EA03-008 Technical Report Guidelines. aug. 24/04

Format for Technical Reports Mackenzie Valley Environmental Impact Review Board

On November 21st 2001, a multi-stakeholder meeting was hosted by the MVEIRB to design a format for technical reports that would enable reviewers to most clearly understand review comments. Government, industry and co-management board representatives participated.

The following suggested format for technical reports resulted from this meeting:

Non-Technical Summary

Each technical report must include a one-page non-technical summary, briefly describing the key points, conclusions and rationale of the report. This should be written in plain language, suitable for community members and the general public without a technical background. This should not exceed one page.

Introduction

- relevant aspects of organization's mandate
- list of general subjects reviewed
- indication that comments have been submitted for all issues identified
- statement of the capacity in which comments are provided (e.g. are responses in offered as expert advisor, responsible minister, federal minister or intervenor, etc..)

Specific comments

For each specific issue reviewed, please:

- 1. Identify the issue (using Terms of Reference line and section numbers for reference)
- 2. State the **developer's conclusion** relating to the issue (referencing source [page or section in EA report or Information Request number] where possible)
- 3. State your conclusion relating to the issue, (including and indication of agreement of disagreement).
- 4. Provide a clear rationale (including any relevant evidence) in enough detail to support your conclusion.
- 5. Provide **recommendations** relating to the issue.

Preliminary Screening References

If reviewers wish to reference comments made during preliminary screening, these should be linked to specific items in the Terms of Reference.

Outstanding Information Request Issues

IR issues constraining the technical review should be identified.

Summary of Recommendations

Reviewers are requested to provide an itemized summary of recommendations.

Sample Technical Report

The following is a sample Technical Report (excluding non-technical summary). It was deliberately based on a <u>fictional</u> development and developer, to emphasize the format, as opposed to the comments.

Introduction

The Department of Paleo-Ecology (DPE) is pleased to offer the following technical comments on the Environmental Assessment Report of the proposed Flintstone Mammoth Ranch (EA93-012). The mandate of the DPE, as described in the Extinct Species Reintroduction Act (Sec. 4(b)) charges this department with responsibility for managing the release of re-created species and related programs and policies.

We have conducted a technical review of the following general subjects in the Flintstone EA document and related information requests:

- Effects on terrestrial wildlife
- Effects on vegetation
- Effects on other re-introduced species
- Tourism related social impacts

Specific comments follow. Where no comments have been offered, no concerns were identified.

The DEP serves in this assessment as both an expert advisor and a regulator. The comments included here are offered in our departmental capacity as an expert advisor, except where it is specifically indicated otherwise.

Specific Comments

1. Changes to plant species composition as a result of mammoth browsing Reference: ToR line # 42, EA Report Section 6.3 (p. 60)

Developer's Conclusion:

Flintstone Inc. concluded that mammoth browsing would have no effect on local plant composition. Flintstone suggests that no change is predicted because the area was historically browsed by mammoth and has been continually browsed by a variety of large mammal species since that time, and that this is a natural pressure on the vegetation.

Our Conclusion:

DPE does not agree with Flintstone's assessment of this impact. Mammoth browsing is likely to have a considerable lasting effect on local plant composition.

Our Rationale / Evidence:

Although mammoths were endemic to this area in the past, significant climate and habitat changes have occurred since (e.g. ice age glaciation and thaw). It is well established by the paleological record that current vegetation patterns are not representative of historical ones during the period when mammoth last browsed this area.

There is also evidence that mammoth are highly selective browsers. Although mammoths were not selective browsers in their historical habitat, there are only eight species of plants expected to be palatable for mammoth in sub-arctic taiga forest that is now typical of the area.

Considering the dietary requirements of one mammoth (>300 kilos/day), the size of the proposed herd (170), and the area of the proposed project (75 km2), we conclude that browsing pressure will be heavy within the proposed project area.

Considering the dietary needs of mammoth, we predict that heavy browsing pressure focussed on so few species in a small area is extremely likely to change plant composition within that area.

The developer has indicated (EA report, sec. 2.5.4.5) that supplementary feeding is not an option.

Our calculations according to the TUSKR model indicate that browsing pressure would be reduced to Moderate-Light (FR rating 7) by either reducing herd size to 12 mammoth in the current area and doing rotational grazing or by expanding the area to 1500 km.

Recommendation:

The developer should reduce the herd size and use rotational grazing or increase the development area (range size) to prevent this impact.

...(repeat above format for each specific comment as necessary).

Preliminary Screening References

Please note that these comments are submitted in addition to the measures suggested to the Sahtu Land and Water Board during preliminary screening, in our correspondence dated May 16th, 2012. Measures 4 and 9 (relating to ToR line 45) are still relevant and applicable. DPE would like the Review Board to consider them during this EA.

Information Request Issues

The DPE would like to note that the Flintstone Inc. has not yet responded to Information Request #9 (safety issues relating to mammoth hair collection). This is the second time this request has been issued. We are unable to provide technical review for this issue without the requested information. (Note: This relates to ToR lines 81 to 87).

Summary of Recommendations

- 1. The developer should reduce the herd size and use rotational grazing or increase the development area (range size) to prevent this impact.
- **2.** ...and so on.