

EXHIBIT A
Stream and Floodplain Restoration in McGarvey Creek, Lower Klamath River
Statement of Work

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

1. Improve spawning and rearing habitat by increasing habitat diversity, reducing fine sediment and improving riparian canopy for Chinook and coho salmon and steelhead and coastal cutthroat trout in a selected section of McGarvey Creek tributary to the Klamath River in Del Norte County. The objective is to rehabilitate floodplain roads and stream crossings, create off-channel overwinter rearing habitat; plant native conifers, and install complex wood jams in fluvial habitats to benefit natal and non-natal salmonids.
2. Conduct work on McGarvey Creek approximately 0.4 miles upstream from the confluence of the Klamath River. The project is located in Township 13N, Range 1E, Section S24 of the Fern Canyon 7.5 Minute U.S.G.S. Quadrangle (parts of the project also are in the Requa, Klamath Glen, and Ah Pah Ridge 7.5 Minute U.S.G.S. Quadrangles), 41.503° Latitude, -123.995° Longitude as depicted in Exhibit C, Project Location Map, which is attached and made part of this agreement by this reference.
3. The project will improve instream habitat by installing 20 complex wood jams:
 - The DFG Grant Manager will evaluate proposed treatments and approve, modify, or delete specific sites or designs.
 - Logs will be purchased or obtained from salvage sources. The logs will be transported sorted and stockpiled close to where they will be installed.
 - Habitat improvements will be accomplished by installing instream habitat structures at 20 sites with three or more logs per structure. An excavator will be used to strategically place the logs at designated locations within the project reach. Care will be taken to maximize habitat complexity at each site by incorporating multiple pieces of wood large enough in size to avoid or minimize hard pinning.
 - Minimum wood length will be 1.5 times the bankfull width of the stream.

Decommission 0.68 miles of floodplain roads thereby saving 7,280 cubic yards of sediment from delivery to McGarvey Creek. Approximately 5,200 cubic yards of fill slope and stream crossing fill from 3 stream crossings and landing/slide/fillslope sites 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 out-sloping 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.

Plant 5,000 native conifers on 6.3 acres of riparian areas. 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. Site rehabilitation and erosion control, (mulching and seeding) can occur any time during construction but will need to be completed prior to October 15. The standard for success for seeding and mulching is 80% ground coverage 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. 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.
6. All stream crossings 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.
7. All crossing upgrades in fish bearing reaches of streams will follow the National Marine Fisheries Service (NMFS 2001) Guidelines for Salmonid Passage at Stream Crossings and DFG criteria for adult and juvenile salmonid fish passage as described in the Third Edition,

Volume II, Part IX, February 2003, of the *California Salmonid Stream Habitat Restoration Manual*. Culvert replacement or modification designs shall be visually reviewed and authorized by NOAA Fisheries (or DFG) engineers prior to commencement of work.

8. 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.
9. 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*.
10. 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.
11. 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)

- 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.

Upland Habitat Projects (HU)

- Number of actions (road decommission / upgrade)
- Number of acres treated.
- Number of miles of road decommissioned or upgraded (e.g., treated).

- Number of cubic yards of sediment saved from entering the stream.

Riparian Habitat Projects (HR, HS)

- Number of miles treated (e.g., fenced)
- Number of acres treated (e.g., planted)
- Number of acres and type of invasive species controlled
- Species and size of trees planted
- Number of trees/density of plantings
- Feet of stream bank stabilized and treatments use

12. The Yurok Tribe 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 Stream and Floodplain Restoration in McGarvey Creek, Lower Klamath River project.

Exhibit C
2010 Stream and Floodplain Restoration in McGarvey Creek, Lower Klamath River Location Map 1
T13N, R1E, S24
USGS 7.5 Minute Requa, Fern Canyon, Klamath Glen, and Ah Pah Ridge Quadrangles
Del Norte County

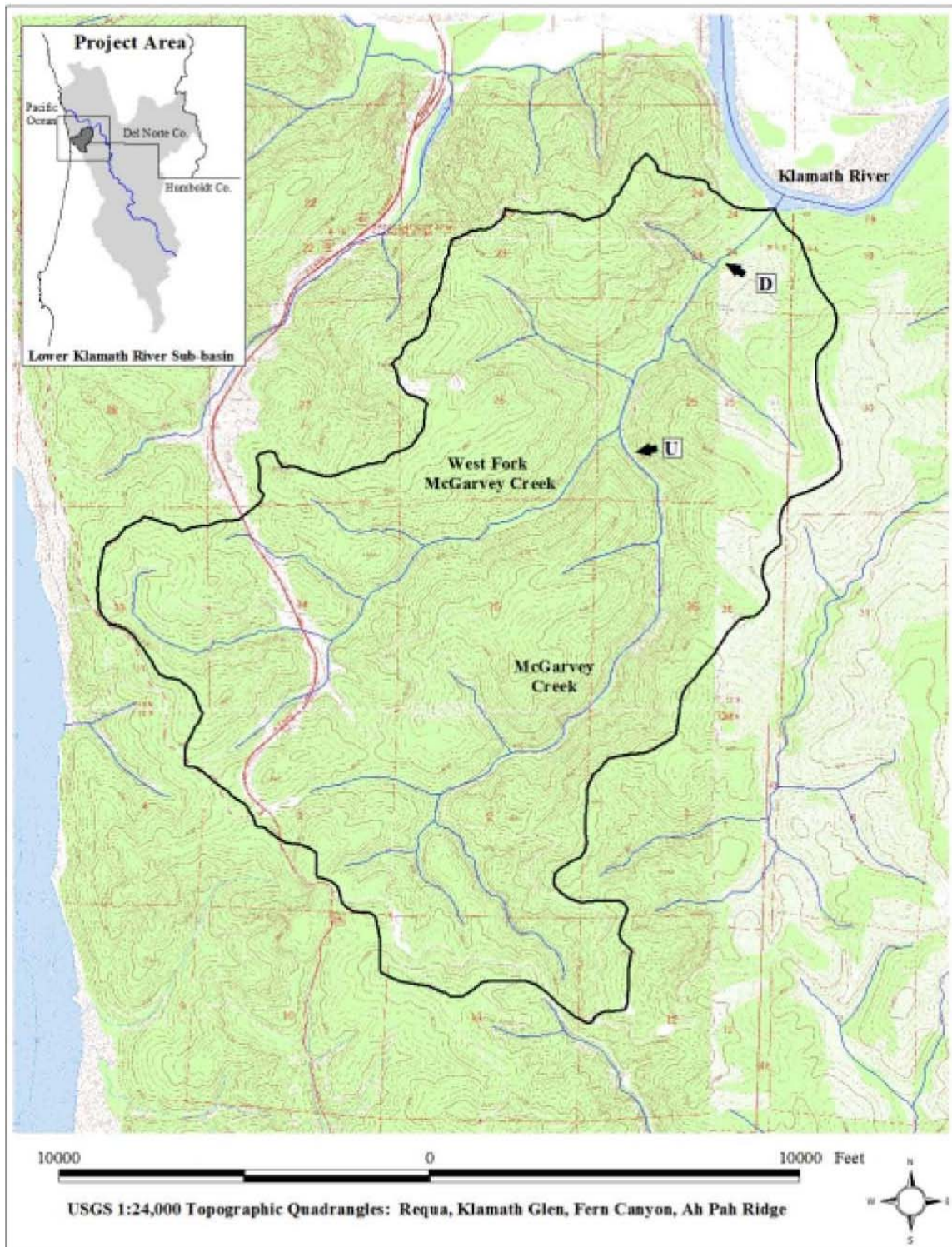
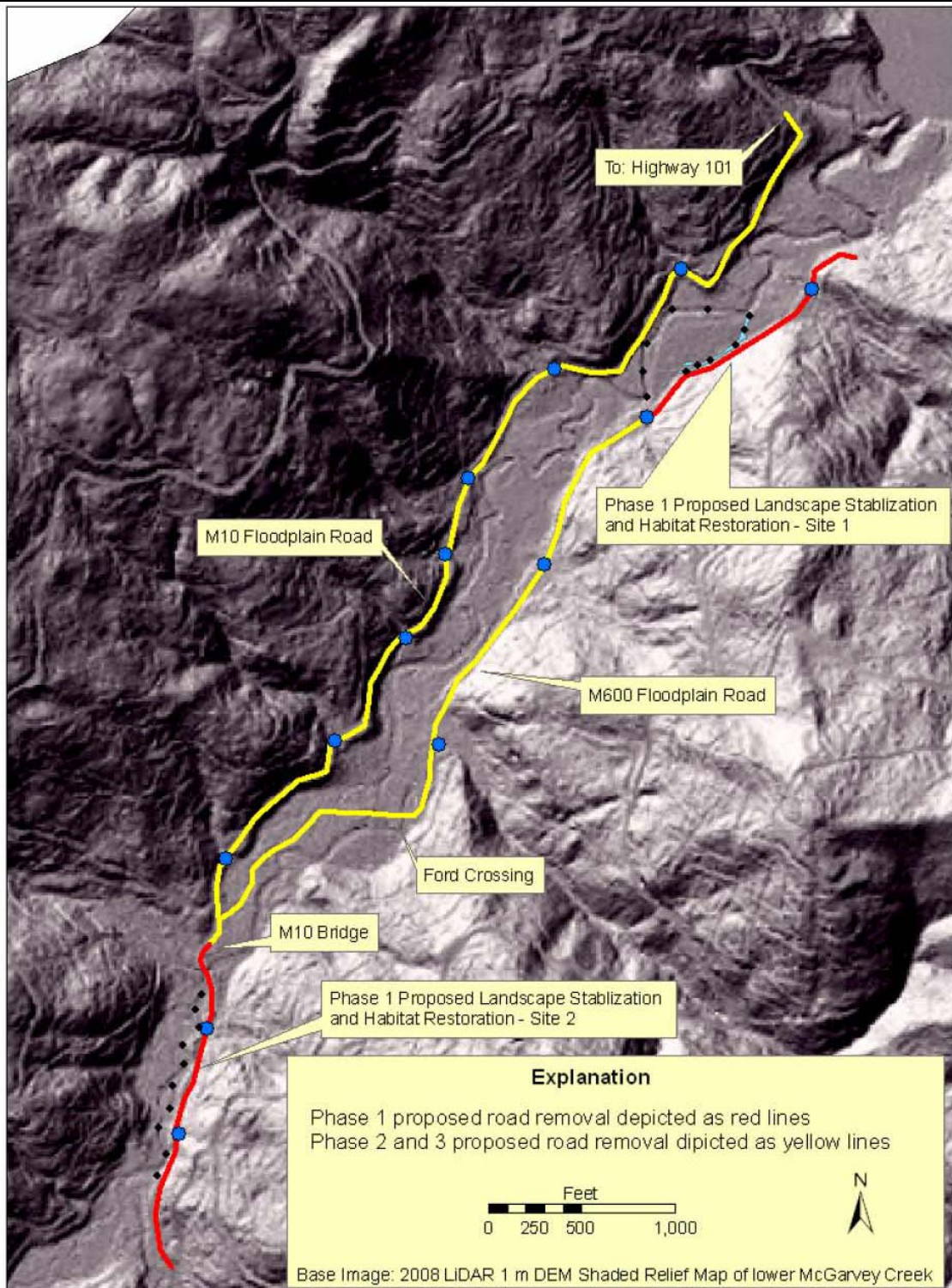


Exhibit C
2010 Stream and Floodplain Restoration in McGarvey Creek, Lower Klamath River Location Map 2
T13N, R1E, S24
USGS 7.5 Minute Requa, Fern Canyon, Klamath Glen, and Ah Pah Ridge Quadrangles
Del Norte County



California Department of Fish and Game

Natural Diversity Database

Selected Elements by Common Name - Portrait

Possible species within the Requa, Fern Canyon, Klamath Glen, and Ah Pah Ridge Quads and surrounding quads for the Stream and Floodplain Restoration in McGarvey Creek, Lower Klamath River Project, T13N, R1E, S24, Del Norte County

Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 Behren's silverspot butterfly <i>Speyeria zerene behrensii</i>	IILEPJ6088	Endangered		G5T1	S1	
2 California globe mallow <i>Iliamna latibracteata</i>	PDMAL0K040			G3	S2.2	1B.2
3 Howell's montia <i>Montia howellii</i>	PDPOR05070			G3G4	S3	2.2
4 Oregon coast paintbrush <i>Castilleja affinis ssp. litoralis</i>	PDSCR0D012			G4G5T4	S2.2	2.2
5 Pacific tailed frog <i>Ascaphus truei</i>	AAABA01010			G4	S2S3	SC
6 Siskiyou checkerbloom <i>Sidalcea malviflora ssp. patula</i>	PDMAL110F9			G5T1	S1.1	1B.2
7 Sitka Spruce Forest	CTT82110CA			G1	S1.1	
8 Wolf's evening-primrose <i>Oenothera wolfii</i>	PDONA0C1K0			G1	S1.1	1B.1
9 Yuma myotis <i>Myotis yumanensis</i>	AMACC01020			G5	S4?	
10 beach layia <i>Layia carnosa</i>	PDAST5N010	Endangered	Endangered	G2	S2.1	1B.1
11 black-crowned night heron <i>Nycticorax nycticorax</i>	ABNGA11010			G5	S3	
12 coast cutthroat trout <i>Oncorhynchus clarkii clarkii</i>	AFCHA0208A			G4T4	S3	SC
13 deceiving sedge <i>Carex saliniformis</i>	PMCYP03BY0			G2	S2.2	1B.2
14 foothill yellow-legged frog <i>Rana boylei</i>	AAABH01050			G3	S2S3	SC
15 ghost-pipe <i>Monotropa uniflora</i>	PDMON03030			G5	S2S3	2.2
16 great blue heron <i>Ardea herodias</i>	ABNGA04010			G5	S4	
17 lagoon sedge <i>Carex lenticularis var. limnophila</i>	PMCYP037A7			G5T5	S1S2.2	2.2
18 marbled murrelet <i>Brachyramphus marmoratus</i>	ABNNN06010	Threatened	Endangered	G3G4	S1	
19 minute pocket moss <i>Fissidens pauperculus</i>	NBMUS2W0U0			G3?	S1.2	1B.2
20 northern meadow sedge <i>Carex praticola</i>	PMCYP03B20			G5	S2S3	2.2
21 northern red-legged frog <i>Rana aurora</i>	AAABH01021			G4T4	S2?	SC
22 northern spotted owl <i>Strix occidentalis caurina</i>	ABNSB12011	Threatened		G3T3	S2S3	SC
23 osprey <i>Pandion haliaetus</i>	ABNKC01010			G5	S3	

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Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
24 pink sand-verbena <i>Abronia umbellata</i> ssp. <i>breviflora</i>	PDNYC010N2			G4G5T2	S2.1	1B.1
25 redwood juga <i>Juga orickensis</i>	IMGASK4190			G2	S1S2	
26 running-pine <i>Lycopodium clavatum</i>	PPLYC01080			G5	S4.1	4.1
27 seaside pea <i>Lathyrus japonicus</i>	PDFAB250C0			G5	S1.1	2.1
28 silver-haired bat <i>Lasionycteris noctivagans</i>	AMACC02010			G5	S3S4	
29 southern torrent salamander <i>Rhyacotriton variegatus</i>	AAAAJ01020			G3G4	S2S3	SC
30 tidewater goby <i>Eucyclogobius newberryi</i>	AFCQN04010	Endangered		G3	S2S3	SC
31 willow flycatcher <i>Empidonax traillii</i>	ABPAE33040		Endangered	G5	S1S2	