 Ecological Restoration Leadership Intent (USDA FS, 2011) to restore at least 50% of accessible, degraded forest meadows to improve habitat function and ability to hold water longer into the summer and deliver clean water. Reconnecting incised channels to the floodplain to distribute flood flows was also identified as a high priority in Goal 2, Objective 2.2 of the Eagle Lake Rainbow Trout Conservation Strategy to provide suitable stream/riparian habitat conditions for ELRT in the Pine Creek watershed.

While measurable benefits are expected in the immediate project area, the limited scale of this project within the greater Pine Creek watershed is expected to produce minimal measurable benefits at the watershed scale on its own merit. Future nearby similar projects may provide potential significant beneficial effects that when considered in conjunction with the Confluence Meadow Restoration Project can potential lead to positive cumulative long-term effects. The stakeholders have expressed their hope that his project will lead to and support stream channel restoration projects in other degraded meadows systems within the watershed.

The Logan Springs Restoration Project (currently in a planning phase) is located .5 miles upstream of Confluence Meadow. This project has similar goals and objectives to the Confluence Meadow Restoration Project, and if implemente4d, would represent a clear potential for positive cumulative benefits. No future implementation schedule has been developed.

c) The project poses no substantial adverse effects on human beings, either directly or indirectly.

Honey Lake Valley Resource Conservation District

170 Russell Ave., Suite C.
Susanville, CA 96130
(530)252-7271

www.honeylakevalleyrcd.org

December 18, 2018

RE: Confluence Meadow Restoration Project

Dear Cultural Resources Representative:

The Honey Lake Valley Resource Conservation District (HLV RCD) hereby notifies you that it is proposing to conduct a project located in the geographic area traditionally and culturally affiliated with the Pit River Tribe. Under California state law, the project is subject to the California Environmental Quality Act, and HLV RCD will prepare an environmental document consisting of a: 1) Categorical Exemption; 2) a negative declaration, 3) a mitigated negative declaration, or 4) an environmental impact report. State law under Assembly Bill 52 (Public Resources Code Section 21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. The request must be in writing to HLV RCD and must identify a lead contact person. HLV RCD will begin the consultation process within 30 days of receiving the tribe's request for consultation. The consultation may include a discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to HLV RCD regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any appropriate measures to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to HLV RCD at address listed above.

Project Information: Confluence Meadow Restoration Project

County: Lassen

Legal Location: Township (T) 32 North (N), Range (R) 9 East (E), Sections (S) 4-5; T33N, R9E, S33 of the Mount Diablo Meridian. This project is on lands managed by the U.S. Forest Service.

Distance and Direction to Nearest Community or Landmark: Spalding, CA

Project Description: see attached

Please feel free to contact me if you have any questions concerning this proposed project or what is being requested in this letter.

Sincerely,

Ian Sims
District Manager
Honey Lake Valley RCD
170 Russell Avenue, Suite C
Susanville, CA 96130
(775)313-1222

Honey Lake Valley Resource Conservation District

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Susanville, CA 96130
(530)252-7271

www.honeylakevalleyrcd.org

December 18, 2018

RE: Confluence Meadow Restoration Project

Dear Cultural Resources Representative:

The Honey Lake Valley Resource Conservation District (HLV RCD) hereby notifies you that it is proposing to conduct a project located in the geographic area traditionally and culturally affiliated with the Susanville Indian Rancheria. Under California state law, the project is subject to the California Environmental Quality Act, and HLV RCD will prepare an environmental document consisting of a: 1) Categorical Exemption; 2) a negative declaration, 3) a mitigated negative declaration, or 4) an environmental impact report. State law under Assembly Bill 52 (Public Resources Code Section 21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. The request must be in writing to HLV RCD and must identify a lead contact person. HLV RCD will begin the consultation process within 30 days of receiving the tribe's request for consultation. The consultation may include a discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to HLV RCD regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any appropriate measures to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to HLV RCD at address listed above.

Project Information: Confluence Meadow Restoration Project

County: Lassen

Legal Location: Township (T) 32 North (N), Range (R) 9 East (E), Sections (S) 4-5; T33N, R9E, S33 of the Mount Diablo Meridian. This project is on lands managed by the U.S. Forest Service.

Distance and Direction to Nearest Community or Landmark: Spalding, CA

Project Description: see attached

Please feel free to contact me if you have any questions concerning this proposed project or what is being requested in this letter.

Sincerely,

Ian Sims
District Manager
Honey Lake Valley RCD
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Susanville, CA 96130
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