

Exhibit A  
Francis Creek Sediment Reduction Project  
Statement of Work

Under direction of the Department of Fish and Game, and under the following conditions and terms, the Grantee will:

1. Improve habitat conditions for Chinook salmon, coho salmon and steelhead trout in Francis Creek, tributaries to the Salt River, tributary to the Eel River estuary in Humboldt County. This will be done by reducing road related sediment delivery.
2. Conduct work in the Francis Creek watershed. The project is located in Township 2N, Range 2W, and Sections 13, 14, 23 and 25 of the Ferndale 7.5 Minute U.S.G.S. Quadrangle, as depicted in Exhibit B, Project Location Map, Exhibit C, Site Map 1, and Exhibit D, Site Map 2, which are attached and made part of this agreement by this reference.
3. The project will upgrade approximately 3.8 miles of ranch road as described in Exhibits E, F, G and H, which are attached and made part of this agreement by this reference. The following treatments will be implemented where appropriate:
  - Installation of culverts sized for the 100-year flood flow, including sufficient capacity for expected wood and sediment;
  - Upgrade a bridge crossing;
  - Installation and/or armoring of critical dips to eliminate diversion potential;
  - Excavation and/or armoring of inboard ditches;
  - Installation of inboard ditch;
  - Excavation of culvert inlets;
  - Excavation of instream stored sediment;
  - Installation of downspouts and/or rock dissipation at culvert outlets;
  - Construction of rock armored fords;
  - Removal of road berms;
  - Installation of rolling dips;
  - Reshaping of road surfaces;
  - Installation of ditch relief culverts;
  - Rocking of road surfaces;
  - Excavation of unstable or potentially unstable sidecast materials that could otherwise fail and deliver sediment to a stream;
  - Installation of instream grade checks;
  - Road surface treatments (ripping, outsloping and/or cross draining) to disperse and reduce surface runoff;
  - Realign short road segments to improve drainage;
  - Armoring of stream banks or exposed soils which may deliver sediment to the stream;
  - Seeding and mulching of all exposed soils which may deliver sediment to a

stream. The standard for success is 80% ground cover for broadcast planting of seed, after a period of three years.

4. The Grantee will not proceed with on the ground implementation until all necessary permits and consultations are secured.
5. The Grantee shall notify the Grant Manager a minimum of five working days before the project site is de-watered and the stream flow diverted. The notification will provide a reasonable time for Department personnel to supervise the implementation of the water diversion plan and oversee the safe removal and relocation of salmonids and other fish life from the project area. If the project requires dewatering of the site, and the relocation of salmonids, the Grantee will implement the following measures to minimize harm and mortality to listed salmonids:
  - Fish relocation and dewatering activities shall only occur between June 15 and October 31 of each year.
  - The Grantee shall minimize the amount of wetted stream channel dewatered at each individual project site to the fullest extent possible.
  - All electrofishing shall be performed by a qualified fisheries biologist and conducted according to the National Marine Fisheries Service, *Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act*, June 2000.
  - The Grantee will provide fish relocation data to the Grant Manager on a form provided by the Department of Fish and Game.
  - Additional measures to minimize injury and mortality of salmonids during fish relocation and dewatering activities shall be implemented as described in Part IX, pages 52 and 53 of the *California Salmonid Stream Habitat Restoration Manual*.
6. The stream crossing design and installation will meet flow carrying capacity required for a 100-year flood event as identified by specifications determined by NOAA Fisheries and the California Department of Fish and Game, for adult and juvenile salmonid fish passage.
7. The project will follow the National Marine Fisheries Service (NMFS 2001) Guidelines for Salmonid Passage at Stream Crossings and DFG criteria for fish passage as described in the Third Edition, Volume II, Part IX, February 2003, of the *California Salmonid Stream Habitat Restoration Manual*. Designs shall be visually reviewed and authorized by NOAA Fisheries (or DFG) engineers prior to commencement of work.
8. All habitat improvements will be in accordance with techniques described in the Third Edition, January 1998, of the *California Salmonid Stream Habitat Restoration Manual*.

9. Work in flowing streams is restricted to June 15 through October 31. Actual project start and end dates, within this timeframe, are at the discretion of the Department of Fish and Game. Planting of tree seedlings will take place after December 1 or when sufficient rainfall has occurred to insure the best chance of survival of the seedlings. The standard for success is 80% survival of plantings or 80% ground cover for broadcast planting of seed, after a period of three years.
10. The Grantee will maintain the new crossing, inspect the crossing in a timely manner and remove debris as necessary during the storm season.
11. An annual report will be submitted each year, no later than December 1, detailing the work completed that field season. The annual report will include, but not necessarily be limited to the following where applicable:
  - implementation start and end dates;
  - percentage of the project completed to date;
  - dewatering and fish relocation data on DFG data sheet (to be provided by the DFG Grant Manager upon request);
  - projected start and end dates for work to be implemented the following season;

The annual report will also include, on a site by site basis:

- road length upgraded;
  - number of stream crossings upgraded;
  - number of landslides/fillslope failures treated;
  - area (ft<sup>2</sup>) of landslide/fillslope failure treatments;
  - stream crossings treated for fish passage;
  - length of stream habitat made accessible by fish passage treatment;
  - sediment savings
  - spoils volumes
  - number of stream bank sites treated
  - length of stream bank protected or stabilized
  - area of feature installed within bankfull width
  - number of trees planted
  - area treated with planting
12. Upon completion of the project, the Grantee shall submit two hard copies of a final written report and one electronic, *Microsoft Word* compatible, copy on a CD. If the project is not completed in the current year, the Grantee will submit a summary of the completed portion no later than December 31 and again each year until completed. The report shall include, but not necessarily be limited to the following information:
    - Grant number
    - Project name
    - Geographic area (e.g., watershed name)

- Location of work – show project location using U.S.G.S. 7.5 minute topographical map or appropriately scaled topographical map
- Geospatial reference/location (lat/long is preferred – defined as point, line, or polygon)
- Project start and end dates and the number of person hours expended
- Total of each fund source, by line item, expended to complete the project, breaking down Grant dollars, by line item, and any other funding, including type of match (cash or in-kind service)
- Expected benefits to anadromous salmonids from the project
- Labeled before and after photographs of any restoration activities and techniques
- Specific project access using public and private roads and trails, with landowner name and address
- Complete as built project description
- Report measurable metrics for the project by responding to the restoration project metrics listed below.

**Habitat Protection and Restoration Projects– Reporting Metrics (HB) (Report N/A to those that do not apply)**

Habitat Projects: (all)

- Identify the watershed/sub-basin plan or assessment in which the project is identified as a priority.
- Name the priority habitat limiting factors identified in that plan that are addressed by the project
- Type of monitoring included in the project
  - Design spec achieved
  - Fish movement/abundance
- Number of stream miles treated/affected by the project within the project boundaries.

Fish Passage Improvement Projects (HB):

- Number of blockages removed or made passable.
- Number of miles made accessible to salmonids.

Upland Habitat Projects (CF, HU)

- Type and number of actions (e.g., fencing, road removal)
- For upslope tree planting projects, # of trees planted and acres treated
- Number of miles of road decommissioned, upgraded or restored (e.g., closed, obliterated, treated) per road segment
- Number of stream crossings decommissioned and upgraded per road segment
- Area of landslide/fillslope treatments per treatment site
- Number of cubic yards of sediment saved from entering the stream per site and per road segment

- Spoils volumes per site and per road segment

Water Quality Projects (TW, HR, HU, HS)

- Water quality limitations addressed by the project (e.g., sediment, turbidity, heat, nutrient loading, chemical pollution).
13. The Grantee will acknowledge the participation of the Department of Fish and Game, Fisheries Restoration Grant funds on any signs, flyers, or other types of written communication or notice to advertise or explain the Francis Creek Sediment Reduction Project.