

YG Technical Feedback on Peel Watershed Draft Land Use Plan
August 2009

This feedback is provided in the same order as the plan (section by section).

A guide to acronyms used in this feedback is provided below.

BMP	Best management practice
CLZ	Critical landscape zone
FNFA	First Nation Final Agreement
GCZ	General conservation zone
IMZ	Integrated management zone
LMU	Land management unit
NYLUP	North Yukon land use plan
RAL	Remote access lake
RCZ	River corridor zone
RLUPC	Regional Land Use Planning Commission
UFA	Umbrella Final Agreement
YESAA	Yukon Environmental and Socio-Economic Assessment Act
YFN	Yukon First Nation
YG	Yukon Government
YGS	Yukon Geological Survey

Plan Layout and General Comments

The document is a challenge for both professionals and public to understand and navigate. It requires a lot of flipping back and forth, which could lead to management intent being overlooked. The following are some suggestions on the plan layout.

- There should be a distinct separation in the document between what is deemed background and what is deemed “The Plan”. The plan and background could be two separate documents. After it is approved, the plan should be primarily concerned with management direction.
- The plan should be a combination of text and maps. Therefore, the Plan could make better use of visuals (such as maps) to help explain the functionality of the document.
- It may be beneficial to split the Landscape Management Units & Land Use Plan Zones map (Appendix A) into two maps. These maps could be used to explain the designations in the legend.
- Information in the plan is not referenced in a consistent manner. Some consideration is needed for when information needs a citation.
- Consider providing more emphasis on landscape values and management outcomes versus activity restrictions.

- Although the Table of Contents identifies Appendix D as containing other management plans, this information is actually in Section 1.8
- Foreword – Table 1.0 is very useful and should be retained.
- There are terms and concepts in the Draft Plan that require clearer definitions and clarification. Examples of this are “important cultural areas”, and the General Conservation Zone. Proper definitions are critical to applying a management regime. For example, “heritage sites” is defined under the *Historic Resources Act*. However, “heritage sites” is not synonymous with “important cultural areas”.
- There are some terms used in the document that are strongly positional or appear opinionated and may be open to mis-interpretation. Efforts should be made during editing to use neutral wording in the plan wherever possible.
- The glossary should only include terms used within the plan, and where applicable, utilize existing definitions from the UFA and other existing legislation (e.g. “palaeontological resources” from the *Historic Resources Act*).

1. Introduction

Page 1-4 (Plan Principles) –

It is important to note that the objectives section of the various chapters in Final Agreements are there mainly for use by the Parties as an aid to interpretation rather than specific “requirement” provisions.

The commission should seek interpretations of the First Nation Final Agreements (FNFA’s) from the Parties. The FNFA’s do not specifically direct or authorize principles of conservation, or the precautionary principle as plan principles. The Commission should provide its own supporting rationale for adoption of those principles.

Specifically:

- First Nations Traditional and Community Resource Use –Need clarification if this is one principle or two. As written, this draws on chapters 12 and 16 (it also makes reference to a non-existing clause “5.4.9”) and as noted the Commission should not draw upon Objectives let alone those of other Chapters as rationale for its work or plan content.
- Conservation – Chapter 11 does not reference applying a conservation principle within the context of the Final Agreement.
- Precautionary Principle – This section draws on one of the Chapter 12 objectives pertaining to the development assessment process (itself a concern similar to the

above comments), but the section referenced (12.1.1.1) does not specifically refer to the 'precautionary principle'.

The term "community resource use" used throughout the plan is not a concept that fits with established terminology under the Final Agreements, and as it is not defined therein, it is difficult to understand how it fits with established rights under the Agreements.

Page 1-6 (1.6 Clarifying Issues and Providing Direction) – the reference is to "UFA agencies"; "UFA boards, councils and committees" would be more accurate.

Page 1-8 Management Goals- Goal 6 could be a subset of Goal 7, as access is a component of economic activity.

Page 1-8. (Goals 2-5). There seems to be a reliance on land withdrawal as the means to "manage" valued features and biological resources, which ignores the suite of tools available for land management.

Page 1-9. Section 1-8 lists other relevant plans. Several plans and processes should be added:

- First Nation of Nacho Nyak Dun Fish & Wildlife Work Plan
- Northern Mountain Caribou Management Planning
- Porcupine Caribou Management Planning
- Bonnet Plume Heritage River Management Plan
- Various species management plans

Page 1-9 (1.8 Linkages to Other Plans) – The Porcupine Caribou Management Board is mentioned as one of the UFA boards. It was established per the Inuvialuit Final Agreement and is not a UFA board.

Page 1-10 (1.8 Linkages to Other Plans)- There is a reference to the Commission having considered the objectives and direction provided in the draft Tombstone Park Management Plan on bordering lands within the Peel Watershed to emphasize "community cultural use priorities". There are no references to these areas in the March 2008 Draft Tombstone Plan. There may have been resource studies that identified such areas were used historically, and it would be appropriate to draw on them as sources of information. However, that is much different than suggesting these areas have been identified through an approved park management plan for community cultural use priorities, which is not the case.

2. Description of Planning Region

Section 2 could be combined with section 1 (Introduction).

Page 2-1 (2.1 Setting) – The statement "As of 2008, there is no private land ownership in the Peel Watershed Planning Region." is incorrect, because the Gwich'in Tribal Council lands within the Yukon are owned in fee simple, with Certificates of Title registered in the Land Titles Office, as would be the case with any 'private' property owner. There are numerous references in the draft which should be corrected including the legends on the

map which treat YFN Settlement Land the same as Tetlit Gwich'in Yukon Land. [See Appendix C of the Gwich'in Comprehensive Land Claim Agreement for further information.]

Page 2-3 (2.4 Economy) –Ecological valuation (e.g. ecosystem services) should be included as a consideration within the economic assessment of the region.

Page 2-5 (2.4.2 Tourism) “The Peel region river-based tourism in this region...” is awkward. Change to “Remote river-based tourism in the Peel region generated about \$3.67 million in direct expenditures from 2001-2006 (Earle 2008)”.

Page 2-5. (2.4.3 Big game Hunting) Second paragraph; last sentence. The term “conservative” should be omitted in order to neutralize this sentence.

Page 2-5 (2.4.4. Oil and Gas). This section does not capture the current work being undertaken by YGS in the Peel basin, the requests YG has received from industry through the disposition process nor Hunt's Permit that recently expired. For a remote frontier basin, this is a very strong indication that industry thinks there is a moderate to high potential for a commercially productive resource.

Page 2-6 (2.4.5 Mining) - The discussion of mining notes a number of challenges to mining development in the Peel including “costly infrastructure”. This is a relative term. The term could be changed to “the cost of infrastructure” to neutralize the sentence.

Page 2-6 (2.4.6 Trapping) – This section should clarify the difference between subsistence and commercial trapping. There are 28 concessions issued per the *Wildlife Act* providing individuals with the exclusive right to harvest furbearing animals for commercial purposes. Also, the last sentence should be reworded as – “which permit exclusive **commercial** harvesting rights....”

Page 2-6 (2.4.7) – Highways and Public Works is not aware of an aggregate study in the region, but would be interested in the results of one if one does exist.

Page 2-7 (2.4.8 Forest Resources)

The majority of forest is found in the Peel River plateau, not alluvial sites. However, the most productive forest sites are found on alluvial soils in the major river valleys, or on southerly exposures.

Page 2-7 (Forest Resources) – The impression is left that the area in question has an approved Forest Resources Management Plan per Chapter 17 of the THFA whereas it does not. A planning process is underway but it is not yet complete or approved.

Page 2-9 (2.5.4 Water) – There is a reference to the Peel River flowing west which should be east.

3. Concepts and Land Use Management Framework

Page 3-3, Table 3.1 Re-title the table to Read “**Recommended** Land Use Designation...” which will enable the removal of “recommended” in the zone column. (*This is a formatting suggestion*).

Page 3-4, (Section 3.2.1). The Commission should provide additional rationale to justify the recommended “conservation and protection zones” (or whatever designation and recommendation is put forward in the Recommended Plan). The Commission should emphasize values such as key habitats, biodiversity hotspots, focal species, and other values related to significance and sensitivity.

P. 3-4 (Section 3.2.1) Tier 1 Sub-regional Planning

Recommendations which require sub-regional planning should be minimized. For example, the plan essentially defers management guidance and does not provide meaningful strategic direction for management of areas. It might be helpful if recommendations about appropriate management and uses within these areas are presented.

Page 3-5 (3.2.1). Goals of RCZs include maintenance of hydrologic integrity of the river system; however none of the bullets really cover water quality. It would be beneficial to include a bullet that recommends water quality to CCME guidelines or natural background while recognizing that stream crossings are a particular concern related to the generation of suspended sediments.

There may be a variety of environmental and economic grounds for considering revising the configuration of the River Corridor Zones in several areas.

The Map reference (Gartner Lee, 2005) in this section appears to be incorrect and should be checked. Other tourism data was also supplied and does not appear to be reflected in the rationale for this zone.

Alternatively, there could be some consideration for combining some of these zones into one category. (See comments in Section 6 – LMU’s)

Page 3-5 Re: “First Nations cultural use priorities (subsistence resources)” as one of the goals of the River Corridor Zones.

Given the broad extent of the subsistence harvesting right already provided by the First Nation Final Agreements, it is not clear what the justification or practical purpose or implication of such a statement is nor why such a recommendation is necessary.

Page 3-5/3-6. There are no goals identified for Remote Access Lakes (RALs). Also, the “management conditions” under RALs do not reflect the existing and potential use by mineral exploration.

Page 3-6. (3.2.1) - The term “eventually” which is noted in the second sentence under the discussion of wilderness values is not useful in a planning context. More specific timing could be provided in order to clarify the intent of General Conservation Zone (GCZ).

Page 3-8 (Figure 3.1) – Some text appears to be missing from the “Example” box for “Strategy”.

Page 3-10 (3.3.1.1) Just for clarification purposes; suggest wording change in the Water Quality Indices bullet:

- “Expertise in water quality trend monitoring already exists in the Yukon, and some useful regional baseline data has been collected in the Yukon River Basin.”

Page 3-13 (3.3.1.2)

It is not definite that using a percentage of baseline volumes would be a useful indicator for water.

Page 3-11 (3.3.1.1)

Research Recommendation- undertaking research would be required for both water quality and quantity indices.

Page 3-14 (3.3.1.2) Cumulative Effects Indicator Levels

A flexible and strategic approach to indicator monitoring will be necessary. It should take into account activity levels and locations. Cumulative effects monitoring should be connected to best management practices and research recommendations in order to apply adaptive management to the region. Providing clarity around these relationships should foster pragmatic implementation of plan recommendations.

4. Land-Use Designations

More explanation of the values being considered should be presented under each zoning designation (e.g. what makes a RCZ or IMZ?) i.e. presenting stronger rationale. This could go with the plan concepts section when explaining (or laying the foundation for) zoning categories.

The sections describing specific LMU’s should be combined with section 6 (LMU) to avoid redundancy.

“Key issues” might be a misnomer for some of the points. For example, a “need for data” is not an issue but a research recommendation. On the other hand, “wetland sensitivity to industrial development” is a key issue.

Various sections of text make reference to “unique” and “irreplaceable” zones, but do not state what about them is unique e.g. p. 4-13.

Chapter 4 – references to Settlement Land parcels -- In general there seem to be many inconsistencies and typos in relation to the references to Settlement Land parcels as described in the text sections and then itemized (or not) in the Recommendation boxes.

Some examples:

- Page 4-4 Fish Lake [LMU1d] – There are two references to the Tetlit Gwich'in parcel "TG R-1FS". This is fee simple land and the correct land titles reference should be made. It also appears that the parcel in question is R-11FS, per the map on page 6-8. Also the reference to "...and site specific selection of NND (S-139b)" should be "...and site specific parcel of NND (S-139B)."
- Page 4-9 (Recommendation) – The text says one NND site specific, but then lists three parcels.
- Page 4-10 (Recommendation) – the text mentions there being several NND parcels, but (unlike similar recommendation statements) does not itemize them. A list should be provided as with the others.
- Page 4-21 (Lower Ogilvie Watershed) – There is a reference to "VHFN" and TG parcel R-08A. It should be VGFN; and VGFN parcel R-08A.

Accurate information about the land ownership and tenure is crucial. Corrections and updates should be made in the next draft.

Page 4-1 (4-1 Recommended Conservation and Protection Zone) – There is a reference to the Tetlit Gwich'in submitting an application to nominate two areas for National Historic Site status. For the reader's benefit, please clarify whether this was done as part of this land use planning process, or as a separate application to Canada.

Page 4-2 (Upper Peel River [LMU 11f]; description of travel route) – There is a reference to the Upper Peel containing an important TH travel route per the Final Agreement. However, per Schedule C of Chapter 13 of the Tr'ondëk Hwëch'in Final Agreement, Heritage Route #2 goes down the Hart River, then down the Peel. It does not follow the Peel upstream of the Hart River. There may be a historic travel route above the confluence, but it is not the one identified in Schedule C, and shown on the maps that were an appendix to the Agreement (*see also related comment below*).

Page 4-6 (Aberdeen Canyon [LMU 11d]) – The reference to the travel route is presumably to the same route referenced above, from Dawson to Fort McPherson, via the Hart then Peel Rivers. The reference to the Final Agreement should be more specific, for example: "(see Tr'ondëk Hwëch'in Final Agreement – Schedule C of Chapter 13)." Also, the reference to Tetlit Gwich'in land selection R-7FS should be corrected to Tetlit Gwich'in Yukon Land parcel R-7FS, registered as Lot 1000, Quad 106E/13, Plan 79259 CLSR.

Page 4-7. Add words to key issue of RALs: "Monitor use of RAL by guided and non-guided wilderness travelers **and exploration.**"

When referring to settlement land, the Commission may want to refer to the registered lot and plan # of the settlement land parcels.

Page 4-23 (Land Withdrawal) – there is a reference to legislative amendments being required to enable land withdrawal. They may be referring to the passing of Orders-in-Council (or Ministerial Orders) under various Acts, but these are not amendments to legislation.

5. General Management

There is excessive detail in Section 5 (60+ pages). Specifically, strategies and BMPs are extensive and read like recommendations. To address these issues, it would be helpful to put them into an Appendix, rather than in the body of the plan. This will help make it clear what the key plan recommendations are. Likewise, it would also be useful to separate the sector specific policy suggestions.

Some of the “strategies” are out of the scope of regional land use planning such as references to humane traps, hunting restrictions, etc.

Several sections have recommendations “To be determined” (e.g. p. 5-4). It needs to be clarified whether it is intended that implementing governments determine these or whether these will be inserted into a Recommended Plan by the Commission.

It is unclear how Section 5 management recommendations relate to each LMU. The linkage between Section 5 and 6 should be clarified.

Page 5-1 Third paragraph has some typos.

Page 5-4, section 5.2.1.1 overstates the surface disturbance amount. Even with the estimated buffers on the estimated surface disturbances, the total disturbance would be approximately 2800 thousand hectares or 0.04% of the region, and for the most part, the roads and footprints are not currently being used.

Page 5-11: Third paragraph – the Hart River has been missed in the listing of Major River Corridors.

Page 5-12. Aquatic resources, Objective 2.3. Numerous small-scale activities can have an impact on river users, e.g. increase in air traffic over river corridors.

Page 5-12 (Bullet #2)

“Extent of available water flow rates, and storage capacity considered inadequate to support industrial activities”.

- Should be corrected by stating, “Extent of available water flow rates, and storage capacity considered inadequate to support industrial activities during the winter months”.

Page 5-12 (Bullet #4)

“Minor alterations to hydrology through construction of all season roads, well pads and similar features can result in significant impacts to water quality.”

Page 5-13: Objectives/Strategies Table

Strategy 2.5.2 needs to be corrected to:

“Conforming to Yukon Government Interim Policy, bulk removal of water ...”

Page 5-15 (Research Recommendation) - “Peel wetlands should be mapped using...”

Page 5-15 & 5-18: Wetlands inventory recommendation is repeated.

Page 5-20 –Strategies noted under objective 3.5 should reflect the fact that government is limited in its ability to regulate where people hunt on off-work time (“no firearms in camp” agreements is one tool that is used by YG).

Page 5-31 – Strategies in relation to mineral licks are good. Development of BMPs for mineral licks could be a research recommendation.

Page 5-33. (5.6 Heritage and Cultural Resources)

Definitions are imperative in this section, and should be cited appropriately (UFA, *Historic Resources Act*). As certain resources are protected by legislation, it must be clearly defined what resources the Commission is referring to.

By including heritage resources, such as archaeological and palaeontological sites alongside cultural areas, subsistence use areas, spiritual areas (such as thermal springs and special places), it creates the impression that these resources or “values” are managed in comparable fashion. It should be noted however, that archaeological and palaeontological resources are protected by Yukon legislation, as laid out in the *Historic Resources Act*. Other areas of “cultural value” may be protected under the *Historic Resources Act* or Chapter 13 of the Umbrella Final Agreement, but only if they are designated as Historic Sites under the HRA. This designation process was designed to allow specific and significant cultural areas to be recognized under the Act. The cultural areas outlined in the Peel Watershed Draft Plan are extremely broad and would unlikely be designated as Historic Sites, and as such would not be protected by the HRA

Cultural resources that are not protected by the *Historic Resources Act*, need not be “protected” by the Land Use Plan, but should be managed as a resource value, in balance with other resource values in the area. Even in the cases of archaeological, palaeontological sites, and historic sites (5.6.4-5.6.5), provision should be made for management (rather than protection) of such sites. The Draft Plan recommends that all such sites be protected from disturbance. Generally, such heritage resources are “managed” rather than “protected” and allowance must be made for mitigation of disturbance.

Although few field surveys have been conducted to identify palaeontological resources in the Peel River Watershed, several areas (see LMU specific information below) have

known palaeontological objects (fossil invertebrates, bones, plants impressions, shells, microfossils etc.) and palaeontological sites or have high potential to yield new discoveries. Palaeontological objects and sites are identified in the *Historic Resources Act* and Chapter 13 of the Umbrella Final Agreement. All palaeontological resources on Yukon Government lands are owned and managed by the Yukon Palaeontology Program (Yukon Palaeontologist) of Yukon Government as per the *Historic Resources Act*. All palaeontological resources on First Nation lands are owned and managed by the First Nation as per the Umbrella Final Agreement.

All proposed developments that may potentially impact palaeontological objects and sites in the Peel River watershed must develop an appropriate management strategy with either Yukon Government (Yukon Palaeontologist) or the appropriate First Nation.

Not all palaeontological sites require protection. However, developers that propose any subsurface disturbances that may impact potential palaeontological resources are required by the *Historic Resources Act* and Umbrella Final Agreement to develop an appropriate management strategy to adequately address these palaeontological resources. Such management strategies may include palaeontological resource assessments prior to development and site monitoring while development is in progress.

The region as a whole has high potential to yield fossil discoveries- see LMU specific information.

Throughout the document, archaeological sites should not be designated as specific FNs so as not to imply ownership or ethnic identity. This needs to be corrected on pages 4-22, 6-59, 6-61, 6-63, 6-67, and Map 4.

Page 5-34 (Key Issues)

Heritage terms are used interchangeably in the Draft Plan, however under the legislation, heritage resources are not equal.

Second bullet: Local knowledge is often kept in confidence by the community.

Third bullet: Not clear what is meant by “continued support of resource stewardship monitoring programs for cultural areas”.

Fifth bullet: Grave sites *are* documented along the Dempster Hwy and afforded full protection.

Objective 5.1 Heritage resources are managed under legislation, and protection or conservation are not always the approaches decided upon in the management of these resources. Plan should be consistent with what is in legislation.

Strategy 5.1.1 and 5.1.2. Both are required already by YESAA. Therefore it is redundant to recommend it here.

Strategy 5.1.3 Not sure what this designation is, and under what authority it would occur.

Strategy 5.1.4. Applicants do not authorize land uses. This strategy is redundant with YESAA requirements.

Strategy 5.1.5 and 5.1.6. These strategies appear to extend and expand beyond what is provided for in heritage resource management processes and legislation.

Strategy 5.2.6. This scale and scope of recommendation does not seem appropriate to a regional land use plan.

Strategy 5.3.2. Implies that FNs identify and manage all heritage resources. There is a need to acknowledge YG as a resource manager.

Strategy 5.3.6. Redundant with YESAA.

Strategy 5.3.7. Redundant with Strategy 5.3.2.

Page 5-36, Section 5.6.3. Unsure how “cultural areas of importance” differ from “traditional use sites”.

Page 5-37 (Key Issues) – The first bullet should be clarified that the sites are proposed as National Historic Sites (i.e. not under Yukon legislation). The term should be historic, rather than historical. Same comments apply to the Recommendation box on the subsequent page.

National Historic Site designation does not confer protection of these sites.

Page 5-38 Policy recommendation- It is unclear why only the TH FA is referred to.

Section 5.6.4 (Key Issues)

First bullet: It is unclear what is meant by “continuous monitoring”.

Second bullet: Known palaeontological and archaeological sites and resources are already protected under legislation.

Section 5.6.5 (Key Issues)

First bullet: It is unclear what is meant by “continuous monitoring”. Some sites would be protected already under legislation, others are managed already. Does this mean the plan is recommending that sites cannot be used for the same purposes as they traditionally were?

Section 5.7 Access management

First sentence: The reality is that it is economic development and the subsequent pattern of land use that determine transportation routes, not the other way around as implied in this sentence.

The first text box “All-Season Access” conveys to the reader that this is a decision not a recommendation.

The second text box refers to “...the oil and gas and mining resource sectors’ social acceptability...” This term cannot be defined within any practical context and should be removed.

Page 5-40. Rather than depicting the preferred routes as proposed in the Draft Plan, access management direction should consider the linkages to processes already in place under the Final Agreements for access management and could focus on goals such as minimizing both construction costs and impacts to ecosystems through an integrated resource management approach.

Page 5-41- 5-44.

The second bullet in the section on desired future state suggests that access infrastructure be reclaimed so that “areas are aesthetically indistinguishable from their previous state”. Is this a practical suggestion?

The statement also assumes that all access infrastructure will at some point become unused. This is an assumption, as some potential land uses might be of such a type that permanent access is required. This bullet, and the overall plan, fails to recognize this possibility.

Strategy 6.2.5 suggests it is necessary to “Map wetlands and riparian zones of any other possible access corridors.” It should go on to say “as required”. There is no immediate need to do work of this kind.

Strategy 6.2.16 is very similar to 6.2.5. The two could easily be combined.

Objective 6.7 includes the concept of carrying out a transportation planning study. The objective assumes that government will provide access – this will not always be the case. In many instances, developers provide access. That being the case, assessment of the impact of access is most efficiently done as part of the development assessment process, whether the government or the developer provides that access. Generally speaking, carrying out a transportation planning study before there is any information available on what developments might occur and when is premature.

Under Best Management Practices, the third bullet is unclear. It seems to suggest that new permanent river crossings be routed through riparian corridors.

Page 5-42 to 5-44. A recommendation for policy development or research for terrestrial access management could be made.

Page 5-43. Objective 6.5. This is not always required.

Page 5-46: The recommendation is to “*Adopt existing or upcoming management plans to guide access in the planning region.*” Is this supposed to be “Adapt”? Not sure what the recommendation means.

Page 5-49. It is unclear what is meant by the third bullet.

Page 5-54. 5.8.2 Tourism and Recreation. Key issues section refers to ‘residents and non-residents’. Does ‘resident’ refer to those who live in the planning region? Is there a difference between commercial recreation and tourism? Also, data on self guided visitors and Yukon resident trips to remote rivers in the Peel watershed is available and presented in the Tourism and Recreation Study.

The document notes that “current tourism and recreation activity in the region is significant with annual visitor expenditures estimated to be over \$600,000. This should clarify that the \$600,000 is for guided and self-guided visitors to remote rivers in the region only.

Page 5-60. 5.8.4 Mineral Resources

“Exploration activities are administered by a comprehensive referral process”. More appropriate wording might be “Exploration and mine development activities are administered by a comprehensive assessment and regulatory regime.”

Page 5-61: Typo in the Coal Development box (second paragraph)

Page 5-63 – A recommendation for government to develop BMPs for mining could be included.

Economic values should be presented in a neutral way without emphasizing a relative importance of sectors. Removing ‘conservative’ from page 2-5 and ‘significant’ from page 5-54 would assist in achieving some neutrality.

A significant amount of research is recommended in the plan. As with indicator monitoring, investment in research will be more justifiable if and when development becomes likely. Ideally, research on BMP’s would proceed before development occurs in order to make informed decisions on which management practices would most effectively minimise impacts. Also, the research recommendations should be prioritized and suggested in an appendix of the plan.

6. LMUs

Consideration should be given to reducing the number of LMU’s by joining adjacent LMUS with the same zoning.

The RAL zoning appears to be spot-zoning, and does not reflect a regional land use planning approach. LMU 5B (0.3 square kilometres) is an example of this and should probably be incorporated into another LMU.

In considering how the plan will be used by land managers, the key section for seeking management intent should be presented with the LMU's, and include the critical values, management goals, and recommendations.

Need further rationale for some of the LMU zoning. For example, for Peel Plateau proposed Tier 1 lands, rationale could include representation of eco-region.

Page 6-34- It is not clear whether "Potential Indicators" are supposed to be checked or blank.

LMU 8A: Turner Wetland and Caribou River: The rationale for withdrawing sub-surface rights for the western portion of the LMU which contains the active permit, is unclear. Designated as a Critical Landscape Zone the management direction to this LMU is described as having "moderate potential" for oil and gas, containing four abandoned wells and oil and gas permit # 18.

LMU 10A: Eagle Plains: Designated as an IMZ Zone IV. A zone IV allows the highest level of development and has a cautionary surface disturbance of .75% and a critical of 1%. According to Appendix B the existing disturbance level is .48% which would allow an additional development of .27%, or 3 square km, before the cautionary level is reached. The plan describes 10A as having the highest potential in the watershed for oil and gas. While the development of Eagle Plains is likely to precede any development in the Peel Plateau, the geological potential is no higher than the potential in the Peel Plateau.

LMU 11B, 7A, 7C: These LMU's also are identified as having oil and gas potential. The proposed zoning for these LMU, either CLZ (protected) or IMZ I (high conservation emphasis), would prohibit the exploration and development of oil and gas resources.

LMU #12

Changing permafrost can lead to changes in both hydrology and water quality. The impacts from long term degradation haven't really been captured in this section. Suggest that expert input on permafrost be sought for the Final Recommended Plan and best practices be considered around the permafrost issue.

Palaeontological Resources by LMU:

The following information could be added to LMU descriptions.

LMU #1B: Snake Watershed Crest

This area has a known palaeontological site consisting of fossil fish. The sedimentary rocks throughout this LMU have high potential to yield additional Paleozoic fossil specimens.

LMU #1C: Upper Snake Watershed

The carbonate rocks of the Road River Formation in this region have known trilobite fossil localities and have high potential to yield additional Paleozoic fossils.

LMU #2A: Lower Bonnet Plume Watershed – Noisy Creek

The coal bearing deposits of the Bonnet Plume Formation in this region have high potential to be associated with Mesozoic plant and vertebrate fossils. There have been woolly mammoth fossils collected on Noisy Creek in the past.

LMU #2B: Upper Bonnet Plume Watershed

The carbonate rocks of the Road River Formation in this region have high potential to yield Paleozoic fossils.

LMU #2C: Chappie Lake Wetlands

The coal bearing deposits of the Bonnet Plume Formation in this region have high potential to be associated with Mesozoic plant and vertebrate fossils.

LMU #3A: Lower Wind River

The coal bearing deposits of the Bonnet Plume Formation in this region have high potential to be associated with Mesozoic plant and vertebrate fossils. The carbonate rocks of the Road River Formation in this region have known trilobite fossil localities and have high potential to yield further Paleozoic fossils.

LMU #3B: Upper Wind River

The coal bearing deposits of the Bonnet Plume Formation in this region have high potential to be associated with Mesozoic plant and vertebrate fossils. The carbonate rocks of the Road River Formation in this region have known trilobite fossil localities and have high potential to yield further Paleozoic fossils.

LMU #4A: Hart Watershed

Sedimentary rocks in this area have high potential to yield Paleozoic fossils.

LMU #5A: Blackstone Watershed

Sedimentary rocks in this region have high potential to yield Paleozoic fossils.

LMU #6A: Lower Ogilvie Watershed

The Bouvette Formation; Road River Group: Ogilvie Formation and Michelle Formation sedimentary rocks in this area have known fossil localities and have high potential to yield further discoveries.

LMU #6B: Upper Ogilvie Watershed

The Bouvette Formation, Road River Group: Ogilvie Formation and Michelle Formation sedimentary rocks in this area have high potential to yield further discoveries.

LMU #8A: Turner Wetlands and Caribou River

The sedimentary rocks in this area have high potential to yield Mesozoic fossils.

LMU #10A: Eagle Plains

The Eagle Plains sandstone sedimentary rocks have known fossil localities and this area has high potential to yield further discoveries.

LMU #10B: Canyon Creek

Sedimentary rocks in this area have high potential to yield fossils.

LMU #11A: Teetil'it njik

Sedimentary rocks in this area have known invertebrate fossil localities and have high potential to yield further discoveries.

LMU #11B: Peel Mainstem

Sedimentary rocks in this area have high potential to yield further discoveries.

LMU #11C: Tshuu tr'adaojiich'u

The Bonnet Plume Formation sedimentary rocks have known dinosaur and plant fossil localities and have high potential to yield further fossil discoveries.

LMU #11D: Aberdeen Canyon

Sedimentary rocks in this area have high potential to yield fossil discoveries.

LMU #11E: Deception Lake

Sedimentary rocks in this area have high potential to yield fossil discoveries.

LMU #12A: Peel Plateau

Sedimentary rocks in this area have high potential to yield fossil discoveries.

7. Plan Implementation

Page 7-2 (Table 7-1) – It is not clear what the purpose of Table 7-1 is, and how it is related to plan implementation. For example under Management Goal 7 there is a reference to Guide-Outfitting and Trapping; with a ‘link’ to UFA 22.3.6. Provision 22.3.6 requires that a Final Agreement set out a process for allocation of licenses, permits, etc. It is not clear what the purpose of identifying these ‘suggested linkages’ is. Also, there are some typos in the table – reference to non-existent UFA provision 16.1.6 for example. Finally, at the bottom of page 7-1 the text mentions the Devolution Transfer Agreement as being referenced in Table 7-1, but it is not.

Page 7-5 (Table 7.2, Action 2.2) - This SMA seems to include LMU 1a and 1b (Lower Snake River). This is not consistent with Map 2.

Page 7-6 Typo: Table 7.2, Section 2.4: Typo. “Prepare a Prepare a...”

Table 7-1: Management Goals 1, 3 and 4: These goals reference ‘protection, management and use of land and related ecosystems and promoting long term integrity of sensitive/important landforms. *The Parks and Land Certainty Act* should be listed in the regulations and policy column.

Page 7-3, Table 7.1. “Tourism and Recreation”: Omit the “Draft Commercial Backcountry Tourism Policy” in the last bullet in fourth column. There is no approved policy at this time.

Table 7.2

2.2 In regards to sub-regional planning, the table recommends:

“Prepare a “Sub-Regional” (sic) in accordance with UFA 11.8.0 and Management Plan for each Special Mgmt Area, including creation of a Management Advisory Board consistent with Final Agreements Section 10.5.2 and 10.5.7 respectively.”

Chapter 11 may be silent on the definition of sub-regional planning and the matters such plans would address, they would still have to pertain to the Objectives of Chapter 11, rather than those of Chapter 10. The reference to 10.5.2 is unwarranted. Although it

speaks to the preparation of a management plan, it does not include a reference to a management advisory body (and 10.5.7 refers to a body, not a “Board”).

It is not clear how many sub-regional plans are being recommended. Is a plan being recommended for each LMU or for each management focus (e.g. watershed protection, designate heritage site, etc.)?

Table 7.2

2.4 These areas may be culturally important, but the presence of historic sites and resources are unknown for most of these locations.

Specific indicators for socio-economic health and sustainability should be recommended for monitoring. Table 7.4 appears to have been wholly adopted from the North Yukon Final Recommended Plan, and does not appear to have been modified for the Peel Region.

All of the recommendations for further research should be added as a table. Additional research considerations could include: provisions for public education and outreach, and long-term, large-scale research within the region.

8. Appendices

“References” are listed, yet few are actually cited in the document.

Glossary of Terms: Terms should only be defined if used within the document and should use existing definitions from UFA or legislation (e.g. *Historic Resources Act* for palaeontological resource).

“Major River Corridor” – It appears this term has been copied from the NYLUP – needs to be revised for this plan’s meaning.

Appendix A: Maps

The economic potential map is cluttered- not an effective presentation of information. Consider showing two maps of renewable and non-renewable resources.

Adjacent zoning does not need to be shown on all of the maps- the colours in the map and on the legend are too close to the Peel zones, and thus leads to confusion.

The intent of zones could be spelled out the in the map legend (e.g. IMZ 1= high conservation/ low development focus).

Suggest numbering the maps in the title block so that they can be referenced easily.

The LMU labels clutter up the map, and it is not obvious which numbers relate to which LMU’s.

LMU 4A- the boundaries should meet the boundary of Tombstone Park. Not clear whether this is a mapping error.

Appendix B. LMU Descriptions and Summary Statistics

Table B-2

Existing surface/linear disturbance tally is problematic for the following reasons:

1. Assumption of buffers, 2. Assumption that no recovery has occurred, 3. No ground-truthing of the measurements.

Table B.3

The LMU's should be ordered by LMU number as this is the easiest way to find them.

Appendix C. Key Issues

Page C-3: Extent of available water flow rates, and storage capacity considered inadequate to support industrial activities during the winter months.

Page C-11: It will be problematic implementing if historic resources protected under the HRA are mixed with "traditional use" or "cultural" areas. Also "Sites and areas not posted for public release" are shown on Map 4.

Page C-12: Heritage River designation for Bonnet Plume does not mean heritage in the same sense as being discussed in this section.

Page C-13: The key issue of air access is missing.

Appendix D is referred to in the Table of Contents, but is not included in the document.