

FINAL REPORT
 to
RECREATIONAL FISHERIES CONSERVATION PARTNERSHIP PROGRAM
 from
COWICHAN LAKE AND RIVER STEWARDSHIP SOCIETY
 on
COWICHAN SHORELINE RESTORATION PROJECT
 at
SAYWELL PARK



The Cowichan Shoreline Restoration Project restored 800 m² of critical riparian habitat at Saywell Park in Lake Cowichan which contributes to the Cowichan Watershed Board's target of restoring 3% of the shoreline of Cowichan Lake by 2021. Invasive blackberry and ivy were replaced with native vegetation to improve fish habitat for coho fry and other salmonid and trout species. The completed project will serve as a demonstration site for riparian restoration and responsible recreation. It will be used for educational field trips and visited by locals and tourists. By involving local secondary students the project provided youth with skills in restoration work and an appreciation of the importance of riparian areas for fish and the overall health of the lake and river. The long-term goal of the Cowichan Lake and River Stewardship Society (CLRSS) is to change a culture of "cutting and clearing" in the lake communities to one of stewardship.

In July of 2013 the Town of Lake Cowichan machine-cut the invasive Himalayan blackberry which had taken over much of the shoreline area at the park. Local volunteers and students from Cowichan Lake School (LCS) then hand-cut the blackberries, as well as invasive ivy, in July, August, and September. This



involved 31 volunteer hours and 24 student hours. In October Gerald Thom and Dave Polster of Polster Environmental Services prepared a planting plan for the area and in the beginning of November Richard

Wahlgen of Streamside Native Plants in Bowser delivered over 1 000 native riparian plants to Lake Cowichan. The riparian plants were planted by mid-November, again by



volunteers and students from LCS. This involved 67 volunteer hours and 10.5 student hours. In early December the upland riparian area was replanted. This entailed 20 volunteer hours and 12 student hours.

In March 2014 additional ground-cover plants from Streamside Native Plants, collected by Gerald Thom, were added and mulch was applied to both upland and riparian areas to retain moisture. This required 29 volunteer hours and 20 student hours.

In the fall of 2013 the Town of Lake Cowichan installed a dock at Saywell Park so that locals and visitors could use the river at this central location in the town for fishing, swimming, and tubing. The dock was



designed to provide safe access while minimizing the impact on the riparian zone. The bridge provides access to the dock without disturbing the riparian area and the dock is anchored safely away from the

shore. Some residents had advocated for an artificial beach at this location; interpretive signage will explain why the dock was a better choice because it maintains fish habitat and water quality.



Engaging youth in restoration and stewardship was an important objective of the project; it is also one of the key goals in CLRSS's strategic plan. Most of the students who contributed to the project are part of a new, innovative Lake Studies program at LCS. The principal and teachers at the school worked closely with CLRSS during the project so that students were receiving relevant instruction in their classes. They were able to participate in the field work due to a flexible timetable introduced at the school in the fall of 2013. Students gained valuable skills while working on the project. When Richard Wahlgren delivered the plants he also gave a seminar to the students at the school. Gerald Thom instructed the students in live-staking of red osier dogwood at the site. The school has also started a native plant nursery that will provide plants for future shoreline restoration. In March some "Laker" students participated in a tour of the watershed led by Rodger Hunter of the Cowichan Watershed Board starting with their own work at Saywell Park. According to Rodger, the tour was "inspiring" and students were "polite, smart, and turned-on."

Saywell Park is in the centre of town adjacent to the Visitor Centre and is much used by both locals and visitors. Interpretive signage has been installed on location to contribute to its value as a demonstration site. CLRSS struck a sub-committee to generate the content and imagery of the signs. CLRSS met with the Town Council and the Advisory Planning Committee to gain approval and ensure that the signs fit



into the overall signage theme of the town. Leon Signs of Duncan produced the signs and the Town of Lake Cowichan located and install them. Four signs were created: "Saywell Park Riparian Restoration" that describes the overall project; "Fish of the Cowichan Ecosystem;" "Birds of the Lake Cowichan Ecosystem;" and "Riparian Plants of the Cowichan Ecosystem." The fish sign includes trout and salmonid species found in the river and lake and informs readers of when they can expect to see these fish.

Each of the bird and plant signs gives the Hul'qumi'num name followed by the common name and the scientific name of the species and includes a brief description focusing on an interesting fact or the importance of that particular species to the ecosystem. Each sign has a muted contextual background.

The project was completed on time and within budget. \$10 856.13 was spent on Activity 1, Riparian Habitat Restoration, and \$924.00 was spent on Activity 2, Signage. The largest expenditure, \$6 930.84, for plants was shared by RFCPP, Fisheries and Oceans Canada – PIP Program, the Cowichan Watershed Board, Drillwell Enterprises, the Haig Brown Fly Fishing Association. 12 partners contributed cash or in-kind and 51 volunteers participated in the on-the-ground work. The value of the in-kind contributions was \$14 245 and the total project value was \$25 101.13

The project generated a lot of interest when Gerald Thom showed a power point presentation at the Cowichan Stewardship Roundtable. We also received considerable media coverage in the local newspaper, the Lake Cowichan Gazette. During the course of the project the Cowichan Watershed Board led a number of diverse groups on watershed tours that started or ended at Saywell Park and highlighted the work CLRSS was doing with the LCS students at the park.

The project will be showcased at "Lake Days," a community event in early June. This central location is used by regularly by locals who walk in the park and use the dock. It is also a popular stop for many visitors in the summer months. The Saywell Park Riparian Restoration Demonstration Site will be a regular stop on watershed tours for every grade five class in the Cowichan Valley and many tours conducted by the Cowichan Watershed Board.

CLRSS has received the funding it needs to embark on the restoration of other properties on the lake during May to August 2014 (the Cowichan Shoreline Stewardship Project). The expertise the students and volunteers have gained during the Saywell Park Project will be invaluable in this next project where private landowners, approached through our riparian visits, have volunteered their properties to be future demonstration sites. In conclusion, it appears that CLRSS has met its objectives for the Saywell Park Project and, through positive efforts, is indeed beginning to create the cultural shift needed to reverse the current trend of shoreline destruction of critical fish habitat in the Cowichan watershed. This riparian restoration/demonstration project would not have been possible without funding from multiple partners, volunteer participation, and collaborative community support.

Activity 1: Riparian Habitat Restoration

Saywell riparian prior to blackberry removal



Same area after blackberry removal



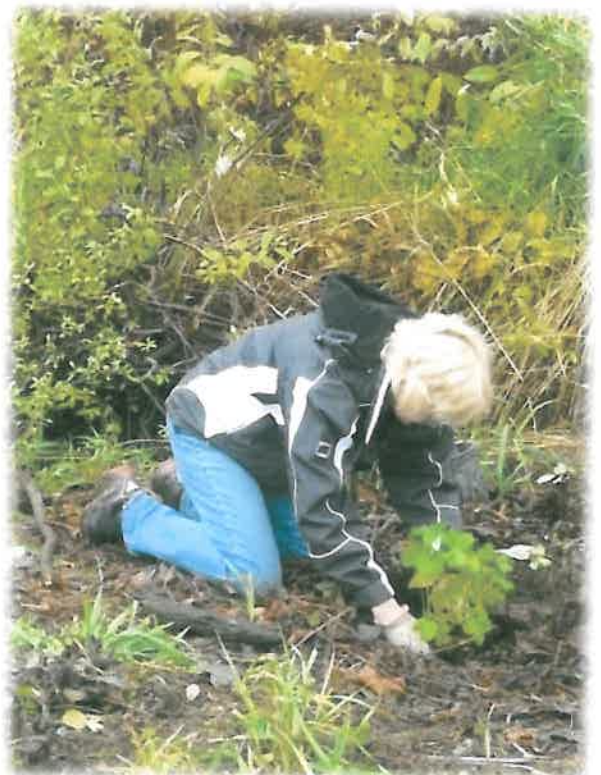
Potted riparian plants before planting



Planted wet riparian area after replanting



Volunteers replanting 200 metres of wet riparian area (600 m²)



Plant layout for upland riparian restoration



Grass removal and soil preparation for upland riparian planting



LCS students replanting upland riparian area



Upland riparian area planted and mulched (200 m²)



Activity 2: Signage

Saywell Park Riparian Restoration



Riparian Plants in the Cowichan Ecosystem



Birds of the Cowichan Lake Ecosystem



Fish of the Cowichan Ecosystem



SCHEDULE 7

PROGRESS REPORT / YEAR END REPORT

Recreational Fisheries Conservation Partnerships Program

Fiscal Year:	2013-2014
Agreement Number:	13-HPAC-PA6-00117
Name and Address of Recipient:	Cowichan Lake and River Stewardship Society Box 907, Lake Cowichan, B.C. V0R 2G0
Amount of Approved Contribution for Fiscal Year:	\$6,250

Reporting period: from: July 1, 2013 to: March 31, 2014

Type of report: <input type="checkbox"/> Progress Report <input checked="" type="checkbox"/> Year End Report	Purpose of report: <input type="checkbox"/> Request for advance payment <input checked="" type="checkbox"/> Request for reimbursement <input checked="" type="checkbox"/> Release holdback
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Section 1 – Financial Summary

RFCPP funds received year to date: \$ 900.00

Table 1.1

RFCPP Budget 2013-2014					
Expense category	Expense description	RFCPP planned budget	Actual expenses for current reporting period	Actual expenses June 2013 to date*	Planned expenses for next reporting period
Vehicle rental and/or operational costs	Fuel for truck	\$250	301.17	301.17	0
Purchase Lease, maintenance of equipment/supplies	Topsoil, fertilizer, beaver fence	\$1,000	928.45	928.45	0
Purchase Lease, maintenance of equipment/supplies	Equipment and tools	\$700	646.77	646.77	0
Purchase Lease, maintenance of equipment/supplies	Saywell Park Riparian Plants	\$2,100	2100.00	2100.00	0
Insurance expenses	Volunteer Insurance	\$1,200	1125.00	1125.00	0
Communications and Distribution costs	Saywell Park project and interpretative signage	\$1,000	924.00	924.00	0
Total		\$6,250	6025.39	6025.39	0

*Includes current reporting period.

Table 1.2

Progress reports: Where the 'Expenses year to date' have exceeded the RFCPP budget by 10% for a given expense category, please provide an explanation.

Year end reports: Where the 'Expenses year to date' have deviated above or below the RFCPP budget by 10% for a given expense category, please provide an explanation.

Expense category*	RFCPP budget	Expenses year to date*	Under- or Over-budget amount	Reason for budget deviation
Vehicle	250.00	301.78	51.78 Over	more driving expenses incurred than forecasted.

*Add rows as required.

Gerald Thom (President)
CLRSS
April 22, 2014

Section 2 – Deliverables

Table 2.1

Activities and Associated Deliverables	Status of Deliverables
Activity 1: Riparian Habitat Restoration Deliverables to provide to DFO: <ul style="list-style-type: none"> • Before, during and after photos to DFO • Final Report* 	Check one: <input checked="" type="checkbox"/> Complete (if checked, submit deliverables with report) <input type="checkbox"/> In progress (if checked, submit draft deliverables with report) <input type="checkbox"/> Cancelled (if checked, provide explanation in table 2.2) <input type="checkbox"/> Delayed (if checked, provide explanation in table 2.2) <input type="checkbox"/> Not started (i.e., reporting period prior to activity start date)
Activity 2: Signage Deliverables to provide to DFO: <ul style="list-style-type: none"> • Photos of installed signage (to be included in Final Report*). 	Check one: <input checked="" type="checkbox"/> Complete (if checked, submit deliverables with report) <input type="checkbox"/> In progress (if checked, submit draft deliverables with report) <input type="checkbox"/> Cancelled (if checked, provide explanation in table 2.2) <input type="checkbox"/> Delayed (if checked, provide explanation in table 2.2) <input type="checkbox"/> Not started (i.e., reporting period prior to activity start date)

A Final Report will be provided that discusses all project deliverables and results listed in the activity workplan. The Final Report will include (at minimum):

- a summary of the work activities undertaken;
- expenditures per work activity; and,
- photo documentation of all the works showing the works before, during and after completion.

TABLE 2.2

For any Activity/deliverable that was cancelled or delayed, please provide an explanation.

Activity/Deliverable*	Explanation for delay
none	

*Add rows as required.

Section 3 – Measuring Program Performance

Table 3.1

Enter actual amounts year to date.


Performance Measure	Planned	Actual
Number of partners providing cash and/or in-kind support to project:	11	12
Number of volunteers working on RFCPP-funded activities:	30	51
Number of people paid using RFCPP funding:	0	0
Amount of recreational fisheries habitat restored (m ² or km ²):	800m ²	800 m ²

Table 3.2

List all capital acquisitions purchased using RFCPP funding (\$1,000 or more):

Item and description*	Cost
1. none	
2.	
3.	

*Add rows as required.


 Gerald Thom (President)
 Cowichan Lake and River Stewardship Society
 April 22, 2014

Saywell Planting List (* = top ten riparian)

Quantity	Plant Name (scientific)	Plant Name (common)	Conditions
	<i>Alnus rubra</i> Bong. *	Red alder	(already on-site)
	<i>Salix scouleriana</i> Barratt ex Hook. *	Scouler's willow	(already on-site)
	<i>Salix sitchensis</i> Sanson ex Bong.	Sitka willow	(already on-site)
10	<i>Malus fusca</i> (Raf.) C.K. Schneid. *	Pacific crab apple	
10	<i>Rhamnus purshiana</i> DC.	Cascara	sun/moist
100	<i>Cornus stolonifera</i> Michx. *	Red osier dogwood	shade-sun/moist-wet
100	<i>Myrica gale</i> L. *	Sweet gale	sun/wet
10	<i>Physocarpus capitatus</i> (Pursh) Kuntze *	Pacific ninebark	sun/moist
50	<i>Rosa nutkana</i> C. Presl *	Nootka rose	sun/wet
50	<i>Rubus spectabilis</i> Pursh	Salmonberry	shade-sun/wet
20	<i>Sambucus racemosa</i> L.	Red elderberry	shade-sun/moist
100	<i>Spiraea douglasii</i> Hook. *	Hardhack	sun/wet
200	<i>Arctostaphylos uva-ursi</i> (L.) Spreng.	Kinnikinnik	sun/moist
100	<i>Polystichum munitum</i> (Kaulf.) C. Presl *	Sword fern	shade-sun/wet
25	<i>Carex obnupta</i> L.H. Bailey	Slough sedge	shade-sun/wet
25	<i>Carex sitchensis</i> Prescott ex Bong. *	Sitka sedge	shade-sun/wet
40	<i>Athyrium filix-femina</i> (L.) Roth	Lady fern	shade/dry
40	<i>Blechnum spicant</i> (L.) Sm.	Deer fern	shade/wet
20	<i>Aruncus dioicus</i> (Walter) Fernald	Goats beard	shade/dry
20	<i>Viburnum edule</i> (Michx.) Raf.	Highbush cranberry	sun/moist
10	<i>Sorbus sitchensis</i> M. Roem.	Mountain ash	sun/moist

20	<i>Sambucus cerulea</i> Raf.	Blue elderberry	shade/dry
20	<i>Ribes sanguineum</i> Pursh	Red flowering current	sun/moist
10	<i>Philadelphus lewisii</i> Pursh	Mock orange	sun/moist
10	<i>Oemleria cerasiformis</i> (Torr. & A. Gray ex Hook. & Arn.) Landon	Indian plum	sun/moist
10	<i>Menziesia ferruginea</i> Sm.	False azalea	sun/moist
10	<i>Holodiscus discolor</i> (Pursh) Maxim.	Oceanspray	sun/moist
1	<i>Fraxinus latifolia</i> Benth.	Oregon ash	shade/moist
1	<i>Cornus nuttallii</i> Audubon ex Torr. & A. Gray	Pacific dogwood	shade-sun/moist
1	<i>Acer glabrum</i> Torr.	Douglas maple	sun/moist
5	<i>Acer circinatum</i> Pursh	Vine maple	shade-sun/moist
20	<i>Vaccinium ovatum</i> Pursh	Evergreen huckleberry	shade/dry
100	<i>Gaultheria shallon</i> Pursh	Salal	shade/dry
5	<i>Tsuga mertensiana</i> (Bong.) Carrière	Mountain hemlock	sun/moist
3	<i>Thuja plicata</i> Donn ex D. Don	Western red cedar	sun/moist
1	<i>Taxus brevifolia</i> Nutt.	Western yew	shade/moist
3	<i>Pseudotsuga menziesii</i> (Mirb.) Franco	Douglas fir	shade/moist-dry
1	<i>Pinus contorta</i> Douglas ex Louden var. <i>contorta</i>	Shore pine	sun/moist
54	<i>Asarum caudatum</i>	Wild ginger	shade/moist
54	<i>Cornus canadensis</i>	Bunchberry/dwarf dogwood	shade-sun/moist
54	<i>Maianthemum dilatatum</i>	False lily of the valley	shade-sun/moist
54	<i>Achlys triphylla</i>	Vanilla leaf	shade-sun/dry
54	<i>Tiarella trifolia</i>	Foamflower	shade-sun/dry
54	<i>Tolmiea menziesii</i>	Piggy back plant	shade/wet