

Fraser Salmon & Watersheds Program



Fraser Basin Council



2008 Final Report Template

FSWP File Number 08 HPR D55

Please use the FSWP File Number provided in previous FSWP 2008 project correspondence

Contact Information

Sponsoring Organization's Legal Name

City of Surrey, Engineering Department

Are you a federally registered Charity, Non-profit organization or Business (Yes /No)?

NO

Are you a registered Society (Yes / No)?

NO

Society Registration number

N/A

Mailing Address

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Project Information

Project Title

City of Surrey's Salmon Habitat Restoration Program (SHaRP)

SHaRP activities occurred across the City of Surrey, a municipal district in Metro Vancouver in southwestern B.C. The majority of sites visited for enhancement works were within or adjacent to watercourses. Sites selected typically included: riparian areas infested with invasive plant species, littered with anthropogenic wastes or that lacked native vegetation cover; creeks with actively eroding channel banks; and agricultural lands where livestock were impacting the integrity of channel banks and substrates. In addition to this, educational and promotional activities were carried out at a variety of community events, business establishments and residential areas within the municipality. SHaRP worked on site remediation projects along the Nicomekl River, ditches in the Serpentine watershed, Bear Creek, Eugene Creek, Archibald Creek and Cougar Creek to name a few.

	\$10,000		\$337,304		\$ 327,304
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^a Non-FSWP funds include both cash and in-kind funding. In-kind funding refers to all non-cash contributions such as equipment, supplies, labour, etc. Please refer to Budget Section for further details.

Project Summary

The objectives of SHaRP 2008 were to enhance negatively affected stream sites and deliver environmental education campaigns to the community, including schools and businesses. The SHaRP 2008 teams restored fish habitat in urban streams, as they are vital routes, rearing, spawning and feeding grounds for seven species of salmon and trout. If these streams were not enhanced, the negative impacts from urbanization could be detrimental to the aquatic species using these streams. The education outreach programs that the teams conduct within the community targets all age groups, from primary school day camps to the operators of industrial and agricultural operations. In addition to the benefits to the environment through the restoration and education programs, the students that make up the SHaRP teams gain valuable career-oriented job experience in workplace safety, team building and leadership, public relations, community and industrial education, habitat restoration, bioengineering and restoration planting techniques. Students emerge with a renewed sense of ownership towards the City and they exhibit a stewardship mentality for the natural environments that surround them. The 2008 SHaRP season was very successful and the teams completed approximately 20 restoration sites in and around watercourses, provided 19 environmental presentations to schools and day camps, attended 24 community events with watershed stewardship information, and educated over 325 business operators of the importance of caring for Surrey's urban salmon habitat through best management practices.

- ☐ All life stages of the 7 species of salmon and trout present commonly found Surrey (Chinook Salmon, Chum Salmon, Coho Salmon, Steelhead Salmon, Pink Salmon, Rainbow Trout, Cutthroat Trout), however the restoration works especially benefits Chum Salmon, Coho Salmon, Rainbow Trout and Cutthroat Trout.
- ☐ Other incidental aquatic species within Surrey's watercourses due to a reduction in pollution events (e.g. benthic macroinvertebrates, fish species, crayfish)

Watershed(s) the project targets: please list

- ☐ Nicomekl Watershed
- ☐ Serpentine Watershed
- ☐ Little Campbell Watershed

Project Deliverables and Results

Enhancement of over 15 riparian sites through installation of plants, removal of invasive plant species, and/or installation of erosion protection material	20 riparian sites were enhanced through plantings, invasive removals and erosion protection installation
Attendance at over 10 community events and 10 day camps	24 community events, 19 day camps and 2 elementary schools were attended by SHaRP
Distribution of over 600 environmental stewardship related brochures and 100 agriculture stewardship related brochures	Approximately 1100 brochures on educational stewardship and 250 agricultural stewardship brochures were distributed
Construction of livestock exclusion fences or buffer strip habitat on farms at a minimum of 4 locations	The agriculture team coordinated riparian enhancement works with 4 agricultural landowners
Educational materials regarding pollution prevention initiatives delivered to a minimum of 75 business operators in conjunction with industrial education campaign	325 businesses were contacted as part of the industrial education campaign
Contact with local newspaper, radio and television media outlets throughout the summer regarding stewardship initiatives and restoration projects.	SHaRP's message was promoted through newspaper articles across Vancouver and Surrey, TV and radio coverage with a feature on CKNW
Partnership with local volunteer groups to assist with restoration works at a minimum of 2 riparian sites	SHaRP worked on 4 enhancement sites with local volunteer groups such as A Rocha, Ducks Unlimited and the Little Campbell Hatchery

Project Effectiveness

SHaRP 2008 was an effective project for the restoration of sensitive riparian habitats, the delivery of interactive educational campaigns and event activities, as well as for the training and engagement of 23 students in stewardship works in Surrey. Criteria used to identify the effectiveness of the project are provided and are followed with a description as to why each was considered successful:

- ❑ Number of students that were hired. Base funding secured for the program was going to allow 17 students to be included within the 2008 program. Through the support of external organizations, the program was able to expand to include an additional 6 students for a total of 7 post-secondary team leaders and 16 high school crew members. The additional crew members ensured that the 2008 SHaRP Teams were able to reach and surpass the aims and goals set out for the season. This relates to the success of the program as more restoration sites were completed and additional events and day camps were attended.
- ❑ The efficiency within which the restoration sites were completed throughout the season. Each SHaRP team completes detailed reporting that reflects the success with which the 2008 program was completed. For example, the Industrial Education Team completed 9 streamside garbage clean ups, marked 150 storm drains, enhanced 9 riparian sites (which includes installing riparian plants and removing invasive species) and ran an educational campaign that reached 325 businesses and 57 residential homes, and was estimated to have distributed over 1100 brochures themed on proper stream care.
- ❑ Ability of the program to be completed on schedule and on budget. All the sites and community events provided to the SHaRP teams were completed during their summer term. The teams additionally completed new initiatives as well, such as locating additional restoration sites that required enhancement and attending many day camps with stewardship themed activities. The program slightly exceeded the original proposed budget, however the ultimate program included additional students than originally proposed and still fell within the overall program budget allowed for the 2008 season.

- ❑ Improved relationship with community members, stewardship groups and residents. SHaRP worked closely with a number of community and stewardship groups on site enhancements projects across the City. In 2008, SHaRP worked in collaboration with the Friends of Semiahmoo Bay, A Rocha Canada, Little Campbell Watershed Society, Cougar Creek Streamkeepers, and Tynehead Hatchery. The teams are highly recognizable in the community due to the long-standing legacy of the program and the highly identifiable green T-shirts with the yellow fish that all the team members wear. Due to the numerous events, day camps and the SummerFest event attended by SHaRP the community residents became familiar with the teams working within their areas and would commend the students on the work they were completing.
- ❑ Continued success of past efforts. SHaRP revisits many of the sites conducted in previous years to ensure that the enhancement works are functioning as intended, that there is no encroachment of invasives within the enhancement area, and so that there is no further accumulation of dumped garbage in the riparian area. Each summer the education teams of SHaRP attend the same events as the previous year and build upon the activities that were offered in previous years so that returning event attendees can learn more about Surrey's salmon habitat.
- ❑ Amount of public support and funding received annually. The amount of support received from community members, stewardship groups, dignitaries and external organizations provides the program coordinators with an idea of the success of the program each year. This documentation of support is vital to present to the City Council each year to ensure that the City continues to provide the SHaRP with the base program funding required that ensures the program's continuing legacy.
- ❑ Number of enthusiastic responses from the high school and post secondary students. At the end of the summer program, SHaRP team leaders write a Final Report where results of the program are reported, and tips for the following year and student responses to the program are provided. As per the Report, the feedback received was positive. One of the main aims for many students was gaining fieldwork experience; leadership skills, teamwork skills and successfully communicating otherwise complicated information to the general public. Students felt they had achieved each of these aims successfully while spending an enjoyable summer working on stewardship issues. The overall response to the program was both enthusiastic and positive and students reiterated their support for the program with hopes that it continues in the future.

- ❑ The integration of restoration works and educational campaigns within a single program offers a great awareness impact to the community as residents are able to learn about the importance of urban salmon habitat while also witnessing the stewardship works occur by youth at sites throughout the City.
- ❑ Including high school students as crew members within the program offers the post secondary team leaders with an exceptional opportunity to mentor younger students and exemplify the benefits of stewardship on the environment. Also by having high school students included in the program it instigates communication within the high schools in Surrey about the experiences offered through the program and the importance of each person taking part to help protect Surrey's sensitive habitats.
- ❑ There are benefits to continuing a program over many years with a similar image and objectives. This format allows the community to recognize the program and the works that the students complete, raises participation levels by industry and agricultural operators as the students become a reliable and recognizable entity, and streamlines the operation of the program as each SHaRP season builds upon the successes of the previous year.

Project Effectiveness

Please describe how your project has addressed each Priority Activity identified in your Detailed Proposal.

Priority Activity	How the Priority Activity has been addressed
Habitat and Water Restoration Stewardship	SHaRP teams performed restoration works at over 20 riparian sites that directly contribute to improving fish habitat. Works included stream bank erosion prevention, removal of invasive species, planting native trees and shrubs in addition to removing garbage when necessary.
Education and Engagement	<p>Community outreach programs and activities were held at 24 various community events across the City and at 19 presentations offered at day camps and schools. Information provided was aimed at youth and adults in an interactive format that made learning about stewardship initiatives and salmon habitat fun and memorable.</p> <p>The program hired 23 post secondary and high school students and provided these students with valuable work experience in environmental management.</p>

Please paste each priority activity identified in your Detailed Proposal in the space provided.

Further Comments

Please provide any further comments including recommendations for future conservation efforts and suggestions for helping partners to meet the goals of the Fraser Salmon and Watersheds Program. If your project produced a narrative or scientific report or additional project products (e.g. maps, photos), attach them as an appendix.

Please find attached additional project products.

Submission Instructions

Please send your Final Report electronically to your designated FSWP Staff Contact. If you are uncertain who this person is or how to contact them, please contact Tiffany Pither, FSWP Administrator.

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Phone: (604) 687-7425 Ext. 319