

Summary Form for Electronic Document Submittal

Form F

Lead agencies may include 15 hardcopies of this document when submitting electronic copies of Environmental Impact Reports, Negative Declarations, Mitigated Negative Declarations, or Notices of Preparation to the State Clearinghouse (SCH). The SCH also accepts other summaries, such as EIR Executive Summaries prepared pursuant to CEQA Guidelines Section 15123. Please include one copy of the Notice of Completion Form (NOC) with your submission and attach the summary to each electronic copy of the document.

SCH #: _____

Project Title: Foster Meadow Restoration Project

Lead Agency: Central Valley Regional Water Quality Control Board

Contact Name: Greg Hendricks

Email: Greg.Hendricks@Waterboards.ca.gov Phone Number: 916-464-4709

Project Location: Foster Meadow, Eldorado National Forest El Dorado
City *County*

Project Description (Proposed actions, location, and/or consequences).

The Foster Meadow Restoration Project (Project) will restore channel-floodplain connectivity in the headwaters of the Middle Fork Cosumnes River in Foster Meadow (Eldorado National Forest, El Dorado County, California). The Project is an activity that will eliminate incised gullies and improve aquatic organism passage (AOP) at the Foster Meadow Road (FS9N14) crossing. Filling the incised channels will require excavation and placement, using heavy equipment, of 22,533 cu yds of soil fill in 7 plugs to eliminate the existing gullies and raise/restore the base elevation of surface water flow in the meadow by redirecting flow into existing vegetated remnant channels. Fill sources include 4 borrow pits along the meadow margins and 4 areas of in-meadow cut/grading. The project will also require placement of 900 cu yds of 2.0-ft minus rock/soil, sourced from the US Forest Service (USFS) Tragedy Pit, for the placement of 9 rock riffles at the project bottom to create a transition between the new meadow gradient and downstream channel gradient, and for the construction of the AOP. The AOP will include multiple floodplain culverts to eliminate the existing backwater effect and improve passage opportunities through the crossing.

Identify the project's significant or potentially significant effects and briefly describe any proposed mitigation measures that would reduce or avoid that effect.

Please see attached sheets for a summary of mitigation measures.

If applicable, describe any of the project's areas of controversy known to the Lead Agency, including issues raised by agencies and the public.

There are no known areas of controversy associated with the Foster Meadow Restoration Project.

Provide a list of the responsible or trustee agencies for the project.

The Responsible Agencies associated with the project are as follows:

US Army Corps of Engineers - Clean Water Act Section 404 Permit

US Forest Service - NEPA Decision Memorandum

Central Valley Regional Water Quality Control Board - Section 401 Water Quality Certification

Summary Form for Electronic Document Submittal

Foster Meadow Restoration Project

This section summarizes the Mitigation Measures discussed under each section of the Initial Study checklist. Some of the measures are redundant because they protect more than one resource.

Mitigation Measures

Air Quality

Potential impacts to air quality from PM10 fugitive dust emissions from construction activities would be less-than-significant with the implementation of the following mitigation measures:

- 3a.** Construction fill and cut areas would be watered as necessary to prevent visible emissions from extending more than 100 feet beyond the active work areas unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
- 3b.** Disturbed surface areas would be watered in sufficient quantity and frequency to suppress dust and maintain a stabilized surface.
- 3c.** At least 80 percent of all inactive disturbed surface areas would be watered on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible due to excessive slope or other safety conditions.
- 3d.** All unpaved roads used for any vehicular traffic would be watered at least once per every two hours of active operations.
- 3e.** The Geology/Soils impact discussion includes mitigation measures to address re-vegetation, which include the following:
 - All desirable plant material that would be excavated or buried in plugs, such as sod mats and willow wads, will be removed and transplanted to plugs, terraces and at key locations in the remnant channel. Locations of transplants are prioritized according to need for maximum soil protection in bare areas and areas of potentially high stress.
 - During the spring and summer following project completion, locally collected seeds would be dispersed into terrace cuts, plugs, and other heavily disturbed areas.
 - Container stock from locally-sourced material would be hand planted in the spring and summer in key locations. Container stock will consist of rhizomatous species that can quickly colonize the terrace cuts and plugs.
 - All revegetation areas would be monitored for three years following project completion. Successful revegetation would consist of 70% survival of willow cuttings and transplanted seedlings. Seeded areas would have at least 50% cover of native vegetation. Any areas that do not meet the survival or cover criteria would be reseeded or replanted.

Biological Resources

Terrestrial Wildlife

The following mitigation measures will ensure that potential construction noise disturbance impacts to CA spotted owl or northern goshawk reproduction would be less than significant:

4a. The ENF District Biologist will conduct pre-construction surveys for California spotted owl and northern goshawk in August, at least two weeks prior to project construction, to determine presence and status of these species within the project area. If California spotted owl or northern goshawk nesting is detected, a limited operating period (LOP) for the detected species may be observed through September 15, when nesting activities are complete. The LOP may not be necessary depending on where the nest/reproductive activity is taking place, in relation to project activities, and will be assessed by the biologist to protect reproduction as necessary. If deemed necessary, the LOP would restrict project activities no more than 0.25 mile from the located nesting/reproductive activity center. Project construction outside the 0.25 mile buffer may continue during the specified LOP.

4b. The District Biologist will be on site during project construction and has the authority to adjust the project to protect Threatened, Endangered and Sensitive species.

Aquatic Wildlife

It was determined that the Foster Meadow Restoration Project may affect, and is likely to adversely affect the Sierra Nevada yellow-legged frog (SNYLF), as consistent with the Programmatic Biological Opinion on Nine Forest Programs on Nine National Forests in the Sierra Nevada of California for the Endangered Sierra Nevada Yellow-legged Frog, Endangered Northern Distinct Population Segment of the Mountain Yellow-legged Frog, and Threatened Yosemite Toad (Programmatic BO). The proposed project implements standards and guidelines and Best Management Practices (BMPs) that will minimize potential project level effects. In addition, project-specific mitigation measures/design criteria were developed that either minimize the intensity and duration of project activities or exclude such from occurring within suitable SNYLF habitat or within a proportion of habitat (see mitigation measures, below). The Project has been designed to implement all of the Conservation Measures and Terms and Conditions described in the Programmatic BO. By implementing the following BMPs, mitigation measures/design criteria, and Conservation Measures and Terms and Conditions, the project would have a less-than-significant impact to SNYLF:

4c. The project activities will conform to the conservation measures and terms and conditions requirements in the Biological Opinion (USFWS 12/19/2014), and subsequent letter which appends this and other projects to that document (USFWS 02/08/2018).

4d. Visual Encounter surveys will be conducted for Sierra Nevada yellow-legged frogs by a qualified Forest Service biologist within 24 hours of construction at the Foster Meadow Road 9N14 stream crossing and within the entire Foster Meadow project area.

4e. If the Sierra Nevada yellow-legged frog are found within the project area during project implementation, their safety shall be assessed by qualified personnel and dealt with according to the Terms and Conditions described in the 2014 Programmatic Biological Opinion issued by the US Fish and Wildlife Service.

4f. Existing waterholes and other aquatic sites including ponds, lakes and streams used for water drafting would be surveyed for Aquatic TES species and flow levels taken prior to use. In the event TES species are found to occur at drafting sites; sites will not be used and future surveys would be conducted by an aquatic specialist to determine presence of potential populations. Dufrene Pond, a nearby manmade pond designated for drafting, contains a small breeding population of SNYLF and will **not** be used for drafting water for dust abatement or other construction needs.

4g. The use of low velocity water pumps and screening devices for pumps (per S&G 110) will be utilized during drafting for project treatments to prevent mortality of eggs, tadpoles, juveniles, and adult SNYLF. A drafting box measuring 2 feet on all sides covered in a maximum of 0.25 inch screening is required.

Botanical Species

Management of botanical resources, special habitats, and noxious weeds would follow the standards and guidelines in the Sierra Nevada Forest Amendment Record of Decision (SNFPA ROD 2004). Specific design criteria and protection measures for the Foster Meadow project would ensure that impacts to sensitive plants, fens, and invasive species would be less-than-significant:

4h. Any new occurrences of sensitive plants identified within the project area would be flagged and avoided when necessary.

4i. A watchlist species, *Botrychium simplex*, occurs within Foster meadow. All known occurrences will be flagged for avoidance during project implementation. Should any new threatened, endangered, sensitive (TES) or watchlist species be located during the proposed project, available steps will be taken to evaluate and mitigate effects.

4j. Fens within Foster Meadow would be flagged prior to project implementation for avoidance. Crews conducting restoration work at Foster Meadow would be informed of the location of the fen.

4k. All off-road equipment would be cleaned to insure it is free of soil, seeds, vegetative matter or other debris that could contain seeds before entering the project area.

4l. Infestations of invasive plants that are discovered during project implementation would be documented and locations mapped. New sites would be reported to the Forest botanist. Rock for riffle construction would be weed free.

4m. Onsite sand, gravel, rock, or organic matter would be used where possible.

4n. Any seed used for restoration or erosion control would be from a locally collected source (ENF, Seed, Mulch and Fertilizer Prescription, 2000).

Cultural Resources

Disturbance impacts to historical/cultural sites in the vicinity of the project area would be less-than-significant with implementation of the following mitigation measure:

5a. One historical site in the vicinity of the project area will be flagged with a buffer of at least ten meters prior to project implementation. All contractors will be informed of this location, and no ground

disturbing activities will occur within the flagged area. The flagging will be removed post project implementation.

Geology and Soils

Erosion and loss of topsoil impacts would be less than significant with the inclusion of the following standard mitigation measures. These measures have been developed under consultation with soil scientists and engineers as an integral component of meadow floodplain restoration. These mitigation measures have been monitored and refined based on previous projects of this type (e.g., Last Chance Creek, 2002-5; Red Clover/McReynolds, 2006; Long Valley Creek, 2008).

7a. Construction would occur during the low flow period, and coincides with the most favorable moisture conditions to the depth of borrow site excavation. The subsurface soil material excavated is used to plug the adjacent channel incision. This material requires enough moisture to allow for compaction to background condition of the adjacent native soil. (The purpose of compaction is to preclude subsidence of the plug material during saturated conditions. Subsidence can lead to the initiation of erosion on the plugs.) Utilization of onsite fill material allows the best match of soil types at the least cost. Material too wet to efficiently transport and work would be avoided. The subsurface (compacted) portions of the plug are constructed using the 'layer lift' method, which entails spreading the material in a thin veneer over the general area of the plug with each delivered bucket load of material. This repeated action, with occasional re-cutting of the working surface allows for efficient wheel compaction without supplemental equipment.

7b. Topsoil, and any organic material, in the area of excavation will be removed to a depth of approximately one foot and stockpiled adjacent to the plugs. When the plugs have been constructed to the design elevation, the plug surface will be cross-rippled to a depth of 12" to restore a deep infiltration capacity. Stockpiled topsoil with associated organics and native seed bank will be spread across the plug with a low ground-pressure track loader. The final pass with equipment is to dress and roughen the topsoil surface for microclimate roughness and to fully incorporate the topsoil with the surface of the subsoil.

7c. Equipment travel into the project area will be restricted to existing open or closed roads and recent timber harvest skid trails and landings. During construction, routes from the borrow sites to plug areas with compaction resulting from construction will be scarified perpendicular to expected surface water flow and dressed with scattered organic material.

7d. Staging areas and temporary haul routes used during the project will be minimized to minimize soil compaction and disturbance to the greatest extent possible. After construction, they will be sub-soiled, perpendicular to surface flow directions, to the full depth of compaction to restore soil porosity. Areas with residual meadow sod will only be lightly scarified to preserve sod integrity. The emphasis is on the least soil disruption while loosening the soil. Extensive mixing or plowing can have a negative effect on soil microorganisms. This technique has been successful in loosening the soil, restoring soil porosity, providing a high infiltration capacity, and thereby reducing cumulative watershed effects.

7e. The project will require re-vegetation. Access routes are expected to have residual sod, and thus not require seeding, but may receive mulching and possibly seed, depending on the condition of the sod. Revegetation will consist of the following measures:

- All desirable plant material that would be excavated or buried in plugs, such as sod mats and willow wads, will be removed and transplanted to plugs, terraces and at key locations in the remnant channel. Locations of transplants are prioritized according to need for maximum soil protection in bare areas and areas of potentially high stress. Sod would be placed with heavy equipment and could be secured using live willow stakes. Willow wads also would be excavated and replanted using heavy equipment.
- During the spring and summer following project completion, locally collected seeds would be dispersed into terrace cuts, plugs, and other heavily disturbed areas.
- Container stock from locally-sourced material would be hand planted in the spring and summer in key locations. Container stock will consist of rhizomatous species that can quickly colonize the terrace cuts and plugs.
- All revegetation areas would be monitored for three years following project completion. Successful revegetation would consist of 70% survival of willow cuttings and transplanted seedlings. Seeded areas would have at least 50% cover of native vegetation. Any areas that do not meet the survival or cover criteria would be reseeded or replanted.

7f. Erosion control would be accomplished using locally collected materials (wood chips, duff, pine needles, etc.). Straw would not be used.

7g. Meadow restoration projects include rest from grazing in disturbed areas for up to three years after construction in order to allow the newly planted vegetation to become established. Currently, the project area is not grazed and the allotment will not be re-opened, so this mitigation requires no further action.

Hazards and Hazardous Materials

The following mitigation measures for accidental fuel spills or leaks, and fire prevention would ensure that hazards and hazardous materials impacts would be less than significant:

9a. Equipment will be re-fueled and serviced at the designated staging area, which is outside of the riparian area and meadow. No fuel will be stored on-site. In the event of an accidental spill, hazmat materials for quick on-site clean-up will be kept at the project sites during all construction activities, and in each piece of equipment.

9b. For fire prevention, a trash pump and/or water truck will be on-site.

Hydrology and Water Quality

Potential short-term, temporary impacts to the water quality of the Middle Fork Cosumnes River due to earth-moving activities would be less than significant with the incorporation of the following mitigation measures:

10a. Construction activities in Foster Meadow would occur during the time of year when the flow of the Middle Fork Cosumnes River is at its lowest. This typically occurs between August 1 and October 30.

10b. Required permits would be obtained including, at the least, the 404 permit from the U.S. Army Corps of Engineers and the 401 Permit from the Central Regional Valley Water Board.

10c. Construction would be supervised on-site by at least one person who has worked on at least one previous pond and plug project.

10d. Watershed mitigation measures also would include the use of Best Management Practices (BMPs) to protect water quality. The following management requirements from the U.S. Forest Service Region 5 *Water Quality Management Handbook* (USDA 2011) would be applied to prevent impacts to on-site and downstream water quality during implementation:

- **BMP 1.18 Meadow Protection** – The objective of this BMP is to avoid damage to ground cover, soil, and the hydrologic function of meadows.
- **BMP 2.5 Water Source Development and Utilization** - The objective of this BMP applies to dust abatement and other management activities requiring the use of water while protecting and maintaining water quality. Water may be needed to assist in construction of structures. Approved drafting sites designated by the district hydrologist would be utilized.
- **BMP 2.8 Stream Crossings** – This BMP minimizes water, aquatic and riparian resource disturbances and related sediment production when constructing, reconstructing, or maintaining temporary and permanent water crossings.
- **BMP 2.11 Equipment Refueling and Servicing** - This BMP prevents pollutants such as fuels, lubricants, bitumens and other harmful materials from being discharged into or near rivers, streams and impoundments, or into natural or man-made channels. Servicing and refueling activities would be located a minimum of 100 feet away from the meadow edge. Site specific locations for equipment fueling would be identified prior to or during project implementation. A non-porous mat or equivalent would be used for the refueling at the staging area.
- **BMP 2.13 Erosion Control Plan** - The requirements of this BMP are met through: 1) the Design Features for hydrology and soil resources that are in the proposed action, 2) the erosion control measures and monitoring that will be contained in the 404 permit (U.S. Army Corps of Engineers) and 401 Permit (State Water Quality Control Board, and 3) other applicable BMP's in the 2011 WQMH as listed in this section.
- **BMP 5.3 Tractor Operation Limitation in Wetlands & Meadows** – The objective of this BMP is to limit turbidity and sediment production resulting from compaction, rutting, run-off concentration, and subsequent erosion by excluding the use of mechanical equipment in wetlands and meadows except for the purpose of restoring wetland meadow and meadow function.
- **BMP 7.1 Watershed Restoration** - The objective of this BMP is to repair degraded watershed conditions and improve water quality and soil stability. Restoration measures described herein reflect state-of-the-art techniques and have been chosen to custom fit the unique hydrologic, physical, biological and climatic characteristics of Foster Meadow. The proposed design for restoration of Foster Meadow restores the meadow condition and hydrologic function to the watershed as described in this document.
- **BMP 7.4 Forest and Hazardous Substance Spill Prevention Control and Countermeasure (SPCC) Plan** - The objective of this BMP is to prevent contamination of waters from accidental spills. BMP 7.4 would be implemented when a total oil product at a site exceeds 1,320 gallons or any single container exceeds 660 gallons. The forest has a SPCC spill plan designed to guide the emergency response to spills during construction.
- **BMP 7.6 Water Quality Monitoring** - The objective of this BMP is to collect representative water data to determine base line conditions for comparison to established water quality standards, which are related to beneficial uses for that particular watershed. This BMP is implemented

through establishment of Stream Condition Inventory (SCI) site prior to project implementation to establish a pre-project condition, and through the requirements of the 401 Water Quality Certification that will be obtained for the project..

BMP 7.8 Cumulative Off-site Watershed Effect - This BMP serves to protect the identified beneficial uses of water from the combined effects of multiple management activities. Beneficial uses and effects have been documented in the Hydrology Report. Impacts of past and present activities including impacts of the proposed future management activities were considered in the evaluation of the analysis area, and summarized in the attached hydrology report.

Tribal Cultural Resources

Impacts tribal cultural resources that could potential be disturbed during excavation would be less than significant with the incorporation of the following mitigation measures:

18a. One historical site with post-aboriginal use in the vicinity of the project area will be flagged with a buffer of at least ten meters prior to project implementation. All contractors will be informed of this location, and no ground disturbing activities will occur within the flagged area. The flagging will be removed post project implementation.

18b. A consultant and construction worker tribal cultural resources awareness brochure will be distributed to all personnel involved in project implementation before any stages of project implementation and construction activities begin on the project site. The brochure will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The brochure will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The brochure will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

18c. The following mitigation measure is intended to address inadvertent discoveries made by construction personnel, agencies, or consultants at the work site when no archaeological or tribal monitor is present during ground disturbing activities.

If potential tribal cultural resources (TCRs) or archaeological resources are discovered during ground disturbing construction activities, all work shall cease within 100 feet (or an appropriate distance based on the apparent distribution of the TCR) of the find. A qualified cultural resources specialist meeting the *Secretary of Interior's Standards and Qualifications for Archaeology*, as well as Native American Representatives from traditionally and culturally affiliated Native American Tribes will assess the significance of the find. To avoid or minimize adverse impacts when tribal cultural resources, archaeological resources, or other cultural resources are discovered, Native American Representatives may make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may include, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the Project area where they will not be subject to future impacts. The United Auburn Indian Community (UAIC) of the Auburn Rancheria does not consider curation of TCRs to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

The types of treatment preferred by UAIC that protects, preserves or restores the integrity of a TCR may include Tribal Monitoring, or recovery of cultural objects, and reburial of cultural objects or cultural soil that is done in a culturally appropriate manner. Recommendations of the treatment of a TCR will be documented in the project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If articulated or disarticulated human remains are discovered during ground disturbing construction activities or ground disturbing activities, all work shall cease within 100 feet of the find and all ground disturbing activities shall not resume until the requirements of Health and Safety Code section 7050.5 and, if applicable, Public Resources Code 5097.98 are met.