

Results at a Glance

Evaluation of the Ecological Integrity Monitoring Program



Objective and Scope

Consistent with the requirements of the Treasury Board Policy on Results (2016) and associated Directive on Results and Standards on Evaluation, this evaluation examines the relevance, coherence, effectiveness and efficiency, guided by the following questions:

Relevance

To what extent is the program aligned with Government of Canada and Parks Canada priorities that address a societal/environmental need?

How relevant are the chosen ecological indicators and measures?

Coherence

How consistent is the program with relevant international norms and standards on ecological integrity?

Effectiveness

To what extent is the program achieving its direct and intermediate outcomes?

Efficiency

To what extent does the current model for the delivery of the program result in the efficient delivery of activities?

The scope of the evaluation included the period between 2015-16 and 2019-20 and included ecological integrity (EI) condition monitoring within national parks¹.

PROGRAM DESCRIPTION

The Ecological Integrity Monitoring (EIM) Program gathers longitudinal ecological integrity (EI) data to help inform decision-making at Parks Canada.

The Ecological Monitoring Division leads the efforts within the Protected Areas Establishment and Conservation Directorate in providing functional direction for Parks Canada's EIM Program.

Field unit superintendents are responsible for establishing and maintaining the EI data framework, which includes: EI measures, EI indicators and EI condition ratings for each park within the field unit. Field unit staff, led by resource conservation managers, conduct on-the-ground data collection.

Key Findings

Relevance

The document review and survey data indicated the need for further guidance for field units on collecting EI data related to two Government of Canada priorities: Indigenous ways of Knowing and climate change.

Ecological integrity indicators were generally seen as representative of park ecosystems. Evidence analysed pointed to opportunities for continuous improvement on the data framework, including EI measures and EI condition ratings.

Coherence

The 2011 Ecological Integrity Monitoring (EIM) Guidelines are consistent with, and have helped to shape, international literature on EI. EIM data informs national biodiversity targets and helps illustrate Canada's contributions to the global framework and targets on conserving biodiversity.

Effectiveness – Direct Outcomes

A document review indicated that EIM information is provided for publicly available reports that reflect government priorities. EIM information has been shared openly with the public online in the Open Government Portal and State of the Park Reports. 2015-16 and 2019-20 and included ecological integrity condition monitoring within national parks.

Effectiveness – Intermediate Outcomes

EIM data has contributed to key documents used for decision-making at Parks Canada (i.e., Park Management Plans). Data also aids field units in accessing short-term funding envelopes (i.e., Conservation and Restoration Program funding).

Evidence analysed pointed to a new area of development for the program: ensuring Indigenous ways of Knowing and Western knowledge are considered equally in informing the health of ecosystems.

The survey and interview analysis indicated that there have been efforts to incorporate landscape-scale monitoring into the EIM program. In order to facilitate landscape-scale monitoring, collaboration with stakeholders has occurred; and an opportunity exists for the program to coordinate the definition, development and maintenance of these collaborations.

Efficiency

Technology (i.e., remote sensing, remote cameras) has enabled some parks to expand the geographic area from which data is collected, as well as allowing for more precise measurements in some cases.

There were resource constraints noted with respect to northern and smaller parks.

¹Effectiveness monitoring in national parks, ecosystem monitoring activities in national marine conservation areas and ecosystem monitoring activities in the national urban park were excluded from the scope of this evaluation.



Results at a Glance (1/2)

Evaluation of the Ecological Integrity Monitoring Program



Recommendations	Management Responses
<p>1. Program Guidance</p> <p>The Vice-President, Protected Areas Establishment and Conservation, should coordinate with the Senior Vice-President, Operations, on an approach to integrate Parks Canada priorities into Ecological Integrity Monitoring Program guidance, with particular attention given to:</p> <ul style="list-style-type: none">• Whether/how the continuing changes in ecosystems as a result of climate change should be addressed within ecological integrity measures, thresholds, and/or indicators; and• The role that external stakeholder engagement should play in the Ecological Integrity Monitoring Program and the structure of this engagement as it relates to landscape-scale conservation/connectivity.	<p>Agreed. Protected Areas Establishment and Conservation Directorate will work with Operations on an approach to further integrate new Parks Canada priorities into ecological integrity monitoring guidance.</p> <p>1.1 Co-develop an approach determining whether and how climate change should be addressed in the Ecological Integrity Monitoring Program: March 2024</p> <p>1.2 Co-develop an approach determining the role of external stakeholders as it relates to landscape-scale conservation in the Ecological Integrity Monitoring Program: September 2024</p> <p>1.3 Review, revise and integrate new guidance in the Guidelines of Ecological Integrity Monitoring: March 2025</p>
<p>2. Indigenous Ways of Knowing</p> <p>The Vice-President, Protected Areas Establishment and Conservation, in collaboration with the Senior Vice-President, Operations, and the Vice-President, Indigenous Affairs and Cultural Heritage, should work with First Nations, Inuit, and Métis to develop an Parks Canada wide approach where both Indigenous ways of Knowing and Western knowledge are considered equally to inform the health of ecosystems.</p>	<p>Agreed. The Protected Areas Establishment and Conservation Directorate will collaborate with Operations and the Indigenous Affairs Branch to work with First Nations, Inuit, and Métis to co-develop approaches where both Indigenous ways of Knowing and Western knowledge are considered equally to inform the monitoring and reporting of the health of ecosystems.</p> <p>2.1 Engage with First Nations, Inuit, and Métis, at both the national and local level: March 2024</p> <p>2.2 Co-develop flexible approaches which consider equally Indigenous ways of Knowing and Western knowledge to inform of the health of ecosystems: March 2025</p> <p>2.3 Implement co-developed approaches into ecological integrity program guidance and policy: September 2025</p>





Recommendations	Management Responses
<p>3. Ecological Integrity Monitoring Data Framework</p> <p>In order to promote the continuous improvement of the Ecological Integrity Monitoring Program, the Vice-President, Protected Areas Establishment and Conservation, should work with the Senior Vice-President, Operations, to examine and provide guidance on the ecological integrity data framework. Particular consideration should be given to:</p> <ul style="list-style-type: none"> • Expanding the use of operational reviews, or developing alternate assessment methods, to examine the relevance of ecological integrity measures and thresholds in monitoring ecological integrity indicators; • Determining whether the number of locations where ecological integrity measurements are collected provides sufficient information to represent the state of an indicator, particularly in large and northern parks; and • Determining whether ecological integrity condition ratings sufficiently reflect the complexity of the ecosystems they are meant to represent, taking into consideration both Western and Indigenous ways of Knowing. 	<p>Agreed. The Protected Areas Establishment and Conservation Directorate will collaborate with Operations to examine and provide guidance for continuous improvement of the ecological integrity monitoring program, in line with available resources.</p> <p>3.1 Review and revise tools to assess relevance of ecological integrity measures and thresholds, and the quality of survey designs: March 2024</p> <p>3.2 Implement revised tools to support improvement of ecological integrity monitoring programs: September 2024</p> <p>3.3 Review and revise ecosystem assessment approaches, and integrate new assessments approaches into the updated Ecological Integrity Monitoring Guidelines: March 2025</p>
<p>4. Program Efficiency</p> <p>In order to promote program efficiency, the Vice-President, Protected Areas Establishment and Conservation, and the Senior Vice-President, Operations, should:</p> <ul style="list-style-type: none"> • Provide field units with centralised guidance on how to use technological tools related to data collection (i.e., remote sensing, remote cameras) while also ensuring that internal resources and expertise are assigned in each field unit to manage the tools; and • Implement a formal mechanism for field units to communicate and collaborate when seen as beneficial. 	<p>Agreed. The Protected Areas Establishment and Conservation Directorate and Operations will continue to work together to promote program efficiency on an ongoing basis, in line with available resources.</p> <p>4.1 Develop and implement a formal collaboration mechanism among field units, to be used when beneficial: March 2024</p> <p>4.2 Develop standardised guidance on the use of technological tools for data collection related to ecological integrity monitoring: March 2025</p> <p>4.3 Ensure that internal resources and expertise in both official languages are assigned in each field unit to manage technological tools, in line with available resources: March 2025</p>