

ODFW / CBNBWB MOU – Upper Pony Creek Reservoir Expansion Project

**MEMORANDUM OF UNDERSTANDING (MOU)
WAIVER TO FISH PASSAGE**

**Oregon Department of Fish and Wildlife
and
Coos Bay-North Bend Water Board**

March 19, 1999

Amended: July 8, 2004

I. PREFACE

House Bill 2607 (1997) grants the Oregon Fish and Wildlife Commission the legal authority, under certain conditions, to waive the fish passage statutes for the purposes of constructing a new, or modifying an existing, dam or diversion project.

As codified at Chapter 730, Oregon Laws 1997, the key provision of HB 2607 provides that:

“...the State Fish and Wildlife Commission may enter into a memorandum of understanding that waives the requirements of ORS 498.351 or 509.605 for any new project or modification of an existing project if:

- (a) The commission determines, after sufficient opportunity for public review and comment, that alternative mitigation [measures] proposed by the project owner or Operator would provide a net benefit to wild anadromous and other migratory native fish...”

The Coos Bay-North Bend Water Board, on behalf of the communities of Coos Bay and North Bend, proposes to expand its existing Upper Pony Creek water reservoir project in the Pony Creek drainage of Coos Bay to handle its increasing demands for municipal and industrial water. Following existing Oregon law, and specifically HB 2607, it now requests through this Memorandum of Understanding a waiver of its legal obligation to provide for fish passage at the Upper Pony Creek dam.

II. PARTIES

This MOU is entered into between the Coos Bay-North Bend Water Board (CBNBWB), acting in behalf of the communities of Coos Bay and North Bend, and the State of Oregon, through the Oregon Fish and Wildlife Commission (Commission).

III. BACKGROUND

The CBNBWB is currently working with the Oregon Department of Fish and Wildlife (ODFW), the U.S. Army Corps of Engineers (USACE) and other federal, state and county agencies to permit the planned expansion of CBNBWB's Upper Pony Creek Reservoir Project (Project).

The Upper Pony Creek dam, originally built in 1952, is one of two CBNBWB municipal water impoundment structures located on Pony Creek, a small watershed that drains directly into Coos Bay. The second of the two impoundments, Lower Pony Creek Reservoir (also known as Merritt Lake) is located just below the Upper Pony Creek dam, and was originally constructed in the 1920's. This dam structure was re-built in 1989. Neither the Upper Pony nor Lower Pony dam structures currently allow for upstream fish passage from Pony Creek. Water to fill the expanded Upper Pony Creek Reservoir Project will come from the natural flows of Pony Creek; and pumped flows from the adjoining Joe Ney watershed.

IV. PURPOSE and AUTHORITY

The CBNBWB has analyzed construction and operational options for providing fish passage at the Upper Pony site. This review concluded that the Project's physical and operational constraints were too great to provide for adequate passage for native migratory fish over the structure. ODFW agrees with the results of this review. These constraints include:

1. The proposed dam raise is located directly upstream from the existing Lower Pony Creek dam and reservoir, which does not provide for fish passage from the Pony Creek estuary. Under these circumstances, fish passage at Upper Pony will not result in the use of the Project reservoir and its small tributaries by any other than resident fish.

2. The water needed to spill down a fish ladder to provide for adequate fish passage is unavailable due primarily to the small size (less than 3 square miles) of the upper Pony Creek watershed. The expanded reservoir will fill from natural Pony Creek runoff only during wet water years. Additional water required for fish passage facilities would have to come from additional sources such as the Joe Ney reservoir, and may impact fish passage facilities already located there.

3. The tributary streams that flow into Upper Pony Reservoir are very small, and are characteristically suitable primarily as spawning areas for cutthroat trout. Good populations of resident cutthroat trout are currently found in Upper Pony reservoir, and already use these small tributaries for spawning and juvenile rearing close to their capacity.

As a result of the above fish passage analysis, CBNBWB requests that a waiver to fish passage be allowed by the Commission pursuant to House Bill 2607 (1997). HB 2607 sets forth a process for the Commission to consider alternative mitigation measures proposed by the project sponsor in lieu of fish passage facilities at the project. These mitigation measures must result in a net benefit to wild anadromous and other migratory native fish impacted by the project. This MOU proposes such alternative mitigation.

The Project sponsor (CBNBWB) recognizes that the mitigation proposed herein is to satisfy the requirements of HB 2607 for the Upper Pony Creek Reservoir Expansion Project. CBNBWB also anticipates continued coordination with ODFW through the USACE Section 404, Clean Water Act process, to address Project impacts as within ODFW rules regarding fish and wildlife habitat mitigation policy (OAR. 635.415 et seq.).

V. PROJECT SITE and EXISTING CONDITIONS

CBNBWB presently operates three reservoirs, (Joe Ney and two Pony Creek reservoirs), and several wells in the Dunes Aquifer located in the Oregon Dunes National Recreation Area (ODNRA). These facilities serve as a municipal and industrial water supply for the cities of Coos Bay and North Bend, and several smaller communities in the Coos Bay-North Bend Water Board (CBNBWB or “Board”) service area.

The water supply from these facilities would be expanded by raising the dam at Upper Pony Reservoir, diverting flows from Joe Ney Reservoir and executing up to the full water right (8 cfs), and installing additional wells in the Dunes Aquifer (a.k.a., “wellfield”). The project site is located in the Coos Bay Area east of Charleston on the southern Oregon coastline (Figure 1). Upper Pony Creek Reservoir is located about 5,000 feet upstream of Lower Pony Creek Dam, also known as Merritt Lake Dam. Joe Ney Dike is located on Joe Ney Creek, about 2 miles east of Charleston. Joe Ney and Upper Pony Creek basins abut one another. Joe Ney Creek flows west to discharge into the north end of South Slough. Upper Pony Creek flows north, discharging into Coos Bay just east of the North Bend airport.

Joe Ney Reservoir is an impoundment created by a small earthen dike across Joe Ney Creek at approximately river mile 1.6. Diversions from Joe Ney supplement the supply from Upper Pony Creek Reservoir to serve the communities within the CBNBWB service area. The existing Upper Pony Creek Reservoir is an impoundment created by a dam across Pony Creek at approximately river mile 4.5. The water supply would be augmented primarily by raising the existing 45.5-foot earthfill Upper Pony Creek Dam by 24 feet to triple the water storage capacity of the reservoir from 2,150 acre-feet to 6,250 acre-feet (Figure 2). In addition, the existing 1.5 cubic feet per second (cfs) capacity pump station at Joe Ney Reservoir would be relocated and replaced with an 8 cfs pump station. In addition, the existing, 10-inch, above-grade pipeline transferring water from Joe Ney Reservoir to the ridgeline dividing the Joe Ney Creek and Pony Creek basins would be replaced with a buried, 22-28 inch pipeline running to Upper Pony Creek Reservoir.

Regional and Project Fish Resources

The Coos Bay watershed encompasses approximately 586 square miles and contains 30 direct tributaries to Coos Bay (Coos Watershed Association, 1995) and numerous indirect tributaries. The Coos Bay estuary system is the second largest estuary in Oregon, second only to the Columbia River estuary, encompassing approximately 13,000 acres with approximately 11,500 acres of associated tidal marsh lands (Taylor and Frenkel, 1979; Kaczynski and Palmisano, 1993). High rainfall in the Coos Bay area (approximately 50 to 65 inches per year [National Oceanographic and Atmospheric Administration, 1993; Drolet, 1995]), dense riparian vegetation, and watersheds with diverse topography provide many diverse habitats for salmon and resident fish spawning and rearing.

Five species of anadromous salmonids—Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon, chum salmon (*O. keta*), winter steelhead trout, and sea-run cutthroat trout—use the Coos Bay area (Oregon Rivers Information System, 1994; ODFW, 1995; Coos Watershed

Association, 1995). Coho salmon are listed under the Endangered Species Act, while steelhead trout and sea-run cutthroat trout remain candidate species. Coastal chinook salmon are not warranted for listing. However, all anadromous salmonid species are listed on Oregon State sensitive species lists. Other sensitive species using the Coos Bay area include green sturgeon (*Acipenser medirostris*), river lamprey (*Lampetra ayresi*), and Pacific lamprey (*L. tridentata*), which are candidate species for potential Endangered Species Act listing. The estuaries and surrounding marine waters are heavily used and vitally important to anadromous species during various life stages.

Resident salmonid game species in the region include cutthroat trout, rainbow trout, and brook trout. Resident non-salmonid game species include striped bass, largemouth and bluegill, and catfish. Resident non-game species include dace, suckers, sculpins, and three-spine sticklebacks,

Wild anadromous runs have decreased in size throughout their range as a result of degraded habitat, incompatible management practices (both land and aquatic), and the impacts of hatchery releases (Wagoner et al., 1990; Kaczynski and Palmisano, 1993). Poor ocean conditions have, at times, also contributed to this decline. Although specific systems in the Coos Basin support good salmonid runs, these runs have declined from historical levels, as have other anadromous runs in Oregon and Washington. Spawning ground count numbers of chinook have actually increased in recent years (Cooney and Jacobs, 1995). However, there has been a general trend of declining coho salmon escapement numbers since 1959. To assist in augmenting commercial and recreational fishing, approximately 40 million coho salmon juveniles have been released by ODFW and private hatcheries into the Coos system from 1976 to 1989 (Wagoner et al., 1990).

Salmonids have considerable variations and preferences in their life histories and stages. The freshwater life stages of salmonids are spawning and incubation, fry, parr, and smolt. The freshwater life stages of salmonids are sequential stages during development with each usually requiring specific habitat. In addition, the residence time in freshwater plays a critical role in anadromous salmonid production. For example, coho salmon typically smolt after one year of residing in freshwater (Nickelson et. al, 1992b), while anadromous cutthroat trout can reside up to seven years before migrating seaward. Salmonids, and in particular coho salmon juveniles, have preferences for different types of stream habitats during various seasons and associated flow regimes (Nickelson et. al., 1992a).

In general, adult coho salmon spawn, and juveniles rear in, low to moderate gradient stream reaches while sea-run cutthroat trout and steelhead trout spawn in moderate to high gradient stream reaches. The adults of these species migrate from the ocean to upper tributary streams to spawn. Coho salmon adults die after spawning. Steelhead trout and sea-run cutthroat trout, on the other hand, migrate back to the ocean after spawning and may return to spawn again. Cutthroat trout are somewhat unique, however, in that some adults will return to freshwater for rearing, typically in the winter.

Coho Salmon

Coho salmon adults are probably the first of the anadromous fish to migrate up streams en-route to their spawning grounds. Adult spawning migration begins in November and continues through February. Adult spawning occurs in gravel riffles and pool tails of clear streams and rivers with

gravel ranging in size from 0.5 inches to 3 inches. Summer rearing occurs in mid-pool areas while winter rearing occurs in off-channel and backwater areas. Coho salmon prefer water temperatures between 54°F and 57°F but can tolerate water temperatures as high as 84°F (Kaczynski and Palmisano, 1993). Juveniles typically rear for one to two years prior to out-migrating. After the juveniles have completed their freshwater rearing they begin their downstream migration toward the ocean. The juvenile out-migration begins as early as February and extends until mid-June.

Steelhead Trout

Winter-run steelhead trout, however, have a more extended upstream migration run, beginning in early December and continuing on through May. Adult steelhead trout return to the ocean soon after spawning. Steelhead trout adults that have completed spawning, known as kelts, migrate back to the ocean after spawning. Adult spawning occurs in gravel riffles of clear streams and occurs between December and May. Spawning occurs in gravel riffles and pool tails of clear small streams with gravels ranging in size from 0.5 inch to approximately 3.0 inches. Rearing occurs in freshwater for up to seven years, typically three years, and can primarily be found in riffle areas during the summer and more sheltered areas during the winter. Juvenile downstream migration typically occurs between February and May. Steelhead trout prefer water temperatures between 50°F and 55°F but can tolerate water temperatures as high as 75°F (Kaczynski and Palmisano, 1993).

Cutthroat Trout

Sub-adults and adults are typically found in near shore ocean environments and estuaries. Some individuals are permanent residents of estuaries. Adult spawning migration occurs between October and March. Cutthroat trout adults that have completed spawning, known as kelts, migrate back to the ocean after spawning, although some cutthroat trout may stay in freshwater for a short period thereafter. Spawning occurs in gravel riffles and pool tails of clear small streams with gravels ranging in size from .25 inch to approximately 1.0 inches. Rearing occurs in small streams for up to seven years but more typically three years, residing in riffle and faster water areas. Juveniles typically begin migrating downstream during the spring, February through May. Cutthroat trout prefer water temperatures between 48°F and 54°F but can tolerate water temperatures as high as 73°F (Reiser and Bjorn, 1979).

Pony Creek Studies

A reconnaissance-level survey was conducted on Pony Creek below Merritt Lake on May 13, 1997 and a quantitative survey of spawning gravel habitat was conducted on October 8, 1998 to provide baseline data (Figure 7). Site specific data from these surveys provided “on ground” data regarding fisheries habitat in these streams. Data from these surveys identified the presence of cutthroat trout spawning and rearing habitat that may be affected by the dam raise. Fish species presence and factors limiting aquatic resource production were noted during the reconnaissance survey.

The survey included the Lower Pony Creek reach located in the area just upstream of Ocean Boulevard and downstream of Merritt Dam and about 1.3 miles of Pony Creek upstream of Pony Slough. At the time of the May and October surveys Merritt Lake was not spilling or releasing

water to Pony Creek and flow in Pony Creek extended bank to bank.

There are two mapped tributaries downstream of Merritt Dam that confluence Pony Creek slightly upstream of Woodland Drive (K-Mart fork) and immediately upstream of Newmark Street (Hospital fork). There is also one unmapped tributary that has its confluence with Pony Creek from the southeast immediately downstream of Ocean Boulevard. This tributary is referred to as the AAA Fork.

A summary of stream habitat types found in Pony Creek downstream of Merritt Reservoir is provided in Table 1.

Table 1. Lower Pony Creek Stream Segments and Habitat Types

Stream	Segment	Channel Type	Habitat Type
Pony Creek (below Merritt Lake)	Merritt Dam to Ocean Blvd	Man-made	Spawning & Rearing
	Ocean Blvd to Woodland Drive	Low Gradient Residential and Forested	Spawning and Rearing
	Woodland Drive to Newmark Street	Low Gradient Urban	Rearing
	Newmark Street to Pony Slough	Low Gradient Marsh	Rearing

Overall, Pony Creek downstream of Merritt Reservoir is a very low gradient, heavily encroached upon urban stream primarily providing moderate to low quality rearing habitat for coho salmon, steelhead trout, and cutthroat trout and other freshwater aquatic species. Riparian vegetation varies from blackberry and grass dominated reaches (above Ocean Boulevard), to good quality deciduous habitat (Ocean Blvd. to Woodland Drive), to urban encroachment (below Woodland Dr.). The stream width is between 8 and 14 feet. Stream depth typically ranges from a few inches to 6 feet.

Spawning habitat for coho salmon, steelhead trout, and cutthroat trout is severely limited. Just below Ocean Boulevard there is a small stream stretch (about 150 feet) where infrequent patches of small pea-sized gravel are found. These gravels provide limited spawning opportunity for resident cutthroat trout. A total of 42.8 square feet of marginal pea-sized spawning gravel was identified in this small stream stretch. This stretch provides the only potential spawning gravel in the lower Pony Creek system.

VI. ALTERNATIVE MITIGATION MEASURES

This section discusses the proposed mitigation and provides analysis of issues that were completed to develop the proposed alternative mitigation project.

Proposed Alternative Mitigation

A. Adequate Streamflows

First, CBNBWB agrees to spill a minimum of 5 cfs flow, or natural flow, whichever is less, during the critical anadromous fish months of October, November, December, January, April, May, and June through the permanent fishway to be constructed at its Joe Ney Slough diversion. Additional water diversions from the Joe Ney system will only occur at times after fishway flows of 5 cfs are met.

Second, CBNBWB agrees to spill 1 cfs continuously from the Lower Pony Creek reservoir for instream use in Lower Pony Creek twelve months each year for the life of the project. This water is from CBNBWB's municipal water right and is separate from, and in addition to, the 835 acre feet storage amounts discussed below.

Third, CBNBWB agrees to store an additional 835 acre feet of water under the storage water rights secured by ODFW each year for fishery enhancement after completion of the Project from either the Joe Ney or Upper Pony system. This stored water will be used as needed (along with CBNBWB's 1 cfs continuous release) to meet the ODFW flow regime figures as measured at a lower Pony Creek streamflow gage detailed below - November-2.0 cfs, December-3.0 cfs, January-4.0 cfs, February-4.0 cfs, March-3.0 cfs, April-3.0 cfs, and May-2.0 cfs. Water to meet these flows will come from releases at the dam, flows from the AAA tributary, and seepage of other surface water between the dam and measuring point. These flows will be maintained annually to protect a minimal resident population of cutthroat trout. These flows will be measured by a stream gauge installed and monitored by CBNBWB located downstream of Merritt Dam at a location somewhat mid-way between the Pony Creek confluence with the AAA tributary and the Pony Creek confluence with the K-Mart tributary. Water remaining from this additional 835 acre feet of winter storage in Pony Reservoir after May each year will be utilized for streamflow enhancement during the summer months at the discretion of ODFW.

Fourth, CBNBWB agrees to pump up to an additional 835 acre feet, as water availability allows, from the Joe Ney system into the Upper Pony Creek Reservoir under the appropriate water rights. This water will be used to replace water needed for fishery enhancement (above the continuous 1 cfs release) that was previously available from the Pony Creek watershed. This stored water will be used to meet the ODFW streamflow requirements for lower Pony Creek as specified above. Water remaining, after May each year, from this additional 835 acre feet of winter storage in Pony Reservoir from Joe Ney will be utilized for streamflow enhancement during the summer months at the discretion of ODFW.

ODFW, with assistance from CBNBWB, will take the lead in securing these additional water rights. CBNBWB agrees to relinquish up to 2,000 acre feet of their 2,500 acre feet water storage right in the Joe Ney watershed to free up the additional water availability needed to obtain these

water rights.

In low flow years when water availability in the Joe Ney system reduces the amount of stored water below the amount needed to meet flow requirements detailed above, there will be as little as the 1 cfs guaranteed release in Pony Creek below the dam for a substantial part of the year. However, ODFW and CBNBWB will seek cooperative solutions towards resolving local water shortages.

Flow augmentation in Pony Creek below Merritt Dam, as outlined above, shall continue for the life of the project.

B. Fish Habitat Improvements

First, CBNBWB will place additional gravel in the Lower Pony Creek system in following key sites and approximate surface areas: ~~1) 50 square yds. between Merritt Dam and Ocean Blvd; 2) 20 square yds. just below Ocean Blvd; 3) 25~~ **1) 95** square yards in the AAA tributary on the north side of Ocean Blvd; ~~4) 50 square yds. in the K Mart Fork below Ocean Blvd on the Russell Young property; and 5) 50~~ **2) 100** square yards in the Hospital Fork above the Woodland Medical Center ~~up to the culvert on the newly constructed road~~ **in the Employee Wellness Trail System.**

Gravel to a depth of 12 inches, and in the diameter range of 0.25 to 1.5 inches, will be placed in the ~~smaller streams such as the~~ AAA tributary, K Mart Fork, and the Hospital Fork to accommodate primarily cutthroat trout. ~~Gravel to a depth of 18 inches, and in the diameter range of 0.25 to 1.0 inches, will be placed in the areas just below Merritt Dam and just below Ocean Blvd. to accommodate both cutthroat trout and coho salmon.~~ Only clean, washed river-run gravel shall be placed into the stream. CBNBWB will acquire the necessary state and federal permits required for the placement of these gravels.

Instream structures such as cross logs will be required at sites where gravel enhancement has occurred. **Additionally, instream structures will be placed at three locations on Willanch Creek to increase habitat complexity and stabilization.** The location of the cross log structures will be dependent on the gradient and stream configuration and is to be coordinated with ODFW. Any wood structure to be placed into the stream shall be twice the bank-full width of the stream channel.

Second, CBNBWB will remove approximately 180 feet of culvert on the Hospital Fork of Lower Pony Creek near the Woodland Medical Center. The stream channel will be daylighted to create 6 to 8 feet of channel width throughout the restored section.

Third, CBNBWB will also acquire 1.74 plus acres of wetland property to be protected by restrictive wetlands easement conditions. This important habitat is located at the confluence of the Hospital Fork and Pony Creek, and provides additional rearing areas for cutthroat trout and coho salmon in the Lower Pony system.

CBNBWB will closely coordinate all fish habitat mitigation measures with ODFW, and other federal and state fishery agencies as needed.

C. Mitigation Schedule

It is the intent of CBNBWB to complete the gravel placement, culvert removal, and wetlands acquisition described above within 1 year of the signing of this MOU.

CBNBWB will begin the streamflow augmentation for lower Pony creek, as described in section A. Adequate Streamflows, within 6 months of the completion of the Project.

It is the intention of ODFW to complete its filing for the necessary water rights, as described in section A. Adequate Streamflows, for the streamflow augmentation of Pony Creek within 90 days of the signing of this MOU.

VII. MAINTENANCE AND MONITORING

Any efforts to achieve mitigation for impacts must be monitored to assure success for the life of the water-development project. CBNBWB monitoring efforts will include the following criteria:

- a) Evaluation of the health of the fish and wildlife populations to be evaluated. Presently, the cutthroat trout and coho salmon have been identified as the evaluation species;
- b) Habitat analysis of mitigation projects. This will include the effects of sedimentation on spawning gravel placed into the Pony Creek System, habitat complexity and stability and channel morphology along the Willanch Creek log placement reach, hydrological functions of the wetland, stability of the open channel after removal of culverts, and channel morphology after changes proposed in flow;
- c) Lower Pony Creek streamflows to be monitored with a stream gage located between the confluence of Pony Creek and the AAA Fork and the confluence of Pony Creek and the K-Mart Fork. These flows and needed spill releases to support them will be coordinated and/or reported to ODFW;
- d) Present gravel condition in the lower Pony Creek System shows only 42.8 square feet of gravel availability below Merritt dam. Gravel and cross-log structures required in the Pony Creek System and log placements in the Willanch Creek System will be monitored annually initially, and then a three-year cycle thereafter. In the Pony Creek System, loss of more than 30% of the original gravel surface area specified in the MOU will be replaced as needed for the life of the project. In the Willanch Creek System, project reaches under this MOU that do not meet "Desirable" conditions for large woody debris as determined by the Advanced Level ODFW Aquatic Inventory Method will have further restoration work completed to meet this condition for the life of the project;
- e) Annual monitoring of the gravel placement will also include the evaluation of the wood structures to ensure the bedload is held back in sufficient amounts for salmonid spawning success. Additional wood will be required in the future if failure of the placed structure

occurs;

- f) The Water Board will compile an annual report detailing the monitoring results and submit the report to ODFW.

VIII. NET BENEFIT ANALYSIS

This project provides for the expansion of Upper Pony Creek Dam and Reservoir. This impoundment structure, constructed in 1952, is currently without fish passage facilities. The Lower Pony Creek (Merritt) Dam, located downstream of Upper Pony Creek reservoir, was originally constructed in 1920 and was modified and re-built in 1989. It is also without fish passage facilities.

In reviewing fish passage options at Upper Pony Creek, there are a number of factors that make fish passage impractical at this site. The existing very high dam structure at Upper Pony Creek and its reservoir's fluctuating water level makes the development of a fish ladder or similar structure very difficult. The water required to maintain such a ladder for passage would also make the project unfeasible for CBNBWB. Trap and haul options were also reviewed and proved unreliable.

The current summer flows below Merritt Dam are extremely low and often measure below 1/4 cfs in August. The maintenance of 1 cfs throughout the summer months will greatly increase the rearing potential for juvenile cutthroat trout in the Lower Pony Creek system. These flows will provide cool water, maintain depth in pools, and allow continued migration of juvenile fish throughout the stream system.

The addition of gravel in the various segments of the Lower Pony Creek Watershed will address the limited spawning availability in the stream. Gravel size will be of adequate size for use by both cutthroat trout and coho salmon. The CBNBWB reservoirs located upstream will also serve as a sediment retention area such that only clean water will be delivered downstream. This will assist in the ongoing success of the gravel placement areas, since they will continue to be productive over a longer term. **The addition of large wood in Willanch Creek will address a limiting habitat feature in this stream.**

The mitigation measures outlined above (summer streamflows, **and-gravel, and large wood placement**) address the two-most critical constraints that limit salmonid fish, particularly anadromous and resident cutthroat trout, use of the small and urbanized Lower Pony Creek system **and Willanch Creek**. To further enhance the rearing potential of Lower Pony Creek, CBNBWB will remove an estimated 180 feet of culvert to once again daylight that section of stream. This daylighting will improve insect production, aquatic and riparian plant recovery, and provide additional rearing habitat for local salmonids.

CBNBWB has also arranged to acquire 1.74 plus acres of wetland in the same vicinity as the culverts to be removed. This wetland will then be put into a wetland conservation easement program to protect critical salmonid rearing habitat and other wetlands species. This wetland is

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adjacent to the “Coca-Cola” wetlands in Lower Pony Creek - making the entire wetland complex larger and more uniformly productive. These wetlands will provide additional and much needed flood relief, filtration of nutrients entering the stream, aquatic insect production, and will continue to improve overall water quality of the Lower Pony Creek system.

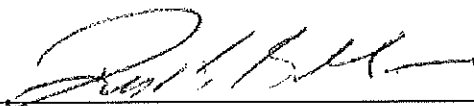
FINANCIAL ASSURANCE

The Coos Bay/North Bend Water Board is a joint instrumentality of the Cities of Coos Bay and North Bend established under their respective Charters. This form of political subdivision is authorized under ORS 225.050. The Water Board has the authority to set water rates, fees and charges. An annual budget is prepared, reviewed and approved by the Water Board at which time operations, maintenance and capital needs of the Board are identified and funded. The Water Board will incorporate the terms of this agreement into the appropriate future annual budgets and adjust expenses and revenues to ensure the adequate funding of the agreed to mitigation measures.


X. CONCLUSION

Based upon the foregoing, the waiver of fish passage requirements for the Upper Pony Reservoir Expansion Project is hereby approved and Coos Bay-North Board Water Board will perform the mitigation described as amended above. The amended mitigation substantially fulfills and improves upon the original mitigation required under this agreement.

COOS BAY-NORTH BEND WATER BOARD

By:  8-5-04
Rob K. Schab, Manager Date

OREGON DEPARTMENT OF FISH AND WILDLIFE

By:  8/3/04
Roy Elicker Date
Deputy Director of Fish and Wildlife Programs