Additional Information

Continued from Coho Help Act Project Request Form (DFW 739)

North Fork Elk River Instream Enhancement Project

4. c. Project schedule:

Implementation of this project will occur over two years during the summer work periods of 2015 and 2016 with final reports (including monitoring data) submitted in 2017. Stream channel conditions, including instream wood surveys, are conducted annually in North Fork Elk River as part of Humboldt Redwood Company's Aquatic Trends Monitoring (ATM) Program.

7. Project Location:

Location description: The project reach is located on North Fork Elk River approximately 2.5 miles upstream from the confluence with South Fork Elk River. The project reach is approximately 1,000 feet long.

Center of project: 124 degrees 6.6 minutes West, 40 degrees 41.88 minutes North

Driving directions to site: From the south, take Highway 101 to the Herrick Avenue/Elk River Road exit. Turn right after the off-ramp and then take your first right onto Elk River Road. Continue on Elk River Road for a few miles and then turn right towards the Headwaters Forest Preserve sign, staying on Elk River Road. Continue on the same road for a few more miles and follow signs to the Riggs Scout Camp. Park at the camp and follow trail down to the river.

A map is attached that clearly identifies the project location and denotes a north arrow and map scale.

8. Project Description:

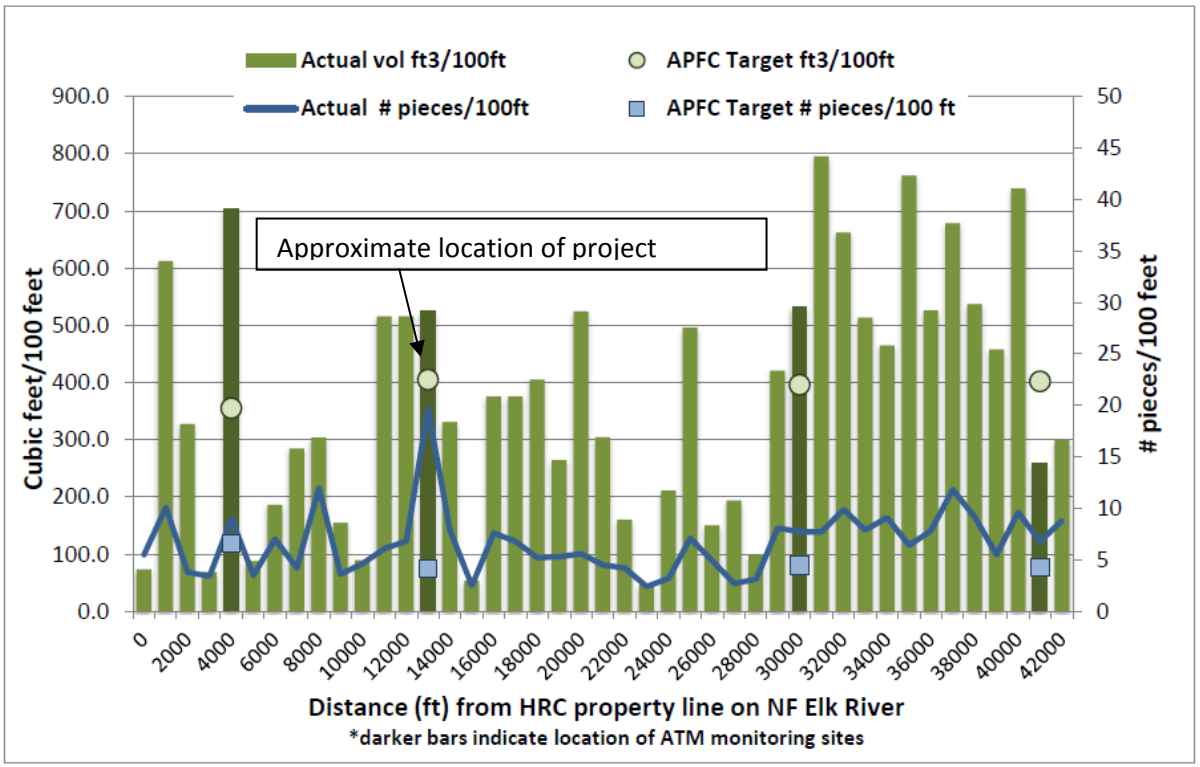
Project Need:

In 2005, as part of Humboldt Redwood Company's Elk/Salmon River Watershed Analysis (ESRWA), a survey was completed on North Fork Elk River to quantify the number and volume of LWD for the entire reach of watercourse with a stream gradient of less than 4%. This was done in a manner that LWD metrics (including those specific to LWD jams) could be assessed spatially within this region. The survey started along the property line and ended approximately 43,000 feet upstream on the North Fork Elk River. Preliminary data is presented in Figure 1 as actual volume and number of pieces per 100 feet along with the Aquatic Properly Functioning Condition (APFC) target values for these metrics calculated at the ATM stations. ATM station locations are designated with a darkened bar.

The target for number of LWD pieces per 100 feet is met consistently throughout the upper survey region and less consistently in the lower. LWD volume targets are met less often in the mid and lower regions of the survey reach. The number of LWD pieces is naturally variable but appears to be lower and less variable in the middle region. HRC intends to further analyze this data and repeat the survey regularly in the future. Future surveys will also include information on the origin of pieces.

The LWD survey data below in Figure 1 is from a separate survey than the data presented below for ATM station 214 (Table 9). As part of this Coho Help Act project, pre- and post-project LWD surveys will be conducted throughout the project reach (500 feet upstream and downstream of the project area).

Figure 1. Excerpt from Humboldt Redwood Company Elk River/Salmon Creek Watershed Analysis 2005



ATM Site 214 – North Fork Elk River above Brown's Gulch

Bed surface D50 has increased at this reach since 2005. Subsurface sediment measures indicate a small decrease in finer materials, but remain steady with limited trending. Pools in this reach meet most APFC targets excluding residual depth, although average residual depth values of 0.83 meters are close to targets of 0.91 meters. Lack of LWD key pieces relative to APFC targets continues as a trend for this site following a significant increase in 2010. The reach occasionally accumulates relatively large wood compared to other sites as evidenced by the record of piece diameter and total volume, although total volume is down to a record low in 2011. Water temperature is decreasing and riparian overstory is increasing consistent with other sites.

Cross section and thalweg surveys indicate this site has some scour and fill, but no dominant process is occurring (see appendix). Vertical stream complexity is generally the same as it was in 2005.

Table 9. Individual site report card for ATM 214, North Fork Elk River.

Site 214 North Fork Elk River	Parameter	Target Value	2005	2006	2007	2008	2009	2010	2011
Bed Surface	D50 mm	65-95	19	16	19	15	22	30	33
Bed Subsurface	%<0.85 mm	<16	14.8	13.3	14.6	13.8	10.7	9.1	11.1
	%<6.35 mm	<25	49.4	43.1	50.6	42.9	41.4	38.0	41.8
	Geomean mm	>20		6.3	5.9	7.1	7.6	8.4	7.0
	Fredle Index	>9		2.3	2.7	2.8	2.7	2.9	2.4
Pool Characteristics	Pool Area (%)	≥25%	82%	41%	83%	67%	84%	54%	85%
	Pool Spacing	<6 CW/pool	3.7	5.4	3.0	6.3	5.2	7.4	5.1
	Residual Pool Depth (m)	>.91 m	0.59	0.90	0.86	1.06	1.04	0.71	0.83
	% Pools Assoc. w/wood	>50%	86%	80%	86%	100%	100%	80%	100%
Large Woody Debris	Total Piece Frequency #/100 ft	>4.74	5.3	2.5	4.0	2.3	4.7	1.7	1.9
	Key Piece Frequency # Pieces/CW	≥.5				0.06	0.29	0.36	0.07
	Total Piece Diameter (in)	≥24.1				23.2	19.5	25.0	25.0
	Total Piece length (ft)	≥34.6				25.9	16.9	19.3	15.3
	Total Piece Volume ft^3/100 ft	≥415				565	228	311	135
Water Temperature	MWAT °C	≤16.8	16.7	17.6	18.6	16.3	15.9	16.1	15.8
Riparian Overstory	% Canopy Over Stream	≥90	60	73	58	92	74	74	88
	% Canopy of Rip Forest	>85%							97

Grayshade: no data from site

Design criteria used for project:

North Fork Elk River supports populations of Chinook and coho salmon and cutthroat and steelhead trout. Data collected within the last decade show low quantities of functional large woody material (LWM) at the proposed project site and continuing downstream. Although woody material densities are very low, juvenile salmon and trout are consistently present during the spring and summer.

One instream wood project has been completed in the North Elk watershed in the recent past. This project was located upstream of the Riggs Scout Camp.

The specific goal of this project is to increase habitat complexity and cover throughout the project reach. Habitat complexity will be increased by strategically placing logs into the stream. The logs will be sourced from two nearby locations. A group of logs (six) was removed from upstream of a hydrological station in North Fork Elk River (Photo 2). All other logs will be sourced from nearby cull decks from recent timber harvest plans. It is not anticipated that any tree falling will be required for this project. Specific objectives are to increase the length and depth of pools, improve spawning gravel retention and deposition downstream of scour areas, and provide additional pool shelter.

Photo 1. Logs from hydrological station in North Fork Elk River

Photo 2. North Fork Elk River Site A (upstream of site appx. 20' facing downstream)

Photo 3. North Fork Elk River Site B (downstream of site appx. 20' facing upstream)

Restoration or enhancement methods that will be used or employed:

The goal of the North Fork Elk River Instream Habitat Enhancement Project is to increase instream habitat complexity and shelter values. This will be achieved by placing locally-sourced logs into the stream with an excavator. A majority of the logs will be 'fixed' pieces that are embedded into the stream bank and/or stream channel. Each log will either be set into an excavated slot in the streambank and covered back over with dirt or pounded into the stream channel or bank with the excavator bucket. All bare dirt surfaces will be mulched (slash and/or straw) prior to completion. Mulches shall be applied so that not less than 90% of the disturbed areas are covered. All mulches shall be applied in a layer not less than two inches deep. Where feasible, all mulches shall be kneaded or tracked-in with track marks parallel to the contour, and tackified as necessary to prevent movement.

Locally-sourced logs from nearby stockpiles will be staged near the Riggs Scout Camp directly above the project site and subsequently transported downstream to the project location via a system of old skid trails. Wood will be installed by an excavator from the streambank and/or the stream channel. Most pieces will be embedded into the streambank and/or channel as there are few ideal riparian trees for wedging within the project reach. Also, the streambank on the right bank is approximately 6-8 feet tall, thus excavating into the streambank will allow for a better placement angle.

The installation of large wood features, approximately 29 individual pieces placed along 1,000 feet of North Fork Elk River at three sites, will increase the frequency and depth of pools. In addition to the goals noted above, this project will also provide velocity refuges during peak winter flows, decrease average water velocities and sort and collect spawning size gravel and address the lack of roughness elements within the project reach. In addition, the placement of large wood will provide complex cover for juvenile salmonids and help reduce density related competition. It is anticipated that habitat created through the placement of large woody material will be readily utilized by native salmonids.

Photos 2 and 3 above indicate that the system is lacking large wood. Logs will range in diameter from 18 - 36 inches and 10 to 40 feet in length.

Disturbance: The estimated project disturbance is 0.75 acres and 452 linear feet. For more detailed information, see Section 11, Supporting Documentation: Project Size.

Net benefit to salmon and other affected species:

Large wood features will improve fish habitat and refugia by:

- Scouring pools (spawning and rearing requirements)
- Sorting and collecting spawning gravels (spawning requirement and water quality)
- Increasing shelter values (rearing requirements and riparian dysfunction)
- Dividing territorial units to reduce density related competition (spawning and rearing requirements)

The above listed limiting factors were determined through review of the Humboldt Redwood Company Elk/Salmon River Watershed Analysis (2013).

PROJECT MONITORING

Monitoring methods and description:

Monitoring of physical stream parameters will be conducted both before and after implementation. Pre-project monitoring was conducted by Humboldt Redwood Company as part of the Elk/Salmon River Watershed Analysis and Aquatic Trends Monitoring programs. Additionally, a pre-project survey of instream wood specific to the proposed reach will be also be conducted . Following implementation, post-project monitoring will occur during the annual Aquatic Trends Monitoring program in North Fork Elk River along with a post-project instream wood survey. Pre- and post-implementation photos will be taken at flagged locations for future photo monitoring.

Three years of post-project monitoring data will be provided. An assessment of annual and final (at year 3) changes to pool volume and frequency, substrate conditions, and large woody debris trends will be provided upon request.

9. Project Area Assessment

Fauna

Based on annual surveys completed by trained Humboldt Redwood Company (HRC) biologists, the following fauna are known to be within the North Fork Elk River area, though not necessarily within the project area. Specifications follow for each species area listed below.

Northern Spotted Owl (NSO): In the North Fork Elk River area, three spotted owl activity centers and three osprey nests are present, though all are greater than 0.5 miles away from the project area. NSO surveys conducted by trained HRC biologists facilitate the generation of GIS spatial information. This information was used to make the following determinations: The known terrestrial species (owls and osprey) are outside the minimum buffer distances, so no adverse impacts are expected.

HRC bases its NSO monitoring protocols on the USFWS-endorsed protocol from 1992. The USFWS protocol is modified using the latest scientific data on owls and site-specific knowledge, in order to better fit the companies land and harvesting methods. MRC monitoring data can be found online at: http://www.mrc.com/monitoring/terrestrial-wildlife/

Southern Oregon Northern California Coastal ESU Coho Salmon (O.kisutch), coastal cutthroat (O. clarki clarki), Chinook (O. tshawytscha) and Northern California ESU Steelhead Trout (O. mykiss): Based on annual surveys conducted by trained MRC biologists, coho and Chinook salmon and steelhead and cutthroat trout are known to be present within the project reach. MRC monitoring data can be found online at: http://www.mrc.com/monitoring/aquatic-conditions/

Flora

Based on an early-season floristic surveys conducted by HRC there are no sensitive botanical species present within the North Fork Elk project area.

10. Environmental Protection Measures

All activities in this project will be completed in accordance with the CA Department of Fish and Wildlife's Habitat Restoration Manual. Additionally, the implementation of extensive minimization/avoidance measures identified in said Habitat Restoration Manual are expected to be sufficient to protect coho salmon and steelhead trout resources. This project was found consistent with the NOAA Biological Opinion (151422SWR2006SR00190:JMA) for fisheries restoration projects in the coastal counties of California. The Biological Opinion finds that such restoration projects are not likely to destroy, or adversely modify critical habitat for coastal salmonids, and requires reasonable and prudent measures be implemented to minimize incidental take of these species.

The following avoidance measures included in this project description can be found in NOAA's National Marine Fisheries Service Biological Opinion and Essential Fish Habitat Consultation; Appendix I Avoidance and Protection Measures as Described in the Biological Opinion:

Proposed methods of fish capture and relocation
Heavy equipment will operate from the streambank and will not enter the stream channel. Fish relocation, if necessary, will be conducted by trained fisheries biologists in accordance with all state and federal permits.

Proposed erosion control measures (minimization and avoidance measures)
Measures to minimize degradation of water quality will follow Section D of Appendix 1 of the NOAA/NMFS Biological Opinion including:

A) Planting of seedlings shall begin after December 1, or when sufficient rainfall has occurred to ensure the best chance of survival of the seedlings, but in no case after April 1.

B) Any disturbed banks shall be fully restored upon completion of construction. Revegetation shall be done using native species. Planting techniques can include seed casting, hydroseeding, or live planting methods.

C) Disturbed and compacted areas shall be re-vegetated with native plant species. The species shall be comprised of a diverse community structure that mimics the native riparian corridor. Planting ratio shall be 2:1 (two plants to every one removed).

D) Unless otherwise specified, the standard for success is 80 percent survival of plantings or 80 percent ground cover for broadcast planting of seed after a period of 3 years.

E) To ensure that the spread or introduction of invasive exotic plants shall be avoided to the maximum extent possible, equipment shall be cleaned of all dirt, mud, and plant material prior to entering a work site. When possible, invasive exotic plants at the work site shall be removed. Areas disturbed by project activities will be restored and planted with native plants.

F) Mulching and seeding shall be done on all exposed soil which may deliver sediment to a stream. Soils exposed by project operations shall be mulched to prevent sediment runoff and transport. Mulches shall be applied so that not less than 90% of the disturbed areas are covered. All mulches, except hydro- mulch, shall be applied in a layer not less than two (2) inches deep. Where feasible, all mulches shall be kneaded or tracked-in with track marks parallel to the contour, and tackified as necessary to prevent excessive movement. All exposed soils and fills, including the downstream face of the road prism

adjacent to the outlet of culverts, shall be reseeded with a mix of native grasses common to the area, free from seeds of noxious or invasive weed species, and applied at a rate which will ensure establishment.

G) If erosion control mats are used in re-vegetation, they shall be made of material that decomposes. Erosion control mats made of nylon plastic, or other non- decomposing material shall not be used.

H) The responsible party shall retain as many trees and brush as feasible, emphasizing shade producing and bank stabilizing trees and brush to minimize impacts to the riparian corridor.

I) If riparian vegetation is to be removed with chainsaws, the grantee shall use saws that operate with vegetable-based bar oil when possible.

J) HRC Habitat Conservation Plan erosion control guidelines:

Within RMZs and EEZs, areas where mineral soil, exceeding 100 contiguous square feet in size, that have been exposed by forestry activities, other than site preparation shall be treated with effective erosion control measures as defined in 6.3.3.9 Item 1. Treatment shall be completed prior to October 15, except that such bare areas created after October 14 and before June 1 shall be treated at the end of the work day if the weather forecast(defined in 6.3.3.9 item 13)is a chance of precipitation equal to or greater than 30% before or on the next day as predicted on the same day early morning forecast, and , prior to weekend or other shutdown periods, and upon completion of the project.

Any material with potential to be hazardous to aquatic life, resulting from project activities, will be prevented from contaminating the soil and entering the creek. All trash that may attract potential predators of salmonids will be properly contained and disposed of daily.

Wood will be installed by way of direct placement with an excavator or other heavy equipment. The use of petroleum powered equipment shall be accomplished in a manner that prevents the release of petroleum materials in the creek. All equipment fueling and maintenance will occur in an upland location, most likely in the same location where vehicles will be parked. The use of petroleum powered equipment shall be accomplished in a manner that prevents the release of petroleum materials in the creek. Oil absorbent and spill containment material will be located on site.

If a spill occurs no additional work shall occur in-channel until the mechanical equipment is inspected by the contractor and the leak has been repaired, the spill has been contained and CDFG and NMFS are contacted and have evaluated the impacts of the spill.

Measures to minimize disturbance from instream construction

Measures to minimize and avoid disturbance from instream construction will follow Section D from Appendix 1 of the NOAA/NMFS Biological Opinion.

Measures to minimize degradation of water quality

Construction or maintenance activities for the project may result in temporary increases in turbidity levels

in the stream. In general, these activities must not result in significant increases in turbidity levels beyond the naturally occurring, background conditions. Measures to minimize degradation of water quality will follow Section E of Appendix 1 of the NOAA/NMFS Biological Opinion.

Measures to minimize loss or disturbance of riparian vegetation

Measures to minimize loss or disturbance to riparian vegetation are described in Section H of Appendix 1 of the NOAA/NMFS Biological Opinion (see examples above).

Proposed monitoring measures

Monitoring information will be submitted to any and all relevant agencies upon request.

Fauna

NSO: The known terrestrial species (owls and ospreay) are outside the minimum buffer distances, so no adverse impacts are expected. Additionally, the project will be implemented after the NSO nesting season (July) in order to avoid potential impacts to this species.

Aquatic Species of Concern: The known northern red-legged frog, southern torrent salamander, tailed frog, foothill yellow-legged frog and northwestern pond turtle species are well outside the project area, so no adverse impacts are expected.

Southern Oregon Northern California Coastal ESU Coho Salmon (O.kisutch), coastal cutthroat (O. clarki clarki), Chinook (O. tshawytscha) and Northern California ESU Steelhead Trout (O. mykiss):

The duration and magnitude of direct effects to listed salmonids and to salmonid critical habitat associated with the implementation of the proposed project will be significantly minimized by implementing instream activities sometime during the summer low-flow period typically between June 15 and October 15. Implementing during the summer low-flow period will avoid emigrating coho/Chinook salmon and/or steelhead/cutthroat smolts and will avoid immigrating adults at all habitat restoration project sites. However, rearing juveniles may be present during project implementation. It is anticipated that a small number of juveniles may be within the action area for each individual restoration project work site. Most restoration activities will focus on improving areas of poor instream habitat, where large numbers of juvenile salmonids are not expected to be present due to poor habitat conditions. Juveniles salmonids will be hazed from areas where activities occur to avoid detrimental impacts. De-watering may be necessary at each work site depending on flow conditions. De-watering and associated fish relocation will be supervised and performed by qualified and permitted HRC fisheries biologist staff in accordance with DFW protocols.

Flora

There are no sensitive botanical resources present within the project area so no adverse impacts are expected.

Archeological and Cultural Resources

There are no known archeological sites within the project area.

11. Supporting Documentation

Human Health and Safety:

Project will maintain existing levels of human health and safety protection. Licensed Timber Operators and all subcontractors will follow all applicable Best Management Practices and safety procedures contained within the Forest Practice Rules and Cal-OSHA protocols.

Regarding flood protection, the project changes to the North Fork Elk stream channel will not be great enough to substantially affect the frequency or duration of flood events, nor will the changes increase exposure of people or property to floods. The main human infrastructure in the project area consists of forestry roads, which are normally not in use during the wet season.

Fish Passage Guidelines and Coho Salmon Recovery Plans:

This project is an instream habitat enhancement project through large wood installation and does not involve work related to fish passage or stream crossings; therefore, consistency with the fish passage guidelines is not applicable.

Voluntary Restoration:

Restoration is voluntary.

Project Size:

The entire project is not larger than five acres or 500 linear feet in size. The entire project area of disturbance was calculated using the 2012 Water Board Disturbance Area Calculator for Large Wood Projects. The table below, taken directly from the Water Board Calculator spreadsheet, shows an entire project disturbance of 0.75 acres and 452 linear feet.

1	PROJECT SIZE CALCULATOR FOR LARGE WOODY MATERIAL (LWM) PROJECTS										
2	STREAM ZONE OPERATIONAL AREAS (within Waters of the State)										
3	AREA ID	Width (ft)	Length (ft)	Disturbance (ft²)		Disturbance (acres)		Linear Impact (ft)			
4	NF Elk River - Site A	35	75	2625		0.06		75			
5	NF Elk River - Site B	35	100	3500		0.08		100			
6	Trail in stream zone between sites	15	217	3255		0.07		217			
7											
8											
9	TOTAL DISTURBANCE			9380	feet²	0.22	acres	392.00	linear ft		
10											
11	PROJECT ACCESS ROUTES (outside Waters of the State)										
12	TRAIL ID	Width (ft)	Length (ft)	Disturbance (ft²)		Disturbance (acres)					
13	Access trail to Site A	15	1454	21810		0.50					
14											
15											
16											
17											
18	TOTAL DISTURBANCE			21810	feet²	0.50	acres				
19											
20	LARGE WOODY MATERIAL CALCULATIONS										
21	Number of Trees	Width (ft)	Length (ft)	Disturbance (ft²)		Disturbance (acres)		Linear Impact (ft)			
22	10	1.5	18	270		0.01		15			
23	7	2	20	280		0.01		14			
24	7	2.5	30	525		0.01		17.5			
25	5	2.75	35	481.25		0.01		13.75			
26											
27	TOTAL DISTURBANCE			1556	feet²	0.04	acres	60.25	linear ft		
28											
29	CANOPY REMOVAL AREA CALCULATIONS							CONVERSION			
30	Number of Trees		Disturbance per tree (acres)		Total Disturbance (acres)			Acres	Feet²		
31			0.015		0.00			1	43560.17		
32											
33	TOTAL PROJECT SIZE										
34	ACRES:	0.75	LINEAR FEET:	452.25							
35	INSTRUCTIONS FOR FILLING OUT LARGE WOODY MATERIAL (LWM) PROJECT SIZE CALCULATOR. Updated 2/11/15.										

The size range of redwood to be installed is between 18 and 42 inches in diameter and between 10

and 40 feet in length.

Cumulative Impact & Significant Effects:

The project will not result in a "cumulative impact" or "significant effect on the environment". While this small habitat restoration project may include short term disturbance, the impacts are inherently 'self-mitigated' to a level below the threshold of significance because the project is designed precisely to make a transition to improved watershed or habitat condition for conservation purposes.

The approved US Army Corps of Engineers Nationwide Permit, the NMFS Biological Opinion documents, and the RWQCB 401 water quality certification, are attached for reference; these documents describe the mandatory terms and conditions required to implement reasonable and prudent measures associated with environmental impacts and species take.

In consideration of related past, present and foreseeable future projects, the individual effects of this project will not compound or increase other environmental impacts. LWD restoration work in NF Elk in past decades had minimal impacts of short duration, and did not fall trees. No similar future projects within the project area are planned. This project will have short term disturbances but will create longer term salmonid habitat improvements.

NOAA Fisheries has accepted this project into the program established by NMFS Biological Opinion #151422SWR2006R00190:JMA. The NMFS BO assessed environmental effects, including cumulative effects, and found the program is not likely to jeopardize the continued existence of listed salmonids, and is not likely to destroy or adversely modify designated critical habitat. The BO program is part of NOAA Fisheries' Community-Based Restoration Program (CRP). For implementation of the CRP, NOAA Fisheries completed an Environmental Assessment and Finding of No Significant Impact (FONSI) in 2002, and also completed a Supplemental Environmental Assessment and FONSI in 2006. NOAA Fisheries Santa Rosa office has also completed a NEPA compliance document specific to the NF Elk River project.

The US Army Corps of Engineers (Corps) has accepted this project into Corps Nationwide Permit 27, pursuant to Section 404 of the Clean Water Act. The Corps Decision Document for Nationwide Permit 27 analyzed impacts of the Nationwide Permit including cumulative impacts (p. 37), concluded individual and cumulative impacts would be minimal, and completed a FONSI for issuance of the Nationwide Permit.

The California State Water Resources Control Board (SWRCB) has accepted this project into SWRCB's General 401 Water Quality Certification Order for Small Habitat Restoration Projects; Order No.SB12006GN. In that order, the SWRCB found that issuance of the order was categorically exempt from CEQA, and that no exceptions apply (which would include exceptions due to a significant effect or a cumulative effect). SWRCB's Notice of Applicability (NOA) accepting the application noted that Regional Board staff determined the Project is categorically exempt
from CEQA (section 15333 - Small Habitat Restoration Projects).

The Project Description, the Project Area Assessment, the Environmental Protection Measures, the terms of the permits obtained (NOAA BO, Corps 404, SWRCB 401), and the NEPA/CEQA documents and findings of NOAA Fisheries, the Corps and SWRCB, are collectively "substantial evidence" that the project will not have a significant impact on the environment and will not have a cumulative impact.

List of Supporting Documents

Humboldt Redwood Company (2013) *Elk/Salmon River Watershed Analysis Report*.

1. NOAA-NMFS Biological Opinion to Corps
2. 404 Corps NWP 27authorization letter; Corps Nationwide Permit 27; Corps San Francisco Regional Conditions.
3. 401 SWRCB Notice of Applicability (NOA)

ACCESS AGREEMENT

FOR

North Fork Elk River Coho Habitat Enhancement Project
UNDER THE COHO HELP ACT

Project Name: North Fork Elk River Coho Habitat Enhancement Project

This Access Agreement ("Agreement") is made by Humboldt Redwood Company ("Landowner/Applicant") and California Department of Fish and Wildlife ("Department") for the purpose of the North Fork Elk River Coho Habitat Enhancement Project ("Project").

AGREEMENT

Landowner hereby gives Applicant and California Department of Fish and Wildlife ("Department") staff permission to enter the property described herein ("Property") in accordance with the following provisions:

1. The Property to which the Agreement applies is located along the North Fork Elk River, beginning just downstream of Riggs Scout Camp and extending upstream approximately 1,000 feet.

2. Applicant and applicant subcontractors may enter the Property to complete tasks associated with completion of the Project. Tasks are included but not limited to pre-project monitoring, project implementation, and post-project monitoring.

3. Department staff may enter the Property to evaluate and monitor the Project and Project location before, during, and after the Project until the Agreement expires.

4. Landowner shall be notified, whether verbally or by email or other writing, at least 48 hours in advance of Applicant or the Department entering the Property. Landowner is entitled to be present or have a representative present at any time Applicant or Department staff is on the Property.

5. Applicant shall make every effort to avoid causing any damage to the Property while on the Property.

6. The Agreement shall expire on: December 31, 2016, except that the term of the Agreement may be extended by mutual agreement by Landowner and Applicant prior to its expiration.

7. By signing the Agreement, Landowner hereby warrants and represents that Landowner has the authority to give Applicant and Department staff permission to enter the Property in accordance with the provisions herein.

8. The Agreement shall become effective upon signature by Landowner and Applicant.

IN WITNESS WHEREOF, Landowner and Applicant have executed this Agreement as set forth below.

LANDOWNER NAME

Humboldt Redwood Company, LLC

LANDOWNER SIGNATURE Date