

Form 1: Identification of VECCs

Component Type	VECCs	Justification
ENVIRONMENTAL		
Ungulates	Moose and other ungulates	Maintain quality habitat
Carnivores	Bears and other carnivores	Maintain quality habitat
Forest birds	Forest bird and forest bird habitat	Maintain quality habitat
Aquatic resources	Fish and fish habitat, water quality, etc.	Maintain quality habitat
Traditional and community lifestyle	Trapping, hunting, berry picking, traditional gathering sites, etc.	Maintain traditional and community values
Wilderness values	Recreation, visual quality, tourism, etc.	Maintain wilderness values of the area

Form 2: Identification of Temporal Bounding

Table 8.0. Identification of Temporal Bounding

	MONTH											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
VECCs												
Moose	X	X	X	X	X	X	X	X	X	X	X	X
Bears	X	X	X	X	X	X	X	X	X	X	X	X
Birds	X	X	X	X	X	X	X	X	X	X	X	X
Aquatic resources	X	X	X	X	X	X	X	X	X	X	X	X
Wilderness values (visual quality, recreation, tourism, etc.)	X	X	X	X	X	X	X	X	X	X	X	X
Maintenance of Traditional/community lifestyle (trapping, hunting, berry picking, traditional gathering sites, etc.)	X	X	X	X	X	X	X	X	X	X	X	X
PROJECT ACTIVITY/ DISTURBANCE												
Disturbance of Soils								S	S	S		
Alteration of Surficial Geology								S	S	S		
Removal of Vegetation ¹	W	W	W	W				S	S	S	W	W
Burning of Slash	X	X	X							X	X	X
Human Presence	X	X	X	X	X	X	X	X	X	X	X	X
Motorized Vehicle use	X	X	X	X	X	X	X	X	X	X	X	X
Resource Extraction	W	W	W	W				S	S	S	W	W
¹ Determination of winter or summer harvesting depends on weather conditions (snowfall and spring breakup, etc.). W=winter (for winter logging); S=summer (for summer logging); BP=with burning permit and permission from fire officer only.												

Form 3. Identification of Local Effects and their Mitigation

Possible Project Effects	VECCs Affected	Effects Mitigatable? (X)		Mitigation Description	Mitigation Success (X)		
		Y	N		None	Partial	Complete
ENVIRONMENTAL							
Habitat loss	Forest birds	X		No harvesting from May-July 31. Riparian management areas (which provide habitat for forest birds) have been established according to THPOG (DIAND 1999). Avoid harvesting and disturbing active nest sites of hawks and owls; leave buffer \geq 100 m diameter around birds of prey nests if found.		X	
Disruption of wildlife movement and wildlife habitat loss	Wildlife	X		Wildlife value areas and winter harvesting only in wildlife value areas.		X	
Increase of wildlife mortality due to access	Wildlife	X		Deactivation of all newly constructed roads will limit vehicle access into the area. Existing roads and trails will not be deactivated.		X	
Altered water quality	Water resources	X		Riparian management areas were established according to THPOG (DIAND 1999).		X	
CULTURAL							
Reduction in wilderness values	Recreation, visual quality	X		Retention, wildlife value areas, the Quill Creek wildlife corridor, riparian management areas and buffers from the Haines Highway will provide forest connectivity and mitigate for wilderness values.		X	
Alteration to traditional/community lifestyle	Trapping, hunting, gathering, berry picking	X		Retention, wildlife value areas, the Quill Creek wildlife corridor, buffers, etc. will limit alteration to traditional/community lifestyle.		X	

Form 4: Identification of Regional Issues

SPECIAL FEATURES	DESCRIPTION
Protected Areas/National Park Nearby	Kluane National Park-across the Haines Highway from the Quill Creek Bench HPA.
Critical Habitat Nearby	No critical habitat nearby.
Unique Landscape Features nearby	No unique landscape features are near the project area.
Rare/Endangered Species nearby	No rare/endangered species are nearby.
Heavily Disturbed Areas nearby	Areas that are disturbed nearby include the Haines Highway corridor and existing roads and trails. Private residences are also within the Quill Creek Bench HPA.
THRESHOLDS	DESCRIPTION
Air	N/A
Water	N/A
Soils	N/A
Vegetation	N/A
Wildlife	N/A
Resource Use	N/A

Form 5: Guideline to Spatial Bounding

Project / Activity	Bound #1	Bound #2								
		air	low flow water body	flowing water body	vegetation/habitat	terrestrial mammals	fish	birds	recreational/cultural use	other resource extraction
Timber Harvesting	Nearest disturbance	1	waterbody	5	5	20	5	5	5	5

Form 6: Project Inclusion List for Cumulative Effects Assessment

Type of Project	Name or Description	Status		
		Past	Current	Future
Forest Harvesting	Currently there is a fuelwood cutting permit issued in Block 3F		X	X
Roads	Roads and trails; the Haines Highway.	X	X	X
Settlements	Dwellings adjacent to Quill Creek and near the Kathleen River/Rainbow and Crescent Lake areas.	X	X	X
		X	X	X
Resource Harvesting	Hunting, trapping, logging	X	X	X
Recreational	Wildlife viewing, camping, canoeing, berry picking, gathering, etc.	X	X	X

Form 7: Identification of Regional Cumulative Effects and their Mitigation

Possible Project Effects	VECCs Affected	Effects Mitigatable ? (X)		Mitigation Description	Mitigation Success (X)		
		Y	N		None	Partial	Complete
ENVIRONMENTAL							
Long range transport of chemical contaminants.	N/A						
Long range transport of physical constituents.	N/A						
Direct habitat loss/ habitat alteration/disruption of wildlife movement and direct mortality of wildlife.	Moose, bears, birds and other wildlife.	X		Wildlife value areas, connectivity corridor adjacent to Quill Creek, riparian management areas, buffer to Haines Highway and retention shall provide mitigation. Harvesting shall not occur during the migratory bird breeding season (May 1-July 31). Avoid harvesting and disturbing active nest sites of hawks and owls; leave ≥100 m diameter around birds of prey nests if found.		X	
CULTURAL							
Alteration of traditional/cultural activities				Connectivity corridor adjacent to Quill Creek, wildlife value areas, riparian management areas, buffer to Haines Highway and retention shall provide mitigation.		X	

Form 8: Baseline Information

VECC	Information Sources and/or Information Provided	Maps Provided?
Moose, bears and other wildlife species, forest birds, wilderness values, aquatic resources	Information provided by Canadian Wildlife Service, Department of Environment, Heritage Parks Canada, previous resource reports, Forest Development Plan, Environmental Dynamics (Fisheries assessments), Thomas Heritage Consulting and other stakeholders, interest groups, and individuals	Maps are provided in some of the information sources.

Form 9: Screening of Local Effects

Activities	VECCs					
	Moose	Aquatic Resources	Bears	Forest Birds	Traditional/Community Lifestyle	Wilderness Values
Disturbance of Soils	L	L	L	L	L	L
Removal of Vegetation	M	L	M	M	L	M
Human Presence	L	L	L	L	L	L
Motorized Vehicle Use	L	L	L	L	L	L
Resource Extraction	L	L	L	L	L	L
Surficial Geology	L	L	L	L	L	L

Form 10: Screening of Cumulative Effects

Type of Cumulative Effect	VECCs	Other Projects/ Activities		
		Forest Harvesting	Haines Hwy	Hunting/ Fishing
Direct habitat loss, blockage of wildlife movements and direct mortality of wildlife	Birds, moose, bears	L	L	L
Alteration of traditional/ cultural activities; alteration of lifestyle	Recreation, visual quality, tourism, trapping, hunting, gatherings, berry picking	L	L	L