

# YESAB

Yukon Environmental and  
Socio-economic Assessment Board

July 18, 2017

## OPEN FOR COMMENT - Draft Interpretive Bulletin YESAB's Assessment Methodology

The Yukon Environmental and Socio-economic Assessment Board (YESAB) is pleased to share a draft Interpretive Bulletin which describes YESAB's environmental and socio-economic assessment methodology. The intent of this Interpretive Bulletin is to facilitate an understanding of the methodology used by YESAB to conduct environmental and socio-economic assessments.

Prior to finalizing this Interpretive Bulletin YESAB would like to take any comments you have into consideration.

Please submit your written comments to Katherine MacKellar, Executive Assistant at [katherine.mackellar@yesab.ca](mailto:katherine.mackellar@yesab.ca) by September 18, 2017.

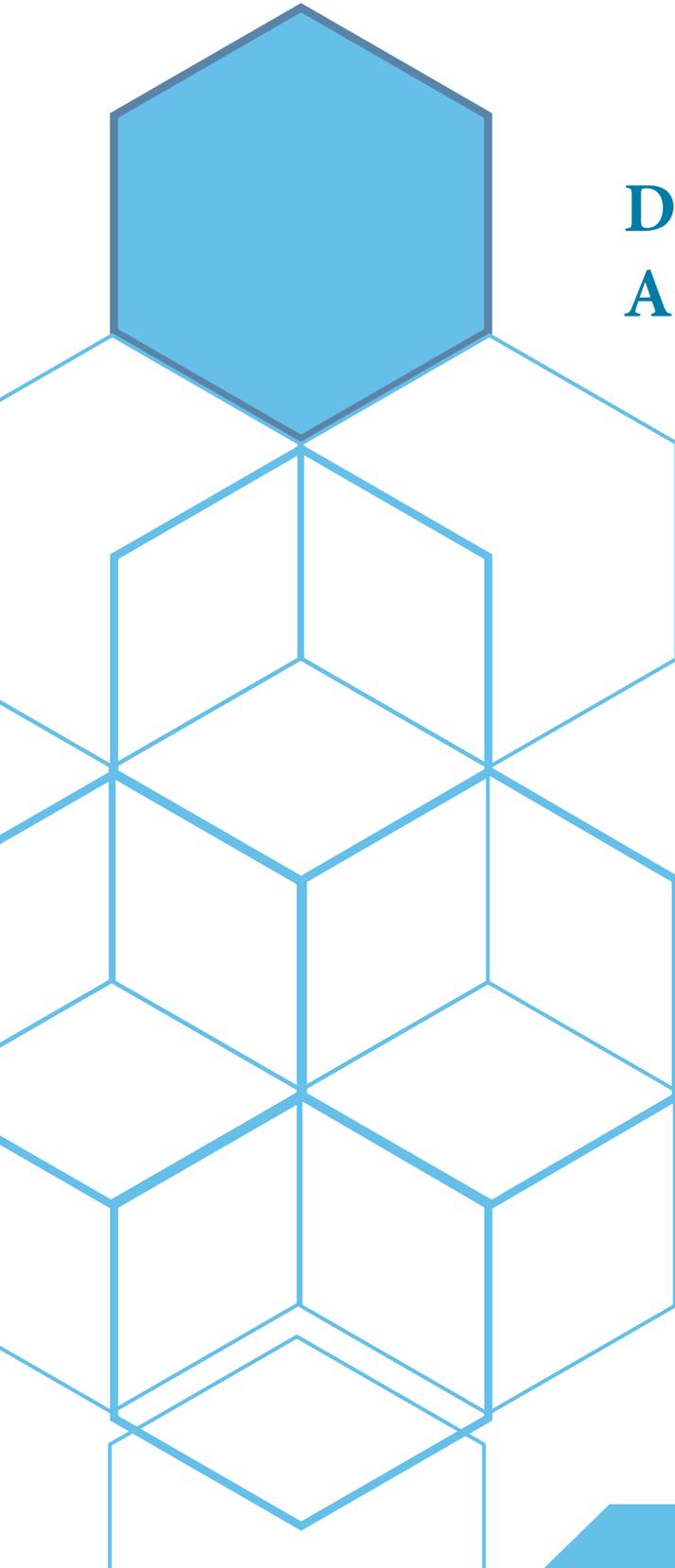
Thank you for considering this request for your comments.

Sincerely,



Wendy Randall

Chair and Executive Committee Member



**Draft**  
**Assessment Methodology**

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## **Preface**

This Interpretive Bulletin describes the Designated Office, the Executive Committee and Panel of the Board's assessment methodology. For the purposes of this Interpretive Bulletin the Designated Office, the Executive Committee and Panel of the Board will be collectively referred to as the Yukon Environmental and Socio-economic Assessment Board (YESAB). The intent of this Interpretive Bulletin is to facilitate an understanding of the methodology used by YESAB to conduct environmental and socio-economic assessments (assessments).

YESAB has certain requirements under the *Yukon Environmental and Socio-economic Assessment Act* (YESAA) relating to how it conducts assessments. For more information about the assessment process and YESAA please visit [www.yesab.ca](http://www.yesab.ca).

YESAB's assessment methodology can be described by the following general steps:

1. Determine Scope of Project
2. Determine Valued Environmental and Socio-Economic Components (VESECs) and Environmental and Socio-Economic Conditions
  - 2.1 Identify and Select VESECs
  - 2.2 Consider Spatial and Temporal Boundaries of VESECs with Respect to Project Activities
  - 2.3 Consider Environmental and Socioeconomic Conditions for VESECs
3. Consider Potential Project Effects
  - 3.1 Identify and Characterize Potential Project Effects
  - 3.2 Determine Significance of Project Effects
  - 3.3 Consider Mitigations
  - 3.4 Characterize Residual Project Effects
4. Consider Potential Cumulative Effects
  - 4.1 Identify and Characterize Potential Cumulative Effects
  - 4.2 Determine Significance of Cumulative Effects
  - 4.3 Consider Mitigations
5. Make a Recommendation to Decision Body(s)
6. Designated Office Refers a Project to Executive Committee for Screening
7. Executive Committee Requires a Review of a Project by a Panel or the Board

See Appendix 1 for assessment methodology infographic.

See Appendix 2 for an explanation of key terms. The explanations included apply to this version of the Interpretive Bulletin and are subject to change.

## **Disclaimer**

This Interpretive Bulletin is not intended to provide legal advice or direction. The Interpretive Bulletin provides information only, and should not be used as a substitute for YESAA or its associated Regulations and Rules. In the event of a discrepancy, YESAA, the Regulations, and Rules prevail. Portions of YESAA have been paraphrased in the Interpretive Bulletin, and should not be relied upon for legal purposes. The procedures described in this Interpretive Bulletin may be deviated from, based on specific project circumstances. YESAB disclaims liability in respect of anything done in reliance, in whole or in part, on the contents of this Interpretive Bulletin.

## **1. Determine Scope of Project**

Project scoping is a key step that determines the parameters of the assessment. In order to scope a project, YESAB examines the specific activities and design associated with a proposed project. YESAB also considers all phases of the project, the timeline of the project and the location of the project.

Determining the scope of the project helps YESAB focus the assessment on the relevant effects associated with the project. Furthermore, project scoping will help YESAB determine the selection of valued environmental and socio-economic components (VESEC's), which is described in section 2.

## **2. Determine Valued Environmental and Socio-Economic Components (VESECs) and Environmental and Socio-Economic Conditions**

### **2.1 Identify and Select VESECs**

VESECs are the components of the physical and socio-economic environment that are valued for various reasons (e.g. environmental, scientific, social, traditional, or cultural reasons) and may require evaluation within an assessment. YESAB identifies VESECs through professional judgement as well as discussions and comments received from government(s) and agencies, First Nations, communities, stakeholders, and other interested parties. YESAB will select and include a list of key VESECs that will be affected by the project. Some examples of VESECs that are affected by project activities in Yukon include: Wildlife and Wildlife Habitat, Heritage Resources and Aquatic Resources.

Identifying and selecting project specific VESECs are essential for focusing assessments, and for determining the significance of project effects which is described below in section 3.1.

### **2.2 Consider Spatial and Temporal Boundaries of VESECs with Respect to Project Activities**

YESAB considers the relevant spatial and temporal boundaries when assessing the potential effects of the project for each selected VESEC.

Spatial boundaries are delineated to encompass the physical and socio-economic environment that could reasonably be expected to be directly or indirectly affected by the project. Spatial boundaries will account for the scale and spatial extent of potential project effects.

Temporal boundaries are set to define the time frame over which predicted project effects may occur. Temporal boundaries will account for all phases of the project as well as the duration of predicted potential project effects.

Spatial and temporal boundaries identified and used in an assessment vary depending on the VESEC as well as project activities and design, which may interact with each VESEC differently.

### **2.3 Consider Environmental and Socio-economic Conditions for VESECs**

YESAB will consider environmental and socio-economic conditions (also referred to as baseline conditions) for each VESEC selected. Environmental and socio-economic conditions are both the present and probable future setting and state of the environmental, and socio-economic surroundings in the absence of the project occurring. An understanding of the environmental and socio-economic conditions enables YESAB to predict effects of the project activities on select VESECs as well as effects of the environment (e.g. if the project is proposed along a flood plain) on the project.

## **3. Consider Potential Project Effects**

### **3.1 Identify and Characterize Potential Project Effects**

Once the project is described and the likely changes to environmental and socio-economic conditions understood, YESAB will identify and characterize potential project effects for each VESEC that will be affected by the project. Potential project effects will be measured in terms of changes to the environmental and socio-economic conditions as a result of the project.

During an effects characterization, YESAB will consider the interaction between project activities and VESECs that might be affected. YESAB will describe project effects on selected VESECs using commonly accepted criteria such as: magnitude, probability, geographic extent, duration & frequency, reversibility and context (See appendix 2 for explanation of terms).

Each selected VESEC may have multiple project effects characterizations. Furthermore, the effects characterization can include both positive and negative environmental and socio-economic effects. Once an effects characterization for each selected VESEC is completed, YESAB will determine the significance of any adverse environmental or socio-economic effects of the project which is described in more detail below in section 3.2.

### **3.2 Determine Significance of Project Effects**

YESAB will determine the significance of any adverse environmental or socio-economic effects of the project, including the effects of accidents or malfunctions that may occur during the life of the project.

Taking into account the project activities and design, the project effects characterization and the context, YESAB will make a determination of significance for all adverse project effects identified within each VESEC.

### **3.3 Consider Mitigations**

If YESAB determines that the project is likely to have significant adverse effects to a select VESEC then YESAB will suggest appropriate mitigations to eliminate, reduce or control those significant adverse environmental and/or socio-economic effects. Mitigations may include measures to compensate and alternatives to the proposed project that would avoid or minimize likely significant adverse environmental or socio-economic effects of the project. There may be circumstances where YESAB determines that likely significant adverse effects to a select VESEC cannot be mitigated.

### **3.4 Characterize Residual Project Effects**

Residual effects are project effects that will likely remain after all suggested mitigations have been implemented. YESAB will describe any anticipated residual effects of the project for each VESEC.

## **4. Consider Potential Cumulative Effects**

A cumulative effect occurs when a residual effect from the project (under assessment) overlaps (spatially and temporally) and combines with the residual effects of other projects or activities.

### **4.1 Identify and Characterize Potential Cumulative Effects**

For each VESEC selected, YESAB will identify and describe any anticipated residual project effects (outlined above in section 3.4) in relation to residual effects of other projects or any activities that have been carried out, are being carried out, or are likely to be carried out. If YESAB determines that there are no residual effects from the proposed project on a selected VESEC then YESAB will not conduct a cumulative effects assessment for that particular VESEC.

YESAB will describe residual effects from other projects or any activities that have been carried out, are being carried out, or are likely to be carried out where there is likely to be a spatial and temporal overlap with residual effects of the project being assessed. Once residual effects from other projects and activities are identified and described, YESAB will characterize potential cumulative effects for each VESEC that may be adversely affected by the project and other projects or activities.

YESAB will describe the combined residual effects on selected VESECs using commonly accepted criteria such as: magnitude, probability, geographic extent, duration & frequency, reversibility and context.

### **4.2 Determine Significance of Cumulative Effects**

YESAB will determine the significance of any adverse cumulative environmental or socio-economic effects that have occurred or might occur in connection with the project.

Taking into account the residual effects of the project in combination with the effects of other projects or any activities that have been carried out, are being carried out or are likely to be carried out and the context, YESAB will make a determination of significance for all potential adverse cumulative effects.

#### **4.3 Consider Mitigations**

If YESAB determines the project is likely to have significant adverse cumulative effects to a select VESEC then YESAB will suggest mitigations to eliminate, reduce, or control those significant adverse environmental or socio-economic cumulative effects. Mitigations may include measures to compensate and alternatives to the proposed project that would avoid or minimize any likely significant adverse environmental or socio-economic effects. There may be circumstances where YESAB determines that likely significant cumulative adverse effects cannot be mitigated.

#### **5 Make a Recommendation to Decision Body(s)**

When an assessment is complete YESAB may recommend that the project proceed, proceed with terms and conditions, or not proceed, or it may refer the project to the Executive Committee for a screening (in the case of a Designated Office evaluation) or to a panel (in the case of an Executive Committee screening). Terms and conditions include suggested mitigations that YESAB has determined will eliminate, reduce or control potential significant adverse environmental and/or socio-economic effects resulting from the project.

YESAB makes its recommendations to relevant Decision Body(s) which can be federal, territorial and/or First Nation governments. There can be multiple decision bodies for a project, depending on the location of the project and authorizations required. Decision Body(s) decide whether to accept, reject, or vary YESAB's recommendation and will issue their decision in a Decision Document.

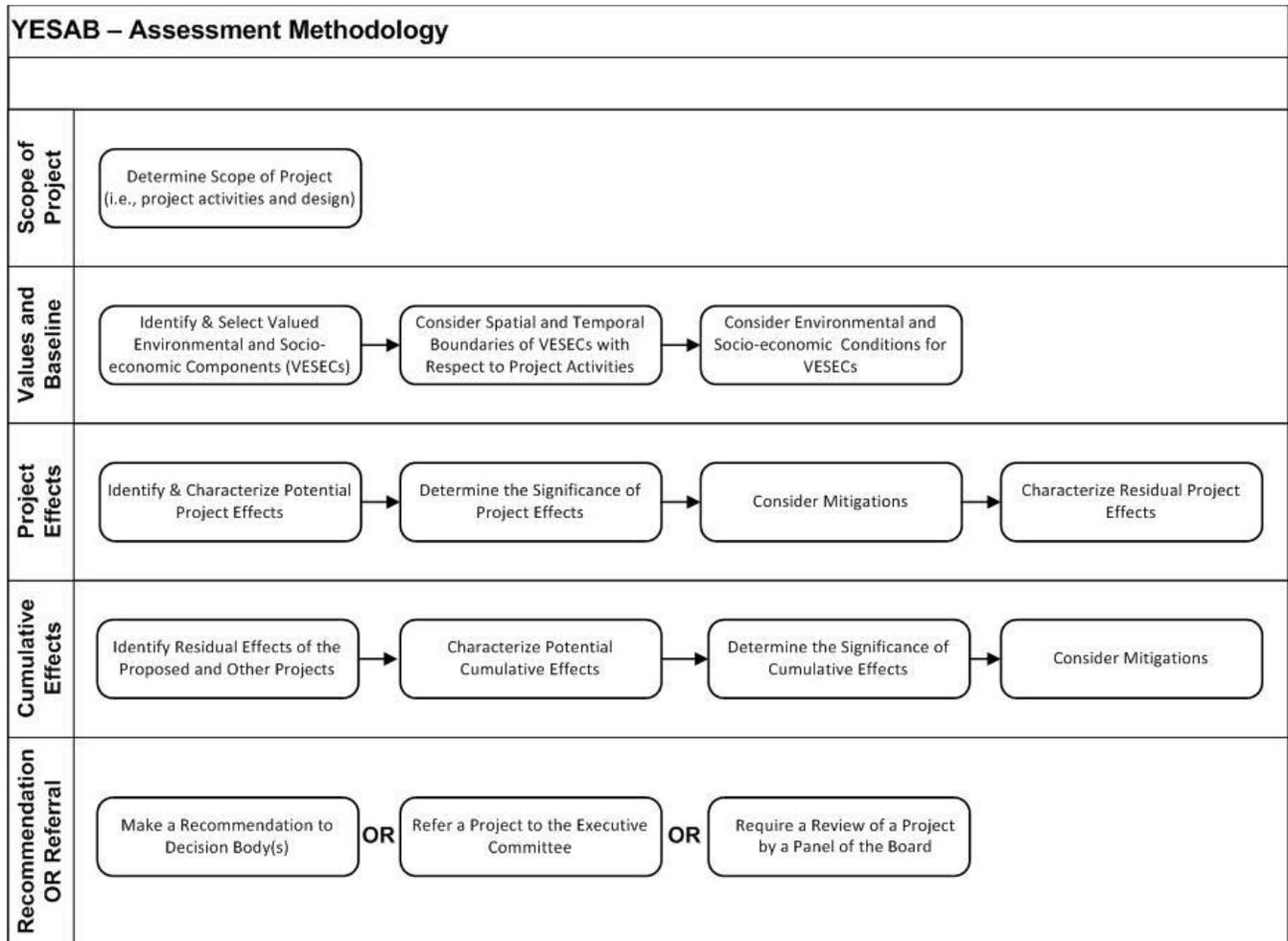
#### **6 Designated Office Refers a Project to Executive Committee for Screening**

If a designated office cannot determine whether a project will have, or is likely to have, significant adverse effects, the designated office will refer the project to the Executive Committee for a screening.

#### **7 Executive Committee Requires a Review of a Project by a Panel or the Board**

If the Executive Committee cannot determine whether a project will have, or is likely to have, significant adverse effects, it will require a review of the project by a Panel of the Board.

# Appendix 1. Assessment Methodology Infographic



## Appendix 2. Explanation of Terms

**Context** - The particular environmental and/or socio-economic context within which the project occurs, including: applicable legislation; standards, plans and policies; ecological or social limits and thresholds; vulnerability and resiliency of social and/or ecological systems and components; political and cultural context; and aboriginal and treaty rights.

**Cumulative effects** – Occur when a residual effect from a project interacts (spatially and temporally) with residual effects of other projects or activities to create an effect greater than the residual effect of the project (under assessment) in isolation.

**Duration & Frequency** - The length of time the effect lasts and how often the effect occurs. The duration of an effect can be short term or long term. The frequency of an effect can be frequent or infrequent.

**Geographic Extent** - The geographic extent of project effects (e.g. the distance from the project and/or the area in which effects are detectable). The geographic extent of effects can be local or regional.

**Magnitude** - The intensity of an effect or extent of change, where "effect" is defined as the change from environmental and socio-economic conditions (also referred to as baseline conditions) resulting from an activity.

**Probability** - The likelihood that an adverse effect will occur.

**Project Effect** - A change to the environmental and socio-economic conditions as a result of the project.

**Residual Effects** – Project effects that will likely remain after all suggested mitigations have been implemented.

**Reversibility** - The degree to which the effect is reversible. Effects can be reversible or permanent. Reversible effects may have lower impacts than irreversible or permanent effects.

**Valued Environmental and Socio-economic Components (VESECs)** – Components of the physical and socio-economic environment that are valued for various reasons (e.g. environmental, scientific, social, traditional, or cultural reasons) and may require evaluation within an assessment.