Introduction:

The Gold Ridge Resource Conservation District (GRRCD) will implement the Fay Creek Complex Wood Implementation Project (project). The project addresses limiting factors to rearing and spawning habitat in two potentially high-quality habitat reaches of Fay Creek, tributary to Salmon Creek. Both the lower 1,690-foot reach and the upper 1,410-foot reach have good riparian cover and cool summer water temperatures but lack channel complexity and sufficient rearing habitat. Throughout the combined length of the project reaches, only seven key pieces of large wood are currently present in the stream channel. The average bankfull width of the channel is 10.1 meters, and the average stream gradient is 1.4%. A total of 27 logs (mostly 50ft to 80ft Douglas fir (*Pseudotsuga menziesii*)) will be placed at 14 sites throughout the two treatment reaches.

These placed logs, some with attached rootwads, are designed to scour pools, provide cover, sort spawning gravels, provide high flow refugia, and enhance overall channel complexity. These techniques for creating both cooler, deeper pools to improve over-summer survival and high-flow refugia during storm events are designed to improve instream survival of coho salmon (*Oncorhynchus kisutch*) and, as a result, may enhance resiliency of coho salmon to climate change characterized by prolonged dry seasons and extended and more extreme rainy seasons. The project will attain the target number of large wood pieces of 1.3 - 4 key pieces/100 meters for streams of 10-100 meter bankfull width as prescribed in NOAAs Coho Salmon Recovery Plan (NMFS 2012). This project is necessary in order to create optimal conditions for coho salmon in a tributary that has been documented to lack cover and channel complexity, reducing its effectiveness as salmon rearing and spawning habitat (2002 DFG Fay Creek Stream Inventory Report).

The project was designed by Blencowe Watershed Management (BWM) who has designed and implemented similar projects in Sonoma and Mendocino Counties. Chris Blencowe is a Registered Professional Forester and will oversee the placement of the designed large wood structures. Standing riparian trees will be utilized to wedge the key pieces in place and affix them longitudinally within the stream channel. In total, 14 structures will be constructed. The method of anchoring large wood pieces by wedging them between standing trees and using minimal hardware will allow the structures to interact more naturally with the dynamic creek system than logs anchored more rigidly with boulders and hardware. Installation of the project will be performed by a licensed professional with the skills and experience to place logs from the top of the bank. This project is designed to avoid the use of equipment in the stream. All machinery will be operated from top of bank, and sites will not be dewatered prior to construction.

Access routes and disturbed areas will be seeded and covered with biodegradable erosion control fabric or straw as appropriate. Invasive species will be prevented from entering the project site according to the Invasive Species Prevention Plan (see attachment GRRCD Aquatic Invasives Protocol). Revegetation of disturbed riparian areas for access will be designated by the Project Forester based on shade, aspect, soil

type and elevation. Plants will not be irrigated. Native species to be planted include Coast Redwood (*Sequoia sempervirens*), Arroyo Willow (*Salix lasiolepis*) and Common Rush (*Juncus effusus*). Plantings will not require maintenance.

The Grantee shall not proceed with on the ground implementation until all necessary permits, consultations, and/or Notice to Proceed are secured.

All habitat improvement(s) will follow techniques in the *California Salmonid Stream Habitat Restoration Manual* (Volume I, Section VII – Project Implementation https://www.wildlife.ca.gov/Grants/FRGP/Guidance).

Objective(s):

The project will enhance rearing and spawning habitat for coho salmon and steelhead trout (*Oncorhynchus mykiss*) by placing 50ft to 80ft locally recruited logs at 14 sites along two stream reaches in Fay Creek over a total length of 850 meters. These key piece structures are designed to scour and enhance pools, retain spawning gravel, provide cover and high-flow refugia, and enhance habitat complexity. In addition, their design is meant to rack additional wood in transit,further adding to the size and complexity of the structures over time.

Project Description:

Location:

Fay Creek is a major tributary to Salmon Creek, a coastal watershed draining into a tidal estuary just north of Bodega Harbor along the Sonoma Coast. Fay Creek confluences with Salmon Creek 5.3 miles upstream of the outlet of Salmon Creek into the Pacific Ocean. The work site spans two private properties beginning 250 feet upstream of the Fay Creek / Salmon Creek confluence. Project coordinates at the downstream end of the project are: 38.3586 N Lat., -123.0011 W Long.

Project Set Up:

Task 1: Project management.

The Grantee (GRRCD) will perform Task 1. All contracting, invoicing and reporting will follow the grant agreement and regulatory provisions and guidelines. The Executive Director will oversee contracting, invoicing, and reporting. The Project Manager will be responsible for preparing contracts, implementation coordination, and reporting, including annual and final reports. The District Administrator will prepare invoices and track budgets.

Task 2: Pre-implementation surveys.

Prior to project implementation (likely to be conducted summer 2021 depending on consultant availability to conduct CEQA-related surveys), the GRRCD Ecologist and/or Qualified Biologist, with field assistance from the Project Manager, will conduct surveys for special status species that may be present within the project area. The qualified Biologist will also be responsible for relocation of any special status species present in the project reach at the time of implementation. California red-legged frog (*Rana draytonii*) surveys will be conducted by GRRCD staff Ecologist both in equipment operations areas and along access routes. Initial surveys will identify potential frog habitat, and site-specific follow-up surveys will be conducted within 48 hours before the start of work at each site and/or access route to detect and relocate any California red-legged frogs that might be present. Protocols detailed in the Streambed Alteration Agreement for the project will be followed, both when surveying for and moving frogs. California freshwater shrimp (*Syncaris pacifica*) surveys will be conducted using a single pass through suitable habitats (determined by water depth, stream gradient, presence of emergent and/or overhanging riparian vegetation, presence of undercut banks and suitable water quality). A fine-mesh net will be used to sweep riparian vegetation overhanging into the creek as well as undercut banks. Both banks will be sampled during a single pass. Surveys needed for CEQA compliance (botanical, archeological, and paleontological) will also be conducted by qualified consultants, depending on availability. As GRRCD needs a grant agreement in place to subcontract to these consultants, implementation of the project will likely be delayed until 2021.

Task 3: Project implementation.

The GRRCD Project Manager, Senior Scientist and Project Designer/Consulting Forester (BWM) will provide implementation oversight and inspections. Twenty-seven 50ft to 80ft Douglas fir logs will be harvested onsite and transported by self-load log truck and rubber tire skidder by a Licensed Timber Operator (LTO). Existing fencing along the riparian corridor will be removed and replaced as needed for equipment access and wood placement. Fencing work will be performed by the LTO. Placement of all wood and construction of all structures will be directed and overseen by BWM. Fine adjustment and bucking (where appropriate) of placed logs may be performed with hand tools including chain saws, winches, rockbars and shovels. Structure #1, an “upstream v” located 80 feet upstream of the Salmon Creek Road culvert will be bolted to adjacent trees as an added measure of stability, given its proximity to the county road culvert. Once all components are placed, erosion control and revegetation measures will be implemented as appropriate by GRRCD staff (Project Manager, Project Coordinator, Senior Scientist, Ecologist) and under BWM oversight. A subcontractor will perform labor compliance monitoring.

Task 4: Pre- and post-implementation monitoring.

Prior to project implementation, one or more photo points will be established by the Project Manager and Senior Scientist for each wood placement site, and pre-work site photos will be taken. Post-implementation photos will be taken at each photo point to enable comparison of pre- and post-work conditions. All structures will be monitored for one year by the Project Manager and Senior Scientist after implementation to assess whether the constructed large wood pieces have been transported or otherwise moved, beyond minor adjustments at the site where they were originally placed. Pre- and post-implementation pool counts will be conducted by the Project Manager, Senior Scientist and Ecologist, after the passage of a minimum of one wet season to document pool formation. Selected pools may be snorkeled by the Project Manager, Senior Scientist and Ecologist to better quantify salmonid use. Data on pool counts and salmonid use will be included in the final report. The Project Engineer will also submit projectas-built designs.

Materials:

Twenty-seven 50ft to 80ft Douglas-fir logs will be harvested onsite by Blencowe Watershed Management in coordination with Ken Smith, a Licensed Timber Operator, to be used in the complex wood structures. Logs are donated by the landowner as cost share.
Allthread, washers, nuts, cutoff blades, drill bits, and PPEs will be used to fasten the complex wood together.
Areas with disturbed soil will be covered with straw and native grass seed, or covered with pinned erosion control fabric and grass seed, as needed. Redwood (*Sequoia sempervirens*) or other native trees and native rush plugs will be planted throughout the project area once rains have started. This material is needed to rehabilitate access areas. Straw, fabric, and fabric pins will be purchased by the contractor. Grass seed and native plants will be purchased by GRRCD. T-stakes, wooden posts and fencing wire will be used to repair existing fencing removed by the LTO for access to the siteThe fencing material will be purchased by the subcontractor. Mileage is needed for GRRCD staff travel to and from the project site. Mileage, lodging, and per diem are also included in the Blencowe subcontractor budget, as they will be traveling from Fort Bragg. A permit fee for the 1602 is also included, to be paid by GRRCD.

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Deliverables:

Task 1: Project management.
Regular invoices and progress reports, Landowner Authorization Agreement, Annual and Final Reports.

Task 2: Pre-implementation surveys.
Copies of permits, including 1602 LSAA, biological surveys and reports, protected species habitat assessment and relocation plan.

Task 3: Project implementation.
As-built construction drawings, and labor and compliance documentation as needed.

Task 4: Pre- and post-implementation monitoring.
Pre- and post-implementation photo documentation, pre- and post-implementation pool count and salmonid use survey results.

Timelines:

Task 1: Project management.
06/01/2020 to 03/31/2023

Task 2: Pre-implementation surveys.
06/01/2020 to 10 /15/2021

Task 3: Project implementation.
08/01/2020 to 10/15/2021

Task 4: Pre- and post-implementation monitoring.
06/01/2020 to 03/31/2023

The annual season work window for the project will be June 15 – October 31.

Additional Requirements:

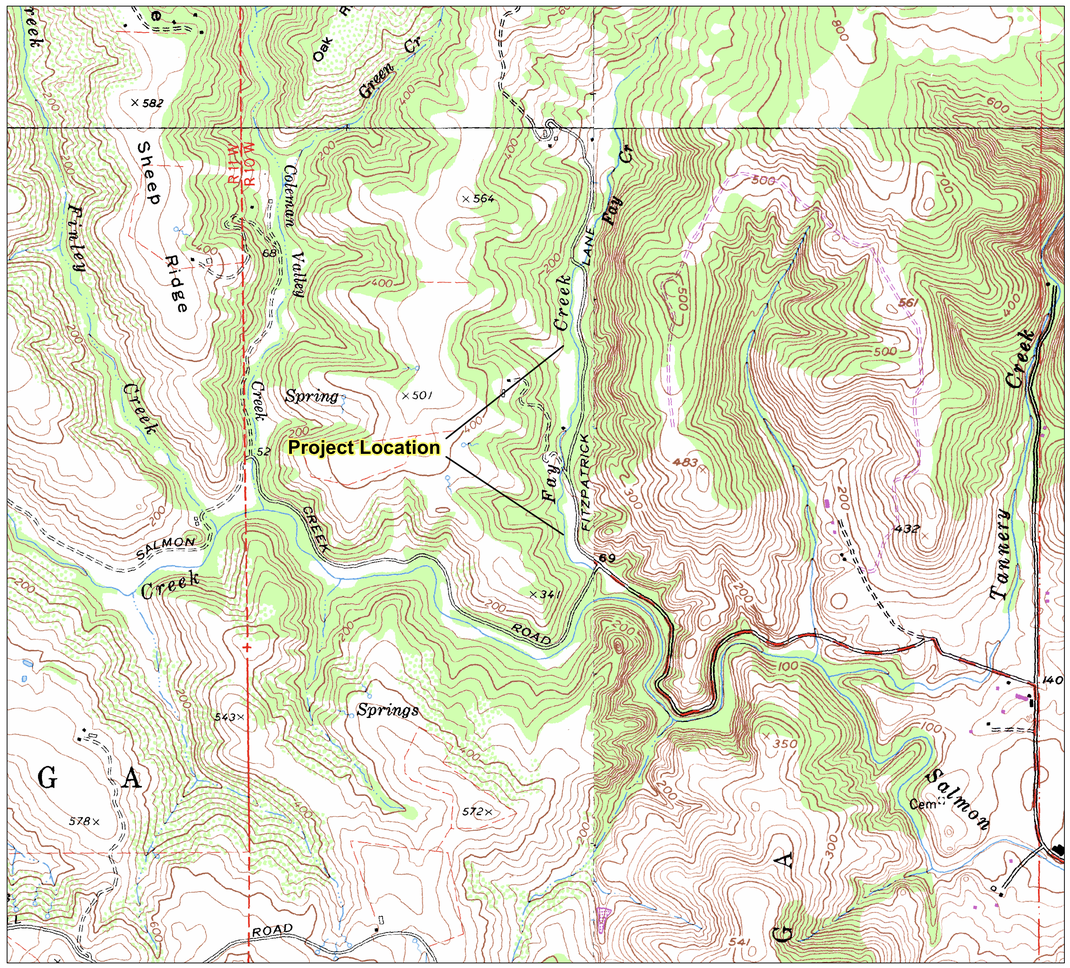
The Grantee will not proceed with on-the-ground implementation until all necessary permits and consultations are secured. Work in flowing streams is restricted per the Army Corps of Engineers Regional General Permit. Actual project start and end dates, within this timeframe, are at the discretion of the California Department of Fish and Wildlife.

No equipment maintenance will be performed within or near the stream channel where pollutants (such as petroleum products) from the equipment may enter the channel via rainfall or runoff. Appropriate spill containment devices (e.g., oil absorbent pads, tarpaulins) will be used when refueling equipment. All equipment will be removed from the streambed and flood plain areas at the end of each workday.

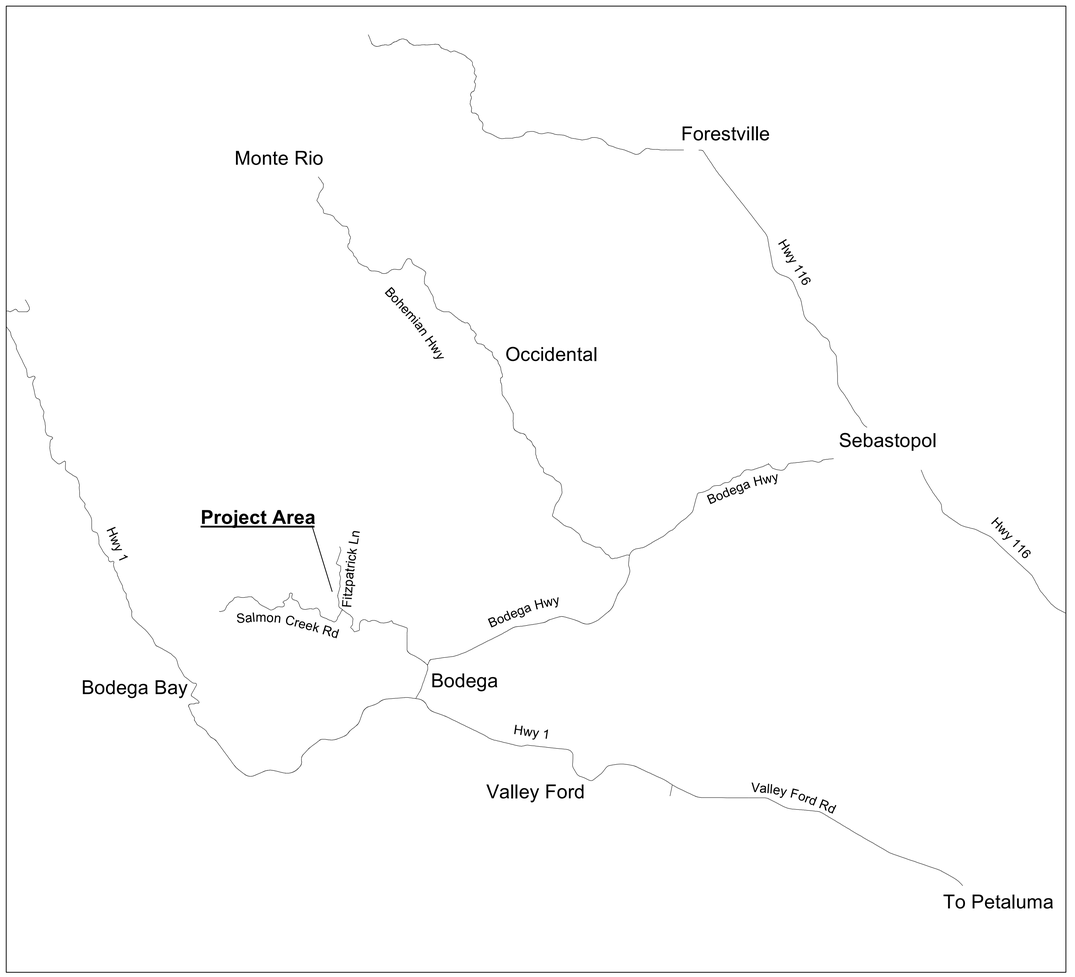
All equipment and gear will be brushed with a stiff brush prior to leaving each stretch of stream to avoid the transport of aquatic invasive species (AIS). When transporting traps out of the area, each numbered trap will be bagged in its own bag to avoid cross contamination during transport in and out of the work area. All crew members will decontaminate equipment and shoes for AIS according to the standards detailed in the California Department of Fish & Wildlife Aquatic Invasive Species Decontamination Protocol.

During project activities, all trash that may attract predators will be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.

Final structure design and placement will be determined by field consultation between the Grantee and the Grantor Project Managers. All habitat improvements will follow techniques described in the *California Salmonid Stream Habitat Restoration Manual.*



Project Location Map: USGS 7.5' "Bodega" Quadrangle. 1" = 1,000'



Project Area Map: 1" = 1 mile

MATERIALS SPECIFICATIONS

LOG SPECIFICATION

1. Tree species shall be Douglas fir.
2. Average log diameter shall be 18" or greater
3. All wood elements must be free of decay, rot, and parasites
4. Onsite wood shall be procured by a Licensed Timber Operator

REQUIRED INSPECTIONS

The Project Forester, Project Manager, and Lead Scientist will observe construction routinely or continuously. The Licensed Timber Operator and all contractors shall arrange the following inspection by the Project Forester. All Project work shall cease until Project Forester's approval of:

1. Logging
   a. After identifying access routes and stockpile areas and before disturbance
2. Log Placement
   a. After identifying access routes and before disturbance.
   b. During final placement of each log.
3. Small Wood Placement

a. After trimming branches for access and log placement, and before final placement of branches.

4. Erosion Control Measures
   a. Finished ground before placement of seed, mulch and blanket.

CONSTRUCTION QUANTITIES

9 - logs 50'+ length, 18" diameter min.
8 - logs 60'+ length, 18" diameter min.
8 - logs 70' + length, 18" diameter min.
1 - log 52' length x 36" diam. with rootwad (existing pull down)
1 - log 26' length, 18" diam. min
Coir blanket = 8,100 sqft
Weed freed straw mulch = 7,200lbs
Native grass seed = 180lbs.

ACCESS NOTES

1. Contractor shall avoid driving heavy equipment in the wetted channel. Contractor shall minimize travel on creekbed to protect aquatic invertebrates.
2. Riparian trees shall be protected to the extent possible. For access, tie trees and branches back where possible, rather than cutting them. Existing trees greater than 6" diameter are not to be cut.
3. Contractor shall clear path for equipment access using hand tools (avoid using heavy equipment), to minimize damage to existing trees.
4. Contractor will collect branches (>1" diam) cut for access and place them on the creek banks, on the upstream side of log structures, as directed by the Project Forester.

EROSION CONTROL – Seed, Mulch & Blanket

All disturbed soil shall be raked, or track walked, on contour to reduce uneven surfaces and reduce concentrated water that may cause rilling on slopes. All disturbed areas shall be seeded . Erosion control blanket or mulch shall be placed immediately after seed application, as follows:

BLANKET

On soil slopes steeper than 4: 1, cover the seed with an erosion control blanket (North American Green C125BN or an equivalent approved by the project forester). Blanket shall be 100% biodegradable, mat of coconut fiber only. Erosion control blanket shall be secured evenly across a smooth, even soil surface. Blanket fasteners shall be minimum 4" long. Fastener spacing shall not be greater than 18" in any direction and shall be staggered. Place fasteners at 6" on center along the upslope edge of blanket.

SEED

All disturbed soil shall receive 50 lbs. per acre of CA native grass. In shaded areas, including the riparian corridor and forest, use "Little three native perennial seed mix" (Molate Fescue, Idaho Fescue, Mokelumne Fescue). In sunny upland areas, use "Hold Fast Native Blend" (California Bromegrass, Cucamonga Blue Wild Rye, Three Weeks Fescue California Bromegrass, Perennial California Poppy, Arroyo Blue Lupine).

MULCH

In flat areas without blanket, apply 2,000 lbs/ acre of mulch immediately following seed application. Apply a layer of weed - free rice straw approximately one inch thick (some soil should be showing). Straw should be spread evenly so that no clumps remain. Alternately, in areas where branches and leaves are generated, these may be used to cover the seed.

STANDARD CONSTRUCTION NOTES

1. Construction shall comply with all federal, state, and county regulation. Contractor shall keep permits onsite during construction.
2. Construction contractor shall assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property. This requirement shall apply continuously and not be limited to normal working hours.
3. OBSERVATION: Project Forester, Project Manager, and Lead Scientist will observe construction shown on these plans. Contractor shall meet with project forester before commencing construction to determine inspection points that require approval before continuing work.
4. Is the contractor's responsibility to determine locations of all existing underground utilities through coordination with the property owner, Underground Service Alert and the various utility companies. Call USA at 811.
5. In the event cultural resources are discovered during project The northwest information center shall be notified at (707) 664-0880. A qualified archeologist shall be consulted for and on-site evaluation.
6. The contractor should verify quantities shown on these plans for bidding purposes. Is the contractor's responsibility to verify quantities for construction.

BEST MANAGEMENT PRACTICES

1. BMPs for construction period runoff and erosion control will be employed, including, but not limited to, silt fencing, fiber rolls, gravel bag berms, sandbag barriers, storm drain inlet protection, tracking controls, and stockpile management,.
2. Access to the site must be reviewed with the Project Manager, Project Lead Scientist and Project Forester. Exact location of access way, and type of vehicles used shall be discussed. Contractor shall be responsible for repairing any damage to property caused by access.
3. Trash, litter, construction debris, must be stored in a designated area approved by the inspector or removed from the site at the end of each working day. Upon completion of work, contractor is responsible for removing all debris to the satisfaction of the inspector.
4. Disturbance to existing grades and vegetation will be limited to the actual site of the conservation project and necessary access routes.
5. Existing ingress or egress points will be used when possible.
6. Placement of temporary access roads, staging areas, and other facilities shall avoid disturbance to habitat and shall be restored to preconstruction conditions or better.
7. No chemically treated timbers shall be used within the creek banks.
8. The use of storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the State (DFW Code 5650).
9. All vehicles and equipment on the site must not leak any type of hazardous materials such as oil, hydraulic fluid, or fuel. Vehicles and equipment must be inspected and approved by the inspector before use. Fueling shall take place outside of the riparian corridor.
10. A contained area located at least 100 feet from a watercourse will be designated for equipment storage, short-term maintenance, and refueling. If possible, these activities will not take place on the project site.
11. Vehicles shall be regularly inspected for leaks and repaired immediately.
12. Contractor shall have emergency spill clean up gear (spill containment and absorption materials) and fire equipment available on site at all times. These items are to e reviewed by inspector before construction begins.
13. Leaks, drips and other spills will be cleaned up immediately to avoid soil or groundwater contamination.
14. Major vehicle maintenance and washing shall be done off site.
15. All spent fluids including motor oil, radiator coolant, or other fluids and used vehicle batteries and filters shall be collected, stored, and recycled as hazardous waste off site.
16. Dry cleanup methods (i.e. absorbent materials, cat litter, and/or rags) shall be used whenever possible. If water is used, the minimal amount required to keep dust levels down shall be used. Spilled dry materials shall be swept up immediately.

Length of affected channel = 3,100'
Length of creek access = 2,400'
Area of disturbance for creek access = 0.56 acres
Assumed area of upland disturbance for logging access = 0.5 acres

GOLD RIDGE RESOURCE CONSERVATION DISTRICT
2776 Sullivan Road, Sebastopol, CA 95472 (707) 823-5244

Date: March 30, 2019

Prepared for:
California Department of Fish and Wildlife
Fisheries Restoration Grants Program
By:
Jason Hoorn, CPESC #6786
Gold Ridge Resource Conservation District
Christopher Blencowe, RPF #002905
Blencowe Watershed Management

Fay Creek Complex Wood Implementation Project
Salmon Creek Watershed
Sonoma County, CA

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Bodega Head (3812331) OR Camp Meeker (3812248) OR Valley Ford (3812238) OR Tomales (3812228) OR Arched Rock (3812342) OR Duncans Mills (3812341))

Possible species within the Bodega Head and surrounding quads for 3107 Fay Creek Complex Wood Implementation Project, Sonoma County

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abronia umbellata var. breviflora pink sand-verbena	PDNYC010N4	None	None	G4G5T2	S2	1B.1
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
Agrostis blasdalei Blasdale's bent grass	PMPOA04060	None	None	G2	S2	1B.2
Allium peninsulare var. franciscanum Franciscan onion	PMLIL021R1	None	None	G5T2	S2	1B.2
Alopecurus aequalis var. sonomensis Sonoma alopecurus	PMPOA07012	Endangered	None	G5T1	S1	1B.1
Amorpha californica var. napensis Napa false indigo	PDFAB08012	None	None	G4T2	S2	1B.2
Amsinckia lunaris bent-flowered fiddleneck	PDBOR01070	None	None	G3	S3	1B.2
Anodonta californiensis California floater	IMBIV04020	None	None	G3Q	S2?	
Anodonta oregonensis Oregon floater	IMBIV04110	None	None	G5Q	S2?	
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Arborimus pomo Sonoma tree vole	AMAFF23030	None	None	G3	S3	SSC
Arctostaphylos bakeri ssp. bakeri Baker's manzanita	PDERI04221	None	Rare	G2T1	S1	1B.1
Arctostaphylos stanfordiana ssp. decumbens Rincon Ridge manzanita	PDERI041G4	None	None	G3T1	S1	1B.1
Arctostaphylos virgata Marin manzanita	PDERI041K0	None	None	G2	S2	1B.2
Ardea alba great egret	ABNGA04040	None	None	G5	S4	
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Blennosperma nanum var. robustum Point Reyes blennosperma	PDAST1A022	None	Rare	G4T2	S2	1B.2
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Bombus occidentalis western bumble bee	IIHYM24250	None	None	G2G3	S1	
Calamagrostis crassiglumis Thurber's reed grass	PMPOA17070	None	None	G3Q	S2	2B.1
Callophrys mossii marinensis Marin elfin butterfly	IILEPE2207	None	None	G4T1	S1	
Calystegia purpurata ssp. saxicola coastal bluff morning-glory	PDCON040D2	None	None	G4T2T3	S2S3	1B.2
Campanula californica swamp harebell	PDCAM02060	None	None	G3	S3	1B.2
Carex comosa bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
Carex saliniformis deceiving sedge	PMCYP03BY0	None	None	G2	S2	1B.2
Castilleja ambigua var. humboldtiensis Humboldt Bay owl's-clover	PDSCR0D402	None	None	G4T2	S2	1B.2
Castilleja leschkeana Point Reyes paintbrush	PDSCR0D1R0	None	None	GHQ	SH	1A
Ceanothus confusus Rincon Ridge ceanothus	PDRHA04220	None	None	G1	S1	1B.1
Ceanothus foliosus var. vineatus Vine Hill ceanothus	PDRHA040D6	None	None	G3T1	S1	1B.1
Ceanothus gloriosus var. porrectus Mt. Vision ceanothus	PDRHA040F7	None	None	G4T2	S2	1B.3
Ceanothus purpureus holly-leaved ceanothus	PDRHA04160	None	None	G2	S2	1B.2
Central Dune Scrub Central Dune Scrub	CTT21320CA	None	None	G2	S2.2	
Cerorhinca monocerata rhinoceros auklet	ABNNN11010	None	None	G5	S3	WL
Charadrius alexandrinus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
Chloropyron maritimum ssp. palustre Point Reyes salty bird's-beak	PDSCR0J0C3	None	None	G4?T2	S2	1B.2
Chorizanthe cuspidata var. cuspidata San Francisco Bay spineflower	PDPGN04081	None	None	G2T1	S1	1B.2
Chorizanthe cuspidata var. villosa woolly-headed spineflower	PDPGN04082	None	None	G2T2	S2	1B.2
Chorizanthe valida Sonoma spineflower	PDPGN040V0	Endangered	Endangered	G1	S1	1B.1
Cicuta maculata var. bolanderi Bolander's water-hemlock	PDAPI0M051	None	None	G5T4T5	S2?	2B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Cirsium andrewsii Franciscan thistle	PDAST2E050	None	None	G3	S3	1B.2
Clarkia concinna ssp. raichei Raiche's red ribbons	PDONA050A2	None	None	G5?T1	S1	1B.1
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coastal Brackish Marsh Coastal Brackish Marsh	CTT52200CA	None	None	G2	S2.1	
Coastal Terrace Prairie Coastal Terrace Prairie	CTT41100CA	None	None	G2	S2.1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coelus globosus globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
Cordylanthus tenuis ssp. capillaris Pennell's bird's-beak	PDSCR0J0S2	Endangered	Rare	G4G5T1	S1	1B.2
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
Cuscuta pacifica var. papillata Mendocino dodder	PDCUS011A2	None	None	G5T1	S1	1B.2
Cypseloides niger black swift	ABNUA01010	None	None	G4	S2	SSC
Danaus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
Delphinium bakeri Baker's larkspur	PDRAN0B050	Endangered	Endangered	G1	S1	1B.1
Delphinium luteum golden larkspur	PDRAN0B0Z0	Endangered	Rare	G1	S1	1B.1
Dicamptodon ensatus California giant salamander	AAAAH01020	None	None	G3	S2S3	SSC
Dirca occidentalis western leatherwood	PDTHY03010	None	None	G2	S2	1B.2
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Erigeron greenei Greene's narrow-leaved daisy	PDAST3M5G0	None	None	G3	S3	1B.2
Erigeron serpentinus serpentine daisy	PDAST3M5M0	None	None	G2	S2	1B.3
Erysimum concinnum bluff wallflower	PDBRA160E3	None	None	G3	S2	1B.2
Eucyclogobius newberryi tidewater goby	AFCQN04010	Endangered	None	G3	S3	SSC

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Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
Fissidens pauperculus minute pocket moss	NBMUS2W0U0	None	None	G3?	S2	1B.2
Fratercula cirrhata tufted puffin	ABNNN12010	None	None	G5	S1S2	SSC
Fritillaria lanceolata var. tristulis Marin checker lily	PMLIL0V0P1	None	None	G5T2	S2	1B.1
Fritillaria liliacea fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Geothlypis trichas sinuosa saltmarsh common yellowthroat	ABPBX1201A	None	None	G5T3	S3	SSC
Gilia capitata ssp. chamissonis blue coast gilia	PDPLM040B3	None	None	G5T2	S2	1B.1
Gilia capitata ssp. pacifica Pacific gilia	PDPLM040B6	None	None	G5T3	S2	1B.2
Gilia capitata ssp. tomentosa woolly-headed gilia	PDPLM040B9	None	None	G5T1	S1	1B.1
Gilia millefoliata dark-eyed gilia	PDPLM04130	None	None	G2	S2	1B.2
Helminthoglypta stiversiana williamsi Williams' bronze shoulderband	IMGASC2034	None	None	G2G3T1	S1	
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	PDAST4R065	None	None	G5T2	S2	1B.2
Hesperevax sparsiflora var. brevifolia short-leaved evax	PDASTE5011	None	None	G4T3	S2	1B.2
Horkelia cuneata var. sericea Kellogg's horkelia	PDROS0W043	None	None	G4T1?	S1?	1B.1
Horkelia marinensis Point Reyes horkelia	PDROS0W0B0	None	None	G2	S2	1B.2
Horkelia tenuiloba thin-lobed horkelia	PDROS0W0E0	None	None	G2	S2	1B.2
Ischnura gemina San Francisco forktail damselfly	IIODO72010	None	None	G2	S2	
Lasiurus blossevillii western red bat	AMACC05060	None	None	G5	S3	SSC
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Lasthenia californica ssp. bakeri Baker's goldfields	PDAST5L0C4	None	None	G3T1	S1	1B.2
Lasthenia californica ssp. macrantha perennial goldfields	PDAST5L0C5	None	None	G3T2	S2	1B.2

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Lasthenia conjugens Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
Lathyrus palustris marsh pea	PDFAB250P0	None	None	G5	S2	2B.2
Layia carnosa beach layia	PDAST5N010	Endangered	Endangered	G2	S2	1B.1
Leptosiphon rosaceus rose leptosiphon	PDPLM09180	None	None	G1	S1	1B.1
Lessingia arachnoidea Crystal Springs lessingia	PDAST5S0C0	None	None	G2	S2	1B.2
Lichnanthe ursina bumblebee scarab beetle	IICOL67020	None	None	G2	S2	
Limnanthes vinculans Sebastopol meadowfoam	PDLIM02090	Endangered	Endangered	G1	S1	1B.1
Lupinus tidestromii Tidestrom's lupine	PDFAB2B3Y0	Endangered	Endangered	G1	S1	1B.1
Microseris paludosa marsh microseris	PDAST6E0D0	None	None	G2	S2	1B.2
Monardella sinuata ssp. nigrescens northern curly-leaved monardella	PDLAM18162	None	None	G3T2	S2	1B.2
Myotis evotis long-eared myotis	AMACC01070	None	None	G5	S3	
Myotis thysanodes fringed myotis	AMACC01090	None	None	G4	S3	
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Oceanodroma homochroa ashy storm-petrel	ABNDC04030	None	None	G2	S2	SSC
Oncorhynchus kisutch pop. 4 coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	G4	S2?	
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
Pandion haliaetus osprey	ABNKC01010	None	None	G5	S4	WL
Pelecanus occidentalis californicus California brown pelican	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
Phacelia insularis var. continentis North Coast phacelia	PDHYD0C2B1	None	None	G2T2	S2	1B.2
Phalacrocorax auritus double-crested cormorant	ABNFD01020	None	None	G5	S4	WL

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Plebejus icarioides parapheres Point Reyes blue butterfly	IILEPG801D	None	None	G5T1T2	S1S2	
Pleuropogon hooverianus North Coast semaphore grass	PMPOA4Y070	None	Threatened	G2	S2	1B.1
Polemonium carneum Oregon polemonium	PDPLM0E050	None	None	G3G4	S2	2B.2
Polygonum marinense Marin knotweed	PDPGN0L1C0	None	None	G2Q	S2	3.1
Rallus obsoletus obsoletus California Ridgway's rail	ABNME05011	Endangered	Endangered	G5T1	S1	FP
Rana boylii foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Sidalcea calycosa ssp. rhizomata Point Reyes checkerbloom	PDMAL11012	None	None	G5T2	S2	1B.2
Sidalcea hickmanii ssp. viridis Marin checkerbloom	PDMAL110A4	None	None	G3TH	SH	1B.1
Sidalcea malviflora ssp. purpurea purple-stemmed checkerbloom	PDMAL110FL	None	None	G5T1	S1	1B.2
Silene scouleri ssp. scouleri Scouler's catchfly	PDCAR0U1MC	None	None	G5T4T5	S2S3	2B.2
Speyeria zerene myrtleae Myrtle's silverspot butterfly	IILEPJ608C	Endangered	None	G5T1	S1	
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
Stebbinsoseris decipiens Santa Cruz microseris	PDAST6E050	None	None	G2	S2	1B.2
Streptanthus glandulosus ssp. hoffmanii Hoffman's bristly jewelflower	PDBRA2G0J4	None	None	G4T2	S2	1B.3
Syncaris pacifica California freshwater shrimp	ICMAL27010	Endangered	Endangered	G2	S2	
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thaleichthys pacificus eulachon	AFCHB04010	Threatened	None	G5	S3	
Thamnolia vermicularis whiteworm lichen	NLTES43860	None	None	G3G5	S1	2B.1
Trifolium amoenum two-fork clover	PDFAB40040	Endangered	None	G1	S1	1B.1

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Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Triphysaria floribunda San Francisco owl's-clover	PDSCR2T010	None	None	G2?	S2?	1B.2
Triquetrella californica coastal triquetrella	NBMUS7S010	None	None	G2	S2	1B.2
Tryonia imitator mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	
Usnea longissima Methuselah's beard lichen	NLLEC5P420	None	None	G4	S4	4.2
Vespericola marinensis Marin hesperian	IMGASA4140	None	None	G2	S2	
Zapus trinotatus orarius Point Reyes jumping mouse	AMAFH01031	None	None	G5T1T3Q	S1S3	SSC

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