



A FRAMEWORK FOR DETERMINING THE SIGNIFICANCE OF ADVERSE EFFECTS OF PROJECTS ASSESSED UNDER YESAA

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PREFACE

This Information Bulletin (Bulletin) describes the framework for determining the significance of adverse effects of [projects](#) under the *Yukon Environmental and Socio-economic Assessment Act* or YESAA (significance determination framework) utilized by the Yukon [Environmental and Socio-economic Assessment Board \(YESAB\)](#) for Designated Office evaluations, Executive Committee screenings and Panel of the Board reviews.¹ For the purposes of this Bulletin the designated offices, the Executive Committee and Panels of the Board will be collectively referred to as YESAB.

The intent of this Bulletin is to provide an overview of how YESAB determines significance in [assessments](#) under the [Yukon Environmental & Socio-economic Assessment Act \(YESAA\)](#). It is not a comprehensive technical guide. The intended audience is anyone who is interested and/or involved in the YESAA process.

The significance determination framework is a fundamental step within YESAB's broader assessment methodology. For more information on YESAB's assessment methodology, refer to the [Assessment Methodology Information Bulletin](#). See [Appendix 1](#) for explanations of terms used in the Bulletin.

Disclaimer: This Bulletin is not intended to provide legal advice or direction. It is for information purposes only, and should not be used as a substitute for the Act or its associated regulations and rules. In the event of a discrepancy, the Act, regulations, and rules prevail. YESAB retains the discretion to deviate from the procedures described in this Bulletin where appropriate.

¹ Although YESAB utilizes one Significance Determination Framework, the scale and complexity will differ between Designated Offices evaluations, the Executive Committee screenings and Panel of the Board's reviews.

INTRODUCTION

Determining the significance of the effects associated with proposed projects is a central tenet in environmental and socio-economic assessment the world over. It is also one of the most challenging aspects of assessment. Practitioners, experts and participants in the assessment process have struggled with the concept of significance dating back to the origins of assessment. Significance is a relative term implying reasoned judgement. It is not formulaic, and there are few definitive frameworks for determining significance.

In conducting an assessment, YESAA asks both proponents and assessors to [consider](#) the significance of any environmental or socio-economic effects of a proposed project. It further directs assessors to [determine](#) the significance of any adverse effects in making a

recommendation about the proposed project to decision bodies.

In determining the significance of likely, adverse [project effects](#), YESAB employs a [composite approach](#) combining:

1. technical factors or [effects characterization criteria \(ECCs\)](#), commonly used in assessment practice; and
2. [contextual factors](#) describing the environmental and socio-economic setting or [context](#) for a proposed project.

This composite approach defines YESAB's framework for determining the significance of adverse effects of proposed projects.

YESAB'S USE OF EFFECTS CHARACTERIZATION CRITERIA

YESAB relies on five technical factors to characterize or describe the potential adverse effects of a proposed project. These factors, set out in Table 1 that follows, are referred to as effects characterization criteria (ECCs).

Table 1: YESAB's Effects Characterization Criteria

ECC	Definition and Explanation
Magnitude	<p>Definition: The extent of a change from baseline conditions as a result of a proposed project.</p> <p>Explanation: Depending on the effect, magnitude may be measured with familiar units; for example, in describing habitat loss, the change from baseline conditions may be measured in hectares. For other effects, more abstract measures may be required, such as effects to heritage resources.</p>
Likelihood	<p>Definition: The probability that an adverse effect will occur.</p> <p>Explanation: Some effects may be certain, while others will be unlikely.</p>
Geographic Extent	<p>Definition: The spatial area(s) in which an effect is predicted to be detectable. Explanation: The geographic extent of effects can be local or regional, and in some cases the geographic extent may be outside the project area. For example, some effects may only occur in communities rather than the project location.</p>
Duration, Frequency & Timing	<p>Definition: Duration: The length of time an effect is predicted to last. Explanation: Certain effects may persist beyond the life of the project.</p> <p>Definition: Frequency: How often an effect is predicted to occur. Explanation: Certain effects occur more frequently than others.</p> <p>Definition: Timing: When an effect is predicted to occur. Explanation: Certain effects depend on the timing in which they occur (e.g. time of year).</p>
Reversibility	<p>Definition: The degree to which a valued environmental or socio-economic component can be returned to baseline conditions or other established reference point after proposed activities have ceased.</p> <p>Explanation: Effects can be reversible or permanent. Reversible effects may have lower impacts than irreversible or permanent effects.</p>

Not all the ECCs are relevant to all effects; a specific effect's characterization and corresponding significance determination may rely on a subset of these criteria.

Example 1:

Using ECCs to describe likely adverse project effects to caribou and caribou habitat.

Common ECCs used when characterizing effects to caribou in respect to habitat loss as a result of a proposed project may include:

Magnitude: The proposed project occurs in an area of low habitat suitability. The change from baseline conditions as a result of the proposed project are negligible.

Geographic Extent: The proposed project footprint is relatively small (7 hectares). The spatial area(s) in which the project effects are predicted to be detectable is small.

Reversibility: Removing vegetation is limited to valley bottoms and will limit effects to lichen (an important food source for caribou), leading to an effect reversible in the short-term.

Describing or characterizing a likely adverse project effect using ECCs helps an assessor understand whether an effect will be important, but to determine its significance, the context in which the effect will occur must also be taken into account.



YESAB'S CONSIDERATION OF CONTEXT

Context is particularly important under YESAA, given the origins of the legislation in the Umbrella Final Agreement and its relationship to First Nation final agreements. Under YESAA, six assessment districts have been established across the Yukon. YESAB is required to maintain a designated office in each assessment district. In large measure, this decentralized structure is intended to account for the local context in assessing proposed projects.

A project's context has an important bearing on determining the significance of likely adverse effects. YESAB defines context as the particular environmental and/or socio-economic setting within which the project occurs. Considering a project's context enables an assessor to situate the predicted effect(s) (as described using ECCs) within the project's broader setting (see example 2). In other words, examining a project's context highlights why a predicted effect matters.

The following contextual factors are often used in determining the significance of likely adverse project effects:

- applicable legislation;
- standards, plans and policies;
- asserted and established Aboriginal and treaty rights;
- the [cumulative effects](#) of other past, present, and likely future projects or activities;
- ecological or social limits and thresholds;
- vulnerability and resiliency of social and/or ecological systems and components; and
- political and cultural setting.

* This list of contextual factors is not exhaustive. Depending on the nature of the project, YESAB may reference other contextual factor(s) within the assessment.

Example 2:

Contextual Factor: the cumulative effects on a caribou herd.

The condition of a caribou herd at the time of assessment will reflect the cumulative effects of all processes and activities affecting it. In some cases, the condition of a caribou herd will have surpassed or be nearing a significance threshold. In this example, if the caribou herd's habitat is already impacted by several other processes and activities, the herd may be less able to withstand the effects of the new proposed project providing YESAB with important context for determining the significance of likely adverse effects from the proposed project.

In 2018 and 2019, YESAB developed guidance regarding the consideration of Aboriginal and final agreement rights and the consideration of cumulative effects in YESAB assessments. Amongst other things, Aboriginal and final agreement rights and cumulative effects provide context relevant to determining the significance of likely adverse effects of the project on identified [Valued Environmental and Socio-economic Component \(VESECs\)](#). (See [Consideration of Aboriginal and Final Agreement Rights in YESAB Assessments Information Bulletin \(2018\)](#); and [Consideration of Cumulative Effects in YESAB Assessments Information Bulletin \(2020\)](#).)

YESAB'S SIGNIFICANCE DETERMINATION FRAMEWORK

Describing and measuring likely adverse effects alongside a consideration of the context in which those effects would occur defines YESAB's approach to determining significance. Building on examples 1 and 2, Example 3 illustrates how these two elements of a composite approach combine to support a finding of significance.

Example 3:

Potential significance determination framework for project proposal.

The ECCs utilized to document the likely adverse effects of the proposed project may indicate that the project would not have significant adverse effects on caribou and their habitat; however, when those effects are examined in the context of cumulative effects, the assessor may conclude that the caribou herd has surpassed a significance threshold and any additional effects to the herd's habitat would be significant and adverse.

If YESAB determines that a project will or is likely to have significant adverse effects, YESAB will include in its recommendation terms and conditions or measures to mitigate those effects. There may also be circumstances where YESAB determines that likely significant adverse effects cannot be mitigated and recommends that the proposed project not proceed.

SUMMARY

Determining the significance of adverse environmental and socio-economic effects is a fundamental step for all YESAB project assessments.

There are two main phases to YESAB's significance determination framework:

1. YESAB conducts a technical analysis of likely adverse effects using effects characterization criteria (ECCs).
2. YESAB integrates context by using contextual factors.

A project's context has an important bearing on determining the significance of likely adverse effects. Considering context enables YESAB assessors to situate the predicted effect(s) (through utilizing ECCs) of a proposed project within the particular environmental and/or socio-economic setting within which the project occurs.

For more information regarding YESAB's Significance Determination Framework, please contact YESAB or visit www.yesab.ca.

APPENDIX 1. EXPLANATION OF TERMS

This appendix provides explanation of key terms used in this Bulletin.

Assessment - An evaluation of a proposed project by a Designated Office, a screening by the Executive Committee or a review by a Panel of the Board.

Baseline Condition - A reference point to analyze the predicted change in condition of a Valued Environmental and Socio-economic Component (VESEC) as a result of the proposed project activities and associated effects.

Composite Approach - Significance determination process combining technical factors or effects characterization criteria (ECCs), commonly used in assessment practice and contextual factors describing the environmental and socio-economic setting or context for a proposed project.

Consider (as in “consider a factor”) - Means take into account, but does not require a resolution or a determination of this specific factor.

Context - The particular environmental and/or socio-economic setting within which the project occurs.

Contextual Factors - The specific context-based considerations that help situate a likely project effect.

Cumulative Effects - Changes to a Valued Environmental and Socio-economic Component (VESEC) caused by an activity (related to a project being assessed) in combination with other past, present, and likely future projects or activities.

Determine - As in “determine if there are significant adverse effects” — make a finding, decide or resolve.

Duration - The length of time an effect is predicted to last.

Effects Characterization Criteria (ECC) - Criteria used to document and describe likely adverse project effects.

Frequency - How often an effect is predicted to occur.

Geographic Extent - The spatial area(s) in which an effect is predicted to be detectable.

Likelihood - The probability that an adverse effect will occur.

Magnitude - The extent of a change from baseline conditions as a result of a proposed project.

Mitigation(s) - Measures for the elimination, reduction or control of adverse environmental or socio-economic effects.

Project - An activity or interrelated group of activities, for which one of the activities requires an assessment under the Yukon Environmental and Socio-economic Assessment Act (YESAA).

Project Effect(s) - A change in the condition of a value or valued environmental and socio-economic component caused either directly or indirectly by a project.

Reversibility - The degree to which a valued environmental or socio-economic component can be returned to baseline conditions or other reference point after proposed activities have ceased.

Terms and Conditions - Mitigations proposed by YESAB to eliminate, reduce or control likely significant adverse environmental and/or socio-economic effects resulting from the project.

Timing - When an effect is predicted to occur.

Valued Environmental and Socio-economic Components (VESECs) - Components of the physical and socio-economic environment that are viewed as important in the setting of a given project (i.e. for environmental, scientific, social, traditional, or cultural reasons), and are predicted to be adversely affected by the proposed project and warrant consideration in an assessment.

Yukon Environmental and Socio-economic Assessment Act (YESAA) - Chapter 12 of the Yukon First Nations Final Agreements called for the establishment by federal legislation of an assessment process that would apply to all lands within Yukon: federal, territorial, First Nation and private. *The Yukon Environmental and Socio-economic Assessment Act* (YESAA) was given Parliamentary Royal Assent on May 13, 2003. The federal legislation outlines the assessment process for Yukon.

Yukon Environmental and Socio-economic Assessment Board (YESAB) - YESAB is an independent arms-length body, responsible for the assessment responsibilities of the Yukon Environmental and Socio-economic Assessment Act (YESAA) legislation and regulations.