



Land Stewardship Grants

Year 2 Reports
2017-20 Funding Cycle

Introduction

In 2008, the Habitat Conservation Trust Foundation (HCTF) was awarded a \$9M endowment contribution from the Province of British Columbia to fund operations and maintenance activities on Conservation Lands. \$3M of the endowment was allocated for activities on private lands managed by non-profit organizations. The first intake of this program occurred in late 2016 and 12 grants were awarded to be used from April 2017 to March 2020. More information about this grant program is available [here](#). This document provides copies of all reports submitted for the 2018-19 fiscal year (Year 2 of 3). The table below lists all reports included plus the total amount spent to date for each project (Year 1 & 2). Note that the detailed financial reporting is removed for confidentiality purposes. If you have any questions about the Land Stewardship Grant program, please contact Christina Waddle, Conservation Specialist at 250-940-3011 or christina.waddle@hctf.ca.

2018-19 Land Stewardship Grant Reports submitted for Year 2

Project #	Project Name	Organization	Amount Spent to Date (Year 1 & 2)
1-649	Blackburn Nature Reserve	Salt Spring Island Conservancy	\$17,138.35
1-650	Cowichan Garry Oak Preserve	The Nature Conservancy of Canada	\$15,615.74
1-678	Settlement Lands	Denman Conservancy Association	\$11,679.82
4-548	Elk Valley Heritage Conservation Area	The Nature Conservancy of Canada	\$15,719.46
5-288	Elkin Ck Nature Preserve	Valhalla Foundation for Ecology	\$28,000.00
5-289	Scout Island	Williams Lake Field Naturalists	\$12,541.94
8-414	Quintal Floodplain	Ducks Unlimited Canada	\$29,776.00

1-649

Blackburn Lake Nature Reserve



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

HCTF Project Number: 1-649

Please refer to the Land Stewardship Grant Year 2 Reporting Instructions when completing this report.

This report must be completed in conjunction with the Activities and Expenditures Report (spreadsheet) customized for your project based on your proposal. This spreadsheet will be emailed to you.

1. PROJECT INFORMATION

Project/Property Name: Blackburn Lake Nature Reserve

Project Leader Name: Christine Torgrimson

Name of Organization: Salt Spring Island Conservancy

Date of Report: March 26, 2019

Author of Report (if different than Project Leader): (same as project leader)

Name of Organization: Salt Spring Island Conservancy

Contact Information: Christine Torgrimson, christine@saltspringconservancy.ca, 250-538-0318

2. SUMMARY

Provide a general description of project work completed in Year 2 (500 words max).

In year 2, SSIC ensured survivorship of over 11,000 native plants transplanted into restored wetland areas in fall 2017, by watering and weeding in those sites in summer 2018. In late 2018 and early 2019, several dozen volunteers collected seeds in the reserve and planted about 2,930 plugs and 50 potted divisions in the nursery, collected and planted 438 woody cuttings in the nursery, and installed 645 wetland and 1,072 upland plants in the central reserve, most of which were cultivated from seeds and cuttings in previous years. Throughout the grant year, several thousand plants were shaded and watered in the native plant nursery. Photopoint stations were used by staff and a volunteer to monitor changes at wetland restoration sites over time. Volunteers helped monitor wildlife cameras to assess wildlife use in restored wetland habitats and other areas of the reserve, with twelve social media posts highlighting activity from Great Blue Herons, Bald Eagles, Red-legged Frogs and other local wildlife. Trail counters were monitored to help guide ongoing management and carefully direct public use. The nature reserve management plan was updated via matching funds and volunteer time, integrating all portions of the reserve acquired in 2013-2017 into one plan (32.6 acres, 5.8 acres, 7 acres); including all restoration work completed through 2017, and delineating protected areas and public access areas. Invasive species removal was completed to maintain wildlife habitat (targeting Scotch Broom,



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Hawthorn, Holly and various thistles), with approximately 8 cubic metres of plant biomass removed throughout 38 acres of the reserve. Yellow Flag Iris was also targeted with approximately 6 cubic metres of rhizomes removed from Hitchcock Pond and a 60m segment of Hitchcock Creek at the outlet of the pond. Volunteers and a technician engaged in trail and reserve maintenance to help guide the public along trails.

3. COMMUNICATIONS

Project Outreach Activities: Provide information on any outreach activities during the year that directly relate to the project.

Project activities were communicated via SSIC's social media page (Facebook) and our website. The public's reaction to our posts showed positive public interest, as many of the posts highlighted interesting local wildlife using the reserve. Project activities also were communicated in several PowerPoint presentations during the year, specifically at the 2018 Wetlands Institute (BC Wildlife Federation) and a presentation to staff and board members of Nature Conservancy Canada. HCTF support was mentioned in both presentations.

Social Media Posts: Garter snakes, Black-headed Grosbeak (x2), Red-legged Frog, Coopers Hawk, Deer, general wildlife, Great Blue Heron, Bald Eagles (x2), Barred owl, & Merlin.

Communicating about HCTF: Provide information on any activities specific to communicating about HCTF undertaken during the year.

HCTF was recognized in SSIC's social media posts, our Funders page on our website, and in PowerPoint presentations.

Media Coverage: Provide a list of any articles or media coverage during the year.

One in-depth article in the Gulf Islands Driftwood (Oct. 16, 2018) featured the four years of restoration at the reserve. As it did not specifically reference any HCTF activities included in this grant, HCTF was not referred to in this particular article.

4. PHOTOS

Include a minimum of three photos as part of your report, attached as separate JPG files. List the filenames below, plus a description of each photo.

Photos 1 – 3: These show the workshop we held to teach community members how to propagate several species of native plants by taking cuttings. The cuttings will be used for future restoration on our nature reserves.

Photo 1: Cuttings Workshop 1

Photo 2: Cuttings Workshop 2

Photo 3: Cuttings Workshop 3



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Photos 4 - 6: These are a sample of the photopoint monitoring that was done by volunteer Simon Henson. They show the progress of the restoration at one of the restored ponds at the Blackburn Lake Nature Reserve.

Photo 4: Restored wetland progress photo, Aug 2016

Photo 5: Restored wetland progress photo, July 2017

Photo 6: Restored wetland progress photo, Sept 2018

Photos 7 -8: These show the workshop we held to teach community members how to propagate several species of native plants by seed. The resulting plants will be used for future restoration on our nature reserves.

Photo 7: Seed Planting Workshop 1

Photo 8: Seed Planting Workshop 2

5. ADDITIONAL DETAILS

Provide a description of any materials and supplies purchases funded by HCTF that are considered capital assets. See Year 2 Reporting Instructions for information on Capital Assets.

There were no Capital assets (over \$1000) expended in Year 2 of this project.

Provide any other information you wish to share with HCTF.

Bridge repair is planned for Year 3, as is further signage development.

6. SUBMIT YOUR GRANT REPORT

- Save this report using the Project # and grant year in the filename. Example: 1-123 Grant Report 2018-19
- Please send your Year 2 Grant Report to Christina Waddle, Conservation Specialist at christina.waddle@hctf.ca or by fax to 250-590-6614.
- Your report should include the following:
 - Completed Year 2 Grant Report Form (this document)
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 - Photos as JPG files
 - Copies of any print media articles (or provide links in report)
 - Invoice (optional)

1-650

Cowichan Garry Oak Preserve



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

HCTF Project Number: CAT18-4-548

Please refer to the Land Stewardship Grant Year 2 Reporting Instructions when completing this report.

This report must be completed in conjunction with the Activities and Expenditures Report (spreadsheet) customized for your project based on your proposal. This spreadsheet will be emailed to you.

1. PROJECT INFORMATION

Project/Property Name: Cowichan Garry Oak Preserve (CGOP)

Project Leader Name: Hillary Page

Name of Organization: Nature Conservancy of Canada

Date of Report: April 1, 2019

Author of Report (if different than Project Leader): Virginia Hudson

Name of Organization: Nature Conservancy of Canada

Contact Information: Virginia.Hudson@natureconservancy.ca

2. SUMMARY

Provide a general description of project work completed in Year 2 (500 words max)

In 2018-2019, NCC hired an external ecologist (Dave Polster) to write a restoration plan for CGOP in order to help guide restoration work on the property. Dave’s knowledge and background related to Garry Oak ecosystems proved to be valuable in helping to better understand plant community delineations and potential approaches to management on the landscape. Findings of this report concluded that major barriers to restoration of native plant communities on the landscape continue to be related to historical soil compaction as well as the cessation of regular fire regimens.

The fire season of 2018 once again created challenges and barriers to conducting a prescribed burn at the property, despite this, ongoing efforts were made to remove invasive vegetation and restore native Garry Oak plant communities. This work was achieved through weekly restoration activities and maintenance programs that included mechanical removal of invasive vegetation (mowing, shears, hand pulling) as well as sheep grazing in controlled enclosures with deer fencing. In 2018-2019, approximately 20 acres were cleared of invasive vegetation, 2 acres were grazed by sheep, 1.5 acres were planted, 4 acres were seeded and 1 acre was mowed to combat snowberry.



Conservation volunteers guided by stewardship staff, continued to maintain the native plant nursery on site through regular weekly “Weedy Wednesday” programs. Volunteers propagated, weeded, maintained and planted out cultivated seedlings and seeds on site where appropriate. Stewardship staff continued to oversee research, property tours and engagement programs on site with a number of researchers returning for another busy field season in 2019. NCC staff coordinated and hosted another successful In Bloom Wildflower Festival on site in April, 2018, with over 300 visitors in attendance that day, providing an opportunity for the public to experience the deep-soil Garry Oak meadows and learn about conservation efforts in this sensitive and rare ecosystem. The Cowichan Valley Naturalist Society (CVNS) continued to monitor and assist a small western bluebird breeding population on site. The CVNS installs and maintains bluebird nest boxes, monitors bluebirds from spring to fall and tags young where appropriate in order to keep help keep track of individuals through a dedicated group of local volunteers.

3. COMMUNICATIONS

Project Outreach Activities: Provide information on any outreach activities during the year that directly relate to the project.

As with Year 1 of this project, the weekly conservation volunteer event “Weedy Wednesdays” were held continuously throughout 2018 with only a few exceptions. A dedicated group of approximately one dozen Cowichan residents make up the majority of the dedicated volunteers who participate in these weekly stewardship actions, and their numbers are periodically supplemented by newcomers. The volunteers help with ongoing site maintenance, including seed collection, native plant propagation and invasive species removal.

In April 2018 NCC hosted our annual In Bloom Wildflower Festival. This event brings community members from the Cowichan Valley (and beyond) to see the blooming of local endemic species of wildflower that are representative of the Garry oak ecosystem. This festival also offers community members the chance to explore the impacts and effects of conservation first-hand from NCC staff and local experts at interactive information stations set up throughout the preserve. A series of Nature Talks engage visitors and explain some of the processes involved in conserving, restoring and stewarding sensitive ecosystems. NCC is currently preparing for the 2019 In Bloom Wildflower Festival which will be held on April 27 2019. Due to the sensitive nature of this preserve, public access is carefully managed at CGOP and opportunities for the public to visit the preserve are restricted to volunteer events, In Bloom and by special permission for research. Approximately 300 people visit the preserve each year during this festival.

A number of site tours and events were hosted on site in Year 2. Tours included a Garry Oak ecosystem and restoration focused site tour for Elder College as well as a site tour for the HCTF Board in October, 2018. NCC staff led a Christmas Bird Count on January 1, 2019 as part of the Audubon’s Society’s nationwide program with over 30 keen birders showing up that day. Two successful Garry Oak restoration workshops were hosted in February, 2018 and March 2019 as part of the Garry Oak Meadow Restoration Marathon with sessions led by a volunteer teams of botanists, ecologists, and birders.



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Communicating about HCTF: Provide information on any activities specific to communicating about HCTF undertaken during the year.

NCC makes it a practice to mention funding and stewardship partners to guests, volunteers and visitors at our conservation areas and preserves.. Given GCOP's role as one of the main points of interaction between NCC and our community (on Vancouver Island specifically), NCC staff have had several chances to promote our partnership with HCTF. HCTF has been added to NCC's "Featured Project" page describing CGOP as a funding partner for land stewardship activities (<http://www.natureconservancy.ca/en/where-we-work/british-columbia/featured-projects/cgop/>). Additionally, in the 2019 version of NCC's informational maps distributed during the In Bloom Festival, HCTF is mentioned as a conservation partner. This map is given to all visitors to the preserve on the day of the event.

Media Coverage: Provide a list of any articles or media coverage during the year.

The Garry Oak Restoration Workshop held at CGOP in March, 2019 as part of the Garry Oak Meadow Marathon was featured in a two news articles this year. These articles highlight the restoration work that was done that day and serve to communicate conservation values and awareness related to sensitive and rare Garry Oak ecosystems (links below).

<https://www.sookenewsmirror.com/community/the-race-to-protect-garry-oak-ecosystems-is-a-marathon/>

<https://www.vicnews.com/community/the-race-to-protect-garry-oak-ecosystems-is-a-marathon/>

4. PHOTOS

Include a minimum of three photos as part of your report, attached as separate JPG files. List the filenames below, plus a description of each photo.

Photo 1 File name and Photo Description: Garry Oak Restoration Workshop: Workshop attendees standing beside a pile of conifer branches they helped move and stack as part of conifer encroachment and thinning work done at CGOP in March, 2019.

Photo 2 File name and Photo Description: Elder College Site Tour: Tour attendees being led on guided hike by NCC stewardship staff learning about invasive management and Garry oak restoration work in October, 2018.

Photo 3 File name and Photo Description: Native Plant Nursery: Native plant nursery in spring with native species ready to plant.

Photo 4 File name and Photo Description: Camas Blooming. Purple camas in full bloom in spring of 2018.



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5. ADDITIONAL DETAILS

Provide a description of any materials and supplies purchases funded by HCTF that are considered capital assets. See Year 2 Reporting Instructions for information on Capital Asset

In Year 2 the following capital assets were purchased using HCTF funds:

- 400 feet of stucco wire fencing for deer proof planting enclosure's (\$696.42)
- 200 U shaped fabric staples to secure planting enclosure's (\$104.37)
- New mower to manage snowberry (\$468.66)

Provide any other information you wish to share with HCTF.

The wildfire season limited NCC's ability to safely carry out prescribed burns on the property with partners at Cobble Hill Fire Base and funding for this activity was directed elsewhere to cover additional contractor time for vegetation and invasive species management, including conifer encroachment abatement work. Plans and permits are currently in place to conduct prescribed burns in 2019, weather and conditions permitting. Irrigation updates to the nursery were not possible in 2018 -2019 due to capacity limitations with the site contractor and volunteers. Options are being considered for potential nursery upgrades and expansions for the future.

NCC has currently spent 77% of the total HCTF grant NCC will not require an extension on this funding application as NCC intends to spend remaining funds provided by Year 3 of the Land Stewardship Grant.

6. SUBMIT YOUR GRANT REPORT

- Save this report using the Project # and grant year in the filename. Example: 1-123 Grant Report 2018-19
- Please send your Year 2 Grant Report to Christina Waddle, Conservation Specialist at christina.waddle@hctf.ca or by fax to 250-590-6614.
- Your report should include the following:
 - Completed Year 2 Grant Report Form (this document)
 - Completed Year 2 Activities and Expenditures Report
 - Photos as JPG files
 - Copies of any print media articles (or provide links in report)
 - Invoice (optional)

By submitting this grant report, you certify that this report is an accurate reflection of project activities and expenditures per the HCTF Grant Agreement.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities	Progress on this Activity in Year 2 (Yes/No)	Completed Activity Description
Cowichan Garry Oak Preserve	To effectively maintain and enhance the natural values found on the property in partnership with local stewards.	Develop high-level management planning documents with community involvement to guide resource conservation, habitat restoration and enhancement and human activities on CGOP.	By June 2017, baseline inventory fieldwork and a report will be complete. By December 2017, a formal property management plan will be complete. By March 2018, strategies, work plans and supporting documents will be complete.	Undertake resource inventory, analyze and compile current and archived resources in an accurate baseline inventory following NCC's standard template. (Year 1)		
				In collaboration with stewardship partners in the Cowichan Valley including Cowichan Tribes, develop and create a formal property management plan following NCC's standard template. (Year 1)		
				Develop regular maintenance programs, invasives management strategy and staff/volunteer plans for site management, research and engagement programs. (Year 2)	Yes	Dave Polster completed a restoration summary report for CGOP and is working in completing site specific restoration prescriptions for delineated ecological communities. Engagement program developed for both 2018 and 2019 by communications and engagement staff with events planned monthly on site. Ongoing research and new research supported and managed by stewardship staff.
	To effectively maintain and enhance the natural values found on the property in partnership with local stewards.	Implement the property management plan to effectively steward the long term natural values of CGOP.	By 2020, management of aggressive invasives will reduce invasive shrub extent by 20% of 2016 mapped levels; By 2020, management of exotic grasses will reduce invasive grass cover by 50% of 2016 mapped levels.	Mechanical removal (mowing, shears, hand pulling) of remaining shrubby invasive species like Scotchbroom. (Year 1-3)	Yes	Mechanical removal (mowing, shears, hand pulling) of invasive species carried out by contractor and volunteers during weekly volunteer events
				Maintenance of sheep grazing to treat exotic grasses (Year 1-3)	Yes	Sheep enclosures maintained and supervised by contractor and volunteers throughout the year in order to treat invasive grass species. Sheep rotated between enclosures as necessary in order to lessen site impacts within each enclosure and maximize benefits
	Restoration and enhancement of endangered Garry Oak meadow ecosystems	Renovation and expansion of the nursery at CGOP to improve restoration work at the property.	By December 2020, expand the current nursery by 1000 square feet; By 2020, increase recruitment of cultivated rare seedlings and plant out an additional 50 seedlings every year.	Expand the nursery and recruit greater diversity of seeds. (Year 1)		
				Installation of irrigation to accommodate watering of seedlings. (Year 2)	No	
				Weeding and maintenance of cultivated seedlings (Year 1-3)	Yes	Cultivated seedlings maintained, watered, and weeded by contractor and volunteers during Weedy Wednesday events.
	Restoration and enhancement of endangered Garry Oak meadow ecosystems	Use of various approved techniques to manage invasive species and maintain the Garry Oak meadow ecosystem.	Additional 400 metres of restoration fencing to secure restoration area for additional 2 acres by 2018; By 2020, annual prescribed burns and mechanical treatment of invasives are used to reduce invasive species cover by 20% increasing the productivity of the Garry Oak meadow and providing opportunities for the establishment of at least 1 new rare plant species population.	Installation of 400 additional metres of restoration fencing to prevent deer from grazing sensitive habitat. (Year 1)		
Prescribed burns are completed annually in partnership with the Cobble Hill Fire Base to maintain Garry Oak meadow habitat by reducing shrub habitat. (Year 1-3)				No	Weather did not permit prescribed burns in 2017 or 2018. Planning and permits are in place for 2019, weather and site conditions permitting.	
Planting out of native species cultivated in the preserve nursery and monitoring of over-wintering success (Year 1-3)				Yes	Native species planted by site contractor and volunteers on a regular basis in a variety of areas on the property. Fencing enclosures for planting installed where appropriate and over wintering success monitored weekly by site contractor.	

Property Vision and/or Overall Management Goals for Property:
NCC's Cowichan Garry Oak Preserve (CGOP) is one of the few remaining examples of an intact Garry oak ecosystem. The primary management goal for the preserve is to restore and protect critical habitat for rare plants, invertebrates and birds, and provide opportunities for restoration, volunteer engagement and research in this ecologically significant ecosystem.

1-678

Settlement Lands



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

HCTF Project Number: 1-678

Please refer to the Land Stewardship Grant Year 2 Reporting Instructions when completing this report.

This report must be completed in conjunction with the Activities and Expenditures Report (spreadsheet) customized for your project based on your proposal. This spreadsheet will be emailed to you.

1. PROJECT INFORMATION

Project/Property Name: Settlement Lands

Project Leader Name: John Millen / Erika Bland

Name of Organization: Denman Conservancy Association

Date of Report: March 31, 2019

Author of Report (if different than Project Leader): Erika Bland

Name of Organization: Denman Conservancy Association

Contact Information: dcalandmanager@gmail.com | 250-702-7773

2. SUMMARY

Provide a general description of project work completed in Year 2 (500 words max).

Great progress was made on all project components scheduled for Y2:

The gate for the fence at Homestead Marsh was completed in April 2018 and now prevents cattle from accessing previously degraded beaver habitat. Monitoring of the fenceline occurred in January and March 2019; vegetation is regenerating nicely in the restored area.

Stewardship for the endangered Taylor’s Checkerspot (TC) Butterfly included completion of demonstration pollinator garden fencing, and installation of an 800Gal cistern. One 50Gal trough was purchased, and one borrowed, for the propagation of two semi-aquatic larval host species (*Veronica serpyllifolia* and *V. scutellata*). Native nectar plant seeds used by TC and other pollinators were purchased and seeded in fall 2018. A volunteer graphic designed interpretive signage for the garden, to be purchased and installed in April 2019. Year #1 of the vegetation response study within the Butterfly Reserve was completed (Andrew Fyson PhD). Limited TC larvae survey work was done in March 2019, with an assessment of the host vegetation throughout the reserve. The Management Plan for Taylor’s Checkerspot in the Settlement Lands was finalized and is being implemented. Ongoing work involves maintaining open meadow habitat by removing small trees and invasive species, mainly scotch broom.

Through consultation with professional biologists, sensitive wetland habitat areas have been mapped throughout the property. Monitoring of beaver, bats, wetland hydrology and invertebrate species has occurred monthly with the help of volunteer naturalists. 2 additional water depth gauges were installed: 1 at Pickles Marsh, 1 at a Butterfly Reserve wetland. Maternal bat colony roost houses at Homestead



Marsh were monitored and bat counts done using an Acoustic Call Recorder, by Jenny Balke (RPBio). Numerous volunteers were engaged by adopting bat houses and monitoring of these houses is ongoing. A student intern was hired by DCA helped to initiate the h2O quality monitoring program, and calibrate the professional water quality instrument purchased in Y1 (federal grant funding-NWCF). This intern completed a Wet-Pro Certification Course, and sought input from a professor of Chemistry at Vancouver Island University (Eric Krogh). With the help of 13 volunteers, monitoring data was collected for invertebrates, bats, wetland ecology, beaver, invasive species, and marsh water quality at the Settlement Lands in Y2. Monitoring will continue with volunteer support in Y3, and DCA is initiating a new volunteer 'Landkeepers' program to engage and train volunteers to help with this monitoring.

A property sign/kiosk was installed with trails information and interpretive signboards. 2kms of trails were cleared and maintained, and wayfinding signage installed. New Covenant Area Boundary signs will be installed at sites along property boundaries with private lands.

A second reciprocating saw and hand tools, were purchased with NWCF and BC Parks funding, and used for removal of invasive species across ~12ha (Scotch Broom, Everlasting Pea, and English Holly). An Invasive species plan for the Settlement Lands, drawing on regional best practices and peer-reviewed literature, was created by volunteer botanist Luise Hermanutz, for Scotch Broom, English Holly, St. John's Wort, Periwinkle, English Hawthorne and Reed Canary Grass. A management plan for Reed Canary Grass in the Settlement Lands was created.

The wildlife viewing platform ("bird blind") previously researched was deemed impractical. Instead, a community group has donated some materials for an interpretive centre/outdoor classroom structure (12'x12' pagoda), which will display interpretive information about the lands and serve as a rest area for pollinator garden volunteers .

3. COMMUNICATIONS

Project Outreach Activities: Provide information on any outreach activities during the year that directly relate to the project.

-Stewardship Walks and Talks - Four public walks were held during this fiscal year as part of project activities: October 2018 – An educational Halloween walk to celebrate the creatures of the Settlement Lands, and showcase the new trail system, was led by Biologist/Botanist Andrew Fyson. In January and February 2019, two Beaver education walks were led by Jenny Balke, RPBio. In March 2019, a wetland science and stewardship walk was led by DCA Land Manager Erika Bland. In total, 37 people attended these walks.

-In October 2018, youth from Denman Community School participated in field trip where they learned about wetland science and stewardship activities related to the Settlement Lands.

-In February 2019, a Denman Conservancy Wetlands Celebration event (The Spring Frog Chorus a.k.a. "FrogFest") was organized by the project coordinator and attended by ~150 people. Information was provided about DCA projects at an information table at this event.

-A professional graphic designer volunteered to make posters for the public walks and events, as well as design the pollinator garden interpretive signage.

-Display tables were set up at numerous events throughout the year featuring information DCA's invasive species work (particularly manual removal of Scotch broom & English Holly) including work



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funded by HCTF: Isfeld Secondary School EcoFair (Courtenay, BC) April 2018; Denman Island Farmers' Market July 2018; Denman Island Xmas Craft Fair December 2018; Denman Island Seedy Saturday January 2019; DCA Annual General Meeting February 2019; Denman Island 'Let's Bee Pesticide Free' Forum March 2019; and DCA 'FrogFest' fundraiser March 2019.

Communicating about HCTF: Provide information on any activities specific to communicating about HCTF undertaken during the year.

Reports on HCTF project works were given at the regular monthly meetings of the DCA Lands Committee and Settlement Lands Committee.

DCA Board of Directors and members were briefed on HCTF activities as part of monthly meetings and via publically available meeting minutes.

Property Sign / Information Kiosk - HCTF Logo is published on the permanent property sign notifying the public about the Settlement Lands and the Conservation Covenant, Trails, and important wildlife species protected by this Conservation Area.

DCA solicited volunteers and volunteer interns through the DCA Website, and Facebook & Twitter accounts, and via other communication networks (email, word of mouth). Social media post reach has increased steadily over the past year. Updates on project work were included in a direct email to the membership in January of 2019.

Articles relating to Project work were published in the April 2018, October 2018 and February 2019 editions of the DCA Newsletter.

Formal presentations were made by the Land Manager and DCA biologist Jenny Balke at the DCA Annual General Meeting in Feb 2019, detailing Project Activities and funding sources including HCTF contributions.

DCA with the Garry Oak Ecosystems Recovery Team (GOERT) co-hosted a public Open House about Taylor's Checkerspot Recovery activities including those funded by HCTF in the Settlement Lands Butterfly Reserve (March 2019). The Open House was attended by over 100 people, including local and provincial government representatives.

Media Coverage: Provide a list of any articles or media coverage during the year.

DCA hosts various project information on our website:

-Garry Oak Ecosystems Recovery Team Poster for Taylor's Checkerspot Open House 2019 (<https://www.denman-conservancy.org/2019/02/09/checkerspot-open-house/>)

-DCA Newsletters featuring highlights from project work are published permanently on the DCA Website. Articles in the April 2018, October 2018 and February 2019 Newsletters feature highlights from Project work (<http://www.denman-conservancy.org/category/dca-newsletter/>). These newsletters are also published in print in the local paper, *Island Grapevine*, reaching ~1000 households on Denman and Hornby Islands in print. Project participants submitted 6 articles with information related to HCTF project works including bat stewardship, walks and talks, invasive species removal, wetland stewardship, and program outreach.

Social Media: DCA manages Facebook and Twitter Accounts through which information about DCA's work, including HCTF funded projects, is circulated to the public. Posts are made regularly and normally



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reach at least a few hundred people. For example, post reach for February 2019 was ~4500, with 2729 post engagements.

4. PHOTOS

Include a minimum of three photos as part of your report, attached as separate JPG files. List the filenames below, plus a description of each photo.

Photo 1 File name and Photo Description: 01-Garden fencing up.jpg – deer fencing installed around demonstration pollinator garden.

Photo 2 File name and Photo Description: 02-Example large broom removed.jpg – large broom plants cut and piled.

Photo 3 File name and Photo Description: 03-H2O Monitoring at new Swale site.jpg – a volunteer does a dip test for water quality parameters at the new Swale monitoring site.

Photo 4 File name and Photo Description: 04-Property kiosk signage and parking area.jpg – reverse of Settlement Lands property sign, with information and interpretive signage on back, and parking area in use.

Photo 5 File name and Photo Description: 05-Property sign front.jpg – our new property sign and info kiosk

Photo 6 File name and Photo Description: 06-invasive everlasting pea removal.jpg – an example of the roots of *Lathyrus sylvestris*, everlasting pea, after digging

Photo 7 File name and Photo Description: 07-St John's Wort assessment.jpg – Professional biologist Luise Hermanutz examines the root of St. John's wort at the Settlement Lands

Photo 8 File name and Photo Description: 08-Volunteer helps with large holly removal.jpg – large holly plants require cutting with a chainsaw, and branches and trunks are then piled densely to compost on site.

Photo 9 File name and Photo Description: 09-Butterfly garden beds.jpg – garden beds seeded, prior to fencing installation.

Photo 10 File name and Photo Description: 10-botanical study bracken fern.jpg – one of the plots in the vegetation response study initiated by Andrew Fyson.

Photo 11 File name and Photo Description: 11-DCA-Walk-Beaver Gardens-2019.01.26-poster.jpg – poster for a beaver habitat educational walk led by J.Balke RPBio, designed by volunteer graphic artist. This walk was attended by 16 people.

Photo 12 File name and Photo Description: 12-DCA-Walk-Halloween Creatures-2018.10.27.jpg – Public trail walk led by biologist and botanist Andrew Fyson.

5. ADDITIONAL DETAILS

Provide a description of any materials and supplies purchases funded by HCTF that are considered capital assets. See Year 2 Reporting Instructions for information on Capital Assets.



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N/A

Provide any other information you wish to share with HCTF.

As noted in Y1 report, due to the Riparian Areas Regulation (Islands Trust) restrictions, and anticipated impacts on sensitive habitat at the proposed bird blind site (Homestead Marsh), it was recommended that funds allocated for this project (intended to provide natural history and outreach opportunities for the community) be re-allocated to a similar project:

--Construction of a small outdoor classroom/interpretive structure near the property entrance.

DCA has received a donation of a substantial amount of materials toward this structure, and plan to proceed with it in Year 3. This would be in lieu of the Bird Blind, using approximately equivalent funds as were previously allocated to the Bird Blind from our overall HCTF budget.

6. SUBMIT YOUR GRANT REPORT

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By submitting this grant report, you certify that this report is an accurate reflection of project activities and expenditures per the HCTF Grant Agreement.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities	Progress on this Activity in Year 2 (Yes/No)	Completed Activity Description
Settlement Lands	Maintain/increase populations of invertebrate species at risk including: Taylor's Checkerspot (TC) (endangered); Dun Skipper; Common Wood Nymph; Western Pine Elf; Western Pondhawk; Blue Dasher;	Enhance Taylor's Checkerspot & other invertebrate species habitat focusing on areas with food & nectar plants for larvae & adults; Create a demonstration Butterfly Garden to expand available habitat while providing education opportunities	Debris from previous tree felling is removed from 0.5ha of existing Butterfly Reserve area to expose nectar & larval host plants; Creation of a 0.02ha demonstration Butterfly Garden involving 20+ volunteers; Invertebrate larvae & adults are observed using plants in the garden by year 3; 10 species of native plants known to be host plants for rare invertebrate species are established & self-propagating within the garden within 5 years from the time of its creation; 3 educational visits are attended by local community school children & community members	Remove debris from 0.5ha of Butterfly Reserve area. Map 0.02ha butterfly garden area & existing plants. Design plan for supplemental butterfly-significant plants. Cultivate specific plant species (Year 1) Prepare sites for additional butterfly-significant plants using hand tools. Install fence and water cistern. Plant supplemental plant species. (Year 2)	Yes	Woody debris and vegetation was removed along monitoring transect within the butterfly reserve. A list of existing plants in the butterfly garden area was compiled. A plan for the purchase of native plant seeds for the pollinator garden was created in consultation with PhD botanist A. Fyson and horticulturist D. Bishop. Taylor's checkerspot larval host plants <i>V.Serpifolia</i> and <i>V. Scutellata</i> cultivated in 2 propagation troughs, one of which was purchased with HCTF funds along with fittings to allow control of the water levels, to mimic vernal hydrology regime needed by these semi-aquatic species.
				Weed, water & maintain garden area throughout summer months to encourage plant growth (Years 2&3)	Yes	10 garden beds (~2x3') were prepared inside the garden area by weeding prepared beds and arranging on-site logs to define pathways. Fenceposts and wire mesh deer fencing was installed around the perimeter of the garden (140') and a gate was installed. The 800 Gal water cistern was installed on site and plans made to build a water collection structure. Seeds for 8 pollinator nectar species were purchased from Saanich Native Plants and seeded into the beds in fall 2018. Some sprouts are visible now in all beds, though it is too early in the season to decipher their species. To supply water for the coming summer, a request has been made for water to be pumped in by the volunteer fire department. A graphic designer volunteer helped to design interpretive signage for the butterfly garde. 5 new volunteers were engaged in garden work in Y2.
	Property Vision and/or Overall Management Goals for Property: The Settlement Lands' rare Coastal Douglas-fir ecological community is to be protected both by a Conservation Covenant, held by the Trust Fund Board (Islands Trust Fund - ITF), and by on-going stewardship to conserve and enhance the property's rich biodiversity and valuable natural features. The Settlement Lands varied terrain with its numerous large wetlands, portions of interconnecting creeks, steep rocky bluffs, slopes of various aspects, and extensive plateaus will continue to provide ecological connectivity and refugia for wildlife by its position in the centre of a large area of protected lands (Denman Island Provincial Park, ITF's Inner Island Nature Reserve and DCA's Central Park and Winter Wren Wood). Overall management goals will emphasize conservation strategies for enhancing the survival of the endangered Taylor's Checkerspot butterfly, as well as the other 14 species at risk and the 6 rare ecosystem communities. In addition, management goals will include providing opportunities for low-impact nature observation, scientific research, community outreach and education.			Establish database (contractor 4hrs with volunteer intern 4 hrs) for recording of monitoring observations (Year 1)	Yes	The database for collecting data was refined based on ongoing monitoring needs. Google forms were created to make collecting and compiling data easy for volunteers
			Conduct scientific research & monitoring to evaluate over time the quality, characteristics & use of Butterfly Reserve and wider SL property by rare invertebrates (Taylor's Checkerspot and Dun Skipper)	Database established to record monitoring data & staff/contractors are trained in its use. TC larvae monitoring areas are selected & monitored 3x/week from February-April; 800m butterfly transect monitored 3x/week from April-June; Intensive botanical plot studies carried out for 2 years, 1x/week for 6 weeks in May/June. Reports on monitoring are produced; Priority activities & areas for invertebrate species are identified to create a 5-year Invertebrates Mgmt Plan specific to the SL property	Monitoring (and associated data entry/reports) of TC larval area (40 hrs HCTF); adult butterfly transect (40 hrs DCA contribution); and intensive botanical study areas (48hrs HCTF) by contractors (Years 1-3)	Yes
			Identify priority management activities and areas and create Settlement Lands Threatened Invertebrates Management Plan (Year 2)	Yes	The Taylor's Checkerspot Management Plan for the Settlement Lands was utilized to determine areas for invasive species control within the butterfly reserve and in surrounding areas. Collaboration is ongoing with the Garry Oak Ecosystems Recovery Team and Ministry of Environment Regional Implementation Group for Taylor's Checkerspot recovery on Denman Island. A public information open house about TC Reserve Management, attended by over 100 people, was hosted jointly by DCA & GOERT in March 2019.	
	Maintain/increase populations of aquatic & bird species at risk including: Red-legged Frog; Common Beaver; Cutthroat Trout; Common Nighthawk; Great Blue Heron; Olive-sided flycatcher; Band-tailed plegion; Barn owl; Western Screech owl; Barn Swallow	Prevent current degradation of wetland riparian habitat and evaluate yearly changes in marsh water levels & quality	Neighbouring cattle are prevented from entering marsh and wetland habitat; 200m of fencing is installed along the eastern boundary of the property adjacent to Homestead Marsh; A program is established for ongoing monitoring of beaver activity and wetland levels; 2 water depth gauges are installed; Beaver activities and wetland levels/quality are recorded monthly for 3 years; Bridge installed along existing trail at crossing of a stream connected to salmonid-bearing watershed headwaters	Install 200 m of woven wire fencing along eastern boundary wetland edge (Contract labour and materials from HCTF; 40hrs labour in kind and DCA Land Manager) (Year 1) Install water depth gauges in Homestead and Pickles Marshes (HCTF funds) (Year 1). Purchase water quality testing equipment & monitor wetland levels and quality monthly for 3 years (DCA contribution) (Years 1-3)	Yes	A gate was installed to complete the fencing installation in April 2018. 420m of woven wire fencing now restricts access to Homestead Marsh by neighbouring cattle (approx. 5.6ha enhanced). Monitoring of the fenceline was carried out in April 2018 and January 2019. There is visible regeneration of vegetation in the areas now protected from grazing. Areas previously susceptible to erosion are now inaccessible by cattle. Two beaver dams are now inaccessible by cattle. Two additional water depth gauges were installed - one at one of the wetlands within the butterfly reserve, and one at a second monitoring site on Pickles Marsh, in June 2018. Plans have been made to add an additional water depth and quality monitoring station on 'the Swale', a large wetland area which is fed by homestead marsh via a beaver dammed channel now protected from cattle. The Swale wetland is situated at the far northeastern corner of the Settlement Lands and is a Seasonally Flooded Agricultural Field extending across private farmland, conservation land, and provincial park land. The Swale has been used historically and in the present-day for agriculture (mainly grazing and historically root crop cultivation). A monthly monitoring program was initiated by an environmental chemistry student intern hired in July/August 2018. 5 volunteers have participated in monthly monitoring visits to date. A DCA 'Landkeepers' Program has been initiated to train more volunteers in wetland monitoring and is scheduled to begin in April 2019. A professional hydrogeologist and retired professional engineer were consulted about the monitoring program and provided volunteer input for how it could be improved.

				Install bridge along stream trail (materials HCTF; 20 hours in kind DCA contribution) (Year 2)	No	Completed in Year 1
		Provide safe community access to specific aquatic habitat areas to encourage community support for conservation and natural history education while protecting habitat & native species through non-disturbance areas	A 7.3 hectare non disturbance area for the protection of beavers and other wetland and bird species is identified and signage is installed to alert users to this area; A bird blind & kiosk are installed to the south of the wetland non-disturbance area; DCA sponsors 2 annual outings to the site focused on guided low-impact wildlife viewing & education; Interpretive information surrounding the importance of beavers, red legged frogs, marsh birds & other species is installed a the bird blind site;	Map out and select Wetland/beaver non-disturbance area and install signage to demarcate boundaries (Year 1)	Yes	A 20 fha wetland/beaver non-disturbance area has been mapped out at the northeast corner of the property around Homestead Marsh and the area directly upland, where regular monitoring has revealed consistent evidence of beaver activity. Consultations about the ecological importance of the proposed wildlife refuge area involved volunteer biologists, birders and ecologists. Use of an existing trail leading into this area has been discontinued. A proposal for the formal designation of the area as a wildlife refuge within the property management plan will be proposed to DCA Lands Committee in spring 2019. Draft signage and a map of the proposed area have been created.
				Design and install bird blind at wetland non-disturbance area edge (Year 3); Design and install interpretive information for bird blind (Year 3).	No	Due to the disturbance to wildlife and neighbouring private landowners, this activity was discontinued. We would like to reallocate these funds to the construction of an outdoor classroom/interpretive centre using some donated materials and volunteer labour, in Y3.
				Conduct 2 educational outreach visits to bird blind with hired local biologists (10 hours in-kind) (Year 3)	No	A halloween habitat stewardship walk at the Settlement Lands was led by A.Fyson in October 2019. A public educational walk about beaver habitat at Homestead Marsh was led by a professional biologist in February 2019. A public wetland stewardship and water science walk to Homestead Marsh was led by DCA Land Manager E. Bland in March 2019.
				Identify key refuge areas through field and report research and communications with adjacent property owners, carried out by contracted biologist/ecologist (4 hours contracted) and reviewed by DCA committee (4 hours in-kind) (Year 1)	No	To continue Y3
		Identify new, and maintain existing, ecological corridors/refugia for wildlife	Key areas for preservation of wildlife refugia are identified using the property baseline study (Balke 2016); Correspondence is initiated with owners of adjacent protected lands to ascertain location and extent of existing or potential refugia areas beyond SL boundaries; Ecological connectivity areas are identified and mapped; Boundary markers are installed at corners of the property and in areas where pedestrian traffic from adjacent lands is expected to occur	Mapping of refuge areas by contractor and Volunteer Intern (Year 1) in connection with DCA Protected Areas Network Mapping project below;	Yes	A beaver non-disturbance wildlife refuge area was mapped by DCA Land Manager. (See above.)
		Protect and enhance biodiversity through the maintenance of wildlife refugia and ecological corridors within the SL property and with adjacent protected areas		12 boundary markers (at SL boundaries with adjacent lands) and 2 Protected Area signs (along Lake Rd and Central Rd) are designed and installed by Land Manager (materials from HCTF funds; labour from DCA) (Year 1)	Yes	Covenant Area Boundary marker signs were designed and 20 of these markers fabricated, and purchased along with hardware for installation, to occur in Y3. 2 'Conservation Area' signs have been fabricated of Yellow Cedar and hardware for installation purchased. Islands Trust Conservancy contributed to the design and fabrication of logo plaques to be mounted these signs. 4 cedar posts were donated. Approval from landowners and Ministry of Transportation was sought for their installation to occur in early April 2019, and neighbours were consulted about the locations. Yellow markers were fabricated and affixed to butterfly reserve boundary marker posts.
				Clearing and subsequent bi-annual maintenance of trails carried out by Land Manager (16 hours HCTF Funds) and volunteers (in-kind) (Years 1-3);	Yes	Trail clearing was carried out on 5 occasions on approx. 2km of trails with the help of 7 volunteers. Stumps were removed from trail surfaces to prevent tripping.
		Ensure protection of refugia, and ecological connectivity areas via a well-defined, low-impact trails network that directs visitors away from these areas while linking the SL property with existing trails on adjacent lands	Safe trail network is created within biodiverse habitats to encourage community support for conservation & to provide natural history education; Directional signs & wayfinding maps are installed at key locations; 2 information kiosks are installed alerting visitors to trails/non-disturbance areas & providing educational information about wildlife & habitat; Barriers are installed at 2 roadside locations to discourage use of motorized vehicles & prevent other unauthorized land uses (i.e. illegal dumping of garden or other wastes).	Installation of wayfinding signage (10 signs) along trails (Year 2)	Yes	25 coloured sign markers were installed along trails, and a corresponding trail map created. Trailhead name signs will be donated by a local artist.
				Installation of information kiosk (HCTF funds) (Year 2), parking barriers (Year 1) & butterfly kiosk (additional funds confirmed) (Year 1)		A property sign /information kiosk was fabricated of yellow cedar with help from a local carpenter and two local artists, and was installed at the main parking area with the help of volunteers in July 2018. Property information and interpretive signage was designed and installed in March 2019.
		Restore native plant habitat by reducing Invasive Species across the SL Property	12 volunteers contribute 120 hours to assist contractors in the removal of invasive species; 8Ha of broom is removed from clearcut areas, old logging landings, roadsides and trails; English Holly (<100 plants) and English hawthorne (<100 plants) are removed from the property; St.John's Wort, Perriwinkle and Everlasting pea is manually removed from 0.02ha area	A brush cutter is purchased and paid contractors (total 100 hrs, 50 of these HCTF funds) remove Broom from designated areas across SL property amounting to 10ha (Years 1-3)	No	Scotch broom plants removed from ~9ha of the property, including removal of small seedlings in areas where large plants were previously removed. All contracted broom work carried out on the project this year was paid by NWCF matching funds. 16 volunteers were engaged in broom removal work in Y2 removal areas. Invasive species work will continue in Y3.
				Land manager locates and removes English Holly and English Hawthorne plants from SL property (16 hours) (Year 3)	Yes	With the help of 3 vounteers, 17 large (>2m tall) and 4 small (<2m tall) holly trees were located and cut down, branches and trunks stacked in parallel dense piles to be composted on site. Holly and English hawthorne removal will continue in Y3
				Land manager (40 hours, 20 in kind hours), with volunteers, removes 0.01ha of St. Johns Wort/Perriwinkle and 0.01ha of Everlasting Pea through digging and mulching (Years 1&2)	Yes	Approximately 75 everlasting pea plants and roots were removed across 0.05 ha in July 2018 and March 2019. A professional biologist was consulted to create a plan for removal of invasive species across the Settlement Lands according to current known best practices. Work on removal of invasive species will continue into Y3.

4-548

Elk Valley Heritage Conservation Area



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

HCTF Project Number: ___CAT18-4-548_____

Please refer to the Land Stewardship Grant Year 2 Reporting Instructions when completing this report.

This report must be completed in conjunction with the Activities and Expenditures Report (spreadsheet) customized for your project based on your proposal. This spreadsheet will be emailed to you.

1. PROJECT INFORMATION

Project/Property Name: Elk Valley Heritage Conservation Area (EVHCA)

Project Leader Name: Richard Klafki

Name of Organization: Nature Conservancy of Canada

Date of Report: 31 March 2019

Author of Report (if different than Project Leader): Kate MacKenzie

Name of Organization: Nature Conservancy of Canada

Contact Information: kate.mackenzie@natureconservancy.ca

2. SUMMARY

Provide a general description of project work completed in Year 2 (500 words max).

The plan to reduce motorized access and illegal garbage dumping at two locations off of Hosmer Main just north of Hosmer went ahead in July, 2018. Fiorentino Brothers Contracting was hired to provide heavy machinery and operators to decommission these two access sites by removing piles of refuse and roughing up the ground to make it impassable to vehicles. The contractor also used the large woody debris that they had stockpiled for this project in 2017, and spread it throughout the two sites to further deter vehicles from entering. NCC stewardship staff seeded the sites with a mix of native grass seed to prevent the spread of invasive species, and are currently planning to have Canfor crews plant spruce seedlings in the summer of 2019 across the two sites. NCC staff also prepared and installed several signs to highlight the sites as restoration projects as well as to prevent illegal dumping and vehicles from entering the area.

Wetland specialist Robin Annschild was hired to oversee the completion of wetland and riparian habitat restoration on the inactive portions of the Wilson Lake gravel quarry in the Elk River floodplain. Through restoration, the compacted soil around the Wilson Lake shoreline was loosened to allow for plant



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

growth, and the shoreline was re-graded and re-formed to create more riparian habitat diversity for shorebirds and waterfowl. As part of the project, large woody debris was added to encourage bird perching and turtle basking. The goals of this project were to improve habitat for waterfowl, increase habitat availability for species-at-risk, improve connectivity for wildlife in a fragmented landscape, and to improve water quality and retention on the landscape. Opportunities to engage the public and local partner organizations were ongoing throughout the completion of this project.

NCC staff developed a monitoring protocol to track the effectiveness of the Wilson Lake restoration project over the long term. Photo points and vegetation survey plots were established around the perimeter of Wilson Lake that will be monitored annually, and the Cows and Fish wetland health assessment protocol for lentic systems has been implemented to track the health of riparian areas over time.

Field work commenced in summer 2018 in preparation for drafting the updated Property Management Plan for the Elk Valley Heritage Conservation Area. The writing component of the plan will continue throughout the spring of 2019.

3. COMMUNICATIONS

Project Outreach Activities: Provide information on any outreach activities during the year that directly relate to the project.

In October 2018, ERA and NCC coordinated a planting event at the Wilson Lake project site, where 20 volunteers came out to harvest and plant live stakes of various species of trees and shrubs.

Communicating about HCTF: Provide information on any activities specific to communicating about HCTF undertaken during the year.

NCC is working with communication staff to prepare a story of the rehabilitated dumping sites to be presented to local media in spring 2019.

Media Coverage: Provide a list of any articles or media coverage during the year.

A news article titled “Many Hands Help Restore Wetlands” was published in the Fernie Free Press and Elk Valley Herald newspapers, which was written by the ERA to describe the planting events that took place at Hosmer Wetland in May, 2018. <https://www.e-know.ca/regions/elk-valley/many-hands-help-restore-wetlands/>



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A news article titled “Students help turn Wilson Lake into a wetland” was written by the ERA to describe the volunteer planting event on October 18, 2018: <https://www.e-know.ca/regions/elk-valley/students-help-turn-wilson-lake-into-a-wetland/>

4. PHOTOS

Include a minimum of three photos as part of your report, attached as separate JPG files. List the filenames below, plus a description of each photo.

- Photo 1 File name and Photo Description:**
IMG_0264: “Before” image of a rehabilitated site showing compacted soil, low plant diversity, and illegal dumping issues.
- Photo 2 File name and Photo Description:**
IMG_0219: “After” image of a rehabilitated site following earthmoving work to prevent motorized access and illegal dumping along Hosmer Main.
- Photo 3 File name and Photo Description:**
IMG_1180: Image of Wilson Lake following shoreline restoration, highlighting the re-graded slopes, contoured riparian areas, and soil decompaction.
- Photo 4 File name and Photo Description:**
DSC05417: Image of volunteers from the live stake planting event at Wilson Lake.

5. ADDITIONAL DETAILS

Provide a description of any materials and supplies purchases funded by HCTF that are considered capital assets. See Year 2 Reporting Instructions for information on Capital Assets.

n/a

Provide any other information you wish to share with HCTF.

Throughout the field season in 2018, NCC staff began collecting information necessary to draft the update to the Elk Valley Heritage Conservation Area property management plan. It is expected that the writing portion of the management plan will be complete in spring 2019.



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

6. SUBMIT YOUR GRANT REPORT

- Save this report using the Project # and grant year in the filename. Example: 1-123 Grant Report 2018-19
- Please send your Year 2 Grant Report to Christina Waddle, Conservation Specialist at christina.waddle@hctf.ca or by fax to 250-590-6614.
- Your report should include the following:
 - Completed Year 2 Grant Report Form (this document)
 - Completed Year 2 Activities and Expenditures Report
 - Photos as JPG files
 - Copies of any print media articles (or provide links in report)
 - Invoice (optional)

By submitting this grant report, you certify that this report is an accurate reflection of project activities and expenditures per the HCTF Grant Agreement.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities	Progress on this Activity in Year 2 (Yes/No)	Completed Activity Description
Elk Valley Conservation Area	Reflect conservation management strategies set forth in Elk/Flathead Natural Area Conservation Plan (NACP)	Specific planning for this suite of sites and their varied threats	Completion of a Second Phase Property Management Plan	update 2010 baseline inventory study, collaborate with local partners (Year 1)		
				reassess ecological threats (see attached) and conservation priorities to better inform stewardship activities on site (Year 1)	Yes	Field work to update the property management plan was started, and the update is on track to be completed in spring 2019.
				action planning (Year 1)		
	Reflect conservation management strategies set forth in Elk/Flathead Natural Area Conservation Plan (NACP)	Implement updated Property Management Plan	Increase awareness of ecological sensitivity among property visitors, while implementing the conservation and stewardship strategies as outlined in the Property Management Plan	motorized recreation access management through route decommissioning, signage, and local awareness (Years 1 to 3)	Yes	Contractor hired to decommission access route/dumping areas and haul away refuse. Signage was installed and restored areas were seeded with native grass.
				gravel pit restoration wetland plan implementation (Years 1 to 3)	Yes	Wetland specialist hired to oversee shoreline riparian restoration of Wilson Lake. ERA hired to run a planting event and NCC staff seeded with native grass mix.
				invasive plant treatment (Years 1 to 3)	Yes	Planning for 2019 invasive species control
<p>Property Vision and/or Overall Management Goals for Property: The Elk River Valley properties have a range of issues to address (see attached example photos). Goals include: to maintain and enhance cross-valley animal movement corridors; reclamation of commercial gravel extraction sites; control of invasive plant species, and; the provision of local, non-motorized recreation access and prevention of illegal dumping.</p>						

5-288

Elkin Creek Nature Preserve



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

HCTF Project Number: 5-288 _____

Please refer to the Land Stewardship Grant Year 2 Reporting Instructions when completing this report.

This report must be completed in conjunction with the Activities and Expenditures Report (spreadsheet) customized for your project based on your proposal. This spreadsheet will be emailed to you.

1. PROJECT INFORMATION

Project/Property Name: Elkin Creek Nature Preserve 5-288

Project Leader Name: Wayne P. McCrory, RPBio.

Name of Organization: Valhalla Foundation for Ecology and Social Justice

Date of Report: February 28, 2019

Author of Report (if different than Project Leader):

Name of Organization:

Contact Information:

2. SUMMARY

Provide a general description of project work completed in Year 2 (500 words max).

The fence went slower this year than before due to our First Nations crew being busy picking morel mushrooms in the 2017 Hanceville Fire and then having a wood cutting contract for the Canadian Red Cross that kept being added on to. Another crew laid out 400 m of fence posts and railings on the west side that is ready for assembly in the spring of 2019. We also did some winter monitoring of crossing through the fence, slashed out the remainder and made some location modifications. It will be finished in 2019.

On the other hand we used the time to hire two different consultants to complete their field surveys and draft technical reports (freshwater fish and wetlands/sensitive habitats) for the stewardship plan since both companies were available. The draft reports are still being reviewed but costs (10,027) have been covered by the Foundation, not HCTF. Communications continued with the Xeni Gwet'in, neighbours and others on the project.



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YEAR 2 REPORT FORM

The free-range cattle appeared to avoid the main blue grass meadows since they were fenced off last year; although they could have by-passed at the north end and entered this sensitive bottomland habitat and freshwater fish juvenile rearing area, the main fence appeared to function as a psychological barrier.

3. COMMUNICATIONS

Project Outreach Activities: Provide information on any outreach activities during the year that directly relate to the project.

VF Director Sadie Parr communicated the project with the Xeni Gwet'in Chief and Council and locals during her (separate) wolf outreach work program.

Communicating about HCTF: Provide information on any activities specific to communicating about HCTF undertaken during the year.

This was communicated verbally to other funders and supporters. VF is planning on doing a spring newsletter that will spread the word re- HCTF support.

Media Coverage: Provide a list of any articles or media coverage during the year.

Chilcotin moccasin telegraph only. A press release will be done after the project is over and we have the final results of the efficacy of the fence.

4. PHOTOS

Include a minimum of three photos as part of your report, attached as separate JPG files. List the filenames below, plus a description of each photo.

Photo 1 File name and Photo Description:



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

Photo 2 File name and Photo Description:

Photo 3 File name and Photo Description:

5. ADDITIONAL DETAILS

Provide a description of any materials and supplies purchases funded by HCTF that are considered capital assets. See Year 2 Reporting Instructions for information on Capital Assets.

No longer term purchases were made that would fit this category.

Provide any other information you wish to share with HCTF.

Our Board of Directors and supporters-at-large deeply appreciate HCTF providing the majority of the funding to make this work. Due to the increased costs VF has raised the additional funds to allow the project to be completed. This includes from the Stewart fund (via the Vancouver Foundation), the private Joan A. Martin Fund, Rick McGuire and the Fitzhenry Foundation).

6. SUBMIT YOUR GRANT REPORT

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- Please send your Year 2 Grant Report to Christina Waddle, Conservation Specialist at christina.waddle@hctf.ca or by fax to 250-590-6614.
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 - Copies of any print media articles (or provide links in report)



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Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

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Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Planned Activities	Progress on this Activity in Year 2 (Yes/No)	Completed Activity Description
<p>Elkin Creek Nature Preserve</p> <p>Property Vision and/or Overall Management Goals for Property: The Valhalla Foundation's long-term vision for its Elkin Creek Nature Preserve is to restore (by fencing out trespass cattle grazing) and preserve a unique valley bottom mosaic of habitats including wetlands, riparian zones, important fish-bearing stream, bluegrass meadows and adjacent bunchgrass hillsides important for a great variety of wildlife, 11 freshwater fish species, Chinook salmon, species at risk, migratory and resident birds and others. Maintaining a major wildlife corridor for grizzly bears and other species and important wintering habitat for moose is an important goal. Our research cabin is used as a base for studies including an on-going wolf diet study. Besides long-term preservation our goal is to use the planned wildlife friendly "ecological fence" as a model for people to learn to protect sensitive riparian and fish habitats from cattle grazing impacts. Our preserve also enhances protection of nearby Nunsti Provincial Park.</p>	Restore and maintain critical wildlife and fisheries habitats	Protect a valley bottom mosaic complex of sensitive stream, riparian, wetland and valley bottomland bluegrass meadow habitats	2 km of wildlife-friendly fencing is installed around the sensitive habitat complex to prevent trespass by cattle from free-range adjacent lands that damage multiple habitats by trampling and over-grazing, especially to fish-stream and riparian habitats.	Research, design and build wildlife friendly fence in spring (year 1) around sensitive habitats. Monitor and remove trespass cattle and repair fence. Monitor wildlife access.	Yes	Another 300 m of west fence was completed and another 100 m laid out with all railings and treated x-posts but not erected. Two loads of treated fence posts hauled for next year. Relocated and slashed other areas.
	Fence inspection, monitoring and closing any gaps (year 2). Determine if wildlife such as wintering moose and seasonal grizzly bears are able to still access critical habitats	Yes	December 2018-January 2019. Some wildlife crossing. Poor snow cover			
	Fence inspection, monitoring and closing any gaps (year 3). Determine if wildlife such as wintering moose and seasonal grizzly bears are able to still access critical habitats					
	Develop a 10-year stewardship plan	Establish a professional-level document with some local input to manage and preserve over the long term high wetland, wildlife and connectivity values	A 10-year stewardship plan using Best Management Practices for preserving high wildlife/ecological values; based on technical inventory of habitats; fish-stream values, grizzly bear and other carnivores, moose and mule deer, birds, species at risk (e.g. rare plant communities, sharp-tailed grouse). Plan to include input from locals, tourism lodge, cattle rancher, First Nations, BC Parks. To include public access management to a nearby provincial park and for hunting, trapping, research, etc.	Habitat and species inventories by staff and consultants (Year 1)		
	Habitat and species inventories by staff and consultants (Year 2). Input from local ranchers, trapper, private land owner using property for access, First Nations and others	Yes	Freshwater fish surveys as well as wetlands/sensitive habitat surveys & draft reports done but to be completed in 2019 as part of the stewardship plan			
	Complete habitat and species inventories by staff and consultants (Year 3) and complete Stewardship plan with Best Management Practices.					
	Complete partial survey of boundaries and permanently mark	Make sure the main boundaries are clearly defined for the fencing project, access management	Main boundaries will be slashed out with permanent metal markers so that our fencing can be properly placed and people will know where the reserve is located	Complete existing boundary slashing and permanent metal posts for main areas of the preserve including areas to be fenced (Year 1)		
	Complete boundary slashing and metal posts for other main areas of the Preserve (Year 2)	Yes	We decided only do the accessible south boundary areas project since the inventory and fence used up so much of the budget; plus the province located some of the corner boundaries as part of their Xeni Land Title i.d. of private lands.			

5-289

Scout Island Nature Centre



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

HCTF Project Number: 5-289

Please refer to the Land Stewardship Grant Year 2 Reporting Instructions when completing this report.

This report must be completed in conjunction with the Activities and Expenditures Report (spreadsheet) customized for your project based on your proposal. This spreadsheet will be emailed to you.

1. PROJECT INFORMATION

Project/Property Name: Scout Island Nature Reserve

Project Leader Name: Sue Hemphill

Name of Organization: Scout Island Nature Centre

Date of Report: March 25, 2019

Author of Report (if different than Project Leader): Ken MacKenzie

Name of Organization: Iverson & MacKenzie Biological Consulting Ltd.

Contact Information: 250-644-7403, klmacken@bcinternet.net

2. SUMMARY

Provide a general description of project work completed in Year 2 (500 words max).

Invasive plants were mechanically treated over an area of about 10 Ha on Scout Island, the causeway leading to the Island and the adjacent mainland. Invasive species controlled include Dalmatian toadflax, Canada thistle, common burdock, common tansy, stickseed, baby's breath, spotted knapweed, and nightshade. To allow native vegetation to become established to help exclude invasive species, approximately 50 m of fencing was installed to prevent Canada geese from overgrazing riparian areas and to prevent deer and beavers from damaging plantings. Approximately 300 seedlings of cottonwood and paper birch were planted in these fenced areas to restore riparian function of the sites, and to provide shade and cover to help prevent the establishment of invasive plant species.

3. COMMUNICATIONS



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

Project Outreach Activities: Provide information on any outreach activities during the year that directly relate to the project.

An article about the invasive plant management project on Scout Island was written for The Muskrat, the newsletter for the Scout Island Nature Centre.

Communicating about HCTF: Provide information on any activities specific to communicating about HCTF undertaken during the year.

The Muskrat article describing the invasive species management on Scout Island can be found at www.williamslakefieldnaturalists.ca/newsletter/Muskrat-2018-04.pdf

Media Coverage: Provide a list of any articles or media coverage during the year.

www.williamslakefieldnaturalists.ca/newsletter/Muskrat-2018-04.pdf

4. PHOTOS

Include a minimum of three photos as part of your report, attached as separate JPG files. List the filenames below, plus a description of each photo.

Photo 1 Willow.jpg - planted willow along the riparian area of Williams Lake

Photo 2 fence.jpg – planted willow and new fence area, burdock and stickseed have been removed for this area.

Photo 3 geese grazing.jpg – area with heavy geese grazing needing protection. Canada thistle patch tarped in an attempt to kill roots.

5. ADDITIONAL DETAILS



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Provide a description of any materials and supplies purchases funded by HCTF that are considered capital assets. See Year 2 Reporting Instructions for information on Capital Assets.

No capital assets were purchased.

Provide any other information you wish to share with HCTF.

6. SUBMIT YOUR GRANT REPORT

- Save this report using the Project # and grant year in the filename. Example: 1-123 Grant Report 2018-19
- Please send your Year 2 Grant Report to Christina Waddle, Conservation Specialist at christina.waddle@hctf.ca or by fax to 250-590-6614.
- Your report should include the following:
 - Completed Year 2 Grant Report Form (this document)
 - Completed Year 2 Activities and Expenditures Report
 - Photos as JPG files
 - Copies of any print media articles (or provide links in report)
 - Invoice (optional)

By submitting this grant report, you certify that this report is an accurate reflection of project activities and expenditures per the HCTF Grant Agreement.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities	Progress on this Activity in Year 2 (Yes/No)	Completed Activity Description
<p>Scout Island Nature Centre</p> <p>Overall Management Goals for Property: 1. conserve and restore the important wetland and upland habitat for wildlife, 2. provide a natural place for viewing and appreciating wildlife, facilitated by a system of walking trails within an urban setting, and 3. offer nature education and interpretation to all ages. The nature centre is on the migration path of hundreds of species of birds making this a prime site for bird watching spring and fall. Because of the varied habitats, numerous species of birds nest here and others come here to feed including white pelicans and double crested cormorants. Painted turtles, mink, mule deer and otters are common.</p>	Decrease the area covered by invasive plant species	Plan developed that details a multi year process that includes:species inventory; distribution ; control/mitigation measures; monitoring plan	Plan is successful in guiding the work carried out over the next 3 years	<p>invasive plant specialist does species inventory and distribution with support from staff</p> <p>Specialist researches and suggests mitagation/control techniques that is developed into a 2-3 year work plan with input from Field Naturalists</p> <p>Monitoring plan is designed by specialist and staff and contractor begins mitigtion steps taken late summer of 2017</p>	Yes	Inventory and Mapping completed in 2017 updated in 2018.
					Yes	Mitigation measures proposed in 2017 report, updated in 2018
	Decrease the area covered by invasive plant species	Targeted Invasive plants are removed	Incidence of Burdock, Stickseed, yellow toad flax, tansy, and Nightshade is reduced by 50%	<p>Contractor uses agreed mitigation techniques for burdock, toadflax, night shade, tansy, and stick weed</p> <p>contractor and staff monitor success of techniques and alter focus if needed 2019</p> <p>contractor and staff design a plan for control of these species after 2020</p>	Yes	Burdock, nightshade, tansy and stick seed hand pulled. All known sites treated.
					No	Will be evaluated in 2019
					No	will be developed in 2019
	Patches of Canada Thistle and mustard species are removed and incidence controlled	areas dominated by Canada thistle and mustard are removed and incidental Canada Thistle are controlled so patches do not form and spread		<p>contractor uses agreed mitigation for Canada Thistle and mustard species</p> <p>contractor and staff monitor success of techniques and alter focus if needed 2019</p> <p>contractor and staff design a plan for control after 2020</p>	Yes	Canada thistle cut and patches tarped.
					No	Effectiveness of tarping for Canada thistle will be evaluated i 2019
					No	will be developed in 2019
	Geese over grazing and disturbance reduced	geese are no longer overgrazing so that native shrub species can establish		<p>contractor and staff research techniques to deterring geese from overgrazed areas and consult with MOE (exclosures, planting of shrubs...) and decide a technique to trial</p> <p>inform public of plan</p> <p>trial 2018-2019 and assess results</p>	Yes	fencing established in 2018. Effectiveness will be evaluated in 2019.
					Yes	Public informed on site during installation and shrub/willow planting.
					yes	fences erected, shrubs and trees planted. Further planting will be done in 2019.
	4	Plant native trees and shrubs and enhance growth of native plants already in place.	areas previoulsy dominated by Canada Thistle and mustard specieshave established native trees and shrubs growing	<p>purchase 1 year old native shrubs and start some from seed (2017) and grow for 1 year in pots</p> <p>transplant shrubs and trees (already growing in our nursery) into areas cleared of thistle and mustard</p> <p>water and keep herbacious growth low to mitigate competiton 2018-2020 so that shrubs and trees can establish.</p>	Yes	cottonwood, willow and birch planted
					no	
	Community committed to maintaining and enhancing wildlife habitat	Classes, School Environmental Groups, and general community engage in stewardship of Scout Island Nature Centre	classes, groups, and individuals will have adopted areas of the Nature Centre to monitor invasive plants, remove invasive plants, and enhance the native plants.	<p>assign designated areas to interested groups and individuals based on groups skill level and train them to assess the baseline (workshop on invasives and native species) for their adopted section -2017</p> <p>weeds removed from each adopted site under the direction of staff and area native species planted or cared for 2018-2019</p> <p>adopted sites monitored for changes and groups decide how to maintain their site to keep invasives out or at a manageable level.</p>	no	
					no	
				no		

8-414

Quintal Floodplains



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

HCTF Project Number: CAT18-8-414

Please refer to the Land Stewardship Grant Year 2 Reporting Instructions when completing this report.

This report must be completed in conjunction with the Activities and Expenditures Report (spreadsheet) customized for your project based on your proposal. This spreadsheet will be emailed to you.

1. PROJECT INFORMATION

Project/Property Name: Quintal Floodplain

Project Leader Name: Sarah Nathan

Name of Organization: Ducks Unlimited Canada

Date of Report: March 31 2019

Author of Report (if different than Project Leader):

Name of Organization:

Contact Information:

2. SUMMARY

Provide a general description of project work completed in Year 2 (500 words max).

We initiated year two of our Land Stewardship grant works at the Quintal Floodplain with continued spring planting in April. In early April, we completed plantings initiated in Year 1, with the planting of 200 Cottonwood trees, 150 Mountain Alders, 150 live stakes and an additional 500 grams of Alder seed at the site.

In the fall, we noted that cut Russian Olive trees left on site after Year 1 had begun suckering. This was a surprise for us, and certainly an important lesson learned regarding control of Russian Olive. We chose to focus our remaining Year 2 efforts on removing these downed Russian Olive trees. Removal and disposal of invasive plant material is challenging and costly given regulations against disposal, and bylaws against as well as risks associated with burning on-site. Fortunately, we were able to identify and retain a contractor who generously donated half of their time to mulch Russian Olive on site. This will help us expend more grant and other partnership funds on controlling other weeds, additional Russian Olive, and planting native species.

Over the course of year two, we noted that Russian Olive in particular threatens the diversity of structural habitats on Quintal Floodplains (in particular, we have determined that one of our biggest



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

risks is Russian Olive encroachment into grassland habitat, given its contributions to the Osoyoos Oxbows Important Bird Area.

3. COMMUNICATIONS

Project Outreach Activities: Provide information on any outreach activities during the year that directly relate to the project.

We have not conducted any significant outreach activities this year.

Communicating about HCTF: Provide information on any activities specific to communicating about HCTF undertaken during the year.

We have promoted this project, and HCTF’s role as funder, on social media here:
<https://twitter.com/DUCinBC/status/1111751276511952896>

Media Coverage: Provide a list of any articles or media coverage during the year.

Our media coverage included promotion on social media, at the link provided under Communicating about HCTF.

4. PHOTOS

Include a minimum of three photos as part of your report, attached as separate JPG files. List the filenames below, plus a description of each photo.

Photo 1 File name and Photo Description:

Quintal_downed_Russian_Olive a photo of cut Russian Olive trees at Quintal

Photo 2 File name and Photo Description:

Russian_Olive_seed A photo of Russian Olive seed set on a tree at Quintal in December 2018

Photo 3 File name and Photo Description:

RussianOliveMulching A photo of Arc Ridge Ltd’s spider mulcher mulching downed Russian Olive to prevent suckering

5. ADDITIONAL DETAILS

Provide a description of any materials and supplies purchases funded by HCTF that are considered capital assets. See Year 2 Reporting Instructions for information on Capital Assets.



Land Stewardship Grant 2017-20 YEAR 2 REPORT FORM

We have not purchased any Capital Assets this year.

Provide any other information you wish to share with HCTF.

We are looking forward to continuing with year 3 of this grant, and to set up some management practices to maintain structural habitats at Quintal Floodplain. To do this, our expenditures will likely focus on control and suppression of Russian Olive.

6. SUBMIT YOUR GRANT REPORT

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By submitting this grant report, you certify that this report is an accurate reflection of project activities and expenditures per the HCTF Grant Agreement.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities	Progress on this Activity in Year 2 (Yes/No)	Completed Activity Description
<p style="text-align: center; font-size: 1.2em;">Quintal Floodplain</p> <p>Property Vision and/or Overall Management Goals for Property: Ducks Unlimited Canada's vision for the Quintal Floodplain property is a mosaic of healthy valley-bottom wetland, riparian and meadow habitats supporting a biologically diverse community of wildlife, including waterfowl, other avifauna (such as COSEWIC-listed Western Yellow-breasted Chat (Endangered), Western Screech Owl (Endangered), Bobolink (Threatened), and Long-billed Curlew (Special Concern)), amphibians, and others.</p>	<p>Establish healthy riparian zones alongside restored wetlands.</p>	<p>Eradicate invasive plants on berms alongside restored oxbows.</p>	<p>Canada thistle, purple loosestrife, and other invasive plants removed from riparian zones around restored oxbows.</p>	<p>Spring/summer monitoring by staff to identify areas requiring further treatment for invasive plants (annual).</p>		<p>Contractor visit to site to inspect plantings and supervise contract operators during chipping of Russian Olive.</p>
				<p>Refinement of treatment plan and site visit with weed removal contractor (annual).</p>		<p>DUC staff and contractor visit to site and discussion of additional restoration activities required (DUC staff time in-kind)</p>
				<p>Chemical treatment of invasive plants by contractor (annual spraying in summer). May shift to mechanical treatment as the incidence of Canada thistle is reduced and native plant density increases at site.</p>		<p>Chipping of invasive Russian Olive on site to stop suckering and further spread of Russian Olive from downed trees.</p>
	<p>Establish healthy riparian zones alongside restored wetlands.</p>	<p>Increase native riparian plant density on berms alongside restored oxbows.</p>	<p>Diverse community of native shrubs and trees (snowberry, rose, etc.) established in riparian zones around restored oxbows (3.5 hectares total).</p>	<p>Fall monitoring by staff to determine survival of planted stock and identify areas requiring further planting treatment (annual).</p>		<p>Contractor time on site monitoring and preparing recommendations for DUC staff</p>
				<p>Refinement of planting plan and site visit with planting contractor (annual).</p>		<p>DUC staff time in fall on research related to site, project management, site visit, and direction to contractors.</p>
				<p>Infill planting and seeding to increase native plant density and discourage re-establishment of invasive plant species along berms. (Estimate 3,300 shrubs/trees planted over 3 years: Year1: 2,000; Year2: 900; Year3: 400. Note, seed may include non-native species selected to discourage re-establishment of fast-spreading invasive plants.)</p>		<p>We planted 200 Cottonwood trees, 150 Mountain Alders, put in 150 live stakes and added 500 grams of Alder seed.</p>