CHAPTER 5

REGULATORY ENVIRONMENTAL ASSESSMENT APPROACH

KEEYASK
Hydropower Limited Partnership

CHAPTER 5
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5.1 INTRODUCTION

This Chapter describes the approach taken by the Keeyask Hydropower Limited Partnership (the Partnership) for the regulatory environmental assessment of the potential effects associated with the Project. It provides an overview of the framework, contribution of Aboriginal traditional knowledge (ATK), local knowledge and technical science to the environmental assessment; the approach to assessing effects of the Project and cumulative effects (CEA); and the approach to determining the significance of residual effects.

5.2 OVERVIEW OF APPROACH

The Project is the subject of two evaluations[1], the first of which was conducted by the Keeyask Cree Nations (KCNs) for their internal purposes and the second of which is a public review currently being conducted by federal and provincial environmental regulators:

- KCNs Evaluation Process:

  The KCNs evaluation process has been underway for more than a decade with the support of Manitoba Hydro. The process assisted the KCNs to understand the Project and its impacts on their communities and Members and to determine the conditions under which they would approve the Joint Keeyask Development Agreement and support the Project. The Project was evaluated by each of the KCNs in terms of their own worldview, values and experience with past hydroelectric development, as well as their relationships with *Askiy* (Mother Earth) (see Chapter 2 and the KCNs' Environmental Evaluation Reports, which are provided to assist other people to understand their independent decisions to be Project proponents).

- Government Regulatory Assessment Process:

  Work by Manitoba Hydro and the KCNs on the government regulatory assessment process has also been underway for many years. The Keeyask Generation Project

[1] In addition to the two evaluations cited above, the federal and provincial governments have responsibilities under Section 35 of the Constitution regarding Aboriginal consultations; and Manitoba Hydro will be required to fully explain its decision to contract for Keeyask production before an independent panel on the need for and alternatives to major new projects and export contracts (see Section 4.2).

environmental impact assessment is in accordance with the regulatory framework outlined in Section 1.3, guidance provided by federal and provincial regulatory agencies, and standard environmental assessment practice. The existing environment and the manner in which it functions was studied and analyzed using the scientific method (referred to as "technical information" in the environmental impact statement (EIS), ATK and local knowledge. The assessment then predicted the effects on this environment if the Project is developed, and mitigation was identified to reduce the severity of adverse effects as much as possible. A monitoring program will determine if the prediction of effects are accurate and if mitigation measures are working as expected; and, if not, will assist in identifying new mitigation measures to apply.

ATK played an important role in planning the Project as well as the conduct of the KCNs evaluations and the regulatory environmental assessment.

Through bilateral and multilateral planning processes involving the KCNs and Manitoba Hydro, the Project was shaped to reduce adverse effects. Since the 1990s, Manitoba Hydro has worked with TCN (and later also with WLFN, YFFN and FLCN) in joint planning committees to improve the Project itself (*e.g.,* choice of a lower-head option, development of a Reservoir Clearing Plan [Appendix 4A], Waterways Management Program [Appendix 4B] and other measures) by drawing on the ATK of Members of the KCNs. This meant that there were fewer effects to be assessed.

ATK played a role for each of the KCNs in coming to conclusions about their participation in the Partnership. Each of the KCNs did its own studies to evaluate the Project and the Partnership. An understanding of the worldview of the KCNs, the evaluation process that they undertook, and their conclusions about the Project and the Partnership are found in Chapter 2.

The KCNs also agreed to contribute ATK to the government regulatory assessment process.

The Partnership, through its regulatory assessment, has:

- Examined and planned the Project in a careful and precautionary manner (Chapter 4, Chapter 8, and Chapter 10);
- Identified potential environmental effects of the Project, including the environmental effects of malfunctions or accidents that may occur in conjunction with the Project (Chapter 6), and cumulative effects likely to result from the Project in combination with other projects or human activities that have been or will be carried out (Chapter 7);
- Developed technically and economically feasible measures to mitigate adverse environmental effects (Chapters 4 and 6);
- Evaluated whether the Project, following the application of mitigation measures, is likely to result in significant adverse environmental effects (Chapter 6); and furthermore,

whether cumulative adverse environmental effects that are likely to result from the Project are significant (Chapter 7);

- Considered the capacity of renewable resources that are likely to be significantly affected by the Project to meet the needs of the present and the future; and
- Evaluated whether the Project is consistent with sustainable development (Chapter 9).

Chapter 4 describes the construction and operation of the permanent facilities (the term "operation" also includes maintenance); construction, operation and decommissioning of the temporary facilities (*i.e.,* those required only to construct the Project); operation and decommissioning of the temporary infrastructure previously licensed and constructed as part of the Keeyask Infrastructure Project (KIP); and operation of the north access road, also licensed and constructed as part of KIP.

Given the exceptionally long life of a hydroelectric generating station, it is not practical to describe in detail the manner in which the Project's permanent facilities will be decommissioned. However, in the event decommissioning is required at some future date, Chapter 4 includes the Proponent's commitment to comply with legislated and licensing requirements, existing agreements, and industry standards prevalent at that time.

5.3 ASSESSMENT FRAMEWORK

Project effects are predicted by comparing the biophysical and human environments between:

- The predicted future conditions without the Project in place; and
- The predicted future conditions with the Project in place.

The assessment recognizes that the lower Nelson River and adjoining waters, including areas affected by Lake Winnipeg Regulation (LWR) and the Churchill River Diversion (CRD), has been and continues to be an altered environment as a result of the initial diversion and regulation of waters in the early 1970s, as well as ongoing regulation and hydroelectric development, as approved under the *Water Power Act* (Manitoba). For the purpose of assessing the effects of the Project, the existing environment without the Project is considered the environmental setting. This environmental setting is reviewed in Section 6.2 of Chapter 6.

Sections 6.3 to 6.8 identify the expected positive and adverse environmental effects of the Project following the application of proposed mitigation measures for each environmental component in the EIS Guidelines. Expected effects that remain after the application of mitigation measures are considered to be residual effects of the Project. The assessment concludes in Sections 6.4 to 6.8 by determining whether expected residual adverse environmental effects on each valued environmental component (VEC) will be significant

(as defined according to the methodology set out for the assessment); and whether the effects assessment conclusion is sensitive to climate change (including Section 6.3 Physical Environment).

The cumulative effects assessment is in Chapter 7 and monitoring and follow-up programs are discussed in Chapter 8.

5.3.1 ASSESSMENT FRAMEWORK STEPS

The assessment employs a series of steps to develop conclusions on the effects of the Project. Key steps include the following:

STEP 1: PROJECT DESCRIPTION

The project description (see Chapter 4) defines the Project components and activities required to construct and operate the Project's permanent facilities and to decommission infrastructure not required for operations. This includes measures to mitigate potential adverse effects and specific programs developed to provide appropriate replacements, substitutions or opportunities to offset adverse effects and enhance benefits of the Project.

STEP 2: SCOPE OF ASSESSMENT

Spatial boundaries define the areas where the biophysical and socio-economic studies were conducted (*i.e.,* the study areas). The study area for each environmental component (*e.g.,* the physical environment, aquatic environment, terrestrial environment) is defined by the geographic extent of the direct and indirect effects of the Project. Where required, the study areas extend beyond the zone of impact to provide context for the studies.

Study areas vary between environmental components to appropriately reflect the extent of Project effects on that component (*e.g.,* the study area for socio-economic effects is larger than the study area for physical effects). Similarly, the study areas for individual VECs and supporting topics within each environmental component also vary as the study area for a species with a large home range need to be larger than the study area for a more sedentary species. The study areas selected are large enough to capture the effects of the Project, but not so large as to mask the effects of the Project (by making the effects of the Project as a percent of the area appear unreasonably small).

The majority of studies focused on the areas where the main impacts would occur. For example, while the regional study area for heritage resources is quite large, the heritage resource studies focus on the reach of the Nelson River between the outflow at Clark Lake and the inflow into Stephens Lake (including the north and south access roads, north and south dykes, and most borrow areas) where the majority of disturbances would occur.

Detailed descriptions of the study areas and related temporal scope for each environmental component are provided in Section 6.2.3.2 (Physical Environment); Section 6.2.3.3 (Aquatic Environment); Section 6.2.3.4 (Terrestrial Environment); Section 6.2.3.5 (Socio-Economic Environment; Section 6.2.3.6 (Resource Use); and Section 6.2.3.7 (Heritage Resources).

During the scoping step, key issues of importance to regulatory authorities and people who may be affected by or have an interest in the Project were identified. From these issues, VECs were selected to focus the assessment of the significance of adverse effects. Selection of VECs was based on the following criteria:

- Overall importance/value to people;
- Key for ecosystem function;
- Umbrella indicator;
- Amenable to scientific study in terms of the analysis of existing and post-construction conditions;
- Potential for substantial Project effects; and
- Regulatory requirements.

VECs selected for each environmental component are listed in the subsequent sections of Chapter 6.

STEP 3: ENVIRONMENTAL SETTING

The existing environment, including the past, the present and the future environment without the Project, is described. This requires a description of the existing environmental setting of the study area, including trends, conditions, and the major influences of past and present projects and activities, in shaping the current and future environmental setting without the Project. The description of the environmental setting includes a discussion of the physical, aquatic, terrestrial, socio-economic, resource use and heritage environments.

STEP 4: IDENTIFICATION OF POTENTIAL EFFECTS

The potential effects of the Project on the existing environment is identified. This step requires a comparison of the existing and future environments with and without the Project, as established in Step 2; potential effects of the Project are identified separately during the Project's construction and operation phases.

STEP 5: MITIGATION OF ADVERSE EFFECTS

Mitigation measures to reduce adverse effects are also identified. These are proposed measures to avoid, prevent or reduce adverse effects and enhance positive effects.

STEP 6: ASSESSMENT OF RESIDUAL EFFECTS

The effects that would remain after the application of mitigation measures are identified. These residual effects are assessed in terms of their nature, magnitude, and spatial and temporal extent.

STEP 7: REGULATORY SIGNIFICANCE OF RESIDUAL EFFECTS

The regulatory significance of residual effects on each VEC is evaluated according to criteria set out in the EIS Guidelines (see Section 5.5).

STEP 8: CUMULATIVE EFFECTS

Cumulative environmental effects are assessed that are likely to result from the Project in combination with other projects or human activities that have been or will be carried out. The cumulative effects assessment focuses on VECs (as described in Step 2) that may be adversely affected by the Project (after mitigation) and considers likely adverse effects caused by the other projects or human activities that overlap in space and time with those of the Project. After considering proposed mitigation and using the same criteria as in Step 7, the regulatory significance of any such residual effects of the Project is determined.

STEP 9: MONITORING AND FOLLOW-UP

The final step is the development of an environmental protection program for monitoring and managing the effects of the Project during construction and operation. The program will be finalized once regulatory requirements are known.

The monitoring programs will help to determine the actual effects of the Project, including:

- Whether they are consistent with the analysis in the environmental impact assessment;
- The effectiveness of mitigation measures; and
- Whether any adaptive management and mitigation measures need to be implemented if unforeseen impacts occur.

5.3.2 SOURCES OF INFORMATION

The partners worked together to conduct and document this environmental assessment. ATK, local knowledge and technical science were used to inform the assessment. As both proponents of the Project and as affected in-vicinity First Nations, the KCNs played an integral role, along with Manitoba Hydro, in directing and shaping the assessment.

5.3.2.1 ABORIGINAL TRADITIONAL KNOWLEDGE

ATK is a cumulative body of knowledge, practice and belief about relationships among living beings that is handed down by Elders to each generation and is a way of life continuously adapted and added to by each generation (as taken from Berkes 2008). ATK is broad and holistic and also includes more specific knowledge. All of the KCNs' ATK is grounded in the Cree worldview. Each of TCN, WLFN, YFFN and FLCN took its own approach to applying their ATK to their respective evaluations of the Project; therefore, different sources of ATK were brought into the process.

ATK played a role in the scoping and conduct of the environmental assessment. A major ATK workshop was held by the partners in June 2008; from there, they established ATK principles to guide how ATK would be brought into the process (see Chapter 2, Appendix 2A). ATK helped to identify issues, effects, mitigation and monitoring. The KCNs brought their ATK to the processes, which guided the environmental assessment (*e.g.,* through the Partners Regulatory and Licensing Committee, EIS Coordination Team, bilateral environmental studies working groups, and multilateral working groups dealing with the aquatic environment, mammals and mercury and human health). In addition, extensive community-based consultation was undertaken by each of the KCNs with its Members. Finally, the KCNs will play a role in monitoring and follow-up plans (including ATK) through mechanisms established through the governance structures of the JKDA.

The more specific ATK of the KCNs, also grounded in their worldview, is reflected in Chapter 6, Environmental Effects Assessment. ATK that contributes to the understanding of the environmental setting is included in Section 6.2, and ATK that contributes to the understanding of effects of the Project is described in Sections 6.3 through 6.8. Where ATK identifies uncertainty regarding conclusions reached through technical science, this is addressed through monitoring and follow-up in Chapter 8.

5.3.3 TECHNICAL AND LOCAL INFORMATION

Technical sources of information include engineering and scientific studies and analyses undertaken by the Proponent, articles in peer-reviewed journals and "grey" literature (*i.e.,* not published in peer-reviewed journals), and existing government databases. Local knowledge came from the Public Involvement Program, including open houses and meetings with local officials, and less formally through interactions between the scientific team and local workers.

Keeyask-specific studies have been undertaken for the assessment for several decades. The studies covered the range of topics required for the environmental assessment, as set out in the Guidelines. Over the past decade, study plans were produced each year by the study team and reviewed and revised in consultation with the KCN communities.

The study program was designed to achieve the following:

- Address concerns and issues identified by the locally-affected KCNs communities and Manitoba Hydro with respect to the proposed developments;
- Provide information that assisted the KCNs and Manitoba Hydro in making their respective decisions regarding the proposed developments;
- Identify opportunities for the KCNs associated with the developments;
- Assist in the planning of the developments by identifying and assessing impacts of alternatives identified by the KCNs and Manitoba Hydro;
- Identify environmental issues that need to be considered during planning of the developments (*e.g.,* identify possible negative effects so they can be avoided or mitigated wherever possible);
- Provide information for the environmental impact assessment and prepare the EIS in accordance with regulatory requirements;
- Provide baseline information to allow for future monitoring studies to determine the environmental effects of the Project and, if necessary, to apply adaptive management strategies; and
- Develop data reports and technical memos for field studies. These technical reports and memos were used as primary sources of information for the analysis documented in each of the supporting volumes. The findings in the supporting volumes, as well as the KCNs' Evaluation Reports, are the sources of primary information for the EIS.

The following are other sources of information, in addition to the field studies undertaken by the technical study team:

- Statistical data sources including data obtained from Statistics Canada, Manitoba Bureau of Statistics, Aboriginal Affairs and Northern Development Canada (previously INAC), Health Canada First Nation and Inuit Health Branch (Health Canada), Manitoba Health, Canadian Food Inspection Agency, Freshwater Fish Marketing Corporation, Fisheries and Oceans Canada (DFO); Manitoba Conservation and Water Stewardship, Environment Canada, and Manitoba Infrastructure and Transportation;
- A program of key person interviews, workshops and focus groups;
- Discussions with known experts in specific areas;
- Datasets and other information obtained from Manitoba Conservation and Water Stewardship , Manitoba Land Initiative, Committee on the Status of Endangered Wildlife in Canada, Agriculture and Agri-Food Canada and Canadian Forest Service;

- Monitoring studies conducted on Manitoba Hydro projects in northern Manitoba, which provide an understanding of both the short-term and long-term effects of similar projects in similar environments; historical studies; and EISs of other relevant projects, particularly large-scale projects in Canada;
- Meetings with regulatory agencies to discuss the status of the environmental studies and provide information to assess ongoing changes to the Project;
- Issues and concerns identified through the Public Involvement Program; and
- Use of both published and unpublished information (a list of the documents depended upon in this assessment is provided in the References section of each supporting volume of the EIS or associated reports).

5.4 APPROACH TO CUMULATIVE EFFECTS ASSESSMENT

The cumulative effects assessment (CEA) assesses the cumulative environmental effects likely to result from the Project in combination with other projects or human activities (as listed in Chapter 7) that have been or will be carried out. After considering proposed mitigation and using the criteria in Section 5.5, the CEA determined if any such residual effects of the Project on VECs are significant from a regulatory perspective.

The CEA focuses on VECs determined in Chapter 6 to be adversely affected by environmental effects of the Project that overlap in space and time with the effects of other projects or human activities.

Chapter 6 assesses adverse effects of the Project on the existing environment, the condition of which is affected by past and current projects and human activities.

Chapter 7 addresses the CEA. The adverse effects of the Project that overlap with the effects of other past and current projects and activities are summarized (based on Chapter 6), and then the adverse effects of the Project that overlap with the potential effects of other future projects and activities are assessed.

5.5 APPROACH TO DETERMINATION OF REGULATORY SIGNIFICANCE

The assessment predicts environmental effects that are both positive and adverse after mitigation measures have been applied (*i.e.,* residual effects). It also evaluates the regulatory significance of adverse residual effects on VECs that are likely to occur.

The regulatory significance of predicted residual adverse environmental effects on each VEC is assessed using a two-step process. In assessing regulatory significance, where possible the Chapter 6 analysis uses relevant regulatory documents, environmental standards, guidelines, or objectives such as prescribed maximum levels of emissions or discharges of specific hazardous agents in the environment.

STEP 1

Each VEC is initially evaluated using the following criteria as provided in the EIS Guidelines:

- Direction or nature (*i.e.*, positive, neutral or adverse) of the effect;
- Magnitude (*i.e.*, severity) of the effect;
- Spatial boundaries (*i.e.*, geographic extent); and
- Temporal boundaries (*i.e.*, duration).

To apply these criteria in the EIS, each is defined as follows:

- **The Direction or Nature of the Effect** describes the nature of the residual effect and the difference or trend of the effect compared with existing baseline or pre-project conditions. Direction is described as:
  - Positive – A beneficial or desirable effect on the environment;
  - Neutral or negligible – No measurable change in the environment[1]; or
  - Adverse – An undesirable effect on the environment.

  The overall direction of change (positive, neutral or adverse) is typically clear for a specific VEC. However, issues can arise when a specific species or habitat has positive effects in some areas and is harmed in other areas. Issues can also arise when considering differing perceptions, perspectives and values among different groups of affected people about their community and region. For example, the assessment of overall direction of change for socio-economic effects also considers the following:

  When assessing effects of the Project on people, it is recognized that there are problems inherent in assessing separately effects on different VECs that contribute to overall personal, family and community life. Effects may be either positive or negative, depending on the people affected. Effects may also be both positive and negative when different groups are affected differently, when different elements of a VEC are affected differently, or when different VECs are considered for the same group.

- **Magnitude** describes the predicted severity or degree of disturbance the residual effect has on a component of the biophysical or socio-economic environment. Where relevant,

[1] Neutral or negligible effects were considered in the EIS to be equivalent to no residual effect.

this criterion takes into consideration the extent to which a VEC is vulnerable (including a species at risk) to any detectable adverse effect. Magnitude is described as:

- Small – No definable, detectable or measurable effect; or below established thresholds of acceptable change; or within the range of natural variability; or minimum impairment of an ecosystem component's function;
- Moderate – Effects that could be measured and could be determined within a normal range of variation of a well designed monitoring program; or are generally below or only marginally beyond guidelines or established thresholds of acceptable change; or are marginally beyond the range of natural variability or marginally beyond minimal impairment of ecosystem component's function; or
- Large – Effects that are easily observable, measured and described (*i.e.,* readily detectable without a monitoring program), and well beyond guidelines or established thresholds of acceptable change; are well beyond the range of natural variability; or are well beyond minimal impairment of an ecosystem component's functions.

- **Geographic Extent** describes the spatial boundary within which the residual environmental effect is expected to occur. Geographic extent is described as:
  - Small geographic extent – Effects that are confined to a small portion of one or more small areas where direct and indirect effects can occur (*e.g.,* rights-of-way or component sites and adjacent buffer areas);
  - Medium geographic extent – Effects that extend into local surrounding areas where direct and indirect effects can occur; or
  - Large geographic extent – Effects that extend into the wider regional area where indirect or cumulative effects may occur.
- **Duration** describes the temporal boundary or length of time within which the predicted residual environmental effect would last. Duration is described as:
  - Short-term – Effects that generally occur within the construction period or initial period of impoundment or that occur within only one generation or recovery cycle of the VEC;
  - Medium-term – Effects that extend through a transition period during the operation phase or that occur within one or two generations or recovery cycles; or
  - Long-term – Effects that extend for a long-term during the operation phase, or that are permanent, or that extend for two or more generations or recovery cycles.

All VECs are examined using the above four criteria (see Figure 5-1). VECs that have an adverse effect and meet the criteria for Step 2 (see below) are examined further. The effects of the Project on VECs that do not proceed beyond the above Step 1 assessment are determined to be not significant for the purposes of this regulatory assessment.

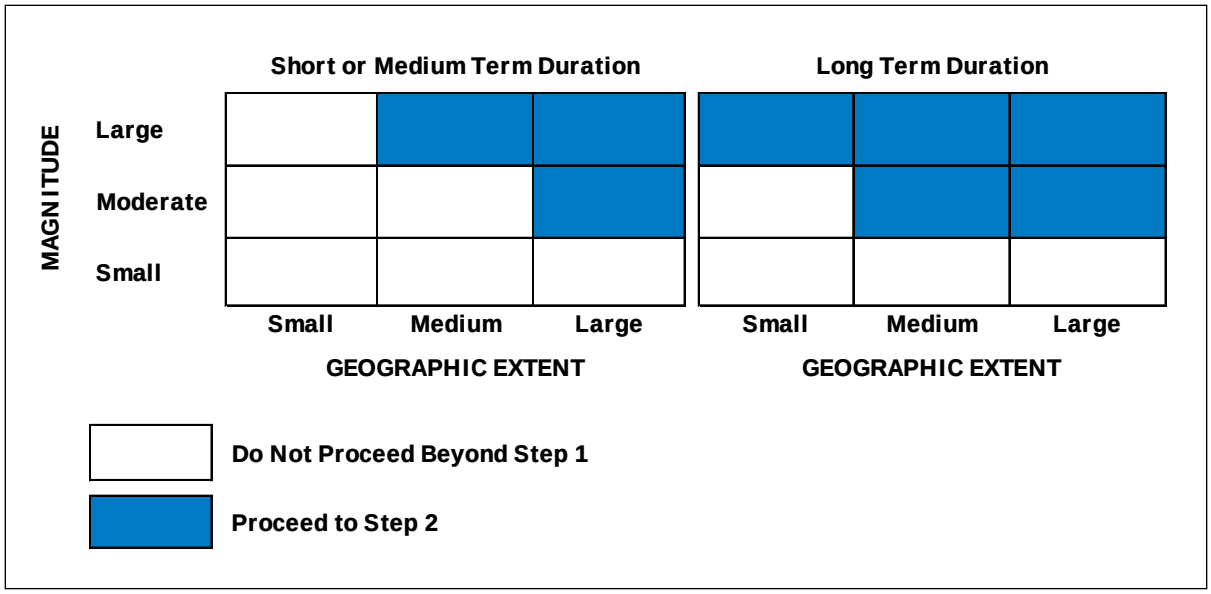

Figure 5-1: Regulatory Significance Step 1 Assessment

STEP 2

VECs that have an adverse effect and meet the following criteria are examined further:

- A species at risk listed as threatened or of special concern under SARA (or is being considered for such listing today based on a COSEWIC recommendation); or
- Small in geographic extent, large in magnitude and long-term in duration; or
- Medium in geographic extent and either large in magnitude (regardless of duration) or moderate in magnitude and long-term in duration; or
- Large in geographic extent and either moderate or large in magnitude (regardless of duration).

In Step 2, additional criteria that may be considered are as follows:

- **Frequency** describes how often the predicted residual environmental effect would occur. Frequency is described as:
  - Infrequent – Effects that occur only once or seldom during the life of the Project (*e.g.,* initial clearing of right of way);
  - Sporadic/Intermittent – Effects that occur only occasionally and without any predictable pattern during the life of the Project (*e.g.,* wildlife – vehicle collisions, bird strikes with transmission lines); or
  - Regular/Continuous – Effects that occur continuously or at regular periodic intervals during the life of the Project.
- **Reversibility** describes the potential for recovery from an adverse effect. Reversibility is described as:
  - Reversible – Effect that is reversible during the life of the Project; or
  - Irreversible – A long-term effect that is permanent.
- **Ecological and Social Context** describes whether the VEC is particularly sensitive to disturbance and has the capacity to adapt to change. This includes where relevant the rarity, uniqueness and fragility of the VEC within the ecosystem (*e.g.,* rare species/habitats, critical habitats, breeding areas). Ecological and Social Context is described as:
  - Low – The VEC is not rare or unique, is resilient to imposed change, or is of minor importance to ecosystem functions or relationship;
  - Moderate – The VEC has some capacity to adapt to imposed change, is moderately/seasonally fragile, or is somewhat important to ecosystem functions or relationship; or
  - High – The VEC is a protected/designated species or fragile with low resilience to imposed change or part of a very fragile ecosystem.

Following Step 2 analysis for a VEC, a determination is provided on whether the adverse effects of the Project on the VEC are significant for the purposes of this regulatory assessment.

For example, if an environmental VEC is known to be highly resilient (*i.e.,* adaptable and recovers well from disturbance), effects that could otherwise be considered significant may, for the purposes of regulatory determination of significance, be determined as insignificant. Conversely, where the loss of even a few individuals may affect the long-term viability of a population, the effect on a VEC may be significant, even where the magnitude and geographic extent are otherwise considered to be in the medium range. For socio-economic VECs, additional factors that may need to be considered include concurrent effects on other

socio-economic VECs affecting the same group of people or others in the same community or region, or the degree to which the affected people have control over mitigation (which may affect "vulnerability" in socio-economic terms), and overall confidence in the assessment after consideration of proposed mitigation measures.

The assessment where relevant also addresses the certainty/uncertainty (*i.e.,* level of confidence) of the analysis/prediction. The Canadian Environmental Assessment Agency's guidance document explains that the level of uncertainty is a condition resulting from the adequacy of scientific information. Some effects are predicable with a high level of certainty while other effects may be unknown until they occur. Sources and degrees of uncertainty for each of the biophysical and socio-economic analyses are identified where relevant and feasible in Chapter 6 (Environmental Effects Assessment). Chapter 6 also notes a number of instances where ATK predicts that the effects will be greater than those predicted by technical science. In cases such as these, monitoring will be undertaken to measure the actual effects of the Project and, if necessary, implement adaptive management measures.

Proposed monitoring and follow-up activities as described in Chapter 8 address, among other matters, management plans to deal with instances where conclusions about whether the Project will cause an effect and/or the extent of such effect differ when based on ATK as compared to technical science. These differences, where known, are reported in the EIS and considered to reflect uncertainty that will require resolution in the monitoring and follow-up in Chapter 8.

In the event that significant adverse effects are predicted for residual effects on VECs, the likelihood is discussed in terms of both the probability of occurrence of the significant adverse effect and the degree of uncertainty. Based on this, a conclusion is made as to whether a significant adverse environmental effect is likely.

Cumulative effects assessment is addressed in Section 5.4 above and in Chapter 7. The significance determinations in Chapter 6 for adverse environmental effects in the context of effects from other past and current projects are reviewed where relevant in Chapter 7 for cumulative effects related to reasonably foreseeable future projects.

If it is determined that the Project will likely cause a significant residual adverse effect on a VEC(s) that is a renewable resource, the EIS further considers the capacity of the VEC(s) to meet the needs of the present and those of the future.