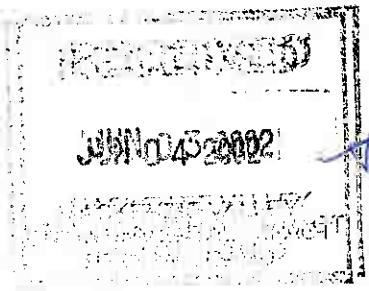


Northwest Territories

Resources, Wildlife and Economic Development - Policy, Legislation and Communications

June 3, 2002

Luciano Azzolini
Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
Box 938, Yellowknife, NT. X1A 2N7

Dear Mr. Azzolini:

Re: Government of the Northwest Territories Response to the Mackenzie Valley Environmental Impact Review Board's Information Request #1.1.69 - 1.1.71, DeBeers Snap Lake Diamond Project Environmental Assessment

Please find attached the Government of the Northwest Territories response to the Mackenzie Valley Environmental Impact Review Board's information requests #1.1.69-1.1.71. If the Review Board has any questions or concerns regarding this document please feel free to contact me at Ph. (867) 920-6362.

Sincerely,

Jason McNeill
Environmental Assessment Specialist.

For
Steven Matthews
Environmental Assessment / Habitat Biologist.

1.1.69 Source: **Government of the Northwest Territories (GNWT)**

Reference: Directed to Government and reference to information included in the EAR noted as not pertinent to the question.

ToR Line:

Issue #1: Consultation with Affected First Nations

To: **Mackenzie Valley Environmental Impact Review Board.**

Preamble: Government has a legal obligation to "consult" with first nations whose rights may be infringed by approvals related to the development. The developer does not have a legal obligation to consult equivalent to that of government but should ensure the early notification and involvement of affected first nations in a participation process intended to assist the company, the MVEIRB and RAs to identify, avoid or mitigate impacts on the environment.

Request: (1) Please provide the Review Board with a detailed summary of your government, department or agency's efforts to ensure effective consultation with first nations and Metis groups affected by the proposed development. Provide dates, and places of meetings, correspondence and details of other efforts to ensure adequate consultation. Indicate any plans for ongoing consultation efforts as the regulatory process unfolds.

Response: The *Mackenzie Valley Resource Management Act (Act)* does not specifically identify an obligation for the Government of the Northwest Territories (GNWT) to consult. Therefore, to assist the Mackenzie Valley Environmental Impact Review Board (the Board) in understanding the GNWT's consultation role, the following is a description of the steps undertaken during the environmental assessment to fulfill the GNWT's mandate for the protection of the environment and peoples.

DeBeers is the proponent for this environmental assessment; the GNWT fulfills the role of a Responsible Minister. As such, the GNWT has the responsibility to review all information submitted by the proponent to ensure that it is technically sound and serves to correctly assess the potential impacts and benefits to the peoples and the lands of the Northwest Territories. This review includes the duty to carefully review

DeBeers' Environmental Assessment Report submission to confirm that the proponent has fulfilled the obligation to consult. However, the GNWT is not solely concerned with information submitted by the proponent in an environmental assessment. The GNWT also examines information submitted by affected and interested parties as these submissions provide an opportunity to view public opinions and concerns.

The socio-economic and biophysical environments are two aspects of the GNWT's mandate that are affected by development. Thus, when reviewing the DeBeers submissions, the GNWT examines the biophysical implications of the development, but also pays particular attention to the socio-economic aspects of the environmental assessment. It is important to note however, that the regulatory processes of the *Act* allow for stringent attention to be directed toward issues of land and water. Hence, the GNWT realizes that issues of a socio-economic nature are fundamental to, and more effectively dealt with, in the environmental assessment process, and subsequent Board's Report of Assessment.

The main tools employed by the GNWT to ensure that effective consultation is achieved during an environmental assessment are:

- **To a large extent, the GNWT relies on the Board's Public Registry. The Public Registry for the DeBeers Environmental Assessment retains a complete public record of documents pertaining to the environmental assessment (in accordance with the *Act*).**

- **Should a socio-economic agreement be necessary, the GNWT becomes involved in extensive direct consultation with affected parties. The agreement is designed to ensure that adequate benefits accrue toward affected parties. In addition the GNWT is a party to contribute a context for information relevant to the Snap Lake development and associated cumulative effects.**

- **Additionally, the GNWT has Regional Offices that serve as an interface between regional concerns and governmental policy and procedures. They are able to provide commentary to the Board, through the internal GNWT review process associated with the project, based on the needs and desires of the regions they represent and support.**

In conclusion, it is important to note that the "legal obligation" noted in this information request was not particularly clear given that it is not the government acting as a proponent in this case. The GNWT also understands there is clear obligation to consult when regulating a development. However, the GNWT does not retain any land or water regulatory responsibilities in the case of the DeBeers Environmental Assessment.

1.1.70 Source: **Government of the Northwest Territories (GNWT)**

Reference: Directed to Government and reference to information included in the EAR is not pertinent to the question.

ToR Line: 573-574

Issue #2: Post Approvals Monitoring

To: **Mackenzie Valley Environmental Impact Review Board**

Preamble: After the BHPB and DDMI environmental impact assessment and regulatory approvals processes were completed; the Minister of DIAND required the negotiation of environmental agreements, which provided for the establishment of a monitoring framework addressing both regional cumulative effects and project effects. These monitoring frameworks are now overseen by the IEMA and EMAB respectively. The Review Board wishes to secure the views of the participants in these other project specific monitoring processes on the need (if any) and appropriate form for the post approvals monitoring framework for the De Beers development.

(1) Please provide your agency or organization's comments on the effectiveness and contribution made by the post-approvals monitoring systems set up by the BHPB and Diavik Environmental Agreements to the mitigation of the development's impacts on the environment, including both project specific impacts and regional cumulative impacts.

Response: **The Government of the Northwest Territories strongly supported the development of environmental agreements for the BHPB and DDMI mining developments. The comprehensive framework established by the agreements was particularly important to the Government of the Northwest Territories to ensure that environmental issues were addressed in the absence of regulatory mechanisms. Although the models established to oversee the agreements are different in**

some aspects, the agreements have contributed to enhanced mitigation, monitoring, reporting and management of environmental effects associated with the two diamond mines. The agreements also provided the framework for cooperative initiatives including new research, mitigation and effects monitoring programs. Provisions in the agreements have allowed government, aboriginal organizations and industry to better understand the environmental impacts associated with diamond mining. Although both agreements (BHPB's and DDMI's) were established as project specific environmental agreements, the scope of many of the environmental initiatives has expanded over time to link with government initiatives and contribute to regional cumulative effects studies.

(2) Please indicate whether your agency or organization foresees the need for a similar arrangement, including specifically the need for an environmental agreement to contribute to the De Beers' development's post-approvals monitoring process.

Response: **In general, environmental agreements have proven to be a successful tool for environmental management of diamond mining in the Slave Geological Province. They need to be project specific and reflect the scale of the particular development and the environmental issues identified. It is important that a comprehensive environmental effects monitoring, mitigation and management program contribute to project specific and regional cumulative effects assessment and management. RWED believes there is an opportunity to consolidate the functions of all environmental agreements of diamond projects in the region to allow new mining developments, such as DeBeer's Snap Lake Project, to effectively participate in regional cumulative effects monitoring, assessment and management. At present, discussions are underway to identify options for a regional cumulative effects management structure.**

1.1.71 Source: **Government of the Northwest Territories (GNWT)**

Reference: EAR Section 6.4.1.1, 6.4.2.3

ToR Lines: 418-420, and 446-449

To: **World Wildlife Canada**

Preamble: The impact analysis (Section 6.4.2.3.3) does not consider the identification of ecological diversity within Ecoregion # 66, the Coppermine River Upland, using the NWT landscape unit methodology.

Correction: **The Ecoregion in question is Ecoregion 68, the Coppermine River Upland.**

Request: "What impacts will the De Beers Snap Lake Diamond Project have on options to complete a network of ecologically representative areas? Specific questions to pursue in answering this question are:

1. "Is there an adequate network of existing ecologically representative areas?"

1.1 YES - "Will the Project impact the integrity of the network?"

1.2 NO - Go to 2.

Response: **The NWT Protected Areas Strategy (NWT-PAS) was approved in September 1999 to guide the completion of a network of ecologically representative protected areas in the Northwest Territories. Responsibility for implementing the NWT-PAS is shared by the federal and territorial governments working in partnership with communities, regional organizations and land claims bodies. Specifically, one of the PAS goals is *to protect representative core areas within each ecoregion of the NWT*, however the identification of new areas to complete a network of ecologically representative protected areas is still at an early stage.**

2. "Are there existing candidates that have been identified to complete a network of ecologically representative areas?"

2.1 YES - "Will the Project impact the integrity of the network?"

2.2 NO - Go to 3.

Response: **Ecoregion 68 contains portions of the proposed national park for the East Arm of Great Slave Lake, where lands have been withdrawn pursuant to the *Territorial Lands Act*. Ecoregion 68 also contains portions of two proposed areas of interest identified through the NWT-PAS, namely the Mohwi Trail, and Waters of Desnedhe Che (Fig. 1). The areas of interest**

have formal support from communities and/or regional organizations but have no definitive boundaries and no restrictions on land access as a result of being identified through the NWT-PAS process. All three areas could contribute to ecological representation, however the areas of interest, Mohwi Trail and Waters of Desnedhe Che, are at an early stage of the NWT-PAS, so the degree to which they may contribute cannot be determined at this time.

3. "Does the Project impact on options to complete a network of ecologically representative areas?"

Response: **It is possible that the project will have an impact on options to complete a network of ecologically representative areas. See responses 3.2 and 3.3 below.**

3.1 "Is there an existing classification of ecological diversity for the affected ecoregion?"

Response: **The NWT-PAS uses a combination of soil characteristics and topography, called *landscape units*, to describe the ecological diversity of NWT ecoregions (Fig. 2). The *National Ecological Framework for Canada* and the *Soil Organic Carbon Digital Database of Canada*, which is part of the *Canadian Soil Information System (CanSIS)*, are used as the basis for determining landscape units. The intent is to identify representative core areas in each ecoregion that will protect portions of a wide variety of landscape units in inverse proportion to their size. By protecting portions of landscape units, the landforms, habitats and many plants and animals linked to those habitats will also be protected.**

Initial locations of representative core areas are determined through a GIS-based selection model that identifies portions of ecoregions that most efficiently capture the unrepresented diversity of landscape units within the minimum accepted size for core areas. The model assigns values within 400,000 ha roving 'windows' for the size of landscape units in an ecoregion, area of landscape units currently protected, and proportion of unrepresented landscape units that fall within the 'window'. The values are combined into total 'window' scores that are mapped to display the optimal initial location of core areas (Fig. 3).

RWED has previously conducted a conservation suitability assessment of a portion of the Slave Geological Province,

including parts of Ecoregion 68 and Ecoregion 41. This study demonstrated a GIS-based procedure to determine areas of high conservation potential based on ecological (habitat and carnivore distribution) and geological (mineral potential/occurrence) values. These values were combined into a ranked matrix describing the 'potential for protection', and mapped as areas where protection was both desirable and feasible.

3.2 "What elements of ecological diversity are directly and/or indirectly affected by the Project?"

Response: **The northern portion of the project's RSA abuts on an area of high landscape unit diversity at MacKay Lake (Fig. 3), and thus may affect a variety of 'elements of ecological diversity', as well as limit options for an optimal representative core area in the region. Also, the project may affect aquatic diversity, as the RSA is located within the MacKay/Aylmer Lake/Artillery Lake drainage. The community of Lutsel K'e has identified "Waters of the Desnedhe Che' as an area of interest encompassing Aylmer Lake, largely out of concern to protect waters flowing into Great Slave Lake. Moreover the RSA is located within the overlap fall-winter range of Bathurst/Beverly barren-ground caribou and their associated predators (e.g. wolves, wolverines and grizzly bears).**

3.3 "Is the level of impact on the affected element of ecological diversity high enough to eliminate remaining options to represent the element in a network of ecologically representative areas, for example, by an analysis of 'rarity' (limited range) or threat (existing degree of fragmentation)?"

Response: **There are 10 different landscape units in Ecoregion 68; the project's 300,000+ ha RSA lies entirely within one of these units - M/4/m/w (Fig. 2). This large landscape unit occurs as two areas separated by Artillery Lake, and totals approximately 3,900,000 ha. As such, proportional representation guidelines under the NWT-PAS suggest that at least 10%, or close to 400,000 ha of its total area should be identified for protection. Given the relatively small percentage of this landscape unit that may be affected by the project (7.7%), and the current lack of other major mining developments in this ecoregion, the Snap Lake Project by itself should not significantly affect landscape unit M/4/m/w or limit options for alternative core areas in Ecoregion 68. However, as stated in 3.2 above, the project RSA lies adjacent to an area of**

high landscape unit diversity, and thus will limit options for designating an optimal representative core area bordering Ecoregion 68 and Ecoregion 41. The Snap Lake Project, when added to already existing mines and mining interests in the larger region, will make it increasingly difficult to designate ecologically viable protected areas in the Slave Geological Province.

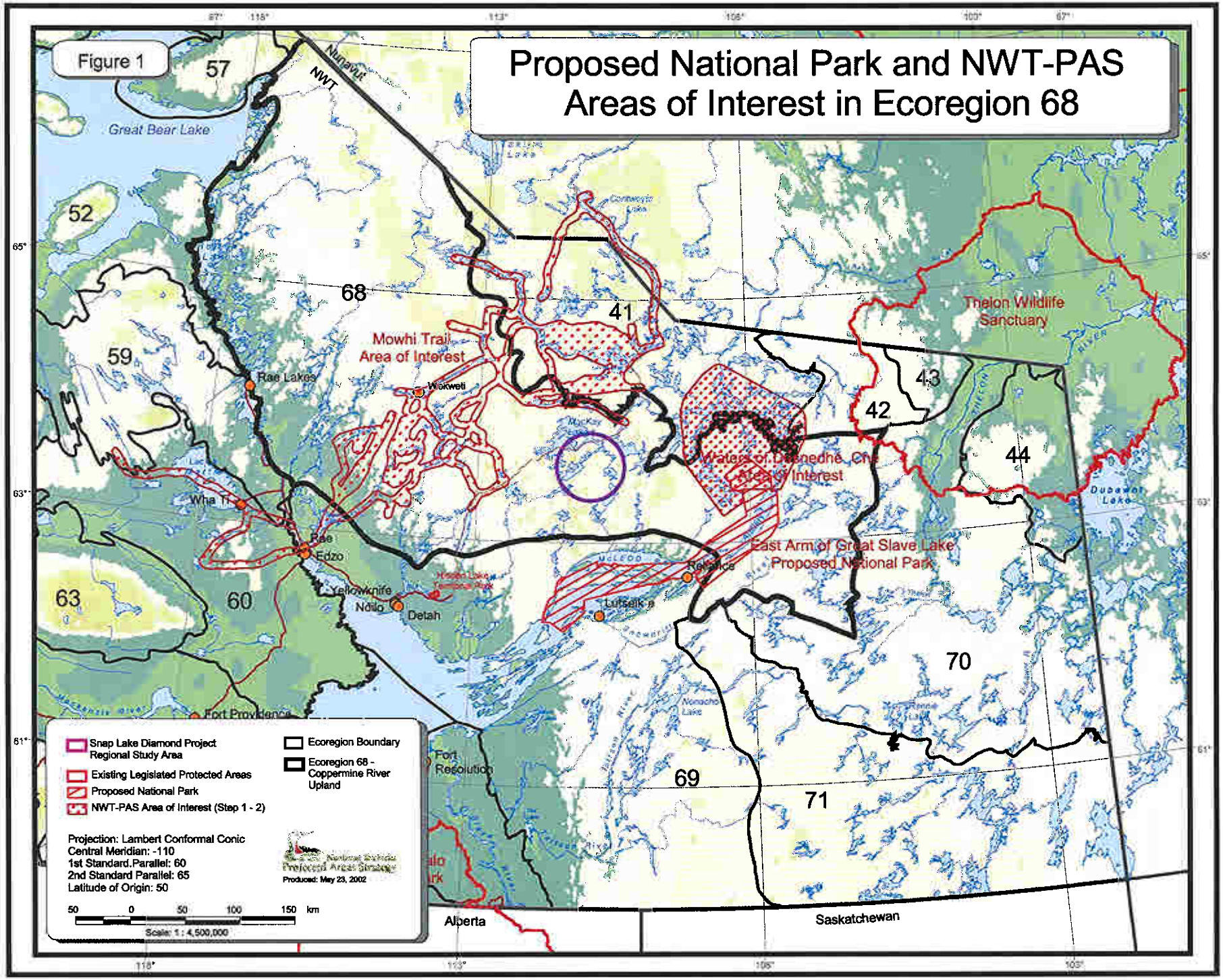
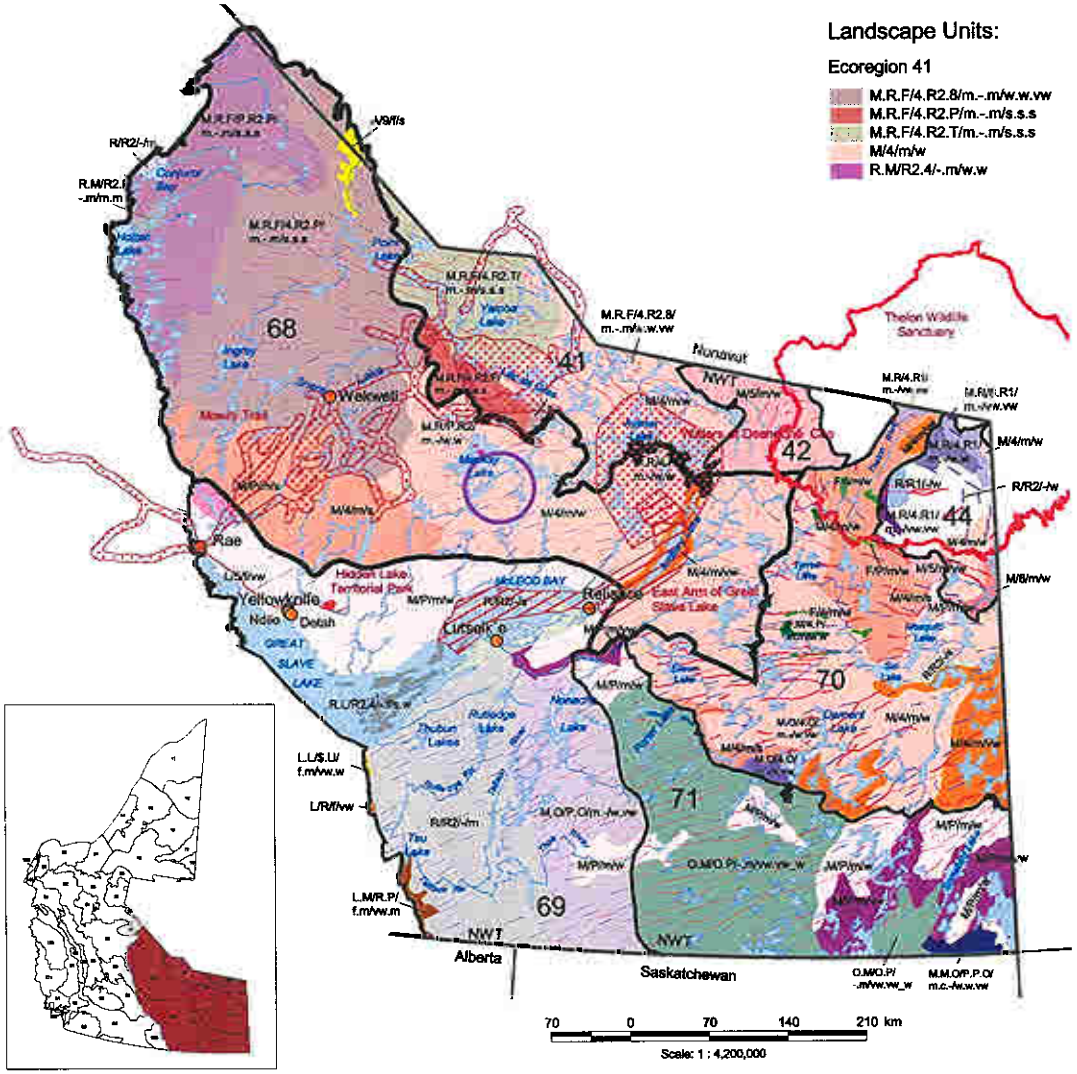


Figure 1
Proposed National Park and NWT-PAS Areas of Interest in Ecoregion 68
Great Bear Lake
Nunavut
NWT
57
52
68
59
63
60
41
42
43
44
70
69
71
Mowhi Trail Area of Interest
Waters of Dehcho Area of Interest
East Arm of Great Slave Lake Proposed National Park
Thelon Wildlife Sanctuary
Rae Lakes
Wekweti
Wha Ti
Rae
Edzo
Yellowknife
Ndilo
Detah
Reliance
Lutselk'e
Fort Providence
Fort Resolution
Alberta
Saskatchewan
Snap Lake Diamond Project Regional Study Area
Existing Legislated Protected Areas
Proposed National Park
NWT-PAS Area of Interest (Step 1 - 2)
Ecoregion Boundary
Ecoregion 68 - Coppermine River Upland
Projection: Lambert Conformal Conic
Central Meridian: -110
1st Standard.Parallel: 60
2nd Standard Parallel: 65
Latitude of Origin: 50
Produced: May 23, 2002
50 0 50 100 150 km
Scale: 1 : 4,500,000

Figure 2

Landscape Units Ecoregion 68 (Coppermine River Upland) and Surrounding Ecoregions



Landscape Units:

Ecoregion 41
- M.R.F/4.R2.8/m.-.m/w.w.vw
- M.R.F/4.R2.P/m.-.m/s.s.s
- M.R.F/4.R2.T/m.-.m/s.s.s
- M/4/m/w
- R.M/R2.4/-.m/w.w

Ecoregion 42
- A/9/f/vw
- M/5/m/w

Ecoregion 44
- M.R/4.R1/m.-/vw.vw
- M.R/4.R1/m.-/w.w
- M.R/8.R1/m.-/vw.vw
- M/4/m/w
- M/8/m/w
- R/R1/-/w
- R/R2/-/w

Ecoregion 68
- A/9/f/s
- M.R.F/4.R2.P/m.-.m/s.s.s
- M.R.F/P.R2.P/m.-.m/s.s.s
- M.R/4.R2/m.-/w.w
- M.R/P.R2/m.-/w.w
- M/4/m/s
- M/4/m/vw
- M/4/m/w
- R.M/R2.P/-.m/m.m
- R/R2/-/m

Ecoregion 69
- L.L/$.U/f.m/vw.w
- L.M/R.P/f.m/vw.m
- L/5/f/vw

Ecoregion 71
- L/R/f/vw
- M.O/P.O/m.-/w.vw
- M/P/m/s
- M/P/m/vw
- M/P/m/w
- R.L/R2.4/-.f/s.w
- R/R2/-/m
- R/R2/-/s

Ecoregion 70
- M.M.O/P.P.O/m.c.-/w.w.vw
- M.M/P.T/c.c/m.m
- M/P/m/vw
- M/P/m/w
- O.M/O.P/-.m/vw.vw_w

Ecoregion 70
- F.M/4.P/m.m/w.w
- F/4/m/w
- F/P/m/w
- M.O/4.O/m.-/s.vw
- M.O/4.O/m.-/w.vw
- M.R/4.R1/m.-/vw.vw
- M/4/m/s
- M/4/m/vw
- M/4/m/w
- M/5/m/vw
- M/P/m/w
- R/R2/-/s

Landscape unit codes:
parent material / soil type / texture / topography

Modifying Features
- Esker
- Drumlin

- NWT-PAS Area of Interest
- Proposed National Park
- Snap Lake Diamond Project Regional Study Area
- 68 Ecoregion Boundary and Number

Data Sources

Ecoregions and Soil Landscapes:
Soil Landscapes of Canada, Ver. 2.2 and Soil Organic Carbon Digital Database of Canada, National Soils Database, 1:1 M, Agriculture and Agri-Foods, Canada, 1998

Eskers, Drumlins, or Moraines:
Fulton, R.J., compiler, Surficial Materials of Canada, 1:5 M, Geological Survey of Canada, Map 1860A, 1995

Produced: May 24, 2002

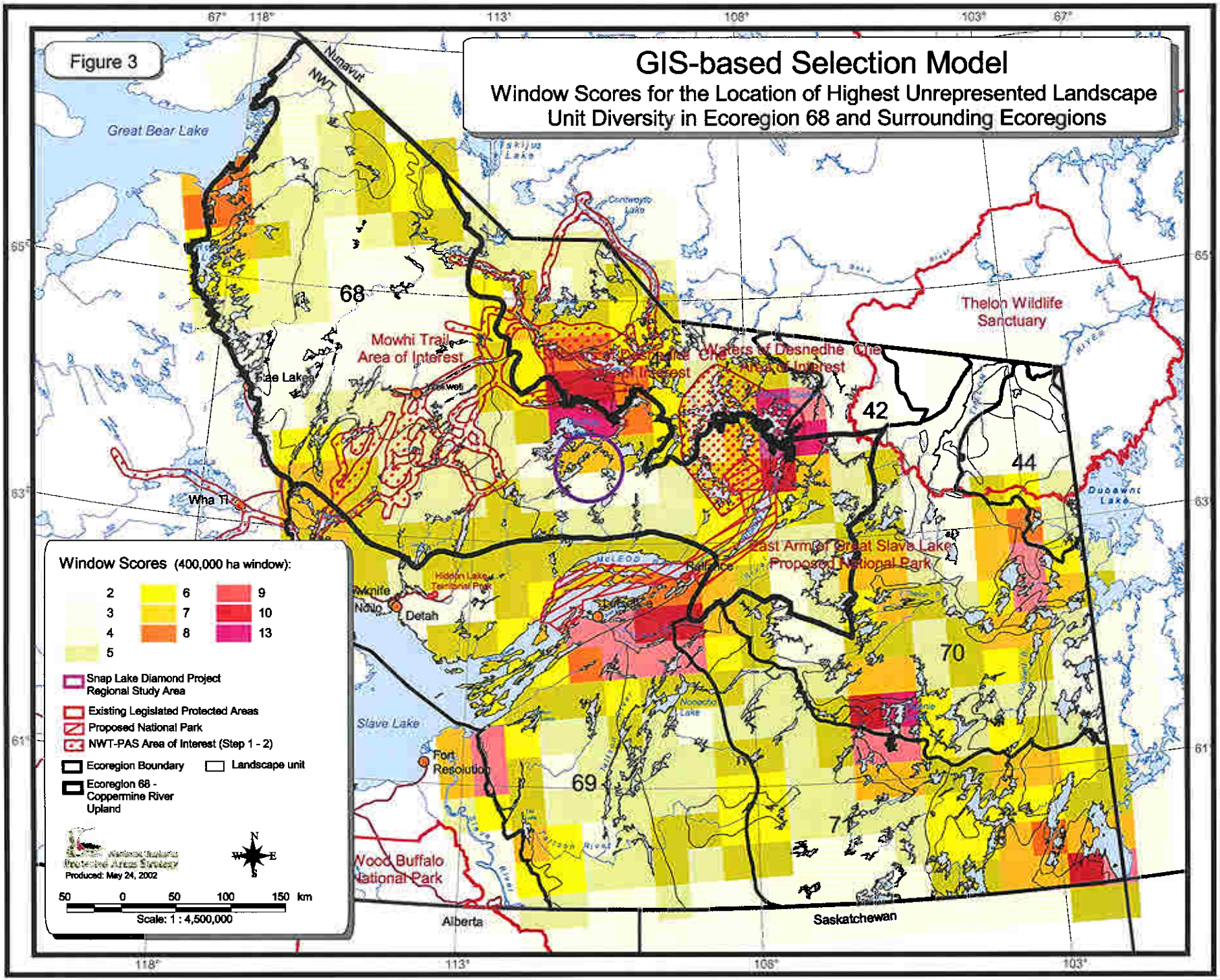


Figure 3
GIS-based Selection Model
Window Scores for the Location of Highest Unrepresented Landscape Unit Diversity in Ecoregion 68 and Surrounding Ecoregions
Nunavut
NWT
Great Bear Lake
68
Mowhi Trail
Area of Interest
Thelon Wildlife
Sanctuary
Waters of Desnedhe Che
Area of Interest
42
44
Wha Ti
East Arm of Great Slave Lake
Proposed National Park
Yellowknife
Detah
70
Slave Lake
Fort
Resolution
69
71
Wood Buffalo
National Park
Alberta
Saskatchewan
Window Scores (400,000 ha window):
2
3
4
5
6
7
8
9
10
13
Snap Lake Diamond Project
Regional Study Area
Existing Legislated Protected Areas
Proposed National Park
NWT-PAS Area of Interest (Step 1 - 2)
Ecoregion Boundary
Landscape unit
Ecoregion 68 -
Coppermine River
Upland
Produced: May 24, 2002
50 0 50 100 150 km
Scale: 1 : 4,500,000
67°
118°
113°
108°
103°
65°
63°
61°