# COQUITLAM OFF CHANNEL
# HABITAT RESTORATION PROJECTS

**Prepared By**
**North Fraser Salmon Assistance Society**

**Prepared With Financial Support of**
**BC Hydro Bridge Coastal**
**Fish and Wildlife Restoration Program**

| | |
|---|---|
| **Project Number** | **06.COQ.02** |
| **Approved** | **January 17 2006** |
| **Approved Funding** | **$56,100** |
| **Total Project Value** | **$80,300** |

## Executive Summary

The goal of the Coquitlam Off Channel Habitat Restoration Projects was to undertake works resulting from an adaptive management and effectiveness monitoring process. The objective was to ensure public and wildlife safety and project effectiveness over time by monitoring and maintaining existing habitat rehabilitation projects.

The Or Creek, Archery Pond, Overlander Pond, Grist Channel and Oxbow Channel Projects were designed to address specific fish and wildlife presence or abundance limiting factors, as identified in the *Bridge-Coastal Fish & Wildlife Restoration Program (BCRP), Volume 2 Coquitlam River (Buntzen Lake) Watershed Chapter 8 Revised Jan 06/03.*

Their maintenance was undertaken successfully. Redistributing accumulated deposits, deepening pool habitat, ensuring assess and egress and increasing rearing habitat improved and increased these projects' productivity.

Abundance and biodiversity limiting factors addressed by this work include:

1. Blocked access to historic habitats
2. Loss of habitat
3. Reduced downstream habitat capability
5. Reduced tributary access
6. Reduced mainstem access
7. Diversion impacts.

The planting/replanting portion of the contract was not undertaken, and the funds returned, as the now-normal fall drought followed by near record rainfall would have reduced the cost/benefit potential below common sense levels. Planting can be undertaken with a revised climate change hardy planting plan when the potential for success is considerably greater, such as early spring 2007 (April).

The objectives of the project were achieved as the elements integral to mitigating the effects of habitat loss and reduced biological productivity due to impacts from inundations, flow regime changes, urban encroachment, dyking and linier develop that have fragmented and altered habitat in the Coquitlam River watershed were achieved.

The projects within the Coquitlam River watershed will continue to be monitored for both maintenance and biological effectiveness, thus continuing to protect the significant investment and biological gains from the Bridge Coastal Restoration Plan, BC Hydro, Fisheries and Oceans Canada and the many community partner's contributions.

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## 1.00 Introduction

### 1.1 Background

In 1903 a dam was constructed on the Coquitlam River to produce hydroelectricity and to supply water for industrial and domestic use. Since the construction of this first dam and subsequent reconstruction projects in 1914, 1985 and 2006 impacts to watershed function, fish, wildlife and riparian biodiversity have been identified.

Presence or abundance limiting factors are articulated in the *Bridge-Coastal Fish & Wildlife Restoration Program, Volume 2 Coquitlam River (Buntzen Lake) Watershed:*

**Factors Limiting Fish Diversity and Production**

1. Blocked access to historic habitats: Anadromous stocks have been excluded from Coquitlam Lake for 92 years.
2. Loss of habitat: Former spawning, rearing and overwintering areas are permanently lost or seasonally reduced due to dam footprint, reservoir flooding, flow diversions, or operating flows; or from non-hydro sources.
3. Reduced downstream habitat capability: Habitats below Coquitlam Dam are altered by reduced wood recruitment.
4. Reduced biological productivity: Coquitlam and Buntzen lakes have been affected long-term by large reservoir drawdown regimes and in the former, loss of historic salmon carcasses.
5. Reduced tributary access: Reduced fish access between reservoir and tributary habitat due to large drawdown regimes.
6. Reduced mainstem access: Reduced access for fish using mainstem channel diminished by the diversion.
7. Diversions: The diversion has reduced flows to the downstream Coquitlam channel and increased flows into Buntzen Lake; these altered flows have affected wetted channel area, seasonal temperatures, sediment flushing, and aquatic productivity in the respective systems.

**Factors Limiting Wildlife Diversity and Productivity**

1. Habitat Changes: Altered flow regime has changed riverine and riparian habitats. Potential effects on wildlife include changes to habitat quality and quantity for tailed frogs, water shrews, harlequins and dippers.
2. Loss of Habitat: Loss of side channel habitat downstream of diversions. Lack of riparian vegetation in drawdown zones; effects on ungulates, furbearers, small mammals and several species of passerines including some neo-tropical migrants. Potential effects include availability of habitat for amphibians, water shrews, other small mammals, and their predators, browse for ungulates and breeding habitat for some species of neo-tropical migrants.
3. Reduced Productivity: Lack of riparian vegetation in drawdown zones; effects on ungulates, furbearers, small mammals and several species of passerines including some neo-tropical migrants.
4. Wildlife Migration: Impediments to wildlife movement (especially large mammals) caused by structures, reservoirs and diversions.

BC Hydro's Bridge Coastal Restoration Program acknowledges these limiting factors or indirect impacts and provides funding support to proponents that undertake works that mitigate the direct and indirect impacts of the dam and its operational effects.

The Strategic Plan Section 6, Volume 1 (2000) prioritizes these works:

1. Continue to undertake cost-effective measures to reduce ongoing impacts on fish and wildlife.
2. Conserve the remaining important habitats within the watershed.
3. Maintain or restore, where feasible, natural processes affecting habitat formation.
4. Replace or construct new habitat where it will directly contribute to fish and wildlife diversity and production in the watershed.
5. Provide support for re-introduction of fish and wildlife, and for artificially supplementing production where necessary.
6. Identify performance indicators, monitor and evaluate project results, and re-adjust restoration strategies and methods based on lessons learned.

## 1.2 Adaptive Management And Effectiveness Monitoring

The Coquitlam Off Channel Habitat Restoration Projects undertook works identified by an adaptive management and effectiveness monitoring process.

The process monitors rehabilitation works in the 262km$^2$ watershed that address fish and wildlife presence or abundance limiting factors, as identified in the Bridge-Coastal Fish & Wildlife Restoration Program Volume 2 Coquitlam River (Buntzen Lake) Watershed.

Effectiveness monitoring and project maintenance are essential in creating cumulative benefits to the fish and wildlife in the watershed and addressing limiting factors identified in the BCRP reports. This important process also protects the original significant financial investment in the projects.

All project work sites were habitat rehabilitation projects originally funded wholly or substantively by BC Hydro.

Five sites were prioritized for 2006:

- Or Creek Ponds Enhancement Project
- Archery Pond Enhancement Project
- Overlander Pond Enhancement Project
- Grist Channel Enhancement Project
- Oxbow Channel Enhancement Project.

## 2.0 Goals and Objectives

The purpose of this project was to undertake maintenance on projects that compensate for the reduced floodplain ecosystems in the Coquitlam River watershed that provided riparian and wetland habitat and important aquatic functions "critical to the maintenance of fish habitats in the watershed, as well as important terrestrial functions that support diverse and productive wildlife habitats in an urban-suburban area as over wintering habitat for coho and steelhead is likely limiting in the Coquitlam River since natural braiding and complexity has been reduced by flow diversions and dyking in the lower reaches." The constructed off channel habitat, the targets of this project produce "a significant portion of the coho smolts produced in the watershed" (BCRP Proposal 2006)

The importance of the aquatic rehabilitation projects within the watershed are invaluable. They are critical to the long-term viability of naturally occurring and reintroduced salmon within the watershed.

The goal of the Coquitlam Off Channel Habitat Restoration Projects was to increase watershed productivity by ensuring existing rehabilitation projects are effective. A secondary goal was to ensure public and wildlife safety at these project sites.

The objectives of and need for the Coquitlam Off Channel Habitat Restoration Projects was to undertake recommended works identified by an adaptive management and effectiveness monitoring process.

The process identified the need for:

- Increased size of pool habitat
- Need for instream complexing (woody debris placements)
- Improved flood protection
- Improved spawning areas
- Improved salmonid access/egress (Impaired by beaver activity).

## 3.0 Study Area

**Table 1 Study Area Description**

| | |
|---|---|
| **Location** | Coquitlam River Watershed<br>Coquitlam BC |
| **Watershed Code** | 100-024500-00000-00000-000-000-000-000-000-000 |
| **Map References** | Geodata BC TRIM Map 92G.026<br>Natural Resources Canada NTS 92G/2 |
| **UTM Co-ordinates** | Zone 10 5459724mN, 516564mE NAD 27 |
| **Construction Drawings** | Originals on file |
| **Land Ownership** | • Or Creek Ponds, GVRD<br>• Archery Pond, City of Coquitlam<br>• Overlander Pond, Private Property, Overlander<br>• Grist Channel, City of Coquitlam<br>• Oxbow Channel, City of Coquitlam |
| **Land Use** | • Or Creek Ponds, Forest, Closed Watershed<br>• Archery Pond, Municipal Park, Coquitlam<br>• Overlander Pond, Forest, adjacent to Prov. Park (Pinecone-Burke Mountain)<br>• Grist Channel, Municipal Park, Coquitlam<br>• Oxbow Channel, Municipal Park, Coquitlam |
| **First Nations Traditional Territory** | Kwikwetlem First Nation Primary Territory |

The Coquitlam River originates in the Coast Mountains and flows south through Coquitlam Lake, across the Fraser River floodplain and enters the Fraser River west of Douglas Island.

The study areas are all located within the Coquitlam River watershed downstream of the BC Hydro owned and operated impound dam (Figure 1 Map Study Area, Coquitlam Watershed). The dam is located 16 km upstream of the confluence with the Fraser River. The Or Creek Site is located on the left bank immediately downstream of the Coquitlam River Dam, the Archery Pond Site, 13,000 m upstream of the Fraser River confluence at the Partridge Creek Confluence is on the right bank within the Upper Coquitlam River Park, the Overlander Pond Site is on the left bank, approximately 100 m upstream of the Pritchett Creek confluence, the Grist Channel Site, approximately 9,000 m upstream of the Fraser River confluence, is on the right bank within the Coquitlam River Park as is the Oxbow Channel Site just downstream on the left bank.

These five habitat rehabilitation project sites are within the floodplain of the Coquitlam River and provide important side channel, intertidal, slough, open-water and flowing aquatic habitats as well as multilayered terrestrial habitat critical to the maintenance of fish and wildlife populations. These projects work towards mitigating the loss or impact resulting from the industrial use of the river by BC Hydro's operations.

Presently the Grist Channel, Oxbow and Archery Pond sites provide opportunity for passive recreation. The well-mapped and maintained hiking trails adjacent to these

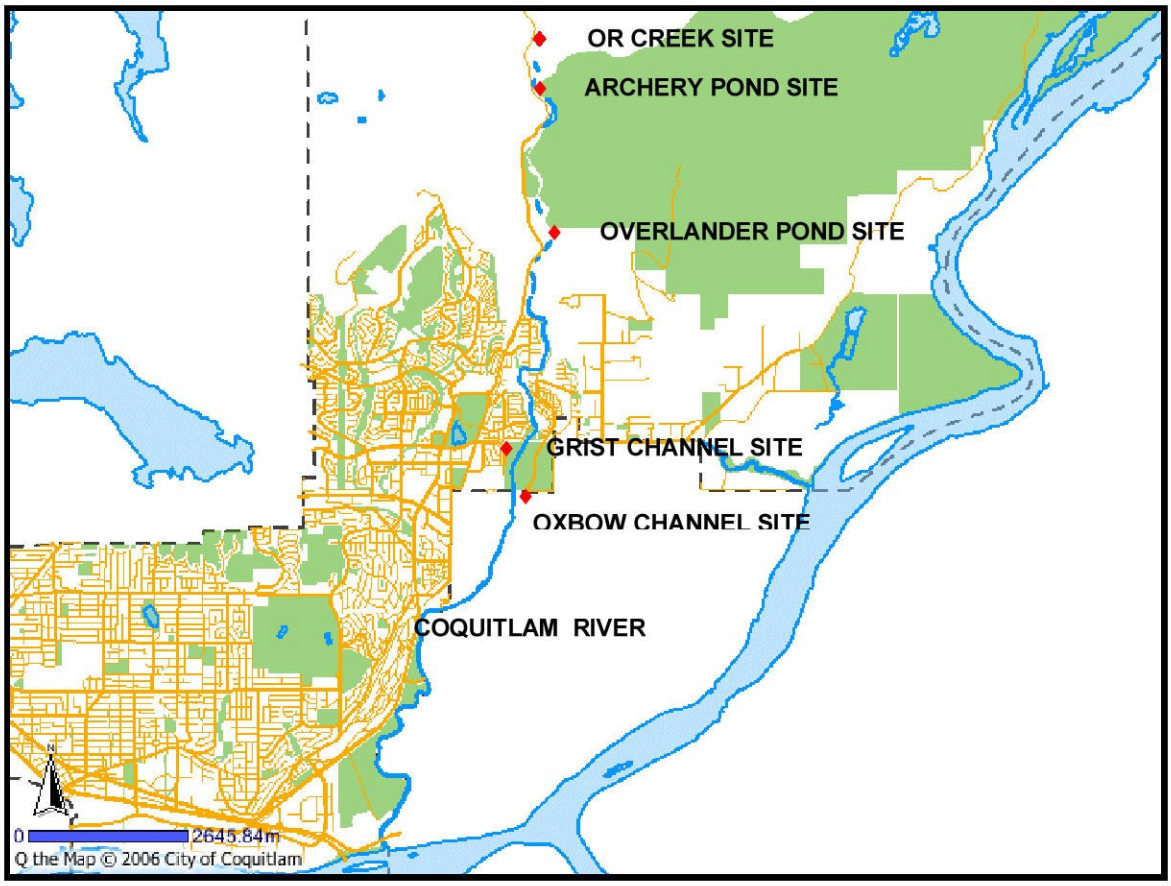


Figure 1 Map Study Area, Coquitlam Watershed

works bring people to the project sites, which provide prime habitat for a broad range of fish and wildlife resulting in exceptional and very close-up wildlife viewing opportunities.

Bird watching and photography of resident and migratory songbirds, raptors and waterfowl of the over 156 bird species that have been documented in the area by the Burke Mountain Naturalists, and confirmed during Audubon's Annual Christmas Bird Count, brings residents and tourists to these sites on a seasonal basis.

Thousands of people come to these project sites each year to watch the salmon spawn and attend regional salmon celebrations.

The increased aquatic productivity from ongoing intensive habitat rehabilitation by government, industry and community have allowed for a limited recreational retention fishery on the river in 2005 and 2006.

Dog-on-off leash policies within the watershed are being monitored to assess the impact of intrusions into sensitive habitat, impacts to shrub and moss layer vegetation and other potential impacts as well as potential positive benefits such as increased observation of habitat and wildlife violation reporting through programs such as the Dogs for Salmon by the Maple Creek Watershed Streamkeepers.

The Or Creek and Overlander Channel project sites are not readily available to the public.

## 4.0 Methods

The methods utilized in the habitat rehabilitation projects were standard excavation and infrastructure retrofit procedures and best management practices, aligned with the FOC/DFO's new Operational Statement - Routing Maintenance Dredging Measures to Protect Fish and Fish Habitat when doing routine maintenance, dredging or operating machinery in or about fish habitat.

Work commenced in late summer and was completed in October 2006.

Kwikwetlem and Katzie First Nation members were employed in the project as archeological observers, site interpreters of traditional knowledge and general laborers.

**Or Creek Pond and Archery Pond Off-Channel Habitat Maintenance and Upgrade**
Or Creek and Archery Ponds, constructed in the early 1990's required work to reverse loss of effectiveness resulting from the impact of regular flood events and beaver activity that had reduced the habitat quality:

- Remove fine sediment deposits restricting flow at intake
- Reposition migrating spawning gravel back into spawning reach

The projects improved access and egress to both projects by the removal of significant beaver dams. Both site's pool habitat was improved by expanding and deepening the pools. Boulder replacement increased stream complexity and increased drift-feeding sites for juveniles.

**Overland Pond Habitat Rehabilitation**
At Overland Pond, constructed in 2002 with BCRP funds, the excavation of the main channel and installation of an 80 m by 6" pipe from the upper groundwater-fed spawning channel and rearing pond to the lower pond has improved the conditions for downstream migration of coho and chum juveniles. During low rainfall years, the access between the two ponds dewatered prior to completion of the downstream migration period, isolating the upper sections of the project and stranding the juveniles. The installation of this pipe, plus a manually operated valve to be used by Fisheries Authorities to manage flows, will prevent standing or dewatering.

This will ensure that these ponds, reputably the most productive in the lower Coquitlam watershed, will continue to produce abundant, robust juveniles.

The deepening of the pool habitat and installation of 6 large root wads will also improve rearing habitat.

A 1.5 m by 10 m berm was also constructed with a combination of lock blocks and natural gravel accumulations to reduce erosion at the lower pond outfall.

Figure 2 Overland Pond Pipeline Site Before


Figure 3 Overlander Pond Pipeline Trench Construction

Figure 4 Overlander Pond Trench

Figure 5 Overlander Pond Pipe 80 m X 6”

Figure 6 Overlander Pond Pipeline After

**Grist Channel Habitat Rehabilitation**
The Grist Channel improvements included the removal of the footbridge, installation and realignment of the supporting lock blocks, their re-armoring and bridge reinstallation. This was done to improve flow and protect the integrity of the bridge.

At Bridge #2 site the fish way and fish access were improved by installing gravel between the riprap.

**Oxbow Side Channel Habitat Rehabilitation**
Oxbow Channel, constructed in 1994 with BCRP funds, required maintenance to ensure its productivity. At the site, improved access for coho and chum adults was achieved by the installation of three beaver bafflers at the outlets of the three main rearing ponds. This was done to improve the beneficial aspects of coho and beaver co-existence.

Gravel, 150 mt from the Lafarge Canada's Coquitlam River grey bank deposit was added in 15-20 areas to be recruited throughout the project.

Year-round fish access was improved by deepening the channels where the invert has increased over time and by relocating the access to the upper pond.

Figure 7 Oxbow Pond Before, Beaver Dam

Figure 8 Oxbow Pond Beaver Bafflers Pipe Installation

Figure 9 Oxbow Pond Beaver Baffler Construction by Scott Ducharme

Figure 10 Oxbow Pond Beaver Baffler After

## 5. Results

### Or Creek Pond and Archery Pond Off-Channel Habitat Maintenance and Upgrade

The Or Creek and Archery Ponds projects improved access and over 200 chum have entered the habitats to spawn as of November 1 2006.

Ensuring access and egress to the 3,300 $m^2$ rearing area of Archery Pond is critical to the ponds being able to produce the annual estimate of 1,650 coho smolts based on the provincial bio-standards of 0.5 coho smolts/$m^2$ of rearing habitat. The same applies to the Or Creek habitat.

### Overland Pond Habitat Rehabilitation

Approximately 1000 $m^2$ of spawning and 1,500 $m^2$ of rearing habitat were improved. Using provincial bio-standards of 250 fry/$m^2$ of spawning habitat and 0.5 coho smolts/$m^2$ of rearing habitat, this will improve the ability of the habitat to produce 250,000 salmonid fry and 750 smolts annually.

### Grist Channel Habitat Rehabilitation

The fish way access and flow improvements have resulted in over 50 chum accessing the channel. However, the recent near-record storm events of November 2006 have damaged the reinstalled footbridge footings. Once the high water subsides an inspection will determine what actions will be required to ensure human safety and fish access.

### Oxbow Side Channel Habitat Rehabilitation

These works added approximately 200 $m^2$ of spawning habitat, increasing the total spawning habitat available to the target species (coho and chum) to 1000 $m^2$. Using provincial bio-standards of 250 fry/$m^2$ of spawning habitat, this will produce approximately 250,000 salmonid fry annually.

The improved flows to Oxbow's 17,300 $m^2$ rearing area, using provincial bio-standards of 0.5 coho smolts/$m^2$ of rearing habitat, will increase it ability to potentially produce an estimated 8,650 coho smolts annually.

Approximately 500 chum have spawned in the project since October 2006 and coho are just beginning their entry.

### Project Monitoring

Project post-construction effectiveness monitoring will be done over the next two years as needed by DFO, volunteer stewards and North Fraser Salmon Assistance Society (NFSAS).

Maintenance monitoring will be conducted semi-annually or as needed by DFO and the NFSAP.

Improvements to the water flow of all projects, particularly during drought years, will increase and stabilize the wetted rearing areas and coho smolt productive capacities.

Kwikwetlem First Nations members did not find archeological evidence.

## 6.0 Discussion

This project was a success and demonstrated the value of conducting ongoing maintenance to ensure effectiveness of the habitat projects, reduce liability and risk and protect the investment by the community in these and other habitat rehabilitation projects. This will lead to addition projects being undertaken in the watershed.

The installation of beaver bafflers to ensure consistent access for adults and egress for juveniles is an improvement over the unsustainable wildlife management policy of removing the beavers though relocation or kill trapping. Beavers and coho, generally, have a beneficial relationship and the bafflers will work to support their cohabitation of the sites without increasing flood risks to human infrastructure.

Highly visible and well-publicized projects increase the level of public awareness of the need for these works and the need for public support of them. The intensive park and trail use of the Archery, Grist and Oxbow projects, coupled with interpretative signage, will increase environmental literacy in the neighborhood and will work to increase individual stewardship ethic.

The contribution of Kwikwetlem First Nation member's traditional and local knowledge to projects in the watershed provides an opportunity to build relationships and to improve projects based on traditional and historic knowledge.

## 7.0 Recommendations

We recommend sharing long-term monitoring results with other restoration teams and local stewards. Monitoring will inform adaptive management processes and habitat rehabilitation plans.

Increased dog off leash impacts to habitat and wildlife throughout urbanized areas is becoming problematic and is polarizing some communities. It is recommended that habitat damage surveys be conducted to inform and support trail-by-trail policy development.

Additional habitat will need to be enhanced or created and there is a shrinking amount of public land on which to undertake these works. We recommend that the BCRP program seeks or supports opportunities to work closely with all landowners, including governments, to secure land during redevelopment and resale for future habitat works.

We recommend the development of a process to coordinate all stewardship activities, both government and public, be a priority to ensure effective use of resources, to reduce redundancy and duplication and to create synergistic results that benefit fish and wildlife and humans. Once a process for coordination is achieved we further recommend that a watershed plan that is inclusive of broader issues (resources, development, land use planning, watershed carrying capacity) and values be developed.

## 8.0 Acknowledgments

Financial contributions for this project were received from:

BC Hydro Bridge Coastal Fish and Wildlife Restoration Program

Financial and in-kind support and sharing of local and traditional knowledge was gratefully received from:

Fisheries and Oceans Canada, OHEB, Resource Restoration

City of Coquitlam

Kwikwetlem First Nation

Katzie First Nation

North Fraser Salmon Assistance Project.

## 9.0 References

*Bridge-Coastal Fish & Wildlife Restoration Program, Volume 2 Coquitlam River (Buntzen Lake) Watershed Chapter 8 Revised Jan 06/03*
http://www.bchydro.com/bcrp/strategic_plan.html
(accessed March 31 2005)

*Bridge Coastal Restoration Program Strategic Plan Section 6, Volume 1 (2000)*
http://www.bchydro.com/bcrp/strategic_plan/strategic_plan.pdf
(accessed March 31 2005)

## Contacts

Fisheries and Oceans Canada Resource Restoration, Habitat Enhancement, Community Involvement Divisions

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# Appendix I

## Financial Statement

**Bridge Coast Fish and Wildlife Restoration Program**
**Coquitlam Off Channel Habitat Restoration Projects**

## Financial Statement Project Number 06.COQ.02
## North Fraser Salmon Assistance Society
## Incorporated Under Society's Act March 24 1999

| | BUDGET | | ACTUAL | |
|---|---|---|---|---|
| | **BCRP** | **OTHER** | **BCRP** | **OTHER** |
| **INCOME, Total Income by Source** | | | | |
| Fisheries and Oceans Canada | | 15,000.00 | | 15,000.00 |
| North Fraser Salmon Assistance Society | | 6,700.00 | | 6,700.00 |
| BCRP | 56,100 | | 51,913.89 | |
| BCH WUP | | 2,500.00 | | 2,500.00 |
| **Grand Total Income, (BCRP & Other)** | **56,100.00** | **24,200.00** | **51,913.89** | **24,200.00** |
| | | | | |
| **EXPENSES** | | | | |
| Personnel, Project | | | | |
| Wages, Project Professional Fees | | 15,000.00 | | 15,000.00 |
| Wages, Construction Supervision | 6,000.00 | 2,000.00 | 6,000.00 | 2,000.00 |
| Wages, Labour, General & First Nations | 6,000.00 | | 6,000.00 | |
| Wages, Monitoring, Vegetation/Wildlife | | 2,500.00 | | 2,500.00 |
| Wages, Monitoring, Water Quality | | | | |
| Consultant Fees – First Nations | 3,000.00 | | 3,000.00 | |
| Total Personnel | **15,000.00** | **19,500.00** | **15,000.00** | **19,500.00** |
| Materials & Equipment | | | | |
| Equipment Rental | 24,000.00 | | 18,290.30 | |
| Equipment Purchased, Small Tools | | 1,000.00 | | 1,000.00 |
| Equipment Purchased, Monitors | | | | |
| Materials Purchased | 10,000.00 | | 13,523.59 | |
| Materials, In Kind Gravel | | | | |
| Supplies, plants, cement, hardware | 2,000.00 | | | |
| Site Signage | | | | |
| Total Materials and Equipment | **36,000.00** | **1,000.00** | **31,813.89** | **1,000.00** |
| Travel Expenses | | 100.00 | | 100.00 |
| Permits | | | | |
| Administration | | | | |
| Contract Administration | 5,100.00 | | 5,100.00 | |
| Office Supplies | | 100.00 | | 100.00 |
| Photocopies & Printing | | | | |
| Postage | | | | |
| Communication, Phones Computer | | 1,100.00 | | 1,100.00 |
| Insurance | | 1,400.00 | | 1,400.00 |
| Office Rental | | 1,000.00 | | 1,000.00 |
| Total Administration | **5,100.00** | **3,700.00** | **5,100.00** | **3,700.00** |
| **GRAND TOTAL EXPENSES** | **56,100.00** | **24,200.00** | **51,913.89** | **24,200.00** |
| **BALANCE** (Grand Total Income less Grand Total Expenses) | | | **4,186.11** | |

# Appendix II

## Performance Measures- Actual Outcomes

**Bridge Coast Fish and Wildlife Restoration Program**
**Coquitlam Off Channel Habitat Restoration Projects**

## Performance Measures Project Number 06.COQ.02

| Performance Measures- Target Outcomes | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Type** | **Primary Habitat Benefit Target Of Project ($M^2$)** | **Primary Target Species** | **Habitat $m^2$** | | | | | | | | | |
| | | | Estuarine | Instream Habitat- Mainstem | Instream Habitat-Tributary | Riparian | Reservoir Shoreline Complexing | Riverine | Lowland Deciduous | Lowland Coniferous | Upland | Wetland |
| **Impact Mitigation** | | | | | | | | | | | | |
| Fish Passage Technologies | Habitat Made Available | | | | | | | | | | | |
| Drawdown Zone Revegetation/Stabilization | Habitat Made Productive | | | | | | | | | | | |
| Wildlife Migration Improvement | Habitat Made Available | | | | | | | | | | | |
| Prevention Of Drowning Of Nests And Nestlings | Wetland Habitat Made Available Above 1:10 Flood | | | | | | | | | | | |
| **Habitat Conservation** | | | | | | | | | | | | |
| Habitat Conserved General | Conserved By Acquisition And Management | | | | | | | | | | | |
| Beaver Passes | Conserved By Other Means | | | | 3 | | | | | | | |
| Designated Rare/Special Habitat | Habitat Protected | | | | | | | | | | | |
| **Maintain Or Restore Habitat Forming Process** | | | | | | | | | | | | |
| Artificial Gravel Recruitment | Area Improved | | | | 15000 m2 | | | | | | | |
| Artificial Wood Debris Recruitment | Area Improved | | | | 500 m2 | | | | | | | |
| Small Scale Complexing In Existing Habitats | Area Improved | | | | | | | | | | | |
| Prescribed Burns Or Other Upland Habitat Enhancement For Wildlife | Area Improved | | | | | | | | | | | |
| **Habitat Development** | | | | | | | | | | | | |
| New Habitat Created | Functional Area Created | Salmonids | | | 200 m2 | | | | | | | |