

**Skeena Region**

# **MANAGEMENT DIRECTION STATEMENT**

**September 2004**



**for Williams Creek  
Ecological Reserve**



**BRITISH  
COLUMBIA**

Ministry of Water, Land  
and Air Protection  
Environmental  
Stewardship Division

# Williams Creek Ecological Reserve Approvals Page


## Forward

On August 29, 1985, Order In Council #1655/85 established the Williams Creek Ecological Reserve (#114). Legislated status was provided on June 29, 2000, when the ecological reserve was listed in Schedule B of the *Protected Areas of British Columbia Act*.

This management direction statement for Williams Creek Ecological Reserve (#114) provides management direction under the *Ecological Reserve Act*, regulations and policies. Ongoing consultation with First Nations may result in revisions where appropriate.

Implementation of strategies identified in this management direction statement will be dependent on available funding and Environmental Stewardship Division priorities.

## Approvals:

  
\_\_\_\_\_  
Regional Manager  
Skeena Region  
Environmental Stewardship Division

Sept. 1, 2004  
Date

  
\_\_\_\_\_  
Assistant Deputy Minister  
Environmental Stewardship Division

Sept. 25, 2004  
Date

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# **Williams Creek Ecological Reserve**

## **Management Direction Statement**

### **Introduction**

#### **Purpose of the Management Direction Statement**

Management direction statements (MDS) provide strategic management direction for protected areas that do not have an approved management plan. Management direction statements also describe protected area values, management issues and concerns; a management strategy focused on immediate priority objectives and strategies; and, direction statements from other planning processes. While the MDS identifies strategies, the completion of strategies is dependent on funding and funding procedures. All development associated with these strategies is subject to the Park and Protected Areas Branch's Impact Assessment Policy.

#### **Context**

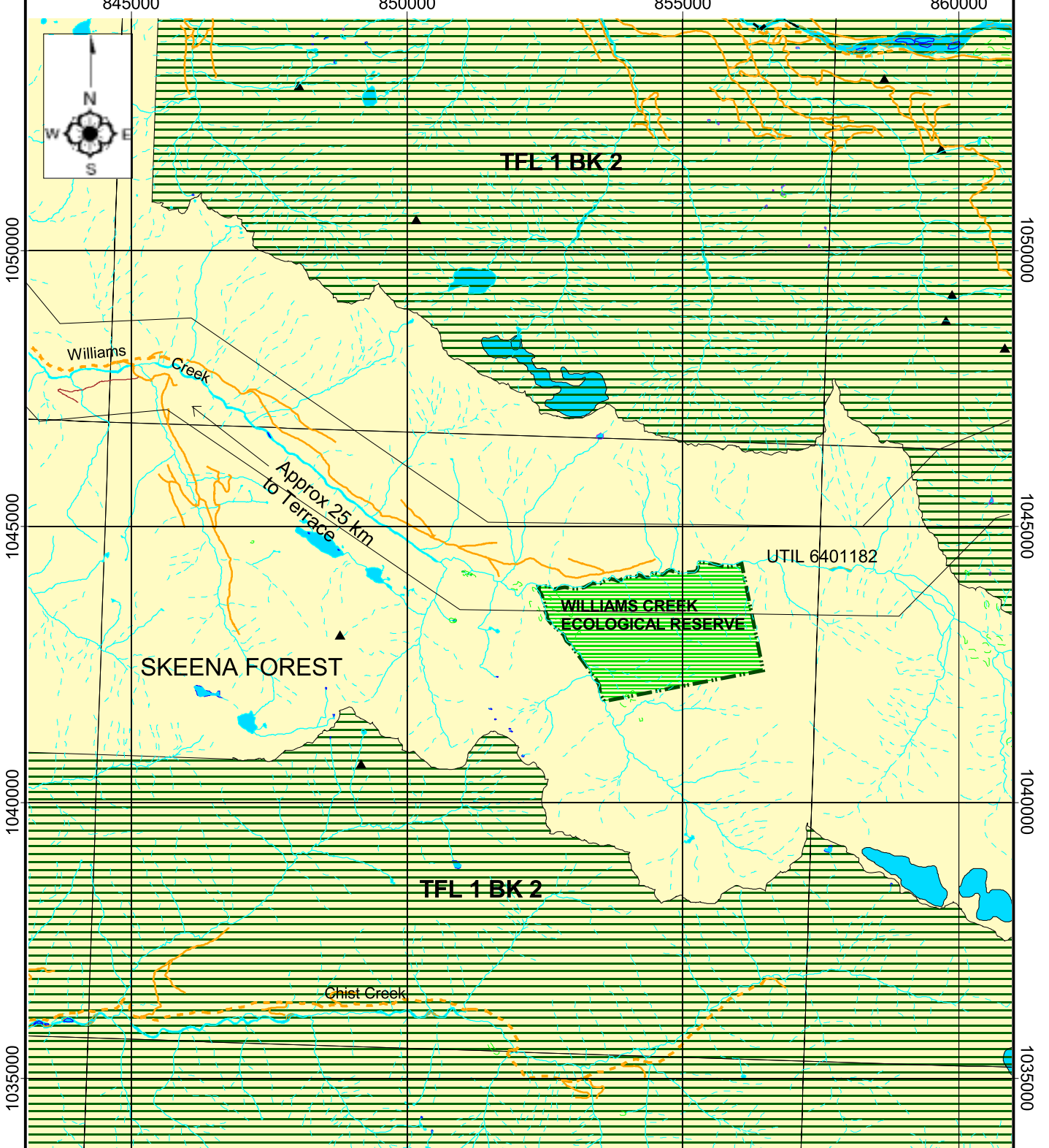
Williams Creek Ecological Reserve is located on the south side of Williams Creek, 20 km southeast of Terrace and encloses the northwestern end of a northwest-southeast trending mountain chain in the Kitimat Ranges. The 700 hectare ecological reserve was established on August 29, 1985 to conserve terraced bogs and representative forests of the Coastal Western Hemlock Biogeoclimatic Zone in northwestern British Columbia. Williams Creek Ecological Reserve is within three biogeoclimatic zones (Coastal Western Hemlock, Mountain Hemlock, and Alpine Tundra). The ecological reserve contains research plots established by the Ministry of Forests. Fossil pollen found in the bogs could reveal forest succession since the last glaciation. This ecological reserve was identified by ecologists from the Ministry of Forests and established in collaboration with that Ministry. Williams Creek Ecological Reserve lies within the asserted territory of the Tsimshian First Nations.

This area was also identified by the Prince Rupert Regional Protected Area Team (RPAT) as part of the Nass Mountains Ecosection. The Nass Mountains Ecosection has been ranked as a Class I ecosection on a scale of I to IV (highest to lowest priority). This classification is based on the current gaps in representation and the extent of existing and anticipated disturbance in the ecosection.

[Click here for Figure 1: Regional Context Map - 1,490 kb pdf](#)

Figure 2: Tenures and Land Use

Williams Creek Ecological Reserve



845000    Scale 1:100000    850000    700 0 700 Meters    855000    860000

		Roads		Williams Ck (ER) Boundary		Tree Farm License
	Rail		Cadastral Data/Tenures		Protected Areas	
			EMPR Mines and Showings			

Skeena District

## Ecological Reserve Attributes

### Conservation

- Williams Creek Ecological Reserve is situated in the under-represented Nass Mountains Ecosection (4.57%). The ecological reserve contributes minimally however to the representation of this ecosection (1.21% of the overall protected areas system representation of the ecosection).
- Williams Creek Ecological Reserve is situated in the Coastal Western Hemlock Wet Submaritime subzone, submontane variant (CWHws1); Coastal Western Hemlock Wet Submaritime subzone, Montane variant (CWHws2); Mountain Hemlock, Moist Maritime subzone, Windward variant (MHmm1); and Alpine Tundra (AT). The CWHws1 is extremely poorly represented in the protected areas system (0.3%). Williams Creek is one of 4 protected areas contributing to the representation of this variant. It contributes 17.64% of the overall protected areas system representation of this variant.
- Williams Creek Ecological Reserve protects an elevational gradient of ecosystems in the Coastal Western Hemlock biogeoclimatic zone.
  - The provincially blue-listed CWHws2 biogeoclimatic subzone-variant is included in the ecological reserve.

### Flora

- Williams Creek Ecological Reserve is within a provincially blue-listed biogeoclimatic subzone (CWHws1).
  - Two (2) provincially red-listed and six (6) blue-listed plant communities are found in the CWHws1 and may occur in the ecological reserve, however, inventory data are lacking (Table 1).
  - One (1) provincially yellow-listed plant community is found in the Mountain Hemlock zone that is found in the ecological reserve. The plant community may occur in the ecological reserve (Table 1).
- Old growth Sitka spruce forests, up to 500 years of age, have been recorded in the ecological reserve.
- The ecological reserve contains regionally significant terraced bogs.
  - Fossilized pollen has been found in the bogs.
  - The pollen may provide valuable information on forest succession since the last glaciation.

**Table 1: Red-list (Endangered or threatened), Blue-list (vulnerable) or Yellow-list plant communities that may occur in the Williams Creek Ecological Reserve.**

<i>Scientific Name</i>	<i>Common Name</i>	<i>BEC</i>	<i>Provincial Rank</i>	<i>Provincial List</i>
<i>Picea sitchensis</i> / <i>Rubus spectabilis</i> Wet Submaritime 1	Sitka spruce / salmonberry Wet Submaritime 1	CWHws1/07	S2	Red
<i>Pinus contorta</i> / <i>Arctostaphylos uva-ursi</i>	Lodgepole pine / kinnikinnick	CWHws1/02 CWHws2/02	S2	Red
<i>Abies amabilis</i> - <i>Thuja plicata</i> / <i>Gymnocarpium dryopteris</i>	Amabilis fir - western redcedar / oak fern	CWHws1/04 CWHws2/04	S3	Blue
<i>Abies amabilis</i> - <i>Thuja plicata</i> / <i>Oplopanax horridus</i> Moist Submaritime	Amabilis fir - western redcedar / devil's club Moist Submaritime	CWHws1/06	S3	Blue
<i>Abies amabilis</i> - <i>Thuja plicata</i> / <i>Oplopanax horridus</i> Wet Submaritime	Amabilis fir - western redcedar / devil's club Wet Submaritime	CWHws2/06	S3	Blue
<i>Picea sitchensis</i> / <i>Rubus spectabilis</i> Wet Submaritime 2	Sitka spruce / salmonberry Wet Submaritime 2	CWHws2/07	S3	Blue
<i>Populus balsamifera</i> ssp. <i>trichocarpa</i> / <i>Cornus stolonifera</i>	Black cottonwood / red-osier dogwood	CWHws1/08* CWHws2/08*	S3	Blue
<i>Thuja plicata</i> / <i>Picea sitchensis</i> - <i>Lysichitum americanum</i>	Western redcedar/Sitka spruce - skunk cabbage	CWHws1/11	S3	Blue
<i>Tsuga mertensiana</i> - <i>Abies amabilis</i> / <i>Vaccinium alaskaense</i>	Mountain hemlock - amabilis fir / blueberry	MHmm1/01	S3S4	Yellow

### Fauna

- The ecological reserve provides excellent habitat for the provincially blue-listed grizzly, as well as for black bear and moose.
  - The ecological reserve contains valuable winter range for the mountain goats.
  - Williams Creek Ecological Reserve also provides habitat for other fur bearers, birds, and waterfowl.

### **Research and Education**

- Williams Creek Ecological Reserve provides opportunities for scientific research on an elevational gradient of forested ecosystems in northwestern British Columbia.
- Terraced bogs that are located in the ecological reserve hold fossilized pollen that could reveal forest succession from the last glaciation.

### **Other Values of Importance**

- Williams Creek Ecological Reserve is within the asserted traditional territory of the Kitselas Band, a Tsimshian First Nation.
- Other cultural heritage attributes of the ecological reserve are unknown.



## **Significance in the Protected Areas System**

- Williams Creek Ecological Reserve protects a provincially significant biogeoclimatic subzone and an elevational gradient of forested ecosystems in northwestern British Columbia that may contain as many as two (2) provincially red-listed and six (6) blue-listed plant communities.
- The ecological reserve protects regionally significant terraced bogs containing fossilized pollen that could provide valuable information on forest succession.

## **Land Uses, Tenures and Interests**

### **Access**

- Access to the ecological reserve is by foot from logging roads located north and west of the ecological reserve. Access by other means requires prior approval.

### **Existing Tenures, Alienations and Encumbrances**

- BC Hydro and Power Authority right-of-way 0275862 is within the ecological reserve.

### **Adjacent Patterns of Land Use**

- Two trapping licences are adjacent to the ecological reserve.
  - 0609T042
  - 0603T083
- One guide outfitting licence 610G001 is adjacent to the ecological reserve
- Forest harvesting has occurred adjacent to the northwest boundary of the ecological reserve.
  - Provincial forests surround the ecological reserve.
  - Adjacent areas are within Forest Licence A16835 (Skeena Cellulose Inc).

### **First Nations Interests**

- Kitselas, Metlakatla and Allied Tsimshian Tribes of Lax Kwa'alaams have identified Williams Creek Ecological Reserve as being part of their traditional territory. All these First Nations are part of the Tsimshian Tribal Council.
- The First Nations have expressed an interest in all protected areas within their traditional territories. Interests include:
  - Ensuring that traditional uses are retained.
  - Becoming more involved in the management and operations of all protected areas within the area they have identified as their traditional territories.
- Environmental Stewardship Division honours aboriginal traditional uses and activities subject to conservation and safety concerns.

### **Other Agency Interests**

- Ministry of Forests has an interest in adjacent forest land and a research interest in the ecological reserve.

- Skeena Cellulose has an interest in adjacent forest lands within their timber license.

## **Private and Public Stakeholder Interests**

- Local residents
- Adjacent Trapline holders
- Adjacent Guide Outfitter
- Educational Institutions
- Scientific communities
- Friends of Ecological Reserves

## **Ecological Reserve Statement**

The primary role of Williams Creek Ecological Reserve is the conservation of terraced bogs that contain fossilized pollen and representative, provincially significant forests of the Coastal Western Hemlock Zone in northwestern British Columbia.

### **Conservation Role**

Williams Creek Ecological Reserve protects terraced bogs and an elevational gradient of forested ecosystems within the Nass Mountains Ecosection. Less than 5% of the Nass Mountains Ecosection is protected. A provincially significant biogeoclimatic subzone-variant (CWHws1) is found within the ecological reserve and as many as one (1) red-listed and six (6) blue-listed plant communities are associated with the rare subzone-variant. Terraced bogs within the ecological reserve are regionally significant and contain fossilized pollen that may provide valuable information on forest succession in northwestern British Columbia.

### **Research and Education**

Williams Creek Ecological Reserve offers researchers a unique opportunity to study regionally significant terraced bogs and forested ecosystems in northwestern British Columbia. The terraced bogs provide opportunities to study bog ecology or conduct palaeontological studies on fossilized pollen. The ecological reserve also protects an elevational gradient of forested ecosystems not impacted by logging. Research concerning natural forest succession and habitat selection and use by large fur-bearers (grizzly, black bear, mountain goat and moose) are all possible within Williams Creek Ecological Reserve.

## Management Commitments and Issues

### Management Direction from Previous Planning

Previous planning has been limited to an annual management plan detailing current year activities.

### Management Issues

Environmental Stewardship Division identified the following management issues.

Theme	Issue
<b>Protecting ecological values</b>	<ul style="list-style-type: none"><li>• Access – increased access to ecological reserve<ul style="list-style-type: none"><li>▪ Logging roads</li><li>▪ BC Hydro right of way</li><li>▪ Unknown amount of use by visitors</li><li>▪ Unknown impacts from access for scientific research</li></ul></li><li>• Logging practices on adjacent lands may have an adverse impact on the integrity of the ecological reserve.</li><li>• Inventory of flora and fauna incomplete.</li></ul>
<b>Protecting cultural heritage values</b>	<ul style="list-style-type: none"><li>• Cultural features not identified to Environmental Stewardship Division.</li></ul>
<b>First Nation Involvement</b>	<ul style="list-style-type: none"><li>• The Tsimshian First Nations are interested in co-managing protected areas within their traditional territory.</li><li>• As part of the Kalum Land and Resource Management Plan harmonization process, the Parks and Protected Areas Section has agreed to discuss the opportunity for a more formal relationship with a number of Tsimshian First Nations.</li><li>• The Tsimshian First Nations would like to see all traditional uses that occur in the ecological reserve continued.</li></ul>

## Management Direction

### Priority Management Objectives and Strategies

Objective	Strategy
<p><b>Protecting ecological values</b></p>	<ul style="list-style-type: none"> <li>• Implement a management approach that will conserve biodiversity and allow natural processes to predominate.               <ul style="list-style-type: none"> <li>▪ Conduct inventories to identify sensitive and critical habitats and red- and blue-listed wildlife and plant communities.                   <ul style="list-style-type: none"> <li>– Develop special management plans for rare, threatened and endangered species as required.</li> </ul> </li> <li>▪ Monitor the effects of scientific research and study and limit access if research is impacting the conservation values of the ecological reserve.</li> <li>▪ Prepare a fire management plan.</li> <li>▪ Liaise with Ministry of Forests and forest licensee to ensure harvesting practices on neighbouring forest land does not impact the integrity of the ecological reserve.</li> </ul> </li> <li>• Develop a non-extractive research program for significant attributes and species in the ecological reserve.               <ul style="list-style-type: none"> <li>▪ Issue research permits for all acceptable research.</li> </ul> </li> <li>• Access               <ul style="list-style-type: none"> <li>▪ Post signs identifying ecological reserve boundaries.</li> <li>▪ Monitor human use in conjunction with other agencies (Ecological Reserve Wardens, Conservation Officer Service, Ministry of Forests, etc.) to determine impacts on the ecosystem.</li> <li>▪ Identify companies that may use the area for guiding purposes (heli-hiking, fishing, hiking, etc) to advise them that these activities are not permitted within the ecological reserve.</li> </ul> </li> <li>• Establish a working relationship with the Tsimshian First Nations to protect the conservation values of the ecological reserve.</li> <li>• Work with BC Hydro to reduce impacts from the right-of-way on the ecological reserve's values.</li> </ul>
<p><b>Protecting cultural heritage values</b></p>	<ul style="list-style-type: none"> <li>• Investigate and collate existing information on cultural heritage values</li> <li>• Work with the Tsimshian First Nations to identify cultural heritage sites and traditional use in area.</li> <li>• Prepare a cultural heritage management plan.</li> </ul>
<p><b>Involve First Nations</b></p>	<ul style="list-style-type: none"> <li>• Discuss the opportunity for a multi-Tsimshian First Nation cooperative arrangement dealing with all protected areas across identified traditional territories. Ensure a linkage with other processes occurring to allow for a coordinated approach on these discussions (i.e. Treaty Process (TNO) and as part of the Coast Strategy for Land Use Planning).</li> <li>• Work with the Tsimshian First Nations to develop cultural resource information for the public.</li> </ul>

**Figure 3. Table of acceptable uses, activities and facilities in the Williams Creek Ecological Reserve.**

<b>Activity/Use/Facility</b>	<b>Acceptability</b>
Aboriginal Traditional Activities and Uses	Y
Hunting	N
Fishing	N
Trapping	N
Grazing (domestic livestock)	N
Recreational Gold Panning/Rock Hounding	N
Utility corridors	N
Communication Sites	N
Horse Use/ Pack Animals	N
Guide Outfitting (hunting)	N
Guide Outfitting (fishing)	N
Guide Outfitting (nature tours)	N
Guide Outfitting (river rafting)	N
Cat-Assisted Skiing	N
Ski Hills	N
Commercial Recreation (facility-based)	N
Commercial recreation (non-facility based)	N
Backcountry Huts	N
Water Control Structures	N
Fish Stocking and Enhancement	N
Road Access	N
Off-road Access (snowmobiling)	N
Off-road Access (motorised)	N
Off-road Access (mechanical activities)	N
Motorised Water Access	N
Aircraft Access	N
Fire Management (suppression)	N1
Fire Management (prescribed fire management)	N1
Fire Management (prevention)	N1
Forest Insect/Disease Control	M
Noxious Weed Control	Y
Exotic Insect/Disease Control	Y
Scientific Research (specimen collection)	M
Scientific Research (manipulative activities)	M

Y= allowed subject to conditions identified in the management  
direction statement or management plan  
M= may be permitted if compatible with protected area objectives

N= not allowed  
N1= allowed for expressed management purposes only  
N2= present and allowed to continue but not normally allowed

## **Consultation and Future Planning**

Environmental Stewardship Division will work with the Tsimshian First Nations to discuss opportunities related to multi-community cooperative opportunities respecting all protected areas within identified traditional territories. The Skeena Region will also liaise with adjacent resource users (e.g. Forest Licensees, BC Hydro) to ensure the ecological reserve's values are considered as part of the adjacent resource development process. Attempts should also be made to raise the awareness of the importance of ecological reserves in the protected areas system, particularly with local government and stakeholders.