



Northwest Territories Protected Areas Strategy

Guidelines for Non-renewable Resource Assessment

I. INTRODUCTION

The Northwest Territories Protected Areas Strategy (NWT-PAS) outlines a series of eight steps for the planning and establishment of protected areas, one of which (Step 5) calls for a detailed evaluation of the area's ecological, cultural and economic values. The evaluation of the economic values includes the assessment of mineral, petroleum and natural gas resource potential in each candidate protected area. This document outlines the principles, objectives and process for the assessment of mineral, petroleum and natural gas resource potential or "non-renewable resource assessment" of candidate protected areas. The non-renewable resource assessment (NRA) will be carried out in conjunction with cultural, ecological, hydroelectric and/or renewable resource assessments through Step 5 of the NWT- PAS.

As stated in the NWT-PAS, the Protected Areas Strategy will conform to all land claim agreements, Aboriginal/inherent and treaty rights, self-government agreements and overlap agreements. In the event of any unforeseen conflicts between this Strategy and such agreements, the latter takes precedence over the Strategy.

The PAS action plan states:

Working closely with all government institutions and communities, regional organizations and/or land claim bodies having resource responsibilities, DIAND and RWED will coordinate the development of an effective mineral and energy resource assessment process for high priority candidate areas. (PAS Section B. 1.6, p. 20)

Supporting Document 7 of the PAS also outlines that funding for resource assessments will be a government responsibility.

A consistent process for mineral, petroleum and natural gas resource assessments will reflect the spirit and intent of the Whitehorse Mining Initiative Leadership Accord signed in 1994, by ensuring that final selection of protected areas takes into account appropriate economic, environmental and social information. The Non-renewable Resource Assessment process is a requirement of Canada's Minerals and Metals Policy

(1996) which states that the mineral potential of an area should be fully taken into account before a decision to create a protected area on federal lands is taken.

Purpose of the Non-renewable Resource Assessment (NRA) process:

To evaluate the mineral, petroleum, and natural gas potential as required under Step 5 of the NWT-PAS in order to make an informed decision about the establishment of a protected area and its boundaries.

II. OBJECTIVES OF THE NRA PROCESS

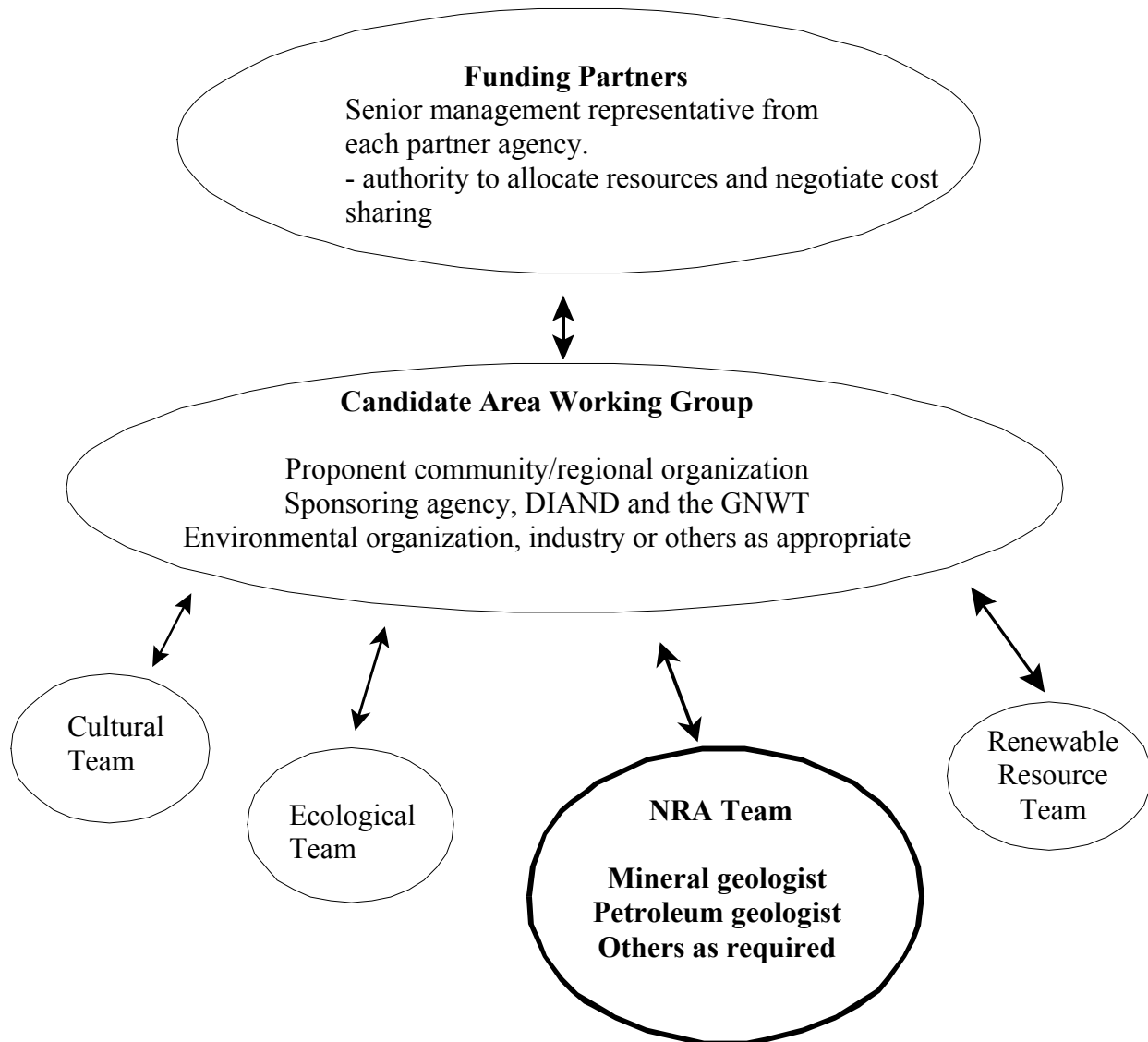
1. Provide an effective, timely and cost-efficient evaluation of the mineral, petroleum, and natural gas potential for a candidate protected area.
2. For the purpose of evaluating a candidate protected area, improve the state of geoscience knowledge for that area.
3. Provide a coordinated and consistent process for government agencies, communities and other stakeholders to plan and implement mineral, petroleum and natural gas resource assessment activities for candidate protected areas.
4. Provide information to be used in the consideration of social and economic implications of the mineral, petroleum and natural gas resource potential along with the social and economic implications of the other evaluation study results for the candidate protected area.

III. PRINCIPLES OF THE NRA PROCESS

1. The NRA process should be consistent with the principles and goals of the NWT-PAS and the Minerals and Metals Policy of the Government of Canada.
2. Assessment studies should be based on quality geoscience work and made available for peer and public review.
3. The cost and complexity of each mineral, petroleum and natural gas resource assessment, and whether fieldwork is required, should be determined on a case-by case basis.
4. The NRA should take into account whether the candidate protected area will have an impact on infrastructure requirements for local and regional mineral, petroleum and natural gas development.
5. For candidate protected areas proposed under Goal 2 of the NWT-PAS (ecoregion representation) the study area for the resource assessment should be large enough to allow for boundary adjustments. Boundary adjustments may not be possible for candidate protected areas proposed as special cultural sites by a community or for sites with outstanding natural features, or site specific wildlife habitat values.
6. The development of a work plan and identification of resources required for Step 5 evaluations should be led by the sponsoring agency and the proponent community/regional organization and should begin prior to the interim land withdrawal. Delays in securing all resources for the NRA should not be used to hold up the interim land withdrawal process.

7. The interim land withdrawal period is for a maximum of five years. A request for extension of the interim land withdrawal period would require consideration and approval by the federal government in consultation with all parties.
8. NRA results should be presented to the communities along with the ecological, cultural, and renewable resource evaluations.
9. Reporting of results to communities should be ongoing, timely and in plain language.
10. Fieldwork, if required, should be conducted in such a way as to cause minimal impacts on the natural and cultural values of a candidate protected area.

IV. FRAMEWORK FOR NON-RENEWABLE RESOURCE ASSESSMENTS



The framework diagram above describes how the non-renewable resource assessment fits within the overall framework of assessments that are carried out through Step 5 of the PAS process.

The role of the Funding Partners is to approve the work plans and budgets for the cultural, ecological, non-renewable and renewable resource assessments, and allocate funds and resources accordingly.

The Candidate Area Working Group develops the overall workplan for the cultural, ecological, non-renewable and renewable resource assessments, and monitors and reviews progress on the assessments.

Once results are available from the various resource assessments, the Candidate Area Working Group coordinates consultation and reporting to communities, regional organizations, land claim bodies, public, industry and the Funding Partners.

NRA Team Terms of Reference:

- Operates out of the C.S. Lord Northern Geoscience Centre, Yellowknife, Northwest Territories and reports on the evaluation to the Candidate Area Working Group.
- Develop specific work plan and budget and review technical aspects of the mineral, petroleum and natural gas resource assessment work.
- Conduct a Phase 1 review of available mineral, petroleum and natural gas information, provide a preliminary assessment of these resources and identify data gaps.
- Develop a specific work plan and budget for fieldwork (if necessary) for review by the Candidate Area Working Group.
- Conduct technical components of the mineral, petroleum and natural gas resource assessment work, write final report, and publish for peer, public and industry review with the approval of the Chief Geologist.
- Communicate results of the NRA in simple terms (in tandem with the other evaluation reports) directly to public meetings and the Candidate Area Working Group.

V. OUTLINE OF THE NON-RENEWABLE RESOURCE ASSESSMENT PROCESS

The NRA team defines the geological study areas, and develops a specific work plan and budget for the Phase 1 mineral, petroleum and natural gas resource assessment. The Candidate Area Working Group reviews this work plan and budget and recommends a budget allocation to the Funding Partners group. The Funding Partners negotiate the cost sharing arrangements for the Step 5 evaluations. Funding for Step 5 evaluation work may also come from environmental organizations and others.

NRA Phase 1 - Compilation of existing data

The majority of the existing minerals data are located in Yellowknife. Materials for initial data compilation for petroleum and energy minerals components reside with Geological Survey of Canada (GSC)/National Energy Board (NEB) in Calgary.

Work to be completed:

- Compile existing data on maps of the study area.
- Identify which mineral deposit types and petroleum and natural gas play types are likely to exist in the study area. Deposit types or petroleum and gas plays have common geological characteristics that govern the distribution and size of mineral and petroleum deposits or accumulations. Deposit types and plays are likely to be restricted to certain areas and geological formations. Several deposit types and plays may be present and overlap within a study area.
- Identify gaps in the geoscience information coverage

The NRA team reviews Phase 1 results along with other reviewers. The results are then summarized and presented to the CAWG along with recommendations on the scope and budget for the Phase 2 component. The CAWG then makes a recommendation to the Funding Partners on whether to proceed to Phase 2.

NRA Phase 2 - New Data Collection and Evaluation.

New data collection and evaluation of mineral, petroleum and natural gas resource potential is conducted as required to provide information necessary, subject to practical limits, for the proponent community/regional organization, sponsoring agency and other stakeholders to make an informed decision on the establishment and boundaries of the proposed protected area.

Work to be completed:

a) Any new geoscience data for the candidate protected area is compiled and reported regularly.

- Petroleum assessments depend primarily on the analysis of existing well and seismic data.
- Investigate all known showings and conduct bedrock and surficial mapping and geochemical survey appropriate to the terrain.

b) Evaluation of potential.

- Analysis of samples collected.
- Updating of geological and mineral showings databases.
- Based on the upgraded geoscience data base, assess the probability of finding each type of deposit or play in each geological domain using mineral, petroleum and natural gas potential rating categories from very high (presence of undiscovered deposits very likely) to very low (presence of undiscovered deposits very unlikely).

c) Write up and publication of the Phase 2 report.

- Draft report is peer reviewed by critical readers within the Federal and Territorial governments according to the Economic Geology Series (EGS)

open file review process, and by members of the NRA Team and Candidate Area Working Group.

NRA Phase 3 - Socio-economic implications.

A report on the socio-economic implications of the NRA study results is prepared. This may include discussion of the national/regional/local significance of the area's non-renewable resource potential; the social and economic context of current exploration and development in the region; feasibility of development with regard to access and transport; and current market trends. The Candidate Area Working Group will determine the scope and resources required for the socio-economic work.

NRA Reporting, Consultation and Review.

Study results are reviewed by the Candidate Area Working Group which develops the reporting and consultation approach with the communities, regional organizations, land claims bodies, industry and public.

The NRA study results are released as an Open file or report and are combined with the evaluation results of the ecological, cultural and other economic value assessment in one report for the candidate protected area.

Consultation and workshops are held with communities, regional organizations and land claim bodies on the Step 5 evaluations from all the study teams, including the socio-economic implications of the evaluation results. A public, industry and government review of the candidate protected area evaluation results is also carried out.

The evaluation results and feedback from the communities, regional organizations, land claim bodies, public, environmental non-government organizations, industry and government forms the basis for a formal proposal (Step 6 of PAS planning process) recommending whether the protected area should be established. If protected area establishment is recommended, management objectives, proposed boundaries and preferred designation are specified. Alternatively, the proposal may be returned to the originating community, regional organization and/or land claim body for revision of specified areas of concern (step 6, part 3).