

United States Government

Department of Energy
Bonneville Power Administration

memorandum

DATE: August 5, 2003

REPLY TO
ATTN OF: KEC-4

SUBJECT: Supplement Analysis for the Mid-Columbia Coho Reintroduction Feasibility Project EA
(DOE/EA-1282/SA-04)

TO: L. Hermeston - KEWL-4
Fish and Wildlife Project Manager

Proposed Action: Mahar Pond Expansion

Project No: 1996-040-00

Location: The site is in Chelan County, Washington, in the Nason Creek watershed, a mile from Highway 2 (Section 5, T26N, R16E, NW ¼ of the NE ¼).

Proposed by: Bonneville Power Administration (BPA) and the Yakama Nation

Description of the Proposed Action: BPA is funding ongoing studies, research, and artificial production of coho salmon in the Wenatchee and Methow river basins. BPA analyzed environmental impacts of these activities in the Mid-Columbia Coho Reintroduction Feasibility Project Final EA, completed in April 1999 (DOE/EA-1282). Supplemental Analyses (DOE/EA-1282/SA-01, -02, and -03) were prepared in April 2001, October 2001, and November 2002 to analyze effects of additional activities proposed for the project. In March 2002 BPA categorically excluded dredging behind Dam 5 at the Leavenworth Fish Hatchery in connection with the project.

The purpose of this fourth Supplement Analysis is to determine if BPA needs to prepare a supplement to the 1999 Final EA for the proposed expansion of the Mahar Creek Pond, which is currently being used by the project to acclimate coho smolts. BPA proposes to fund expansion of the existing pond on a seasonal unnamed creek from its current size of 12,000 cubic feet to 36,000 cubic feet, thus allowing the acclimation and release of up to 183,000 coho smolts. As part of the expansion, the project proposes to dig a well to supplement the water supply from the seasonal creek.

The expansion of the Mahar pond is needed because of the evolving nature of this feasibility project. The project is no longer able to use one of the original acclimation sites and replacement acclimation capacity is needed. The total number of smolts acclimated and released under the project will not increase under this proposal.

Detailed information about the pond expansion proposal is contained in the attachment to this Supplement Analysis.

Analysis: Section 5 of the attachment to this Supplement Analysis details the analysis of the effects of these actions.

Findings: This Supplement Analysis finds 1) that the proposed actions are substantially consistent with the Mid-Columbia Coho Reintroduction Feasibility Project Final EA (DOE/EA-1282) and FONSI, and, 2) that there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, no further NEPA documentation is required.

/s/ Nancy Weintraub 8-5-03

Nancy H. Weintraub
Environmental Specialist

CONCUR:

/s/ Thomas McKinney

Thomas C. McKinney
NEPA Compliance Officer

DATE: 8-5-03

Attachment

cc:

Mr. T. Scribner, Yakama Nation

**MID-COLUMBIA COHO REINTRODUCTION FEASIBILITY
PROJECT
SUPPLEMENT ANALYSIS**

EXPANSION OF MAHAR ACCLIMATION SITE

DOE/EA 1282 SA-04

Bonneville Power Administration

August 2003

1. Introduction

Since 1996, Bonneville Power Administration (BPA) has been funding studies by the Yakama Nation (YN), in cooperation with Washington Department of Fish and Wildlife (WDFW) and other participants, to determine the feasibility of reintroducing coho salmon (*Oncorhynchus kisutch*) into mid-Columbia River basins from which they were extirpated. The program's long-term goal is to establish a locally adapted, naturally reproducing coho population, rather than to rely on hatchery production; and to do so while minimizing risks to other listed and sensitive fish species. The method used to accomplish this goal relies on acclimating smolts to the extent possible in waters to which researchers hope they will return as adults.

The purpose of this Supplement Analysis is to determine if a supplemental EA is needed to analyze the proposed expansion of an existing coho acclimation site.

2. NEPA Analysis to Date

In spring of 1998, BPA determined that acclimation and release of coho smolts for research purposes at four sites in the Methow basin were categorically excluded from NEPA analysis. A comprehensive research program was proposed in the fall of 1998 (YIN 1998). Effects of the overall research program were evaluated in an Environmental Assessment (EA) in 1999 (USDOE/BPA 1999a). The EA focused on the impacts of construction of coho acclimation facilities in the Wenatchee basin, of coho smolt releases, of monitoring their survival and interactions with other species, and of operation and modification of existing production facilities needed to conduct the research. Effects of that plan on species listed under the Endangered Species Act also were analyzed in Biological Assessments submitted to U.S. Fish and Wildlife Service (USFWS) and to National Marine Fisheries Service (NMFS [now NOAA Fisheries]). The project was further refined in a Hatchery and Genetics Management Plan that was required by NMFS in its Biological Opinion (YN et al. 1999, updated in 2002).

In April 2001, BPA prepared a Supplement Analysis to evaluate additional research activities, temporary incubation and rearing facilities at the proposed Two Rivers acclimation site, and potential additional acclimation sites not evaluated in the EA (USDOE/BPA 2001b). In an October 2001 Supplement Analysis, BPA analyzed the effects of using an existing building near Peshastin, Washington for a temporary site to incubate coho eggs for the program (USDOE/BPA 2001c). In March 2002, BPA categorically excluded the dredging of an existing pond behind Dam 5 at Leavenworth National Fish Hatchery to improve its effectiveness as an acclimation site and, in October of that year, prepared a third Supplement Analysis on additional acclimation sites (USDOE/BPA 2002).

3. Description of the Proposed Action

Currently the Mid-Columbia Coho Reintroduction Feasibility Project is active in the Wenatchee and Methow basins (Figure 1), with the primary focus in the Wenatchee basin.

BPA proposes to fund expansion of the existing coho acclimation pond on a seasonal unnamed creek from its current size of 12,000 cubic feet to 36,000 cubic feet, thus allowing the acclimation and release of up to 183,000 coho smolts. As part of the expansion, the project proposes to dig a well to supplement the water supply from the seasonal creek.

The site is in Chelan County in the Nason Creek watershed, a mile from Highway 2 (Section 5, T26N, R16E, NW ¼ of the NE ¼). The Mid-Columbia Coho project named the site Mahar Creek Pond. It is shown in Figure 2.

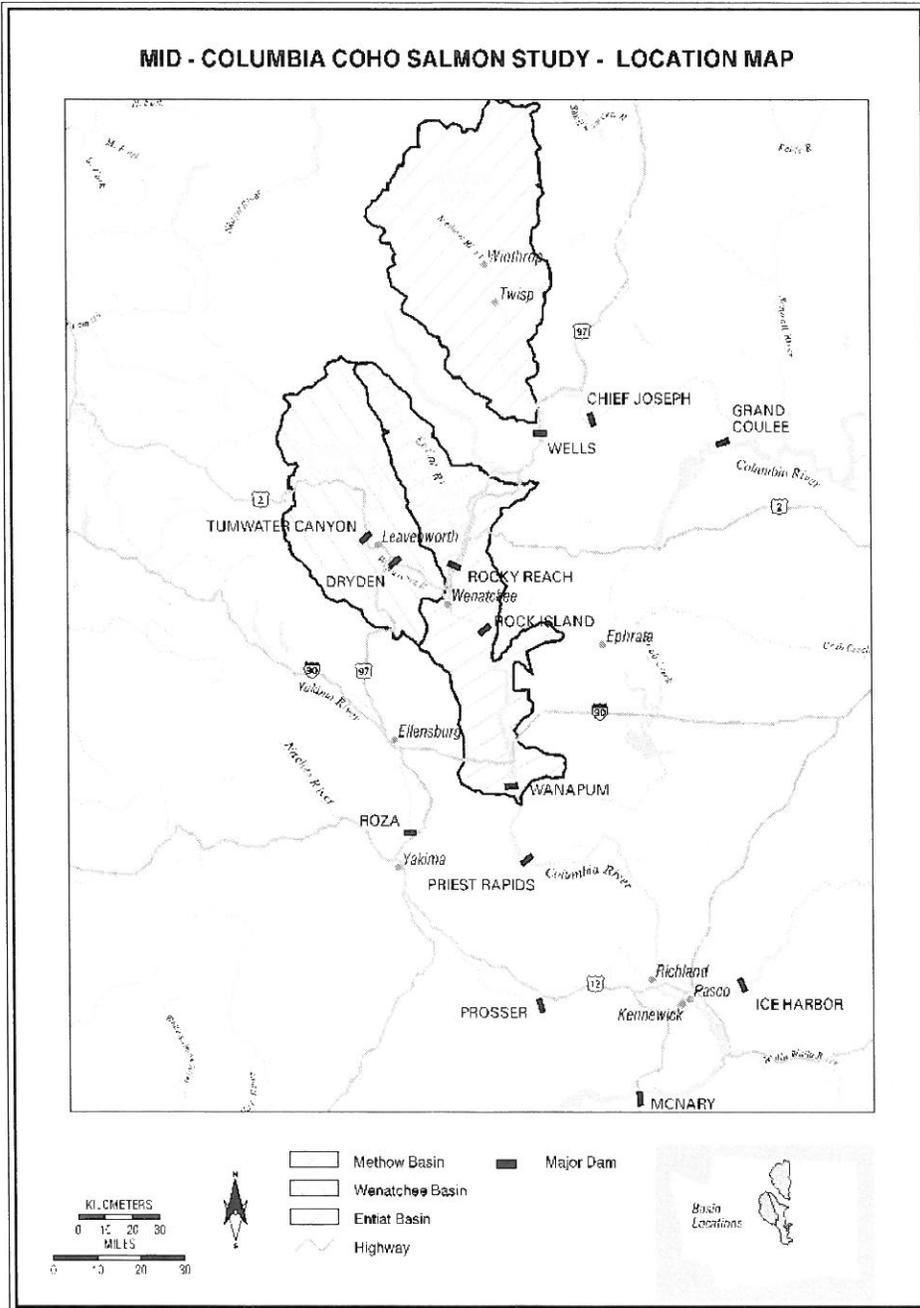


Figure 1. Mid-Columbia Coho Reintroduction Feasibility Study Area

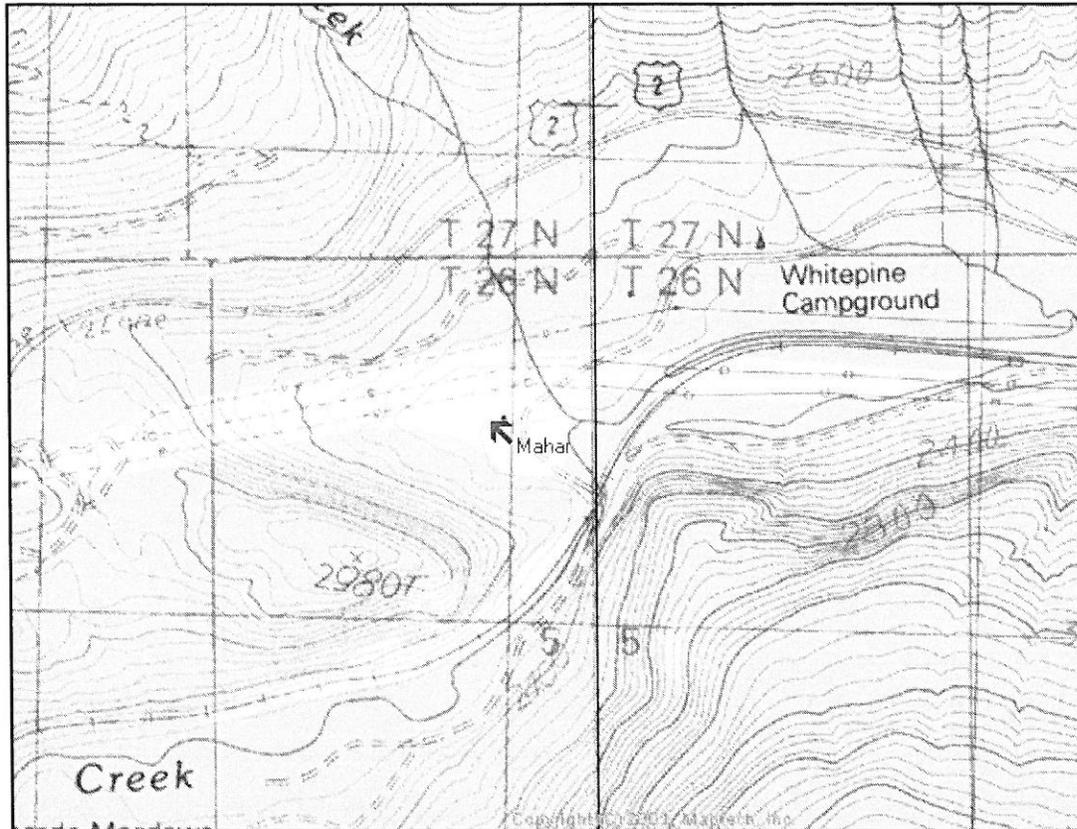


Figure 2. Mahar Creek Pond Location

Use of this site originally was evaluated in a supplement to BPA's 1999 EA (USDOE/BPA 2002). The Supplement Analysis evaluated seasonal installation and removal of nets across an existing pond on privately owned land, and the acclimation and release from the site of 50,000 to 100,000 smolts. In 2003, approximately 35,000 smolts were acclimated there.

The current proposal would require excavation from the existing pond of approximately 890 cubic yards of earth. The fill would be deposited in the yard of the adjacent residence. A groundwater well would be drilled to provide warmer groundwater to temper the very cold water flowing into the pond in the spring during the acclimation period. First a test well would be drilled to determine if water supply from the creek can be supplemented. If sufficient additional supply can be obtained without significant adverse effects on other groundwater users in the area, the test well would be converted to a production well. Up to 183,000 smolts would be voluntarily released from the site annually between April and May.

4. New Activities and Circumstances Since Earlier NEPA Documents

In order to determine if reintroduction of coho is feasible in these basins, the project collects broodstock; incubates eggs and rears fry at existing hatcheries; acclimates and releases smolts; and studies the natural production, ecological interactions, long-term fitness, and culturing/genetics of coho salmon. Because it is a feasibility study, the project must rely on existing or temporary facilities. Most existing facilities are programmed for other species as their first priority. As a result, when needs change in the priority program, the coho feasibility project often must find another site. Since the coho program's inception in 1996, sites for most activities

In spring 2002, the property owner of the Dam 5 coho acclimation site near Leavenworth NFH notified the YN that she no longer wishes to allow coho to be acclimated there. She believes it will interfere with the goal of restoring the Icicle Creek side channel to its natural state, which was the subject of a USFWS Environmental Impact Statement (USFWS 2002) and Record of Decision. Thus, the Dam 5 site will be unavailable after 2003. This site was used to acclimate the majority of coho smolts released into the Wenatchee basin (751,500 of the 1 million released in 2002). To provide a replacement site, improvements are being made to the unused small Foster-Lucas ponds at the hatchery. Approximately 600,000 coho smolts would be acclimated there, but additional sites off-station must be used for the remainder of the 1 million smolts programmed for release in the Wenatchee basin.

Release of more smolts in natural sites away from the hatchery also would provide more opportunities for the feasibility program to study survival, adult returns, and reproductive success of coho reared in natural conditions. Studies are outlined in the updated version of the Hatchery and Genetics Management Plan for this program (YN et al. 2002).

5. Effects of Project Activities Not Previously Evaluated

This section describes existing conditions at the site of the proposed action and the potential environmental effects of the proposal on those conditions.

5.1 Land Use

The pond is on the property of an existing privately owned and occupied residence (Figure 4). Originally excavated by the property owner, the pond is currently used to acclimate and release coho smolts for the project.



Figure 4. View of the proposed Mahar pond expansion area (foreground), existing pond (mid-picture), and private home (background)

The proposed action would increase the size of the 2,000-square-foot pond to about 6,000 square feet (G. Ferguson, Sea Springs Co., June 24, 2003, pers. comm.). Neither expansion of the pond nor a new well would change current land uses.

The project would be reviewed for consistency with state and local plans through Washington’s Joint Aquatic Resources Permit Application (JARPA) process. An environmental checklist for SEPA review has also been submitted. Although the proposed expansion would be subject to requirements under Chelan County’s Shoreline Master Program, it probably would be exempt from shoreline permits because it is proposed to enhance fishery resources (USDOE/BPA 1999a).

5.2 Geology and Soils

Soils at the site are silt and gravel, with evidence of flood deposits. The area to be excavated for the pond expansion and the well has already been disturbed (Figure 4). Terrain is flat, with slopes of less than one percent (Ferguson 2003).

Approximately 890 cubic yards of earth would be excavated from the existing pond to increase its size. The fill would be used to level a yard being put in at the adjacent residence. Excavating the pond and spreading the fill could cause erosion until the disturbed areas are stabilized. To minimize erosion, the pond would be excavated during low flow, dry periods in late summer. During this period the small creek flow that enters the pond is absorbed into the pond bottom and does not exit the pond. The pond will be used as a settling basin for soils that are eroded during excavation. Erosion control fencing will be placed around the fill areas. After construction has been completed, disturbed areas will be covered with erosion control mats and planted with vegetation. See also section 5.4 Water Quality.

Drilling the well would have no noticeable effect on geology and soils.

5.3 Vegetation

The existing pond is on an unnamed tributary to Nason Creek at about 2,200 feet elevation. Mature western red cedar growing along the stream bank downstream of the existing pond and dense second-growth western red cedar growing upstream of the pond indicate the area was forested prior to logging and grading. The lower banks of the pond now are bare soil (Figure 5). Patches of thimbleberry and scattered weedy forbs and grasses grow in the surrounding soils, which have been cleared for construction (Meridian 2002).

In a letter dated February 13, 2003, the USFWS indicated that the following threatened and endangered plant species listed under the Endangered Species Act (ESA) might be found in the vicinity of the site.

Species	Listing Status
Ute ladies’ tresses (<i>Spiranthes diluvialis</i>)	Threatened
Wenatchee Mountains checkermallow (<i>Sidalcea oregano var. calva</i>)	Endangered (Critical Habitat designated)
Showy stickweed (<i>Hachekia venucta</i>)	Endangered



Figure 5. Existing Mahar Creek Pond (Source: Meridian 2002)

About 50 feet of the stream channel upstream of the existing pond would be excavated. In this reach, the channel is about two feet wide. The banks are vegetated with mixed grasses and weedy forbs, such as creeping buttercup, dandelion and clovers. Most of the expansion, however, would occur to the west of the existing pond and would affect an area that appears to have been recently logged and graded. Vegetation in this area is dominated by mixed grasses, bracken fern and fireweed, and scattered alder saplings. Excavation may require removal of some alder saplings and thimbleberry, but no other trees or shrubs would be affected (McLanahan 2003). Drilling the well would not noticeably affect vegetation in the disturbed area.

A review of habitat requirements and a site visit in September, 2002 indicate the project area does not provide suitable habitat for any of the three ESA-listed plant species. Ute ladies'-tresses typically grows in mesic or wet meadows where soils are inundated early in the growing season but retain subsurface moisture throughout the season. Wenatchee checker-mallow also requires sites that have surface water or saturated soils well into early summer. Showy stickseed grows in drier, open settings, in loose, granitic soils, on slopes from 25-70 degrees. USFWS concurred with these findings as reported in the Biological Assessment prepared for the project (Keller and Weintraub 2003).

Pond and riparian habitat would be enhanced by planting native shrubs such as willow (*Salix* species) and red-osier dogwood (*Cornus stolonifera*) along the pond margins to provide shade and cover for fish, and nesting and foraging opportunities for songbirds.

5.4 Water Quality

The water supply to the pond is from a small, unnamed, seasonal stream that the proposed groundwater well would supplement. At the pond outfall, the stream water is captured in a weir that is used to control the pond water levels before being released back into the unnamed stream

- ✓ a spill containment and control plan (as applicable) containing notification procedures, specific cleanup and disposal procedures for different products, and quick response containment and cleanup measures.
- Inspect daily all vehicles that would be used within 150 feet of any stream, river, or wetland, for fluid leaks; repair any detected leaks before the vehicle resumes operation; and document the inspections in a record that would be available for review by NOAA Fisheries and BPA.
- Keep heavy equipment left on-site 100 feet away from any waterway or wetland area when not in use, and use drip pans as necessary to minimize soil contamination from leaks.
- Store all fuel and petroleum products at least 100 feet from existing waterways and wetlands, if they are stored on-site.
- If discharges (e.g., sediment) into streams near the pond are possible during construction, construct a coffer dam to avoid/minimize such impacts.
- Plant native vegetation, such as red osier dogwood and/or willows, along the pond margins to provide shade and cover for fish and birds.

5.5 Fish and Wildlife

At the project site, YN staff have observed, or seen evidence of, birds such as hawks, great blue herons, and various songbirds; and deer, elk, black bears, beavers and otters. Various species of salmon and trout are found in nearby Nason Creek. USFWS indicated that the following threatened and endangered animal species listed under ESA might be found near the project site.

Species	Listing Status
Spring chinook salmon (<i>Oncorhynchus tshawytscha</i>)	Endangered
Summer steelhead (<i>Oncorhynchus mykiss</i>)	Endangered
Bull trout (<i>Salvelinus confluentus</i>)	Threatened
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Threatened
Northern spotted owl (<i>Strix occidentalis caurina</i>)	Threatened (critical habitat designated)
Marbled murrelet (<i>Brachyramphus marmoratus marmoratus</i>)	Threatened (critical habitat designated – project area not within critical habitat)
Grizzly bear (<i>Ursus arctos</i> = <i>U. a. horribilis</i>)	Threatened
Gray wolf (<i>Canis lupus</i>)	Endangered
Canada lynx (<i>Lynx canadensis</i>)	Threatened

Effects on fish and wildlife could be caused by coho smolt releases into subbasin waters as well as from construction activities necessary to expand the acclimation pond.

Effects of coho smolt releases on listed fish species in the Wenatchee basin have been evaluated in other NEPA documents and Biological Assessments prepared for NMFS and USFWS (USDOE/BPA 1999a, 1999b, 2001a, 2001b, 2001c). This project would not increase the total number of fish released in the Wenatchee subbasin, but it would change the location of the releases within the subbasin. BPA also prepared a Biological Assessment of the effects on listed species of the Mahar pond expansion (Keller and Weintraub 2003).

Conclusions from previous reports were that coho smolts migrate rapidly when volitionally released (as they would be from Mahar Creek Pond), and thus constitute a low predation risk to **spring chinook** fry in Nason Creek. Feasibility studies done for the Mid-Columbia Coho Project have supported this conclusion (Murdoch and Dunnigan 2001; Murdoch and LaRue 2002). The project area tributaries to Nason Creek are not known to provide spring chinook spawning habitat. The slightly increased temperature of water discharged from the expanded Mahar pond is unlikely to adversely affect spring chinook habitat downstream (Keller and Weintraub 2003) (see section 5.4 Water Quality). Best management practices as described in section 5.4 would reduce or eliminate potential adverse impacts.

ESA-listed **steelhead** are found in subbasin creeks, but spawning and rearing steelhead are not expected to be preyed on by coho smolts because steelhead emerge from gravel after acclimated coho have migrated downstream (USDOE/BPA 1999a). Temperature and discharge impacts would be similar to those described for spring chinook.

Bull trout spawn in the upper tributaries, so by the time they are in the area of the coho acclimation sites, they are too large to be prey for coho (USDOE/BPA 1999a). Temperature and discharge impacts would be similar to those described for spring chinook and steelhead.

The risk that remains unknown is that of competition with listed fish from the progeny of coho that have returned to the Wenatchee basin and spawned naturally. If natural production of coho increases, there is potential for competition for food and space with spring chinook and steelhead, although the evidence is inconclusive. A study of the effect of coho smolt releases on abundance of steelhead/rainbow and cutthroat trout in the Yakima basin indicates that coho releases do not affect abundance, although the researcher acknowledged the study's limitations due to its lack of statistical power (Dunnigan 1999). So far, naturally produced coho in Nason Creek have been too few to pose a risk to any species—only three coho redds were found in Nason Creek in 2001 (Murdoch and LaRue 2002), and only one coho redd was found in 2002 (Technical Work Group meeting presentation, January 29-30, 2003). Mid-Columbia Coho Project participants, including the Technical Work Group¹, recognize that some risk must be imposed in order to study the effect of competition among the species. They review project study results annually and agree on smolt release numbers that will minimize risk to listed fish while also meeting project study objectives. Studies of the ecological impact of the progeny of naturally reproducing hatchery coho adults are part of the feasibility research and were addressed in previous NEPA documents for this project (see section 2 of this Supplement Analysis).

¹ Participants include BPA, YN, WDFW, USFWS, NOAA Fisheries, Chelan County Public Utility District, U.S. Forest Service (USFS), and others.

No listed wildlife species have been sighted within a mile of Mahar Creek Pond. Although **bald eagles** are known in the general vicinity of the project, the site itself does not contain the large trees or open waters preferred by eagles for nesting and foraging. In addition, work would be done outside nesting or wintering seasons, so the project would not likely adversely affect bald eagles (Keller and Weintraub 2003). Likewise, the project site contains no desirable habitat for **northern spotted owls** or their prey, so construction or use of the site likely would not affect them (Keller and Weintraub 2003).

Because the site is too far from saltwater (75 miles) and contains no old-growth habitat preferred by the **marbled murrelet**, the project would not affect the species (Keller and Weintraub 2003).

There have been no documented observations of **gray wolves** in the central part of Washington State. The WDFW Priority Species and Habitat Database does not list gray wolves in the project vicinity (WDFW 2002). The database also does not contain records of **Canada lynx**, which tend to occupy habitat at higher elevations than the proposed project site. Although the database does not identify **grizzly bears** in the project vicinity (WDFW 2002), they could be present as transients. They might be attracted to the site, particularly in spring after emerging from hibernation, by the smell of the coho smolts or by the presence of human food supplies or garbage. YN would develop a grizzly bear protection plan for this site to include measures to minimize potential human/grizzly contacts, such as storage and disposal of refuse, disposal of dead smolts, and other measures to limit bear attractants.

5.6 Floodplains and Wetlands

In accordance with the Department of Energy regulations on Compliance with Floodplain/Wetlands Environmental Review Requirements (10 Code of Federal Regulations (CFR) 1022.12), BPA has prepared the following assessment of the impacts of expansion of the existing Mahar pond on floodplains and wetlands.

Wetlands: The Mahar site is not mapped as wetland in the National Wetland Inventory database, and no wetland indicators were observed during the site visit in September, 2002, except along the stream (McLanahan 2003). The area that is to be used for pond expansion consists of disturbed uplands. Previous construction activities at the site cleared the original vegetation.

Assuming an average 4-foot width from bank top to bank top under existing conditions, project construction would affect about 200 square feet of perennial stream and emergent vegetation along the banks. This area would be converted from a perennial stream/emergent wetland to an open water pond wetland classification (McLanahan 2003). The expansion plans include enlarging the riparian areas and planting native vegetation. Increasing the overall size of the pond would increase the circumference and add wetland margins. Planting native vegetation would increase the opportunity for wetland plants to become established.

Floodplains: The pond is in the channel of a seasonal, unnamed creek that flows into Nason Creek. The pond site is approximately 700 feet upstream of the confluence of the creek with Nason Creek. The floodplain boundaries of Nason Creek have not been determined in this area; however, the pond and disposal site for excavated material are 40 feet higher in elevation than the creek. It is not expected that Nason Creek floods reach this elevation. However, the project is within the floodplain of the unnamed creek (Ferguson 2003).

Enlarging the pond would have a slightly beneficial effect on creek flood elevations. The removal of material from the floodplain would slightly increase flood storage capacity and lower flood elevations to the extent that the pond is not bank-full during a flood. Application for permits to work in floodplains have been submitted through the JARPA process.

Flooding will not impact the operation of the pond for coho acclimation purposes. However, periodic high flows may deposit debris in the pond. In future years, this accumulation of rock, gravel, and silt in the pond may require additional excavation.

The pond expansion is not expected to have any impact on the Nason Creek floodplain.

5.7 Cultural Resources

Applied Archaeological Research, a consulting firm hired by BPA, conducted a literature search and field study of the Mahar site. The field study consisted of an intensive pedestrian survey of the entire project area of potential effect (APE) and the excavation of two shovel test probes.

Surface inspection at the Mahar site consisted of two archaeologists walking meandering transects spaced no more than 10 meters apart in order to cover the entire APE, which included the excavation area, the access road, and the area where excavated materials are to be deposited. They found the concrete foundation of a house near the Mahar pond site, but south of and outside of the APE, so conducted only a cursory examination. Wood and metal debris were scattered around the foundation. Other items noted included a modern washing machine, aerosol cans and modern debris. It is unknown, based on the results of this cursory examination, if the structure dates definitively to the historical era or if it is modern.

AAR's background research indicates that no recorded archaeological resources are within the Mahar project area. The lack of cultural material in the test probes, combined with the lack of artifacts on the ground surface, suggest that no archaeological resources are located within the APE (AAR 2003). The Washington State Historic Preservation Officer concurred with these findings on July 28, 2003.

The foundation and associated artifact scatter located near to the Mahar pond site is outside of the current APE and would not be affected by the proposed project. It has not been definitively dated to the historic era or the modern era. Should this structure be affected as part of future development plans, a thorough archaeological examination would be required (AAR 2003).

In the unlikely event that archaeological material is encountered during work at these sites, an archaeologist would immediately be notified and work halted in the vicinity of the finds until they can be inspected and assessed.

5.8 Noise, Air Quality, Visual, Socioeconomic Effects

The site's property owner agrees to the short-term noise and dust during the two-week construction period, and to the minor disturbance during the annual 6-8 week period in spring when project staff would be visiting the site to feed the smolts and conduct tests. Construction noise and dust would occur during regular working hours. The area would be wetted periodically to reduce dust.

Once new vegetation has become established, the visual effects of the excavation will be mitigated and the visual quality of the site improved. The nearest other residence is ¼ mile away and is unlikely to be affected by construction or operation of the acclimation pond.

The construction project is too small to have a noticeable socioeconomic benefit in the area, although it might provide welcome work for an individual company. Operation of the site each spring would use existing YN staff, so the number of jobs in the area would not increase.

6. REFERENCES

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Budget- Habitat Restoration

Itemized Phase - Estimated Budget (Rounded to nearest dollar)

Contractor: Lower Columbia River Estuary Partnership (Estuary Partnership)

BPA Project No.: 30016

Budget Period: 7/01/03 - 6/30/06+A38

BPA Contract No.: NEW

	Year One		Year Two	
	Unit Rate	Total	Unit Rate	Total
1. PERSONNEL				
Habitat Coordinator 1 FTE	\$29.89	\$62,160.00	\$31.98	\$66,511.00
FRINGE	\$8.11	\$16,860.00	\$9.33	\$19,400.00
Field Technical 0.5FTE	\$29.89	\$31,080.00	\$31.98	\$33,256.00
FRINGE	\$8.11	\$8,430.00	\$9.33	\$9,700.00
Personnel Subtotal:		\$118,530.00		\$128,867.00
2. TRAVEL				
2 trips per year average of \$2,600 per trip to participate in regional or national meeting by EPA, NOAA, or others on habitat restoration				
<i>Airfare:</i>	\$600.00	\$1,200.00	\$600.00	\$1,200.00
<i>Lodging: average three - four nights</i>	\$475.00	\$950.00	\$475.00	\$950.00
In-State				
Out of State				
<i>Per Diem: average four days</i>	\$45.00	\$180.00	\$45.00	\$180.00
<i>Miscellaneous</i>	\$75.00	\$150.00	\$75.00	\$150.00
<i>Parking & Ground Transportation</i>	\$60.00	\$120.00	\$60.00	\$120.00
Travel Subtotal:		\$2,600.00		\$2,600.00
3. VEHICLES				
Lease: Estuary Partnership leases vehicles for out of town travel.	40 trips per year @ \$35 per lease	\$1,400.00	40 trips per year @ \$35 per lease	\$1,400.00
Gas		\$1,000.00		\$1,000.00
Vehicle Subtotal:		\$2,400.00		\$2,400.00
4. SUPPLIES/ EQUIPMENT				
(Expense Items) The Estuary Partnership uses a per employee per hour assessment based on actual expenditures				
Office Supplies/Equipment	5.00 per EE per hour x 1.5 FTE	\$14,040.00	Adjusted for cost increases	\$14,742.00
One time purchase two workstations 1.5 FTE		\$3,500.00		\$0.00
Supplies/Equipment Subtotal:		\$17,540.00		\$14,742.00
5. RENT/UTILITIES				
	2.75 per EE per hour x 1.5FTE	\$8,580.00	Adjusted for cost increases	\$9,009.00
Rent/Utilities Subtotal		\$8,580.00		\$9,009.00
6. SUBCONTRACTS				
Field Guide of Case Studies: Writing, design, printing and distribution		\$0.00		\$50,000.00
6. Subcontracts Subtotal:		\$0.00		\$50,000.00

	Year Three		Total
Unit Rate	Total		
\$34.22	\$71,167.00		\$199,838.00
\$10.72	\$22,300.00		\$58,560.00
\$34.22	\$35,584.00		\$99,920.00
\$10.72	\$11,150.00		\$29,280.00
	\$140,201.00		\$387,598.00

\$600.00	\$1,200.00		\$3,600.00
\$475.00	\$950.00		\$2,850.00
			\$0.00
			\$0.00
\$45.00	\$180.00		\$540.00
\$75.00	\$150.00		\$450.00
\$60.00	\$120.00		\$360.00
	\$2,600.00		\$7,800.00

40 trips per year @\$35 per lease	\$1,400.00		\$4,200.00
	\$1,000.00		\$3,000.00
	\$2,400.00		\$7,200.00

Adjusted for cost increases	\$15,480.00		\$44,262.00
	\$0.00		\$3,500.00
	\$15,480.00		\$47,762.00

Adjusted for cost increases	\$9,460.00		\$27,049.00
	\$9,460.00		\$27,049.00

	\$15,000.00		\$65,000.00
	\$15,000.00		\$65,000.00