R & E Grant Application 15 Biennium

Project #: 15-036

Woodward Creek Instream Restoration

Project Information

R&E Project Request: $38,121.00
Total Project: $154,930.00
Start Date: 8/10/2015
End Date: 6/30/2017
Organization: Coquille Watershed Association (Tax ID #: 93-1171301)

Fiscal Officer

Name: Kelly Miles
Address: 223 N Alder, Suite D
Coquille, OR 97423
Telephone: 541-396-2541
Telephone 2: 541-982-0151
Fax: 541-396-2545
Email: coqwa@hotmail.com

Applicant Information

Name: Kelly Miles
Address: 223 N Alder, Suite D
Coquille, OR 97423
Telephone: 541-396-2541
Telephone 2: 541-982-0151
Fax: 541-396-2545
Email: coqwa@hotmail.com

Past Recommended or Completed Projects

This applicant has no previous projects that match criteria.

Location Information

Where is it?

The project will occur on public land owned or managed by another party
The project will occur on private land owned or managed by another party

Landowner Information

Name: Bureau of Land Management
Address: 1300 Airport Lane
North Bend, OR, 97459
Phone: 5417560100
Email: jfeola@blm.gov

Name: Campbell Global
Address: PO Box 588
North Bend, OR, 97459
Phone: 5417561193
Fax: 5417567833
Email: thoesly@campbellglobal.com

Name: Roseburg Resources
Affiliation: Oxbow Timber 1 LLC
Address: 711 Port Dock Road
Reedsport, OR, 97467
Phone: 5412710159
Fax: 5412713331
Email: timt@rfpco.com

Site Description

Street Address, nearest intersection, or other descriptive location.

There is no site address. Turn right off Fairview Sumner Lane onto BLM road 27-12-14 Steinnon Cr/Woodward Cr. Project starts in 27s, 12w, Sec11.

Directions to the site from the nearest highway junction.

From Hwy 42 @ Coquille turn North onto North Central Blvd. Drive 0.75 miles and turn Right onto Fairview Rd. Drive 8.3 miles and you will come to a four way stop and the Four Corners Store will be on your left. Turn left onto Fairview Sumner Ln. Drive 1.5 miles and look for a large gravel pull off on the right. This is the BLM access road to 27-12-14-0. The gravel road will split ~0.3 miles up, stay to the right. BLM property starts at about 0.5 miles and starts project off and continues through BLM, OxBow Timber and Menasha properties another 4 miles.

Following project completion, public anglers will be allowed the following level of access to the project site:

No access

Please describe what leases, easements, agreements are in place to ensure angler access to the project site, and what is the length of each agreement.

This project is designed to promote improved habitat spawning and rearing conditions above the

normal fishing access areas. Although this project is not open to normal access, trout fishing is accessible by foot traffic and limited vehicle access when gates are open.

Dominant Land Use Type:

Forest

Project Location

General Project Location.

County: Coos

Town/City: Fairview-Coquille

ODFW Dist: Charleston

Stream/Lake/Estuary Name: Woodward Creek

Sub-basin: 171003050403 5th field

Tributary of: North Fork-Coquille River

Specific Project Location.

Latitude	Longitude
-124.745693	43.2539309

Project Summary

Project Summary

Please provide a couple sentence summary of the proposal.

The project will improve spawning and rearing habitat for Coho Salmon, Steelhead and Cutthroat Trout, and Pacific Lamprey in Woodward Creek.

Overall Project Goals

Describe the primary goals or outcomes of the entire project, including elements not requesting funding from R&E.

Increase wood volume

Increase wood pieces

Increase number of large wood key pieces

Increase pool depth

Increase pool cover

Increase channel complexity

Improve juvenile rearing habitat

Primary objectives of R&E funding

Please describe the measurable objectives for the R&E portion of the funding request.

Large wood - increase number of pieces by 8 pieces/100m after implementation

Large wood - increase volume of wood/100m by 20m3/100m after implementation

Large wood - increase key pieces/100m to >3/100m after implementation

Pools - Increase # pools >= 1 m from pre-implementation survey within 3 years of

implementation.

Pools - Increase # complex pools from pre-implementation survey within 3 years of implementation

Pools - Increase average residual pool depth from pre-implementation survey within 5 years of implementation

Current Situation/Justification

Please describe the current situation and explain why this funding is needed.

This project is a continuation of the multi-year, whole basin restoration approach being implemented in the North Fork Coquille River Basin (NFCR). Since 2008, the Coquille Watershed Association has been a partner in implementing stream restoration projects within approximately 32 miles of tributaries of the NFCR. The project area lacks long-term instream large wood and large wood recruitment sources because the majority of the riparian area consists of hardwoods.

Recreation and Commercial Benefit

This project will provide benefits to:

Recreational fisheries
Commercial fisheries

Explain how this project will contribute to current (and/or potential) fishing opportunities, access, or fisheries management.

Historically, the Coquille River basin was a salmon and steelhead producing powerhouse, with coho salmon returns to the basin as high as 400,000 and a robust run of fall Chinook salmon, along with spring Chinook, winter steelhead, and sea-run cutthroat. Instream habitat projects like Woodward Creek help to create and sustain vibrant fishing communities by enhancing aquatic habitats and improving water quality, and this project will improve spawning and rearing habitat for coho salmon, cutthroat and steelhead trout, and Pacific Lamprey, and with improved habitat there will be more fish produced for recreational and commercial fisheries. In 2011, a report from the University of Oregon's Institute for a Sustainable Environment titled "The Economic Impacts of Oregon's South Coast Restoration Industry", stated that investments in restoration have benefited the South Coast with healthier sport and sustenance fisheries, and also notes that ODFW estimates the total economic impact of the 2011 wild coho salmon sport fishing season on the Coquille River was more than $2.1 million.

Is this project part of an approved Salmon-Trout Enhancement Program (STEP) activity?

No

This project has been identified as a priority for:

Local/watershed
Basin/regional
Statewide

Identify any plan or other document that identifies this priority.

North Fork Coquille Watershed Analysis (BLM 2001) - reports that loss of wood recruitment to stream channels and loss of streambank vegetation has degraded instream and riparian habitat.

OR Conservation Strategy (2006) - recommends working with forest managers to meet large wood loading benchmarks. It also suggests maintaining or enhancing habitat and pools.

OR Coast Coho Conservation Plan for State of OR (1997) - lists stream complexity as the

primary limiting factor for independent populations in the OR Coast Coho ESU.

Coquille Watershed Association Action Plan (1997) - identifies North Fork Coquille River subwatershed as a high priority sub-basin for restoration.

Coquille River Sub-basin Plan (2007) lists North Fork Coquille River subwatershed as the highest priverority for protection and enhancement of coho habitat.

The upper North Fork Coquille River is delineated as a Key Watershed by the Forest Ecosystem Management Assessment Team in the Northwest Forest Plan (1994).

This project is intended to benefit the following species:

Coho Salmon
Lamprey
Winter Steelhead
Cutthroat Trout
Rainbow Trout

This project will benefit anglers or fishery by providing:

Habitat Enhancements

Habitat Enhancements

The primary purpose of this project is to improve/increase:

In water structure, complexity, and habitat

Project Description

Schedule

Activity	Date	RE Funding
Complete project design & layout	04/2015	No
NEPA analysis and Decision Record	04/2016	No
Bid solicitation & site visits	05/2016	No
Complete contracts	05/2016	No
Land-use agreements	05/2016	No
Permit applications	05/2016	Yes
Cut and stage trees, create access at sites for excavator	06/2016	Yes
Aquatic Habitat Survey (pre-)	06/2016	No
Implementation - place logs	07-09/2016	Yes
Site Rehabilitation	09/2016	No
Aquatic Habitat Survey (post-)	09/2016	No
Post-Project Monitoring	09/2017, 2018, 2019	No
Aquatic Habitat Survey (post-)	06/2021	No
Aquatic Habitat Survey (post-)	06/2026	No

Permits

Permit	Secured?	Date Expected
USACE - covered with Aquatic Restoration Biological Opinion II (ARBO II) with BLM	Yes	05/2016
RGP/DSL GA - covered with ARBO II with BLM	Yes	05/2016
ODF notification for cutting trees, excavator placement	No	05/2016
Coos County Land Use review & sign-off	No	05/2016

Project Design and Description

Please describe in detail the methods or approach that will be used to achieve the project objectives.

Biologists from Coquille Watershed Association, ODFW, and BLM have determined the location,

design, and materials needed for the instream structures based on a detailed assessment of the stream from past habitat surveys and site visits. GPS points were recorded for each site.

Some trees have already been set aside from a nearby private timber sale to be used to place in sites located on Roseburg Resource Co. land. Some trees have also been set aside by Campbell Global to be placed in sites on their property. Trees will be located in nearby stands on private and federal lands to be purchased and donated for the project. Sites will be constructed with approximately 309 Douglas-fir logs, approximately 20-36" dbh and 40-50' long. Trees will be felled, bucked, and moved with a self-loader to site locations.

Logs will be placed in approximately 30 sites along 2.5 miles of Woodward Creek using the Aquatic Restoration Biological Opinion II and ODFW Guide to Placement of Wood, Boulders, and Gravel for Habitat Restoration (2010). Instream work will occur between July 1 and September 15. To ensure log placements remain stable, a minimum of two key pieces of wood at least twice the bank-full width in length will be placed at each site throughout the project area. Logs will also be wedged between stream-side trees at pinch-points where feasible. Areas where there is floodplain access were targeted for creating large stable wood complexes intended to catch additional materials. In the event of a flood or high water event the log placement sites could shift, so design considers and accounts for some movement of structures.

When the project is completed, any bare soil created by the excavator will be sub-soiled, seeded and/or mulched with native seed and certified weed-free straw prior to the onset of fall rains.

The CWA will make 3 site vists, once a year, starting the first year after completion to visually observe and record the status of the structures. Pre- and post-implementation aquatic habitat surveys will be requested from ODFW (one pre-, one post-, one after 3 years, 5 years, and 10 years) to monitor the effectiveness of the project and to see if the project met its goals.

Engineering

Does the project involve capital improvement, engineering, site grading or other construction?

No

Project Management and Maintenance

What is the life expectancy of R&E funded construction, structures, equipment, supplies, data or fishery?

The instream log structures will take many decades to decay and degrade. The project will be monitored for up to 10 years after the project is completed to see how the habitat changes over time.

Who is responsible for long term management, maintenance, and oversight of the project beyond what is funded by R&E.

The Coquille Watershed Association will be responsible for the long term maintenance of this project. It is extremely rare that instream log structures ever need maintenance. On rare occasions some logs will move out of structures and into culverts or above bridges. The nearest bridge is over one mile downstream and there are many natural pinch points and meanders between the lowest project site and the bridge that would catch any wood that has the unlikely chance of moving downstream. The CWA and BLM biologists will conduct periodic site visits for

approximately three years after the project is complete to evaluate the structures.

Will the project require ongoing maintenance?

No

Is there a plan to collect baseline data and to conduct monitoring efforts to measure the effectiveness of the project?

Yes

Pre- and post-implementation aquatic habitat surveys will be requested from ODFW (one pre-, one post-, one after 3 years, 5 years, and 10 years) to monitor the effectiveness of the project and to see if the project met its goals.

Project Funding

Funding

Have you applied for OWEB funding for this project?

Yes

OWEB application number: 215-2026

Did not receive an award.

Other Funding Source	Type	Secured	Dollar Value	Comments
Coos Bay District BLM	Cash	Secured	50,000	Cash
Coos Bay District BLM	In-Kind	Secured	40,000	BLM staff, travel, logs
Landowner - Oxbow Timber 1 LLC	In-Kind	Secured	9,060	Staff, road work, travel, logs
Landowner - Campbell Global	In-Kind	Secured	12,600	Staff, road work, logs
Coquille Watershed Association	In-Kind	Secured	3,601	Design, review and approval, tree falling, on-site port-a-potty, safety supplies
ODFW	In-Kind	Pending	1,548	Staff, travel, monitoring
		Total	116809	

Budget

Item	Unit Number	Unit Cost	In-kind or non-cash contr butions	Funding from other sources	R&E Funds	Total Costs
PROJECT MANAGEMENT						
CWA Project Manager	120	21.33	0	2560	0	2560
CWA Director	60	28.73	0	1724	0	1724
		SUBTOTAL(1)	0	4284	0	4284
IN-HOUSE PERSONNEL						
CWA Restoration Crew (3 at 160 hrs ea)	480	23.38	0	11223	0	11223
		SUBTOTAL(2)	0	11223	0	11223
CONTRACTED SERVICES						
County Land Use and Review	1	1151	0	600	551	1151
Excavator mobilization/In-Out	2	1200	0	2400	0	2400
Excavator placement/per log	309	100	0	17180	13720	30900
Self-loader for log transport/per hour	40	100	0	2550	1450	4000
Skidder mobilization/In-Out	2	800	0	0	1600	1600
Skidder to transport logs to sites/per day	10	500	0	0	5000	5000
Tree falling and decking/per tree	144	75	2550	5250	3000	10800
On-site port-a-potty/per month	1	75	75	0	0	75
Fuel trailer rental/per day	14	45	0	630	0	630
Equipment trailer rental/per day	14	7.5	0	105	0	105
ATV rental/per day	14	25	0	350	0	350
BLM Fish Biologist/per hour	124	41	5084	0	0	5084
ODFW Fish Biologist/per hour	40	31	1240	0	0	1240
CWA Technical. Advisory Team (5)/per hour	10	30	300	0	0	300
CWA Executive Council & Board (20)/per hour	20	15	300	0	0	300
Campbell Global/Pre-imp road access work	1	10000	10000	0	0	10000
Oxbow Timber/Pre-imp road access work	1	2448	2448	0	0	2448
Campbell Global Forestry Manager/per hour	24	50	1200	0	0	1200
Oxbow Timber Forestry Manager/per hour	24	51.25	1230	0	0	1230
Post-monitoring/per year	3	500	0	1500	0	1500
		SUBTOTAL(3)	24427	30565	25321	80313
TRAVEL						
CWA Project Management/16 RT @ 60 miles	960	0.575	0	552	0	552
CWA Restoration Crew/16 RT @ 60 miles	960	0.575	0	552	0	552
BLM Staff/15 RT @ 71.4 miles	1071	0.575	616	0	0	616
ODFW Staff/5 RT @ 107 miles	535	0.575	308	0	0	308
Oxbow Timber Staff/3 RT @ 120 miles	360	0.575	207	0	0	207
		SUBTOTAL(4)	1131	1104	0	2235
SUPPLIES/MATERIALS						
BLM trees	98	350	34300	0	0	34300
Oxbow Timber trees	35	325	4875	0	6500	11375
Campbell Global trees	22	350	1400	0	6300	7700
Small equipment supplies/chainsaw blades/chains	4	13.5	0	54	0	54
Brush & weed clearing supplies/trimmer/line/nippers	1	376	376	0	0	376
ATV & small equipment fuel/per gallon	30	4.5	0	135	0	135
Sediment control materials	1	500	0	500	0	500
Certified weed-free mulch/per bale	100	6	0	600	0	600
BLM native weed-free grass seed/per pound	150	4.5	0	675	0	675
2-Gal container native trees	100	5	0	500	0	500
Soil/per cy	4	90	0	360	0	360
Seedlings	300	1	300	0	0	300
		SUBTOTAL(5)	41251	2824	12800	56875
EDUCATION/OUTREACH						
	0	0	0	0	0	0

		SUBTOTAL(6)	0	0	0	0
EQUIPMENT						
	0	0	0	0	0	0
		SUBTOTAL(7)	0	0	0	0
FISCAL ADMINISTRATION						
	0	0	0	0	0	0
		SUBTOTAL(8)	0	0	0	0
		BUDGET TOTAL	66809	50000	38121	154930

Additional Files

Click a link to view that particular file.

BLM LOS

Campbell Global LOS

Campbell logs

GIS points

ODFW AHI survey

ODFWsnorkel survey

Roseburg LOS

Signature Page and IRS 501(c)(3)

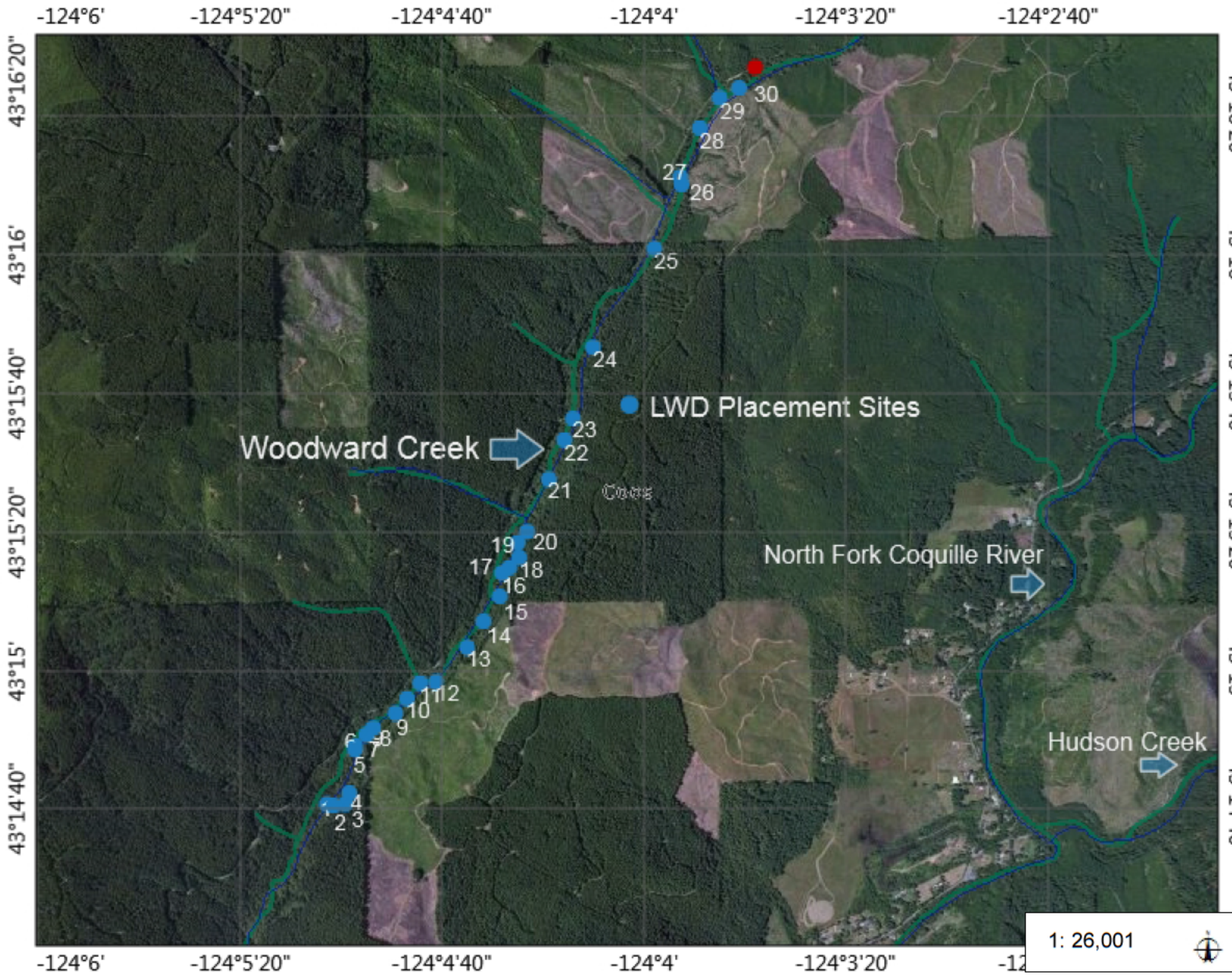
Site designs

Woodward Creek Map

Woodward Creek Map 2

Woodward Creek Pre-photos

Woodward Creek Fairview LWD Restoration



Legend

- Counties (Census 2010)
- Anadromous Fish Distribution

Spring Chinook Salmon Distribution (2012)
- Spawning
- Rearing
- Migration
- Unknown
- Historical

Fall Chinook Salmon Distribution (2012)
- Spawning
- Rearing
- Migration
- Unknown
- Historical

Coho Salmon Distr bution (2012)
- Spawning
- Rearing
- Migration
- Unknown
- Historical

Summer Steelhead distr bution (2012)
- Spawning
- Rearing
- Migration
- Unknown
- Historical

Winter Steelhead distribution (2012)
- Spawning
- Rearing
- Migration

1: 26,001

Notes

Blue dots-LWD sites
Red dot-Road blocked

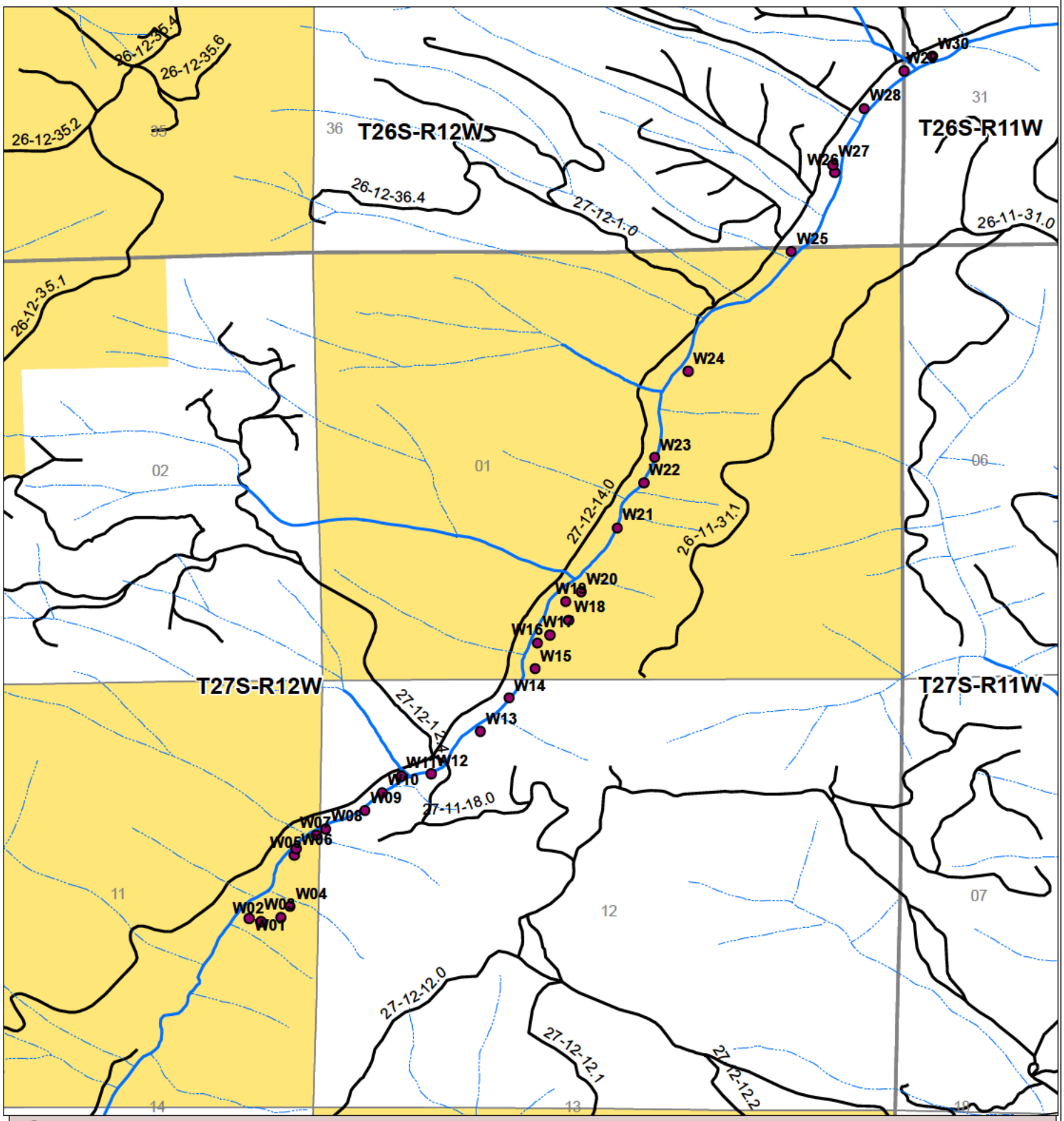
0.8 0 0.41 0.8 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

This map is a user generated static output from the Oregon Explorer Map Viewer (http://tools.oregonexplorer.info/oe_map_viewer/Viewer.html?Viewer=OE) and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Woodward Creek Instream Restoration 2016



Woodward Ck LW 2016
Perennial Stream
Intermittent Stream
County Road
BLM or Other Road
BLM Administered Land
State of Oregon Lands
Private or Other Lands

N

0 0.25 Miles

Scale 1:19,941

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

Woodward Creek-Fairview LWD Restoration Pre-photos 2014:

Site 1 - Spawning coho pair

Site 4

More coho near Site 4

Site 8 - Floodplain connectivity

Site 9

Site 11 - Floodplain connectivity

Site 18

Site 20

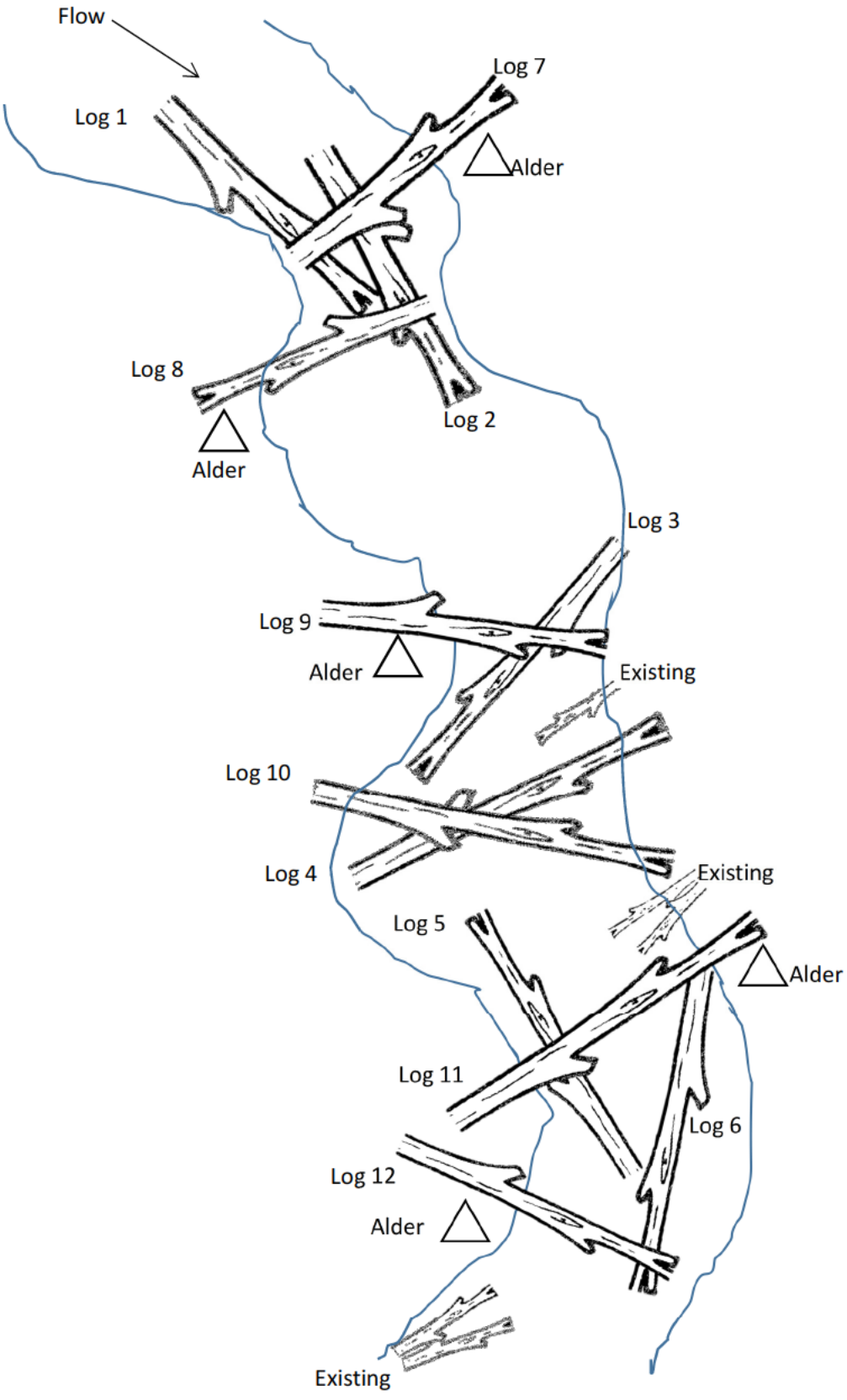
Site 25

Woodward Creek Preliminary LWD Site

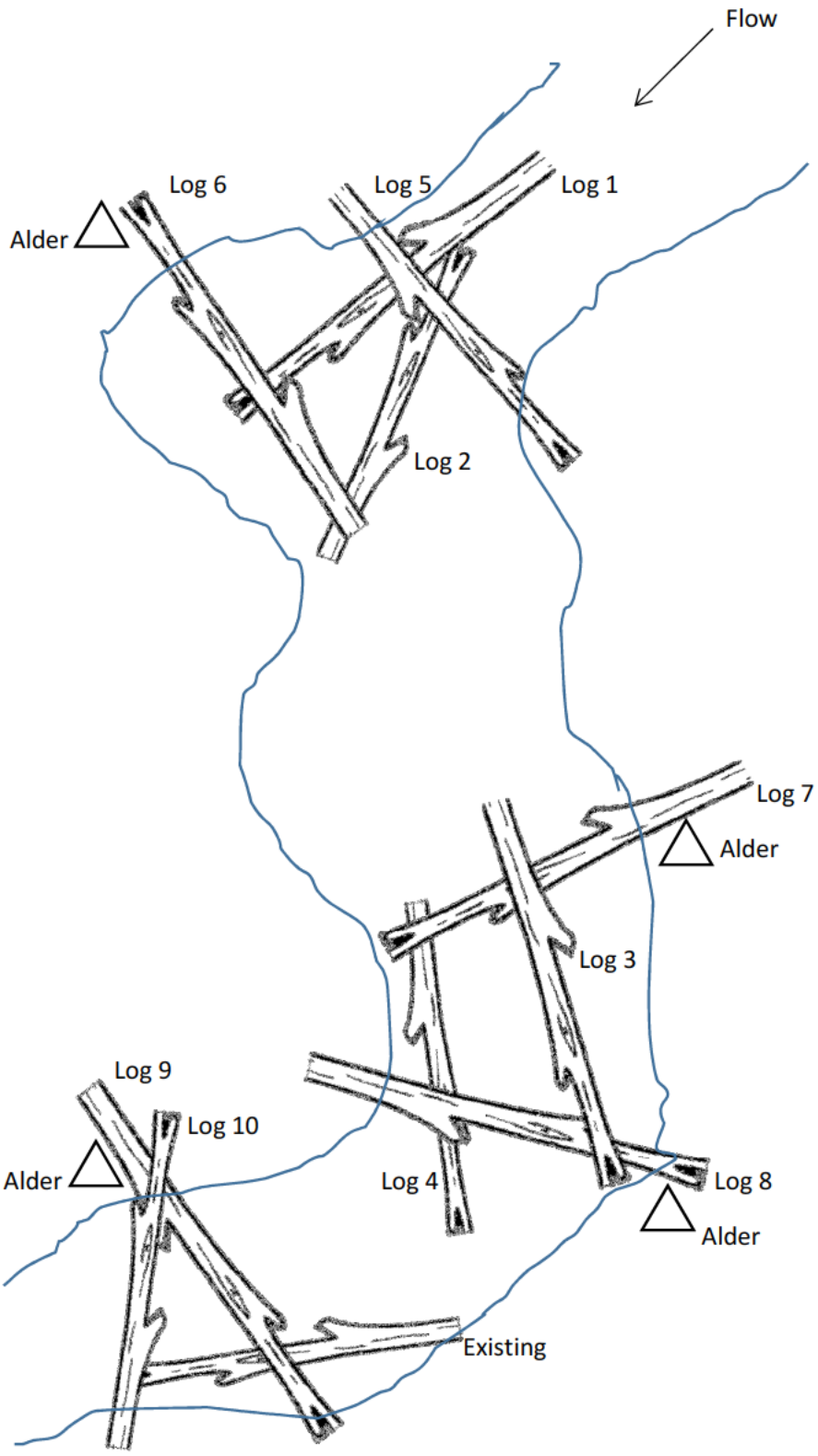
Layout 29-32 sites, 308-310 logs

Site	Site_	#logs
W02	02_16	16
W03	03_12	12
W04	04_10	10
W05	05_12	12
W06	06_8	8
W07	07_10	10
W08	08_14_p	14
W09	09_14_bp	14
W10	10_14	14
W11	11_14_p	14
W12	12_8	8
W13	13_10	10
W15	15_3	3
W16	16_8_p	8
W17	17_10	10
W18	18_12_p	12
W19	19_10	10
W20	20_8	8
W21	21_3	3
W22	22_11_bp	11
W23	23_12	12
W24	24_6	6
W25	25_14	14
W26	26_12	12
W27	27_16	15
W29	29_6	6
W30	30_6	6
W31	31_6	6
W32	32_10	10
W33	33_14	14
Prelim	total:	308

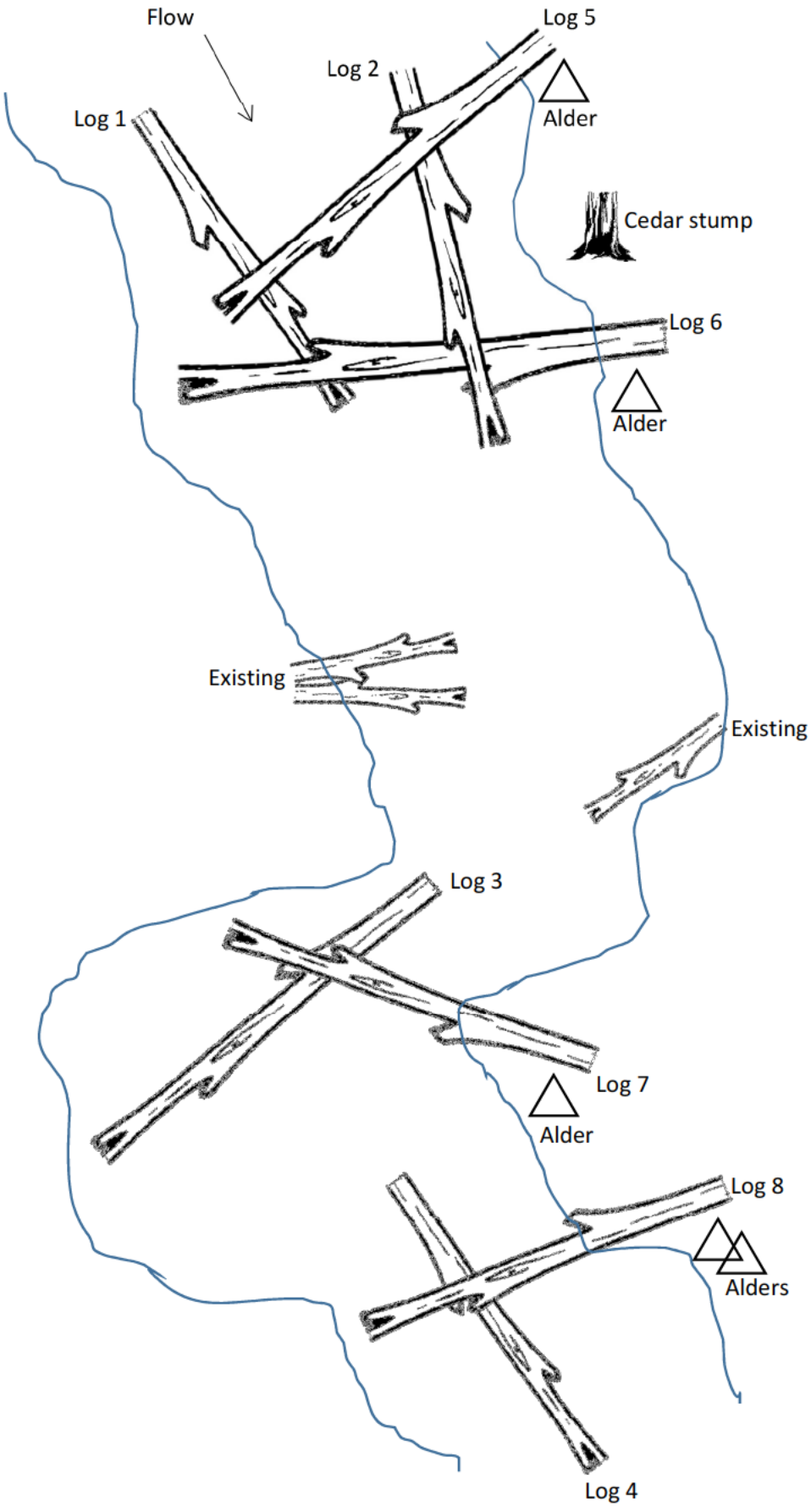
Woodward Creek Site 5 - LWD Placement – 12 logs



Woodward Creek Site 7 - LWD Placement – 10 logs



Woodward Creek Site 12 - LWD Placement – 8 logs



ODFW AQUATIC INVENTORY PROJECT
OREGON PLAN FOR SALMON WATERSHEDS
STREAM HABITAT REPORT

STREAM:	Woodward Cr
GCG:	3-MS
SITE ID:	5049
BASIN:	COQUILLE RIVER
INTERVAL:	Nine Year
SURVEY DATE:	2/11/2013
SURVEY CREW:	Jacob Kwapiszeski & Cameron Hinman
USGS MAPS:	DANIELS CREEK
ECOREGION:	Mid-Coastal Sedimentary
REPORT PREPARED BY:	Diana Forsberg / Matt Strickland

SURVEY DESCRIPTION:

Location: T26S-R12W-S01NE

Channel morphology: Constrained by high terraces

Dominant landuse(s): Young forest trees (3-15 cm dbh)

Dominant riparian vegetation: Deciduous trees: size class 30-50cm dbh

Primary channel length (meters) and area (m^2): 1,187 : 5,245

Secondary channel length (meters) and area (m^2) 94 : 146

VWI average: 7.2 VWI Range: 3 - 11.5 Average Gradient: 1.0%

Pieces LWD per 100m: 33.5 Wood Volume (m^3) per 100m: 20.2

Percent pools: 65% Complex pools (LWD pieces>=3): 30 Pools >=1m deep: 7

Percent substrate (avg):	Silt / organics	Sand	Gravel	Cobble	Boulder	Bedrock
All units	15	33	48	1	0	2
Pool units	18	40	40	0	0	1
Fast water units	2	19	68	5	2	3

SURVEY COMMENTS:

This survey is within coho distribution. Adult spawning surveys were conducted in collaboration with this habitat survey. There were no potential barriers to upstream fish migration in the surveyed length. The survey crew noted that this was a low gradient system, containing mostly silt and gravel with an abundance of wood and debris jams. Cutthroat trout, raccoon tracks, and deer tracks were also observed.

OREGON DEPARTMENT OF FISH AND WILDLIFE — **Woodward Cr**

HABITAT INVENTORY — **GCG: 3-MS** **SITE ID: 5049**

Survey Date: 2/11/2013

Report Date: 5/28/2013 **T26S-R12W-S01NE** **REACH 1**

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

Narrow Valley Floor		Broad Valley Floor	
Steep V-shape	0%	Constraining Terraces	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%

Valley Width Index 7.2 VWI Range: 3 - 11.5

Channel Morphology (Percent Reach Length)

Constrained		Unconstrained	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	Braided Channel	0%
Alt. Terrace/Hill	0%		
Landuse	0%		

Channel Characteristics

Type	Length (m)	Area (m2)	Dry Units
Primary	1,187	5,245	0
Secondary	94	146	3

Channel Dimensions (m)

Wetted		Active		Floodprone *n* = 5		First Terrace *n* = 5	
Width:	4.1	Width:	6.9	9.6	(7.1 - 12.5)	10.7	(7.2 - 14.3)
Depth:	0.49	Height:	0.4	0.8	(0.8 - 1)	1.0	(0.9 - 1.2)

W:D ratio: 16.7

Stream Flow Type: MF

Average Unit Gradient: 1.0%

Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.4

Habitat Units/100m (total channel length): 9.0

Habitat Units/100m (primary channel length): 9.7

Riparian, Bank, and Wood Summary

	Primary	Secondary
Land Use:	YT	LT
Riparian Vegetation:	D30	S

Bank Condition and Shade

Bank Status	Percent Reach Length	Shade (% of 180)
Actively Eroding:	0%	Reach avg:
Undercut Banks:	0%	Range: -

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	398	33.5
Volume (m^3):	240	20.2
Key pieces (>=12m x 0.60m):	2	0.2

OREGON DEPT OF FISH AND WILDLIFE **Woodward Cr**

HABITAT INVENTORY **GCG: 3-MS SITE ID: 5049**

Survey Date: 2/11/2013

Report Date: 5/28/2013 **T26S-R12W-S01NE** **REACH 1**

HABITAT DETAIL

Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m^2)	Large Boulders (#>0.5m)	Substrate Percent Wetted Area S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BEDROCK	1	2	0.5	0.05	1	0	0	5	0	0	0	95
CASCADE/BOULDERS	2	21	3.4	0.25	100	0	0	5	35	40	20	0
DRY UNIT	3	12	0.7	0.00	8	0	47	33	20	0	0	0
POOL-BACKWATER	4	25	2.1	0.38	57	0	60	30	10	0	0	0
POOL-DAMMED	1	7	4.0	0.70	27	0	0	50	50	0	0	0
POOL-ISOLATED	1	2	1.3	0.30	2	0	90	10	0	0	0	0
POOL-LATERAL SCOUR	52	686	4.4	0.72	3,041	0	19	38	41	0	0	1
POOL-PLUNGE	6	39	5.6	0.72	222	0	15	53	33	0	0	0
POOL-STRAIGHT SCOUR	4	54	4.5	0.68	231	0	14	46	40	0	0	0
RIFFLE	28	403	3.8	0.21	1,556	0	2	21	73	3	0	0
STEP/COBBLE	6	23	4.6	0.21	104	0	2	43	52	0	0	3
STEP/LOG	7	8	5.4	0.21	42	0	3	29	68	0	0	0
Total:	115	1,281	4.1	0.49	5,391	0	**Avg:** 15	33	48	1	0	2

HABITAT SUMMARY

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m^2)	Wetted Area Percent	Large Boulders Number	Large Boulders (# / $100m^2$)
Dammed & BW Pools	6	34	2.3	0.42	86	1.59%	0	0.0
Scour Pools	62	779	4.5	0.71	3,495	64.82%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	28	403	3.8	0.21	1,556	28.86%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	3	23	2.4	0.18	101	1.87%	0	0.0
Step/Falls	13	30	5.0	0.21	146	2.70%	0	0.0
Dry	3	12	0.7	0.00	8	0.15%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE **Woodward Cr**

HABITAT INVENTORY **GCG: 3-MS SITE ID: 5049**

Survey Date: 2/11/2013

Report Date: 5/28/2013 **T26S-R12W-S01NE** **REACH 1**

POOL SUMMARY

	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	68	53.1	57.3
Pools >=1m deep:	7	5.5	5.9
Complex pools (LWD pieces>=3):	30	23.4	25.3
Pool frequency (channel widths/pool):	2.7		
Residual pool depth (avg):	0.54		

OREGON DEPT OF FISH AND WILDLIFE **OREGON PLAN MONITORING SITE**
HABITAT INVENTORY **SURVEY DATE: 2/11/2013**

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 5049 STREAM: Woodward Cr

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RI	00	14.3	/SS	413425/4790946, START SIGN ON D40 MYRTLE ON LB HT, CT/MT, D30/S, LT/YT, T=6C
2	LP	01	21.8	BV, TJ/	BV OLD
3	CR	11	21.8		ACW=0.9,T=7C, BDRK=HARDPAN
5	SL	00	35.1		H=0.15M
9	LP	00	84.8	DJ	
12	LP	00	112.8	BV	OLD
13	LP	00	135.8	DJ, /LA	
25	LP	00	269.8	DJ	
30	SC	01	321.3		413513/4791063, CT/CT, D30/S, YT/LT, T=6C
31	RI	11	321.3		ACW=1.7
41	RI	00	448.9	WL	RACCOON TRACKS
42	LP	00	461.4	/LA	
43	LP	00	472.4	BV	
45	LP	00	497.4		HARDPAN SUBSTRATE
46	RI	00	526.1		413623/4791174, CT/MT, D30/S, YT/LT, T=6C
48	SC	00	539.1		BDRK=HARDPAN
51	SC	01	551.7		H=0.4M
55	SC	00	556		H=0.6M
56	DP	00	562.7	DJ	DJ EXTENDS U50-56
57	LP	00	579.2		BDRK=HARDPAN
60	LP	00	626.2	WL	RACCOON
61	SP	00	639.2	/CE	RIGHT
62	SL	00	639.9		H=0.3M
63	LP	00	650.4		SAW TROUT
65	SL	00	659.9		H=0.25M

OREGON DEPT OF FISH AND WILDLIFE **OREGON PLAN MONITORING SITE**
HABITAT INVENTORY **SURVEY DATE: 2/11/2013**

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 5049 STREAM: Woodward Cr

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
68	SL	00	681.6		H=0.2M
73	SL	00	715.6		H=0.35M
76	LP	00	758.6	LA/, SS/	
80	LP	00	798.6		50% ACTIVE EROSION
81	SC	00	805.1		413628/4791358, CT/MT, D30/S, YT/LT, T=6C
85	DU	02	840.6	BV	
94	CB	01	955.6	DJ, TJ	
95	CB	11	955.6	CE/	ACW=2.0M,413641/4791518, T=7C
96	LP	00	969.6	BV	CUTTHROAT OBSERVED
99	RI	00	1031.1	WL	DEER TRACKS
100	SP	00	1046.6	/LI	
101	LP	01	1061.1	DJ	
105	PP	00	1103.2	WL	DEAD GARTNER SNAKES
106	SL	00	1104.4		H=0.4M
109	LP	01	1140.9	DJ	
115	SL	00	1187.2		H=0.25M, 413782/4791660, CT/MT, D30/G, YT/ST, T=6C

3-MS-5049 Woodward Creek (Coquille River Basin) - 2013 Winter Habitat Survey

Subwatershed 171003050403 - ODFW Snorkel Surveys

Year	IDNum	Reach	SiteStatus	SurveyLength	SampledPools	SampledSurfaceArea	SumOfCOHO	SumOfCUTS	SumOfSTHD	CohoAvePoolDensity	CohoAvePoolDensitySD	CutsAvePoolDensity	CutsAvePoolDensitySD	SthdAvePoolDensity	SthdAvePoolDensitySD	PointUTM_E	PointUTM_N
1998	5036	Coquille R, NFk	Snorkeled	1000	1	440	53	0	0	0.12045455		0		0		412368	4783800
1998	5052	Woodward Cr	Snorkeled	1000	24	1674	256	35	0	0.17764099	0.124677419	0.0207454	0.024183473	0	0	412667	4789329
1998	5096	Coquille R, NFk	Snorkeled	1000	3	324	99	5	0	0.40277778	0.254966108	0.017592593	0.02157626	0	0	416398	4790117
1999	5050	Woodward Cr	Snorkeled	1000	5	117	32	2	0	0.25625	0.155484235	0.02	0.02981424	0	0	413511	4791030
2000	5030	Steele Cr	Electro	1052	18		A	A	A							411232	4784445
2000	5072	Hudson Cr	Snorkeled	1000	25	849	P	P	A	0.98910508	0.883090982	0.074607308	0.1007365	0	0	418493	4789702
2000	5080	Hudson Cr	Snorkeled	1000	35	896	P	P	P	0.82209517	0.528937146	0.002232143	0.008928571	0.0016897	0.0069876	416040	4788767
2004	5049	Woodward Cr	Snorkeled	1000	36	928	708	26	3	0.94219982	0.692281262	0.03311558	0.053790728	0.00625	0.022216	413766	4791631
2004	5075	Hudson Cr	Snorkeled	1000	23	503.25	67	33	16	0.17829125	0.301804026	0.053175444	0.071976945	0.016137	0.0257412	419438	4789943
2007	5073	Hudson Cr	Snorkeled	1095	19	699.65	702	81	7	1.44084349	1.042670852	0.120376243	0.140883078	0.0050383	0.0124564	420143	4790754
2007	5091	Coquille R, NFk	Snorkeled	1037	18	12896	1917	39	8	0.18663332	0.104967152	0.007477791	0.010965617	0.0014749	0.0027114	416716	4789867
2007	5096	Coquille R, NFk	Snorkeled	1104	19	10578	966	12	9	0.21802227	0.251101265	0.00268077	0.00638462	0.0013329	0.0030962	416398	4790117
2008	5050	Woodward Cr	Snorkeled	1025	38	1349.5	977	139	0	0.8761826	0.525189401	0.129777869	0.107607859	0	0	413511	4791030
2008	5073	Hudson Cr	Snorkeled	1104	25	624.5	313	54	15	0.6098989	0.425723668	0.125296548	0.184121482	0.0411088	0.0745694	420143	4790754
2008	5091	Coquille R, NFk	Snorkeled	1087	31	17136	1307	79	54	0.14070174	0.130359199	0.019905037	0.033388616	0.0345544	0.0751323	416716	4789867
2009	5030	Steele Cr	Snorkeled	998	22	570.25	139	11	12	0.24765051	0.213173687	0.017773635	0.048637443	0.0219892	0.0360197	411232	4784445
2009	5051	Woodward Cr	Snorkeled	988	36	1875.9	826	16	33	0.50379618	0.229604915	0.008775466	0.012433761	0.0203127	0.0267	413136	4790528
2009	5072	Hudson Cr	Snorkeled	1057	15	451.25	509	14	29	1.99548948	0.880360459	0.0265625	0.044763028	0.0669149	0.070425	418493	4789702
2009	5073	Hudson Cr	Snorkeled	1066	22	529	916	26	32	2.74292807	1.809360162	0.042240327	0.071490955	0.0905478	0.1111255	420143	4790754
2009	5091	Coquille R, NFk	Snorkeled	1053	6	1740.3	318	11	20	0.25636036	0.132083491	0.011533794	0.012410377	0.0152332	0.0149855	416716	4789867
2010	5073	Hudson Cr	Snorkeled	1118	20	945.55	557	52	13	0.66925623	0.373969994	0.06370696	0.082076299	0.0179412	0.0343982	420143	4790754
2010	49979	Hudson Cr	Snorkeled	1000	24	1548.3	395	28	2	0.35545864	0.230258639	0.026305987	0.03540643	0.0012497	0.0045657	415406	4788373
2011	5073	Hudson Cr	Snorkeled	1098	25	1286.4	1647	13	47	1.63402992	1.051867143	0.009371848	0.014023659	0.0486697	0.0602978	420143	4790754
2011	5091	Coquille R, NFk	Snorkeled	1008	19	15188	2165	4	54	0.27659257	0.177625368	0.000263077	0.000884811	0.0074261	0.0096724	416716	4789867
2012	5051	Woodward Cr	Snorkeled	975	35	2027.4	1106	30	34	0.58288381	0.288590411	0.014714827	0.019895115	0.0151463	0.0187808	413136	4790528
2012	5071	Hudson Cr	Snorkeled	999	23	1018.6	407	6	28	0.44964411	0.23352439	0.004909164	0.010908024	0.0441631	0.0676734	419096	4789864
2012	5073	Hudson Cr	Snorkeled	1129	18	1667.7	670	33	56	0.48583187	0.266047881	0.020599149	0.018620463	0.0392905	0.0254159	420143	4790754
2012	5091	Coquille R, NFk	Snorkeled	1028	14	14714	3237	31	42	0.20083279	0.081036177	0.004633427	0.009413895	0.0057408	0.0048062	416716	4789867
2013	5049	Woodward Cr	Snorkeled	1438	62	2712.3	1776	78	80	0.83511559	0.42887695	0.036624644	0.064199584	0.0384673	0.0513351	413766	4791631
2013	5073	Hudson Cr	Snorkeled	1057	15	703.9	902	117	16	1.57987312	1.086599861	0.145366388	0.109463467	0.0157576	0.023092	420143	4790754
2013	5075	Hudson Cr	Snorkeled	1066	20	709.3	1076	26	51	1.84373468	0.913386802	0.025981994	0.051555157	0.0833484	0.071029	419438	4789943
2013	5091	Coquille R, NFk	Snorkeled	1047	18	17927	4253	40	113	0.44792541	0.391690562	0.003099995	0.004583899	0.0163051	0.0293942	416716	4789867

site	new site	lat	long
W02 16	W01	43.24477	-124.084
W03 12	W02	43.24467	-124.084
W04 12	W03	43.2448	-124.083
W05 12	W04	43.24515	-124.083
W06 8	W05	43.24687	-124.083
W07 10	W06	43.24708	-124.083
W08 14	W07	43.24753	-124.082
W09 14	W08	43.24774	-124.082
W10 14	W09	43.24835	-124.08
W11 14	W10	43.24894	-124.08
W12 8	W11	43.24951	-124.079
W13 10	W12	43.24957	-124.078
W15 3	W13	43.25099	-124.076
W16 8	W14	43.25209	-124.076
W17 10	W15	43.25307	-124.075
W18 12	W16	43.25393	-124.075
W19 10	W17	43.2542	-124.074
W20 8	W18	43.25469	-124.074
W21 3	W19	43.25531	-124.074
W22 11	W20	43.25564	-124.073
W23 12	W21	43.25775	-124.072
W24 6	W22	43.25926	-124.071
W25 14	W23	43.26011	-124.071
W26 12	W24	43.26297	-124.07
W27 16	W25	43.26695	-124.066
W29 6	W26	43.26959	-124.065
W30 6	W27	43.26984	-124.065
W31 6	W28	43.27172	-124.064
W32 10	W29	43.27298	-124.062
W33 14	W30	43.27345	-124.061

Roseburg
A Forest Products Company

June 2, 2015

ODFW R & E Board
4034 Fairview Industrial Drive SE
Salem, OR 97302

Dear R & E Board,

This letter is to express our support of the instream project "Woodward-Fairview LWD Restoration". The Coquille Watershed Association (CWA), Oxbow Timber 1 LLC and other partners; the Coos Bay Bureau of Land Management (BLM), the Campbell Group (Menasha), and the Oregon Department of Fish and Wildlife, are proposing to place approximately 310 logs on 31 sites along 3 miles of Woodward Creek. Woodward Creek supports Oregon coast coho salmon, Chinook, winter steelhead and anadromous fish. It is also possible Pacific lamprey and freshwater mussels' habitat.

We have reviewed the proposals for our property and are ready to work with the CWA to implement the proposed project. In anticipation of this project being funded, Oxbow Timber spent $2,448 brushing the access road from the county road to the end of Oxbow's ownership on Woodward creek road this past spring. We have pending match of 15 donated trees with purchase of 20 trees at cost of $325 each. Staff assistance of approximately 3 days plus travel for project cooperation, and will donate approximately 300 seedlings for restoration.

Roseburg Resources is committed to supporting enhancement projects like this and behalf of our land holding company, Oxbow Timber 1, LLC, is proud to contribute $6,832 of in-kind support for this grant application.

I can be reached at 541-271-0159 x55019 or by email at timt@rfpco.com if you have any questions. Thank you for your interest in this project.

Sincerely,

[redacted]

Tim Truax
District Forester – Reedsport Area

CampbellGlobal
FOREST & NATURAL RESOURCE INVESTMENTS

June 3, 2015

Oregon Department of Fish and Wildlife
Restoration and Enhancement Board
4034 Fairview Industrial Drive SE
Salem, Oregon 97302

Dear ODF&W R&E BOARD,

This letter is to express our support of the in-stream project "Woodward-Fairview LWD Restoration". The Coquille Watershed Associations (CWA), Campbell Global and other partners; the Coos Bay Bureau of Land Management (BLM), Oxbow Timber LLC, and the Oregon Department of Fish and Wildlife are proposing to place approximately 310 logs on 31 sites along 3 miles of Woodward Creek. Woodward Creek supports Oregon coast Coho salmon, Chinook salmon, winter steelhead and other anadromous fish. It is possibly Pacific lamprey and freshwater mussels habitat.

We have reviewed the proposals for our property and are ready to work with the Coquille Watershed Association to implements the proposed project. At this time we have pending match of staff technical assistance for project design , review and are donating more than $1400 worth of logs to be placed on Menasha's portion of the project. Last year, Menasha Forest Products Corp. and Pacific West Timber Company spent nearly $10,000 to reconstruct access to the project site. Following completion of this project we are planning to block this area to no authorized ATV use in order to minimize damage to areas adjacent to Woodward Creek.We would greatly appreciate your consideration of the proposal.

Sincerely,

[redacted]

Oregon Logging Manager
Campbell Global

1515 SHERIDAN STREET (P.O. BOX 588) | NORTH BEND, OREGON 97459 | 541.756.1193 | FAX 541.756.7833
www.CampbellGlobal.com

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Coos Bay District Office
1300 Airport Lane, North Bend, OR 97459
Web Address: http://www.blm.gov/or/districts/coosbay
E-mail: BLM_OR_CB_Mail@blm.gov
Telephone: (541) 756-0100 Toll Free: (888) 809-0839 Fax: (541) 751-4303

June 3, 2015

ODFW Fish Restoration and Enhancement Program
4034 Fairview Industrial Drive SE
Salem, OR 97302

Dear ODFW Fish Restoration and Enhancement Board:

The Coos Bay District BLM supports the Woodward Creek large wood placement project. We are excited to participate in a multi-partner project to continue the whole basin approach to restoration within the North Fork Coquille River system that our organization has been participating in since 2008.

Woodward Creek is important spawning and rearing habitat for Coho Salmon and Steelhead and Cutthroat Trout and Pacific Lamprey and designated as critical habitat for Oregon Coast Coho Salmon.

We will be contributing $50,000 cash to the project and an in-kind match of approximately $40,000 which includes time for a fish biologist to work on the project and BLM trees to be placed in BLM sites. The Umpqua Area fish biologist has already spent five days assessing, designing, and coordinating with other project partners for this project.

We look forward to continuing our excellent partnership with the Coquille Watershed Association.

[redacted]

Todd D. Buchholz
Umpqua Field Manager
Coos Bay District, BLM

Signature Authorization Page

I hereby make an application for financial assistance under the terms and conditions of the R&E Program as described in my project application.

I understand that if my project is approved for funding, the following will apply:

- All project sponsors must sign a grant agreement containing the terms and conditions on which funding will be released.
- Project expenses which occur before the grant agreement is signed or after the expiration date will not be paid by the R&E Program.
- Copies of all necessary permits must be submitted to the R&E Program.
- Project sponsors must certify compliance with local, state, and federal regulations and laws.
- Landowner, monitoring and maintenance agreements must be submitted to the R&E Program.
- Regular progress reports may be required, and at the end of each project a Completion Report must be submitted.
- Educational products resulting from projects are public domain.
- All information submitted to either party under this application is subject to the federal Freedom of Information Act.

Project Title: Woodward Creek Instream Restoration

Applicant: Coquille Watershed Association

Date: 6/2/15

Fiscal Officer: __Kelly Miles_[redacted]_____

Date: __6/2/15_____

INTERNAL REVENUE SERVICE
DISTRICT DIRECTOR
2 CUPANIA CIRCLE
MONTEREY PARK, CA 91755-7406

DEPARTMENT OF THE TREASURY

Date: FEB 2 7 1998

COQUILLE WATERSHED ASSOCIATION
382 NORTH CENTRAL
COQUILLE, OR 97423

Employer Identification Number:
93-1171301
Case Number:
955318088
Contact Person:
GAYLE M ADAMS
Contact Telephone Number:
(909) 624-5529
Accounting Period Ending:
December 31
Foundation Status Classification:
IRC 170(b)(1)(a)(vi)
Advance Ruling Period Begins:
January 26, 1998
Advance Ruling Period Ends:
December 31, 1999
Addendum Applies:
no

Dear Applicant:

Based on information you supplied, and assuming your operations will be as stated in your application for recognition of exemption, we have determined you are exempt from federal income tax under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3).

Because you are a newly created organization, we are not now making a final determination of your foundation status under section 509(a) of the Code. However, we have determined that you can reasonably expect to be a publicly supported organization described in sections 509(a)(1) and 170(b)(1)(A)(vi).

Accordingly, during an advance ruling period you will be treated as a publicly supported organization, and not as a private foundation. This advance ruling period begins and ends on the dates shown above.

Within 90 days after the end of your advance ruling period, you must send us the information needed to determine whether you have met the requirements of the applicable support test during the advance ruling period. If you establish that you have been a publicly supported organization, we will classify you as a section 509(a)(1) or 509(a)(2) organization as long as you continue to meet the requirements of the applicable support test. If you do not meet the public support requirements during the advance ruling period, we will classify you as a private foundation for future periods. Also, if we classify you as a private foundation, we will treat you as a private foundation from your beginning date for purposes of section 507(d) and 4940.

Grantors and contributors may rely on our determination that you are not a private foundation until 90 days after the end of your advance ruling period. If you send us the required information within the 90 days, grantors and contributors may continue to rely on the advance determination until we make a final determination of your foundation status.

If we publish a notice in the Internal Revenue Bulletin stating that we

will no longer treat you as a publicly supported organization, grantors and contributors may not rely on this determination after the date we publish the notice. In addition, if you lose your status as a publicly supported organization, and a grantor or contributor was responsible for, or was aware of, the act or failure to act, that resulted in your loss of such status, that person may not rely on this determination from the date of the act or failure to act. Also, if a grantor or contributor learned that we had given notice that you would be removed from classification as a publicly supported organization, then that person may not rely on this determination as of the date he or she acquired such knowledge.

If you change your sources of support, your purposes, character, or method of operation, please let us know so we can consider the effect of the change on your exempt status and foundation status. If you amend your organizational document or bylaws, please send us a copy of the amended document or bylaws. Also, let us know all changes in your name or address.

As of January 1, 1984, you are liable for social security taxes under the Federal Insurance Contributions Act on amounts of $100 or more you pay to each of your employees during a calendar year. You are not liable for the tax imposed under the Federal Unemployment Tax Act (FUTA).

Organizations that are not private foundations are not subject to the private foundation excise taxes under Chapter 42 of the Internal Revenue Code. However, you are not automatically exempt from other federal excise taxes. If you have any questions about excise, employment, or other federal taxes, please let us know.

Donors may deduct contributions to you as provided in section 170 of the Internal Revenue Code. Bequests, legacies, devises, transfers, or gifts to you or for your use are deductible for Federal estate and gift tax purposes if they meet the applicable provisions of sections 2055, 2106, and 2522 of the Code.

Donors may deduct contributions to you only to the extent that their contributions are gifts, with no consideration received. Ticket purchases and similar payments in conjunction with fundraising events may not necessarily qualify as deductible contributions, depending on the circumstances. Revenue Ruling 67-246, published in Cumulative Bulletin 1967-2, on page 104, gives guidelines regarding when taxpayers may deduct payments for admission to, or other participation in, fundraising activities for charity.

You are not required to file Form 990, Return of Organization Exempt From Income Tax, if your gross receipts each year are normally $25,000 or less. If you receive a Form 990 package in the mail, simply attach the label provided, check the box in the heading to indicate that your annual gross receipts are normally $25,000 or less, and sign the return.

If you are required to file a return you must file it by the 15th day of the fifth month after the end of your annual accounting period. We charge a penalty of $10 a day when a return is filed late, unless there is reasonable

cause for the delay. However, the maximum penalty we charge cannot exceed $5,000 or 5 percent of your gross receipts for the year, whichever is less. We may also charge this penalty if a return is not complete. So, please be sure your return is complete before you file it.

You are not required to file federal income tax returns unless you are subject to the tax on unrelated business income under section 511 of the Code. If you are subject to this tax, you must file an income tax return on Form 990-T, Exempt Organization Business Income Tax Return. In this letter we are not determining whether any of your present or proposed activities are unrelated trade or business as defined in section 513 of the Code.

You need an employer identification number even if you have no employees. If an employer identification number was not entered on your application, we will assign a number to you and advise you of it. Please use that number on all returns you file and in all correspondence with the Internal Revenue Service.

If we said in the heading of this letter that an addendum applies, the addendum enclosed is an integral part of this letter.

Because this letter could help us resolve any questions about your exempt status and foundation status, you should keep it in your permanent records.

If you have any questions, please contact the person whose name and telephone number are shown in the heading of this letter.

Sincerely yours,

[redacted]

Richard R. Orosco
District Director