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Conservation Proposal Form

Voluntary Conservation Covenant or Land Donation

	OFFICE USE ONI	L Y
Please Check ✓ One Item to the rig	ht)	nant
	SECTION 1: First OWNER	R INFORMATION
Name Denman Conserv	rancy Association (DCA) c/o Jac	ckie Hipwell, DCA Covenant Coordinator
Street Address Box 60 Town/Prov Denman Island, I Telephone 250-335-1110 Email jackiedi@telus.net	Postal Code VOR 1T0 Fax:	Region:
	SECTION 2: APPLICANT (IF DIFFERENT FROM OV	
Name	Street Address	Town/Prov.
Postal Code Telephone	Fax	Email
Lat 1: F 1/2 of NF 1/4	SECTION 3: DESCRIPTIO - Section 21 Denman Island.	ON OF PROPERTIES
	107385000 Parcel Identifier (I	PID): 006-639-771
Lot 2: W 1/2 of NE 1/4 Folio Number 7 Size: 30.69 hec	77107386000 Parcel Identifie	except that part in Plan VIP78186 er (PID): 006-657-656
District: Nanaimo Street Address or Genera	Hospin: Cantral Dd	
	allev Regional District	

Section 4: Detailed site plan. Notable natural, physical features and changes indicated.

Note: Settlement Lands consists of two legal land parcels comprising approximately a ¼ section (157 ac) of land.

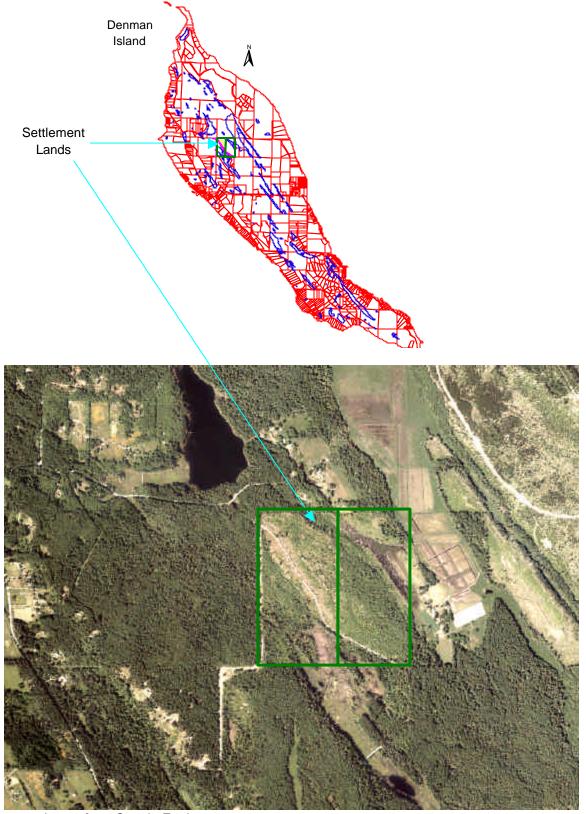
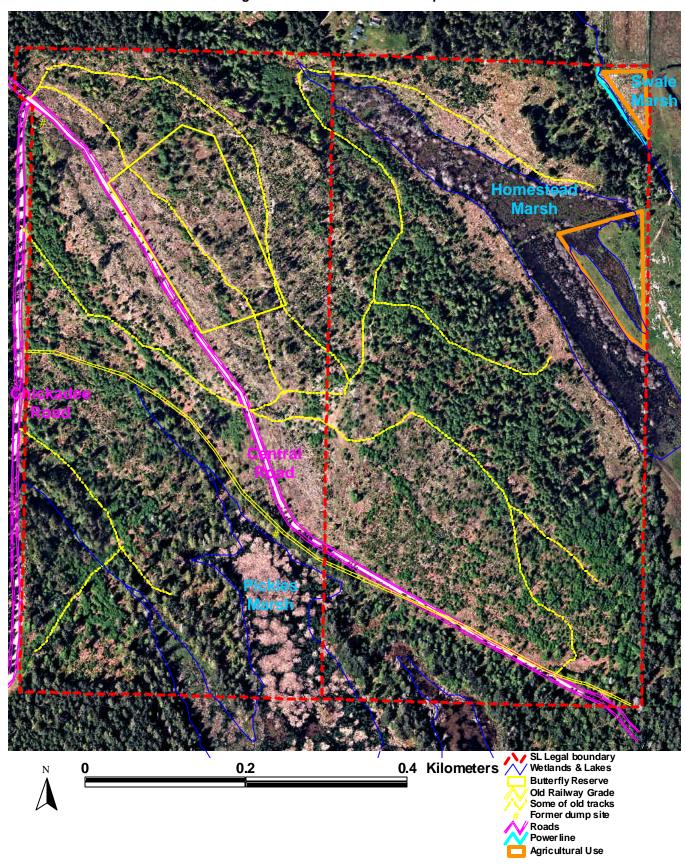


Image from Google Earth

Site Plan

Figure 1. Settlement Lands site plan



Section 5: Reason for placing a Conservation Covenant on the Settlement Lands

The two properties proposed for conservation covenants are collectively called "The Settlement Lands." The name derives from the fact that these lands were acquired by DCA in 2006 as part of a lengthy and complicated legal *settlement*, and that early pioneers *settled* this land with a homestead and orchard. The lands, which lie within the Coastal Douglas-fir zone, were logged 16 years ago and are regenerating naturally. The lands are characterized by wetlands and high biodiversity.

As an organization with a primary mandate to protect the natural values of Denman Island, we have always anticipated that these lands would be conserved in perpetuity and thus, prevent subdivision and incursions that would jeopardise their natural values. DCA holds 15 covenants and is well aware of the protection they can afford. Among those covenants are two held on Islands Trust Fund(ITF)-owned lands. DCA and ITF have a long-term, strong working relationship dedicated to conservation.

The location of these lands provides an important connection between already conserved lands, including the Denman Island Provincial Park, land held by the ITF (Inner Island Nature Reserve), and lands held by DCA (Central Park and Winter Wren Wood), thus creating a substantial Protected Areas Network.

SECTION 6: Description of Special Features.

Important Features Summary

I. Highly significant ecology:

- o 9 species and 2 communities at risk (Endangered, Threatened, Special Concern, BC red & blue list, as well as several locally uncommon species
- o Old-growth Douglas-fir forest fragment
- o recovering Coastal Douglas-fir forest in Coastal Douglas-fir moist maritime biogeoclimatic subzone
- o Complex and diverse habitats and topography with various elevations, aspects and moisture gradients that contribute significantly to Denman's overall biodiversity.
- o Major and minor wetlands
- **II. Protected area corridor and Passive recreation link**: This site also provides an important central link in a continuous corridor of protected areas on north Denman extending from Denman Road in the south to the north end of the new Denman Provincial Park.

III. Historic remnants:

- Old homestead
- o Old railway grade

I. Ecological Features

Forest One of Denman's most significant intact remnants of old-growth Douglas-fir *Pseudotsuga menziesii* forest existed on this site adjacent to Pickles Beaver Pond until the recent 'high-grade' logging in the late 1990's. Currently, many of the ancient Douglas-fir trees remain in this forest fragment and likely other original species have been retained and will regenerate, thus contributing to the genetic legacy of the previous forest. This riparian old forest is a valuable fragment of the vanishing Coastal Douglas-fir moist maritime biogeoclimatic subzone vegetation. Unfortunately the majority of the second-growth forest cover throughout the property was removed during the "messy" clear-cut logging. Thus most of the understorey forest has been regenerating over the last 15 years.



Isolated old growth Douglas-firs throughout property

Wetlands The wetlands are many and varied. Three large wetlands: Pickles Beaver Pond, the Homestead wetland and the swale are major components of the headwaters of Beadnell Creek, Denman's largest Class A salmon stream. The large wetlands are varied with open water sections, as well as varied vegetation areas such as cattail, buckbean, tule, spirea, and pond lily, plus flooded field areas. Smaller open sedge wetlands are found in various parts of the site, including two wetlands where breeding populations of Taylor's checkerspots have been recorded. In addition there are wet areas of red alder and slough sedge as well as several ditches, some of which have been dammed by beavers.



Sedge fen View east to Swale wetland in winter

Slopes & Cliffs Major slopes/ridges run across the site. The slopes are NE and SW facing and they range from approximately 5 to 30 m in height with slopes of 15 to 51% and areas of sheer rocky cliff. Additional unique flora is found associated with the rock outcrops. There are also occasional large rocks or erratics left as a result of glaciation, on the property.







Rocky cliffs, slopes and exposed rock habitat

Butterfly Reserve The Settlement Lands Butterfly Reserve is an area of semi-open-land habitat managed for the Taylor's checkerspot and other butterflies. Taylor's Checkerspots were observed breeding in the two small sedge fens within the reserve in 2007 by Cris Guppy (2007). This occurrence of these butterflies on the Settlement Lands may have been due to the opening of the habitat by the 2000 logging. They were first recorded on Denman Island in 2005 in the western Settlement Land property.

Taylor's checkerpots require the combination of sunny habitat, low vegetation cover, shallow wetland breeding habitat with suitable plants for egg-laying such as marsh speedwell *Veronica scutellata* and may-blooming nectar plants such as wild strawberries *Fragaria sp*. As suitable protected butterfly habitat is scarce and as this endangered butterfly is found on this site, management of a small portion of the Settlement Lands, 3.12 ha, was begun with a grant from the federal Habitat Stewardship Program. The initial management efforts were directed at removing young trees to retain low vegetation around the small wetlands and along a linking travel corridor that was an old logging road. In addition, encroaching Scotch broom was removed. These activities are described in the attached report (Fyson, 2015).



Taylor's checkerspot in Settlement Lands 2005

Rare Species 9 species and 2 communities at Risk (Table 1)

- A nationally significant butterfly, the **Taylor's checkerspot** *Euphydryas editha taylori*, listed as endangered under SARA and on the BC red list, has had a breeding population on this site. A specific "butterfly conservation area" on this property is being managed for this endangered species.
- **Band-tailed pigeon** *Patagioenas fasciata* (blue-list BC),
- **Blue dasher** *Pachydiplax longipennis* (blue-list BC),
- **Common nighthawk** *Chordeiles mino* (threatened SARA),
- Common Wood Nymph Cercyonis pegala (threatened SARA),
- Cutthroat trout Oncorhynchus clarki (blue-list BC),
- **Dun skipper** *Euphyes vestris* (blue-list⁴ BC, threatened⁵ SARA),
- **Red-legged frog** *Rana aurora* (blue-listed BC, special concern⁶ SARA),
- Western pondhawk dragonfly Erythemis collocata (blue-list BC) and
- Grand fir / dull Oregon grape Abies grandis / Mahonia nervosa (red list BC),
- **Common cattail marsh** *Typha latifolia* (blue list BC)

Locally uncommon plant species for Denman that reflect the site diversity

- Falsebox *Pachistima myrsinites*,
- Sitka spruce Picea sitchensis and
- Red osier dogwood Cornus stolonifera.
- ¹ Endangered species: a wildlife species that is facing imminent extirpation or extinction.
- SARA Canadian Government's Species at Risk Act
- ¹ **BC Red List**:Includes any ecological community, and indigenous species and subspecies that is extirpated, endangered, or threatened in British Columbia. Extirpated elements no longer exist in the wild in British Columbia, but do occur elsewhere. Endangered elements are facing imminent extirpation or extinction. Threatened elements are likely to become endangered if limiting factors are not reversed. Red-listed species and sub-species have or are candidates for- official Extirpated, Endangered or Threatened Status in BC. Not all Red-listed taxa will necessarily become formally designated. Placing taxa on these lists flags them as being at risk and requiring investigation.
- BC Blue List: Includes any ecological community, and indigenous species and subspecies considered to be of special concern (formerly vulnerable) in British Columbia. Elements are of special concern because of characteristics that make them particularly sensitive to human activities or natural events. Blue-listed elements are at risk, but are not Extirpated. Endangered or Threatened.
- ¹ **Threatened species:** a wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.
- ¹ **Special concern species:** a wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats.





Blue dasher





Red-legged frog

Common Wood nymph

Table 1. Rare Species in Settlement Lands

Rare Species & Communities	Date Recorded	Rating	Report
Band-tailed pigeon Patagioenas fasciata	2007	BC Provincial Blue list	Balke, J. 2007. Ecological overview Inner forest marsh reserve - The settlement lands. Denman Conservancy Association.
Blue dasher Pachydiplax longipennis	2007	BC Provincial Blue list	Balke, J.M.E., Miskelly, J. 2007. Taylor's Checkerspot <i>Euphydryas editha</i> taylori and rare dragonflies on Denman Island, B.C. 2007.
Common Nighthawk Chordeiles minor	2007→2015	SARA Federal Threatened list	"
Common Wood Nymph Cercyonis pegala	2007→2015	BC Provincial Red list	n.
Dun skipper Euphyes vestries	2007	SARA Federal Threatened list	Guppy, C.S. 2007. Taylor's Checkerspot (<i>Euphydryas editha taylori</i>) on the Denman Island Settlement Lands. Report for Parks Canada, Victoria
Cutthroat trout Oncorhynchus clarki clarki	1990's→	BC Provincial Blue list	Balke, varies surveys
Red-legged frog Rana aurora	1993→	Prov. Blue list Fed. SARA Special Concern	J. Balke, A. Fyson various surveys
Taylor's checkerspot Euphydryas editha taylori	2005-2010	Prov. Red list Fed. SARA Endangered list	Guppy, C.S. 2007. Taylor's Checkerspot (<i>Euphydryas editha taylori</i>) on the Denman Island Settlement Lands. Report for Parks Canada, Victoria
			Denman Conservancy Association. 2014. <i>Draft</i> Guide to the stewardship of Taylor's checkerspot <i>Euphydryas editha taylori</i> on Denman Island. Report to the Habitat Stewardship Program, Environment Canada
Western Pond hawk Erythemis collocata	2007→	BC Provincial Blue list	Balke, J.M.E., Miskelly, J. 2007. Taylor's Checkerspot <i>Euphydryas editha taylori</i> and rare dragonflies on Denman Island, B.C. 2007.
Grand fir / dull Oregon grape Abies grandis / Mahonia nervosa	1993→	BC Provincial Red list	Balke, J. 2007. Ecological overview Inner forest marsh reserve - The settlement lands. Denman Conservancy Association.
Common cattail marsh Typha latifolia CDFmm/Wm05	1993→	BC Provincial Blue list	и

NOTE: Attached files:

- Settlement Lands Taylor's checkerspot reserve, A. Fyson, 2014.
- Plant species List Settlement Lands, A. Fyson, 2015.
- Report on former dump sites, J. Millen, 2015.

II. Protected Corridor

The property creates a significant protected conservation/wildlife corridor through valuable and varied wetland habitat. In addition recreational trail thoroughfares from the new Denman Island Provincial Park are linked by this property.

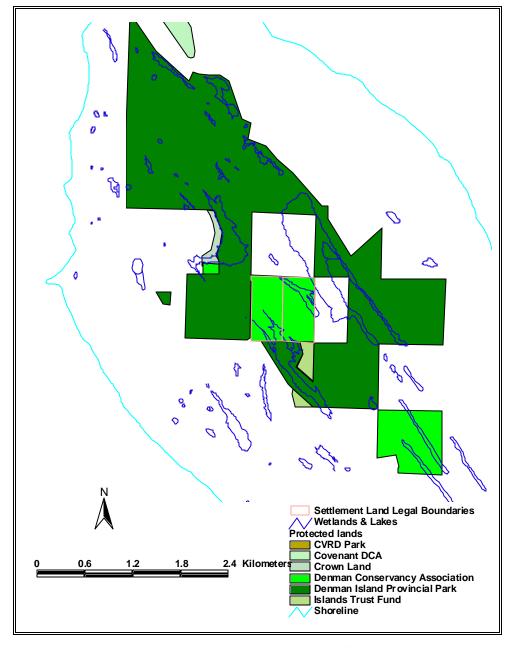


Figure 2. Protected lands surrounding the Settlement Lands

III. Historic Remnants

Sections of split rail fence and an overgrown orchard of old apples trees are all that remain of the original homestead on the property. The land was pioneered by European settlers around the 1890's. Railway logging took place on north Denman in the late 1890's, early 1900's and a very overgrown old railway grade crosses the property. The grade, on which the re-used railway rails were placed, was elevated on a built-up bed in order to cross the lowland wetlands on the western property. This railway bed had remnants of the original wooden ties.

The property was 'messily' logged during 2000-1 and is crossed by skid roads and landings created during this period. In addition, ditches have been dug in several locations on the eastern property to drain the land for agriculture. Over the last decade, beaver have been actively modifying the old ditches and creating dams to enhance the water coverage of the Homestead marsh and have maintained a sustained water level in this marsh despite the summer drought of 2015.

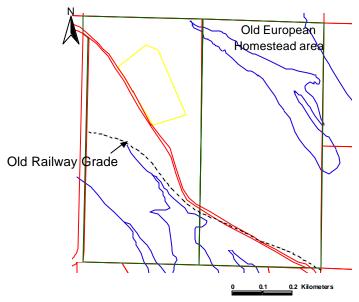


Figure 3. Settlement Lands original European homestead and historic railway grade

Section 7. Description of improvements to the land.

Historic changes to the property were described in Section 6 and include:

- Two periods of logging with accompanying access by railway grade (first logging) and skid roads (second logging),
- Early European homestead, only remains are split rails and dying apple trees under growing canopy. Current remaining signs of these changes are due to road access, hydro and previous agricultural practices. These include (Figure 4):
 - Central Road crossing both lots while connecting Lake Road to Pickles Road,
 - Hydro powerline,
 - Farm track that ran along beside the powerline above,
 - Previous agricultural use for cattle grazing and pasture/hay field area.
 - Former agricultural drainage ditches,

In addition prior to 1990, 2 small areas near Central Road were used to dump unwanted refuse. The material is now largely covered. A report on the former dump sites is attached (Millen 2015). Also, some of the former logging tracks can still be seen and some will provide the basis for walking trails.

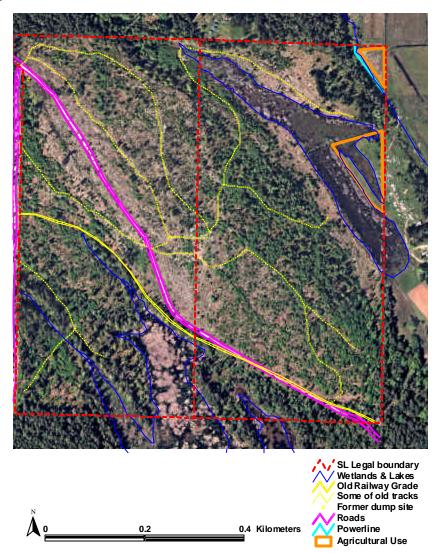
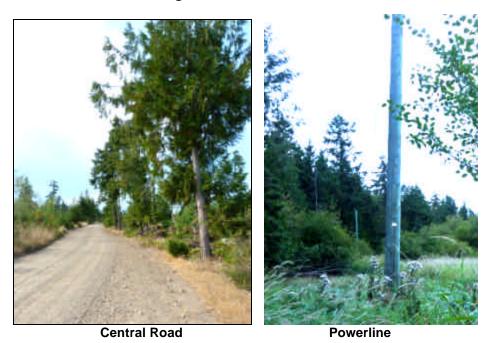


Figure 4. Land Alterations



Section 8: Description of water licences, tenancies or other agreements on the land.

There are no water licenses or tenancies on this property.

Central Road, which traverses the property from approximately the southeast corner to the northwest corner, has been designated by the Ministry of Transportation to be a Scenic/Heritage Road. This portion of Central Road is classified by MOT as an "unsurveyed travelled road" (Islands Trust, 1998) and a consultative process between MOT and IT is to be initiated before any upgrading activities, as noted in their memorandum of understanding (Ministry of Transportation and Highways and Islands Trust, 1992).

Chickadee Lake Road follows the west boundary and its road allowance is external to the property.

The east portion of the swale, as indicated on the attached map, has been ditched, drained, cleared and planted and has been traditionally used for cattle grazing and hay although no "legal" agreement is in place for this use.

A title search revealed a charge, DD 55523-I, on the east six feet of the North East ¼ of Section 21. It appears this charge was created in 1923 to provide "a right of way with or without horses and vehicles and for servants or agents" through to Central Road, which exits the property on its southeast corner.

There is a BC Hydro power-line in the NE corner of the property.

Section 9: Description of lands surrounding the property and their use

The site is bordered by a combination of conservation, Provincial Park and private land, as shown in Figure 5. As noted, the site strategically links other protected areas. The site is bisected on a NW-SE diagonal by a non-gazetted section of Central Road and bordered on the west by a new road, Chickadee Rd, constructed in 2005-6 to access a new subdivision to the southwest.

The private lands on the borders are in large lots, greater than 15 acres. These lots are currently settled and managed for agriculture (Swale Farm and Lake Farm); or undeveloped and awaiting sale or occupation (Raven Forest Products).

Southern boundary:

- western portion (~20% of boundary) a 16 ha lot, zoned Forest resource, currently owned by Raven Forest Products. This property has regenerating forest from 1990's logging and remains undeveloped.
- eastern portion (~80% of boundary) zoned Conservation and consisting of BC Parks' portion of Pickles Beaver Pond in Denman Provincial Park making up ~60% of boundary, and the Islands Trust Fund's property, Inner Island Nature Reserve, making up the remaining ~20% of boundary, both of which are undeveloped natural areas.
- southeast zoned Conservation is a 160 ac a portion of Denman Provincial Park, that is undeveloped forest, salmonid creeks and wetlands.
- southwest zoned Rural residential is a 40 ac private land, single density lot, with regenerating forest and wetland.

Northern Boundary:

- Chickadee Lake Farm (160 ac) 1/3 zoned Residential (R); 2/3 Agriculture (Ag) in the ALR. The farm is a land share with 5 homesites in R and 3 in Ag, farmed both historically and currently. The land has substantial second-growth forest (approximately 70 ac) and has not been logged during the current tenancy (1970-present).
- northeast zoned Conservation, is a portion of Denman Provincial Park that is undeveloped forest and the Swale wetland.
- northwest zoned Conservation, is a portion of Denman Provincial Park containing Chickadee Lake, Denman's largest lake that is also undeveloped forest with an old logging road.

Eastern boundary:

• Swale Farm (60 ac) zoned Agriculture and farmed both historically and currently.

Western boundary:

- Chickadee Road (public) separates the Settlement Lands property from the Denman Provincial Park.
- Adjacent land zoned Conservation. Denman Provincial Park, a 160 ac lot of undeveloped forest.

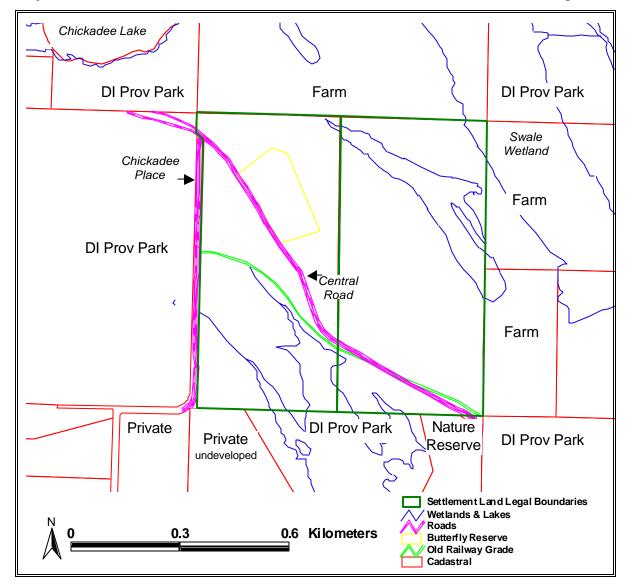


Figure 5. Properties bordering the Settlement Lands.

SECTION 10: Is this property or a portion of the property in the Agricultural Land Reserve or Forest Land Reserve?

AGRICULTURAL LAND RESERVE YES X Size of area: 12.97 hectares

A portion (12.97 ha) of the eastern Settlement Lands property is in Agricultural Land Reserve (ALR).

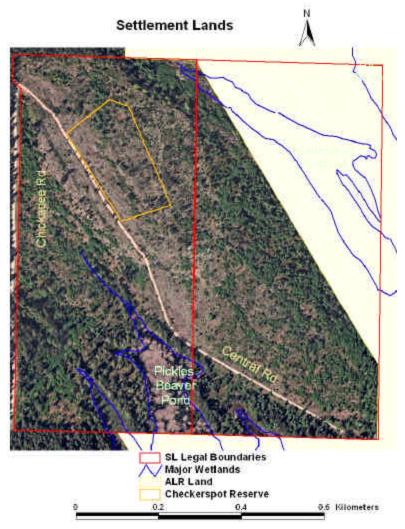


Figure 6. Portion of Settlement Lands in the Agricultural Land Reserve.

Documents relating to the Settlement Lands

Balke, J. 2007. Ecological Overview Inner Forest Marsh Reserve/the Settlement Lands. report to DCA. Balke, J.M.E., Miskelly, J. 2007. Taylor's Checkerspot *Euphydryas editha taylori* and rare dragonflies on Denman Island, B.C. 2007. Report to GOERT, Victoria, BC.

Denman Conservancy Association. 2014. *Draft* Guide to the stewardship of Taylor's checkerspot *Euphydryas editha taylori* on Denman Island. Report to the Habitat Stewardship Program, Environment Canada

Fyson, A. 2014. Settlement Lands Taylor's checkerspot reserve. Draft description and management plan. Fyson, A. 2015. Plant list for the Settlement Lands – updated 2015.

- Fyson, A. 2015. Vegetation control in the Settlement Lands butterfly reserve. Report to J. Heron, Ministry of Environment, BC.
- Guppy, C.S. 2007. Taylor's Checkerspot (*Euphydryas editha taylori*) on the Denman Island Settlement Lands. Report for Parks Canada, Victoria.
- Islands Trust. 1998. Scenic and Heritage Roads. Fax Memorandum received by Denman Local Trust Committee from David Marlor regarding the scenic heritage roads on Denman as approved by the Ministry of Transportation and Highways 1996.
- Isle West Appraisals Ltd. 2006. Appraisal: Central Road lands, Denman Island, BC.
- Millen, J. 2015. Report of former dump sites on Settlement Lands, Denman Island, BC. Report to Denman Conservancy Lands Committee.
- Ministry of Transportation and Highways and Islands Trust. 1992. Memorandum of Understanding regarding Road standards and classification and MOTH/IT consultative process in the Islands Trust area. Available at: www.islandstrust.bc.ca/tc/pdf/orgagrdec081992pro.pdf.

SECTION 11:	If this is a covenant proposal, do you wish to have this covenant co-held with another organization/conservancy? Note that such an organization/conservancy must be authorized to accept covenants under Section 219 of the <i>Land Title Act</i> and authorized to accept a statutory right of way under Section 218 of the <i>Land Title Act</i> .	
NO X	YESName of the Organization/Conservancy	