EXHIBIT A

Freshwater Creek Road Decommissioning Project, Phase III Additional Sites

SCOPE OF WORK

Under direction of the Grantor, and under the following conditions and terms, the Grantee will:

1. Improve spawning and rearing habitat by reducing coarse/fine sediment delivery and improving riparian canopy for Chinook and coho salmon, steelhead trout, and cutthroat trout in a selected section of Freshwater Creek, tributary to Humboldt Bay in Humboldt County. The objective is to save 2,883 cubic yards of sediment from delivery by dispersing road runoff on 0.72 miles of road and reestablishing drainage patterns at 7 stream crossings.

2. Conduct work on Freshwater Creek watershed. The project is located in Township 5N, Range 1E, Sections 28, 33; and Township 4N, Range 1E, and Sections 1, 2, and 11 of the Arcata South 7.5 Minute U.S.G.S. Quadrangle, 40.7899 N latitude and 124.0803 W longitude to 40.7907 N and 124.0673 W at the north boundary and 40.7719 N latitude and 124.0805 W longitude to 40.7730 N and 124.0667 W at the south boundary as depicted in Exhibit C, Project Location Map, which is attached and made part of this agreement by this reference.

3. Decommission 0.72 miles of road and 11 sites thereby saving approximately 2,883 cubic yards of sediment from delivery to Freshwater Creek. Fill slope and stream crossing fill from approximately 7 stream crossings and 4 landslides will be excavated and stored in stable locations. The following treatments will be implemented where appropriate:
   - Excavation of in-place stream crossings at locations where roads or landings were built across stream channels. This includes complete excavation of the fill, including the culvert or Humboldt log crossing so the original stream bed and side slopes are exhumed. A stream crossing excavation includes removing the culvert and the underlying and the adjacent fill material. Complete excavation of stream crossing fills, includes 100 year flood channel bottom widths and 2:1 or otherwise stable side slopes. When possible the excavated spoil will be stored at nearby stable locations where it will not erode. If there is a limited amount of stable storage locations at the excavation site the crossing fill material will be hauled off-site for storage.
   - Road surface treatments: 1) ripping of the surface of the road or landing using mechanical rippers to reduce surface runoff and improve revegetation; 2) in-place outsloping or the excavation of unstable side cast material that could fail and deliver sediment to a stream along the outside edge of a road prism or landing and the replacement of the spoil on the roadbed against the corresponding adjacent cutbank, or in close proximity of the site; 3) exported out-sloping which involves not placing the material against the cutbank so the material is end hauled to a spoil disposal site; 4) installation of cross drains or deep water bars at 50, 75, 100 or 200 foot intervals or as necessary at springs

and seeps to disperse road surface runoff. The cross road drains provide road surface drainage and prevent the collection of concentrated runoff on the former roadbed.

- Seeding and mulching of all exposed soils which may deliver sediment to a stream. Woody debris will be concentrated on finished slopes adjacent to stream crossings. The standard for success is 80% ground cover for broadcast planting of seed, after a period of three years.

4. Sites which are expected to erode and deliver sediment to the stream are the only locations where work will be authorized for reimbursement under the terms of this agreement. Reimbursement will not be authorized for work done to improve aesthetics only.

5. 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 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. All road decommissioning will be done in accordance with techniques described in the Handbook for Forest and Ranch Roads, (PWA, 1994c.) and the *California Salmonid Stream Restoration Manual*, Third Edition, Volume II, Part X, January 2004. All road decommissioning sites and techniques shall be approved by the Grant Manager before any equipment work takes place.

7. 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.

8. 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.

9. If the project will not be completed by March 31, 2010, and therefore the grantee will be requesting an amendment for time, this request and a justification for the delay resulting in the time request must be submitted no later than December 1, 2010.

10. 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 in total to date
    - Dewatering and fish relocation on DFG data sheet (to be provided by the DFG Grant Manager upon request)
    - Project 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 segment decommissioned per road segment
    - Sediment spoils volume estimate per road segment
    - Upslope stream crossings decommissioned (not for fish passage)
    - Sediment volume prevented from entering the stream per crossing
    - Sediment spoils volume estimate per crossing
    - Upslope area treated (sq ft) (landslides, bank stabilization)
    - Amount of riparian area treated per site in acres

11. Upon completion of the project, the Grantee shall submit two (2) hard copies of a final written report and one (1) electronic, Microsoft Word compatible, copy on a CD. The report shall not be considered final until approved and accepted by the grant manager. 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;
    - 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; and
- Report measurable metrics for the project by responding to the restoration project metrics listed below.

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

<u>Habitat Projects (All)</u>

- 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.

Upland Habitat Projects (HU)

- Number of actions (road decommission / upgrade)
- Total acres of upslope area treated.
- Total miles of road treated.
- Miles of road treated for road drainage system improvements.
- Miles of road decommissioned.
- Number of cubic yards of sediment saved from entering the stream.

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.

12. The Grantee will acknowledge the participation of the Department of Fish and Game, Fishery Restoration Grant Program funds on any signs, flyers, or other types of written communication or notice to advertise or explain the Freshwater Creek Road Decommissioning Project, Phase III.

EXHIBIT C
Freshwater Creek Road Decommissioning Project, Phase III
Additional sites
Project Location Map
T5N R1E S 28,33
Humboldt County

California Department of Fish and Game
Natural Diversity Database
Possible species within the Arcata South and surrounding quads for the Freshwater Creek Road Decommissioning Project Phase III T5N R1E S 28, 33, Humbo

	Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1	California clapper rail *Rallus longirostris obsoletus*	ABNME05016	Endangered	Endangered	G5T1	S1	
2	California globe mallow *Iliamna latibracteata*	PDMAL0K040			G3	S2.2	1B.2
3	Cooper's hawk *Accipiter cooperii*	ABNKC12040			G5	S3	
4	Del Norte salamander *Plethodon elongatus*	AAAAD12050			G4	S3	SC
5	Howell's montia *Montia howellii*	PDPOR05070			G3G4	S3	2.2
6	Humboldt Bay owl's-clover *Castilleja ambigua ssp. humboldtiensis*	PDSCR0D402			G4T2	S2.2	1B.2
7	Humboldt Bay wallflower *Erysimum menziesii ssp. eurekense*	PDBRA160E2	Endangered	Endangered	G3?T1	S1.1	1B.1
8	Humboldt marten *Martes americana humboldtensis*	AMAJF01012			G5T2T3	S2S3	SC
9	Kneeland Prairie pennycress *Thlaspi californicum*	PDBRA2P041	Endangered		G1	S1.1	1B.1
10	Lyngbye's sedge *Carex lyngbyei*	PMCYP037Y0			G5	S2.2	2.2
11	Norris' beard moss *Didymodon norrisii*	NBMUS2C0H0			G2G3	S2.2	2.2
12	Northern Coastal Salt Marsh	CTT52110CA			G3	S3.2	
13	Northern Foredune Grassland	CTT21211CA			G1	S1.1	
14	Oregon coast paintbrush *Castilleja affinis ssp. litoralis*	PDSCR0D012			G4G5T4	S2.2	2.2
15	Oregon goldthread *Coptis laciniata*	PDRAN0A020			G4G5	S2.2	2.2
16	Pacific fisher *Martes pennanti (pacifica) DPS*	AMAJF01021	Candidate	unknown code...	G5	S2S3	SC
17	Pacific gilia *Gilia capitata ssp. pacifica*	PDPLM040B6			G5T3T4	S2.2?	1B.2
18	Pacific tailed frog *Ascaphus truei*	AAABA01010			G4	S2S3	SC
19	Point Reyes bird's-beak *Cordylanthus maritimus ssp. palustris*	PDSCR0J0C3			G4?T2	S2.2	1B.2
20	Siskiyou checkerbloom *Sidalcea malviflora ssp. patula*	PDMAL110F9			G5T1	S1.1	1B.2
21	Sonoma tree vole *Arborimus pomo*	AMAFF23030			G3	S3	SC
22	Upland Douglas Fir Forest	CTT82420CA			G4	S3.1	
23	Wolf's evening-primrose *Oenothera wolfii*	PDONA0C1K0			G1	S1.1	1B.1
24	alpine marsh violet *Viola palustris*	PDVIO041G0			G5	S1S2	2.2

	Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
25	bald eagle *Haliaeetus leucocephalus*	ABNKC10010	Delisted	Endangered	G5	S2	
26	bank swallow *Riparia riparia*	ABPAU08010		Threatened	G5	S2S3	
27	beach layia *Layia carnosa*	PDAST5N010	Endangered	Endangered	G2	S2.1	1B.1
28	bensoniella *Bensoniella oregona*	PDSAX02010		Rare	G3	S2.2	1B.1
29	black-crowned night heron *Nycticorax nycticorax*	ABNGA11010			G5	S3	
30	bristle-stalked sedge *Carex leptalea*	PMCYP037E0			G5	S2?	2.2
31	coast cutthroat trout *Oncorhynchus clarkii clarkii*	AFCHA0208A			G4T4	S3	SC
32	coast fawn lily *Erythronium revolutum*	PMLIL0U0F0			G4	S3	2.2
33	coast sidalcea *Sidalcea oregana ssp. eximia*	PDMAL110K9			G5T1	S1.2	1B.2
34	coastal marsh milk-vetch *Astragalus pycnostachyus var. pycnostachyus*	PDFAB0F7B2			G2T2	S2.2	1B.2
35	coho salmon - southern Oregon / northern California ESU *Oncorhynchus kisutch*	AFCHA02032	Threatened	Threatened	G4T2Q	S2?	SC
36	cylindrical trichodon *Trichodon cylindricus*	NBMUS7N020			G4G5	S2.2	2.2
37	dark-eyed gilia *Gilia millefoliata*	PDPLM04130			G2	S2.2	1B.2
38	double-crested cormorant *Phalacrocorax auritus*	ABNFD01020			G5	S3	
39	foothill yellow-legged frog *Rana boylii*	AAABH01050			G3	S2S3	SC
40	ghost-pipe *Monotropa uniflora*	PDMON03030			G5	S2S3	2.2
41	giant fawn lily *Erythronium oregonum*	PMLIL0U0C0			G5	S2.2	2.2
42	golden eagle *Aquila chrysaetos*	ABNKC22010			G5	S3	
43	great blue heron *Ardea herodias*	ABNGA04010			G5	S4	
44	great egret *Ardea alba*	ABNGA04040			G5	S4	
45	green sturgeon *Acipenser medirostris*	AFCAA01030	Threatened		G3	S1S2	SC
46	leafy-stemmed mitrewort *Mitella caulescens*	PDSAX0N020			G5	S4.2	4.2
47	long-beard lichen *Usnea longissima*	NLLEC5P420			G4	S4.2	

	Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
48	long-eared myotis *Myotis evotis*	AMACC01070			G5	S4?	
49	maple-leaved checkerbloom *Sidalcea malachroides*	PDMAL110E0			G3G4	S3S4.2	4.2
50	marbled murrelet *Brachyramphus marmoratus*	ABNNN06010	Threatened	Endangered	G3G4	S1	
51	marsh pea *Lathyrus palustris*	PDFAB250P0			G5	S2S3	2.2
52	minute pocket moss *Fissidens pauperculus*	NBMUS2W0U0			G3?	S1.2	1B.2
53	northern clustered sedge *Carex arcta*	PMCYP030X0			G5	S1S2	2.2
54	northern meadow sedge *Carex praticola*	PMCYP03B20			G5	S2S3	2.2
55	northern red-legged frog *Rana aurora*	AAABH01021			G4T4	S2?	SC
56	northern spotted owl *Strix occidentalis caurina*	ABNSB12011	Threatened		G3T3	S2S3	SC
57	osprey *Pandion haliaetus*	ABNKC01010			G5	S3	
58	pink sand-verbena *Abronia umbellata ssp. breviflora*	PDNYC010N2			G4G5T2	S2.1	1B.1
59	running-pine *Lycopodium clavatum*	PPLYC01080			G5	S4.1	4.1
60	sandy beach tiger beetle *Cicindela hirticollis gravida*	IICOL02101			G5T2	S1	
61	seaside pea *Lathyrus japonicus*	PDFAB250C0			G5	S1.1	2.1
62	sharp-shinned hawk *Accipiter striatus*	ABNKC12020			G5	S3	
63	short-leaved evax *Hesperevax sparsiflora var. brevifolia*	PDASTE5011			G4T2T3	S2S3	1B.2
64	snowy egret *Egretta thula*	ABNGA06030			G5	S4	
65	southern torrent salamander *Rhyacotriton variegatus*	AAAAJ01020			G3G4	S2S3	SC
66	summer-run steelhead trout *Oncorhynchus mykiss irideus*	AFCHA0213B			G5T4Q	S2	SC
67	tidewater goby *Eucyclogobius newberryi*	AFCQN04010	Endangered		G3	S2S3	SC
68	western lily *Lilium occidentale*	PMLIL1A0G0	Endangered	Endangered	G1	S1.2	1B.1
69	western pond turtle *Actinemys marmorata*	ARAAD02030			G3G4	S3	SC
70	western sand-spurrey *Spergularia canadensis var. occidentalis*	PDCAR0W032			G5T4?	S1.1	2.1

	Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
71	western snowy plover *Charadrius alexandrinus nivosus*	ABNNB03031	Threatened		G4T3	S2	SC
72	white-footed vole *Arborimus albipes*	AMAFF23010			G3G4	S2S3	SC