



A Wetland Park Creation Guide For Communities

Pleasant Valley Wetland Heritage Park

Managed by the

*BC Small Wetlands Association
Spallumcheen, BC*

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INTRODUCTION

The Pleasant Valley Wetland Heritage Park story began when the BC Small Wetlands Association entered into a Land Use Agreement with the owner of a Spallumcheen Valley hobby farm and excavated two small ponds to help mitigate flooding at spring run-off. A two-acre natural area developed around the wetlands and over the past three years, this has become a cultural educational park for the benefit of the community. We wanted to share our experience with other communities, and inspire more landowners to create a wetland park on their land.

In a Letter of Support from the Township of Spallumcheen, Mayor Christine Fraser wrote: “The Township is proud to have such an amazing park and wetland within our jurisdiction. The value of teaching and preserving the Secwépemc culture is without measure”.



The BC Small Wetlands Association produced this guide to encourage other communities to develop their own wetland park.

Permissions and requirements for constructing ponds and developing a park may be different in other communities.



FINDING A SUITABLE LOCATION

The first step is to select a location and get permission to use the land - many farms have waterlogged areas in spring and often these areas are not suitable for cultivation. You could offer to enter into a land use agreement with an owner to maintain the area as a wetland. A land use agreement provides a conservation group or Non-Profit Society access to construct or restore wetlands on private land and apply for funding to maintain it. Succession and continuity planning is an important aspect of a land use agreement – this will guarantee access to the site in perpetuity.

Looking beyond land titles you could research locations that may have been wetland in the past and find out if it is possible to restore the area. Ask people who are often out in the community to be freshwater detectives. Hikers, hunters, farriers, agricultural workers and bird watchers can look for wet areas, crop marks, indicator plants and soil.

HELP FOR DO IT YOURSELFERS

Most of our previous project experience is in restoration and stream bank remediation. Nobody on the team had actually been involved in constructing a wetland pond “from the ground down”. We deferred to the experts and carried out a lot of research before we started. Two guides that were very helpful and informative:

Wetland Restoration on Private Land: BC Wildlife Federation
Wetlands on my Lands: Ducks Unlimited

To download copies [click here](#)

WHAT IS THE WATER SOURCE FOR YOUR WETLAND?

Our site was essentially a flooded field with no other water source besides spring run off. As the site dried over summer, we wanted to find out the typical groundwater levels for the area and this proved to be a challenge. The Ministry of Forests, Lands and Natural Resources does not have data on local water tables and our local authorities told us there is no easy way to determine groundwater depth unless there is an existing well on the property or nearby. If your chosen site is not stream fed, you will need to dig test holes to find the groundwater level.

WHAT PERMITS WILL YOU NEED?

In British Columbia, contact Front Counter BC regarding permitting requirements under the Water Sustainability Act. A Section 11 application is required for work if the area is stream fed. A water license (conservation) is required if groundwater is going to be accessed by dugout



during the construction of a wetland. A well used as a water source must be registered and licensed. However, shallow excavation of an ephemeral pond created by spring run off is considered non-vested and does not require a licence. If the land is within an ALR, you will also need to contact the Agricultural Land Commission (ALC). They permit wetland construction that does not require the removal of materials from the site, or the introduction of soils and materials to site.

THE PARK COMES TO LIFE...



It is amazing how quickly biodiversity establishes through riparian planting and the introduction of native trees, shrubs and grasses and it is worthwhile taking the time to find out more about the area where your park is going to be located. You may discover as we did that there is a rich history of settlers, indigenous populations and changing landscapes. It was through research at the Museum

and talking to Secwépemc Elders that we discovered wetlands and forest existed here before logging commenced in the late 1800s.

Our location in the Spallumcheen Valley borders on the Splat's'in reserve, the most southern tribe of the Interior Salish Shuswap Nation. When the Shuswap and Okanagan Nation territories overlapped in this area thousands of years ago, hunters and gatherers roamed freely through the rich landscape. Secwépemc Elders have voiced their concerns over the impact of climate change on culturally important native plants that they still harvest. Soapberry, Huckleberry and Saskatoon all ripen at the same time making it difficult to utilize the berries before they spoil. There are fewer tules (broad leaf bulrush) as wetland areas are developed.

Inspired by what we learned, we wanted to create a historically devolved park and restore native trees and shrubs to the area, not only for the Secwépemc community but also as a valuable history/biology lesson for local students



OUR FOCUS IS ON YOUTH

The cultural ecological outreach we are developing at the park will address the need for indigenous youth at risk and others to gain employment and participate in traditional ecological knowledge programs that embrace their Secwepemc language and culture. Youth in our communities face multiple issues - fractured home lives for example can lead to drug use, bullying and low self-esteem. The outreach will enable youth to connect to their cultural roots through working in the park, participating in riparian planting, monitoring the wetland ponds and keeping journals of the birds, animals, amphibians, insects and native plants. They plant native grasses, trees and shrubs and learn how to propagate some of the culturally important native plants and seeds that no longer grow in the area. Our experience is that once youth become involved in the hands on work, they are eager to learn more. They will be able to adopt their own tree or shrub, returning often to the park to watch it grow over the years, sharing the experience with their friends.

COMMUNICATION

The youth in our community are often the best communicators - they network with their peers, their family and their community through social media and smart phones. They are our wetland ambassadors, greeting visitors and answering questions. Youth help to maintain a [carbon sequestration worksheet](#) on our website that measures carbon storage in tonnes. We can demonstrate that we are meeting and exceeding our carbon storage goals at the park and the worksheet has been widely shared with federal, provincial and other conservation organizations. We created interpretive signage for the native trees and shrubs in the park and these have become a very popular way of communicating Secwépemc traditions. The signs include both the English and Secwépemc names of the plants, trees and shrubs their cultural importance and traditional uses. A scannable QR code on each sign links to an information page on the Society website.



PROJECTS AND MORE PROJECTS

We quickly developed a long wish list of projects that we are undertaking as funding permits. These might provide some ideas for initiatives at your park:

- Planting native conifers including Lodge pole Pine, Douglas Fir and Western Red Cedar to create a small forest. We are also sourcing and planting culturally important shrubs that no longer grow in the area.
- In 2020 we created an “Edible Trees’ forest garden with Tree Canada, which is something you may want to explore in your community. Forest gardens have been grown for millennia, they are typically small with three compact layers of permaculture featuring large and small fruit trees, shrubs and perennials. The harvest, shared with the community, will include fruit, nuts, edible leaves, medicinal plant products, posts, materials for baskets, mulch, seeds and propagation materials.
- Youth are creating an inventory of the trees planted every year in the park and learning how to monitor carbon sequestration by trees, shrubs, plants and grasses, recording the results on a worksheet that calculates carbon storage by species, age and size.
- We will invite people to adopt a tree, shrub or berry bush and encourage them to visit at blossom time and harvest time to see how they have grown.
- Secwépemc Elders from the local Splats’in and Neskonlith communities are going to show youth how to create willow dolls, rush mats and sage smudge sticks.
- Youth will work with Splats'in crafters to make biodegradable seed paper fused with seeds from native plants in the park. The paper will make bookmarks, leaflets and invitations that can be planted.
- We will host a wetland workshop in 2022 with the BC Wildlife Federation. BCWF offers a 2.5-day Wetland keepers workshop to highlight the ecological importance of wetlands and they provide the tools and skills to community members to steward wetlands within their own backyards. BCWF provide staff and expert support to help coordinate and deliver the workshop.
- Youth will be assigned points in the park to survey and record species present and the area they covered in 1-meter-square quadrants. We will have a biologist and ethnobotanist assist in assigning the conservation value of native species in the park (how rare it is and how often encountered in a high-quality habitat) or wetness value (whether the plant is mostly in wetlands or uplands). Tracked in each quadrant over three years, it measures progress in restoration, such as possible increase in conservation and biodiversity values, decrease in invasive cover, or increase in "wet-loving" plants as well as wildlife species of interest.



HOW TO FIND FUNDING

There are a number of Federal, Provincial and NGO funding sources for wetland projects. Their program guides will help you determine if your wetland park project will fit their funding guidelines. Some funds are specific to regions and have stipulations for eligibility.

For example, the Habitat Conservation Trust Foundation do not support applications for funding from private landowners but a Not for Profit can apply if there is a land use agreement with the owner. The Fish & Wildlife Compensation Program funded by BC Hydro supports wetland restoration programs if they are within watersheds that have BC Hydro dams.

Our funding partners for wetland development, youth ambassadors and the cultural ecological outreach are:

Environment & Climate Change Canada Eco-Action
Habitat Conservation Trust Foundation - PCAF
Okanagan Basin Water Board - WCQI
Real Estate Foundation of BC
BC Community Gaming
Tree Canada
Township of Spallumcheen

COLLABORATION AND VOLUNTEERS

Over the past fifteen years, we have been the students, learning everything we needed to know about biodiversity conservation from Secwépemc Elders and Traditional Ecological Knowledge experts. We worked with Splots'in Yucwmenlúcwu (Caretakers of the Land) and with Bonnie Thomas of Neskonlith, daughter of Dr. Mary Thomas. Ethnobotanist Dr. Nancy Turner, Emeritus Professor at University of Victoria, was a close friend of Mary. Nancy provided a list of culturally important native trees and shrubs that are disappearing from the area. Nancy donated "Secwépemc People and Plants" to the Society, which is based on Mary's and other Elder's recollections. It has become an invaluable reference guide for restoration work in the park. Retired Provincial Biologist Marge Sidney provided expertise on how to create wetland ponds based on her extensive experience. We are eternally grateful to a group of hardworking volunteers from the Armstrong Spallumcheen Trails Society, who between them planted close to a hundred trees and shrubs. The Township of Spallumcheen installed a culvert and gate to create the park entrance and provided a small grant to assist with managing COVID-19 restrictions.



DEDICATION OF THE PARK

The park is dedicated to revered Secwépemc Elder Dr. Mary Thomas, who was, and remains, a powerful voice for educational programs and the application of traditional ecological knowledge.



Mary Thomas taught us that long before contemporary terms like “carbon footprint”, “green economy” and “sustainability” were in common usage, indigenous peoples believed in living in respectful balance with all life. Mary was always concerned about the environment and frequently said that prior to engaging in potentially harmful activities, we must all consider the long-term effects on the land, the water, the air, the animals and birds, and plants, and act accordingly.

OUR PARTNERS

We would like to acknowledge our funding partners who have been pivotal in enabling the BC Small Wetlands Association to develop the park and offer programs for youth and the community.



YOUR COMMENTS ARE WELCOME

We believe that over the coming years, we will meet and exceed all of our expectations of the park becoming an eco-tourism destination, an educational outdoor classroom for youth and a gathering place for the local community.

We would love to hear from other community organizations and answer any questions on our park. You can contact us at info@smallwetlands.com

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