



ADDENDUM TO THE AUGUST 2017 DRAFT SCOPING REPORT

Strategic Environmental Assessment of Potential Threats to the World Heritage Values of Wood Buffalo National Park World Heritage Site

December 2017

Strategic Environmental Assessment of Potential Threats to the World Heritage Values of Wood Buffalo National Park World Heritage Site

Addendum to the August 2017 Draft Scoping Report

1. Purpose of Addendum

This addendum prepared by Independent Environmental Consultants (IEC) presents a summary of the comments Parks Canada received in September 2017 on the Draft Scoping Report for the Strategic Environmental Assessment (SEA) of potential threats to the world heritage values of Wood Buffalo National Park (WBNP) World Heritage Site. The addendum also presents how these comments have refined both the approach to, and content of, the SEA. It was determined that an addendum document would be a more effective and efficient response to the comments than a revised Scoping Report. The addendum is also an opportunity to identify the other mechanisms available to address some of the comments that have been raised.

This addendum presents a summary of the comments received on the Draft Scoping Report and outlines how relevant comments have informed the approach of the SEA going forward.

2. Overview of Comments Received

A large number of detailed submissions were received in response to the comment period on the Draft Scoping Report. The submissions offered comments on the scoping document, but also a wide variety of other issues which ultimately may or may not be best addressed within the SEA. Parks Canada and IEC have followed-up with many of the partners and stakeholders through meetings and/or teleconferences to discuss their comments and the scope of the SEA.

Comments were received from a wide spectrum of reviewers including federal government departments and agencies, provincial and territorial governments, Indigenous communities, industry and industrial associations and environmental non-governmental organizations (ENGOS). Based on the submissions received, it is apparent there is a keen interest in the SEA and the issues it is addressing, along with other issues concerning the adequacy of scientific information, governance, consultation and engagement.

It should be noted that some of the comments were contrary to other comments received (for example, there are those who maintain that the causes of change are from human activity and those that maintain that change is occurring naturally), or not within the direct decision-making and control of Parks Canada to address requiring collaboration with other jurisdictions (for example, the adequacy of the federal environmental assessment process, the best approaches forward for Crown-Indigenous relationships, etc.). It should also be noted that through the Action Plan that will follow the completion of the SEA, decision makers and affected parties will continue to work together on addressing potential threats to WBNP's world heritage values.

The comments can be grouped into 5 categories: 1) Data Sources, 2) Indigenous Knowledge (IK), 3) Assessment Approach, 4) Governance Framework, and 5) Consultation.

The following paragraphs provide a general overview of who submitted comments, a summary table of some of the comments received, and a brief description of the nature of the comments by category. Note that the overview is general, and that certain issues could be captured under multiple categories (e.g. comments from Indigenous groups on data sources are included under Indigenous knowledge). Section 4 describes how these comments have influenced the SEA. Tables listing all the comments received, and SEA team’s responses will be appended to the SEA final report. The Appendix will list comments in a manner where specific comments are not attributable to individual reviewers.

1) Data Sources:

Commenting Group	Summary of Comments
Indigenous Communities	Additional literature to be examined and potentially incorporated provided to Parks Canada. (See summary below related to IK)
ENGOs	Ensure that the limitations of the Environmental Impact Statements for individual projects are taken into consideration.
	The temporal boundary should extend much farther into the past than 1950 to capture the natural variability of the system and the system under natural conditions.
	The sources of information and science that the SEA proposes to study should have been provided.
Industry	A robust list of the information sources that will be used in completing the SEA should be provided.
	Industry has identified information sources which are important for consideration in the SEA. A number of peer reviewed studies, monitoring reports, and government documents were suggested.
	Relied too heavily on the Reactive Monitoring Mission report as a data source to the exclusion of other perspectives
	The temporal boundary of 1950 to 2050 excludes a body of scientific research that provides paleo-limnology data for the PAD that covers a much broader timeframe
	Not all literature is in agreement on some matters and this is not mentioned.
Government	Recognize the ongoing Oil Sands Monitoring Program in the Extended Geographic Area that has been focused on the PAD connected waterways and deltaic wetland/lakes
	Information used in Table 1 is unclear.
	Hydrology impacts from upstream development need to include risks from chemical contaminants that may be associated with oil sands developments, pulp and paper, and/or hydroelectric projects
	The temporal boundary should extend much farther into the past than 1950 to capture the natural variability of the system and the system under natural conditions.
	There is more recent and additional scientific information on the air quality impacts of the oil sands industry on the surrounding region available.
	Support for using “several different sources” of information for a weight of evidence approach

As outlined in the table above, comments referenced scientific studies which indicated differing effects of various projects and natural changes to the health of the Peace Athabasca Delta (PAD) and the park’s world heritage values (referred to as Outstanding Universal Value or OUV by the World Heritage

Committee).¹ The world heritage values of WBNP are the international criteria that are critical to the park’s designation as a World Heritage Site. There is some disagreement as to what is causing the changes within WBNP, specifically the PAD, however, there is general agreement on the importance of maintaining and protecting the world heritage values, the ecological integrity of the park, and the ability of the land to support Indigenous ways of life. In addition, given the amount of information available for review there was commentary on the information sources used to develop the Scoping Report. For example, some comments indicated that not enough weight was given to IK while others commented on the lack of focus on published research by certain researchers. Others noted the lack of monitoring data from industry, and others thought too much weight was given to the information presented to the 2016 World Heritage Reactive Monitoring Mission (RMM) and reflected in the March 2017 RMM report.

2) Indigenous Knowledge:

Commenting Group	Summary of Comments
Indigenous Communities	Lack of consideration of IK. Greater coordination and commitment is required to ensure that our IK is appropriately incorporated
	Lack of support and involvement of Indigenous peoples and their community. Indigenous experts should contribute to the SEA.
	Would benefit from additional context relating to Indigenous people.
	Does not provide clarity on how, when and where IK and perspectives will be involved in the assessment approach for the SEA
ENGOS	Support for inclusion of IK in SEA.
	Encouragement to work with Elders to understand PAD maximum height of ice and water based on clues in the landscape
Government	When scoping OUV elements it is unclear how IK has been taken into account
	What’s missing is a discussion on muskrat: their historical importance to local trappers as a source of income, their importance as traditional food, their abundance and historical population levels, and their recent declines due to changes in water quantity and quality
	According to IK, wet meadows are declining and being invaded by invasive thistles in some areas. The condition of the grasslands may be declining.

As noted in the table above, Indigenous communities, ENGOS and government all commented on the need to consider IK. Indigenous communities requested the more comprehensive and explicit use of Indigenous (Traditional) Knowledge (IK) in the SEA. In addition, greater clarity on when and how Indigenous perspectives would be utilized in the SEA was also requested.

¹ The term OUV is utilized by the International Union for the Conservation of Nature (IUCN) and United Nations Educational, Scientific and Cultural Organization (UNESCO) to mean “parts of the cultural and natural heritage are of outstanding interest and therefore need to be preserved as part of the world heritage of mankind as a whole.”

3) Assessment Approach:

Commenting Group	Summary of Comments
Indigenous Communities	We are concerned that the purpose and scope of the SEA may not match the request of the RMM
	Impacts to local wildlife, wood bison and migratory birds, need to be included in the SEA.
	The PAD includes aspects outside of WBNP and includes the watersheds that flow into Lake Claire. This is not reflected in the geographic boundary of the PAD in the Draft Scoping Report.
	Stressors relating to water quality in the SEA are not included. Consult with us before finalizing the new list of stressors
	Additional scenarios should be added to take into account the volatile nature of local development trends and uncertainties inherent in modeling future conditions.
	Please provide a description of, and justification for, the extent that the SEA will assess the Athabasca River and impacts to the river from existing and proposed oil sands operations.
	Please include the Whooping Crane in the scope of the SEA and assess the impacts from existing and proposed oil sands development to the Whooping Crane as they occur along the migratory corridor and in the PAD
	Please assess the need for a formal buffer zone around WBNP, particularly at the southern boundary, and provide recommendations regarding the nature and extent of this buffer.
ENGOs	Should more clearly identify whether current information gaps are responsible for omitting certain stressors and indicators,
	Uncertain closure approach for large impounded oil sands tailings ponds should be identified as a future stressor. There is no proven process yet to reclaim tailings ponds and safely release process-affected water into the Athabasca River.
	Maintain optimal fish populations in the PAD should be added as an important indicator.
	Consider water quality stressors
Industry	Missing from the assessment methods is the description of how the SEA will identify and assess the residual effects of the past, present and future projects which (according to typical methodologies for project-specific EAs) should form the basis of the cumulative effects assessment
	Selection methods for valued components (VCs) do not follow typical EA selection methods. Please clarify.
	How is Table 1 relevant to the assessment? How are these selected values going to be used in the assessment?
	How will the SEA assess climate change? Climate change is discussed mostly related to projects) but it is occurring independently of existing and proposed projects.
	The various weirs (e.g. on the Rochers and Revillon Coupe Rivers) that have been constructed in the PAD with the purpose of altering water flows should be included as projects in the cumulative effects assessment.
	Government
Please ensure that climate is appropriately considered while scoping world heritage value elements. Given the intent of the SEA, it is recommended that elements that are anticipated to be influenced by climate change should be scoped in.	
A large number of migratory birds land on tailings ponds every year with unknown health effects. The SEA should consider migratory bird populations as the element for analysis.	
It is not clear what contaminants will be considered in the SEA. Metals and PACs (PAHs and related compounds) have been flagged by multiple groups as areas of concern. Also acid deposition is not mentioned, but warrants consideration.	
Bison (in particular the Ronald Lake Wood Bison herd) should be considered a separate OUV element for evaluation	
Consider disease as a stressor including disease associated with climate change	

	Consider increased geographic distribution of white-tailed deer associated with road development and oil sands activity as a potential risk factor to wildlife in WBNP
	Suggest that the proposed approach also include strategies, priorities and recommendations for future management and protection of ecosystem integrity.
	Why is the Slave River excluded from this SEA?

As detailed above, a considerable number of comments were received about the assessment approaches and methodology. In general, concerns were raised about time and geographic boundaries proposed for the assessment, the lack of independent oversight, lack of clarity of data sources, how some components of world heritage values were screened out from consideration in the SEA, and the need for a clearer description of how data and information will be used in the SEA. In addition, comments were raised about the scenarios to be used for the cumulative effects assessment, the scope of projects being included and how climate change would be addressed. Many commenters also suggested additional data sources and approaches to be used.

4) Governance Framework:

Commenting Group	Summary of Comments
Indigenous Communities	Support for RMM recommendations
	Suggestion for an oversight body for the SEA
ENGOS	Support for RMM recommendations
	Many publications that the SEA will use were generated within, or were limited by, a regulatory system that has had inadequate monitoring and has not assessed or managed cumulative effects
	Does not adequately reflect the guidance provided by the Cabinet directive that an SEA must include: (a) Follow up. There is a need for measures to monitor the environmental effects of the policy and (b) Public and stakeholder concerns. The SEA must identify concerns among those most likely to be affected by impacts on the world heritage values of WBNP.
	The scoping report does not adequately reflect IUCN's guidance that: (a) "EAs must ensure that impacts on the world heritage values of the site are fully considered in land use planning decisions with the objective of preserving these sites for future generations" (b) "Experts with world heritage, protected area, and biodiversity knowledge should be involved early on"
	We are concerned that the Mackenzie River Basin Trans Boundary Waters Master Agreement does not recognize the waters of the Peace River within WBNP as Federal waters and Alberta becomes the de facto negotiator with BC for a flow regime which will protect the Delta.
	Given the ongoing relationship between buffalo and wolves such depopulation will wreak havoc within the park as wolves turn to other prey or other vulnerable species at risk such as caribou within and outside the park.
	Does not indicate that the SEA will consider the management regime of Parks Canada with respect to the world heritage values of the Park.
	The SEA should identify all projects that will likely have irreversible adverse environmental effects on the world heritage values of the Park.
Industry	The Government of Canada is in the process of amending its regulatory processes (<i>Canadian Environmental Assessment Act</i> , <i>National Energy Board</i> , <i>Navigation Protection Act</i> and <i>Fisheries Act</i>) in part to ensure stakeholders are adequately engaged as early as possible within decision-making processes
	Note that, during its 10-day visit, the RMM spent approximately 8 days with the MCFN and representatives. Meetings with industry representatives were confined to a half day.

	Regional and strategic assessments should be prepared in consultation with the provinces and other land managers.
	Discussion is focused solely on the potential use of the SEA by Parks Canada. The SEA should be driven by and informed by broader interests than just that of a single federal agency.
Government	The matter of a buffer around the WBNP is certainly a concern and some on the west of the Park continually ask for the depopulation of the entire buffalo herd given their infection with brucellosis.
	The SEA should identify all projects that will likely have irreversible adverse environmental effects on the world heritage values of the Park.

The table above notes that some comments questioned the ability of the SEA to provide recommendations and strategies for management and protection of the world heritage values into the future. In addition, some questioned whether the SEA would meet relevant Canadian government guidance for SEA, and International Union for the Conservation of Nature (IUCN) guidance for EA. Others questioned the ability of Parks Canada to comment on and influence resource management decision-making responsibilities which sit with the Provincial governments (for example, water flow regulation on rivers).

5) Consultation:

Commenting Group	Summary of Comments
Indigenous Communities	Lack of involvement of Indigenous communities in SEA
ENGOS	Ensure SEA is presented in a way that it is understandable to lay people
Government	Metis peoples should also be consulted as part of the cumulative effects analysis.

A few commenters observed a lack of early consultation consistent with best practices, nation-to-nation relationships, reconciliation, and ongoing reviews of regulatory frameworks (including legislation related to environmental assessment). Questions were also raised about on-going consultation mechanisms and what will be done with comments. Indigenous communities raised concerns about the lack of appropriate consultation.

3. Mechanisms to Address Comments

Given the breadth and complexities of the comments received, they will be addressed using one of the mechanisms detailed below:

Refinements to the data and approach used for the SEA:

Comments received have influenced the approach taken to completing the SEA and the data used to support it. This is detailed in Section 4 below. As noted above, some of the comments were contrary to others; as such, the SEA report will endeavour to reflect opposing points of view where possible. Not all comments will be addressed in the SEA as some are better responded to by mechanisms beyond the SEA (i.e., addressed directly by government rather than within the SEA by an independent contractor).

Inform the Action Plan being coordinated by Parks Canada:

Many comments will be addressed by the Action Plan for WBNP that Parks Canada is creating for December 1st, 2018, as per the World Heritage Committee request. The Action Plan will constitute a funded and coherent work plan that will be implemented over time to ensure the world heritage values of the WBNP World Heritage Site are maintained for generations to come.

The plan will be informed by the findings of the SEA, and its development will require the involvement of Indigenous communities, other levels of government, industry and ENGOs. To date, Parks Canada has been reaching out to these groups to seek their involvement, and together a more formal working relationship will be developed to complete the Action Plan. Information about the Action Plan will be posted on the Parks Canada website as it becomes available.

Shared with Other Decision-Makers:

Other comments received which relate to the relationship between the Government of Canada and Indigenous Peoples, the adequacy of the existing federal EA process, resource availability for science and consultation, etc. will be shared with the Government of Canada and respective jurisdictional authorities for consideration in existing or new programs and initiatives.

4. Key Influence of Comments on Scope of SEA

The following sections describe how the comments summarized in Section 2 are influencing the preparation of the SEA report.

Data Sources:

Since its creation in 1922 WBNP has been studied extensively by researchers in numerous fields. Additionally, there exists a body of IK created over many generations about the lands and resources in the park. Both sources of knowledge will be used in the SEA. The SEA will present a detailed analysis of the state of the park including how it has changed over time, and the challenges and opportunities that exist for the future. The SEA will be a desktop study of relevant available literature (peer-reviewed papers, non-peer reviewed documents, reports, and presentations), supplemented by emails as well as in-person and phone interviews. The SEA approach is directed by several imperatives, including to:

- Follow the stated goal for the SEA by the World Heritage Committee to determine the cumulative impact of development on the world heritage values of WBNP as a World Heritage Site;
- Incorporate the views of different parties involved;
- Meet the data requirements and information needs for the SEA;
- Where possible provide decision makers with a shared repository of current information to inform and guide their future decision making;
- Do the best job possible given the time constraints for the SEA (with submission of a final report in the spring of 2018); and

- Utilize as much as possible the breadth and depth of knowledge about the park generated over the past 50 plus years.

Extensive review and dialogue within the scoping exercise clarified the focus of the SEA. The analysis of potential threats to world heritage values is focused on the PAD, not to the exclusion of other world heritage values, but because preliminary research and consultation identified the PAD as the most affected component of the world heritage values and the health of the PAD links to most other components of the world heritage values. In the scoping analysis, the values that lie north of the Peace River (i.e., gypsum karst, whooping crane breeding habitat, salt plains) were found to be situated in areas more isolated from industrial development. However, there have been changes noted broadly in WBNP by IK holders, including waterfowl, bison, muskrat, fish and moose population changes (not all of which fall within the scope of the world heritage values). The status of all components of the world heritage values will be assessed in the SEA but in less detail than the analysis of the PAD.

The SEA will focus on the cumulative change observed on important environmental aspects of the PAD. The challenge in assessing cumulative effects in the PAD is that there are numerous influences that interact over time to shift the health and function of an extremely complex ecosystem. Therefore, it can be extremely difficult to attribute changes to specific causes. As a result, the SEA will critically examine a wide range of perspectives and conclusions related to the extent and nature of change in the PAD.

Indigenous Knowledge:

Indigenous peoples have inhabited the area of WBNP and the surrounding regions for thousands of years. The SEA approach acknowledges that the impacts discussed within this report not only affect the world heritage values of the park as a World Heritage Site, but also the ecological integrity of the park and the way of life of Indigenous peoples. Therefore both IK and scientific knowledge will be considered within the SEA. The draft and final SEA reports will be reviewed by Indigenous communities prior to final distribution, all IK will be properly credited, and this research acknowledges the crucial role that Indigenous communities have in this assessment. WBNP is their home and they have been instrumental in the initiation and development of this assessment process. Parks Canada and IEC are working to keep Indigenous communities involved in the assessment, including further trips to WBNP to engage with elders, land users and leadership on the development of the SEA. Ongoing engagement with interested communities will support an iterative approach to developing the SEA and allow community representatives to validate how IK is shared, used and presented in the report.

Assessment Approach:

The SEA is being developed using an approach that respects change and the unknown. As commented upon by several reviewers, the principles of the approach were not made explicit in the Draft Scoping Report. These principles will be clarified in the SEA report and will aid the reader in understanding the overall direction of the SEA. These concepts include:

- a) A commitment to a precautionary approach;

- b) A commitment to integrating IK throughout the SEA; and
- c) A commitment to recommending adaptive management principles in the development of recommendations.

These concepts guide the SEA research approach and provide the foundation for its interpretation.

Based on the comments received, the broadened scope of this SEA has also resulted in an expansion of the assessment approach. Going beyond what was presented in the Draft Scoping Report, methodologies referred to as "pathways of effects" and "systems based modelling" are now being added to demonstrate the relationships between important ecological components within the PAD. Pathways of effects, described as "stories of change" in meetings with land users from the Mikisew Cree First Nation (MCFN), can be used to communicate potential effects of development and climate change. Additionally, systems based diagrams will be used to show the integration of these pathways across time, space and scale by generating a web where all the pathways are connected. These models will help identify opportunities and challenges for future management.

The SEA will include a cumulative effects analysis of different important environmental aspects of the PAD² and scenarios involving a high level strategic analysis of effects to the PAD, including industrial growth projections around WBNP and climate change. A set of recommendations for achieving both short-term and long-term ecosystem health of WBNP will also be generated, including identifying gaps in knowledge and areas for future research and attention. The recommendations will focus on actions that may be considered in the subsequent WBNP Action Plan.

Governance Framework:

This SEA recognizes that changes in the PAD are multi-faceted and all parties, including Federal, provincial and territorial governments, Indigenous communities, industry, ENGOs and researchers have crucial roles to play in ensuring the PAD's sustainability in the future. As Melody Lepine, of the MCFN Government and Industry Relations (GIR) said, "Solutions must be cumulative as well."

This SEA is not a stand-alone process and product, but part of a complex governance structure emerging to support WBNP in maintaining the integrity of the natural features that resulted in its designation as a world heritage site. The SEA results will inform the development of the Action Plan and may provide recommendations regarding research, monitoring, management and governance.

² Cumulative effects analysis includes analysis of factors such as Peace River Flow Effects, PAD Drying and Water Level Effects, Athabasca River Flow and Water Level Effects, Lake Athabasca Water Level Effects, Slave River Flow and Water Level Effects, Weir Effects on River and Lake Levels, Cumulative Effects of Sedimentation in the PAD (sediment transport and quality), Cumulative Effects on Ice Jamming and Flood Events in the PAD considering river regulation, climate change, and timescale, Cumulative Effects on Water Quality in the PAD and Cumulative Impacts on Aboriginal Peoples, Fish, Wildlife, and Vegetation

Consultation:

The world heritage values of WBNP and the methods to measure them have been modified and expanded to reflect the feedback received from Indigenous groups and other parties.

In response to the comments received, the breadth and depth of the SEA has been expanded from that outlined in the Draft Scoping Report. IEC and Parks Canada have committed to greater engagement with Indigenous communities. The intention is to ensure better integration of IK into the report, as well as to increase communication with other parties such as provinces, territories, industry and researchers. This commitment to greater engagement will require several consultant visits to Fort Chipewyan and Fort Smith to learn about ecosystem change from IK holders. Additionally, email and phone engagement with other groups has been expanded to generate a final SEA report that is iterative, balanced and reflective of all sources of knowledge.

5. Concluding Statement

Parks Canada and IEC would like to thank all stakeholders and Indigenous representatives who provided comments on the Draft Scoping Report and shared their perspective on the SEA project. All of the comments received have been reviewed and considered and will continue to inform the SEA as it progresses.

A draft of the SEA will be made available for review and comment in February 2018. Discussions will continue with interested parties, and particularly with Indigenous communities. A list of next steps and anticipated dates is provided below:

Month	SEA Phase/Objective	SEA Tasks – IEC and PCA	Engagement Activities
November	Respond to Scoping Report	Refinement of SEA approach Balancing and incorporation of feedback	Follow-up calls and meetings where needed
	SEA writing and integration with Action Plan	Prepare addendum describing how input received is being used	Follow-up with Indigenous communities regarding interest and capacity
December	SEA writing	IEC commence writing of SEA report Complete and share Addendum	Publish 2 nd newsletter and website update
January	Draft SEA report	Verify approach for inclusion of Indigenous Knowledge Continue writing of SEA report chapters	Meetings in WBNP
February	Comment Period on draft SEA begins	Draft SEA report released for comment Parks Canada WBNP Website update Comment period for all interested parties	
March	Assess comments received	Analyze comments Prepare summary of comments Refine SEA report	Submission of SEA review Specific clarifications as necessary Develop and share tracking tables

April	Finalize SEA	End of SEA contract Parks summary and response	Possible submissions in response to final SEA
	Continue with Action Plan	Share SEA results with Action Plan delegates	Separate engagement processes going forward related to Action Plan