

EXHIBIT A
Rowdy Creek Instream Habitat Enhancement Project
Statement of Work

Under direction of the Department of Fish and Game, and under the following conditions and terms, the Rural Human Services will:

1. Improve spawning and rearing habitat by increasing habitat diversity and improving riparian canopy for Chinook and coho salmon, steelhead and coastal cutthroat trout in a selected section of Rowdy Creek tributary to the Smith River in Del Norte County. The objective is to develop pools and increase habitat cover by installing 14 large woody debris structures and to provide future large wood recruitment by planting 1,000 native conifer trees.
2. Conduct work on Rowdy Creek approximately 4.3 miles upstream from the confluence of the Smith River. The project is located in Township 18N, Range 1E, Sections 30 and 19 of the High Divide 7.5 Minute U.S.G.S. Quadrangle, 124.111856 West, 41.925843 North, as depicted in Exhibit C, Project Location Map, which is attached and made part of this agreement by this reference.
3. Habitat improvements will be accomplished by creating 14 instream structures as follows: constructing six log and boulder clusters and two log / boulder / root wad clusters; adding logs and root wads to three existing boulder structures; logs and boulders to two existing boulder structures; and root wads to one existing boulder structure. A typical structure will include a combination of two or more logs / root wads anchored to one or more imported boulders. Additionally, a log will be re-attached to one existing boulder cluster. Grantee will then plant 1,000 trees over an area of approximately 15 acres. Tree species include Sitka spruce, coast redwood, and Douglas fir. Final structure design and placement will be determined by field consultation between the Grantee and the DFG Grant Manager.
4. The Grantee will not proceed with on the ground implementation until all necessary permits and consultations are secured.
5. Work will consist of the following:
 - California Conservation Corps (CCC) crew members will construct instream log structures according to the site specific plans to be provided, using locally available logs or logs from other locations.
 - Logs may be moved into location by CCC hand crews, or by using heavy equipment if necessary.
 - Various anchoring techniques, which will be approved by the DFG grant manager prior to the initiation of work, may be used to hold multiple logs together to form complex structures. Anchoring techniques will include wedging logs into existing rocks and logs along the riparian banks; anchoring to live mature trees growing on riparian banks;

or anchoring to existing boulders. Anchoring materials will consist of 1” threaded rebar, cable, nuts and washers, and waterproof epoxy.

6. 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 ensure the best chance of survival of the seedlings. The standard for success is 80% survival of plantings, after a period of three years.
7. The Grantee shall notify the Grant Manager a minimum of five working days before any fish bearing stream reaches are dewatered 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 aquatic species 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*.
8. All habitat improvements will follow techniques described in the Third Edition, January 1998, of the *California Salmonid Stream Habitat Restoration Manual*, Flosi et al. and the *California Salmonid Stream Habitat Restoration Manual*, Third Edition, Volume II, Part XI, January 2004.
9. 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 1 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 (HI, HR, HS) (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.

Instream Habitat Projects (HI, HS)

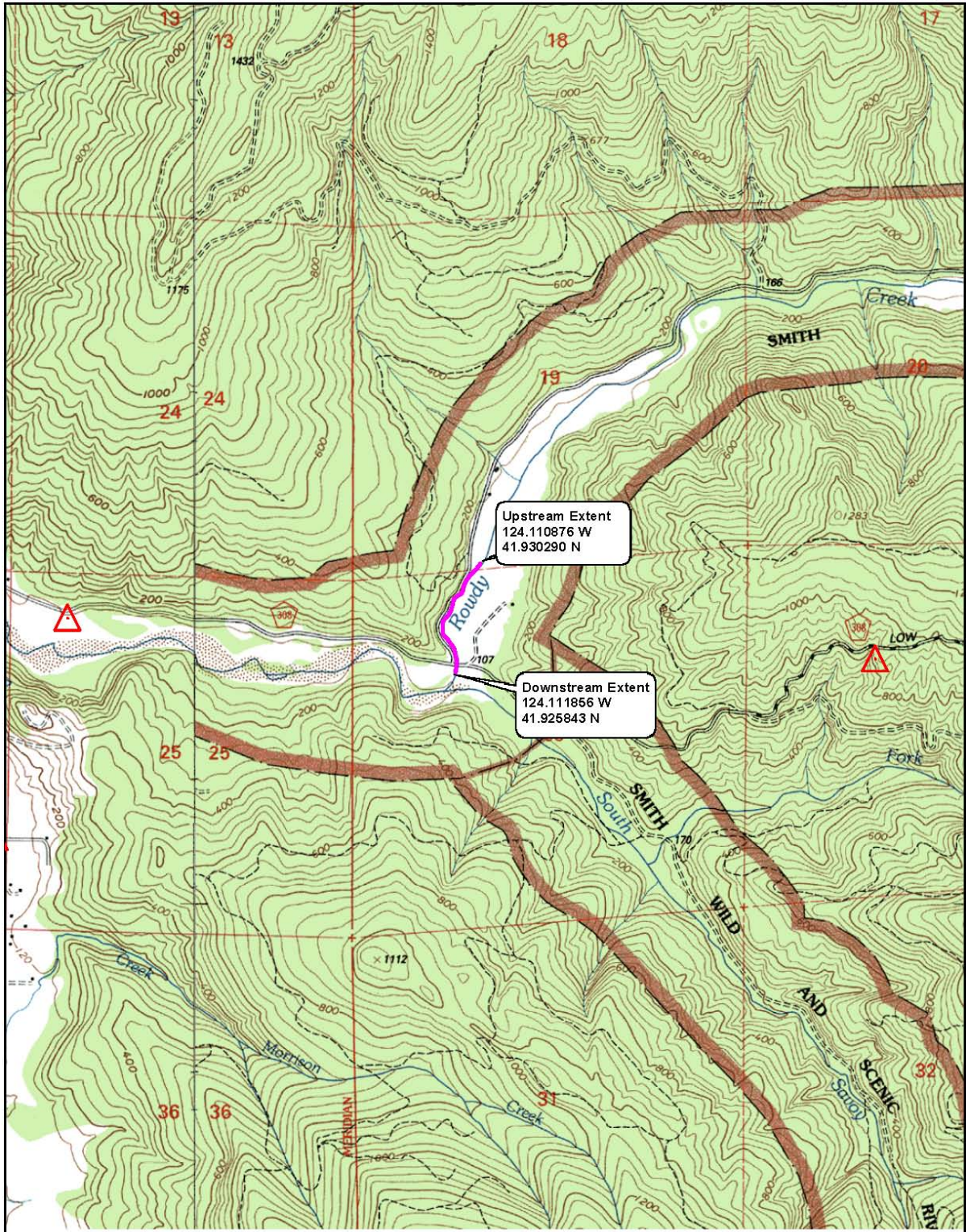
- Description of instream treatments used, including site locations referenced to an established landmark, number of treatment sites, and any modifications to site/treatment design.
- Type of materials used for channel structure placement, select from: individual logs (unanchored); logs fastened together (logjam); rocks/boulders (unanchored); rocks/boulders (fastened or anchored); stumps with roots attached (root wads); weirs; gabions; deflectors/barbs; or other engineered structures
- Miles of stream treated with channel structure placement
- Number of instream pools created by structure placement
- Number of structures placed in channel.

Riparian Habitat Projects (HR, HS)

- Miles of stream treated overall, count stream reach only once.

- Miles of riparian stream bank treated, measure both sides of the bank.
 - Total acres of riparian area treated.
 - Acres of riparian area planted.
 - Species scientific names of plants planted.
10. 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 Rowdy Creek Instream Habitat Enhancement Project.

Exhibit C
2010 Rowdy Creek Instream Habitat Enhancement Project Location Map 1
T18N, R1E, S30,19
USGS 7.5 Minute High Divide Quadrangle
Del Norte County



California Department of Fish and Game

Natural Diversity Database

Selected Elements by Common Name - Portrait

Possible species within the High Divide Quad and surrounding quads for the Rowdy Creek Instream Habitat Enhancement Project, T18N, R1E, S30,19, Del Norte County

Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 Coastal and Valley Freshwater Marsh	CTT52410CA			G3	S2.1	
2 Del Norte salamander <i>Plethodon elongatus</i>	AAAAD12050			G4	S3	SC
3 Fort Dick limnephilus caddisfly <i>Limnephilus atercus</i>	IITRI15020			G4	S1	
4 Hippolyta fritillary <i>Speyeria zerene hippolyta</i>	IILEPJ6087	Threatened		G5T1	S1	
5 Howell's jewel-flower <i>Streptanthus howellii</i>	PDBRA2G0N0			G2	S1.2	1B.2
6 Howell's sandwort <i>Minuartia howellii</i>	PDCAR0G0F0			G4	S3.2	1B.3
7 Oregon coast paintbrush <i>Castilleja affinis ssp. litoralis</i>	PDSCR0D012			G4G5T4	S2.2	2.2
8 Oregon polemonium <i>Polemonium carneum</i>	PDPLM0E050			G4	S1	2.2
9 Pacific gilia <i>Gilia capitata ssp. pacifica</i>	PDPLM040B6			G5T3T4	S2.2?	1B.2
10 Pacific tailed frog <i>Ascaphus truei</i>	AAABA01010			G4	S2S3	SC
11 Siskiyou checkerbloom <i>Sidalcea malviflora ssp. patula</i>	PDMAL110F9			G5T1	S1.1	1B.2
12 Wolf's evening-primrose <i>Oenothera wolfii</i>	PDONA0C1K0			G1	S1.1	1B.1
13 Yontocket satyr <i>Coenonympha tullia yontockett</i>	IILEPN6035			G5T1T2	S1	
14 alpine marsh violet <i>Viola palustris</i>	PDVIO041G0			G5	S1S2	2.2
15 bald eagle <i>Haliaeetus leucocephalus</i>	ABNKC10010	Delisted	Endangered	G5	S2	
16 bank swallow <i>Riparia riparia</i>	ABPAU08010		Threatened	G5	S2S3	
17 coast cutthroat trout <i>Oncorhynchus clarkii clarkii</i>	AFCHA0208A			G4T4	S3	SC
18 coast sidalcea <i>Sidalcea oregana ssp. eximia</i>	PDMAL110K9			G5T1	S1.2	1B.2
19 dark-eyed gilia <i>Gilia millefoliata</i>	PDPLM04130			G2	S2.2	1B.2
20 double-crested cormorant <i>Phalacrocorax auritus</i>	ABNFD01020			G5	S3	
21 foothill yellow-legged frog <i>Rana boylei</i>	AAABH01050			G3	S2S3	SC
22 ghost-pipe <i>Monotropa uniflora</i>	PDMON03030			G5	S2S3	2.2
23 great egret <i>Ardea alba</i>	ABNGA04040			G5	S4	

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Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
24 green yellow sedge <i>Carex viridula var. viridula</i>	PMCYP03EM3			G5T5	S1.3	2.3
25 horned butterwort <i>Pinguicula macroceras</i>	PDLNT01040			G5	S3.2	2.2
26 leafy-stemmed mitrewort <i>Mitella caulescens</i>	PDSAX0N020			G5	S4.2	4.2
27 marbled murrelet <i>Brachyramphus marmoratus</i>	ABNNN06010	Threatened	Endangered	G3G4	S1	
28 northern red-legged frog <i>Rana aurora</i>	AAABH01021			G4T4	S2?	SC
29 northern spotted owl <i>Strix occidentalis caurina</i>	ABNSB12011	Threatened		G3T3	S2S3	SC
30 rhinoceros auklet <i>Cerorhinca monocerata</i>	ABNNN11010			G5	S3	
31 sand dune phacelia <i>Phacelia argentea</i>	PDHYD0C070			G2	S1.1	1B.1
32 seaside pea <i>Lathyrus japonicus</i>	PDFAB250C0			G5	S1.1	2.1
33 serpentine sedge <i>Carex serpenticola</i>	PMCYP03KM0			G4	S2.3	2.3
34 short-leaved evax <i>Hesperevax sparsiflora var. brevifolia</i>	PDASTE5011			G4T2T3	S2S3	1B.2
35 snowy egret <i>Egretta thula</i>	ABNGA06030			G5	S4	
36 tidewater goby <i>Eucyclogobius newberryi</i>	AFCQN04010	Endangered		G3	S2S3	SC
37 tufted puffin <i>Fratercula cirrhata</i>	ABNNN12010			G5	S2	SC
38 western snowy plover <i>Charadrius alexandrinus nivosus</i>	ABNNB03031	Threatened		G4T3	S2	SC
39 willow flycatcher <i>Empidonax traillii</i>	ABPAE33040		Endangered	G5	S1S2	
40 yellow-tubered toothwort <i>Cardamine nuttallii var. gemmata</i>	PDBRA0K0R3			G5T3	S2.2	1B.3