

HABITAT CONSERVATION TRUST FOUNDATION

LAND STEWARDSHIP GRANTS

Approved Project Plans 2020-23 Funding Cycle



Habitat Conservation Trust Foundation Land Stewardship Grants 2020-23

Introduction

In 2008, the Habitat Conservation Trust Foundation (HCTF) was provided with 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 2016 and 12 grants were awarded for the 2017-2020 period. The second intake for this program occurred in late 2019 and 13 grants were awarded for 2020-2023. This document contains copies of the following project plans approved for funding.

Project #	Project Name	Project Region	Grant Amount
1-647	Martha's Place	Vancouver Island	\$12,648
1-651	Matson Conservation Area	Vancouver Island	\$33,000
1-733	Central Denman Conservation Complex	Vancouver Island	\$33,243
1-734	Millard Learning Centre	Vancouver Island	\$43,780
1-735	Chemainus Estuary Lands owned by Ducks Unlimited Canada (DUC)	Vancouver Island	\$20,328
2-673	Rodgers	Lower Mainland	\$7,779
2-674	Savary Island Road	Lower Mainland	\$7,953
2-675	Vancouver Boulevard	Lower Mainland	\$7,952
2-676	Frenchies Island	Lower Mainland	\$9,900
3-425	Turtle Valley Farm/Toad Hollow Invasive Plant Management and Rehabilitation Project	Thompson - Nicola	\$45,051
4-551	Fort Shepherd Conservancy Area	Kootenays	\$47,188
4-606	Morrissey Meadows	Kootenays	\$19,256
8-457	R.E. Taylor Conservation Property	Okanagan	\$9,130

Total for program:

\$297,208

1-647 Martha's Place



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: <u>1-647</u>

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at christina.waddle@hctf.ca or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project Leader:				Рац	Paul Chapman					
Field Contact (optional):				Lin	Lindsey Haist					
Role of Project Leader in Organization:			า:	Executive Director						
Organization Name: Nanaimo & Are			rea Lo	a Land Trust						
Address #8 – 140 Wallace Street										
City:	Nar	naimo		Prov	ince:	BC		Postal Code:	V9R 5B1	
Phone: 250-714-1990				Alternative Phone: 250-714-1994						
Email: paul@nalt.bc.ca										
Website: <u>http://nalt.bc.ca/</u>										

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$12,648

3. ORGANIZATION DETAILS

Date of incorporation:	April 19 th , 2995				
BC Society No. (if applicable):	S-33510				
CRA Charitable registration number (if applicable):	893193771 RR0001				
Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.					

Since 1995 NALT has worked to fulfil its mission – *to support, promote and protect the natural values of land and water in our area.* We do this through land protection, stewardship and outreach. We are perhaps best known for leading the acquisition campaigns to secure Cottle Lake Park and Mount Benson Regional Park. We also hold 13 conservation covenants and own or are transitioning to own 2 properties. We carry out and support many stream stewardship initiatives and promote natural systems through our native plant nursery. In recent years we have produced two water stewardship symposia and are currently working on a third annual event with our partners. With a budget of \$261,000 (est. 2018), 1 full-time and two part-time staff, a contract Nursery Coordinator and 455 volunteers (70 active in 2018) we work to implement the mission – *A healthy and sustainable environment in which the natural values of land and water in the Nanaimo area are protected in perpetuity.*

NALT has been involved in conservation land management planning and monitoring of activities as part of the responsibilities of holding conservation covenants. With funding from HCTF, NALT developed management plans for two owned properties, the Martha Warde Property (fee simple) and the Parnassian Woods (life estate). Some elements of the Martha Warde management plan have been initiated depending on available funds. Management of the Parnassian Woods awaits conclusion of the life estate agreement.

4. CONSERVATION PROPERTY INFORMATION

Property/Project Name:	Martha's Place				
Other names used (if applicable):	Martha W	a Warde Property			
Property Identification Number(s) (PID):	00646311	.8			
Geographic Coordinates (Lat, Long):	49°24'50.	5"N 124°38'27.2"W			
Property size (Ha):	8.9				
Does your organization have fee simple ow	nership of t	this property?	Ye	s 🖂	No
If yes, how long has your organization own	ed this prop	perty?		Since	e 2010
If no, provide the name the NGO who has f ownership of the property.*					
Is the property leased to any other party?*	*	Yes 🗌		No 🖂	
If yes, provide the name of the leaseholder					
Have you previously received any HCTF funding for the property or activities on the property? Yes No					No 🗌
*If the property is owned by another NGO, you must include a letter from the NGO property owner stating that they support the application.					
**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.					

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words.

Martha's Place is a 22-acre (8.9ha) property near Qualicum Beach, BC. The property is within the Coastal Douglas Fir Moist Maritime (CDFmm) biogeoclimatic zone, one of the rarest ecosystems in BC, and supports a portion of Nash Creek, a fish-bearing watershed of importance to local salmon and trout populations. The forested area of the property is characterized by mostly young structural stage (< 80 years) Douglas-fir forest with some areas of old conifer growth and riparian vegetation. Habitat features on the property support many wildlife species including some threatened species on the BC Conservation Data Centre Red and Blue lists.

Martha's Place has some ecologically valuable wildlife habitat features that provide nesting, foraging and hunting opportunities for a variety of species. Young forests are an important stage in regeneration and often contain high loads of coarse woody debris (CWD) and wildlife snags along with early seral vegetation that provides food and shelter. Riparian areas like the Nash Creek watershed contain high biological and structural diversity, create connectivity between forested and aquatic ecosystems, protect watercourses against erosion, provide fish spawning habitat, and play a key role in water and soil filtration. Preserving habitat diversity is critical to conservation as species utilize different habitats throughout their life cycle for different purposes or in different seasons. Forested areas containing a variety of structural stages along with well-developed understory, riparian vegetation and other key features have the potential to support a diversity of wildlife. The property consists of red-listed coastal Douglas-fir ecological community and is likely habitat for red and blue-listed species including peregrine falcon, western screech owl, northern goshawk, northern pygmy owl, barn swallow, pine grosbeak, Townsend's big-eared bat and northern red-legged frogs.

Nash Creek is a small watershed that runs about 2.5 km from its origin within Crown land inland of Martha's Place to its estuary in Qualicum Bay. The creek flows into Martha's Place near the property's western boundary and crosses underneath the LRCT and E&N Railway before flowing south out of the property. Coho salmon (*Oncorhynchus kisutch*) and cutthroat trout (*Oncorhynchus clarkii*) spawn in the stream but smolt are sometimes prevented from emigrating to the ocean due to drastic changes in seasonal flow and a build-up of gravel at the creek mouth (Gaboury, 2011). Old growth and well-developed riparian vegetation surround the creek providing critical habitat for fish and other wildlife including the Blue-listed Northern red-legged frog.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

NALT's vision for the property is a healthy maturing cDf forest and creekshed supporting a diversity of plant and animal species and providing critical habitat features for a number of red and blue listed species endemic to the CDFmm biogeoclimatic zone or transiting the zone along a migratory route. The management goals are:

- To steward the land to protect, conserve and enhance its natural values
- To protect and enhance, where applicable, natural ecological processes
- To ensure that permitted land uses will not significantly impair the natural condition of the land or inhibit natural ecological processes within natural areas of the land
- To identify and locate invasive species and recommend a plan for their removal and control

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

Without funding the implementation of the management plan will be delayed, specifically removal and control of invasive species and the completion of a Baseline Inventory to support management goals.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

Property Management Plan for the Ecological Values of Martha's Place, Qualicum Beach, BC 2017

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

NALT intends to contract for completion of specific tasks, namely invasive species removal and control and a Baseline Inventory for the property.

Describe local community involvement in conserving and maintaining the property (200 words max).

A couple providing caretaker services live on the property. Depending on the nature of the work, NALT may engage volunteers to assist with specific activities.

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

As it is currently occupied by caretaker tenants, public access is restricted. In the future, NALT may use the property as an interpretive centre given its proximity to the Regional District of Nanaimo's Lighthouse Country Regional Trail. Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

No.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

NALT calculates the administration of this project at 15% of the total project value. NALT will cover the administrative cost as part of NALT operations budget.

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.



Figure 2. Map and air photo of Martha's Place. Adapted from RDNMAP GIS mapping tool, Regional District of Nanaimo. URL: <u>http://www.rdn.bc.ca/gis-mapping</u>



Legend

- Property boundaries
- ----- Nash Creek
- ----- Path of old logging road

- RA Residential-Agricultural Area F Forested Area
- r Forested Area



Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
	To identify and locate invasive species and recommend a plan for removal and control	Implement a program for invasive species removal from forested area of property	Control and/or removal of priority invasive species including English ivy, English holly andHimalayam blackberries.	Primary removal of priority invasive plant species (2020) Maintenance of invasive plant species removal/control (2021) Maintenance of invasive plant species removal/control (2022)
Martha's Place	To steward the land, to protect, conserve and enhance its natural values; to protect and enhance, where applicable, natural ecological processes; to ensure that permitted land uses will not significantly impair the natural condition of the land or inhibit natural ecological processes within natural areas of the land.	Baseline Inventory Study to identify plants and wildlife, map ecosystems and document ecological values.	Completed Baseline Inventory	Produce Baseline Inventory Study (2020)
Budget Summary - HCTF Funding Fotal: \$ 12,648.00 Admin Fee %				
Admin Fee \$ \$ - B Yr Total incl Admin \$ 12,648.00 Fee:				
TOTAL of Additional Contributions Required				



1-651 Matson Conservation Area



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: <u>1-651</u> (HCTF to complete)

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at christina.waddle@hctf.ca or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project Leader:			We	Wendy Tyrrell					
Field Contact (optional):									
Role of Project Leader in Organization:			า:	Habitat Management Coordinator					
Organization Name: Habitat Acquis			isitior	n Trust					
Address		PO Box 96	63						
City: Victoria			Pro	vince:	BC		Postal Code:	V8V 3S2	
Phone: 250.995.2428				Alte	rnative Phone:				
Email: wendy@hat.bc.ca									
Website: http://hat.bc.ca									

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$43,766

3. ORGANIZATION DETAILS

Date of incorporation:	1996			
BC Society No. (if applicable):	S-36193			
CRA Charitable registration number (if applicable):	88962 6545 RR0001			
Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.				

HAT is a regional land trust located in Victoria BC whose mission is to conserve nature on southern Vancouver Island and the southern Gulf Islands and we envision a future where the full array of natural habitats in our focus area are healthy and conserved. HAT pursues its mission by increasing protected areas, by stewarding and restoring natural areas, by engaging the public and above all, HAT works through partnerships. HAT was established in 1996 by the Victoria Natural History Society (VNHS) who envisioned a local land trust that would directly conserve land by acquiring titles and covenants, and by working with residents to foster stewardship of natural ecosystems.

HAT was involved in promoting the effort to establish a Sea-to-Sea Greenbelt in the Sooke Hills and beyond. As a result of that effort HAT worked with the Society to Protect Ayum Creek to conserve Ayum Estuary. That purchase became HAT's first acquisition. Today, the Sea-to-Sea Greenbelt is over 95% protected, and HAT directly stewards over 1600 hectares of natural habitats. Since then, HAT has participated in the protection of 30 conservation areas through easements/conservation covenants and fee-simple while managing those places through a variety volunteer stewardship programs.

HAT has 5 full- and part-time employees and roughly 400 active volunteers. HAT is a volunteerfocused organization that administers several programs that outreach to youth as well as adults. Volunteer and outreach programs include: Good Neighbours, BC Community Bat Program (Southern Vancouver Island), Green Spots, Goldstream Chums, Friends of Havenwood Park, and the Matson Mattocks as well as HAT's volunteer events that perform restoration work on different conservation areas each month.

Collectively, HAT staff have 77 years of experience in conservation land management, and organizationally HAT is well-respected for our stewardship of a variety of conservation areas throughout the Capital Regional District area.

Property/Project Name:	Matson C	Conservation Area				
Other names used (if applicable):	MCA	CA				
Property Identification Number(s) (PID):	023-666-8	397				
Geographic Coordinates (Lat, Long):	48°25'43″	to 48°25′46″ N; 12	3°23′	41" to 12	3°23′48″E	
Property size (Ha):	0.984					
Does your organization have fee simple ow	his property?	Ye	es 🖂	No 🗌		
If yes, how long has your organization own	ed this prop	perty?		15	years	
If no, provide the name the NGO who has f ownership of the property.*						
Is the property leased to any other party?*	Yes			No 🖂		
If yes, provide the name of the leaseholder						

4. CONSERVATION PROPERTY INFORMATION

Have you previously received any HCTF funding for the property or activities on the property?

No	\square
INO	\square

*If the property is owned by another NGO, you **must** include a letter from the NGO property owner stating that they support the application.

**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words.

Matson Conservation Area (MCA) is the last section of intact Garry Oak Ecosystem along the Victoria Harbour front, located within the Victoria Harbour Migratory Bird Sanctuary, in the heart of the Salish Sea. Rare and endangered plant communities include Douglas-fir – Arbutus, Douglas-fir – Alaska onion grass, Garry oak - California brome, Garry oak – Arbutus, and Garry oak – Oceanspray, all provincially listed as S1 or S2 ("imperilled" or "critically imperilled"). This piece of land hosts blue-listed Great Blue Heron and Purple Martin, as well as Bald Eagles, Anna's Hummingbirds, North American River Otter den site. This property also has great cultural significance, containing two shell middens confirming extensive land use by First Nations. This unique parcel of land is found along the Songhees Walkway in Esquimalt and provides a valuable ecological buffer between Victoria and Esquimalt parklands. The current condition of the ecosystems range from intact Garry Oak habitat to heavily degraded Douglas-fir forest. The site was once a large mansion with extensive European gardens, leading to our current challenge with invasive species (e.g., Scotch broom, English ivy, English Hawthorn, English Holly, Himalayan blackberry, Daphne laurel and several non-native grasses) were found thriving throughout the property and HAT and our partners are invested in an intensive long-term restoration and stewardship program.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

HAT's vision for Matson Conservation Area (MCA) is as a functioning ecosystem that is also a hub for volunteer activities and public awareness for conservation, invasive species, and how functional, local ecosystems can work in an urban setting.

The primary management goals for this property are to:

- Restore and sustain the ecological integrity and ecosystem processes within the Conservation Area;
- Restore and Enhance wetland habitat and create public access (near Garrett Place public entrance) to enhance wildlife habitat, increase public engagement and decrease impact of homeless encampments;
- Successfully coordinate management through a newly established Management Advisory Group; and
- Establish public outreach and educational opportunities.

Underlying priorities include:

- Removing invasive species and monitoring/managing progress and successes;
- Enhancing, restoring and sustaining the native Garry Oak ecosystems and the native wildlife that occur there;
- Encouraging community support and involvement for activities being undertaken on the Conservation Area;
- Fostering public understanding of and support for the enhancement projects; and
- Outreach and education to the general public to enhance community knowledge of Garry Oak Ecosystems.

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

Currently, MCA is being funded solely through HAT's endowment fund prohibiting any substantial management or stewardship from taking place or even from being planned, specifically as much of the work needed at MCA is considered "management," making it difficult to find funding for ongoing work and future planning. Given this limited funding, achieving management objectives and oversight of the volunteer stewardship group (the Matson Mattocks) provides challenges of stagnancy and rollover of important goals year to year. At this point, volunteers are undertaking the majority of monitoring and stewardship and are in desperate need of an updated management plan. An ongoing decline in management will lead to a re-establishment of invasive plants and trees that are currently under regular management, habitat for pollinators will decline, and roosting habitat and nesting trees will wane and perish if understory is not managed. Ecosystem loss will continue with iconic Garry Oak meadow species, such as common and great camas, chocolate lilies and sea blush, once again being crowded out by introduced grasses and annual and perineal forbs. Additionally, public access will continue to be a challenge, and temporary encampments on the property will not be reported and will become increasingly difficult to manage. The public and our partners will be hesitant to support and collaborate with Habitat Acquisition Trust if we are not able to meet our mandate of caring and restoring the MCA. This funding stream offered by HCTF represents the filling of a much-needed niche in the conservation community and, importantly for organizations like HAT, which would provide for the respectful care of these sensitive ecosystems in a consistent and thorough fashion.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

- Matson Property Management Plan (2004)
- Matson Baseline Report (2005)
- HAT's strategic Plan (2015-2020)
- Conservation Covenant (Matson Conservation Area)

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

- Don Mann Excavating: labour, materials, expertise (confirmed);
- Matson Mattocks: volunteer labour, stewardship activities, wardens of the sight (confirmed);
- TD Friends of the Environment Foundation (3 years previous funding, and volunteer labour);
- Township of Esquimalt: Parks Dept. pick up of biomass weekly, Bylaw services to manage encampments and garbage, drug paraphernalia.
- Victoria Community Police Officers: Providing service to escort campers out of the MCA.
- Greater Victoria Green Team: Partnered with HAT by providing volunteers for numerous community-based restoration events.
- Victoria Migratory Bird Sanctuary: Support for public awareness and importance of MCA to the Sanctuary.
- Ecological Gifts Program: Has provided limited funding for managing the MCA.

Describe local community involvement in conserving and maintaining the property (200 words max).

The Matson Mattocks are the stewardship group that holds weekly restoration events, contributing over 320 hours of stewardship per year for over 10 years. The Greater Victoria Green Team and Telus Day of Giving has also provided hours towards management of the land.

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

Yes. The property is easily accessed from the Songhees Walkway (which can be accessed via Westbay Marine Village off of Head St, and from an access point off of Kimta Rd), as well there is a public entrance at the end of Garrett Place that utilizes the walkway along the front of the Swallows Landing condos, with a sweeping view of the meadow below and waters leading to a set of metal stairs that are raised above the meadow down to the walkway. This is perhaps the most used access to Matson Conservation Area.

9. FINANCIAL INFORMATION

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

No.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

No. Costs of administration are included in staff time (Executive Director's time).

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.





Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
Matson Conservation Area	Enhance, restore and sustain the native Garry Oak associated ecosystems and the native wildlife that occurs in this Conservation Area	Remove invasive tree, shrub and grass species that threaten biodiversity and native plant germination and success.	 Invasive species cover on Matson Conservation Area will be reduced by 25% over 3 years. Through collaboration, Matson Mattocks will continue to volunteer restoration efforts weekly. Creation of an Invasive Plant Management Strategy utilizing Best Management Practices and an integrative management approach. Application of herbicide to manage specific Invasive Species 	Hold at least two community-based restoration events (1 per year) targeting highest priority invasive plant species that threaten the site. Meet with the Matson Mattocks three times per year to establish priority management activities and review previous activities and achievements; attend occasional Matson Mattocks volunteer days Work with contractor on herbicide application
		Install native trees, shrubs, grasses and forbs to enhance biodiversity, pollinator sources and prevent re-establishment of invasive plants.	 Habitat diversity and abundance will be increased by 20% Addition of native food, nesting and cover sources for wildlife, measured through surveys and monitoring. 	Install at least 500 native plants in the meadow and Douglas fir understor in years 1 and 2 Disperse at least \$2000 of annual and perennial seeds suitable for the Garry Oak Meadow in years 1 and 2
Budget Summary - HCTF Funding Total: \$ 30,000.00 Admin Fee % 10%		Monitor/manage progress and success using qualititative and quantitative data collection methods and reporting results at the end of 3 years.	 Utilizing a monitoring program, both quantitatively and qualitatively data collected will provide valuable information to gauge success over time. In monitoring annually utilizing volunteer community members we can provide learning opportunites for the stewardship members. Monitoring will provide data that can provide valuable information vital for implementing an adaptive management program. 	Perform a species survey (over 2 seasons) to gather information for a baseline on species and abundance. Monitor planting sites and meadow annually using photo-point surveys (qualitative) and collecting line-transect data (quantitative) in meadow and Douglas fir forest. Write summary report depicting activities performed, successes and monitoring results.
Admin Fee \$\$3,000.003 Yr Total incl Admin\$33,000.00Fee:	Restore and enhance land near Garrett Place at public entrance of property	Create and enhance wildlife habitat at a disturbed site near the public entrance to the MCA	 Creation of bird and wetland habitat; mitigation of pollutants and runoff from roadway Enhancement of public access; decrease in site disturbance due to homeless encampments by opening site-lines and increasing foot-traffic 	Clean up disturbed site at end of Garrett Place (removal of invasive species and debris) in-kind by Mann Construction Trail building through forested area Wetland habitat creation at the site of natural drainage

TOTAL of Additional Contributions Required\$ 27,500.00TOTAL of Additional Contributions Confirmed\$ -	Successfully coordinate the newly established MCA collaborative group of partners (Management Advisory Group)	Coordinate and implement priority management activies	1. Management Advisory Group will meet 2x/year to coordinate implementation of the Management Plan and Restoration Plan for Matson Conservation Area.	Coordinate Management Advisory Group meetings 2x/year Provide Annual Summary Reports to Management Advisory Group
	Establish public outreach and educational opportunities	Encourage community support and engagement in Conservation Area	1. Interpretive signs will be installed to encourage public learning about the ecology and history of the site	Design, print and install interpretive signage onsite.

1-733 Central Denman Conservation Complex



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: <u>1-733</u> (HCTF to complete)

1. PROPONENT (APPLICANT) INFORMATION

Project Leader:			Erik	ka Blai	nd				
Field Contact (optional):			(Sa	(Same as above.)					
Role of I	Proje	ect Leader	in Organizatior	า:	Land I	Manager			
Organization Name: Denman Conse			servan	vancy Association					
Address		P.O. Box 60							
City:	Dei	nman Island Province: BC			BC		Postal Code:	VOR 1T0	
Phone: 250-702-7773			Alternative Phone: 250 240 3210 (Ron Shepherd, DCA Treasurer)				n Shepherd, DCA		
Email: <u>dcalandmanager@gmai</u>		il.com	<u>n / in</u>	fo@denmancons	serv	ancy.org			
Website: <u>www.denmanconserva</u>		incy.o	rg						

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$ 33,871.55

3. ORGANIZATION DETAILS

Date of incorporation:	1991
BC Society No. (if applicable):	S0027585
CRA Charitable registration number (if applicable):	13769 8700 BC0001

Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.

DCA envisions diverse and resilient ecosystems, stewarded in perpetuity by an inspired and informed community. Our mission is 'To engage the Denman Island community in the protection of natural ecosystems on the island, through: Acquiring, managing and stewarding lands; Educating; Enabling nature experiences; Building collaborative relationships; Enhancing human and financial resources to

sustain our organization; and, Conducting our work/role in the context of global environmental issues.'

With an annual membership of 240+ people, the work of DCA is carried out almost entirely by volunteers. In 2008 an annual, part-time Land Manager contract position was created to support the 10-person Board of Directors and its lands management sub-committee. The annual operating budget is approximately \$72,000, with funds coming primarily from memberships and cash donations, active fundraising on Denman Island (biennial Home and Garden Tour, T-shirt sales, annual book-sale), and project grants.

In 28 years of conservation experience DCA has undertaken numerous projects related to wetland and forest stewardship including: *Land acquisition (Purchase of 2 properties, organizing, ensuring and contributing to the purchase of, and then managing for the Islands Trust Conservancy, 4 Nature Reserves, and holding covenants on 15 properties); *Stewardship (Assisting 113 landowners with stewardship of sensitive ecosystems on their properties under a major Private Land Stewardship Program & working with 20 landowners of vernal pools to conserve rare species including Taylor's Checkerspot butterflies in the Meadow Stewardship Program); *Salmon enhancement (community education and inventory, mapping of surface fresh water in wetlands and creeks under the BC Urban Salmon Habitat Program); *Species conservation education and outreach through numerous workshops and articles on many species such as beavers, bats, wood ducks, river otters, purple martins, amphibians, aquatic invertebrates; annual Frog Festival and over 15 winters of weekly trumpeter swan counts on all major Denman wetlands; participation in the twice-annual Denman bird counts to do our part in taking the pulse of our part of the international collaboration for protection of Important Bird Areas, Pacific Yukon Region.

Previously Funded Land Management/Stewardship projects: HCTF Land Stewardship Grant 1-678 'Settlement Lands' (2017-2020) (THANK YOU!); National Wetlands Conservation Fund (NWCF 1718 'Enhancement of Degraded Wetlands in Beadnell Headwaters Wetland Complex' 2017-2019); Eco Action grant EA-BC-2009k060 (2010 -2012), 'Landkeepers'; HSP projects 2013HSP6639 - Taylors Checkerspot butterfly Habitat Stewardship and continuing HSP Checkerspot work, jointly with BC MoE and GOERT Recovery Implementation Group; private land stewardship for Taylor's Checkerspot; Land Stewards program 1997-99.

DCA is a partner in the management of Islands Trust Conservancy (ITC) properties on Denman Island. ITC is a BC Government agency with major conservation land holdings in the Gulf Islands of BC. The ITC Board holds a conservation covenant on the Settlement Lands and Winter Wren Wood properties. DCA also works collaboratively with Denman Island Memorial Society (DIMS) to ensure the management of the Denman Natural Burial Cemetery meets the conservation objectives set out in the Covenant held by DCA on that property. (Letters of support for this project from ITC and DIMS are enclosed with this application.)

Property/Project Name:	Central Denman Conservation Complex		
Other names used (if applicable):	Complex Includes 5 conservation areas:		
	(1) Winter Wren Wood (DCA)		
	(2) Settlement Lands (DCA)		

4. CONSERVATION PROPERTY INFORMATION

	1				
	(3) Central Park (DCA	A)			
	(4) Inner Island Nature Reserve (ITC)				
	(5) Denman Island N	atural Burial Cemetery	(DIMS)		
Property Identification Number(s) (PID):	(1) 009-712-305				
	(2) 006-657-656 + 00	06-639-771			
	(3) 006-639-411				
	(4) 018-012-256				
	(5) 028-994-965				
Geographic Coordinates (Lat, Long):	(1) 49.557080 -124.	817643			
	(2) 49.552534 -124.	805212			
	(3) 49.537198 -124.	782411			
	(4) 49.546807 -124.	801255			
	(5) 49.535111 -124.	778210			
Property size (Ha):	(1) 2.4 Ha				
	(2) 63.5 Ha				
	(3) 60 Ha				
	(4) 36.6 Ha				
	(5) 1.1 Ha				
	TOTAL: 163.6 ha				
Does your organization have fee simple ow property?	nership of this	Yes 🖂	No 🖂		
If yes, how long has your organization own	ed this property?	DCA retains ownersh properties, and previ the other 2 to partne societies.	ously donated		
		(1) Winter Wren Woo acquired 2000	od: DCA		
		(2) Settlement Lands: DCA acquired 2006			
		(3) Central Park: DCA	acquired 2006		
		(4) Inner Island Natur DCA acquired 1992, c 1992, DCA is co-mana	lonated to ITC		
		(5) Denman Island Na Cemetery: DCA subdi			

		•	and donated to DIMS olds covenant.
If no, provide the name the NGO who has fee simple ownership of the property.*	Inner Island NR is owned by Islands Trust Conservancy, donated by DCA in 1992.		
	Denman Natural Burial Cemetery is owned Denman Island Memorial Society, donated DCA in 2013.		
Is the property leased to any other party?**	Ye	s	No 🖂
If yes, provide the name of the leaseholder.			
Have you previously received any HCTF funding for the property or activities on the property?	Ye	es 🖂	No 🗌
*If the property is owned by another NGO, you must in stating that they support the application.	NGO property owner		

**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words.

The Central Denman Conservation Complex (which includes Central Park, Settlement Lands, Winter Wren Wood, Inner Island Nature Reserve and Denman Natural Burial Cemetery) features 403 acres (163 ha) of rare Coastal Douglas-fir ecological communities across five conservation land parcels. All but one of the properties are protected by Conservation Covenants, and on-going stewardship work by DCA and partner agencies conserves and enhances the rich biodiversity and valuable natural features found within these lands. The Complex hosts numerous large, varied vernal and perennial wetlands; Salmonid-bearing Chickadee Lake & Beadnell Creek and portions of interconnecting riparian habitat within the Beadnell and Graveyard Marsh watersheds; steep rocky bluffs; slopes of different aspects; mature and old Coastal Douglas-fir forest; and upland meadow plateaus. All of these habitats together provide important ecological connectivity and refuge for many wildlife species. The five properties in the Complex are all adjacent to one another or connected by trails crossing through the surrounding ~300ha Denman Island Provincial Park/Protected Area. The Central Denman Island Conservation Complex provides the main ecological linkage between the north and south drainages of Denman Island.

Winter Wren Wood protects old forest and wetland habitat adjacent to Chickadee Lake, and Inner Island Nature Reserve and Settlement Lands protect remnant old-growth stands and two major connected wetlands (Pickles and Homestead Marshes), which are headwaters of the Beadnell Creek drainage that supports salmonid species (cutthroat trout, and Coho and Chum salmon). The Central Park South Swale wetland is also linked to this watershed. Central Park and Denman Island Natural Burial Cemetery also protect the Graveyard Marsh headwaters, which drain further south and support diverse riparian and mixed deciduous habitats and breeding grounds for river otter. Networks of ditches currently allow the former Swale Marsh (~50 hectares) adjacent to the Complex to be drained for agriculture, further underscoring the importance of conserving remaining wetlands and upland habitats as refuge spaces for biodiversity in this area. Characteristics of re-growing forest in Central Park suggest that one of its forest types is among the most rare and threatened forest communities in BC: CDFmm site series 05 'Western red cedar, Douglas-Fir – Kindbergia' (05), RED LISTED in climax condition.

Overall management goals for the Property Complex emphasize habitat protection and biodiversity enhancement for at least 16 species at risk, including the endangered Taylor's Checkerspot butterfly, and at least 6 rare ecosystem communities. Management goals also include providing opportunities for safe, low-impact nature observation, scientific research, community outreach, and education.

Federally or Provincially-listed Species at Risk recorded within the Complex include: Band-tailed pigeon, Barn owl, Barn swallow, Blue dasher dragonfly, Common nighthawk, Common wood nymph butterfly, Cutthroat trout, Dun skipper butterfly, Great blue heron, Little brown myotis, Northern red-legged frog, Olive-sided flycatcher, Western pine elfin butterfly, Western Pondhawk dragonfly, Western screech-owl, and Taylor's Checkerspot butterfly.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

The roots of vision for this project come from the Protected Areas Network vision put forth by Silva Ecosystem Consultants in their thorough mapping and ecological assessment of Denman Island in 1999 (See map enclosed). At that time, clear-cut logging impacted 1/3 of the island's total land area, mainly in its north half. The extensive forest and wetland surveys done as part of the Silva ecological assessment helped Denman Conservancy Association crystallize our 'Central Park Vision' for an extensive network of contiguous protected lands that maintain ecological connectivity for diverse wildlife, from Denman Road to Chickadee Lake. DCA's work to acquire the five properties within the Central Denman Conservation Complex has thus brought this Protected Areas Network Vision to fruition, and the ongoing management of the lands in this Network is critical for repairing damage from the 1999-2000 logging period and protecting/restoring ecological structure and function within these Coastal Douglas-fir forest and wetland communities.

Goal 1: Maintain/increase populations of invertebrate, amphibian, mammal & bird species at risk including: Taylor's Checkerspot (SARA endangered); Dun Skipper (BC Red List); Western Pondhawk (BC Blue List); Northern Red-legged frog (BC Blue List); Olive-sided flycatcher (BC Blue List); Common Nighthawk (SARA Threatened); Little brown bat (SARA Endangered).

Goal 2: Following positive ID of one American Bullfrog on Denman Island (2018), protect native wildlife diversity & habitat for Northern Red-legged frog (BC Blue List), other amphibians, and breeding waterfowl. Prevent colonization of American Bullfrog into areas where it is currently unrecorded.

Goal 3: Protect sensitive habitat from damage with management aids in areas of concern for wildlife & rare plant communities (migrating/nesting waterfowl; at-risk invertebrates & amphibians; old-growth Coastal Douglas-fir forest stands; sensitive bluff flora).

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

Taylor's Checkerspot and other invertebrate pollinators, along with many birds, mammals and amphibians, require open, wet meadows and shallow, vernal pools for breeding, basking, migration and foraging. Vegetation in-growth in the Settlement Lands Butterfly Reserve located at the centre of known critical habitat for Checkerspots, especially growth of invasive species (Scotch broom, Canada thistle, Reed Canarygrass) is likely to shade out important host plant species for TC and other pollinator species, if not controlled. Enhancement (by propagation and translocation) of native meadow flora will mitigate against reductions in biodiversity brought about by monoculture-forming agronomic grasses and other invasive plant species which colonize disturbed open areas.

The Denman Island Wildlife Advisory Committee has confirmed one record (2018) of an American Bullfrog on Denman Island, and a few more unconfirmed reports of calls have since been reported by local naturalists. To date, American Bullfrogs are not known to be present in Denman Island wetlands, but could pose a significant risk to native fauna including the threatened Northern Red-legged frog if populations are able to develop. Initiating proactive monitoring and providing on-island opportunities for training in Early Detection and Rapid Response protocols for Bullfrogs will mitigate this risk.

Human development is increasingly causing irreversible destruction of habitat for at risk bat species, which is further exacerbated by hydrological regime changes, predation and disease. Without appropriate and safe maternal roosting habitat that is lost with such development, and maintenance of functionally diverse wetland habitats that serve drinking and foraging needs of bats, populations of bats in BC will continue to decline.

In the absence of proper boundary marking, accidental (and intentional) incursion from private lands into protected areas is more likely to occur than if boundaries are clearly marked. When the signage and management aids that help direct appropriate uses within protected areas are degraded or deficient, unauthorized uses (such as hunting, tree-cutting, dumping of refuse, off-leash dogs, domestic plant cultivation, disturbance/trampling of sensitive species and their habitats) are more likely to occur/continue, especially where some of these uses have historical precedent prior to the acquisition of lands for conservation. Improving signage and management aids is an important aspect of the ongoing work of protecting sensitive habitats while maintaining safe public access to build community empathy for natural areas.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

- Winter Wren Wood Management Plan 2002; First Revision in progress, Denman Conservancy Association 2019
- Settlement Lands Management Plan 2017, Denman Conservancy Association
- Baseline Documentation Report for the Settlement Lands, Balke 2017
- Central Park Management Plan 2006; First Revision Denman Conservancy Association 2016
- Inner Island Nature Reserve Management Plan 1994; First Revision Denman Conservancy Association 2005; Second Revision in progress, Islands Trust Conservancy 2019
- Baseline Documentation Report for Inner Island Nature Reserve Durand 2003; First Revision Balke 2019
- Management Plan for Denman Island Natural Burial Cemetery 2012; First Revision Denman Island Memorial Society & Denman Conservancy Association 2018
- Baseline Documentation report for Denman Island Natural Burial Cemetery, Fyson 2010, First Revision Fyson 2019.
- Parks Canada Agency. 2005. Recovery Strategy for Multi-species at Risk in Maritime Meadows Associated with Garry Oak Ecosystems in Canada (proposed). In Species at Risk Act Recovery Strategy Series. Ottawa: Parks Canada Agency. 98 pps.
- Environment Canada. 2016. Recovery Strategy for the Olive-sided Flycatcher (Contopus cooperi) in Canada. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa. vii + 52 pps.
- Environment Canada. August et al. 2012. Invasive Species Strategy for British Columbia, 25 pps.
- B.C. Ministry of Environment. 2016. Best Management Practices for Bats in British Columbia, Victoria, BC. 108 pps.
- Environment Canada. 2016. Management Plan for the Northern Red-legged Frog (Rana aurora) in Canada [Proposed]. Species at Risk Act Management Plan Series. Environment Canada, Ottawa. 4 pps.+ Annex.
- Environment Canada. 2016. Recovery Strategy for the Common Nighthawk (Chordeiles minor) in Canada. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa. vii + 49 pps.
- B.C. ministry of Environment, Lands and Parks. 1998. Inventory Methods for Pond-breeding Amphibians and Painted Turtle. Standards for Components of British Columbia's Biodiversity No. 37 Version 2.0.
- Coastal Douglas Fir (CDF) Conservation Partnership. 2017. Conservation Strategy.
- Silva Ecosystem Assessment, Protected Areas Network Proposal Maps, Hammond 1999.
- Bird Conservation Regional Strategies (BCRS)-Region 5, Pacific Yukon Region. (Specific Activities called for within this strategy: Monitoring of wetland populations, water quality and invasive species.)
- Atlantic Water Network. 2019. Wet-Pro Water Quality Monitoring Protocols & Training Modules, online https://wet-pro.ca/

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

Islands Trust Conservancy (letter enclosed, Nuala Murphy) – funding via Annual Service Contract; legal and other technical and legal conservation expertise; consultation on signage needs; mapping and GIS support

Denman Island Memorial Society (letter enclosed, Jane Lighthall) – volunteer labour (i.e. for removal of invasive species) and Garry Oak meadow seeds for restoration effort

Denman Island Residents' Association Parks Committee (letter enclosed, Laura Pope)– volunteer support, tools/equipment, expertise and knowledge of wildlife and recreational connectivity in the Central Denman Conservation Complex; consultation on management aids/signage needs

Denman Island Wildlife Advisory Committee – island-level coordinated response group for wildlife conservation issues, including invasive animal species (American Bullfrog)

Denman Island Volunteer Fire Department – coordination of signage, management aids and monitoring for protection against wildfire through extreme fire risk season

Denman Island Community Education Society – Staff time and volunteer labour through ongoing youth nature program collaboration

Wildlife Preservation Canada – 2020 Funding confirmed (Wildflower Seed Grant \$2000)

Comox Valley Conservation Foundation – 2020 Funding for youth nature volunteers (Community Enhancement Grant *pending* \$2000)

Environment Canada - Habitat Stewardship Program - Funding for American Bullfrog Early Detection and Rapid Response community training initiative (*Application to be submitted* fall 2019 \$4,000)

Describe local community involvement in conserving and maintaining the property (200 words max).

Denman Islanders have fundraised and donated countless hours toward the acquisition (by Denman Conservancy Association) of all of the properties within the Conservation Complex. Many islanders have supported DCA over its nearly 30 years of conservation work by donating their expertise, time, materials and labour. The community continues to take responsibility for the management of the Central Denman Conservation Complex lands through various activities, including: oversight and day-to-day activities of the Conservancy (by volunteer Board of Directors and Lands Committee and DCA membership of 240+ individuals); regular attendance by many DCA members and other islanders at volunteer work-bees, walks & talks, and other citizen science monitoring activities such as seasonal bird counts. Examples of previous material donations directly used in property management within the project properties include: handmade signs, information kiosks, benches, boardwalks, trail markers, fencing, bird/waterfowl nest boxes, bat houses, and interpretive materials. In 2018 DCA's volunteer 'honour roll' list included more than 200 names. DCA has a good working relationship with many other community organizations as well as municipal and provincial agencies.

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

Yes, all properties within the Conservation Complex are connected by a public trail network, and there are entrances to this trail network at various locations throughout the Complex.

9. FINANCIAL INFORMATION

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

No.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

Yes. 2% is requested.

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.



Inset Map:



SILVA Map, Protected Areas Network, North Section (1999)





Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
	amphibean, mammal & bird species at risk including: Taylor's Checkerspot (SARA endangered); Dun Skipper (BC Red List); Western Pondhawk (BC Blue List); Northern Red-legged frog (BC Blue List); Olive-sided	Checkerspot (TC) & other invertebrate pollinators by controlling ingrowing vegetation & increasing density of food & nectar plants for larvae & adult	host species, for translocation/seed collection used in Butterfly Reserve. Surplus plants/seeds distributed annually	DCA Land Manager & volunteers dig up 1000+ conifer trees <2m fr Butterfly Reserve, retaining moist root masses & staging in fenced Butterfly garden for distribution to landholders with critical TC hab (Y 1-3) Garden seeded with TC host spp by volunteers and youth. Seedling translocated to 2ha Reserve habitat (Y2&3). Garden & purchased s
Control Donmon	flycatcher (BC Blue List); Common Nighthawk (SARA Threatened); Little brown bat (SARA Endangered);		to 10 private landholders with critical TC habitat. Translocated plants show survival rate of min 50% after 1 year. Germination present at min 50% of seed distribution sites within 2 years.	In anside to 211a Reserve habitat (12&3). Garden & purchased s distributed to 0.4ha vernal wetland & adjacent habitat (Y 1-3). Follow-up monitoring /survival rate data collected annually.
Central Denman Conservation Complex	Maintain/increase populations of invertebrate,	, Augment invasive species	/ /	DCA Land Manager and 20 volunteers collect seeds and berries fro
	amphibean, mammal & bird species at risk including: Taylor's Checkerspot (SARA endangered); Dun Skipper (BC Red List);	removal efforts by revegetatating treated areas with native plant species to create varied shade	The DCA Land Manager organizes 20 volunteers to seed native species of local provenance and representative of	native plants of local provenance & distribute across 20ha where Scotch Broom control has taken place. (Y 1-3)
	Western Pondhawk (BC Blue List); Northern Red-legged frog (BC Blue List); Olive-sided flycatcher (BC Blue List); Common Nighthawk (SARA Threatened); Little brown bat (SARA Endangered);	and reduce ingrowth of new Broom and other invasive plants.	natural species diversity (8+ species) within areas treated	Follow-up monitoring /survival rate data collected annually.
dget Summary - HCTF Funding	including: Taylor's Checkerspot (SARA endangered); Dun Skipper (BC Red List);	habitats by restoring native plant diversity through manual removal of invasive species (Scotch	throughout 403acre Conservation Complex, mapping	Carry out 10 volunteer work-bees each year + hire contractor for a per year to remove Invasive Scotch Broom, Canada Thistle, English Holly, Daphne Laurel and other species) across the Conservation Complex (Y 1-3).
tal: \$ 46,725.00	Red-legged frog (BC Blue List); Olive-sided flycatcher (BC Blue List); Common Nighthawk		berries. GPS locations of cut holly trees are marked, &	Hire contractor to remove min. 100 large English Holly Plants, ma GPS locations of plants removed, focusing especially on plants with berries, using a chainsaw (Y 1).
min Fee % 3%	(SARA Threatened); Little brown bat (SARA Endangered);	Canarygrass, English Hawthorne).	 follow-up treatments in Y2&3 to cut resprouting shoots. Completed work is documented with photographs & maps of treated areas to guide continual management efforts. 	
min Fee \$\$\$1,401.75	Following positive ID of one American Bullfrog on Denman Island (2018), protect native		Initiate a volunteer working group to carry out bi-weekly	Early-detection monitoring (acoustic & eyeshine surveys) at perror wetlands in the Complex (Pickles Marsh, Homestead Marsh, Chic Lake, Swale Marsh, Graveyard Marsh) weekly May-Sept for 3 yea 3).
Yr Total incl Admin \$ 48,126.75 e:	wildlife diveristy & habitat for Northern Red- legged frog (BC Blue List), other amphibeans & breeding waterfowl. Prevent colonization of American Bullfrog into areas where it is currently unrecorded.	American Bullfrogs (HCTF & HSP Funds - Application pending).	habitats within the Central Denman Island Conservation	Implement outreach in D.I. community, focusing on Early Detect
DTAL of Additional Intributions Equired	Protect sensitive habitat from damage with management aids in areas of concern for wildlife & rare plant communities	Clarify & mark conservation area		DCA Land Manager & retired professional surveyer volunteer loc key boundary points/property corners, in collaboration with neighbours including 8 private landholders, and the following ag Islands Trust Conservancy, BC Parks, & Denman Island Memorial Society (Y1)
TAL of Additional\$ 52,480.00ntributionsnfirmed	(migrating/nesting waterfowl: at-risk	boundaries, especially where land use changes occur due to private	d boundary lines, specifically focusing on sites where changes in land use / management occur on adjacent neighbouring	37 Boundary marker signs are fabricated & installed on painted posts at sites located by retired surveyor volunteer & DCA Land Manager (Y1)
	· · · · · · · · · · · · · · · · · · ·			
	Protect sensitive habitat from damage with management aids in areas of concern for	Install new/ repair degraded	35+ signs are designed & installed at locations a) where	Replace or repair 15+ plywood management signs in Complex (degraded from long-term use) with durable aluminium or coate wood signs (Y2)
	wildlife & rare plant communities (migrating/nesting waterfowl; at-risk invertebrates & amphibians; old-growth Coastal Douglas-fir forest stands; sensitive bluff	 signage & barriers along trails at key locations where incursion into sensitive areas is anticipated by the public. 	ecological sensitivity or b) where information is needed for	sealer (Y2)
	Coastal Douglas-fir forest stands; sensitive bluff flora).	υν της ρασης.	Sensitive fiora signs have degraded through hong term doe.	bluff flora.
	Protect sensitive habitat from damage with	Protect against wildtire hv	Volunteer coordinator organizes volunteer fire monitoring	Volunteer coordinator organizes fire monitoring crew for daily monitoring through fire season (Y1-3)
	management aids in areas of concern for wildlife & rare plant communities (migrating/nesting waterfowl; at-risk invertebrates & amphibians; old-growth	encouraging seasonally- appropriate access to Conservation Complex lands &	Γ_{1}	b. Refurbish chain closure used to restrict vehicle access to Win Wren Wood parking area during extreme fire season. New post installed for chain supports (Y1)
	Coastal Douglas-fir forest stands; sensitive bluff flora).	f providing means for safe disposal of flammable materials.	4 main property entrances in summer & maintained by fire monitoring crew.	Metal receptacles & no-smoking signs are placed at all entrance public trails in Conservation Complex (placed ~June, removed Septmeber) (Y1-3)
	Maintain/increase populations of invertebrate, amphibean, mammal & bird species at risk including: Taylor's Checkerspot (SARA endangered); Dun Skipper (BC Red List);	Enhance appropriate and safe	2 'Bat Condos' are constructed in the Conservation Complex, in areas chosen through analysis of echolocation monitoring	
	Western Pondhawk (BC Blue List); Northern Red-legged frog (BC Blue List); Olive-sided	maternal roosting habitat for	by Registered Professional Biologist and community hat	Contract Carpenter to construct 2 bat condos at chosen location following specifications outlined in Best Management Practices

1-734 Millard Learning Centre



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: <u>1-734</u>

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at christina.waddle@hctf.ca or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project Leader:				Ad	Adam Huggins				
Field Contact (optional):									
Role of Project Leader in Organization:			า:	Restoration Coordinator					
Organization Name: Galiano Consei			ervan	vancy Association					
Address 10825 Porlier Pass Road									
City:	Gal	iano Island			Province: BC			Postal Code:	VON 1P0
Phone: 250-539-2424				Alternative Phone:					
Email: restoration@galianocon		nserv							
Website: Galianoconservancy.ca									

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$43,780

3. ORGANIZATION DETAILS

Date of incorporation:	June 21, 1989			
BC Society No. (if applicable):	S-25093			
CRA Charitable registration number (if applicable):	BN886092998 R0001			
Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.				

The Galiano Conservancy Association (GCA) is a grassroots organization that was founded in 1989 as one of the first community-based land trusts in British Columbia. Our mission is *to protect, steward and restore Galiano Island ecosystems by creating a network of natural areas where a healthy environment, learning and a love of nature flourish,* and we actively do so through land acquisition, ecological restoration, youth education, and environmental outreach programs.

The GCA has been conducting award winning restoration projects on Galiano Island for over twentyfive years and has been running environmental education programs for the past nineteen. We presently oversee the stewardship of over 1000 acres of land and have provided education to more than 37,000 participants on environmental topics. Our conservation activities have included invasive species removal in sensitive ecosystems, restoration in Douglas-fir plantation forests, island-wide ecosystem mapping, eagle nest and species-at-risk inventories, riparian restoration for salmonid enhancement, public awareness raising and monitoring of Rockfish Conservation Areas, bat population and species monitoring, and re-vegetation of cleared and heavily impacted areas. Current projects include ongoing invasive species management, ecocultural forest restoration of traditional foods and medicines in collaboration with members of the Penelakut First Nation, kelp and eelgrass monitoring, groundwater conservation and renewable energy demonstration, public outreach and monitoring to support cetacean conservation in the Salish Sea, and wetland creation.

The GCA has an annual operating budget of around \$500,000, with an eight-person volunteer board of directors, four full-time staff, and four part-time staff. In a given year, we provide between 10 and 20 paid student and volunteer internship positions. We have an active, engaged membership and donor base, growing earned revenue streams, and have received funding from Federal, Provincial, corporate, foundation, and private sources. In the past year, our volunteers clocked over 3,000 hours to support our education, restoration, and agriculture programs. Our staff now includes experienced practitioners in environmental education, ecological restoration, and sustainable agriculture. Our inhouse expertise is supported by our close ties to professors at the School of Environmental Studies at the University of Victoria, and the dozens of undergraduate and graduate-level university students that participate in our programs annually, producing reports and academic publications.

Property/Project Name:	Millard Learning Centre				
Other names used (if applicable):	District Lot 57				
Property Identification Number(s) (PID):	002-025-175				
Geographic Coordinates (Lat, Long):	48.931, -123.473				
Property size (Ha):	76.1				
Does your organization have fee simple ow	nership of t	his property?	Ye	s 🖂	No 🗌
If yes, how long has your organization own	ed this prop	erty?		7.5	years
If no, provide the name the NGO who has f ownership of the property.*					
Is the property leased to any other party?*	Yes			No 🖂	

4. CONSERVATION PROPERTY INFORMATION

If yes, provide the name of the leaseholder.		
Have you previously received any HCTF funding for the property or activities on the property?	Yes	No 🖂
*If the property is owned by another NGO, you must in stating that they support the application.	nclude a letter from the I	NGO property owner

**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words. District Lot 57 lies in the heart of the endangered Coastal Douglas-fir (CDF) biogeoclimatic zone, an ecological classification that has been ranked as imperilled both provincially and globally.

The protection of District Lot 57 (DL57) was identified as a high priority in the Islands Trust Fund's Regional Conservation Plan (2011-2015), which was endorsed by the Islands Trust Council (December, 2010), and the protection of DL57 is consistent with the goals of NCC's Salish Sea Natural Areas Conservation Plan. The property is part of the Mid-Galiano Island Protection Network, a 500+ hectare contiguous network of conservation properties that protects a significant portion of the island's topographic variation and associated ecological diversity, and secures valuable pathways for plant and animal migration from sea level to Galiano's highest ridgeline. While DL57 includes tracts of healthy old-growth and mature forest, wetlands and sensitive coastal bluff, it also has an extensive history of agricultural use, grazing and small-scale forestry. Areas that have been impacted and modified through these past uses are now the focus of our ecological restoration work.

Forest and Woodland: Almost 20 hectares (ha) of old-growth and mature forested coastal ridge run the length of DL57's 2 km shoreline, forming a matrix of red-listed ecological communities. Below the forested ridge top lies approximately 7 ha of contiguous steep southwest facing coastal bluff, including patches of red-listed Garry oak communities, moss and herb-dominated seepage sites, and exposed rock or cliff. A large portion of DL57 (28 ha) is characterized by 70 to 100-year old Douglas-fir and western redcedar dominated forest with scattered remnant old-growth trees and snags. Most of the moist valley bottoms and lower slopes on DL57 (22 ha) were logged over the past century and maintained through grazing as open grass, sedge and rush-dominated fields. A small portion of this area (approximately 2 ha) was used for gardens and orchards.

Freshwater: There are two small seasonal creeks and a number of associated sedge and rushdominated marsh and swamp communities in forested and cleared depression areas on DL57. One of the streams culminates in a 20 meter waterfall that cascades down a rocky bluff into the Trincomali Channel.

Species at Risk: The property provides habitat for several species at risk including the Olive-sided

Flycatcher (*Contopus cooperi*; Blue listed), Barn Swallow (*Hirundo rustica*, Blue-listed), Band-tailed Pigeon (*Columba fasciata*, Blue-listed), Common Nighthawk (*Chordeiles minor*; Yellow-listed), Peregrine Falcon (*Falco peregrinus*; Red-listed), Double-crested Cormorant (*Phalacrocorax auritus*; Blue-listed) Pelagic Cormorant (*Phalacrocorax pelagicus*; Yellow-listed), dense-spike primrose (*Epilobium densiflorum*; Red-listed), red-legged frog (*Rana aurora*; Blue-listed), and Pacific sideband snail (*Monadenia fidelis*; Blue-listed).

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

The GCA's mission for the MLC property is to "Steward the Land in a manner that restores and maintains healthy, resilient ecosystems and then models innovative approaches to sustainable living."

The 76 hectare property was acquired in 2012 to protect its significant ecological values and to demonstrate ecological restoration in degraded areas. It was also envisioned that a learning centre be established to provide facilities for applied environmental education and research.

Since this time much has been accomplished, with three restoration demonstration areas having been established at the 'old mill site', Chrystal Cove and the Nuts'a'maat Forage Forest along with a native plant nursery to support this work directly. The GCA has also established a learning centre and office infrastructure on the property, limited to a site less than 2 hectares in extent and falling within an area of the property designated for such use by the management plan. Here the GCA demonstrates renewable energies, groundwater conservation and ecosystem-based landscape design. The facility provides a centre for applied environmental education where over 1200 students are hosted annually to learn about the GCA's ecological restoration and conservation work. This infrastructure is also used by university partners to facilitate undergraduate studies and post-graduate applied research.

The GCA is committed to continuing its effort to restore degraded ecosystems on the Millard Learning Centre property and to monitor and learn from established projects. This work is critical for the ecological integrity of the site and for providing demonstrations and training for our education participants and local community volunteers.

Our management goals and objectives for the next three years are as follows:

- 1. Protect sensitive ecosystems from invasive species and excessive browsing
 - Control target invasive species across the property and eliminate them from sensitive areas
 - Expand, maintain, and monitor deer exclosures at restoration sites and permanent monitoring plots
- 2. Ensure effective restoration by maintaining and monitoring established restoration projects
 - Maintain and monitor the Nuts'a'maat Forage Forest
 - Maintain and monitor the old mill and Chrystal Cove restoration sites
- 3. Improve knowledge of species at risk on the property
 - Carry out surveys to identify new populations, suitable habitat, and / or health trends of existing populations for target species at risk
- 4. Restore hydrological process across the property
 - Prepare comprehensive restoration plan for the Chrystal Creek watershed based on expert consultation, reports, and additional surveys
 - Re-vegetate eroded riparian areas
- 5. Create and maintain a public trail network
 - Expand and maintain a high quality public trail network
- 6. Ensure long-term management goals are met
 - Update relevant management plans for 2020, taking organizational successes, feedback, and climate change into consideration

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

The Millard Learning Centre protects a wide variety of species, ecosystems, and ecological values, while also receiving heavy traffic (visitors and education participants) throughout the year. However, funding for long-term monitoring and maintenance of restoration sites and ecological values is lacking. Increased visitor presence, overgrazing due to hyperabundant native black-tailed deer (*Odocoileus hemionas*), invasive species, and erosion all threaten the terrestrial and aquatic habitats on the property. Without dedicated funds to monitor and maintain species at risk, restoration sites, and critical infrastructure, the long-term ecological integrity of this protected area will be compromised, and critical opportunities to learn from and improve ecological restoration efforts will be missed.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

Formal Management Plans and Reports

Millard Learning Centre Management Plan (2013) – this document requires updating in 2020

Millard Learning Centre Invasive Alien Species Control Plan (2014) – this document requires updating in 2020.

Participatory Restoration of the Mill Site (Hamann-Benoit, 2014)

Millard Learning Centre Framework for Ecological Restoration and Integrated Land-use Management (2015)

Design Concept Plan for Chrystal Creek Re-construction (LGL Limited, 2016)

A model of food forestry and its monitoring framework in the context of ecological restoration (Park, 2016)

Native Plant Forage Forest Restoration Plan (Huggins, 2017)

Student Plans

(Note: Over the past decade, over 50 detailed reports and restoration plans have been produced by undergraduate and graduate-level students at the Millard Learning Centre. Below is a brief selection pertaining to this application)

Species at Risk Status Report: Galiano Island (2011)

Chrystal Cove Restoration Project (2015)

The Northern Red-legged frog (*Rana aurora*) at the Millard Learning Centre: A habitat assessment, monitoring protocol, and strategy for bullfrog prevention (2018)

Chrystal cove Restoration Assessment (2018)

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

The Galiano Conservancy works with a wide variety of partner organizations, academics, and professionals on restoration and planning for the Millard Learning Centre. These include:

University of Victoria: Annual Restoration field schools, student coop placements, undergraduate and post-graduate research, expertise for planning and prescriptions (Eric Higgs, Natalie Ban, John Volpe and students)

University of British Columbia: restoration field schools, expertise for research, planning and implementation of restoration (Dan Moore, Jeanine Rhemtulla and students)

Red Fish School for Change: Annual field school (Ryan Hilperts, Nick Stanger and students)

Galiano Community School and Penelakut Island Elementary School: experiential education programs – participation in ecological restoration and management activities

Penelakut Elders: planning and integration of traditional knowledge in management and restoration (Augie Sylvester, Karen Charlie, Richard Charlie, Richard Jim)

Biodiversity Galiano: citizen science biological inventory – bioblitz

Galiano Island Parks and Recreation Commission: co-management of public hiking trails

BCWF Wetland Education Program: Expert consultation and collaboration in the delivery of wetland restoration and creation workshop, scheduled for summer 2020

Describe local community involvement in conserving and maintaining the property (200 words max).

Local community involvement is integral to the ongoing management of the Millard Learning Centre. The GCA engages a network of over 100 local volunteers in ongoing management activities through regular and ad hoc work parties and events. Volunteers ranging from experts to unskilled labour contribute to planning processes, trail maintenance, invasive species control, restoration work, and biological inventory of the property. Local community members also benefit from having managed access to the property on designated foot trails.

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

The property is accessible to the public. We have established a parking area and interpretive centre/office at the main entrance. From there, a limited number of designated foot-only trails are open to the public from dawn to dusk. These trails provide access to connected public trails on adjacent protected lands as well as access to the shoreline of the property.

The property includes a variety of additional trails that are used by GCA staff and participants in GCA educational programs. These trails are open to the general public when educational programs are not being delivered.

9. FINANCIAL INFORMATION

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

No.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

We have included a 10% administration fee in the proposal to contribute to costs directly related to the implementation of project activities – bookkeeping, office facility and supplies, insurance etc.

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.





Millard Learning Centre Stewardship Map

- Key Stewardship Sites
 Education / Infrastructure Area
 Wet Field formerly cultivated
 Marsh Wetland
 Pond
 Forest/Marsh Complex
 0 100 200 Meters
- - Trail proposed for construction
- - Trail Existing
- Driveway
- Creek
- Property Line

Produced by: Galiano Conservancy 2017 Aerial Photography Projection: UTM Zone 10N, NAD83 Scale: 1:4,000







Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
				Remove scotch broom (Cytisus scoparius) from Chrystal Cove annually
	1. Protect sensitive ecosystems from invasive species and excessive	Control target invasive species across property and eliminate from	Scotch broom (Cytisus scoparius) and tansy ragwort (Senecio jacobeaea syn. Jacobaea vulgaris) controlled or	Remove scotch broom (Cytisus scoparius) from seepage sites and sensitive areas annually
Millard Learning Centre (DL	browsing	sensitive areas	eliminated at target sites	Remove tansy ragwort (Senecio jacobeaea syn. Jacobaea vulgaris) across the property annually
57)				Perform annual monitoring protocol at permanent monitoring plots
	1. Protect sensitive ecosystems from invasive species and excessive browsing	Expand, maintain, and monitor deer exclosures at restoration sites and permanent monitoring	Three years of data collected from permanenet monitoring plots; deer exclosures maintained, allowing restoration sites and permanent monitoring plots to remain protected from browsing	Regularly inspect deer exclosures to ensure their integrity against incursions; repair and / or replace damaged exclosures as needed
	browsing	plots	browsing	Create additional permanent monitoring exlosures at key locations to expand understanding of browsing impacts across ecosystem types / seral stages
Budget Summary - HCTF Funding	2. Ensure effective restoration		Three years of detailed monitoring data collected for	Perform annual monitoring protocol in the Nuts'a'maat Forage Forest as laid out by Park & Higgs, 2017
Total: \$ 39,800.00	by maintaining and monitoring established restoration	Maintain and monitor the Nuts'a'maat Forage Forest	adaptive management and future publication; Nuts'a'maat Forage Forest maintained and expanded, with edible	Control introduced thistles (Cirsium spp.) and agronomic grasses to assist establishment and productivity of native species
Admin Fee % 10%	projects		products obtained from most species by the end of year 3	Establish additional native species as propagules become available from the nursery
Admin Fee \$\$\$3,980.00				Monitor to determine health and success of restoration treatments at old mill and Chrystal Cove restoration sites; determine necessary follow-up treatments
3 Yr Total incl Admin \$ 43,780.00 Fee:	 Ensure effective restoration by maintaining and monitoring established restoration 	Maintain and monitor the old mill and Chrystal	Old mill and Chrsytal Cove restorations revisited, monitored, and maintained	Perform follow-up treatments (removing cages, replacing dead plants, invasive species control, etc.) based on monitoring
	projects	Cove restoration sites		Restory utility road cut on old mill site
TOTAL of Additional Contributions Required	3. Improve knowledge of species at risk on the property	Carry out surveys to identify new populations, suitable habitat, and / or health trends of existing populations for target species at risk	Data on habitat and population trends for red-legged frogs (Rana aurora) and dense-spike primrose obtained, and additional suitable habitat identified; presence/absence of sharp-tailed snake (Contia tenuis) determined, and suitable habitat areas assessed for introduction potential	Establish and perform annual monitoring protocol for red-legged frogs (Rana aurora) based on 2018 report, including presence / absence across suitable habitat on the property and population trends within known populations
TOTAL of Additional\$ 38,075.00ContributionsConfirmed				Survey suitable habitat for signs of sharp-tailed snake (Contia tenuis) as per the 2015 Provincial Recovery Strategy and 2011 status report on Species at Risk for Galiano Island
				Survey property for additional populations of desne-spike primrose (Epilobium densiflorum) and identify sites for seeding
		Prepare comprehensive restoration plan for the		Review Design Concept Plan for Chrystal Creek Re-construction (2016) and perform additional surveys to expand project scope to watershed
	4. Restore hydrological processes across the property	Chrystal Creek watershed based on expert consultation,	Restoration plan for Chrystal Creek watershed prepared and budgeted; riparian vegetation established in key areas to prevent erosion	Consult BCWF experts during summer 2020 wetland creation workshop at the MLC to assess restoration potential of the Chyrstal Creek watershed
		reports, and additional surveys	prevent erosion	Watershed Prepare comprehensive restoration plan for the Chrystal Creek watershed
				Live-stake riparian areas and pond perimeters to stabilize soils and prevent erosion
	4. Restore hydrological processes across the property	Revegetate eroded riparian areas	Riparian areas protected against erosion across the property	
	5. Encourage public access to		10 km of trails maintained across the property, with some	Complete 2 km destination trail connecting parking area to Tranquility Bluff, to be open to the public year-round
	conservation lands, demonstration facilities, and	Expand and maintain a high quality public trail network	trails available at all times regardless of educational programs; clear signage and maps posted across trail	Maintain existing 8 km of trails, to be open to the public when youth education programs are not in session
	restoration sites		network	Repair and imporve trail signage as needed
		Update relevant		Revise and update Millard Learning Centre Management Plan (2013) for 2020
	6. Ensure long term management goals are met	management plans for 2020, taking organizational successes, feedback, and climate change into consideration	Key management plans updated to reflect successes and revise management priorities for the next decade	Reivse and update Invasive Alien Species Management Plan (2014) for 2020

1-735 Chemainus Estuary



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: _____ (HCTF to complete)

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at christina.waddle@hctf.ca or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project	Project Leader:			Jor	dan Bi	romley			
Field Contact (optional):									
Role of Project Leader in Organization:			า:	Executive Director					
Organization Name: Q'ul-Ihanumut			itsun .	in Aquatic Resources Society					
Address 7973 Chemainus Rd									
City:	Che	emainus		Prov	Province: BC VOR1K5		VOR1K5		
Phone:	Phone: 250-210-0800				Alternative Phone: 250-246-4736				
Email:	jordanbromley@gars.ngo								
Website	Website: www.qars.ngo (pending)								

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$18,480.00

3. ORGANIZATION DETAILS

Date of incorporation:	March 5 th , 2013				
BC Society No. (if applicable):	S-0060934				
CRA Charitable registration N/A number (if applicable):					
Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.					

The Q'ul-lhanumutsun Aquatic Resources Society is a non profit Society whose members are the six Indigenous communities of Halalt First nation, Penelakut Tribe, Lyackson First Nation, Stz'uminus First Nation, Cowichan Tribes, and Ts'uubaa-asatx First Nation. It has been in operation since 2008 and was incorporated in 2013. The mission of the Society is "working together at a technical level to support sustainability and positive transformation in aquatic resource management practices." The approximate annual budget of the Society is \$260k through the Fisheries and Oceans Canada Aboriginal Aquatic Resources and Oceans Management (AAROM) program. The Society works with volunteers in the six Indigenous communities and from organizations such as the Ladysmith Sportsman's club and others. The Society has 2 full time staff and between and 3 and 5 contracted staff.

The Society is actively engaged in conservation and land management in a number of areas including chum salmon enumeration in the Chemainus river (2016-2020), PCB testing in the Chemainus and Cowichan rivers (2015), the collaborative development of the Bonsall Creek Watershed management plan (2016), the development of an Indigenous remotely piloted aircraft system (RPAS) working group for habitat and conservation work (2020). Engagement with government and member indigenous communities on fisheries management for herring, salmon, crab, clam, prawn, and geoduck is ongoing in each year. Community events and education outreach activities are conducted annually in the communities.

Property/Project Name:		Chemainus Estuary Lands owned by Ducks Unlimited Canada (DUC)			
Other names u	sed (if applicable):	N/A			
Property Ident	ification Number(s) (PID):	See below			
PID	Legal Descriptions				
029-153-425	LOT 1 SECTIONS 7 & 8, RANGE 8 SECTIONS 6, 7 & 8, RANGE 9 CHEMAINUS DISTRIC ⁻ PLAN VIP89510				
029-153-433	LOT 2 SECTIONS 7 & 8 RANGE 8 CHEMAINUS DISTRICT PLAN VIP89510				
029-153-441	LOT 3 SECTION 5 RANGE 8 AND SECTIONS 5 & 6 RANGE 9 CHEMAINUS DISTRICT PLAN VIP89510				
009-739-718	THOSE PARTS OF SECTION 9, RANGE 8, CHEMAINUS DISTRICT, LYING EAST OF THE CHEMAINUS RIVER, INCLUDING ALL THAT PART OF A STRIP OF LAND 33 FEET WIDE AS SHOWN COLOURED PURPLE AND GREEN ON PLAN 16 BL, KNOWN AS MAINGUY ROAD, EXCEPT PART IN PLAN VIP86453				

4. CONSERVATION PROPERTY INFORMATION

009-739-777 LOT 2, CHEMAINUS DISTRICT						
009-739-785 LOT 2A, CHEMAINUS DISTRICT						
Geographic Coordinates (Lat, Long):	48.889407	7, -123.673083				
Property size (Ha):	189.5					
Does your organization have fee simple ow	nership of t	his property?	Yes	No 🖂		
If yes, how long has your organization owned	ed this prop	perty?	Ν	J/A		
If no, provide the name the NGO who has for ownership of the property.*	ee simple	Ducks Unlimited Canada has owned the property since 2009				
Is the property leased to any other party?*	*	Yes 🖂 🛛 No 🗌				
If yes, provide the name of the leaseholder		There are three ag the property. Port Farms, Mariaholm not the focus of th	er's Dairy, We e Farms. The	estholme se fields are		
Have you previously received any HCTF fun the property or activities on the property?	Yes 🗌		No 🖂			
*If the property is owned by another NGO, you must include a letter from the NGO property owner stating that they support the application.						

**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words. The Chemainus Estuary, consisting of intertidal flats, agricultural fields, and forested areas, is the largest estuary (210.5 ha) on the east coast of Vancouver Island. It has been ranked as a Class 1 Estuary (highest rank) by Ducks Unlimited Canada and the Canadian Wildlife Service based on biological values and its relatively undisturbed diversity (Ryder et al. 2007). It has also been

recognized by Environment Canada as a critical waterfowl habitat area (Hayes et al. 1993). Indeed, it has been reported that averages of 1,000 waterfowl per day have been sighted during migration and wintering periods. The Chemainus Estuary is an important migratory stretch along the Pacific Flyway. Great blue herons, bald eagles, purple martins, and a variety of other shorebirds, waterfowl, loons and grebes, raptors, and songbirds frequent the area. In recent years, purple martin nesting boxes have been installed in the estuary by Mosaic Forest Management due to the loss of habitat and risk of extirpation of this species from BC. Ducks Unlimited Canada (2014) commissioned a report to investigate rare plants and rare plant communities in key intertidal areas of Chemainus Estuary. Three blue-listed rare plant species (Geyer's onion (*Allium geyeri* var. *tenerum*), seaside juniper (*Juniperus maritima*), and small spike rush (*Eleocharius parvula*)) were found and mapped in 45 occurrences (Roemer and Batten, 2014). In addition, it was found that a large portion of the intertidal areas studied were dominated by red-listed communities including: *Carex lyngbyei* Herbaceous Vegetation; *Distichlis spicata* var. *spicata* Herbaceous Vegetation; *Sarcocornia pacifica – Glaux maritima*; and *Ruppia maritima* Herbaceous Vegetation.

Two streams flow into Chemainus Estuary, the Chemainus River and Bonsall Creek. Both of these streams provide excellent spawning habitat for salmonids and support populations of chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), chum salmon (*O. keta*), steelhead and rainbow trout (*O. mykiss*), anadromous and nonanadromous cutthroat trout (*O. clarkii*). Lamprey, sculpins, and stickleback can also be found in these streams. The estuary itself is home to a wide variety of fishes including but not limited to, Pacific herring (*Clupeas pallasii*), surf smelt (Osmeridai spp.), sandlance (Ammodytes spp.), sole (*Solea* spp.), and flounder (*Platichthys* spp.).

Mammals in this area include beavers (*Castor canadensis*), minks (*Neovison vison*), river otters (*Lontra canadensis*), and Columbian black-tailed deer (*Odocoileus hemionus columbianus*). The habitat also likely supports the Townsends vole (*Microtus townsendii*) and other mouse and shrew species. Black bear (*Ursus americanus*) and cougar (*Puma concolor*) sightings are very rare around the estuary.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

The vision for this property is that it will be a resilient, healthy estuary landscape with intertidal wetland and upland areas that provide habitat for waterfowl, fish and other wildlife while also providing valuable cultural and recreational activities as part of a social-ecological system.

Goals:

1. Make informed decisions about Estuary Management and Health

Objective: Conduct Aerial Habitat Inventory and Monitoring

Activities: RPAS surveys for plant communities, thermal mapping of waterways and discharge, and habitat rehabilitation needs; aerial data analyzed to determine rehabilitation needs and inform invasive plant removal strategy.

Expected Outcome: Habitat inventories and water surveys completed that can be used for estuary management and planning.

2. Maintain and preserve healthy Indigenous plant populations in the Chemainus Estuary

Objective: Conduct Invasive Plant Removal

Activities: Review invasive plant distribution; develop Invasive Plant Removal Strategy; remove invasive plants.

Expected Outcome: Indigenous plant community (cattails, Nootka rose, others) re-occupation of areas previously displaced by invasive species (yellow flag iris, Himalayan blackberry, giant hogweed, others).

3. Support the implementation of the Chemainus Estuary Management Plan

Objective: Develop and Install Educational signage in the Estuary

Activities: Engage Indigenous communities on sign content; work with contractor to develop proofs, install signage.

Expected Outcome: Indigenous values and history are reflected in public installations in the estuary; estuary path users are informed on history of the estuary, estuary wildlife and plant values, and conservation works in the estuary.

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

In the event that educational signs are not installed, the public will not have the opportunity to learn about the rich history of the Chemainus Estuary and its vibrant ecological values, including several endangered and/or threatened species.

Without RPAS (aerial) surveys being completed, the only opportunity for survey data will be through conventional fixed-wing orthophoto, which are not only prohibitively expensive, but do not allow for the collection of temperature data or the creation of 3d models using photogrammetry data and

software. This will negatively impact the ability to make informed decisions in the Estuary regarding rehabilitation and invasive plant removal.

Should invasive plants continue to be unmonitored and not removed, these species will displace native plant communities and alter the sensitive ecosystems associated with them.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

DUC began engaging with stakeholders and Indigenous communities on a draft Chemainus Estuary Management Plan beginning in 2017. In 2020 the Chemainus Estuary management plan was finalized.

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

Ducks Unlimited Canada (DUC) will contribute expertise and labour as in-kind support for this project in relation to volunteer coordination for invasive plant removal, and the development and site selection for educational signs. DUC staff will reach out to the Cowichan Region DUC volunteer committee to participate in these activities.

Mosaic will contribute expertise for the development of the educational signs.

Describe local community involvement in conserving and maintaining the property (200 words max).

Indigenous communities and community groups that have been actively engaged with the Stewardship of this property include: Halalt First Nation, Penelakut Tribe, Stz'uminus First Nation, Lyackson First Nation, the Vancouver Island Retriever Club, the DUC Volunteer group (Cowichan Chapter).

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

Public use of this property has occurred since the property was purchased by BC Forest Products and subsequent forest companies in the late 1980's. It has continued without active management and without posted rules or regulations. Most visitors use the property for walking, dog walking, bird watching, swimming, fishing, and geocaching. After DUC purchased the property in 2009, a cul-de-sac and parking area was put in at the end of Swallowfield Road. This stops visitors from parking along the

road and impacting neighboring properties. A gate owned by Catalyst pulp and paper is maintained at this area that prevents vehicle access to the Estuary by the public.

DUC intends to seek a firearms exemption in order to provide organized hunting opportunities on the Estuary. The site has also been used for many years by the Vancouver Island Dog Retriever Clubs for training and events, under agreement with the previous landowners. In recent years, DUC has worked together with these clubs to allow access and to steward the property with invasive plant control and garbage removal.

Local governments including the Cowichan Valley Regional District and the Municipality of North Cowichan recognize the value of this area. The Cowichan Valley Regional District has designated this area as a key location within their Regional Parks and Trails Master Plan. In the Chemainus Estuary Management Plan, a public trail is proposed where current pedestrian access occurs. This trail will be the location of proposed signage.



9. FINANCIAL INFORMATION

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

No capital expenditures associated with project.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

QARS charges an administration fee of 10%

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.

PID	Legal Descriptions
029-153-425	LOT 1 SECTIONS 7 & 8, RANGE 8 SECTIONS 6, 7 & 8, RANGE 9 CHEMAINUS DISTRICT
	PLAN VIP89510
029-153-433	LOT 2 SECTIONS 7 & 8 RANGE 8 CHEMAINUS DISTRICT PLAN VIP89510
029-153-441	LOT 3 SECTION 5 RANGE 8 AND SECTIONS 5 & 6 RANGE 9 CHEMAINUS DISTRICT
	PLAN VIP89510
009-739-718	THOSE PARTS OF SECTION 9, RANGE 8, CHEMAINUS DISTRICT, LYING EAST OF THE
	CHEMAINUS RIVER, INCLUDING ALL THAT PART OF A STRIP OF LAND 33 FEET WIDE
	AS SHOWN COLOURED PURPLE AND GREEN ON PLAN 16 BL, KNOWN AS MAINGUY
	ROAD, EXCEPT PART IN PLAN VIP86453
009-739-777	LOT 2, CHEMAINUS DISTRICT
009-739-785	LOT 2A, CHEMAINUS DISTRICT







Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
Chemainus Estuary		Develop and install		
	Chemainus Estuary ecological values preserved through responsible and informed estuary use	Develop and install educational signage, suggested topics: Intro to Chemainus Estuary/ Hul'q'umi'num name Indigenous History in area, Native Plants/names in Hul'q'umi'num, Purple	Signs installed in Estuary along public path to enrich estuary use for the public and educate the public on estuary values.	Hold working groups with Indigenous knowledge holders and others on proposed sign topics and layout. 2 meetings per sign, 4 signs, 8 meetings total @ \$975 (6 Indigenous participants recieiving honoraria at \$100 each Have proofs developed and fabricated by contractor. Cost fabrication for 4 x 8 aluminum sign \$650, total 4 signs \$2600. 4x4x12 posts plus hardware and cement footing.@\$100 per post x 8 posts = \$800 Install signs in Estuary \$200 per post for wages and travel for two people x 8 posts
Budget Summary - HCTF Funding				RPAS surveys for plant communities
Total: \$ 18,480.00	Make informed decisions about Estuary Management and Health	Conduct Aerial Habitat Inventory and Monitoring	Habitat Inventories and water surveys completed that can be used for estuary management and planning.	RPAS thermal mapping of waterways and discharge
Admin Fee % 10%	dilu freata		1	Aerial data analyzed to determine rehabilitation needs and inform invasive plant removal strategy
Admin Fee \$ \$ 1,848.00		1		Review Invasive Plant Distribution
3 Yr Total incl Admin \$ 20,328.00 Fee:	Maintain and preserve healthy Indigenous plant populations in the Chemainus Estuary	Conduct Invasive Plant Removal	Indigenous plant community (cattails, Nootka rose, others) re-occupation of areas previously displaced by invasive species (yellow flag iris, Himalayan blackberry, others).	Develop invasive Plant Removal Strategy; hold yellow flag Iris removal workshop.
				Remove Invasive Plants - protective equipment for volunteers to use for giant hogweed removal (1500), in kind staff time to assist in remova/coordination of removal (\$2500)
TOTAL of Additional Contributions Required				QARS adminstrative cost @10% (includes finance, book keeping, equipment maintenance)
TOTAL of Additional \$ 48,000.00 Contributions Confirmed	Project adminnistration expense	Project adminnistration expense	Project adminnistration expense	
		- 		
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		<u> </u>		

2-673 Conservation - Rodgers



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: <u>2-673</u> (HCTF to complete)

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at christina.waddle@hctf.ca or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project Leader:				Liz	Liz Webster					
Field Contact (optional):				Phi	Phil Henderson					
Role of	Proje	ct Leader	in Organizatior	n:	Executive Director					
Organization Name: Savary Island Land Trust				Trust						
Address		Box 141								
City:	Lun	d		Prov	Province: B.C. Po		Postal Code:	V0N 2G0		
Phone:	ne: 604-483 4743				Alternative Phone: 604 414 7291					
Email:		silts@telus.net								
Website										

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$7881.64

3. ORGANIZATION DETAILS

Date of incorporation:	October 17, 1997			
BC Society No. (if applicable):	S0037480			
CRA Charitable registration 89858 6425 RR0001 number (if applicable):				
Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.				

The Savary Island Land Trust (SILT) is a non profit, registered charity dedicated to the protection of natural areas and biodiversity on Savary Island. When SILT began in 1997 there was no protected land on this rare and fragile Island, today over one third of Savary is protected by The Nature Trust of BC, the Province of BC and SILT.

SILT was established in 1997 with the vision to preserve the Heart of the Island, the last undivided and undeveloped wilderness on Savary; DL 1375. The land was under threat of subdivision and development as a 90-unit gated community. The "Heart of Savary" is 350 acres in the centre of the Island and is one of the best examples of coastal sand dunes in Canada, providing habitat for two at-risk plants: Grey Beach Peavine and Contorted-pod Eveningprimrose. The trail network in the Heart of the Island has guided people to quiet beaches, wild lands, rare meadows and some of the last Old Growth Forests in the region for generations.

All levels of government, local donors, SILT and the Nature Trust of BC worked towards preserving this island treasure, and in 2001, The Nature Trust of BC acquired a 50% interest in the land. Through the efforts SILT and the Friends of Savary, The Nature Trust of BC acquired the remaining 50% in the Heart of the Island in 2018.

While the Heart of Savary has been a big part of our work over the last 20 plus years, we have also had the opportunity to receive several gifts of land and to purchase other parcels, so that today SILT holds 21 parcels of land for a total of 18 acres through out Savary Island. SILT is also involved in public education and stewardship including invasive species removal in sensitive ecosystems on the Crown Perimeter of Savary Island.

Property/Project Name:	tion - Rodgers				
Other names used (if applicable):	1108 Roda Road	1108 Rodgers Road; 1106 Rodgers Road; 1102 Rodgers Road			
Property Identification Number(s) (PID):	013-520-9	97; 013-521-012; 0	13-65	6-961	
Geographic Coordinates (Lat, Long):	49.940457 -124.862697; 49.940435 -124.862892; 49.940354 -124.863305				
Property size (Ha):	0.12 ha; 0	0.12 ha; 0.12 ha; 0.12 ha			
Does your organization have fee simple ow	nership of t	his property?	Ye	s 🗶	No 🗌
If yes, how long has your organization own	ed this prop	erty?	5 ye	ars	
If no, provide the name the NGO who has f ownership of the property.*	ee simple				
Is the property leased to any other party?*	Yes			No X	

4. CONSERVATION PROPERTY INFORMATION

If yes, provide the name of the leaseholder.					
Have you previously received any HCTF funding for the property or activities on the property?	Yes	No 🗶			
*If the property is owned by another NGO, you must include a letter from the NGO property owner					

*If the property is owned by another NGO, you **must** include a letter from the NGO property owner stating that they support the application.

**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words.

A wetland mapped as a swamp in the Sensitive Ecosystems Inventory. It is given no conservation rank by the CDC and no species at risk (plant or animal) are indicated. The three properties comprise a significant portion of one of the few wetlands on Savary Island. It warrants further study to determine whether it is a swamp and to determine specific wetland classification within the British Columbia and Canadian Wetland Classification systems and associated conservation rank. It should also be examined more closely for the presence of plant and animal species at risk.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

The property was purchased for and is intended to conserve a representative wetland. This wetland may not be considered at risk provincially but is rare locally and possibly, regionally.

Conduct a legal survey to determine the boundaries and install iron pins.

Conduct a baseline ecological inventory of the properties. Properly classify the wetland and associated features of the property based on plant species, topographical features and soil. Determine its conservation rank, local and regional significance.

Determine the presence of plant or animal species at risk and any unique assemblages of animals associated with it. Ie. is the uniqueness of the wetland reflected in a unique associated assemblage of animals.

Identify threats (forest clearing, drainage) and potential means of reducing or erasing those threats and conserving the wetland features.

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

Savary Island was subdivided in 1910 and currently has over 1500 small parcels, most 50 feet wide. The age of the survey and the limited number of other current surveys in the area makes it more work to determine boundaries and mark corners prior to registering the survey with Land Title. Because of the density of lots on the Island it is important to establish our boundaries and prevent trespass. It is critical to first identify the properties conservation values (beyond a general wetland classification) so that we can understand what is at risk and how best to protect it. With incessant and careless development on Savary Island we stand to lose important ecological features before we know what is present – what we will lose. The effects of adjacency are heightened on Savary because of lot configuration (large edge to area ratio). Wetlands are particularly vulnerable to adjacent activities such as loss of forest cover and drainage on adjacent lots. As with other SILT parcels on Savary, it is critical to know what we have so we can better manage and conserve it and factor that into other purchases and conservation objectives.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

The SILT Land Securement Framework (2019, in Draft) provides key general ecological guidelines for land procurement and preservation. The study is intended to inform the need for management by assessing current conditions, conservation status and threats. "Active management" will only be initiated if the studies identify a need. The over-riding management goal of SILT is to conserve the ecosystems and ecological processes that maintain them. The key to this is reducing effects of development and maintaining ecological connections to adjacent lands, an ongoing goal of acquisitions.

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

We do not anticipate the need for volunteer assistance for these properties. SILT has group of dedicated volunteers that can be called upon. Phil Henderson, of Strix Environmental Consulting has agreed to provide almost 60% in-kind contribution of fees to conduct the study on this and the other properties (Savary Island Road and Vancouver Boulevard).

Describe local community involvement in conserving and maintaining the property (200 words max).

SILT relies on generous donors dedicated to conserving representative ecological communities on Savary Island. It is through them, SILT members, its Board and Directors that we have successfully acquired important land for conservation. We foresee no active involvement unless specific issues are identified (hence, the need for a study).

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

The public is not encouraged to enter the property. They are not actively restricted from entering the property.

9. FINANCIAL INFORMATION

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

No.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

Yes an administration fee of 15% is included in the budget.

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023





Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
		Determine and register	Perimeter survey, mark corners, register	Survey
	Legal Survey of Property	legal boundaries	with Land Title Office	
Rodgers Road Properties	Baseline Inventory of Properties	Determine site use by and presence of plants and animals; refine ecological classification; determine ecological context, threats and value;	Better understand ecological attributes of properties and landscape (spatial) consideraions to guide future acquisitions and land use.	 vegetation plot sampling for BEC site series and delineation within properties soil sampling for wetland properties (Rodgers Rd.) wetland classification other features: snags, coarse woody debris significant features (veteran trees, boulders, seepage sites, ephemeral wetlands or depressions) general plant species inventory rare plant species: vascular plants and bryophytes breeding bird survey (point count) + incidentals during other work bird nest survey (particularly raptors and herons) bird use survey: other sign such as roosting, etc. ecological/landscape context, threats identify collected plants (vascular and bryophytes) deposit plant specimens at UBC herbarium
Budget Summary - HCTF Funding				
Total: \$ 6,853.60				
Admin Fee % 15%				
Admin Fee \$ \$ 1,028.04				
3 Yr Total incl Admin \$ 7,881.64 Fee:				
TOTAL of Additional Contributions Required				
TOTAL of Additional \$ 2,000.00 Contributions Confirmed				

2-674 Conservation - Savary Island Road



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: <u>2-674</u>

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at christina.waddle@hctf.ca or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project Leader:				Liz	Liz Webster					
Field Contact (optional):				Phi	Phil Henderson					
Role of Project Leader in Organization:			n:	Executive Director						
Organization Name: Savary Island L			Land	and Trust						
Address Box 141										
City:	ity: Lund		Prov	Province: B.C.			Postal Code:	V0N 2G0		
Phone: 604-483 4743				Alternative Phone: 604 414 7291						
Email: silts@telus.net										
Website: https://savaryislandland			dtrus	t.org						

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$8,058.05

3. ORGANIZATION DETAILS

Date of incorporation:	October 17, 1997				
BC Society No. (if applicable):	\$0037480				
	50037480				
CRA Charitable registration	89858 6425 RR0001				
number (if applicable):					
Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.					

The Savary Island Land Trust (SILT) is a non profit, registered charity dedicated to the protection of natural areas and biodiversity on Savary Island. When SILT began in 1997 there was no protected land on this rare and fragile Island, today over one third of Savary is protected by The Nature Trust of BC, the Province of BC and SILT.

SILT was established in 1997 with the vision to preserve the Heart of the Island, the last undivided and undeveloped wilderness on Savary; DL 1375. The land was under threat of subdivision and development as a 90-unit gated community. The "Heart of Savary" is 350 acres in the centre of the Island and is one of the best examples of coastal sand dunes in Canada, providing habitat for two at-risk plants: Grey Beach Peavine and Contorted-pod Eveningprimrose. The trail network in the Heart of the Island has guided people to quiet beaches, wild lands, rare meadows and some of the last Old Growth Forests in the region for generations.

All levels of government, local donors, SILT and the Nature Trust of BC worked towards preserving this island treasure, and in 2001, The Nature Trust of BC acquired a 50% interest in the land. Through the efforts SILT and the Friends of Savary, The Nature Trust of BC acquired the remaining 50% in the Heart of the Island in 2018.

While the Heart of Savary has been a big part of our work over the last 20 plus years, we have also had the opportunity to receive several gifts of land and to purchase other parcels, so that today SILT holds 21 parcels of land for a total of 18 acres through out Savary Island. SILT is also involved in public education and stewardship including invasive species removal in sensitive ecosystems on the Crown Perimeter of Savary Island.

4.	CONSERVATION PROPERTY INFORMATION

Property/Project Name:	Conservation – Savary Island Road					
Other names used (if applicable):	1296 Savary Island Road; 1300 Savary Island Road; 1306 Savary Island Road					
Property Identification Number(s) (PID):	011-051-1	.91; 011-051-264; 0	11-051-	-311		
Geographic Coordinates (Lat, Long):	5,533,528	.309 367,308.297 N	/leters (all lots	together)	
Property size (Ha):	total: 0.42	total: 0.42 ha				
Does your organization have fee simple ow	nership of t	his property?	Yes	X	No 🗌	
If yes, how long has your organization own	ed this prop	perty?	2 weel	ks		
If no, provide the name the NGO who has f ownership of the property.*						
Is the property leased to any other party?*	Yes			No X		
If yes, provide the name of the leaseholder						

Have you previously received any HCTF funding for the property or activities on the property?	Yes 🗌	No X
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*If the property is owned by another NGO, you **must** include a letter from the NGO property owner stating that they support the application.

**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words.

Most ecological communities in the CDF (Coastal Douglas-fir) biogeoclimatic zones are Red- or Bluelisted provincially because of past and present development and future development pressure. The BC Conservation Data Centre lists the northern-most portion the property as a Red-listed ecological community (Grand Fir/Dull Oregon-grape). On Savary, development pressure is exacerbated by its small size, extremely high lot density and continued demand for recreation property and associated forest clearing and building. This increases the ecological significance and value of these properties. They may support plant species at risk or communities that have not been examined.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

Maintain the properties as naturally functioning ecological unit. To conduct a detailed examination of the plants and animals of the site to understand its ecology and determine a finer, more precise and informative ecological classification.

The intention behind purchasing these properties was to conserve valuable ecological attributes of a forest that is under incessant threat. This includes conserving the plant species that comprise the plant community as well as the plant's structural attributes and the animals this supports.

Conduct a legal survey to determine the boundaries and install iron pins.

Conduct a baseline ecological inventory of the properties to refine its ecological classification, plant and animal attributes and assess its ecological value and threats. Determine its conservation rank, local and regional significance.

Determine the presence of plant or animal species at risk and any unique assemblages of animals associated with this forest. This will provide the basis for assessing other properties.

Identify threats (forest clearing) and potential means of reducing or erasing those threats and conserving the forest.

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

Savary Island was subdivided in 1910 and currently has over 1500 small parcels, most 50 feet wide. The age of the survey and the limited number of other current surveys in the area makes it more work to determine boundaries and mark corners prior to registering the survey with Land Title. Because of the density of lots on the Island it is important to establish our boundaries and prevent trespass. It is critical to first identify the properties' conservation values so that we can understand what is at risk and how best to protect it. With incessant and careless development on Savary Island we stand to lose important ecological features before we know what is present – what we will lose. The effects of adjacency are heightened on Savary because of lot configuration (large edge to area ratio). Forests, like the wetlands of Rodgers Road, are also vulnerable to activities on adjacent properties, especially forest clearing. Forest cleared on the periphery of the lots will affect the ecological conditions of the property such as through increased sunlight, wind and evaporation as well as the potential introduction of non-native plants. The result is an irreversible change to the types of plants, their configuration and, consequently changes to the community of animals. As with other SILT parcels on Savary, it is critical to know what we have so we can better manage and conserve it and factor that into other purchases and conservation objectives.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

The SILT Land Securement Framework (2019, in Draft) provides key general ecological guidelines for land procurement and preservation. The study is intended to inform the need for management by assessing current conditions, conservation status and threats. "Active management" will only be initiated if the studies identify a need. The over-riding management goal of SILT is to conserve the ecosystems and ecological processes that maintain them. The key to this is reducing effects of development and maintaining ecological connections to adjacent lands, an ongoing goal of acquisitions.

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

We do not anticipate the need for volunteer assistants for these properties. SILT has a group of dedicated volunteers that can be called upon. Phil Henderson, of Strix Environmental Consulting has agreed to provide almost 60% in-kind contribution of fees to conduct the study on this and the other properties (Savary Island Road and Rodgers Road).

Describe local community involvement in conserving and maintaining the property (200 words max).

SILT relies on generous donors dedicated to conserving representative ecological communities on Savary Island. It is through these generous donors as well as the efforts and contributions of SILT members, Board and Directors that SILT has successfully acquired important land for conservation. We foresee no active involvement unless specific issues are identified (hence, the need for a study). Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

The public is not encouraged to enter the property. They are not actively restricted from entering the property.

9. FINANCIAL INFORMATION

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

No.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

Yes, an administration fee of 15% is included in the budget.

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023





Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

	·			·
Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
	Legal Survey of Property	Determine and register legal boundaries	Perimeter survey, mark corners, register with Land Title Office	Survey
Savary Island Road	Baseline Inventory of Properties	determine site use by and presence of plants and animals; refine ecological classification; determine ecological context, threats and value;	Better understand ecological attributes of properties and landscape (spatial) consideraions to guide future acquisitions and land use.	vegetation plot sampling for BEC site series and delineation within properties; other features: snags, coarse woody debris significant features (veteran trees, boulders, seepage sites, ephemeral wetlands or depressions) general plant species inventory rare plant species: vascular plants and bryophytes breeding bird survey (point count) + incidentals during other work bird nest survey (particularly raptors and herons) bird use survey: other sign such as roosting, etc. ecological/landscape context, threats identify collected plants (vascular and bryophytes) deposit plant specimens at UBC herbarium
Budget Summary - HCTF Funding Total: \$ 7,007.00 Admin Fee % 15%				
Admin Fee \$ \$ 1,051.05 3 Yr Total incl Admin \$ 8,058.05 Fee:				
TOTAL of Additional \$ 1,500.00 Contributions Required TOTAL of Additional \$ 1,500.00 Contributions Confirmed				

2-675 Conservation - Vancouver Boulevard



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: <u>2-675</u> (HCTF to complete)

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at christina.waddle@hctf.ca or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project Leader:				Liz	Liz Webster					
Field Contact (optional):			Phi	Phil Henderson						
Role of Project Leader in Organization:			า:	Executive Director						
Organization Name: Savary Island L			Land	and Trust						
Address Box 141										
City:	Lun	nd		Prov	Province: B.C.			Postal Code:	V0N 2G0	
Phone: 604-483 4743				Alternative Phone: 604 414 7291						
Email: silts@telus.net										
Website: https://savaryislandland			dtrus	t.org						

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$8,056.90

3. ORGANIZATION DETAILS

Dete of income weting	Ostakar 17, 1007				
Date of incorporation:	October 17, 1997				
BC Society No. (if applicable):	S0037480				
CRA Charitable registration number (if applicable):	89858 6425 RR0001				
Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.					
The Savary Island Land Trust (SILT) is a non profit, registered charity dedicated to the protection of natural areas and biodiversity on Savary Island. When SILT began in 1997 there was no protected land on this rare and fragile Island, today over one third of Savary is protected by The Nature Trust of BC, the Province of BC and SILT.

SILT was established in 1997 with the vision to preserve the Heart of the Island, the last undivided and undeveloped wilderness on Savary; DL 1375. The land was under threat of subdivision and development as a 90-unit gated community. The "Heart of Savary" is 350 acres in the centre of the Island and is one of the best examples of coastal sand dunes in Canada, providing habitat for two at-risk plants: Grey Beach Peavine and Contorted-pod Eveningprimrose. The trail network in the Heart of the Island has guided people to quiet beaches, wild lands, rare meadows and some of the last Old Growth Forests in the region for generations.

All levels of government, local donors, SILT and the Nature Trust of BC worked towards preserving this island treasure, and in 2001, The Nature Trust of BC acquired a 50% interest in the land. Through the efforts SILT and the Friends of Savary, The Nature Trust of BC acquired the remaining 50% in the Heart of the Island in 2018.

While the Heart of Savary has been a big part of our work over the last 20 plus years, we have also had the opportunity to receive several gifts of land and to purchase other parcels, so that today SILT holds 21 parcels of land for a total of 18 acres through out Savary Island. SILT is also involved in public education and stewardship including invasive species removal in sensitive ecosystems on the Crown Perimeter of Savary Island.

Property/Project Name:	oulevard		
Other names used (if applicable):	1234 Vancouver Boulevard; 2 1240 Vancouver Boulevard; 2		
Property Identification Number(s) (PID):	013-508-547; 004-221-010; 0)13-508-580; 0	05-169-241
Geographic Coordinates (Lat, Long):	eographic Coordinates (Lat, Long): 5,533,496.030 367,004.820 367,018.578 Meters; 5,533,4 5,533,478.832 367,046.624		
Property size (Ha):	total: 0.55 ha		
Does your organization have fee simple ow	nership of this property?	Yes X	No 🗌
If yes, how long has your organization own	5 years		
If no, provide the name the NGO who has f ownership of the property.*	ee simple		

4. CONSERVATION PROPERTY INFORMATION

Is the property leased to any other party?**	Yes	No X
If yes, provide the name of the leaseholder.		
Have you previously received any HCTF funding for the property or activities on the property?	Yes	No X

*If the property is owned by another NGO, you **must** include a letter from the NGO property owner stating that they support the application.

**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words.

Most ecological communities in the CDF (Coastal Douglas-fir) biogeoclimatic zones are Red- or Bluelisted provincially because of past and present development and future development pressure. On Savary, this pressure is exacerbated by its small size, extremely high lot density and continued demand for recreation property and associated forest clearing and building. This increases the ecological significance and value of these properties. They may support plant species at risk or communities that have not been examined.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

Maintain the properties as naturally functioning ecological unit. To conduct a detailed examination of the plants and animals of the site to understand its ecology and determine a finer, more precise and informative ecological classification.

The intention behind purchasing these properties was to conserve valuable ecological attributes of a forest that is under incessant threat. This includes conserving the plant species that comprise the plant community as well as the plant's structural attributes and the animals this supports.

Conduct a legal survey to determine the boundaries and install iron pins.

Conduct a baseline ecological inventory of the properties to refine its ecological classification, plant and animal attributes and assess its ecological value and threats. Determine its conservation rank, local and regional significance.

Determine the presence of plant or animal species at risk and any unique assemblages of animals associated with this forest. This will provide the basis for assessing other properties.

Identify threats (forest clearing) and potential means of reducing or erasing those threats and conserving the forest.

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

Savary Island was subdivided in 1910 and currently has over 1500 small parcels, most 50 feet wide. The age of the survey and the limited number of other current surveys in the area makes it more work to determine boundaries and mark corners prior to registering the survey with Land Title. Because of the density of lots on the Island it is important to establish our boundaries and prevent trespass. It is critical to first identify the properties' conservation values so that we can understand what is at risk and how best to protect it. With incessant and careless development on Savary Island we stand to lose important ecological features before we know what is present – what we will lose. The effects of adjacency are heightened on Savary because of lot configuration (large edge to area ratio). Forests, like the wetlands of Rodgers Road, are also vulnerable to activities on adjacent properties, especially forest clearing. Forest cleared on the periphery of the lots will affect the ecological conditions of the property such as through increased sunlight, wind and evaporation as well as the potential introduction of non-native plants. The result is an irreversible change to the types of plants, their configuration and, consequently changes to the community of animals. As with other SILT parcels on Savary, it is critical to know what we have so we can better manage and conserve it and factor that into other purchases and conservation objectives.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

The SILT Land Securement Framework (2019, in Draft) provides key general ecological guidelines for land procurement and preservation. The study is intended to inform the need for management by assessing current conditions, conservation status and threats. "Active management" will only be initiated if the studies identify a need. The over-riding management goal of SILT is to conserve the ecosystems and ecological processes that maintain them. The key to this is reducing effects of development and maintaining ecological connections to adjacent lands, an ongoing goal of acquisitions.

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

We do not anticipate the need for volunteer assistants for these properties. SILT has a group of dedicated volunteers that can be called upon. Phil Henderson, of Strix Environmental Consulting has agreed to provide almost 60% in-kind contribution of fees to conduct the study on this and the other properties (Savary Island Road and Rodgers Road).

Describe local community involvement in conserving and maintaining the property (200 words max).

SILT relies on generous donors dedicated to conserving representative ecological communities on Savary Island. It is through these generous donors as well as the efforts and contributions of SILT

members, Board and Directors that SILT has successfully acquired important land for conservation. We foresee no active involvement unless specific issues are identified (hence, the need for a study).

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

The public is not encouraged to enter the property. They are not actively restricted from entering the property.

9. FINANCIAL INFORMATION

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

No.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

Yes, an administration fee of 15% is included in the budget.

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.





Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
	Legal Survey of Property	Determine and register legal boundaries	Perimeter survey, mark corners, register with Land Title Office	Survey
Vancouver Boulevard	Baseline Inventory of Properties	determine site use by and presence of plants and animals; refine ecological classification; determine ecological context, threats and value;	Better understand ecological attributes of properties and landscape (spatial) consideraions to guide future acquisitions and land use.	vegetation plot sampling for BEC site series and delineation within properties; other features: snags, coarse woody debris significant features (veteran trees, boulders, seepage sites, ephemeral wetlands or depressions) general plant species inventory rare plant species: vascular plants and bryophytes breeding bird survey (point count) + incidentals during other work bird nest survey (particularly raptors and herons) bird use survey: other sign such as roosting, etc. ecological/landscape context, threats identify collected plants (vascular and bryophytes) deposit plant specimens at UBC herbarium
Budget Summary - HCTF Funding				
Total: \$ 7,006.00 Admin Fee % 15%				
Admin Fee \$ \$ 1,050.90				
3 Yr Total incl Admin \$ 8,056.90 Fee:				
TOTAL of Additional Contributions Required				
TOTAL of Additional \$ 1,500.00 Contributions Confirmed				

2-676 Frenchies Island



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: 2-676

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at <u>christina.waddle@hctf.ca</u> or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project Leader: Sara				ah Na	than				
Field Contact (optional):									
Role of	Proje	ct Leader	in Organizatior	ו:	Head of Habitat Restoration, BC				
Organization Name: Ducks Unlimited				ted Co	anada				
Address		511-1337	0 78 th Ave						
City:	Sur	rey		Prov	vince:	BC		Postal Code:	V3W 0H6
Phone:		778-888-1706			Alte	rnative Phone:			
Email:	Email: S_nathan@ducks.ca								
Website: www.ducks.ca									

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$18,150.00

3. ORGANIZATION DETAILS

Date of incorporation:	April 1 1938				
BC Society No. (if applicable):	N/A both organizations are Canada-wide NGOs.				
CRA Charitable registration	11888 8957 RR0001				
number (if applicable):					
Briefly describe your organization including history, vision, mission, approximate annual budget,					
funding sources, and number of staff and volunteers involved. Describe your experience with					
conservation land management. M	aximum 500 words.				

Ducks Unlimited Canada's (DUC) mission is to conserve, restore and manage wetlands and associated habitats for North America's waterfowl. DUC partners with governments of all levels, First Nations communities, industry, other non-profit organizations and private landowners to get our work done so we can connect people to nature and make a healthier world for future generations.

DUC's first conservation project was initiated in 1938, and DUC has now been conserving and restoring wetlands in British Columbia for 50 years. Over that time, DUC's impact has grown to over 600 individual wetland projects under long-term conservation agreements across BC. While best known for engineered water control infrastructure to manage wetland habitat, DUC has also successfully managed numerous estuary restoration projects using earthworks to remove dikes and berms, as well as a number of invasive plant management programs.

DUC's experience with conservation land management is significant. With over 600 wetland conservation projects across the province, DUC regularly has staff and contractors in the field managing projects on the ground through activities such as: engineering inspections and clean-outs of water control structures; major habitat restoration projects involving earth works; invasive vegetation management; inventory of vegetation and wildlife species on conservation properties; and liaising with landowners and other conservation partners.

In BC, DUC has 12 staff and an operating budget of approximately \$6,000,000.00 for fiscal 2020. Our funding sources include US Fish and Game through the North American Waterfowl Conservation Act; grants from the Canadian Federal government and the Province of BC, Ministry of FLNRORD; grants from foundations such as HCTF and the Pacific Salmon Foundation; and private donations. Our volunteer base is significant, with 695 active volunteers in BC.

Property/Project Name:	Island				
Other names used (if applicable):					
Property Identification Number(s) (PID):	00485660	1			
Geographic Coordinates (Lat, Long):	49° 6′ 5.39	9N, 123°6'58.55W			
Property size (Ha):					
Does your organization have fee simple ow	nership of t	of this property? Yes x			No 🗌
If yes, how long has your organization own	ed this prop	property? DUC has owned Frenchies Island since 1999.			
If no, provide the name the NGO who has f ownership of the property.*	ee simple				
Is the property leased to any other party?*	Yes x No		No 🗌		
If yes, provide the name of the leaseholder	Frenchies Island Waterfowl Society			/l Society	
Have you previously received any HCTF fun the property or activities on the property?	Yes No x		No x		

4. CONSERVATION PROPERTY INFORMATION

*If the property is owned by another NGO, you **must** include a letter from the NGO property owner stating that they support the application.

**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words.

Frenchies Island is a small, previously diked island and its associated tidal marshes to the west and southwest on the north end of Duck Island. Frenchies is centrally located within the 900 hectare complex of freshwater tidal marshes of the South Arm Marshes Wildlife Management Area (SAMWMA); however Frenchies remains a fee-simple property of DUC, and is not part of the Provincially managed SAM WMA. just upstream of the Fraser River estuary. The Fraser estuary is the largest estuary along the BC coast, supports millions of birds and is internationally recognized for its waterfowl, fisheries and other wildlife populations.

At the turn of the century, the South Arm of the Fraser River shifted regularly, relocating sandbars, islands and shipping channels between the Municipalities of Richmond (to the north) and Delta (to the south). The marshes on Frenchies and within the adjacent South Arm Marshes WMA owe their present configuration to the installation of wingdams, jetties and training walls designed to help maintain one main shipping channel at the mouth of the Fraser River. In the slow-moving shallows behind these training walls, deposition of silts and sands has resulted in the gradual development of this group of marshy islands separated by wide shallow tidal sloughs.

This island marsh complex provides critical feeding and rearing habitat for juvenile salmon and other fish, and as feeding and resting areas for migrant waterfowl, particularly when tides and storms make the outer more exposed foreshore habitats unavailable. Thousands of dabbling ducks frequent the mix of tidal channels, river channels, intertidal marshes and flooded fields of islands within the complex. Migrant snow geese feed extensively on new shoots of the tidal marshes in spring, and rafts of diving ducks over-winter in the many sloughs of the area. Localized breeding by Canada geese, mallard, bluewinged teal and wood duck occurs also. In 2019, DUC sampled fish use of the channels on Frenchies Island: results indicate numerous juvenile salmon, including Chinook and Chum, migrating through the island during spring.

Previously farmed, DUC and Fisheries and Oceans Canada teamed up to restore native marsh habitat and fish passage on Frenchies Island in 2009. Works included breaching the perimeter dike in three places and digging a network of fish channels throughout the island. This restored natural tidal exchange and fish passage on the island. Satellite imagery indicates that a native plant community dominated the site over the first few growing seasons, however by as early as 2014 *T. angustifolia* was well-established, forming large monotypic patches within the site. Vegetation sampling from October 2018 indicated that *T. angustifolia* now covers 35.7% (+/- 9.2, 95% CI, n = 30) of the site (leaf litter from previous years not included) and comprises 84% of the living vegetative cover.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

Our vision is to restore Frenchies Island from nearly monotypic *T. angustifolia* to a native vegetation community in order to support a healthy foodweb and, in turn, fish and waterfowl populations. We also hope to obtain funds by way of this grant to inventory benthic invertebrates in *T. angustifolia* dominated habitats compared to habitats dominated by native vegetation. Since we manage other habitats within the Fraser Estuary which are also showing increasing distribution of *T. angustifolia*, we view our work on Frenchies as a valuable stewardship learning opportunity that will help guide our management activities within the Fraser Estuary more broadly.

We are particularly interested in the foodweb impacts of *T. angustifolia* because we want to understand its implications for our species of interest (waterfowl; salmonids) in order to determine whether controlling this plant is worth the investment. Anecdotally, we have observed far fewer waterfowl on *T. angustifolia* dominated sites such as Frenchies Island compared to within native vegetation. A collaborator from the Skagit Estuary in Washington state, Gregory Hood, has made similar observations (G. Hood, pers. comm. Sept. 25 2019). However, juvenile salmon are still present within Frenchies Island during spring migration.

Since the presence of *T. angustifolia* in the Fraser Estuary is a relatively new phenomenon, no literature currently exists regarding the influence of this plant on juvenile salmon through the foodweb. We hope to address this limiting factor since, as *T. angustifolia* continues to spread throughout the Pacific Northwest, habitat managers, including DUC and conservation partners, are beginning to allocate resources towards controlling this invasive plant. Determining the foodweb impacts of *T. angustifolia* on juvenile salmon will help clarify whether controlling this plant should be a stewardship priority.

Using a grant from Fisheries and Oceans Canada's Coastal Restoration (CRF) fund, we initiated an adaptive management experiment to control *T. angustifolia* on Frenchies Island in summer 2019. This program employed methods used by Hood in the Skagit, adapted for the BC permitting context (i.e. we timed our cattail cutting to prevent disrupting nesting songbirds). This program will continue in 2020 and 2021 with a potential final cut in 2022, and is primarily funded by DUC's Coastal Restoration Fund grant. However, additional funds by way of this application would facilitate rental of additional brush cutters, which would enable us to recruit volunteers to help with cutting efforts.

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

Currently, we have no confirmed funds to carry out benthic invertebrate sampling on Frenchies Island. Our adaptive management program to control *T. angustifolia* on Frenchies would continue under our CRF grant. We believe that this work will have a very important role in stewardship more broadly on conservation lands in the Fraser Estuary. Many ecological stressors are present in the

Fraser Estuary, so it is important to prioritize stewardship actions in a world of budget and capacity constraints. Assessing the foodweb impacts of *T. angustifolia* will help us determine the relative importance of controlling this invasive plant.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

Stewart, D. and E. Balke. 2018. Proposed Alien Cattail (*Typha* spp.) Removal at Frenchies Island, Fraser River Estuary, BC.

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

UBC: we have a Masters student from UBC currently running the adaptive management experiment to control T. angustifolia; this work began in fall 2018.

BCIT/SFU: we have a Masters student from the BCIT/SFU Masters program in Ecological Restoration currently using Predictive Vegetation Modelling to further develop a restoration presecription from Frenchies Island; this work began in spring 2019. We have just recruited a first year Masters student from the same program to study the foodweb impacts of T. angustifolia using benthic invertebrate sampling, starting in spring 2020. Funds from this application would be used for laboratory processing of benthic invertebrate samples.

MiTACS: MiTACS provides matching funds for graduate student research. MiTACS is funding our two current graduate students, and we anticipate we will also receive matching funds for the incoming student to start in spring 2020.

Raincoast Conservation Foundation: DUC partners with Raincoast on fish sampling related to each agency's respective CRF grant program. A pilot study on benthic invertebrates carried out by DUC in summer 2019 was devised by Sarah Nathan (DUC) and David Scott (Raincoast Conservation Foundation). David Scott remains involved in an advisory capacity.

Pacific Salmon Foundation: The PSF funded a pilot study of benthic invertebrate communities within invasive T. angustifolia compared to native vegetation. We will apply for additional funds from PSF to continue sampling benthic invertebrates at control sites outside of Frenchies Island.

DFO: Much of the above work is also supported by a grant from DFO's CRF. This funding has allowed us to sample fish on Frenchies Island and provided funds for the first two graduate students. Most materials and supplies and transportation for the work proposed in this application is funded by DUC's CRF grant.

Describe local community involvement in conserving and maintaining the property (200 words max).

We regularly have student volunteers from BCIT's undergraduate program in Ecological restoration participate in our fish sampling program on Frenchies Island. We will offer participation and learning

in benthic invertebrate sampling to student volunteers also. Large volunteer events are difficult at Frenchies Island as the site is boat-access only. We hope to recruit volunteers to help cut cattail on Frenchies using funds from this grant to rent additional brush cutters.

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

Frenchies is accessible to the public, however it is accessible by boat only. Members of the Frenchies Island Waterfowl Society hunt waterfowl on the property.

9. FINANCIAL INFORMATION

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

We are not requesting funds for capital expenditures.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

DUC will charge a 10% administration fee for handling budget and all contracting.

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023



Figure 1: Aerial photo of Frenchies Island. Old perimeter dike outlined in yellow.



Figure 2: Frenchies Island; property boundary indicated by red polygon.



Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
Frenchies Island	Decrease presence of native speices on the properties	Control invasive european cattail on Frenchies Island using adaptive management experiment	Restore native estuarine marsh vegetation communities (e.g. sedges, soft-stemmed bulrush, wapato)	Cut T. angustifolia as per adaptive management plan Apply most effective treatment to control plots Final year of treatment (cutting)
Frenchies Island	Support benthic invertebrate prey for fish and waterfowl	Inventory benthic invertebrates in invasive typha compared to native vegetation at Frenchies	Determine whether benthic invertebrate abundance and or diversity is affected by invasive T. angustifolia at Frenchies; use this to guide restoration actions on Frenchies	Student to collect benthic invertebrate samples in the field and conduct statistical analysis lab to analyse 10 benthic invertebrate samples at Frenchies Island year 1
Budget Summary - HCTF Funding Total: \$ 16,500.00 Admin Fee % 10%				
Admin Fee \$ \$ 1,650.00 3 Yr Total incl Admin \$ 18,150.00 Fee: \$ 18,150.00				
TOTAL of Additional Contributions \$ 37,500.00 Contributions \$ 20,000.00 TOTAL of Additional Contributions \$ 20,000.00 Confirmed \$ 20,000.00				

3-425

TURTLE VALLEY FARM/TOAD Hollow Invasive Plant Management and Rehabilitation Project



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: <u>3-425</u>

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at christina.waddle@hctf.ca or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project Leader: Danielle Cross									
Field Contact (optional):									
Role of I	Proje	ct Leader	in Organizatio	า:	Stewardship Coordinator, Southern Interior BC				
Organization Name: Nature Conservancy of Canada									
Address		200 – 825	Broughton St.						
City:	Vict	toria		Prov	ince:	BC		Postal Code:	V8W 1E5
Phone:	e: 250-216-8502 Alternative Phone:				rnative Phone:				
Email: Danielle.cross@natureconservancy.ca									
Website: www.natureconservancy.ca									

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$45,050.50

3. ORGANIZATION DETAILS

Date of incorporation:	November 28, 1962			
BC Society No. (if applicable):				
CRA Charitable registration number (if applicable):	11924 6544 RR0001			
Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.				

The Nature Conservancy of Canada (NCC) is Canada's leading national land conservation organization. We are a private, non-profit organization that partners with individuals, corporations, other non-profit organizations and governments of all levels to protect the natural areas that sustain Canada's plants and wildlife. Since 1962, NCC and its partners have helped to protect 14 million hectares (35 million acres), coast to coast to coast. Currently NCC employs over 220 staff and 1,800 annual volunteers across the country. Locally, NCC BC Region has a history of successful land conservation management in British Columbia. Beginning with their first project, the acquisition of Mud Bay in 1974, NCC BC Region has helped to protect 820,611 hectares of the province's most biologically diverse lands and waters.

Vision

We envision a world in which Canadians conserve nature in all its diversity, and safeguard the lands and waters that sustain life.

Mission

The Nature Conservancy of Canada leads and inspires others to join us in creating a legacy for future generations by conserving important natural areas and biological diversity across all regions of Canada.

Funding sources include private donations and grants from governments, and other grant foundations such as Habitat Conservation Trust Foundation (HCTF). NCC's partnership with HCTF has enabled NCC to work to restore the ecologically and cultural significant <u>Cowichan Garry Oak Preserve</u>, protect sensitive vegetation communities at the <u>Dutch Creek Hoodoos Conservation Area</u>, and complete several conservation actions throughout the <u>Elk Valley Heritage Conservation Area</u>.

National Income Statement:

In the 2018-19 fiscal year (June 1, 2018 to May 31, 2019) NCC's revenue for the entire country was \$88,991,460. Expenses were \$89,644,662. Excess revenue over expenses for the year were \$1,747,338. You access all annual reports and audited financial statements for NCC on our website: <u>Annual Reports</u>.

4. CONSERVATION PROPERTY INFORMATION

Property/Project Name:	Turtle Valley Farm/Toad Hollow Invasive Plant Management and Rehabilitation Project			
Other names used (if applicable):	Toad Hollow (stand alone non-farm parcel)			
Property Identification Number(s) (PID):	012-685-186			
Geographic Coordinates (Lat, Long):	50.79143, -119.61359			
Property size (Ha):	64.75			
Does your organization have fee simple ow	nership of this property?	Yes 🖂	No 🗌	
If yes, how long has your organization own	ed this property?	4 y	ears	
If no, provide the name the NGO who has f ownership of the property.*	ee simple	<u>.</u>		

Is the property leased to any other party?**	Yes	No 🖂
If yes, provide the name of the leaseholder.		
Have you previously received any HCTF funding for the property or activities on the property?	Yes	No 🖂

*If the property is owned by another NGO, you **must** include a letter from the NGO property owner stating that they support the application.

**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words.

Toad Hollow is a stand-alone parcel of the Turtle Valley Farm property that was acquired through a court agreed transfer from The Land Conservancy to Nature Conservancy of Canada on September 30, 2015 to ensure this conservation property's continued protection. Toad Hollow is a largely undisturbed parcel consisting of 56 intact hectares of healthy Interior Douglas Fir biogeoclimatic zone, Shuswap moist warm variant subzone forest. The most significant feature on this property is the over five hectares of functioning healthy cattail marsh and connected shrub carr wetlands that provide habitat for both terrestrial and water dependant species for all or part of their life cycle including species at risk such as Western Toad (*Anaxyus boreas*) (Figure 1). This property creates a corridor between adjacent private farmland parcels and crown land and provides critical moose winter range and habitat for multiple other wildlife species.

Approximately three hectares of forest were cleared to convert to pasture prior to acquisition by NCC. This land is not suited to pasture or forage production and NCC does not want any further loss of biodiversity or ecological integrity on this otherwise functioning and unique site. Instead NCC aims to restore the cleared land back to its previous forested state to ensure quality habitat for wildlife in the region and stop the spread of invasive species on this property.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

NCC's vision for Toad Hollow is a vibrant IDF/mw01 forest encompassing a healthy wetland complex home to numerous wildlife species including those at risk. To achieve this NCC needs to complete restoration of the disturbed meadow/pasture to its previous Interior Douglas Fir forest state.

Currently the disturbed meadow is largely infested with numerous invasive plant species listed as noxious under the BC Weed Control Act Regulation including Orange and Yellow Hawkweeds, Sowthistle species, Canada Thistle, Spotted Knapweed, Ox-eye Daisy, Sulphur Cinquefoil and one new invasive species, Cypress Spurge. Under the Weed Control Act landowners have a duty to control noxious weeds on their property. Noxious weeds are the largest threat to biodiversity on this property and must be managed through an intensive combination of chemical, mechanical and bio control methods. Density and distribution are such that seeding, and planting will be required after control to reduce bare soil and opportunities for additional invasive species establishment. The invasive plant situation at Toad Hollow has been exacerbated by continued and constant livestock trespass of local horses that enter along the road or through dilapidated and rotten fencing along the perimeter. Installation of a cattleguard along the road and combination of new or where possible repaired wildlife friendly fencing along the perimeter would prevent this trespass and reduce the opportunity for further introduction of invasive plant species to the site or spread from this site. Cattleguards must be installed using Ministry of Transportation and Infrastructure (MOTI) specs as this is a public road. MOTI stated that depending on the width of a road and culvert availability a single installation can range from \$10,000 to \$20,000.

Toad Hollow is situated in the Kamloops Nicola Livestock District. In Livestock Districts under the BC Livestock Act, livestock can roam free and it is the responsibility of a landowner, in this instance NCC, to exclude livestock from their property. Additionally, there is currently a pending Range Tenure application bordering the full length of the north and east sides of Toad Hollow. This has the potential for a great deal more livestock trespass into Toad Hollow and poses a large threat to the sensitive wetlands. Therefore, although fencing is a large expense, for this property it will ensure that invasive species management and control is effective by removing livestock from the property making it more cost efficient in the long-term management of Toad Hollow and getting invasive species management to a place where annual control is on option in general operational budgets.

To manage the current threats on this site and achieve their vision, NCC has the following management goals:

- 1. Reduce invasive plant species coverage in the disturbed meadow and along road right-of-way by 60% by 2023.
- 2. Maintain reduction of invasive plant species on site after this rehabilitation project through the development of a property specific Invasive Plant Management Plan for long-term management of Toad Hollow by 2021.
- 3. Achieve healthy riparian score ratings for all riparian areas on the property by 2023.
- 4. Increase natural vegetation (shrubs, grasses and forbs) in the disturbed area by 30% by 2023.
- 5. Control livestock trespass by 2022 through installation of cattleguard, replacement of old rotten fence along north and east boundary and a combination of repair and replacement of fence along south and west boundary. All fencing to be wildlife friendly fencing.
- 6. Engage local community in invasive species awareness, management and conservation.

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

Unlike other NCC properties, NCC does not have specific endowment funds for Toad Hollow due to how it was acquired from TLC. The magnitude of a restoration project and the management of the invasive plant infestation on this property are beyond NCC operational budgets. Without funds NCC simply lacks the capacity to complete all the components of this project which include in-depth pre site assessments, an intense 3-year invasive management program and then continued invasive species management after that, installation of a cattleguard and replacement of inadequate perimeter fencing and signage. Without this restoration work invasive species will spread into the adjacent functioning wetlands and healthy IDF/mw01 forest and livestock will continue to overgraze portions of the property, reducing biodiversity and ecological integrity of this site. Continued

degradation of habitat from adjacent livestock trespass will lead to more extensive overgrazing, introduction of additional invasive plant species, expansion of invasive species distribution on the site, soil compaction, increased bare ground, loss of vegetation cover and structure and a decrease in wetland functionality overall. This is of particular concern given that these wetlands provide habitat for the at-risk Western Toad and that the current surrounding forest structure and shrub carr areas provide critical winter habitat for moose.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

Turtle Valley Property Management Plan 2016-2021 (2016)

Baseline Inventory Report Turtle Valley Farm (2016)

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

NCC has already reached out to the Thompson-Nicola Invasive Plant Management Committee (TNIPMC) created by the Thompson-Nicola Regional District (TNRD) for assistance in developing a strategy for invasive species management for Toad Hollow. As a result of this application TNIPMC has confirmed financial assistance to develop and complete an Invasive Plant Management Plan for this property (see Letter of Support). A joint site visit was completed prior to development of this proposal to discuss options for invasive plant control and forest restoration. Key topics included invasive species management in proximity to wetlands and forest edge, species specific control methods, biological control options and the effects of these control methods on future restoration plantings. TNIPMC is open to providing additional guidance in terms of professional knowledge regarding treatments on the site to NCC contractors and additional collaborations for education purposes with NCC. Additionally, TNIPMC offers programs to land owners in the region to assist with invasive plant management. NCC may be eligible for both the New Invaders Program (100% rebate of the cost of herbicide treatment on private land for new invaders) and the Sprayer and Seeder Loanout programs on this project.

Describe local community involvement in conserving and maintaining the property (200 words max).

NCC intends to hold a volunteer day for mechanical invasive plant removal in wet areas and around regenerating forest edges in the first two years of the project. If successful additional volunteer weed pulls will be added. Finally, a volunteer planting event in year 3 will be planned. Volunteers will be recruited through NCC social media platforms and existing volunteer base. Events like these engage the public and community and create a sense of local accomplishment and pride. NCC will increase and improve signage around the property to expand community awareness of this conservation area.

Finally, there will be potential to include this property as part of any local invasive plant management field tours.

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

Yes, this property is accessible to the general public for low impact day use only activities such as wildlife appreciation and viewing, hunting, hiking and snowshoeing. There is no motorized access, this includes mountain bikes, on the property other than the main road and a trail that leads to crown land. Dogs are not allowed on site.

9. FINANCIAL INFORMATION

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

The only capital expenditure planned on this project is the purchase of a cattleguard. This cattleguard is required to prevent livestock trespass from adjacent crown and private parcels. Gates cannot be used as this is a public road and access must remain open. Depending on availability and width requirement determined by MOTI a single cattleguard ranges in cost from approximately seven to ten thousand dollars without installation.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

No. Administrative costs including travel are covered through a combination of staff day rates and other funding sources. Unfortunately, due to the nature of the acquisition of this property there are no property specific endowment funds. Additional listed contribution funds have had to be allocated from a combination of limited internal operating dollars and individual donor dollars.

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.





Figure 1. Portion of cattail marsh at Toad Hollow.



Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
	Reduce invasive plant species	Control or eradicate		Chemical control applications by contractor - Year 1 and 2, using best management practices as discussed with local invasive species council and through research by NCC staff
	coverage on distrubed meadow and along road right-	invasive plant species using best management	Invasive species inventory completed and target of 60% reduction in coverage of priority species by 2023 (Year 3)	Release of biocontrol agents as available for Canada thistle and spotted knapweed in particular
Toad Hollow (Turtle	of-way	practices		NCC staff to conduct pre-treatment inventory and assessment and monitor effectiveness of invasive management control adjusting if necessary to ensure effectiveness (Year 1, 2 and 3)
Valley Farm)		dito		TNIPMC to develop Invasive Plant Management Plan by 2021.
	Maintain reduction in invasive plant coverage	Control or eradicate invasive plant species using best management practices	Invasive plant management plan in place and being utilized (Start of Year 2 and beyond).	
		P * *		
Budget Summary - HCTF Funding		Protect riparian areas for wildlife such as wetland		NCC staff to conduct Riparian Health Assessments in Year 1 prior to invasive species control and fencing and then in Year 3 to measure effectiveness of treatments and fencing.
Total: \$ 45,050.50	Maintain or increase riparian health scores	dependant birds, moose and species at risk including Western Toad	Riparian Health Assessments completed and riparian areas score a Healthy rating by 2023 (Year 3)	
Admin Fee %				
Admin Fee \$ -				NCC to conduct pre-treatment inventory of disturbed meadow and then post-treatment inventories in Year 2 and Year 3
3 Yr Total incl Admin \$ 45,050.50 Fee:	Increase cover of natural vegetation on disturbed meadow	Establish natural vegetation including shrubs on the disturbed meadow	Restoration site assesment completed with natural vegetation and grass species establishing on 30% of the site by 2023 (Year 3)	Fall seed after spring chemical application on disturbed meadow
				Plant shrubs in disturbed meadow (Year 3)
TOTAL of Additional Contributions Required	Additional tions		Cattleguard installed along the road transecting the property and 2.4 km of functioning wildlife friendly fencing, are in	Replace or repair when possible 2.4 km of fence with wildlife friendly fencing (smooth top wire no more than 40" high, with bottom wire 18" above ground), no stays, post placement about 16 ft. apart, remove all exisiting fence and wire and dispose off site (Year 1).
TOTAL of Additional \$ 22,609.50 Contributions Confirmed	Control livestock trespass on the property	and associated grazing and trailing on the property	and 2.4 km of functioning wilding friendly tencing are in place along the property boundary to prevent livestock, mainly horses, from accessing the property via adjacent private land.	Inspect fence annually. Make adjustments and repairs as necessary to ensure horses do not enter the property (Year 2 and 3)
				Install cattleguard along the road at east property boundary (Year 1)
	Engage local community in	Engage local community		Host weed pull day to assist with mechanical removal around wetland and forest edges - Year 1, with potential for second in year 2
	invasive plant awareness and management and conservation lands	members to particpate in weed pulls or shrub	A handful of local volunteers take an interest in and actively participate in the continued conservation activities on this property.	Engage neighbors to report any livestock or other issues on the property - ongoing
	lanus	planting volunteer days		Install additional property signs - Year 2

4-551 Fort Shepherd Conservancy Area



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: 4-551

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at christina.waddle@hctf.ca or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project Leader:				Kar	Karen Iwachow				
Field Contact (optional):									
Role of Project Leader in Organization:				า:	Environmental Technician & Land Manager				
Organization Name: TLC The Land C				Cons	Conservancy of British Columbia				
Address	Address PO Box 50054 RPO Fairfield Plaza								
City:	Vict	toria		Prov	ince:	вс		Postal Code:	V8S 5L8
Phone: (250)479-8053			Alternative Phone: 1-877-485-2422						
Email:		kiwachow@conservancy.bc.ca							
Website	Website: http://conservancy.bc.ca								

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$64, 987.90

3. ORGANIZATION DETAILS

Date of incorporation:	May 1, 1997			
BC Society No. (if applicable):	S-36826			
CRA Charitable registration number (if applicable):	88902 8338 RR0001			
Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.				

TLC has protected land for over 20 years through direct acquisition and conservation covenants with over 125,000 acres protected, historically. Currently, TLC owns seven properties that protect 1,100 acres, and over 240 conservation covenants that protect over 13,000 acres. TLC envisions a future where the biological diversity of BC, including areas of scientific, historical, cultural, scenic and compatible outdoor recreational value, are protected for the benefit of current and future generations. Our mission is to protect and restore the biological diversity of British Columbia for present and future generations through action and education.

TLC's approximate annual budget is \$700,000 with funding sources including members, donors and granting foundations (e.g. TD Friends of the Environment Foundation, BC Gaming). Currently, TLC employs eight staff and reaches approximately 350 volunteers each year through our covenant monitoring and restoration program as well as through properties including Abkhazi Garden (owned and managed by TLC).

Conservation land management is at the forefront of TLC's operations, either by directly managing owned properties or supporting landowners in stewardship of their land protected by conservation covenant. Ecological integrity monitoring of these protected lands is key to their continued functionality.

4. CONSERVATION PROPERTY INFORMATION

Property/Project Name:	Fort Shepherd Conservancy A	Area			
Other names used (if applicable):					
Property Identification Number(s) (PID):	017022959; 016683510; 017046858; 016718488; 017046866; 017046858; 017022959; 024-300-365				
Geographic Coordinates (Lat, Long):	49°02'22.7"N 117°37'28.5"W				
Property size (Ha):	964				
Does your organization have fee simple ow	Yes 🖂	No 🗌			
If yes, how long has your organization own	Since 2006, TLC has been working with Teck Resources Limited to create the Fort Shepherd Conservancy Area. In September 2006, Teck announced that they would sell the valuable lands to TLC. As part of the deal, Teck donated one million dollars of the land's purchase price under the federal Ecological Gifts Program. With support from Columbia Basin Trust,				

			Fish & Wildlife
		Со	ompensation Program
		(FW	/CP), and the B.C. Trust
		f	or Public Lands, TLC
		pur	rchased the first phase
		C	of the Fort Shepherd
		Co	onservancy Area from
			Teck in December
			2007. Trail Wildlife
			ociation and Kootenay
			/ildlife Heritage Fund
			ociety each donated
			\$4,500, and several
		-	enerous community
			mbers helped complete
			final payment for Fort hepherd Conservancy
			ea in December 2008.
If no, provide the name the NGO who has fee simple ownership of the property.*		N,	/Α
Is the property leased to any other party?**	Yes 🗌		No 🖂
If yes, provide the name of the leaseholder.		N,	/A
Have you previously received any HCTF funding for the property or activities on the property?	Yes Early in 2008, we received support from B.C. Conservation Foundation and Habitat Conservation Trust Fund for the second phase which was securing adjacent critical habitat areas along the Columbia River		No 🗌
	Trust Fund for th second phase wh was securing adja critical habitat ar along the Colum	he nich cent eas	
*If the property is owned by another NGO, you must i stating that they support the application.	Trust Fund for th second phase wh was securing adja critical habitat ar along the Colum River	he iich cent eas bia	NGO property owner

organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words.

The Fort Shepherd Conservancy Area (FSCA) is the largest intact, contiguous parcel of land in British Columbia found within the rare, very dry, warm Interior Cedar Hemlock (ICHxw) biogeoclimatic subzone. The area provides high capability ungulate winter range and is known to support an impressive diversity of other flora and fauna, including several species that are of conservation concern.

The FSCA encompasses 964 ha of land on the west side of Columbia River. The Canada-United States border forms the southern boundary of the area and semi- wildlands owned by Teck Resources Limited. are found to the north and west. The FSCA lies within the Interior Cedar Hemlock biogeoclimatic zone and both the very dry warm (ICHxw) and dry warm (ICHdw) subzones are represented. Various terraces extend along the length of the FSCA property from valley bottom (≅400 m elevation) westward to the height of land (≅1,600 m elevation). The northern portion of the plan area is dominated by steep sandy slopes with very coarse-textured disturbed soils and sparse forest and shrub cover. Invasive weeds have encroached through much of this area and it is highly disturbed. Proceeding further south, soils are more developed, but they are acidic and lack a well developed mineral-organic surface horizon. Terraces in lower FSCA are comprised of a mosaic of mixed open forest, shrubland and herb-dominated habitats interspersed with occasional rock outcrops and cliffs. These low elevation areas provide a good interspersion of high value browse with scattered coniferous cover and they are heavily used by ungulates and other wildlife during the winter months.

The FSCA has been subject to a range of anthropogenic disturbances, including long term exposure to sulphur dioxide emissions from the Trail smelter coupled with intensive timber harvesting and repeated severe forest fires to facilitate mineral extraction during the 1920's and 1930's. More recent impacts include linear developments (i.e., power lines, roads, gas lines), gold and placer mining activity, intensification of recreational use (e.g., hunting, fishing, camping, wildlife viewing and off-road vehicle [ORV] activity). The latter activities have resulted in a proliferation of roads, trails, invasive weeds, garbage and campfires, with associated damage and disturbance to soils, endemic vegetation and wildlife. Due to the negative impacts the area was closed to the public in 2016.

There are confirmed records (from the 2008 management plan) for 123 terrestrial vertebrate species in the FSCA, including 2 amphibian, 6 reptile, 23 mammal and 92 bird species. The area historically supports a minimum of 13 vertebrate species that are listed provincially (2 red-listed; 10 blue-listed). Seven species are listed federally (2 threatened; 4 of special concern; 1 endangered) and all seven of these currently appear on the SARA Schedule 1 list. Conducting species inventories relating to the update of the management plan would be a critical step forward in understanding if these species still exist on the property.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

The FSCA holds ecologically unique wildland area with significant wildlife, habitat, heritage, archeological and recreational values. Special conservation efforts and stewardship will conserve this ecological legacy for future generations.

FSCA has an existing management plan which was created in 2008 by contractors Pandion Ecological Research Ltd. The standing management plan testifies that a collaborative partnership with participating groups guided by the principles of maintenance of ecosystem integrity, health, biological diversity, and self sustaining native wildlife populations, the significant values of the FSCA will be protected, enhanced and restored, with opportunities for human activities compatible with this conservation vision encouraged. Though these values have not changed, restoration activities, project updates and new challenges have arisen over the last 11 years. Most notably access to the FSCA has changed. Recreational use of the FSCA saw continued unauthorized motorized vehicle use causing extensive damage to identified sensitive habitats. After several attempts to deter the environmentally detrimental activities the FSCA was forced to close to the public in 2016. Since then, the property has seen some natural recovery from the damage but now requires new management objectives to minimize the potential for human disturbance and habitat degradation associated with recreational activities. In 2019, TLC and Teck Resources Limited. drafted an Access Agreement Plan which will guide the appropriate allowable activities for public access, heavily restricting motorized access when the FSCA reopens in 2020. These changes to access and recreational management need to be reflected in the new management plan.

Climate change has been identified as a significant stressor that may affect these values in many ways. Management goals will also be updated to reflect the advances in restoration practices that have occurred since the standing management plan was created 11 years ago. The management plan update will reflect recent activities in the FSCA and will require revised maps to identify where restoration, road rehabilitation and trail-building work has occurred. The lands surrounding the FSCA are owned by Teck Resources Limited. and are undergoing restorative treatments to address legacy impacts; investigating these treatments and their success may have implications for the FSCA and could also be included in the updated management plan. Species at Risk (SAR) and rare plant communities listed by the CDC will also be inventoried with best management actions for these updated in the plan. In preparation for the updated management plan, TLC and Trail Wildlife Association (TWA) hosted a public open house event on July 15, 2019, for community input regarding management. Currently a stewardship committee, comprised of TWA, Teck Resources Limited. and TLC, meets once a month to collaboratively address management issues.

Strategic management goals for the FSCA management plan update:

- 1. To maintain and restore the ecosystem integrity, health, biological diversity and habitat quality considering climate change impacts to the FSCA for the benefit of its native wildlife populations;
- 2. To protect and enhance the ecological and archeological values of the FSCA;
- 3. To manage the FSCA for human land use opportunities that do not compromise the conservation and management of its ecological values; and
- 4. To encourage initiatives that promote public awareness, stewardship and educational opportunities with respect to the FSCA and its unique values.

Specific management objectives focusing on representative habitats, habitat elements, Species At Risk, plants species and communities, wildlife guilds, as well as heritage, archeological and recreational values were put forward. These objectives are linked to general and site-specific recommendations that are intended to conserve or enhance existing values, prevent or mitigate

impacts, enhance or restore degraded areas, fill information gaps, and/or increase opportunities for public awareness, stewardship and learning with respect to this unique property. These objectives will be revised from the 2008 management plan to reflect the work that has been completed and ongoing or newly identified tasks to be addressed. All implementation activities described in Part 2 of this application will be subject to the management plan priority actions.

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

FSCA is over 2,200 acres; a property this large and with the complex and sensitive systems within it requires resources provided by high level expertise in those areas of interest. TLC does not have the capacity in house to support these projects so will need to contract qualified professionals. Updating the management plan for the FSCA is crucial to its success in maintaining ecological integrity so that it may provide habitat for the species that reside there and appropriate recreational values for everyone.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

Fort Shepherd Conservancy Area: Access Management Policy (2009) Access agreement with Teck Resources Limited. Fort Shepherd Conservancy 2017 report Fort Shepherd Flats: Biological Soil Crust, Pre-Burn Monitoring and Recommendations (2016) Fort Shepherd Townsend's Big-Eared Bat Project Geological Setting (2003) Kootenay Region 2014 Wildlife Tree Creation Project WTP Fort Shepherd report December 2013 Biodiversity Inventory within the ICHxw at Fort Shepherd2008 Common Nighthawk Inventory in the Pend d'Oreille and Fort Shepherd Conservancy Area (2008) Fort Shepherd Conservancy Management Plan (2008) Kootenay Camas Project Waneta and Pend d'Oreille Camas Inventory 2012 Final Report Identifying and Securing Hibernation Habitat for Bats in the Columbia Basin in Response to Risk of White Nose Syndrome Year 1 Summary (2012) Identifying and Securing Hibernation Habitat for Bats in the Columbia Basin in Response to Risk of White Nose Syndrome Year 2 Summary (2013) Fort Shepherd Restoration Recommendations (2012)

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

Trail Wildlife Association - labour and expertise (local stewardship group with many years of

knowledge and experience with the FSCA).

Describe local community involvement in conserving and maintaining the property (200 words max).

The Trail Wildlife Association (TWA) has been instrumental in protecting, monitoring and restoring the FSCA. Members of the TWA first brought the need to conserve the land to TLC's attention and solicited donations from members and the community to secure the land as an important wildlife refuge. To this day, TWA remains on the Fort Shepherd Stewardship Committee and co-manage the land with TLC. They have been instrumental in identifying restoration needs and carrying out work. TWA's partnership is vital to the continued proper management of the FSCA.

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

The property will be accessible to the general public after an access agreement has been reached with Teck Resources Limited who own the land adjacent to the FSCA and through which anyone must travel in order to reach the FSCA. Once this agreement is in place, access will be limited to pedestrian and equestrian, with no motorized vehicle use strictly enforced. The closure to motorized use is due to ongoing damage observed within the sensitive ecosystem.

9. FINANCIAL INFORMATION

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

N.A.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

No. TLC covers administrative expenses associated with the management of the FSCA through an annual staff allocation of \$48,515.25. Funds are derived from TLC members and donors.

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.



Figure 1: Fort Shepherd Conservancy Area Access Map 2017



Figure 2: Fort Shepherd Conservancy Area vegetation resources inventory habitats



Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performanc e Indicators by End of Year 3	Activities
	Management Plan Update	Update the existing management plan to reflect restoration that has occurred, changes in habitat conditions, access management and address climate change stressors.	Management Plan is updated and objectives are implemented.	Contract Pandion Ecological Research Ltd. to prepare management plan
				TLC staff coordination and support for management plan creation
Fort Shepherd				TLC coordination with partners to implement management plan action items
i ort snepheru	Maintain and restore ecosystem integrity, health, and biological diversity with a climate change lens.	Improve representative habitats, elements, and species at risk (SAR)	Comprehensive species inventories for identified sites. Populations of SAR are maintained or increased relative to baseline.	Species inventories completed by staff or contractors
				Develop weed management plan with BCTC, FortisBC and TCML to not impact SAR recovery actions
				Riparian area survey for knapweed control
Budget Summary - HCTF Funding	Maintain and rectore	Improve winter range habitat for ungulates	Increased number of wintering ungulates due to enhanced winter forage	Brushing of decadent shrubs to reduce fuel load, improve growth for drought conditions and improve forage for ungulates
Total: \$ 64,987.90	Maintain and restore ecosystem integrity, health, and biological diversity with a climate change lens.			Remove fencing to allow unrestricted wildlife movement
Admin Fee %				Native shrub planting along roadways, in riparian areas and along ROWs.
Admin Fee \$ \$ -	Maintain and restore ecosystem integrity, health, and biological diversity with a climate change lens.	Increase the number of wildlife trees and coarse woody debris (CWD)	Increased density of CWD and increased populations of wildlife tree-dependent species on site.	Fungal innoculation of 20 trees to create wildlife trees
3 Yr Total incl Admin \$ 64,987.90 Fee:				Create wildlife trees and large hollow logs using mechanical means
				Install bird nesting boxes for wildlife tree-dependent species as interim habitat
TOTAL of Additional \$ 120,150.00 Contributions	Encourage initiatives that promote public awareness, stewardship and educational opportunities	Foster a sense of stewardship over the land.	Regular community-led outings to contribute to stewardship objectives (e.g. winter ungulate counts, Christmas bird count, SAR surveys).	Interpretive signage at key entry points
Required TOTAL of Additional Contributions Confirmed				Publicize new management goals and activities through open-house events with the community on the land
				Promote training and educational opportunities with post-secondary programs
	Manage human land use opportunities that do not compromise conseration and management of it's ecological values	Create access management plan for easement/right of way contractors and trail users	25% of unused roads decommissioned with signage for all retained roads to remain	Continue road decommissioning of unauthorized/unused roads
				Meet with BCTC, FortisBC and TCML representatives on site to conduct a powerline access road inventory
				Install trail markers
	Protect and enhance the ecological and archeological vales	Control or eliminate invasive species using best management practices	Reduction in invasive species coverage and vigour. Increase in habitat for native species and SAR.	Conduct work parties with community volunteers to remove invasive species in high priority areas
				Identify critical habitat for SAR and address threats
				Monitoring and management of regrowth in treated areas
		Manage archeological site restoration and/or protection	All archeological sites mapped with clear direction on how to protect and preserve.	Map existing archeological sites with assistance from the First Nation Guardian Program
	Protect and enhance the ecological and archeological vales			Work with existing placer mining claim holders to ensure negative impacts do not occur from mining activities
				Replace damaged bronze plaque vandalized from the cairn site
4-606 Morrissey Meadows



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: ____4-606___ (HCTF to complete)

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at <u>christina.waddle@hctf.ca</u> or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project Leader:				Ric	Richard Klafki				
Field Contact (optional):			Kat	e Mac	Kenzie				
Role of Project Leader in Organization:				า:	Program Director – Canadian Rocky Mountains				
Organiza	Organization Name: The Nature Conservancy of Canada								
Address	Address 800-825 Broughton Street								
City:	Vict	oria		Prov	ince:	BC		Postal Code:	V8W 1E5
Phone:	e: 250-688-6270 Alternative Phone: 250-479-3191								
Email:		richard.klafki@natureconservancy.ca							
Website	:	www.natureconservancy.ca							

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$19,256.00

3. ORGANIZATION DETAILS

Date of incorporation:	1962				
BC Society No. (if applicable):	n/a				
CRA Charitable registration 11924 6544 RR0001 number (if applicable):					
Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.					

The Nature Conservancy of Canada (NCC) leads and inspires others to join us in creating a legacy for future generations by conserving important natural areas and biological diversity across all regions of Canada.

NCC is a leading national, non-profit, private land conservation organization. We protect and care for ecologically significant lands and waters and the species that they sustain. Our science-based conservation planning process drives our work. We partner with individuals, governments, Indigenous communities, foundations, corporations and others to achieve durable conservation solutions. We secure properties through donation, purchase, conservation agreements and the relinquishment of other legal interests, and manage them for the long term. Since 1962, NCC and our partners have helped conserve more than 14 million hectares (35 million acres) from coast to coast to coast.

NCC employs over 220 staff and 1,800 annual volunteers across the country.

NCC's first project in British Columbia was the acquisition of Mud Bay in 1974 — a vibrant intertidal property in Vancouver's Boundary Bay. Since then we have helped to protect over 820,000 hectares of the province's most biologically diverse lands and waters. Today the BC Region continues to work with our partners to protect and steward British Columbia's natural heritage.

Through our partnership with the Habitat Conservation Trust Foundation NCC has worked to restore the ecologically and cultural significant <u>Cowichan Garry Oak Preserve</u>, protect sensitive vegetation communities at the <u>Dutch Creek Hoodoos Conservation Area</u>, and complete several conservation actions throughout the <u>Elk Valley Heritage Conservation Area</u>.

National Income Statement:

In the 2018-19 fiscal year (June 1, 2018 to May 31, 2019) NCC's revenue for the entire country was \$88,991,460. Expenses were \$89,644,662. Excess revenue over expenses for the year were \$1,747,338. You access all annual reports and audited financial statements for NCC on our website: Annual Reports.

4. CONSERVATION PROPERTY INFORMATION

Property/Project Name:	Property: Morrissey Meadows				
	Project: Mo	orrissey Meadows	Habitat Enhan	cement	
Other names used (if applicable):	n/a				
Property Identification Number(s) (PID):	016-372-89	91, 016-427-891			
Geographic Coordinates (Lat, Long):	Geographic Coordinates (Lat, Long): 49.37097828883581, -115.01320278666662				
Property size (Ha):					
Does your organization have fee simple ow	nership of th	rship of this property? Yes 🛛 No 🗌			
If yes, how long has your organization own	ed this prope	perty? Since January 25, 2018			
If no, provide the name the NGO who has f ownership of the property.*	ee simple		n/a		

Is the property leased to any other party?**	Yes 🖂	No 🗌
If yes, provide the name of the leaseholder.		Rancher (leases only a he property)
Have you previously received any HCTF funding for the property or activities on the property?	Yes	No 🖂

*If the property is owned by another NGO, you **must** include a letter from the NGO property owner stating that they support the application.

**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words.

The Morrissey Meadows property is 42.8 ha (105.8 acres) of mixed forest and pasture land in the Elk River Valley, and is situated within the floodplain of the Elk River. It is one of only a few parcels in the Elk River floodplain that are protected for conservation. The property supports ecologically important mixed forest featuring mid-aged Black Cottonwood trees, as well as a network of remnant wetlands derived from side flood channels of the Elk River. The main channel of the Elk River flows through the property and supports species at risk such as Bull Trout and Westslope Cutthroat Trout. The property also falls within an identified Grizzly Bear linkage zone with mapped core Grizzly Bear habitat covering approximately 70% of the property area, and contains high value winter range for Elk and Moose. Abandoned buildings associated with the historical homestead are known to provide roosting habitat for several bat species including the endangered Little Brown Myotis.

The property is characterized by the Elk Moist Cool Interior Cedar – Hemlock (ICHmk4) biogeoclimatic zone, which is defined by warm, wet summers and cool winters with moderate snowfall. The property is described by modified low elevation floodplain forest, tame pasture, mature Interior Cedar Hemlock forest, avalanche path meadows, and is bisected by Highway 3. The property is located directly west of NCC fee-simple conservation lands (Elk Valley Heritage Conservation Area) and bounded on the west and south by undeveloped Crown land, and on the north by the Elk River and undeveloped private land.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

NCC's vision is for the Morrissey Meadows property to support a rich assemblage of healthy forest and wetland vegetation communities, which together provide important habitat and movement corridors for wildlife such as Elk, Whitetail Deer, Grizzly Bear, and Moose. Through the help of partnerships and the local community, NCC wishes to manage Morrissey Meadows so that it remains as a resilient, functional landscape that is not only rich in historical and cultural value, but that also contributes to the protection of key riparian habitat of the Elk River for species at risk such as Bull Trout and Westslope Cutthroat Trout.

In the management plan for Morrissey Meadows, NCC identified livestock grazing and invasive plants as the two major threats to biodiversity on the property. The long history of land clearing, hay harvesting, and livestock grazing has resulted in degradation of floodplain vegetation communities and the proliferation of invasive species such as Spotted Knapweed, Burdock and Canada Thistle.

Addressing these threats will provide the basis of NCC's ongoing management objectives on the property. Most importantly NCC plans to reverse the impact of livestock on riparian habitat by working with the rancher to install cattle exclusion fences in the spring of 2021, and by re-vegetating those riparian areas that will become excluded from cattle. Over time these actions will stabilize some of the most degraded portions of the Elk River shoreline and help to reduce the erosion and surface runoff that is currently causing bank destabilization and increased sedimentation. An annual monitoring protocol will be established to measure the success of restoration efforts, and to track new vegetation growth over time. NCC also plans to reduce livestock grazing by half on the property over the next three years, and continue to prevent cattle from entering restored areas by working with the rancher to maintain exclusion fencing. Over the long term (5+ years), NCC plans to phase out livestock grazing from the property entirely so that the pasture lands can provide quality forage habitat for Elk and deer while regenerating back into forested riparian habitat.

Over time, vegetated riparian habitat along the Elk River will also improve local habitat for fish. Woody plants and rooted material provide shade and hiding places for fish, stabilize the banks, and control the movement of sediments. The leaves and other organic material that fall from streamside vegetation provide key nutrients for the invertebrates that fish rely on for food.

Controlling invasive species will be an ongoing management priority on the property. NCC staff have worked for the last two seasons with the East Kootenay Invasive Species Council (EKISC) and local weed control operators to inventory and control invasive plants. Through consistent effort the vision is to reduce the prevalence of invasive plants over time and promote the growth of native plant species. Achieving this goal would improve winter forage for ungulates and habitat for species at risk such as Grizzly Bear and American Badger.

Additional management actions that would benefit species at risk on the property include cleaning up refuse from around the old homestead site, and removing large pieces of scrap metal from several locations on the property. These actions will greatly improve the forage value of the property for ungulates such as Elk and deer.

The following are the goals NCC is looking to achieve through various conservation and management activities at the Morrissey Meadows property with funding from the Habitat Conservation Trust Foundation:

1. Restore and enhance the shoreline and riparian habitat of the Elk River and its side channels.

2. Enhance biodiversity and improve the condition of ungulate winter range and species at risk habitat.

3. Engage partner organizations and the local community to participate in conservation and restoration activities.

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

The management plan for the Morrissey Meadows property that was developed by NCC staff in 2019 identified livestock grazing and terrestrial invasive species as the two greatest threats to biodiversity. This project seeks to address both of those threats by installing livestock exclusion fencing along riparian areas, restoring the shoreline habitat that has been previously degraded, and by managing and controlling the spread of invasive plant species.

Even with livestock exclusion fencing in place the shoreline of the Elk River will continue to erode rapidly, preventing the natural establishment of riparian vegetation that could otherwise stabilize the banks. Restoration and active re-vegetation are required to quickly stabilize the banks and prevent ongoing erosion and sedimentation into the Elk River. The continued input of sediments into the river will reduce the quality of downstream habitat for fish species such as Bull Trout and Westslope Cutthroat Trout.

If left untreated invasive species will continue spreading and potentially encroach on habitats that are currently unaffected. Invasive plants outcompete native plants, and over time can negatively impact the structure and function of the plant communities found on the property. Specifically, the presence of invasive plants reduces the value of the vegetation communities as important ungulate winter range.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

Morrissey Meadows Baseline Inventory Report (2019)

Morrissey Meadows Property Management Plan (2019)

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

Elk River Alliance – Expertise and experience in riparian restoration as well as community engagement/outreach

Wildsight (Elk Valley Branch) - Labour in the form of volunteers

Fish and Wildlife Compensation Program – Additional potential funding source

U.S. Fish and Wildlife Service – Additional funding source

Describe local community involvement in conserving and maintaining the property (200 words max).

It is expected that the delivery of this project will be a collaborative effort between NCC and local interest groups such as the Elk River Alliance, which will provide an excellent opportunity for NCC to

build on this type of partnership. The project will also provide opportunities for members of the public to become involved in the restoration work through volunteer events.

NCC will also improve grazing management on the property by working with the ranching lease holder to install livestock fencing to exclude cattle from entering riparian areas.

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

NCC allows public access to Morrissey Meadows for non-motorized recreation, hunting, and angling. A portion of the property is also under a grazing lease agreement between the months of June and August. The only access restriction for the public is off-road motorized use, as off-road vehicles may cause disturbance to wildlife, vegetation communities, riparian areas, and may contribute to the further spread of invasive plants.

9. FINANCIAL INFORMATION

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

None

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

No administration fee is charged. Some staff time will be allocated to cover NCC's involvement in management of the stewardship activities outlined in this proposal. Administrative expenses will be covered by baseline endowment funding.

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.



Figure 1. Location of the Morrissey Meadows property.



Figure 2. Location of Morrissey Meadows property boundaries (in green).



Figure 3. Ecological communities of Morrissey Meadows. The Elk River, floodplain forest (Fm01 - Cottonwood - Snowberry - Rose), and tame pasture communities are the primary targets for restoration and enhancement activities.



Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Complex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
	Restore and enhance the shoreline and riparian habitat of the Elk River and its side channels.	Improve bank stability and the condition of riparian vegetation along the Elk River for aquatic spcies such as Bull Trout and Westslope Cutthroat Trout.	activities. Restoration activities are completed to enhance the riparian	Develop a plan to restore riparian vegetation, and provide support in the form of materials to the rancher to install fencing to exclude cattle from riparian areas. Purchase vegetation and grass seed to complete riparian plantings, and install temporary wildlife exclusion fences to avoid damage to plants from wildlife. Establish monitoring plots to measure effectiveness and track recovery of riparian vegetation
Morrissey Meadows	Enhance biodiversity and improve the condition of ungulate winter range and species at risk habitat.	dition of controlled or removed based on the most based on the most eliminated where nossible		Work with the East Kootenay Invasive Species Council (EKISC) and local contractors to control invasive plants through treatments and monitoring. t
Budget Summary - HCTF Funding	Enhance biodiversity and	Improve habitat for		Hire contractor and rent roll off dumptster bin to remove refuse from the property that has been dumped or left by previous landowners.
Total: \$ 19,256.00	improve the condition of ungulate winter range and species at risk habitat.	improve habitat for wildlife and species at risk (e.g. Little Brown Myotis, Elk).	Refuse left of the property from previous landowners is removed.	
Admin Fee %	Species at risk notice.	WIYOUS, LINJ.		
Admin Fee \$ -				Partner with local organizations (e.g. Elk River Alliance, Wildsight) to help coordinate local volunteers to complete the vegetation planting, install wildlife exclosures and provide tools for volunteers.
3 Yr Total incl Admin \$ 19,256.00 Fee:	Engage partner organizations and the local community to participate in conservation and restoration activities.	Community members participate in restoration activities.	10-15 volunteers participate in planting riparian vegetation.	
TOTAL of Additional Contributions Required				
TOTAL of Additional \$ 8,304.00 Contributions Confirmed				
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8-457 R.E. Taylor Conservation Property



Land Stewardship Grant Application Form Part 1 of 2 Funding Cycle: 2020-2023

HCTF Project File #: <u>8-457</u> (HCTF to complete)

Please submit a separate Application Form for each property/complex for which you are applying under this program. Please review the Program Guidelines and Eligible Activities List in full before filling out this form. If you have further questions, please contact Christina Waddle at HCTF at christina.waddle@hctf.ca or 250-940-3011.

1. PROPONENT (APPLICANT) INFORMATION

Project Leader:				Ros	Ross Everatt				
Field Contact (optional):			Al F	Al Peatt, Executive Director					
Role of Project Leader in Organization:			า:	President					
Organization Name: Southern Interio				rior La	and Tr	ust Society			
Address		916 Ethel	Street						
City:	ity: Kelowna Pro				ince:	BC		Postal Code:	V1Y 2W2
Phone: 250-328-4699					Alte	rnative Phone:			
Email: Operations: apeatt@siltrust.ca Ross Everatt: reveratt@siltrust.ca									
Website	Website: www.siltrust.ca								

2. AMOUNT REQUESTED FROM HCTF

What is the total amount of funding requested from HCTF? Ensure that this number matches the total request in Part 2: Budget and Activity Detail. \$9,130

3. ORGANIZATION DETAILS

Date of incorporation:	January 6, 1988				
BC Society No. (if applicable):	S-0023194				
CRA Charitable registration number (if applicable):	119248276RR0001				
Briefly describe your organization including history, vision, mission, approximate annual budget, funding sources, and number of staff and volunteers involved. Describe your experience with conservation land management. Maximum 500 words.					

The Southern Interior Land Trust Society (SILT) was established in 1988 as the Okanagan Region Wildlife Heritage Fund Society. SILT is a registered not-for-profit charity run by an independent volunteer board. SILT seeks to create a legacy of protected, important habitats for all living things.

SILT selectively acquires and maintains gems and jewels of wildlife habitat in the BC southern interior that act as "stepping-stones" for ecosystem connectivity and animal movement. SILT's operations are managed by a senior registered professional wildlife biologist. SILT has adopted the CLTA "Canadian Land Trust Standards and Practices" as the Society's Guiding Principles.

SILT currently owns five fee-simple conservation properties:

- The 4.9-hectare R.E. Taylor Conservation Property near Olalla, acquired for its value as an undisturbed water birch riparian forest and wildlife movement corridor on Keremeos Creek;
- The 20-hectare Cold Creek property on the Similkameen River west of Keremeos, acquired for its woodland riparian, dry upland, spring-fed stream, and talus habitats and managed for wildlife and public access.
- A 1.5-hectare parcel on Wards Lake near Grand Forks. Wards Lake is a protected wildlife area. SILT's property is managed to provide public access for wildlife viewing and enjoyment;
- The 20-hectare Edwards Pond near Grand Forks, acquired for its Painted Turtle and wetland/cottonwood values, and its community importance as a huntable, natural area;
- The 6-hectare Ginty's Pond at Cawston near Keremeos, acquired for its wetland, riparian habitat and community/educational value.

SILT has over 30 years' experience in conservation land management. SILT's Executive Director was a senior provincial wildlife/habitat biologist in the Okanagan for about 20 years and has developed and implemented many conservation-land acquisition and stewardship projects. SILT's other directors bring a wide breadth of business, financial, academic and practical experience to SILT's activities.

For its field activities, SILT draws on volunteers from wildlife-related organizations, schools and universities. Occasionally, SILT will subcontract work to local businesses and suppliers.

4. CONSERVATION PROPERTY INFORMATION

Property/Project Name:	R.E. Taylo	r Conservation Prop	perty		
Other names used (if applicable):					
Property Identification Number(s) (PID):	008-914-8	326			
Geographic Coordinates (Lat, Long):	49.28302	<u> 6, -119.831546</u>			
Property size (Ha):	4.9 ha				
Does your organization have fee simple ow	nership of t	his property?	Ŷ	'es X	No 🗌
If yes, how long has your organization own	ed this prop	perty?	1 ye	ear	
If no, provide the name the NGO who has f ownership of the property.*	ee simple				
Is the property leased to any other party?*	Yes			No X	

If yes, provide the name of the leaseholder.		
Have you previously received any HCTF funding for the property or activities on the property?	Yes X (acquisition contribution)	No

*If the property is owned by another NGO, you **must** include a letter from the NGO property owner stating that they support the application.

**If the property is leased to another party, there must be an agreement in place giving your organization management authority to undertake the activities presented in your application.

5. HABITAT DESCRIPTION/VALUES

Provide a description of the ecological significance of this property. Max 500 words.

The R.E. Taylor Conservation Property is ecologically significant at a regional and possibly a provincial scale. About 95% of the parcel is mature riparian forest regionally ranked at very high value for conservation, while the remaining 5% is currently non-cultivated wet meadow ranked at moderate value (SOSCP, 2012). The entire property lies within a BC Conservation Data Centre (CDC) mapped polygon of the red-listed plant community black cottonwood - Douglas-fir / common snowberry - red-osier dogwood (CDC, 2014). Vegetation on the property is dominated by water birch with some red-osier dogwood and common snowberry in the understory. This indicates the actual plant community lies in transition between water birch-rose and cottonwood-dogwood classifications. Both plant communities are themselves ecosystems-at-risk important to many species-at-risk—both having experienced extreme loss at a regional scale [Water Birch-Rose, 92% gone; Cottonwood-Dogwood, 58% gone] (Lea, 2008).

Situated on flat valley bottomland, and divided by several flowing channels of Keremeos Creek, the property provides habitat for at least six federally listed species at risk including yellow-breasted chat, western screech owl, Lewis's woodpecker, barn owl, badger and common nighthawk. Deer, bear, moose, bobcat and other wildlife also use the property for foraging and security, and as cross-valley movement corridor. Rainbow trout and other fish reside in the creek.

6. PROPERTY MANAGEMENT

Describe your vision for the property and list your management goals, which should be included as Goals in Part 2 of the application.

The R.E. Taylor Conservation Property is a protected wildlife area. SILT acquired the land to provide movement, forage and security habitats for wildlife, and non-motorized public access for wildlife-related recreation and enjoyment of nature.

SILT's vision is for the property to remain in good condition as natural habitat used by wildlife and by the community as a place to see wildlife, to hunt, fish and enjoy nature.

Management Goals:

- Maintain productive habitat for wildlife.
- Improve vehicle parking to increase visitor safety.
- Increase public awareness, use and care of the property.

SILT proposes to:

- 1. Repair and improve the 700 meter-long perimeter fence that marks the property boundary. Improvements will include adding top and/or bottom rails at known wildlife crossing points.
- 2. Improve the driveway and parking area to increase public safety and use of the property; seed native grass species where appropriate.
- 3. Clean up & dispose of broken concrete, metal pipe fittings and on-site litter; plant native plants (e.g. rose, Oregon grape, snowberry) in disturbed areas.
- 4. Plan & conduct a spring biodiversity survey (bioblitz) using local experts and school students.
- 5. Liaise with adjoining property owners and others (e.g. Keremeos-Cawston Sportsman Association) about SILT, the Taylor property & management planning and mutual goals.
- 6. Write a management statement to document resource values and to guide SILT's future ongoing maintenance and management of the property and its habitat features, and ongoing community involvement in care of the land.

Provide a brief statement on the risks to the property's conservation values if you do not receive HCTF funding to complete the work described in Part 2.

The property is currently wire-fenced on three sides adjoining two cattle ranches but the fencing is in some disrepair. There is no known history of cattle grazing on the Taylor property; it is mature water birch forest with an intact understory. Without funding, the fence will continue to degrade and cattle trespass will be likely. This will reduce the property's current value to wildlife and for nature appreciation.

A previous owner left a pile of broken concrete slab, several large pieces of heavy concrete, and a pile of large metal municipal-water pipe fittings onsite. While this material might be providing minor habitat for small animals, it is visible, unattractive and not conducive to a conservation holding. If funding is not available, the materials will remain exposed and a potential risk for human injury.

There is no available area to park a vehicle except on the existing driveway, and no safe place to turn a vehicle around. This requires drivers to back into traffic on the busy and high-speed Highway 3A. A safe space to park and turn around will reduce the potential for danger to the public and SILT officials visiting the property. This will require importing additional fill to construct a short ramp from the driveway onto a flat, previously disturbed area able to safely accommodate two or three cars. If funding is not available, the potential human safety issue will remain.

7. GUIDING DOCUMENTS

List any documents used to guide management at the site (e.g. management plan, access management plan, restoration plan, invasive species management guide). Please include the year the document was completed.

Internal SILT files.

B.C. Conservation Data Centre (CDC). 2014. Occurrence Report Summary, Shape ID: 75198

Lea, Ted. 2008. Historical (pre-settlement) Ecosystems of the Okanagan Valley and Lower Similkameen Valley of British Columbia – pre-European contact to the present, Vancouver, BC, Canada. Davidsonia 19:1 3

South Okanagan Similkameen Conservation Program (SOSCP). 2012. Keeping Nature in Our Future: A Biodiversity Conservation Strategy for the South Okanagan-Similkameen (with maps)

8. PARTNERSHIP AND COMMUNITY ENGAGEMENT

List any anticipated project partners and the nature of their contribution (e.g. labour, materials, funding and/or expertise).

We hope to engage the Keremeos-Cawston Sportsman Association; South Okanagan Naturalists Club, Keremeos Secondary School, and Okanagan-Similkameen wildlife and plant experts in a conservation resource survey (bioblitz) and in volunteer management planning and ongoing maintenance of the property.

- South Okanagan Naturalists Club citizen science for biodiversity blitz.
- Keremeos-Cawston Sportsman Association citizen science; labour for repairs & clean-up
- Keremeos Secondary School Biology student involvement in bioblitz and future property study and mgt (teacher-led habitat learning activities/planting/future invasive plant pull).

Describe local community involvement in conserving and maintaining the property (200 words max).

SILT volunteers periodically inspect the property and remove litter as able.

Is the property accessible to the general public? If there are property access restrictions, what are they, and what is their purpose?

Yes. SILT works to keep its properties open to all types of wildlife-related recreation. SILT believes that doing so rewards the people that contribute to habitat conservation. The Taylor property is accessible to the public from Highway 3A. There are no property access restrictions. There is no history of motorized vehicle use other than parking on the short driveway.

Are any materials and supplies requested considered capital expenditures (e.g. individual items over \$1000 each)? If so, please provide additional rationale for the purchase.

No.

Do you charge an administration fee? If yes, what is the percentage? If no, describe how you will cover administrative expenses.

Yes; 10%.

10. PROPERTY MAP

Insert or attach one or more map(s) of the property or complex. The map should include property boundaries, and any significant features on the property.



Figure 1: The R.E. Taylor Conservation Property about 7km north of Keremeos, BC



Figure 2: Piles of broken concrete and metal pipe fittings (in background)



Land Stewardship Grant - Application Form Part 2 of 2: Budget and Activity Detail

Please read the Program Guidelines, including the "Notes to Application Form Part 2 (spreadsheet)" and the "Sample Part 2" before completing this form.

Property/Comp	olex Name:	Goal	Objective	Expected Outcome/Performance Indicators by End of Year 3	Activities
R.E. Ta	ylor	Maintain productive habitat for wildlife	Existing 700 meter-long perimeter fence is effective; known wildlife crossing points are made safe.	700 meters of fence is maintained to exclude cattle from the property; at least one known wildlife crossing of the fence made safer with top and/or bottom rail.	Inspect fence, note areas of concern and wildlife crossing points, purchase supplies and make necessary reparis. Monitor fence effectiveness by inspecting for signs of cattle trespass, liaise with adjacent owners; maintain fence.
Conservation Property				A target of 20 native shrubs are planted in disturbed areas and are surviving	Clean-up and dispose of litter and debris (costed in contractor work below); plan for planting native species in disturbed areas Purchase native plants and conduct planting and seeding Monitor plant survival and replace any dead plants
Budget Summary - HCTF Funding Total: \$ 8,300.00 Admin Fee % 10%		Improve vehicle parking to increase visitor safety	2-3 vehicle parking and a safe turning space constructed	Visitors no longer have to back their vehicles into Highway 3A traffic to exit the property	Supervise contractor; improve driveway and construct parking area (cost includes contractor machine time & and clean fill)
Admin Fee \$ \$	Yr Total incl Admin \$ 9,130.00		Community members participate in a biodiversity survey	Six or more volunteers participate in a biodiversity survey (bioblitz); results are reported publicly	Plan and conduct a spring biodiveristy survey (bioblitz) involving local experts, the interested public and secondary students Organize data and report (website/newsletter) on results
TOTAL of Additional Contributions Required \$ TOTAL of Additional Contributions Confirmed \$	5,400.00 3,800.00	Increase public awareness, use and care of the property	Prepare a brief management statement using current information.	A brief managmeeent statement is completed and available for use by current and future SILT officials.	Liaise with adjoining property owners and others about the Taylor property, management planning, and mutual goals. Write a management statement to document known resource values and to guide SILT's future managment of the property and ongoing community involvement.