# NORTH YUKON REGIONAL LAND USE PLAN CONFORMITY CHECK

YESAB Project #	2010-0157		
Project Title:	Porcupine River Gravel Development		
Date:	July 28 <sup>th</sup> , 2010	Completed by:	Sam Skinner
		(name)	
Submitted to:	YESAB Dawson Designated Office		
	Box 5060		
	Dawson City, YT Y0B 1G0		
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Project conforms to Regional Land Use Plan: (select one) Yes

# **Background Information and Conformity Check Analysis**

Affected Landscape Management Unit(LMU)(s): (insert rows as needed for additional LMUs) Map 1 and Section 6									
LM Un	it #	# 2C		LMU Name: B		Bluefis	Bluefish - Cadzow Lake Wetlands		
Zoning	Zoning: IMA – Zone I		Land Owner	Land Owner: YG					
LM Un	it#	2A –	CA	LMU Name	e:	Comm	unity Area		
Zoning	g:	CA		Land Own	er:	YG			
LM Un	it#			LMU Name	e:				
Zoning	g:			Land Owner	er:				
Landscape Disturbance Indicators: ) Table 3.2, sections 3.3.1.1, 5.1.1 Surface Disturbance (ha):									
LMU	Cautio Level	nary	Critical Level	Current est. Level*		oject timate	Total Estimate	Notific- ation Rqr'd**	Parties Notified
2c	73.5 h	na	98.0 ha	Not yet provided	0 h	ıa***	Not possible	No	No
2a/CA	NA**	***	NA****		0 h	ıa	NA****	No	No
Linear [	Linear Disturbance (km/km²):								
LMU	Cautio Level	nary	Critical Level	Current est. Level*		oject timate	Total Estimate	Notific- ation Rqr'd**	Parties Notified
2c	73.5 k	cm	98.0 km	Not yet provided	0 k	cm	Not possible	No	No
2a/CA	NA**	***	NA****	<u> </u>	0 k	m	NA****	No	No
*current e	*current estimated cumulative effects levels are to be provided by the Plan Parties								

<sup>\*</sup>current estimated cumulative effects levels are to be provided by the Plan Parties

<sup>\*\*</sup> the YLUPC shall notify the Parties prior to submitting the conformity check to YESAB if they are concerned cautionary or critical levels may be reached

<sup>\*\*\*</sup>Projected surface disturbance (<20ha) does not meet the strict definition of surface disturbance in the plan

<sup>\*\*\*\*</sup>Not Applicable because the project falls within the Community Area, which is exempt from disturbance indicator monitoring.

### **Special Management Considerations:** (Section 6, LMUs)

1. Within the IMA, Zone I designation identifies high ecological and cultural values within a sensitive biophysical setting. All-season infrastructure is discouraged.

### Affected Values and General Management Directions (GMD): (Section 5)

Only include values identified in LMU. If no GMDs exist or are relevant, do not include in this table.

Ecological Resources: Terrestrial habitat	Corresponding GMD:  2.1.1 Reduce size, intensity and duration of human-caused physical surface disturbances (e.g., utilize low impact seismic, winter roads and enhanced reclamation).		
	2.3.1 Avoid or reduce activities in significant wildlife habitats during important biological periods (e.g., utilize timing windows).		
Aquatic habitat	3.1.1 Minimize surface and vegetation disturbance in riparian areas.		
	3.1.2 Avoid in-stream aggregate (gravel) extraction.		
Significant fish over- wintering and spawning habitat	3.3.1Avoid direct disturbance to sensitive over-wintering habitats.		
	3.3.2 Avoid significant salmon spawning habitat.		
	3.3.3 Avoid or reduce activities in fish habitat during important biological periods or seasons (utilize timing windows).		
	3.3.4 Avoid or reduce winter in-stream water withdrawals in sensitive over-wintering fish habitat.		
Wetlands, lakes, rivers, and sensitive permafrost areas	4.1-3.1Avoid or minimize industrial land use activities in wetlands and riparian areas.		
	4.1-3.3 Reduce surface and vegetation impacts in riparian and sensitive permafrost areas. (as in 3.1.1 above)		
	4.2.4 Minimize alteration of drainage patterns, water flow and soil temperature.		
	4.3.4 Avoid large-scale industrial and/or infrastructure projects within Major River corridors.		
Heritage, Social, Cultural Resources:	Corresponding GMD:		
First Nations land- based subsistence lifestyles and harvesting	5.1.1 Minimize land use impacts in the vicinity of identified heritage and historic resources.		

Economic Development:	Corresponding GMD:
Maintain opportunities to access lands and resources for a variety of land users and uses	6.1.1 Minimize land use conflicts by avoiding or reducing the level of land use activities in important subsistence harvesting areas and current community use areas.
Maintenance of a mixed economy	6.3.2 Avoid or reduce activities in significant heritage and current community use areas during important seasonal use periods (e.g., utilize timing windows).
Plan Recommended	Best Management Practices: (Section 5 following each value)
Wildlife	<ul> <li>Use appropriate operational timing-windows in significant wildlife habitats to minimize activities, whenever possible, during periods of wildlife use.</li> <li>When new access creation is necessary:         <ul> <li>Non-permanent winter access routes should be developed and utilized versus all-season access routes.</li> <li>Gate or otherwise restrict hunting along new access routes.</li> <li>Where possible, direct new access routes through less significant wildlife habitats.</li> </ul> </li> </ul>
Porcupine Caribou	Consider the following seasons when determining appropriate operational timing-windows (seasons when Porcupine caribou occupy the region)
Significant fish overwintering and spawning habitat	<ul> <li>To minimize potential impacts to regional fish populations, aggregate (gravel) mining should be prohibited in significant fish habitats.</li> <li>If aggregate mining is required in significant fish habitats, appropriate operational timing-windows should be utilized to minimize activities during important biological periods.</li> </ul>
Wetlands, lakes, rivers, and sensitive permafrost areas	<ul> <li>Where new all-season or winter access roads and/or trails are required to cross Major River and other riparian corridors, these should be designed, constructed, and used in a manner that minimizes direct and indirect impacts to fish, wildlife and their habitats.</li> <li>Surface disturbance and land use activities within and adjacent to Major River and other riparian corridors should not result in diminished water quality, quantity or flow.</li> <li>Whenever possible, avoid aggregate (gravel) mining activities in Major River Corridors.</li> </ul>
Heritage and Culture	Avoid and/or mitigate exploration and development activities and impacts in areas with known heritage or historic resource values, where such areas or sites are not

	otherwise protected through existing land withdrawals
Transportation & Access	<ul> <li>Whenever possible, land use activities should be coordinated to utilize the same access route(s).</li> </ul>
Aggregate Resources	To minimize potential impacts to regional fish populations, aggregate (gravel) mining should be prohibited where it may affect significant fish habitats.
	<ul> <li>Minimize gravel requirements for necessary infrastructure through coordinated access, feature reduction, and geotechnical engineering</li> <li>Ensure efficient use of identified aggregate resources.</li> </ul>

#### **Additional Analysis or Comments:**

- Many of the General Management Directions (GMDs) and Best Management Practices
  (BMPs) listed in the North Yukon Regional Land Use Plan are applicable to this
  proposal; however, several of the most relevant are listed in the above 2 tables for
  convenience. GMDs and BMPs listed above in bold have not or cannot be
  addressed in this proposal.
- The Plan is clearly adverse to in-stream aggregate (gravel) extraction, and all but rules out that activity.
- The proposal otherwise does include a number of strategies and practices recommended by the plan. The consideration of the whole community's gravel needs for the next 5 to 10 years is a good example of coordinated land use a concept generally supported by regional plans.
- The Plan recommends that *Water withdrawals in sensitive fish over-wintering areas* should be prohibited but does allow that major rivers may be relatively resilient. Therefore, this recommendation may not apply in this case.
- Activities in this proposal will not result in any additional surface disturbance, as defined by the strict definition in this plan (proposed activities likely will not facilitate travel or access by wildlife or people see footnote on page 3-6). However, the proposed quarrying activities fit the Plan's general, and intended, definition of surface disturbance: the amount of area physically disturbed by human activities... resulting in direct habitat impacts (page 3-5). Any disturbances on the Old Crow side of the Porcupine River are exempt from cumulative effects monitoring because it is in the Community Area zone.
- The proposed quarrying activities fall within LMU 2C (Bluefish Cadzow Lake Wetlands), which, as the proponent noted, is zoned for the lowest level of development (IMA Zone I). The footprint of the proposed quarry (less than 0.2km² or 20ha) is about 27% of that LMU's critical level. This, together with the current level of surface disturbance (not yet determined), could the total above the cautionary level. Further, the Plan indicates that functional disturbance (including disruption to soil or hydrology) are discouraged from LMUs zoned as IMA Zone I.

• If in-stream gravel extraction is to go ahead, the Last Bar appears to be the gravel source most aligned with the Plan because vegetation clearing for access is not needed and because activity will be confined relatively close to Old Crow.