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Executive Summary

Beginning April 1 2014, the BC Wildlife Federation’s Wetlands Education Program successfully delivered a series of workshops in the West Kootenays in order to deliver upon commitments made within the FWCP proposal: “Advancing Wetland Stewardship in the West Kootenays 2014” (Reference No: W-F15-22). The overarching goal of the workshops/initiatives is to build the capacity of West Kootenay residents to protect, enhance, create, and steward wetlands. The 2014 projects closely align with the FWCP’s Columbia Basin Riparian and Wetland Action Plan, including several of the initiatives occurring within the Slocan Valley and the Duncan-Lardeau (two FWCP priority areas).

56 unique participants attended the 2014 workshops and events, which included:

- a Wetlandkeepers workshop in Rossland (May 23-25);
- an Open House, which complimented the Rossland Wetlandkeepers workshop (May 24)
- a Wetland Restoration and Mapping Workshop in Meadow Creek (May 30-June 1)
- a Open House, which complimented the Meadow Creek workshop and helped communicate FWCP initiatives in the region to members of the public.

Other initiatives supported by FWCP in 2014-15, included support to the Slocan Wetland and Assessment Monitoring Program (SWAMP) and the provision of support to past participants for their wetland conservation projects.

As originally outlined in the 2014-15 proposal, the BCWF only intended to develop wetland restoration site designs, build community support for the wetland restoration projects, and enhance regional capacity in the 2014-15 fiscal year through the delivery of these projects. However, thanks to FWCP and other funders, BCWF managed to leverage additional funds to initiate many of the restoration works in early 2015 (i.e., on the Halleran Property and the Nellistjn Property). Furthermore, two of our partners were also successful in receiving funds to implement projects: Friends of Kootenay Lake (in relation to the Sunshine Bay Regional Park wetland project) and Rossland Society for Environmental Action (in relation to the North Jubilee Park Wetland Project – scheduled for 2015). Our 2014 workshops and related activities were highly instrumental in enabling these projects to proceed.
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1. Introduction

In comparison to many other ecosystems, the benefits from wetlands are exceptionally large relative to their size (MacKenzie and Shaw 1999). Based on one commonly referenced study, the market and non-market values of wetland goods and services (ex. climate regulation, nutrient cycling, and food production) are valued at $19,580 hectare/year (Costanza, et al 1997), which extrapolates to approximately $100billion/year in B.C. (MOE 2010). When total economic values are considered, wetlands often provide greater economic returns than when the land is converted for other uses (WRI 2005).

However, wetlands have been historically degraded and destroyed in low-elevation areas of the West Kootenay region from large scale developments (such as hydro-electric production, agriculture, diking, and transportation networks) as well as from residential growth (e.g., see Utzig and Smith 2011). Furthermore, remaining wetlands are at risk of degradation from human activities such as mud-bogging and the introduction/spread of invasive plants.

The Fish and Wildlife Compensation Program considers wetland conservation and restoration as a priority for the Columbia Basin and has developed a number of interim initiatives (Columbia Basin Riparian and Wetlands Action Plan (Draft) 2012). Other action plans in the Columbia Basin identify wetlands as a priority habitat for conservation/restoration (e.g., see Green et al. 2006). Continuing work from the previous year, in 2014 the BC Wildlife Federation’s Wetland Education Program (WEP) supported these initiatives by building the capacity of West Kootenay residents to protect, enhance and construct wetlands through the delivery of several workshops and events: a Wetlandkeepers and associated Open House in Rossland and Wetland Restoration and Mapping Workshop in Meadow Creek. WEP also continued to support the Slocan Wetland Assessment and Monitoring Program (SWAMP) in mapping wetlands in the Slocan Valley. Furthermore, restoration design was completed on Gerry Nellistijn’s property (Salmo) and the Sunshine Bay Regional Park (Harrop-Proctor), which resulted in wetland restoration.

Over 2.5 days, the Rossland Wetlandkeepers workshop educated participants on vegetation inventories, invertebrate sampling, bird monitoring, invasive species removal, and wetland health assessment methods. At the request of the Rossland Society for Environmental Action, the workshop had a special focus on wetlands at North Jubilee Park and Centennial Park and, more particularly, how they could be restored to healthier, better functioning states. Restoration design exercises were led by wetland restoration specialist Tom Biebighauser. On the second evening, BCWF hosted an open house centred on the benefits of wetland restoration.

In Meadow Creek, a Wetland Restoration and Mapping Workshop was held across 2.5 days. Participants learned how to assess and map wetlands, and how to identify wetland restoration opportunities. Furthermore, they were taught various methods of wetland restoration and how to design a restoration project. In Fall 2014, BCWF secured funding to initiate restoration works on the Halleran property which was completed in March 2015 as part of phase 1.

In addition to the delivery of these two workshops, the BCWF provided support to past participants who were involved in 2012 and 2013 workshops. The two largest initiatives were restoration design prescriptions provided at the Sunshine Bay Regional Park (Kootenay Lake) and the Nellistijn property (Salmo). Restoration activities subsequently occurred on both sites within 2014-15.

This report provides further details to the above projects, their impact, and future steps to be taken.
Goals and Objectives

1. Goal: Through Wetlandkeepers Workshop: increase community capacity to protect, enhance, restore, and steward wetlands in the Rossland area.

Objective: Train 10-25 community members during the delivery of a 2.5 day Wetlandkeepers workshop in Rossland, BC, to collect baseline inventory information, learn about stewardship techniques, and increase support for a proposed project at North Jubilee Park

2. Goal: Through Wetlands Restoration and Mapping Workshop: increase community capacity to protect, enhance, restore, and steward wetlands in the Duncan-Lardeau area.

Objective: Support the restoration of wetlands on Nature Trust of BC Property and the Halleran Property through wetland design and raising awareness. Train 10-25 individuals during the delivery of a 2 day Wetland Restoration and Mapping workshop. Participants will learn how to assess wetlands, map them with GPS units, and about restoration techniques

3. Goal: Enhance capacity of West Kootenay residents to conserve and restore wetlands

Objectives: Work with past workshop participants and other community members to assess a minimum of 5 wetland sites in the region for their restoration needs and provide advice and actionable measures.

4. Goal: Increase wetland-related private landowner collaborations in the Salmo Watershed

Objective: Develop a restoration plan for Gerry Nellijstín’s property to propose as 2015 works, and a communications plan to connect with other landowners in Salmo Watershed.

5. Goal: Enhance capacity of Slocan residents to prioritize wetlands in the Slocan Valley for conservation and restoration.

Objective: Participate in 2 to 4 advisory meetings with SWAMP to provide resources and share insight from around BC; publish report on progress to disseminate learning outcomes and transferable techniques.

Study Area

All projects and workshops were held in the West Kootenays. Below are GPS locations of related workshops and events, with descriptions of field locations when appropriate.

- Wetlandkeepers, Rossland
  - North Jubilee Park: 49.082525, -117.797043
    - Historically a wetland, North Jubilee Park now consists of a sports field and community garden. According to residents, people have been unsuccessfully attempting to drain the remaining wetland for a number of years. This is a highly visible site with regular traffic and hosts amphibians and nesting Killdeer. The Rossland Society for Environmental Action wishes to restore the remaining wetland.
  - Centennial Park: 49.076199, -117.815273
- A wetland surrounded by residential housing, a RV Park, BMX bike park, baseball field, and historical mining sites. Motorized vehicles and biking has degraded a portion of the site and created erosion issues. A mix of marsh and swamp, the site has high potential for restoration of wet meadow habitat.

- Open House, Rossland
  - Seven Summit Learning Centre: 49.076528, -117.794228

- Wetland Restoration and Mapping Workshop, Meadow Creek
  - Halleran Property: 50.233113, -116.983460
    - Historically a floodplain/wetland complex, the Halleran property has been modified by stream channelization, dyking and levelling for agricultural use. Formerly a diversity of wetland types, the site is currently a low-diversity wet meadow at high water levels only. Frequented by Grizzly Bear, Elk, Caribou, Western Toad, and Olive-sided Flycatcher, restoration of wetlands on this site promises to have high value. 8 sites were planned to be restored.
  - Nature Trust of BC Property: 50.189812, -116.940746
    - Irene Manley of FWCP identified this property as a candidate for restoration. A former farming site, a number of potential restoration wetlands were designed.

- Site prescriptions
  - Nellistijn Property: 49.239989, -117.239253
    - Adjacent to the Salmo River, this private property consists of degraded floodplain due to dyking activities. A number of potential wetland restoration sites were identified. The property will provide a model within the Salmo watershed for private land wetland restoration.
  - Sunshine Bay Regional Park: 49.605217, -117.043381
    - An ephemeral wetland that dries early, leading to the death of amphibian offspring. The site shows evidence of historical draining. In partnership with FWCP, The Friends of Kootenay Lake, and the Harrop Riparian Society, BCWF and wetlands expert Tom Biebighauser designed a restoration plan for the site.
  - KP Park: 49.195971, -117.274418
    - A 2013 BCWF restoration project. A stormwater pond created next to Wilde Creek in KP Park, Salmo, BC.
  - Kinnaird Elementary: 49.289219, -117.653622
    - A 2013 BCWF restoration project. A school yard wetland created at Kinnaird Elementary, Castlegar, BC.
  - Tulaberry Organic Farms: 49.551271, -117.672484
    - A 2013 BCWF restoration project. A private property restoration project along a side-channel of the Little Slocan River.
  - Centennial Park: 49.077122, -117.818496
    - A site visited during the Rossland Wetlandkeepers workshop. A wetland meadow and swamp complex. Some potential for Shallow water wetland creation and erosion control mitigation.

Methods

Methodologies for soils, vegetation zonation, plant mapping, plant/wildlife inventories, invasive species removal, project planning, land owner contact and dialogue techniques are primarily based on the Wetlandkeepers Handbook (Southam and Curran 1996). However, participants were also introduced to additional methodologies where available/appropriate, in order to harmonize with well-established protocols in BC. These include evaluation methodologies to assess wetland health using BCWF’s Wetlandkeeper Long Form Surveys (developed in 2011), rapid wetland assessment forms (Ambrose et al. 2004), and the BC CDC Conservation Evaluation Form (RISC 2006). Furthermore, participants learned how to identify wetland ecological communities using the Mackenzie and Moran (2004)’s Land Management Handbook. When Tom Biebighauser was not present, wetland restoration and construction
techniques drew upon Biebighauser (2011). A Marsh Bird Monitoring Protocol, being piloted in BC by the Canadian Wildlife Service, was also used at our Wetlandkeepers workshop in Rossland (i.e., at the Oasis Wetland north of Trail, BC).

Further details for each workshop and methodologies are provided below:

**Wetlandkeepers (Rossland, May 23-25)**

A wetlandkeepers workshop was held from May 23 to 25 in Rossland. Through a number of in-class and hands-on activities, participants learned a variety of skills that will allow them to steward wetlands in their communities. Topics included: wetland classification, vegetation surveying and identification, soil sampling, mapping using GPS units, invasive species identification and removal techniques (led by Jennifer Vogel of the Central Kootenay Invasive Plant Committee), and marsh bird monitoring (With local birder Ed Beynon). At the request of The Rossland Society for Environmental Action, the workshop also included basic, hands-on wetland restoration design, which was led by wetland restoration expert Tom Biebighauser.

A complimentary open house for the public was held on the 24th to raise awareness on the importance of wetland restoration and the potential for restoration at North Jubilee Park.

**Wetland Restoration and Mapping Workshop (Meadow Creek, May 30-June 1)**

A Wetland Restoration and Mapping Workshop was held from May 30 to June 1 in Meadow Creek. Through a number of in-class and hands-on activities, participants learned a variety of skills that will allow them to classify existing wetlands, identify potential restoration sites, design restoration projects, and use mapping in the process. Topics included: wetland classification, vegetation surveying and identification, soil sampling, mapping using GPS units, invasive species identification and control measures (led by Jennifer Vogel of the Central Kootenay Invasive Plant Committee), waterfowl design considerations (led by Bruce Harrison of Ducks Unlimited) and a number of restoration techniques (led by wetland restoration expert Tom Biebighauser). Participants received hands-on training using a number of restoration tools, such as rods and levels, and clinometers. Sites that would be candidates for restoration were used by participants to design restoration projects on the Halleran property and on two Nature Trust of BC properties.

**Slocan Wetland Assessment and Monitoring Program**

In 2013-15, SWAMP has been using a wetland survey plot form that is largely based on the Land Management Handbook’s 25 “Describing Terrestrial Ecosystems in the Field” and 52 “Wetlands of BC: A Guide to Classification”. The BCWF worked with the lead consultant, Ryan Durand, to integrate a modified version of this form as a template for plot evaluation to be used on the Community Mapping Network’s BC Wetlands Atlas. Supplementary to the survey plot form that describes existing site parameters, the BCWF developed an online form for restoration and maintenance considerations, based on forms developed by restoration specialist Tom Biebighauser, that can also be publically displayed on the BC Wetlands Atlas. It is hoped that this latter form will enable community groups to better assess projects for maintenance and restoration considerations.
Results

Wetlandkeepers (Rossland, May 23-25)

17 people participated in the Rossland Wetlandkeepers workshop. Testimonials from 2 participants can be seen below. Restoration designs for 3 wetlands were provided to the Rossland Society for Environmental Action, who used it in their North Jubilee Park Wetland Feasibility Study. The workshop, open house, and an associated meeting with city staff were instrumental in garnering support from the City to approve the restoration project in early 2015. The Rossland Society for Environmental Action recently announced that they also successfully received funding to restore the wetland at North Jubilee Park in 2015.

A number of other sites were designed at Centennial Park, which the Rossland Society for Environmental Action also hopes to restore in the future. The open house was attended by a number of Wetlandkeepers participants as well as 13 additional residents.

“This work experience & advice were invaluable – hard to get this information from reference material.”

-Workshop participant

“Excellent effort made to relay a HUGE amount of information in a short time to a group of individuals at various levels of education. Well done!”

-Workshop participant

Wetland Restoration and Mapping Workshop (Meadow Creek, May 30-June 1)

26 people participated in the Wetland Restoration and Mapping Workshop in Meadow Creek. The BCWF also supported an adjoining open house on the Saturday to discuss the wetland restoration project and other FWCP activities that were occurring on Nature Trust Property in the area. Testimonials from 2 participants of the workshop can be read below. Wetland Restoration designs for the Nature Trust of BC property and Halleran property were developed. In October 2014, the BC Wildlife Federation was successful in acquiring financial support for phase 1 of a multi-year restoration project on the Halleran Property. Phase 1 was completed by March 31st, 2015. Four designs were developed during the Spring 2014 workshop for the Halleran property and were used during restoration activities in January 2015 where 5 wetlands were restored (with planting and installation of wildlife boxes occurring in March 2015).

Wetlands on the Halleran property in May 2015. The sign displays the FWCP logo.
“Very well put together. [The workshop] was structured enough so we were constantly learning and doing activities but not so much that changes to the schedule were inhibited. There was a welcoming atmosphere, both with the people who attended and the coordinators. Thanks Neil and Jason! This was an awesome workshop! And thanks Tom! Loved your enthusiasm.”

-Workshop Participant

“…[the workshop] was very informative- even coming from an environmental studies/fisheries background, wetlands have always been a mystery, and this workshop really helps to clarify many things.”

-Workshop Participant

Assisting Past Participants

- Sunshine Bay Regional Park:
  - An ephemeral wetland that dries early, leading to the death of amphibian offspring. The site shows evidence of historical draining. In partnership with FWCP, The Friends of Kootenay Lake, and the Harrop Riparian Society, BCWF and wetlands expert Tom Biebighauser designed a restoration plan for the site.

- KP Park:
  - A 2013 BCWF restoration project. In May 2014, a plant list and prescription was provided to the City who had funding for further planting of the riparian area.

- Kinnaird Elementary:
  - A 2013 BCWF restoration project. In 2014, a site visit occurred to check on plant survival success and any maintenance issues and provide any recommendation to partners. The site had high plant survival. BCWF is developing school based curriculum through other grants so children will increase the benefit of this school yard wetland.

- Tulaberry Organic Farms:
  - A 2013 BCWF restoration project. In 2014, a site visit occurred to check on plant survival success and any maintenance issues. No issues were identified, and plant survival success was deemed high.

- Centennial Park:
  - The site was visited during the Rossland Wetlandkeepers workshop with Tom Biebighauser to assess the site for potential restoration opportunities. There were upstream erosion concerns due to offroad vehicle use causing headcuts. Some opportunities exist for stabilizing the headcuts and these suggestions were passed along to our partners Rossland Society for Environmental Action.

Nellistijn Property

With support from Irene Manley (Ministry of Forests, Lands, and Natural Resource Operations) and Tom Biebighauser (Wetland restoration specialist), the BCWF designed 3 potential wetlands in Spring of 2014 to be restored on the Nellistijn property. In the Summer of 2014, property owner Gerry Nellistijn managed to secure in-kind support from a regional lands reclamations branch of the Provincial government to remove excess mineral soils on his property to be used on a nearby reclamation site. Some of the excess soil was removed on the areas where wetland sites were designed. In the Fall, BC Wildlife Federation received additional funds from the Federal Government’s National Wetlands Conservation Fund to proceed with the wetlands restoration phase of the project, and restoration works were completed in January and March 2015. Some modifications to the restoration designs developed in Spring 2014 were required, as the site had been modified due to soils removed in the Summer, however the site was further enhanced for wildlife attributes.

In collaboration with the Salmo Watershed Streamkeepers Society, a 12 page booklet is being published in Spring 2015 to communicate the benefits of wetland restoration to private landowners in the Salmo watershed. It will be available in April for distribution.
Slocan Wetland Assessment and Monitoring Program Support

In 2014-15, BCWF took an advisory role during steering/technical advisory committee meetings to support the Slocan Wetland Assessment and Monitoring Program (SWAMP). A separate application to FWCP will describe this project in detail that was administered by local stewardship groups (i.e., Slocan River Watershed Society, Slocan Lake Stewardship Society, Slocan Solutions Society). In addition to the advisory role, BCWF also supported the project by contacting resource specialists to help publish their mapping initiative on the Community Mapping Network of BC Wetlands Atlas in order to make it publically available. Resource Specialists were retained to make improvements to the Atlas’s online forms so that members of SWAMP (and other conservation groups in the region) could upload their data to the form with fields consistent with provincial standards (i.e., based on Land Management Handbook (LMH) 25 Describing Terrestrial Ecosystems in the Field and LMH 52 Wetlands of BC: A Guide to Classification). A wetland restoration and maintenance design form was also generated on the BC Wetlands Atlas (based on Wetland Restoration Specialist’s Tom Biebighauser’s wetland design forms). The SWAMP initiative is a unique and leading example of how citizen based groups are able to work alongside professionals to map wetlands at a watershed scale and involve community participation, and BCWF is showcasing this initiative in other regions of BC (for example: it was highlighted to Boundary Region and Okanagan Region in 2014-15). There are plans to showcase as a feasible model within the Elk River Watershed, east shore communities of Kootenay Lake, and Squamish River Watershed in 2015-16.

Discussion

BCWF’s Wetlands Education Program continued its support in the Columbia Basin in 2014, and was in line with a number of FWCP priorities, as outlined in the Columbia Basin Riparian and Wetland Action Plan, including:

- "restoring degraded wetlands and creating ‘new’ wetlands are seen as key [Priority 1] habitat actions”. The WEP provided support towards addressing these priority actions through supporting the restoration of wetlands via design prescriptions in Harrop-Proctor, Salmo, and Meadow Creek (all of which have resulted in the restoration of wetlands and have high potential for additional restorations nearby). Priority 1 also includes the desire to “Contribute to wetland/riparian land acquisition/covenant opportunities as they arise”. To address this, WEP developed a draft landowner contact/communication booklet for the Salmo Watershed that contains information on the importance of wetlands, watersheds, and riparian habitat; resources for landowners; as well as information and contacts for BCWF and the Salmo Watershed Streamkeepers Society should a landowner wish to pursue wetland creation/restoration/protection on their property. In addition, the landowner stewardship agreement that was completed in 2013 is being modified into a legally binding form, as a middle ground solution, to be used in appropriate future projects.

- "Identify[ing] small wetlands outside focal areas for possible protection and management." (Priority 2). BCWF supported this by providing wetland identification and wetland GPS mapping training at the Rossland Wetlandkeepers and Meadow Creek Wetland Restoration and Mapping Workshop. BCWF also supported the Slocan Wetland Assessment & Monitoring Project (SWAMP), which has mapped 9 wetlands in the Slocan Valley.

- "Identify opportunities to create new riparian and wetland habitat".

The 2014 projects will continue to receive support in a number of ways. Stewardship groups and individuals that attended workshops will receive support to attain their wetland stewardship goals (e.g. through grant writing or advice). BCWF will continue to support the North Jubilee Park Wetland project and SWAMP. Where appropriate, BCWF will continue to provide a supportive role and provide advice on
the restoration sites that were a result of 2014 programming. The Meadow Creek restoration project will include the restoration of an additional 4 wetlands in 2015.

Recommendations

BCWF’s Wetland Education program strongly believes that training and providing support to communities and local stewardship groups can increase the capacity for improved conservation and protection actions. The workshops have fostered a community of practitioners and have increased the capacity of the region to be more self-reliant with long lasting benefits. These community members are expected to not only be stewards of local wetlands, but will also help identify new locations for future wetland projects. It is the Wetland Education Program’s recommendation that the FWCP and other organizations continue to invest in similar capacity building programs in the Columbia Basin to build upon the momentum that the Wetlands Program instigated through the delivery of 2012, 2013, and 2014 projects.

Acknowledgements

We would like to thank the following financial supporters:
- Fish and Wildlife Compensation Program on behalf of its project partners BC Hydro, the Province of BC, Fisheries and Oceans Canada, First Nations and the public. (All workshops discussed)
- Columbia Basin Trust (All workshops discussed)
- Government of BC - Community Gaming Grant: (All workshops discussed)
- Wildlife Habitat Canada (All workshops discussed)
- Real Estate Foundation of BC (Rossland Wetlandkeepers)
- Shell (All workshops discussed)
- The Barnet Rifle Club (All workshops discussed)

We would also like to thank the following project partners for their support:
 References


Confirmation of FWCP Recognition

FWCP’s logo was displayed before the related workshops on all advertisements, including posters and the Eventbrite pages. During WEP workshops the BCWF recognized the financial support of the FWCP on participant packages, schedules, and in presentations.

Photos of workshops (recognition in album description):
Rossland Wetlandkeepers: https://www.flickr.com/photos/bcwfwep/sets/72157644683893078/
Meadow Creek Restoration Workshop: https://www.flickr.com/photos/bcwfwep/sets/72157645087843872/

Furthermore, FWCP’s financial support was accredited in the following publications.

Figure 1. Advert from the May/June 2014 Issue of Outdoor Edge Magazine thanking FWCP
BCWF Wetlands Education Program

Wetlandkeepers in Rossland, B.C.

The BCWF Wetlands Education Program brought the popular Wetlandkeepers course to Rossland, B.C. May 23rd to 25th, 2014. The two and a half day course covered a diverse range of topics including wetland mapping, hydrology, marsh bird monitoring, wetland restoration design, and invasive species removal.

Tom Bibbighasser, a renowned wetlands expert from the Center for Wetlands & Stream Restoration in the U.S., spoke about wetland restoration and ran the group through a restoration design exercise. Tom has restored over 1400 wetlands across North America and brought significant experience and expertise to the event.

Wetlandkeepers was offered in partnership with the Rossland Society for Environmental Action and received support from the Barnett Rifle Club, BCWF, Columbia Basin Trust, Fish and Wildlife Compensation Program, Province of B.C., Real Estate Foundation of British Columbia, and Shell Canada.

Photos include highlights of the workshop and visits to sites receiving continuing support since 2013.

Figure 2. Article from the July/August 2014 issue of Outdoor Edge Magazine thanking FWCP.
BCWF Wetlands Education Program
Summer 2014 Programming

The spring and summer of 2014 have been a very busy one for the BCWF Wetlands Education Program. WEF Coordinator Neil Fletcher and his staff have been travelling across B.C. for the past couple of months spreading awareness and providing expert information about conserving our province’s precious wetlands and water resources. Highlights of the 2014 workshop schedule so far include Wetlandkeepers courses in Rossland and Prince George, a Restoration Design / GPR workshop in Meadow Creek, and a Working Group workshop in Grand Forks.

Wetlandkeepers Workshop, Rossland, B.C.

WEF visited Rossland, B.C., at the end of May for a two-and-a-half day workshop attended by seventeen people. The event, which was offered in collaboration with the Rossland Society for Environmental Action, featured a number of fascinating guest speakers including Ed Beynon, West Kootenay Naturalist and local bird expert Jen Vogel from the Central Kootenay Invasive Plant Committee; and world-renowned wetland restoration expert Tom Biebigauar. The goal of the workshop was to raise awareness and interest for a proposed wetland restoration project at North Jubilee Park. The project also supported restoration considerations for a large wetland complex in Centennial Park.

Restoration Design Workshop, Meadow Creek, B.C.

Meadow Creek, B.C. played host to a special Wetland Restoration and Design Workshop from May 30th to June 1st. Twenty-six people took part in the event, with some travelling from as far away as Vancouver and even Salt Spring Island to attend the event. In addition to expert speakers Tom Biebigauar and Jen Vogel, the workshop also featured Bruce Harrison, Lead Researcher for Ducks Unlimited – B.C. The workshop featured an enormous amount of practical information on wetland restoration, with participants helping to design wetlands on properties owned by the Nature Trust and Terry and Michele Halloran.

Working Group Workshop Grand Forks, B.C.

On June 3rd, WEP facilitated an intense one-day workshop in Grand Forks that was focused on strategies to pursue wetland conservation opportunities in the Regional District of Kootenay Boundary. Guest speakers at the workshop came from a variety of backgrounds and included Adam Patterson from Ecoscape Environmental Consulting, who spoke about outcomes from Phase I of the Okanagan Wetland Strategy; Ryan Durand of Durand Consulting, who shared details of the Sicamous Wetland Assessment and Monitoring Project; and Deborah Carlson of West Coast Environmental Law, who discussed legal tools and policies within B.C. Several key priorities were identified among the group as next steps towards conserving wetlands in the district.

The Working Group Workshop was offered in partnership with the Regional District of Kootenay Boundary.

Figure 3. Sample from an article in the September/October 2014 issue of Outdoor Edge thanking FWCP
Figure 4. Sample of article posted in The Nelson Daily regarding the Meadow Creek restoration project, which was supported by FWCP. The article is available at:

http://thenelsondaily.com/news/largest-private-wetland-restoration-project-bc-opens-meadow-creek-36988#.VO0HPi5i8q4
Figure 5. A sample poster advertising a FWCP-supported workshop.
Figure 6. An Eventbrite page for a FWCP-supported workshop.
Figure 7. Sample of a webpage for a FWCP-supported program.
Winter offers unique opportunities and challenges for our restoration team (Tom Blebighauser, Robin Annschild, and Tony McLeod) who are braving the below zero temperatures to create wetlands in Meadow Creek, BC. The frozen ground gave us access to an otherwise saturated field, but we had to clear snow before the wetland could be created. Property owners, Terry and Michele, have waited nearly a decade for this moment. They hope to enhance habitat for Western Toad, Grizzly Bears, and other wildlife species. The project will compliment wetland enhancement plans for neighbouring Nature Trust of BC property. Phase 1 of this project could not occur without the financial support from Environment Canada, Fish and Wildlife Compensation Program, Columbia Basin Trust, Wildlife Habitat Canada, and BC Wildlife Federation.

Figure 8. Sample of BCWF Wetlands Education Program Facebook post thanking FWCP
WHERE THERE’S A WILL THERE’S A WETLAND

Locals are giving Mother Nature a hand and are learning how to build wetlands in the Columbia Region with the help of Tom Biebighauser, an expert when it comes to creating wetlands.

The wetlands in the Columbia Basin have been negatively impacted as a result of the construction of the dams and as a result, they are one of the priority areas for action in our region,” says FWCP Columbia public representative Grant Tompkins who attended a recent wetland workshop in Meadow Creek, hosted by the Wetland Education Program of the BC Wildlife Federation, with funding provided by the FWCP and others. “It’s a perfect fit for the FWCP to be behind both the stewardship of existing wetlands, and the construction of new ones; and it’s great to see the BC Wildlife Federation funding training workshops that have such practical and tangible results.”

Biebighauser was kept extremely busy during his time in the Kootenay region, identifying sites with drainout and filled wetlands that can be restored to functioning wetland habitat.

In total, nearly 30 participants attended the two 2-day workshops. During the workshops and the associated wetland tour, approximately 25 potential wetlands were mapped on private property, crown land, and conservation properties.

Ministry of Forests, Lands and Natural Resource Operations wildlife biologist Irene Marley, who attended one of the workshops and organized the wetland tour with Biebighauser, has high hopes.

“There are certainly plenty of opportunities for wetland projects in the Columbia Region. The beauty of Tom Biebighauser’s approach is that he is world-renowned for cost-effectively restoring degraded sites to properly functioning wetlands that are incredibly rich for many wildlife species.”

Figure 8. Issue No 3. Fall 2014 of FWCP News featured an article on the Wetland Design and Mapping Workshop.
Appendices

1. Maps of restoration projects:

1. Map of Halleran property and shallow water wetlands restored (in green) during Phase 1.

2. Financial Statement of Accounts—A completed pdf template is attached as separate document.