**EXHIBIT A**
**Conner Creek Fish Passage Improvement Project**
**SCOPE OF WORK**

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

1. Improve fish passage for coho salmon and steelhead trout in Conner Creek, tributary to the Trinity River in Trinity County. The objective is to improve access to approximately 2.5 miles of habitat, to increase spawning habitat for adult salmonids and rearing habitat for juvenile salmonids.

2. Conduct work on two locations of Conner Creek. The project sites are on Conner Creek Road (#1) and Red Hill Road (#2). Crossing #1 is located 4,080 feet upstream of its confluence with the Trinity River and crossing #2 is approximately 1,100 feet upstream of crossing #1. The projects are located in Township 33N, Range 11W, Section 02 of the U.S.G.S. Quadrangle. Crossing #1 is at $40.7495^{0}$ N and $123.0813^{0}$ W; Crossing #2 is at $40.7486^{0}$ N and $123.0845^{0}$ W as depicted in Exhibit C, Project Location Map, which is attached and made part of this agreement by this reference.

3. Improve fish passage in Conner Creek by completing the following work:
   - Design plans for the stream crossing installation to be submitted to the Grant Manager prior to project commencement. The plans will include details of construction, scaled drawings of the new crossing structure, stream channel cross sections and a longitudinal profile, as well as specifics on traffic detour, sediment control, water diversion and fish relocation if necessary.
   - Implement plans for fish removal, water diversion, sediment control and traffic detour.
   - Crossing #1 –The existing 14’ long bridge will be modified by removing one abutment, extending the bridge to 19’ or more and replacing the deck, alternative deck beam sizes and configurations will be considered that could increase the soffit height of the deck. The existing concrete sill and fish ladder will be removed and three grade control structures will be placed at and upstream of the bridge site.
   - Crossing #2 – The existing crossing will be replaced with an embedded multiplate arch culvert: 18’ wide by 80’, or less in length. The existing culvert and roadfill material will be excavated after a Bailey Bridge is installed for use as the temporary “detour” for the roadway (a Bailey Bridge or similar structure is required at this crossing due to the sharp curve in the roadway at the stream crossing and limited access areas for a detour). The crossing would be backfilled with engineered streambed material.
   - Treat disturbed and /or erodible stream banks at the project site with appropriately sized boulders, bioengineering and revegetation. Any additional disturbed soils will be seeded, mulched and planted with native plants.

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 Department of Fish and Game, for adult and juvenile salmonid fish passage, unless modified and authorized under a design exception from both agencies.

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 (and/or CDFG) 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 Trinity County Department of Transportation will maintain the new crossings, inspect the crossing in a timely manner and remove debris as necessary during the storm season.

11. If the project will not be completed by March 31, 2010, and therefore the grantee will be requesting an amendment for a time extension, this request and a justification for the delay resulting in the time extension request must also be submitted no later than December 1, 2009.

12. 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:

    - number of stream crossings upgraded
    - 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.

13. 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. 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.

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.

Riparian Habitat Projects (HR, HS)

- Number of acres treated (e.g., planted) according to plan.
- Species and size of trees planted.
- Number of trees/density of plantings.
- Feet of stream bank stabilized and treatments used.

14. 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 Conner Creek Fish Passage Improvement Project.

**California Department of Fish and Game**
**Natural Diversity Database**
**Selected Elements by Common Name - Portrait**
**Possible species within the Dedrick and surrounding quads for the Conner Creek Fish Passage Improvement Project**

| | Common Name/Scientific Name | Element Code | Federal Status | State Status | GRank | SRank | CDFG or CNPS |
|---|---|---|---|---|---|---|---|
| 1 | American (=pine) marten<br>*Martes americana* | AMAJF01010 | | | G5 | S3S4 | |
| 2 | American badger<br>*Taxidea taxus* | AMAJF04010 | | | G5 | S4 | SC |
| 3 | Baker's globe mallow<br>*Iliamna bakeri* | PDMAL0K010 | | | G4 | S3.2 | 4.2 |
| 4 | Big Bar hesperian<br>*Vespericola pressleyi* | IMGASA4170 | | | G1 | S1 | |
| 5 | Canyon Creek stonecrop<br>*Sedum paradisum* | PDCRA0A0U3 | | | G1 | S1.3 | 1B.3 |
| 6 | Cascades frog<br>*Rana cascadae* | AAABH01060 | | | G3G4 | S3 | SC |
| 7 | Darlingtonia Seep | CTT51120CA | | | G4 | S3.2 | |
| 8 | Dudley's rush<br>*Juncus dudleyi* | PMJUN01390 | | | G5 | S2.3? | 2.3 |
| 9 | English Peak greenbriar<br>*Smilax jamesii* | PMSMI010D0 | | | G3 | S3.2 | 1B.3 |
| 10 | Heckner's lewisia<br>*Lewisia cotyledon var. heckneri* | PDPOR04052 | | | G4T2 | S2.2 | 1B.2 |
| 11 | Humboldt marten<br>*Martes americana humboldtensis* | AMAJF01012 | | | G5T2T3 | S2S3 | SC |
| 12 | Klamath Mountain catchfly<br>*Silene salmonacea* | PDCAR0U2D0 | | | G1G2 | S1S2.2 | 1B.2 |
| 13 | Lyall's tonestus<br>*Tonestus lyallii* | PDASTE0050 | | | G5 | S1.3? | 2.3 |
| 14 | Oregon fireweed<br>*Epilobium oreganum* | PDONA060P0 | | | G2 | S2.2 | 1B.2 |
| 15 | Oregon snowshoe hare<br>*Lepus americanus klamathensis* | AMAEB03011 | | | G5T3T4Q | S2? | SC |
| 16 | Pacific fisher<br>*Martes pennanti (pacifica) DPS* | AMAJF01021 | Candidate | | G5 | S2S3 | SC |
| 17 | Regel's rush<br>*Juncus regelii* | PMJUN012D0 | | | G4? | S1.3? | 2.3 |
| 18 | Shasta chaenactis<br>*Chaenactis suffrutescens* | PDAST200H0 | | | G3 | S3.2? | 1B.3 |
| 19 | Siskiyou fireweed<br>*Epilobium siskiyouense* | PDONA06100 | | | G3 | S2.2 | 1B.3 |
| 20 | Tinity Alps ground beetle<br>*Nebria sahlbergii triad* | IICOL6L081 | | | G1G3T1T3 | S1S3 | |
| 21 | Tracy's beardtongue<br>*Penstemon tracyi* | PDSCR1L6A0 | | | G1 | S1.3 | 1B.3 |
| 22 | Trinity Spot<br>*Punctum hannai* | IMGAS47080 | | | G1 | S1S3 | |
| 23 | Trinity bristle snail<br>*Monadenia infumata setosa* | IMGASC7080 | | Threatened | G2T2 | S2 | |

| | Common Name/Scientific Name | Element Code | Federal Status | State Status | GRank | SRank | CDFG or CNPS |
|---|---|---|---|---|---|---|---|
| 24 | Trinity shoulderband<br>*Helminthoglypta talmadgei* | IMGASC2630 | | | G1G3 | S1S3 | |
| 25 | Wilkin's harebell<br>*Campanula wilkinsiana* | PDCAM020Z0 | | | G2 | S2.2 | 1B.2 |
| 26 | buttercup-leaf suksdorfia<br>*Suksdorfia ranunculifolia* | PDSAX0W010 | | | G5 | S2 | 2 |
| 27 | elongate copper moss<br>*Mielichhoferia elongata* | NBMUS4Q022 | | | G4? | S2.2 | 2.2 |
| 28 | flagella-like atractylocarpus<br>*Atractylocarpus flagellaceus* | NBMUS84010 | | | G5 | S1.2 | 2.2 |
| 29 | foothill yellow-legged frog<br>*Rana boylii* | AAABH01050 | | | G3 | S2S3 | SC |
| 30 | golden eagle<br>*Aquila chrysaetos* | ABNKC22010 | | | G5 | S3 | |
| 31 | hooded lancetooth<br>*Ancotrema voyanum* | IMGAS36130 | | | G1G2 | S1S2 | |
| 32 | northwestern pond turtle<br>*Actinemys marmorata marmorata* | ARAAD02031 | | | G3G4T3 | S3 | SC |
| 33 | showy raillardella<br>*Raillardella pringlei* | PDAST7X030 | | | G2 | S2.2 | 1B.2 |
| 34 | spring-run chinook salmon<br>*Oncorhynchus tshawytscha spring-run* | AFCHA0205A | Threatened | Threatened | G5 | S1 | |
| 35 | summer-run steelhead trout<br>*Oncorhynchus mykiss irideus* | AFCHA0213B | | | G5T4Q | S2 | SC |
| 36 | thread-leaved beardtongue<br>*Penstemon filiformis* | PDSCR1L2A0 | | | G3 | S3.3 | 1B.3 |
| 37 | western tailed frog<br>*Ascaphus truei* | AAABA01010 | | | G4 | S2S3 | SC |
| 38 | white-flowered rein orchid<br>*Piperia candida* | PMORC1X050 | | | G3 | S3.2 | 1B.2 |
| 39 | woolly pussy-toes<br>*Antennaria lanata* | PDAST0H0B0 | | | G5 | S1.2 | 2.2 |

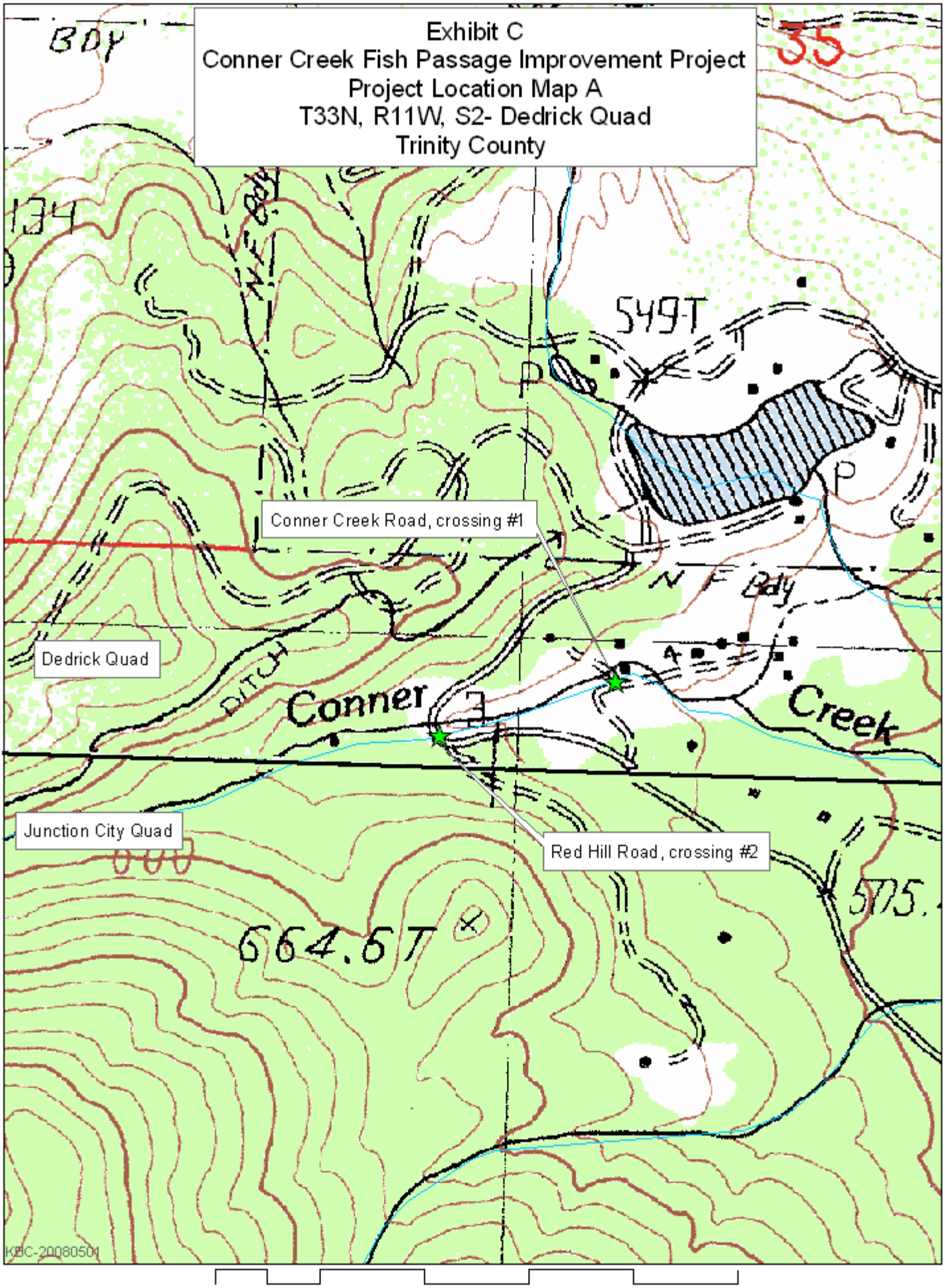
Exhibit C
Conner Creek Fish Passage Improvement Project
Project Location Map A
T33N, R11W, S2- Dedrick Quad
Trinity County
Conner Creek Road, crossing #1
Red Hill Road, crossing #2
Dedrick Quad
Junction City Quad
Conner
Creek
DITCH
549T
664.6T
575.
KBC-20080501
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