

Davies Creek Rehabilitation
Re-Creating Spawning areas and Calming Pools

BOWEN ISLAND
FISH & WILDLIFE CLUB



Bowen Island B.C.

Bowen Island Davies Creek Rehabilitation Re-Creating Spawning areas and Calming Pools Within Crippen Regional Park

Phase One, Create calming areas in lower Davies Creek, Crippen Regional Park



Windfalls were removed from beside Davies Creek close to Dorman Road in Crippen Regional Park. Access was gained from the "lower ball field."

Photo taken August 2009.

The windfalls were handed over from the excavator to the backhoe for transportation to the creek close to the ocean. Photo taken August 2009.



It was a tight squeeze to transport the trees around the old Union Steamship cabins. Photo taken August 2009.

The windfalls were placed into lower Davies Creek in four [4] locations. This is to allow calming areas and shade for salmon as well as the resident cutthroat trout. [Photo taken November 01 2009].



It shows and demonstrates exactly what the club was trying to achieve with the placement of the tree root structure.
Photo taken November 01 2009

Photo taken November 01 2009
Note the pools and “Calming areas” that the roots created.



Phase Two, Create enhanced spawning area in upper Davies Creek, Crippen Regional Park

30 feet of pipe was placed beforehand to allow the creek to flow through the pipe. When the fill is placed over the pipe it will be dry and not stop the flow while working. Photo taken August 31, 2009



Photos taken August 31, 2009

Continuing with placing the pipe, rock and gravel from the creek bed was placed over the pipe to protect it for when the heavy rock was placed over it.





The rock was obtained locally on Bowen Island from the J & E Backhoe "Pit"

Photo taken August 31, 2009

A few years ago when we were rehabilitating the spawning channels at the bottom of the falls at the fresh water Lagoon location, we obtained river gravel from Squamish [Funding from Pacific Salmon Foundation]. We did not use all the river gravel we had available and fortunately the owner of J & E Backhoe allowed the Bowen Island Fish & Wildlife Club to store the unused "spawning gravel" for no cost at his gravel pit location. This was the material we used to spread over the base rocks.



Photo taken August 31, 2009

Phase Three, Planting Habitat in and around lower Davies Creek in Crippen regional Park



Two of these signs are posted in the Enhancement area of the park. The signs were placed by Metro Vancouver regional Parks. The sign mentions the partners regarding removing and planting, not the previous work of the actual Creek bed enhancements.

Photo taken November 01, 2009



Temporary fencing provided by parks and another sign posted by Metro Vancouver regarding the restoration.

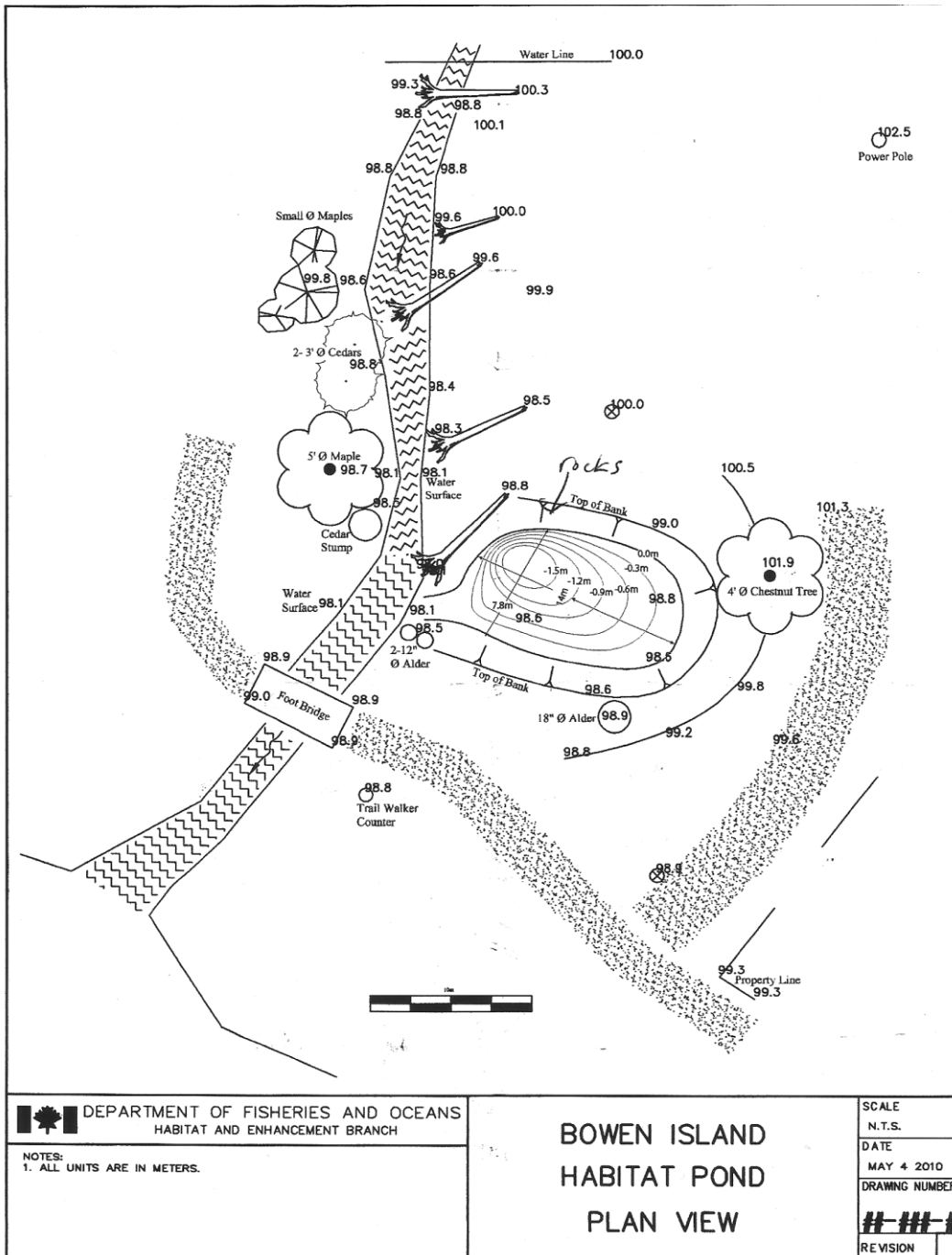
Photos taken November 01, 2009

The following is a list of plants and quantities that were placed in this part of the rehabilitation project. The plants and the list were provided by Markus Merkens, Natural Resource Management Specialist, Metro Vancouver West Area Parks.

Type of Plant	Size	Quantity
<i>Acer macrophyllum</i>	#10	5
<i>Alnus rubra</i>	# 5	5
<i>Tsuga heterophylla</i>	#10	5
<i>Tsuga heterophylla</i>	#1	10
<i>Thuja plicata</i>	#10	4
<i>Thuja plicata</i>	#1	10
<i>Gaultheria shallon</i>	#2	50
<i>Holodiscus discolor</i>	#2	10
<i>Mahonia nervosa</i>	#2	30
<i>Rosa nutkana</i>	#2	20
<i>Rubus spectabilis</i>	#2	80
<i>Rubus parviflorus</i>	#2	30
<i>Symphoricarpos albus</i>	#2	25
<i>Athyrium filix-femina</i>	#1	35
<i>Polystichum munitum</i>	#1	70
<i>Dicentra formosa</i>	3.5"	72
<i>Maianthemum dilatatum</i>	3.5"	72
<i>Tellima grandiflora</i>	3.5"	72
<i>Tolmeia menziesia</i>	3.5"	90

Phase Four, Create a winter rearing pond in the lower reaches of Davies Creek, Crippen Regional Park

This is the continuation of our project and also of our partnership with the Pacific Salmon Foundation, DFO and Metro Vancouver Parks. This drawing shows the placement of the windfall trees and the soon to be built "Wintering Pond". Davies Creek flows from the top of the drawing to the bottom left. The foot bridge is about 100 feet from the Ocean at the bottom left of the drawing.



Just behind and to the left of this sign is where the new wintering pond is to be constructed.

The actual cost of construction is the responsibility of the Fish & Wildlife Club and will be paid by a grant from the Pacific Salmon Foundation. The replanting, addition of a new Cedar split rail fence and ongoing maintenance is the responsibility of Metro Vancouver Parks.

Photo taken July 23, 2010



This photograph is looking North, across Davies Creek to the area that will become the pond.

Photo taken July 23, 2010

All the existing trees will be undisturbed, and some Salmon Berry bushes will be replanted.

Photo taken July 23, 2010



The following 2 photographs on this page were taken July 29, 2010 by Markus Merkens Natural Resource Management Specialist, Metro Vancouver West Area Parks.

All the brush removed and digging the hole started but time out to discuss if further changes are required.



Ground water seepage is filling up the new pond.

Metro Vancouver Parks provided and installed the signage and temporary fencing.

Photo taken Sept. 06, 2010



The actual cost of construction is the responsibility of the Fish & Wildlife Club and will be paid by in kind and a grant from the Pacific Salmon Foundation. The replanting, addition of a new Cedar split rail fence and ongoing maintenance will be provided by Metro Vancouver Parks.

Photo taken Sept. 06, 2010



Tree “blow downs” complete with root balls were obtained from nearby in the park. The purpose is to provide shade and hiding areas for the fish.

Photo taken Sept. 06, 2010

The digging of the wintering pond is complete. At this time the pond is not connected to Davies Creek [just a few feet away] but will be when the rains start again. It is our intention that in about October or November that the remaining 200 or so Coho we have at the hatchery will be released upstream and will be able to use this pool for the first time.

Photo taken Sept. 06, 2010



Local Bowen Island, Metro Vancouver Parks Staff have removed all the temporary fencing and replaced it with a “Split” Rail design.

Photo taken Aug. 05, 2011



Photo taken Aug. 05, 2011

Photo taken Aug. 05, 2011



Finances

Pacific Salmon Foundation grant.

Bowen Island Fish & Wildlife Club funds.

J & E Backhoe Company Ltd. Reduction in some labour and equipment charges.

In-Kind

Bowen Island Fish & Wildlife Club

Department of Fisheries and Oceans.

Metro Vancouver Parks

Crippen Park Stewardship Group

J & E Backhoe Company Ltd.

Groups and Organizations

Pacific Salmon Foundation

Department of Fisheries and Oceans

Bowen Island Fish and Wildlife Club

Metro Vancouver Parks

Crippen Park Stewardship Group

A great project! Thanks everyone!

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