R & E Grant Application 13 Biennium

Project #: 13-063

Noble Creek Watershed Restoration

Project Information

R&E Project Request:	$49,592.00
Match Funding:	$226,968.00
Total Project:	$276,560.00
Start Date:	7/1/2014
End Date:	9/15/2014
Project Email:	nscheidt@cooswatershed.org
Project Biennium:	13 Biennium
Organization:	Coos Watershed Association (Tax ID #: 93-1146207)

Fiscal Officer

Name:	Aimee Peters
Address:	PO Box 5860 Charleston, OR 97420
Telephone:	541-888-5922
Fax:	541-888-6111
Email:	apeters@cooswatershed.org

Technical Contact

Name:	Nicholas Scheidt
Address:	PO Box 5860 Charleston, OR 97420
Telephone:	541-888-5922
Telephone 2:	541-404-6288
Fax:	541-888-6111
Email:	nscheidt@cooswatershed.org

Applicant Information

Name:	Nicholas Scheidt
Address:	PO Box 5860 Charleston, OR 97420
Telephone:	541-888-5922
Telephone 2:	541-404-6288
Fax:	541-888-6111
Email:	nscheidt@cooswatershed.org

Past Recommended or Completed Projects

Number	Name	Status
11-127	East Fork Millicoma Oxbow Reconnection	Completed

Project Summary

This project is part of ODFW's 25 Year Angling Plan.

Activity Type: Habitat

Summary: The Coos Watershed Association (CoosWA), Clyde and Dorothy Haga, Roseburg Resources Company and ODFW propose to implement a stream restoration project in Noble Creek that will also reduce risk of flooding inside the Noble Creek Hatchery. Noble Creek is a tributary to Isthmus Slough (Coos Bay) that is important to hatchery production of fall Chinook salmon and has the potential to be important coho salmon, steelhead and cutthroat trout, and pacific lamprey habitat. We propose to: 1) Replace six road crossings to improve habitat connectivity; 2) Permanently remove three additional fish culverts; 3) Decommission 0.9 miles of riparian road; 4) Replace three non-fish crossings; 5) Place 96 pieces of large wood; and 6)Plant native trees in 2.75 acres of riparian buffer. The project will improve ecosystem integrity by restoring watershed processes, improving habitat

quality, and decreasing habitat fragmentation.

Objectives: Please see attached project Map 1 for project locations. Our objectives are: 1) Replace Haga crossing with concrete slab bridge to reduce threat of flooding inside hatchery and improve fish passage (Photos 1-4); 2) Replace 5 culverts owned by Roseburg Resources Company (RRC) to improve passage conditions for coho salmon, winter steelhead, cutthroat trout, and pacific lamprey (Photos 5-12); 3)Permanently remove 3 RRC stream crossings to improve coho and steelhead passage; 4) Decommission 0.9 miles of RRC riparian road to improve water quality; 5) Plant native trees on RRC land in 2.75 acres of riparian that was previously cleared through logging and grazing (Photos 13-15); and 6) Place 96 pieces of large wood in Noble Creek on RRC land (Photo 5).

Fishery Benefits: The Haga stream crossing located just above the Noble Creek hatchery (see Map 1, Photos 1-4) is under-sized to pass flood flows and requires maintenance to reduce risk of flooding damage to hatchery. The main culvert has to be cleared of sticks and/or beaver dams at least once per year to prevent flooding. The crossing has over-topped and flooded the hatchery and gravel parking lot in the past. Poor timing of hatchery flooding could impact retention of adult Chinook prior to spawning or smolts prior release date.

All of the watershed restoration efforts upstream from the hatchery will help to increase natural production of coho salmon by addressing winter and summer rearing habitat needs, with winter rearing being the primary limiting factor to coho in the basin. Improved coho production in Noble Creek, along with similar ongoing projects in the Coos, will help to increase the quota for our recreational non-fin clipped coho fishery in Coos Bay. Ultimately, we strive to restore our coho populations so that an ocean commercial coho fishery will be re-established.

Watershed Benefits: This area was identified by the Coos Watershed "Isthmus and Coalbank Slough Sub-basin Assessment" (2011) as a high priority for wetland restoration, culvert replacements, road upgrades, road decommissions and large wood placement to benefit coho salmon. The project will improve the quality of or access to more than 4 miles of potentially good to excellent spawning (see photo 5) and rearing habitat for adult coho and steelhead. Coho salmon intrinsic potential is excellent with values between 0.81 to 0.91 (in the planting and wood placement reaches). Steelhead trout have moderate to high intrinsic potential from 0.49 to 0.75. However, anthropogenic activities have decreased stream complexity and created fish passage barriers which now limit aquatic production.

Poor winter rearing habitat is due to a lack of large wood and disconnected floodplains. Floodplains are disconnected because the stream was relocated to the southern hillslope and dredged to create pasture for grazing. The coniferous riparian stands were cleared: 1) To create pasture; 2) As a part of logging; 3) To build riparian road; and 4) Through formation of a mill pond. Wood placements (see Map 1 for wood placement reach) will help to reconnect floodplains and improve habitat complexity until wood recruitment rates from the riparian forest increase.

Additionally, important winter rearing habitats in tributary streams were disconnected due to poorly design road culverts. The five culvert replacements and 3 permanent culvert (Map 1) removals will help to improve access to 1.65 miles of important coho winter rearing habitat. Ebersole et al (2009) found that similar tributary streams in the West Fork Smith River system provide some of the best over-wintering habitats for coho and restoration should consider reconnection of main stems to small tributaries.

Riparian plantings in 2.75 acres of riparian area (Map 2) will help to improve stream shading, water quality through bank stability, summer food supply (terrestrials bugs), and future recruitment of large wood. Native trees will be planted with conifers in dryer areas and deciduous species in wetter locations.

Decommission of 0.9 miles of riparian roads will help to improve water quality through increased road related storm water infiltration and help to restore riparian stands.

Current Situation:

There are two culverts in the Haga stream crossing that is immediately above the hatchery (see attached photos). The combined flow capacity of these culverts is approximately 150 cfs (HY-8 analysis done by CoosWA) compared to a 2-year flood of 146 cfs, 50-year flood of 441 cfs and 100- year flood of 510 cfs (USGS Streamstats). The crossing has frequently plugged in the past which caused flood waters to go around and into the hatchery facility. Coho salmon have been observed swimming through the gravel parking lot during these periods (photo will be presented at Board meeting).

Most of the RRC culverts (Photos 6-12) are perched and all are under-sized to pass flood flows. They provide poor adult passage and block juvenile passage, in most cases, blocking access to important winter rearing habitats.

The wood placement reach in Noble Creek has a low-gradient (<1%) with an active channel width (ACW) of 15 feet. The drainage area above the lowest wood placement site is 2.2 square miles with 50 and 100- year peak flow events of 330 cfs and 396 cfs, respectively. The project reach (Map 1) has good potential for coho production, with intrinsic potential from 0.81 to 0.91, but lack in-stream complexity due to a deficiency of large wood (Photo 1). According to the ODFW Stream Channel and Riparian Habitat Benchmarks (Moore 1997), it is desirable to have >20 pieces of large wood per 100 meters (15 cm x 3 m minimum piece size), >30 m3 volume of large wood per 100 meters, and >3 “key” pieces per 100 meters. An aquatic habitat survey conducted by CoosWA in 2012 found that the project reach has 6 pieces of wood per 100 meters, 6 m3 of wood per 100 meters and 0.2 “key” pieces per 100 meters on average.

Riparian vegetation was cleared to create pastureland and the riparian lowland along Noble Creek has been infested with reed canary grass seeded by ranchers

to use as forage for their livestock. Reed canary grass does not provide adequate long term bank stability and its shallow root system allows undercutting of the channel resulting in bank failure. Most if not all of the conifers on the hillsides have been logged, reducing the amount of long-term shade and future large wood recruitment.

There is 0.9 miles of obsolete riparian road that parallel anadromous streams. The roads create hydrologic flow paths that deliver fine sediment to Noble Creek. If not properly decommissioned, road failures will form and deliver sediment to Noble Creek on an annual basis.

Alternatives: We considered installing a new corrugated metal pipe (CMP) in the Haga crossing. The CMP would need to be a 128" x 83" x 40' long pipe-arch to meet state and federal requirements. The cost a this culvert replacement would have been approximately $34,540 to purchase a new culvert and install it. The donation of bridge slabs from Coos County make installation of a bridge more cost effective than a new culvert in this case.

Designer: Haga Bridge: Don Porior,PE; Nick Scheidt (CoosWA); and Christopher Claire (ODFW). Roseburg Culverts: Erwin Hackett (Roseburg Road Engineer), Nick Scheidt and Christopher Claire.

Wood placements: Nick Scheidt and Jeff Jackson (ODFW).

Methods: Bridge and culverts will be designed to meet current ODFW Fish Passage Plan guidance, Oregon Road/Stream Crossing Restoration Guide (1999), ODFW fish passage guidance for the stream simulation method (October, 2004) and federal guidelines (USFS 2008). We are working with ODFW on the Fish Passage Plan for the Haga Bridge(see attached letter from ODFW Christopher Claire)and expect that the plan will be approved by March 2014. The selection of a bridge design, over a culvert, helps to ensure that the project will meet fish passage requirements. Wood placements will be done in accordance to the Oregon Guidelines for Wood, Boulder and Spawning Gravel Placement 2010. All of the new stream crossings will easily pass a 100-year storm event. The 100 year storm was size according to ODF guidance (150 cubic feet per second per square mile in this area) and then adjusted for 100-year storm events by multiplying the number of contributing acres by a constant of 1.2 and recalculating the cubic feet per second based on square miles. The ODF estimates are similar to estimates from USGS StreamStats. Road decommissioning will meet recommendations in the Oregon Department of Forestry Forest Roads Manual (2000) Section 8. Forest Road Vacating. Waterbars bar spacing will be 1/2 of the length recommended for active roads. Design criteria for the riparian planting project will follow the guidelines in the Coastal Oregon Riparian Silviculture Guide (Massingill 2003).

Inspector: The bridge will be inspected by Don Porior, PE. Roseburg Culverts: Erwin Hackett (Roseburg Road Engineer), Nick Scheidt (CoosWA) and Christopher Claire (ODFW). Wood placements: Nick Scheidt (CoosWA) and Jeff Jackson (ODFW)

Funding Elements: We are requesting R&E funds to install the Haga bridge and place large wood. We are requesting staff time for Nick Scheidt. Nick will be in charge of project management for the Haga Bridge and wood placements. Project Management will include: Oversite of site surveys and engineering design, permit acquisition, contractor solicitation and tours, project partner coordination, wood site designs, construction planning oversite, bridge inspection oversight, wood placement inspection, project erosion control oversite, project photos (before, during, after) and final report. As a non-profit organization, inclusion of staff time in grant applications is necessary since we operate almost entirely off of grant funding. We do not have general funds to cover staff time.

Partners: No

Existing Plan: Yes

The Coos Watershed Assessed Noble Creek as a part of the Isthmus and Coalbank Slough Sub-basin Assessment in 2011. The Assessment identified that wetland restoration, fish passage, wood placement, riparian planting and road drainage improvements as high priority projects that will enhance stream production. The Coos Watershed Association and project partners have worked together to obtain OWEB funding and now request ODFW R and E Board funding as a part of the action plan to address factors limiting stream production in the

Isthmus Slough sub-basin.

Affected Contacted: Yes

Affected Supportive: Yes

Affected Comments: Clyde and Dorothy Haga support the new bridge and restoration on Roseburg Resources land (see attached letter of support). Roseburg Resources supports the project (see attached letter). The local ODFW District strongly supports the project (see attached letter).

Project Schedule/Participants/Funding

Activity	Date	Participants
Haga Bridge Installation	9/15/2014	CoosWA
Fish Culvert Sites 1-5	9/15/2014	CoosWA and Roseburg Resources
Wood Placements	9/15/2014	CoosWA
Riparian Planting	3/31/2014	CoosWA
Road Decommission and Crossing Removal	9/15/2014	CoosWA

Affected Species:

Chinook Salmon
Coho Salmon
Cutthroat Trout
Pacific Lamprey
Steelhead

Project Permits

Name	Issued By	Secured?	Date Secured	Date Expected
ODFW Fish Passage Plan	ODFW	No	1/1/0001	3/1/2014
DSL Fill Removal	Oregon Department of State Lands	No	1/1/0001	5/1/2014
USACE Fill Removal	Army Corps of Engineers	No	1/1/0001	6/1/2014

Project Monitoring

Organization	Address	Activity	Frequency
Coos Watershed Association	PO Box 5860 Charleston, OR 97420	Annual Photos and Inspection	Annually 2014-2017

Project Maintenance

Organization	Address	Activity	Frequency
Clyde and Dorothy Haga	93638 Green Acres Ln Coos Bay, OR 97420	Haga Bridge	As needed.
Coos Watershed Association	PO Box 5860 Charleston, OR 97420	Wood Placements	As needed.
Coos Watershed Association	PO Box 5860 Charleston, OR 97420	Riparian Planting	Annually for 5 years.
Roseburg Resources Company: Tim Truax	711 Port Dock Road Reedsport, OR 97467	Replaced culverts.	As needed.

Project Match Funding

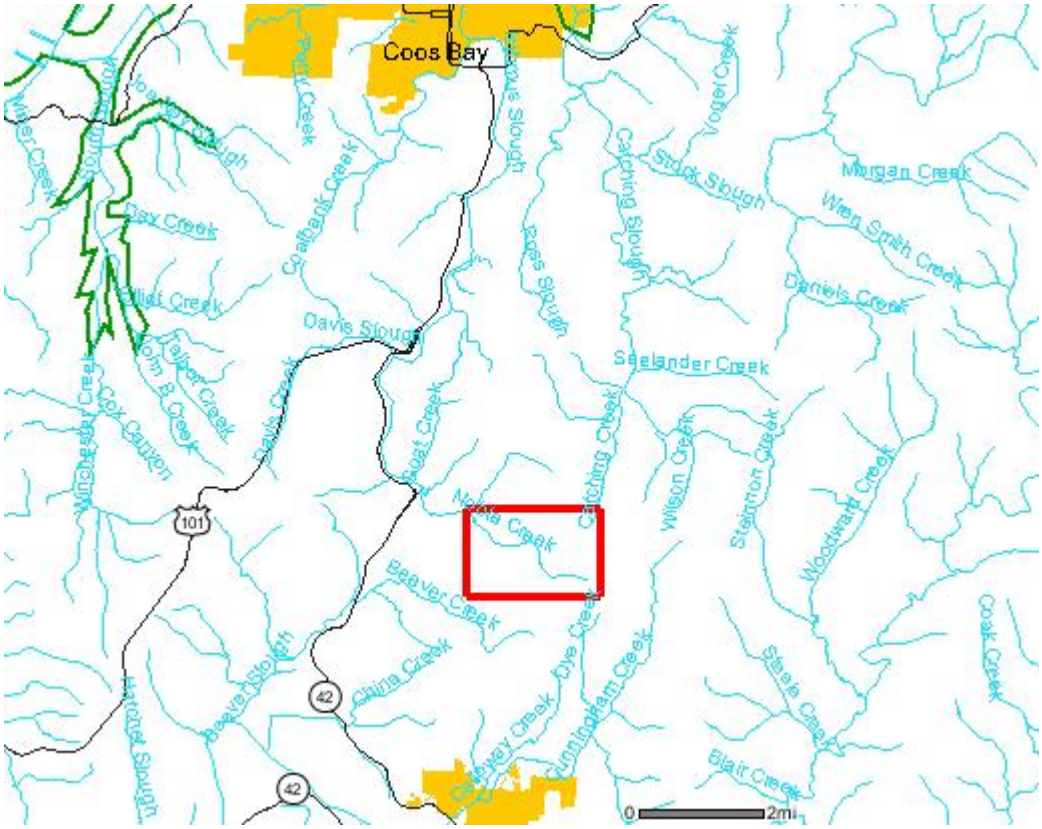
Funding Source	Cash	In-Kind	Other	Description	Total	Secured?	Conditions?	Comments
R&E Request	$49,592.00	$0.00	$0.00		$49,592.00	No	No	
Coos County Road Department	$0.00	$12,500.00	$0.00		$12,500.00	Yes	No	
Roseburg Resources Company	$48,522.50	$0.00	$0.00		$48,522.50	Yes	No	
ODFW	$0.00	$1,120.00	$0.00		$1,120.00	Yes	No	
OWEB	$164,825.50	$0.00	$0.00		$164,825.50	Yes	No	
				Total Match Funding:	$276,560.00			

Project Budget

Item	Item Type	Units	Unit Cost	R&E Funds	Match Funds	Total
Financial Admin. (Contracting, Invoicing, etc)	Administration	1	$18,019.00	$4,000.00	$14,019.00	$18,019.00
Bridge Site Protection (rip-rap placement)	Contracted Services	1	$1,850.00	$1,850.00	$0.00	$1,850.00
Delivery of Haga Bridge Slabs	Contracted Services	5	$554.00	$2,770.00	$0.00	$2,770.00
Haga Bridge (bypass, erosion control, site prep.)	Contracted Services	1	$2,700.00	$2,700.00	$0.00	$2,700.00
Haga Bridge Slab Installation	Contracted Services	5	$588.00	$2,940.00	$0.00	$2,940.00
Haga culvert removal	Contracted Services	1	$2,000.00	$2,000.00	$0.00	$2,000.00
Large Wood Placement (cable yarder)	Contracted Services	96	$258.00	$7,968.00	$16,800.00	$24,768.00
Log Hauling (35-50' long by 22-36" diameter)	Contracted Services	96	$138.00	$2,048.00	$11,200.00	$13,248.00
Mobilization (Fish Culverts)	Contracted Services	1	$4,000.00	$0.00	$4,000.00	$4,000.00
Mobilization (Wood Placements)	Contracted Services	1	$2,000.00	$0.00	$2,000.00	$2,000.00
Permanent Fish Crossing Removals	Contracted Services	3	$3,300.00	$0.00	$9,900.00	$9,900.00
Riparian Planting Site Preparation	Contracted Services	1	$1,375.00	$0.00	$1,375.00	$1,375.00
Road Decommissioning (0.9 miles)	Contracted Services	1	$3,000.00	$0.00	$3,000.00	$3,000.00
Sites 1-5 Fish Culvert Replacements	Contracted Services	5	$10,576.00	$0.00	$52,880.00	$52,880.00
Structural Excavation for Haga Bridge Footings	Contracted Services	1	$1,850.00	$1,850.00	$0.00	$1,850.00
Surveys and Engineering Designs	Contracted Services	1	$2,500.00	$2,500.00	$0.00	$2,500.00
Culvert Designs	Personnel	7	$1,100.00	$0.00	$7,700.00	$7,700.00
Erosion Control Crew (4 person)	Personnel	5	$792.00	$0.00	$3,960.00	$3,960.00
ODFW Project Assistance	Personnel	35	$32.00	$0.00	$1,120.00	$1,120.00
Project Management	Personnel	53	$328.00	$5,146.00	$12,238.00	$17,384.00
Riparian Planting	Personnel	1	$17,066.00	$0.00	$17,066.00	$17,066.00
Bridge Footings (16'x2'x1.25' concrete w/rebar)	Supplies/Materials /Services	2	$960.00	$1,920.00	$0.00	$1,920.00
Bridge Site Protection Rock (Class 5 Rip-rap)	Supplies/Materials /Services	112	$25.00	$2,800.00	$0.00	$2,800.00
Bridge Slabs	Supplies/Materials /Services	5	$2,500.00	$0.00	$12,500.00	$12,500.00
Erosion Control Straw and Seed	Supplies/Materials /Services	1	$1,188.00	$0.00	$1,188.00	$1,188.00
Logs (35-50' long and 22-36" diam.)	Supplies/Materials /Services	96	$150.00	$6,000.00	$8,400.00	$14,400.00
Non-fish Culverts (24" HDPE)	Supplies/Materials /Services	3	$825.00	$0.00	$2,475.00	$2,475.00
Riparian Planting	Supplies/Materials /Services	1	$20,034.00	$0.00	$20,034.00	$20,034.00

Roadway Aggregate (bridge approaches)	Supplies/Materials /Services	33	$25.00	$825.00	$0.00	$825.00
Select Granular Backfill (Bridge footing base)	Supplies/Materials /Services	65	$25.00	$1,625.00	$0.00	$1,625.00
Sites 1-5 Fish Culvert Replacements	Supplies/Materials /Services	5	$4,708.00	$0.00	$23,540.00	$23,540.00
Stream Embedment Rock (rip-rap and river run)	Supplies/Materials /Services	26	$25.00	$650.00	$0.00	$650.00
Management, Planting, and Erosion Control	Travel	1	$1,573.00	$0.00	$1,573.00	$1,573.00
					Total Budget:	$276,560.00

Project Map



Additional Files

Click a link to view that particular file.

ConceptualBridgeDesign

County Bridge Slab Donation

FishCulvertDesigns

Haga Support Letter

ODFW Support Letter

Project Map1

Project Photos

RiparianPlantingMap2

Roseburg Resources Support Letter

Signature Page

ROSEBURG
RESOURCES CO.

December 10, 2013

Coos Watershed Association
PO Box 5860
Charleston, OR 97420

RE: Noble Creek Habitat Improvements

Nick,

Roseburg Resources Company will partner with Coos Watershed Association to help improve aquatic habitat in Noble Creek. Roseburg Resources Company will contribute up to $57,787 towards replacement of fish culverts, large wood placement, riparian planting and plant establishment, road drainage upgrades and road decommissioning. Of this estimated total, $42,387 will be cash match to help pay for contracted services, culvert materials, site preparation herbicide, and riparian plant establishment. The remaining $15,400 will be in-kind match for engineering time. Roseburg Resources Company fully supports this ODFW R&E project and looks forward to working with the Coos Watershed Association.

Sincerely,

[redacted]

Tim Truax
District Forester
Roseburg Resources Company

711 Port Dock Road
Reedsport, OR 97467
PH 541.271.0159
TF 800.245.1115
FX 541.271.3331
www.Roseburg.com

December 10, 2013

Nick Scheidt
Coos Watershed Association
PO Box 5860
Charleston, OR 97420

RE: Noble Creek Watershed Restoration

Nick,

We will partner with Coos Watershed Association and the Oregon Department of Fish and Wildlife to replace our Noble Creek culvert with a bridge. The crossing is just upstream from the Noble Creek Hatchery facility. The existing culvert is small enough that it plugs due to beaver activity and sticks that come down in storms. A new bridge would help to reduce maintenance and also reduce risk of a culvert failure that could impact the hatchery. We understand that the new bridge will have to meet ODFW Fish Passage Requirements and be stamped by an Oregon Licensed Engineer. We look forward to working with project partners to improve natural coho production in Noble Creek.

Sincerely,

[redacted]

Clyde Haga
Dorothy Haga
93638 Green Acres Ln
Coos Bay, Oregon 97420

Oregon
John A. Kitzhaber MD., Governor

Department of Fish and Wildlife
Charleston Field Office
63538 Boat Basin Dr.
P.O. Box 5003
Charleston, OR 97420
(541) 888-5515
FAX (541) 888-6860

December 12, 2013

Dear Restoration and Enhancement Board,

The Coos Watershed Association has worked with Oregon Department of Fish and Wildlife (ODFW) and Roseburg Forest products in the past two years to initiate habitat improvements in the Noble Creek watershed (tributary to Isthmus Slough, Coos Bay, OR) that are expected to notably increase the productive capacity for Oregon Coast ESA listed coho *Oncorhynchus kisutch,* winter steelhead *O. mykiss irrideus*, coastal cutthroat trout *O. clarki clarki,* and Pacific lamprey *Entosphenus tridentata.* Noble Creek is the location for the second largest ODFW Salmon and Trout Enhancement Program (STEP) hatchery in the Coos Basin. Coos Watershed Association has proposed, through a Restoration and Enhancement grant, to replace an undersized culvert immediately upstream of the Noble Creek Hatchery facility. This pipe currently has a propensity to collect debris due to its limited capacity and contributes to reduced juvenile fish movements at times during high flows and summer low flows periods. It can at times present a flooding risk to the STEP facility due to its limited size if it becomes plugged by debris.

The proposed project would utilize the R&E funding to replace the undersized culvert with a concrete bridge exceeding State of Oregon Fish Passage criteria. ODFW is working with the Coos Watershed Association to complete the Fish Passage Plan as streamflows allow during this winter period. Replacement of this culvert with a bridge will improve passage conditions to roughly 4.0 miles of habitat. The majority of this habitat has been documented to have a moderate or high intrinsic potential for coho production. Matching funds from several sources will be utilized to install Large Woody Debris (LWD) in a 0.8 mile segment of Noble Creek that has been subjected to historical heavy grazing, streamside logging, milling operations, and direct channelization. Perhaps as important as any treatment will be decommissioning of 0.9 miles of road network with the matching funds. Improving water quality through reduction of road related sediment will assist in alleviating long-term chronic impacts to salmonid production as well.

These efforts to improve habitat complexity, alleviate culvert restrictions, and reduce sediment input into Noble Creek are foundationally critical for enhancing spawning and rearing habitat for ESA listed coho, Pacific lamprey, winter steelhead, and coastal cutthroat trout. Habitat complexity and water quality is directly linked to production of these species. Sediment loading above natural background levels contributes to embedding of substrates which often results in reduced hatch rates for eggs in redds, inhibited production of macroinvertebrates (invertebrates largely live in the interstitial spaces of gravels), and impacts on the ability of fish to obtain food due to the nature of salmonids to feed predominantly using their sight (Burns 1970; Hall and Lanz 1969; Weiser and Wright 1988; Suttle et al. 2004; Tripp and Poulin 1992; Waters 1995).

Completing this work is considered a direct and important pathway in conjunction with other ongoing habitat improvement and sediment reduction efforts to increase production of anadromous and resident salmonids. ODFW staff at the local Coos-Coquille-Fish District office have been in consultation with the Coos Watershed Association to fully affirm that the individual portions of this project will meet or exceed both fish passage and engineering criteria required for the R&E grant process. ODFW staff anticipate contributing 35hrs. of staff totaling $1,120 in-kind contribution for fish passage attributes of this project and monitoring of culverts placed in 2013. Additionally, ODFW staff will be involved with direct habitat complexity (placement

of LWD) and sediment management (road decommissioning) aspects of the project. We are highly supportive of this proposal and future proposals to address multiple impacts affecting anadromous and resident native fish production.

Sincerely,

Christopher W. Claire

Christopher W. Claire
Habitat Protection Biologist
Oregon Dept. of Fish and Wildlife
Coos-Coquille-Tenmile Fish District

Literature Cited

Burns J. W. 1970. Spawning Bed Sedimentation Studies in Northern California Streams. California Fish and Game: 56(4) : 253-270.

Reiser, D.W., and R.G. White 1988. Effects of Two Sediment Size-Classes on Survival of Steelhead and Chinook Salmon Eggs. North American Journal of Fisheries Management: 8:432-437.

Hall, J.D., and R.L. Lantz 1969. Effects of Logging on the Habitat of Coho Salmon and Cutthroat Trout. Symposium on Salmon and Trout in Streams. H.R. MacMillian lectures in fisheries: pp355-375.

Suttle, K. B., M.E. Power, J.M. Levine, and C. McNeely 2004. How Fine Sediment in Riverbeds Impairs Growth and Survival of Juvenile Salmonids. Ecological Applications: 14(4), 2004 pp. 969-974.

Tripp, D. B., and V. A. Poulin 1992. The Effects of Logging and Mass Wasting on Juvenile Salmonid Populations in Streams on the Queen Charlotte Islands. Ministry of Forestry 31 Bastion Square Victorica, B.C., V8W 3E7. 1992: 36p.

Waters, T.F 1995. Sediment in Streams, Sources, Biological Effects, and Control. American Fisheries Society Monograph 7. Bethesda Maryland 1995. pp79-104.

Coos Watershed Association
P.O. Box 5860
Charleston, OR 97420
(541) 888-5922
(Fax) 888-6111
E-mail: cooswa@cooswatershed.org

October 28, 2013

John Rowe, Roadmaster
Coos County Road Department
1281 W. Central,
Coquille, Oregon 97423

Re: Donation of County Bridge Slabs for Watershed Restoration

Mr. Rowe:

The Coos Watershed Association (CoosWA) is writing to request 30 of the concrete bridge slabs inventoried from the Beaver Creek bridge project. The bridge slabs will be used as match from the County for watershed restoration projects. The projects will occur in Coos County to benefit its residents. It is our understanding that the estimated value of slabs plus the County time to load the slabs is $2,500/slab. This value will be used to determine the County match for restoration projects. We have spoken with a contractor that is available to haul all 30 slabs with a low-boy trailer in late November, or December. We will contact Gary Gangewer 2 weeks in advance of hauling to determine when the County is available to load the bridge slabs. We hope that this letter reserves these bridge slabs until such time.

Please reply to confirm this kind donation on the behalf of Coos County.

Respectfully,

[redacted]

Jon Souder
Executive Director

CC: Gary Gangewer

Subject: RE: Request for County Bridge Slabs
From: Gary Gangewer <ggangewer@co.coos.or.us>
Date: 10/29/2013 8:42 AM
To: Nick Scheidt <nscheidt@cooswatershed.org>, John Rowe <jrowe@co.coos.or.us>
CC: Jon Souder <jsouder@cooswatershed.org>

Nick, Jon,

Your request is granted----we will hold (30) of the slabs for the CoosWa.

Gary

-----Original Message-----
From: Nick Scheidt [mailto:nscheidt@cooswatershed.org]
Sent: Monday, October 28, 2013 5:05 PM
To: John Rowe
Cc: Gary Gangewer; Jon Souder
Subject: Request for County Bridge Slabs

John,

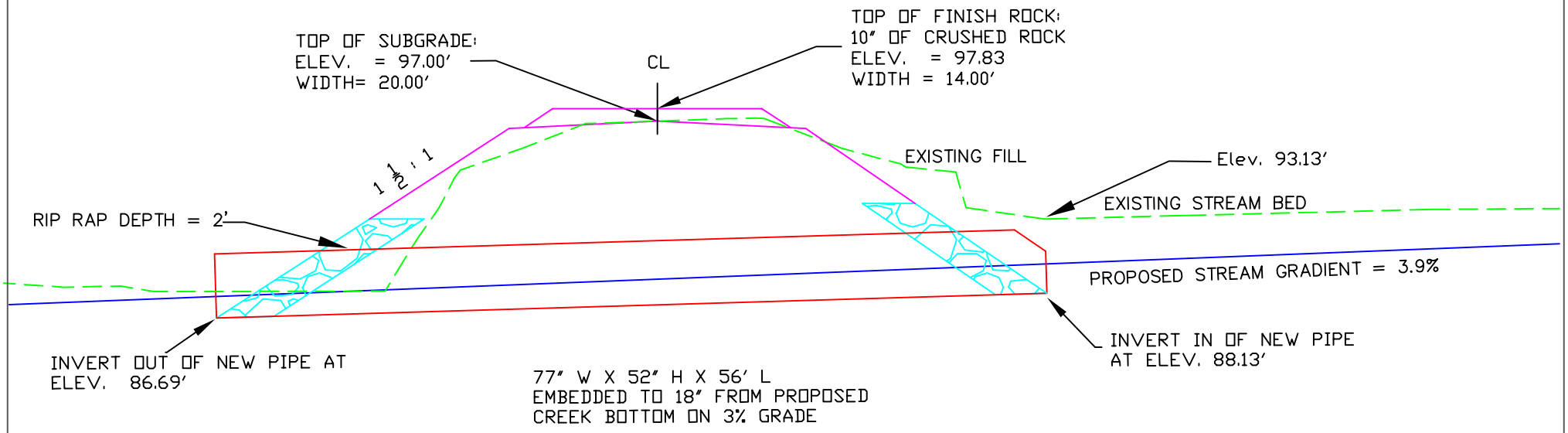
Please see attached request for County bridge slabs. Please reply, via email is fine for us, and let me know if this works.

Sincerely,

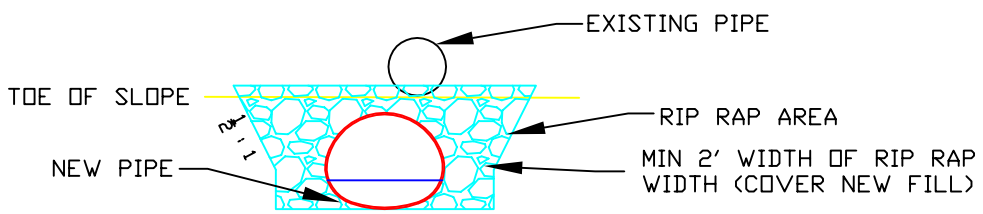
Nick

--
Nick Scheidt
Project Manager
Coos Watershed Association
541-888-5922
nscheidt@cooswatershed.org
www.cooswatershed.org

NOBLE CREEK SITE 1
PROPOSED FISH PIPE
PROFILE & CROSS SECTION VIEW
9/20/2012

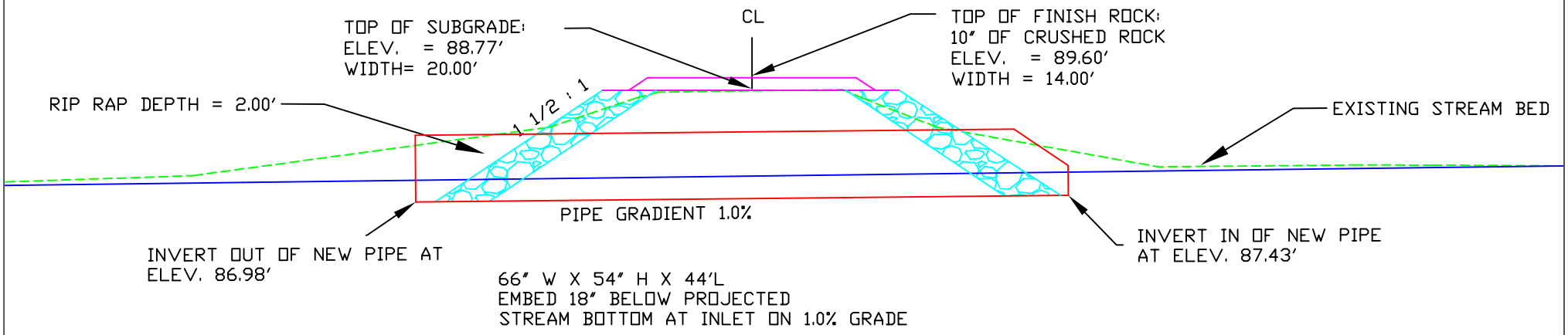


CROSS SECTION: INLET VIEW

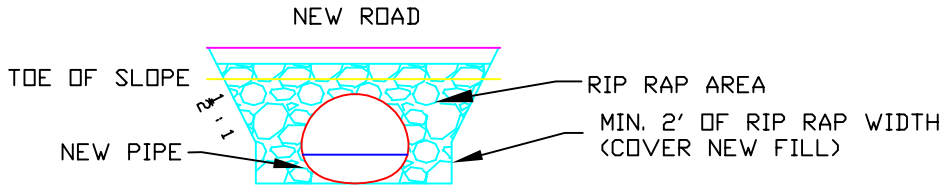


SCALE: 1" = 10'

NOBLE CREEK SITE 2
PROPOSED FISH PIPE
PROFILE & CROSS SECTION VIEW
9/14/2012

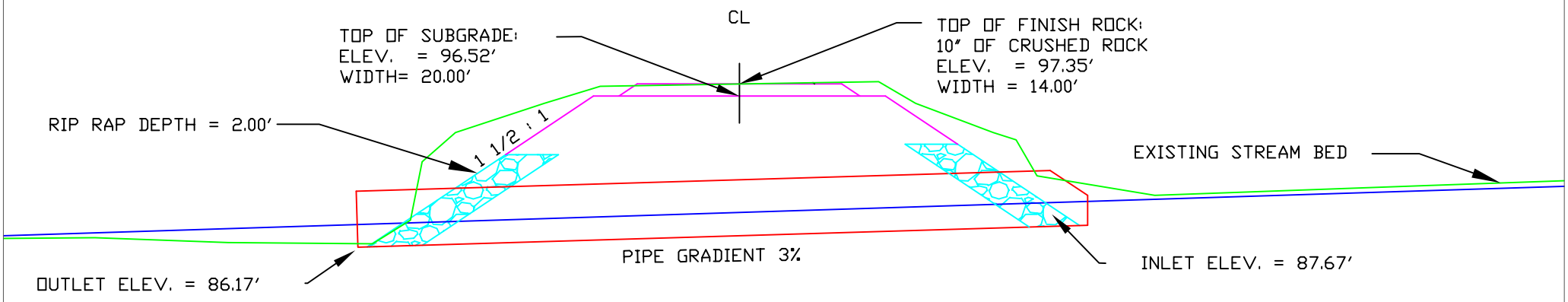


CROSS SECTION: INLET VIEW



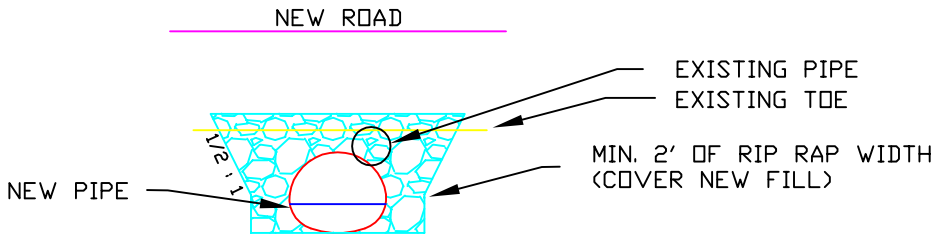
SCALE: 1" = 10'

NOBLE CREEK SITE 3
PROPOSED FISH PIPE
PROFILE & CROSS SECTION VIEW
9/14/2012



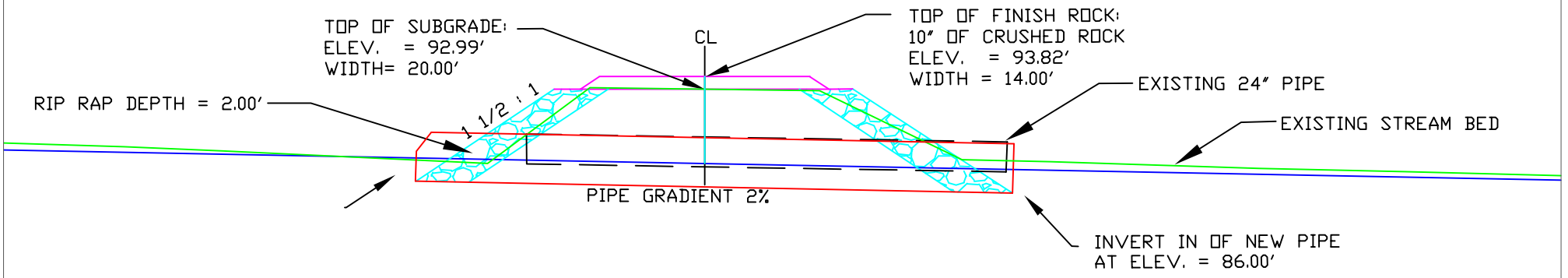
60" W X 46" H X 50'L
EMBED 18" BELOW PROJECTED
STREAM BOTTOM AT INLET ON 3% GRADE

CROSS SECTION: INLET VIEW



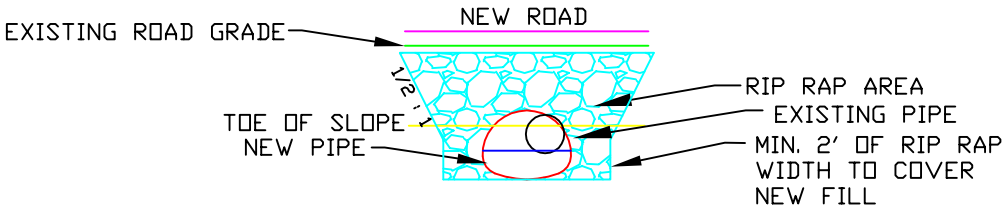
SCALE: 1" = 10'

NOBLE CREEK SITE 4
PROPOSED FISH PIPE
PROFILE & CROSS SECTION
9/19/2012



56" W X 40" H X 42'L
EMBED 18" BELOW PROJECTED
STREAM BOTTOM AT INLET ON 2.0% GRADE

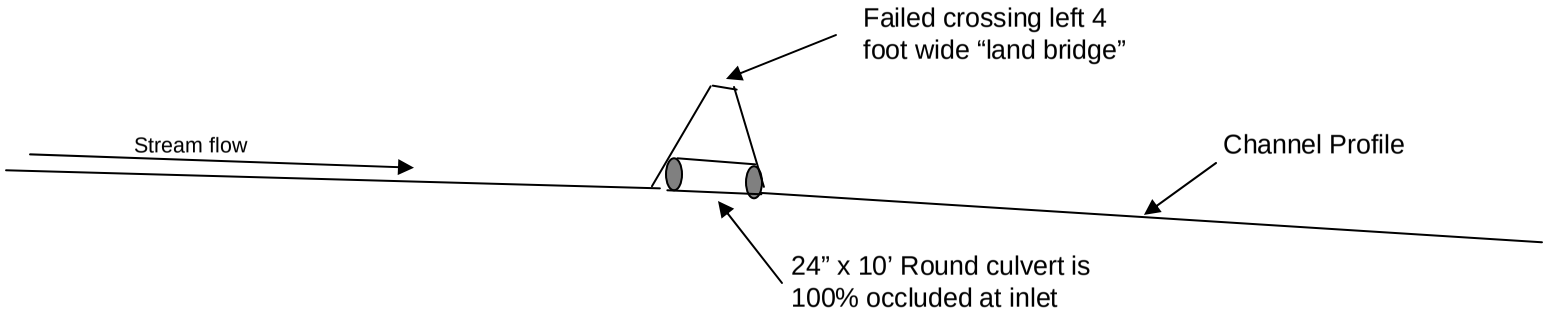
CROSS SECTION: INLET VIEW



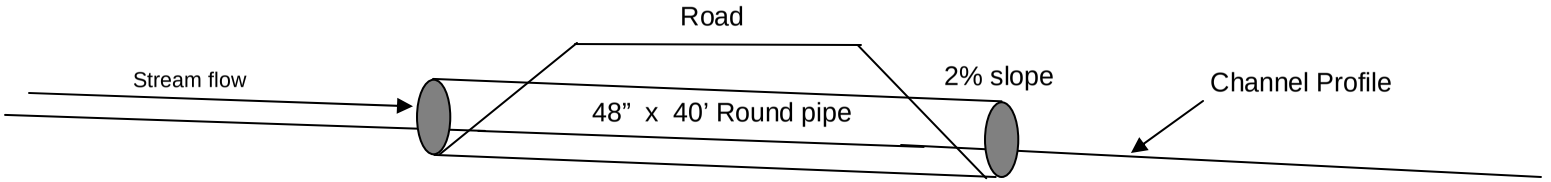
SCALE: 1" = 10'

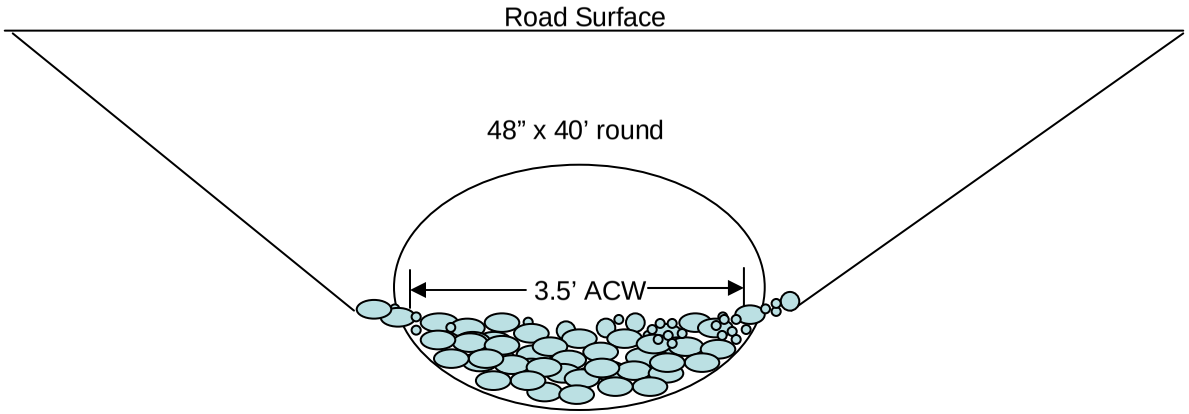
Preliminary Design Specification for Noble Ck Site 5 Culvert Installation

Longitudinal profile showing existing features



Longitudinal profile showing expected condition after proposed action



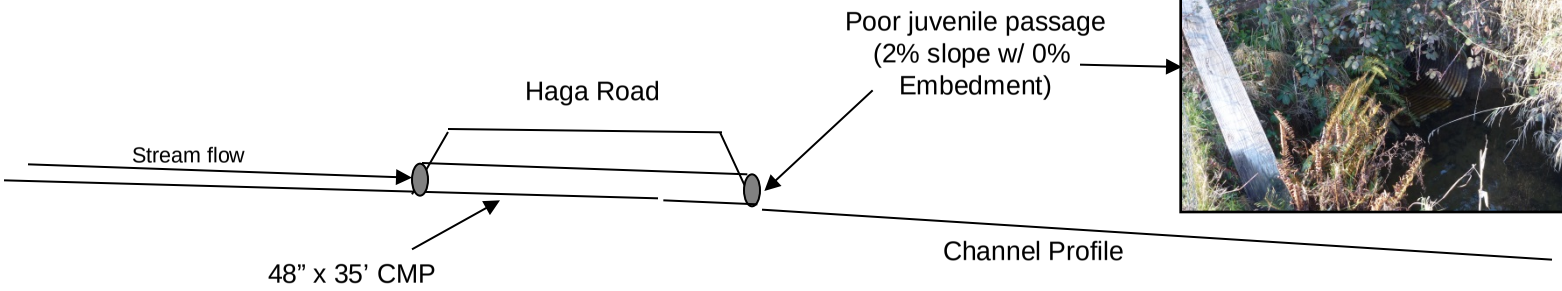


Detail – 40 % Embedded

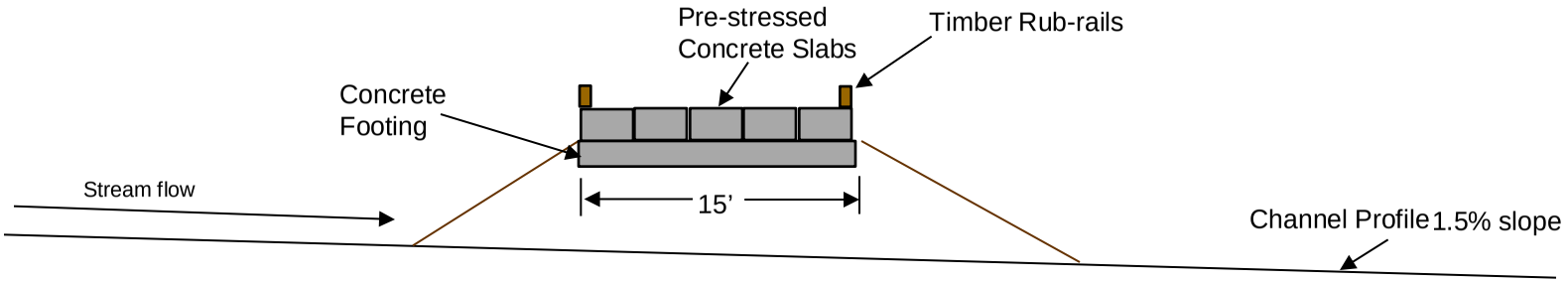
NTS

Conceptual Design: Noble Creek Crossing

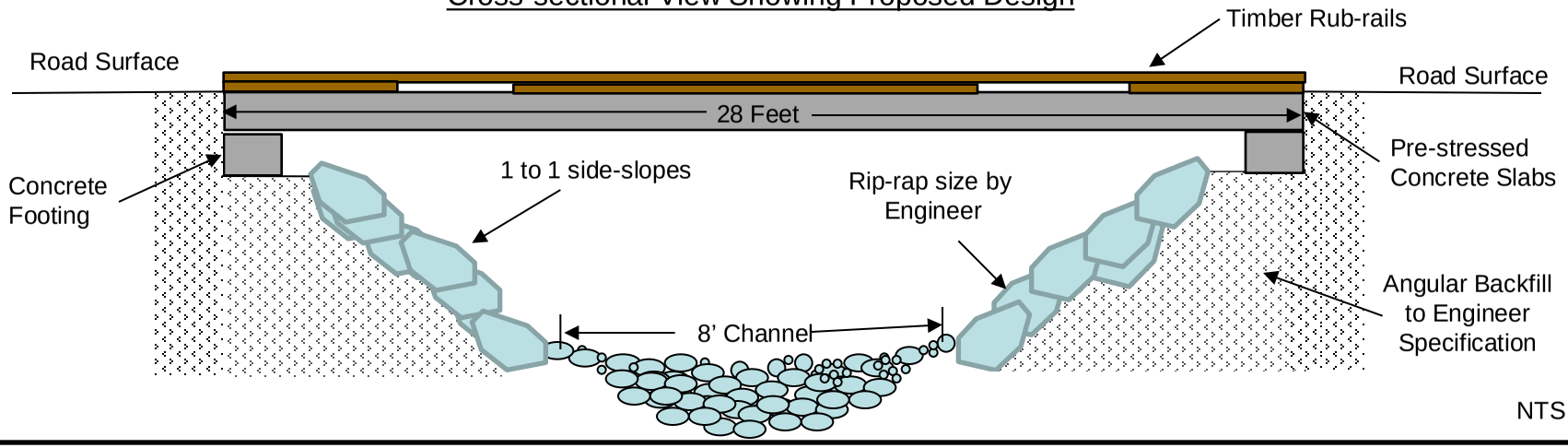
Longitudinal profile showing existing features



Longitudinal Profile Showing Proposed Design



Cross-sectional View Showing Proposed Design



NTS

Map 2: Noble Creek Riparian Planting Design

Species Composition

Conifers (10' x 10' spacing)

SS = Sitka spruce

WRC = Western red cedar

WHL = Western hemlock

Hardwoods (8' x 8' spacing)

OA = Oregon ash

CA = Crabapple

Shrubs (3' x 3' spacing)

DS = Douglas spirea

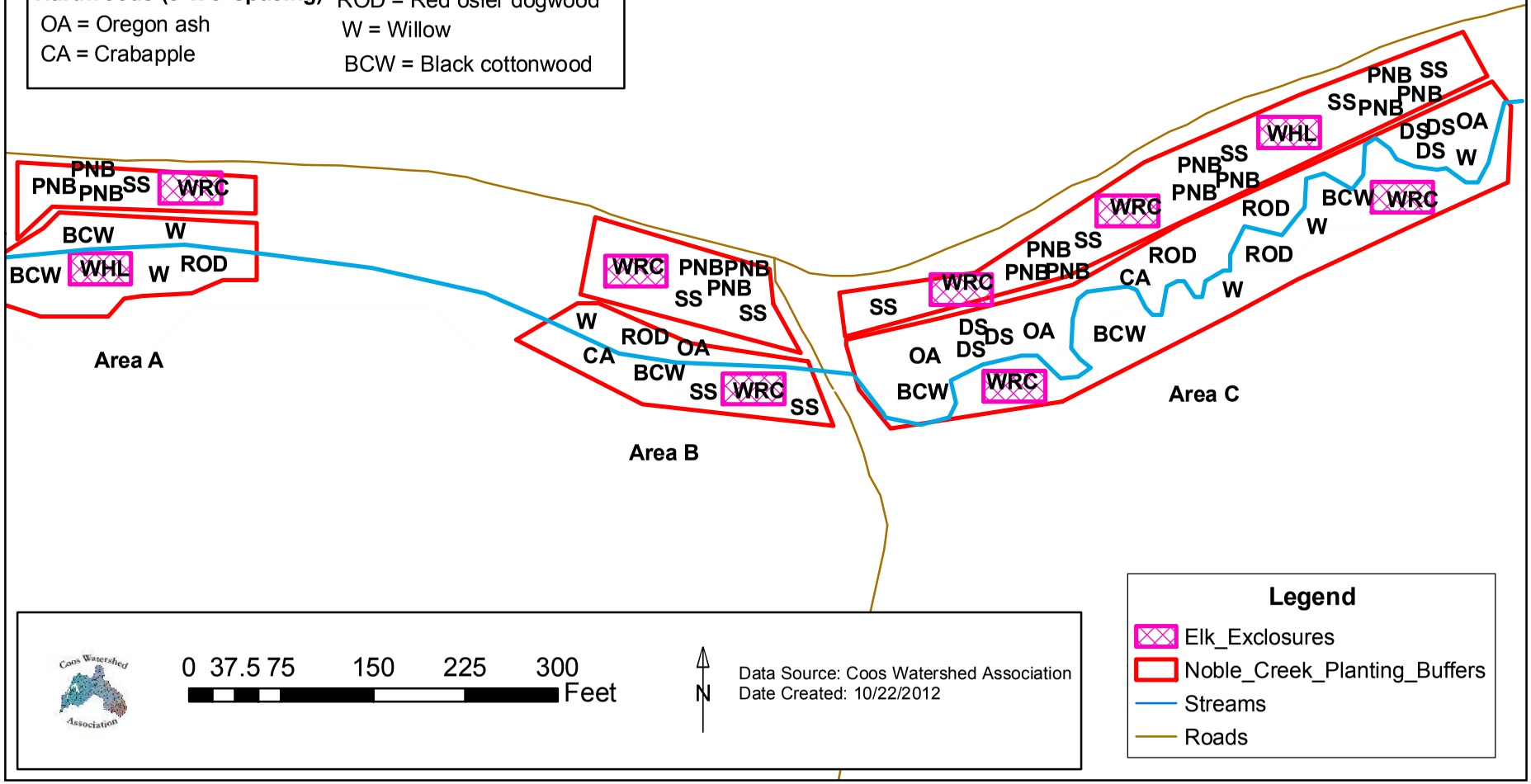
PNB = Pacific ninebark

Cuttings (1' x 1' spacing)

ROD = Red osier dogwood

W = Willow

BCW = Black cottonwood



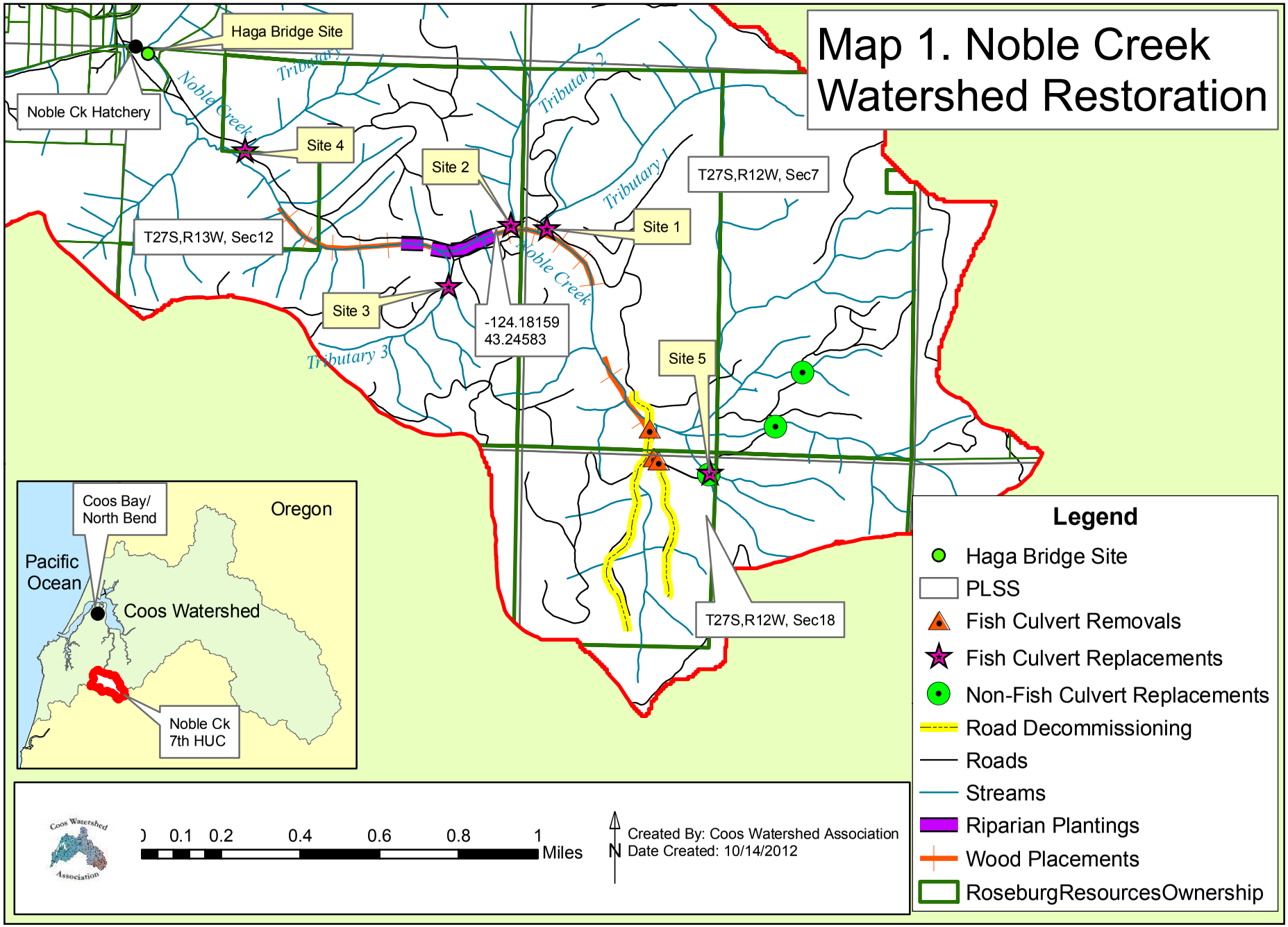
0 37.5 75 150 225 300 Feet

N

Data Source: Coos Watershed Association
Date Created: 10/22/2012

Legend

- Elk_Exclosures
- Noble_Creek_Planting_Buffers
- Streams
- Roads


Map 1. Noble Creek Watershed Restoration
Haga Bridge Site
Noble Ck Hatchery
Noble Creek
Tributary 1
Tributary 2
Tributary 3
Site 4
Site 2
Site 1
Site 3
Site 5
T27S,R13W, Sec12
T27S,R12W, Sec7
T27S,R12W, Sec18
-124.18159
43.24583
Coos Bay/
North Bend
Oregon
Pacific
Ocean
Coos Watershed
Noble Ck
7th HUC
Legend
Haga Bridge Site
PLSS
Fish Culvert Removals
Fish Culvert Replacements
Non-Fish Culvert Replacements
Road Decommissioning
Roads
Streams
Riparian Plantings
Wood Placements
RoseburgResourcesOwnership
0 0.1 0.2 0.4 0.6 0.8 1
Miles
N
Created By: Coos Watershed Association
Date Created: 10/14/2012

Haga Bridge Site and Hatchery Photos

Photo 1. Shows proximity of Haga crossing to Noble Ck Hatchery.

Photo 2. Standing on Haga crossing looking downstream at the hatchery.

Photo 3. Shows area of hatchery that would be flooded if culverts plugged during flood.

Photo 4. A large portion of the flood flows would return to the creek here at downstream end of raceway.

Wood Placement and Fish Culvert Photos

Photo 5. A portion of wood placement reach downstream of culvert site 1.

Photo 6. Culvert site 1 undersized 36" culvert at outlet. The existing pipe is perched and creates a high jump/velocity barrier for juvenile and adult salmonids. Note: Paul Merz is perched like a puma atop the culvert!

Photo 7. Culvert site 2 undersized 24" culvert at inlet.

Photo 8. Culvert site 2 culvert at outlet.

Fish Culvert Photos

Photo 9. Habitat upstream of undersized culvert at Culvert site 3 (Photo: July 2012)

Photo 10. Culvert site 3 24" undersized culvert at outlet. The existing pipe is perched and is a high velocity barrier to adult and juvenile salmonids (Photo: July 2012)

Photo 11. Cuvlert site 4 24" undersized culvert at inlet (Photo: July 2012)

Photo 12. Culvert site 5 culvert buried under road at outlet (Photo: July 2012)

Riparian Photos

Photo 13: Planting area A consists of reed canary grass, dock and sedge with south shade from maples and alders. There are currently very few conifers in the riparian buffer and limited in-stream woody debris. The creek meanders on the south edge of the meadow (see white arrow).

Photo 14. View of the downstream planting section in Area C from the spur road that crosses Noble Creek. Sedges and reed canary grass predominate.

Photo 15. The riparian buffer along reach 4 of Noble Creek is dominated by young, dense stands of red alder that established after conifers were logged or removed for grazing.

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

DEPARTMENT OF THE TREASURY

Date: AUG 30 1996

COOS WATERSHED ASSOCIATION
C/O ANNE W. DONNELLY
C/O CYNTHIA CUMFER, ATTORNEY
316 N.E. 28TH
PORTLAND,, OR 97232

Employer Identification Number:
93-1146207
Case Number:
956125016
Contact Person:
R. DIZON
Contact Telephone Number:
(213) 725-6619
Accounting Period Ending:
June 30
Form 990 Required:
Yes
Addendum Applies:
Yes

Dear Applicant:

Based on information 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).

We have further determined that you are not a private foundation within the meaning of section 509(a) of the Code, because you are an organization described in sections 509(a)(1) and 170(b)(1)(A)(vi).

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

As of January 1, 1984, you are liable for taxes under the Federal Insurance Contributions Act (social security taxes) on remuneration 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).

Since you are not a private foundation, you are not subject to the excise taxes under Chapter 42 of the 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.

Grantors and contributors may rely on this determination unless the Internal Revenue Service publishes notice to the contrary. However, if you lose your section 509(a)(1) status, a grantor or contributor may not rely on this determination if he or she was in part responsible for, or was aware of, the act or failure to act, or the substantial or material change on the part of the organization that resulted in your loss of such status, or if he or she acquired knowledge that the Internal Revenue Service had given notice that you would no longer be classified as a section 509(a)(1) organization.

Donors may deduct contributions to you as provided in section 170 of the

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 Code sections 2055, 2106, and 2522.

Contribution deductions are allowable to donors 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. See Revenue Ruling 67-246, published in Cumulative Bulletin 1967-2, on page 104, which sets forth guidelines regarding the deductibility, as charitable contributions, of payments made by taxpayers for admission to or other participation in fundraising activities for charity.

In the heading of this letter we have indicated whether you must file Form 990, Return of Organization Exempt From Income Tax. If Yes is indicated, you are required to file Form 990 only if your gross receipts each year are normally more than $25,000. However, if you receive a Form 990 package in the mail, please file the return even if you do not exceed the gross receipts test. If you are not required to file, 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 a return is required, it must be filed by the 15th day of the fifth month after the end of your annual accounting period. A penalty of $10 a day is charged when a return is filed late, unless there is reasonable cause for the delay. However, the maximum penalty charged cannot exceed $5,000 or 5 percent of your gross receipts for the year, whichever is less. This penalty may also be charged 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, a number will be assigned to you and you will be advised of it. Please use that number on all returns you file and in all correspondence with the Internal Revenue Service.

This determination is based on evidence that your funds are dedicated to the purposes listed in section 501(c)(3) of the Code. To assure your continued exemption, you should keep records to show that funds are expended only for those purposes. If you distribute funds to other organizations, your records should show whether they are exempt under section 501(c)(3). In cases where the recipient organization is not exempt under section 501(c)(3), there should be evidence that the funds will remain dedicated to the required

purposes and that they will be used for those purposes by the recipient.

Evidence submitted with your application indicates that you may engage in lobbying activities. Section 501(c)(3) of the Code specifically prohibits lobbying as a substantial part of your activities. If you do not wish to be subject to the test of substantiality under section 501(c)(3), you may elect to be covered under the provisions of 501(h) of the Code by filing Form 5768, Election/Revocation of Election by an Eligible Section 501(c)(3) Organization to Make Expenditures to Influence Legislation. This section establishes ceiling amounts for lobbying expenditures.

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

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

We have sent a copy of this letter to your representative as indicated in your power of attorney.

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]

Acting District Director

Addendum

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: Noble Creek Watershed Restoration

[redacted]

Applicant: Nick Scheidt, Coos Watershed Association

Date: 12/10/13

[redacted]

Fiscal Officer: Aimee Peters

Date: 12-10-13