



Species at Risk Act (SARA) Consultation,
Cooperation and Accommodation Project

Whitebark Pine Early Engagement Session Workshop
for:

Environment and Climate Change Canada –
Canadian Wildlife Service – Pacific and Prairie Regions

Participant Summary Report

Created by:

The Centre for Indigenous Environmental Resources (CIER)



CIER

Centre for Indigenous
Environmental Resources

Acknowledgements

The Centre for Indigenous Environmental Resources (CIER) and Environment and Climate Change Canada, Canadian Wildlife Service (ECCC-CWS) would like to thank the participants that attended the virtual *Species at Risk Act (SARA) Consultation, Cooperation, and Accommodation Project* workshop titled 'Whitebark Pine Early-Engagement Session Workshop' on February 14th, 2023.

Table of Contents

- Acknowledgements.....1
- Executive Summary.....2
- Whitebark Pine Virtual Workshop Agenda.....3
-
- Presentation Overview.....3
- Species Information.....4
- Early Engagement Workshop.....4
- Overview of WBP Presentations.....7
- Cultural Significance.....9
- Threats.....9
- Recovery Strategies and Next Steps.....10

Executive Summary

Environment and Climate Change Canada – Canadian Wildlife Services (ECCC-CWS) is partnering with the Centre for Indigenous Environmental Resources (CIER) on a national Species at Risk Act Consultation, Cooperation, and Accommodation (SARA-CCA) project. The multi-year project will facilitate Indigenous communities' and organizations' participation in ECCC-CWS' listing and recovery planning processes for terrestrial species as part of implementing SARA.

The Whitebark Pine (WBP) was assessed as Endangered on Schedule 1 of SARA in 2012, and ECCC-CWS have been working to amend the recovery strategy posted as proposed in 2017. ECCC-CWS [Pacific and Prairie regions] partnered with CIER to host a virtual Early Engagement Informational Workshop on February 14th, 2023, on WBP as part of the national SARA-CCA project. ECCC recognizes the cultural, ecological, and economic significance WBP holds for Indigenous peoples and other Canadians and understands the importance of working together to safeguard this species' well-being. The intent for the recovery strategy and action plan is to collaborate with Indigenous communities, organizations, and governments to identify measures to reverse the decline of WBP in its natural range.

CIER's role is to support and facilitate a range of activities between Indigenous communities and organizations and ECCC-CWS on developing recovery documents, sharing knowledge and language, addressing threats to terrestrial species at risk survival and recovery, and land use planning for species at risk on reserve lands and within traditional territories. CIER also manages the provision of funds on behalf of ECCC-CWS participation, capacity funding requests and Expression of Interest (EOI) call for proposals.

Whitebark Pine Virtual Workshop Agenda

9:00 – 9:30 am	Welcome Housekeeping Introductions	Kate Hewitt Centre for Indigenous Environmental Resources
9:30 – 9:45 am	Federal Recovery Planning - Where we're at and where we're going	Undiné Thompson & Kimberly Dohms Canadian Wildlife Service – Environment and Climate Change Canada
9:45 – 10:00 am	Whitebark Pine Recovery in the Mountain National Parks	Elizabeth Vincer Species Conservation Branch - Parks Canada
10:00 - 10:15 am	Implementing Recovery Actions for Whitebark Pine in British Columbia	Francis Iredale Wildlife Habitat and Species Recovery Branch – Government of BC
10:15 – 10:30 am	Recovery Planning and Implementation for Whitebark Pine in Alberta	Robin Gutsell Environment and Protected Areas - Government of Alberta
10:30 – 10:45 am	Health Break	
10:45 am	Questions and Discussion – Facilitated by CIER	
11:40 am	Workshop Wrap-Up and Closing Comments	

Presentation Overview

The WBP virtual workshop was carried out under an amendment to the initial proposed strategy (2013) and therefore not the first WBP Indigenous engagement session carried out by ECCC-CWS. ECCC-CWS is continuing the process through early engagement to initiate dialogue on the status of WBP under the SARA. The main objectives were to engage early on the development of the Amendment to the Proposed Federal Recovery Strategy for Whitebark Pine; help build our relationships with, listen to, learn from, and collaborate with Indigenous Peoples, and; to deepen our understandings of the importance of Whitebark Pine to improve its chances of recovery. This workshop was also held to support a meaningful approach to include Indigenous perspectives and knowledge about Whitebark Pine in Canada's recovery planning for this species.

Species Information

The Whitebark Pine (*Pinus albicaulis*) is a long-lived five needled pine (conifer) with approximately 56% of its global range found in Canada. WBP is considered a keystone species and can be found in high elevation habitat from the United States border northward to Mount Blanchet Park in British Columbia, and Willmore Wilderness Park in Alberta, and from the coastal mountain ranges in the west to the Rocky Mountains of southern Alberta in the east. There are four main range-wide threats to WBP: white pine blister rust, climate change, fire and fire suppression, and Mountain Pine Beetle. The survival and recovery of WBP in Canada depends on meeting the species' survival, seed dispersal, regeneration, and recovery needs.

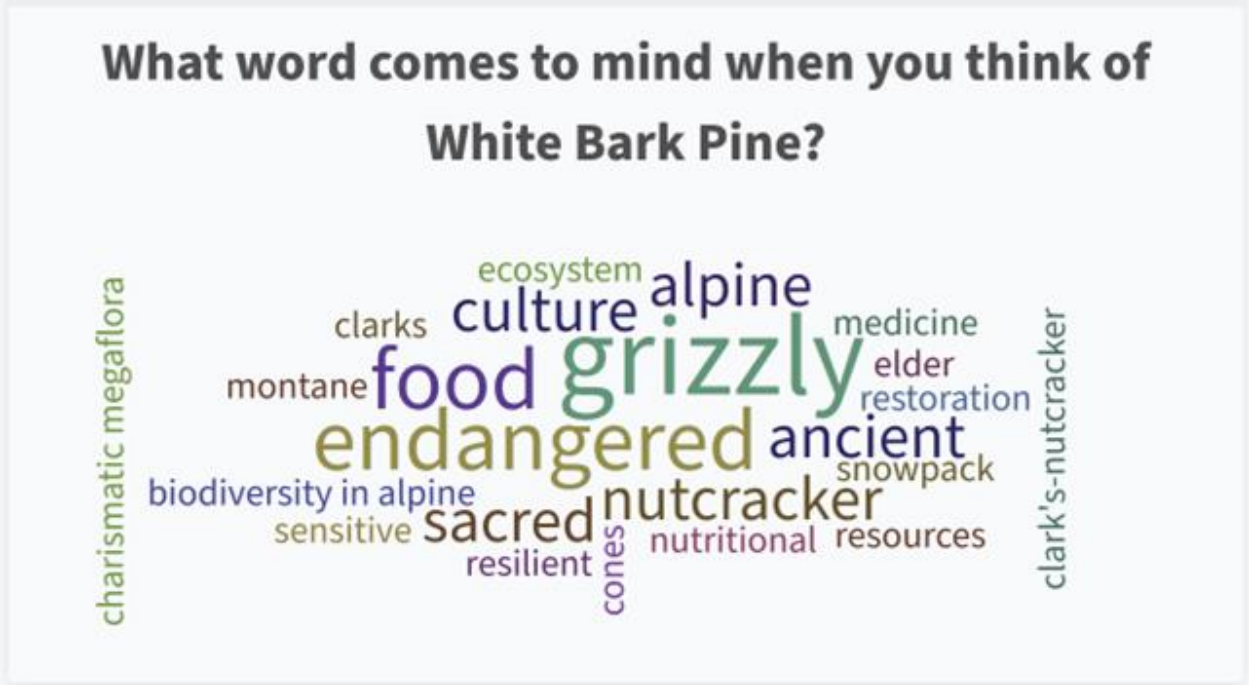
Early Engagement Workshop

A total of 42 participants with affiliation to 21 Indigenous organizations attended the WBP workshop. The facilitator for the four-hour session was Kate Hewitt from CIER and supported by Thomas McKay from CIER. Two WordCloud questions were incorporated into the WBP workshop presentation. The results of these questions can be seen in Figures 1 and 2. A graphic recording of the presentations and discussions on WBP were captured by Aaron Russell of Conference Doodles and can be seen below (Figure 3).

Figure 1. What traditional territory are you from?



Figure 2. What word comes to mind when you think of Whitebark Pine?

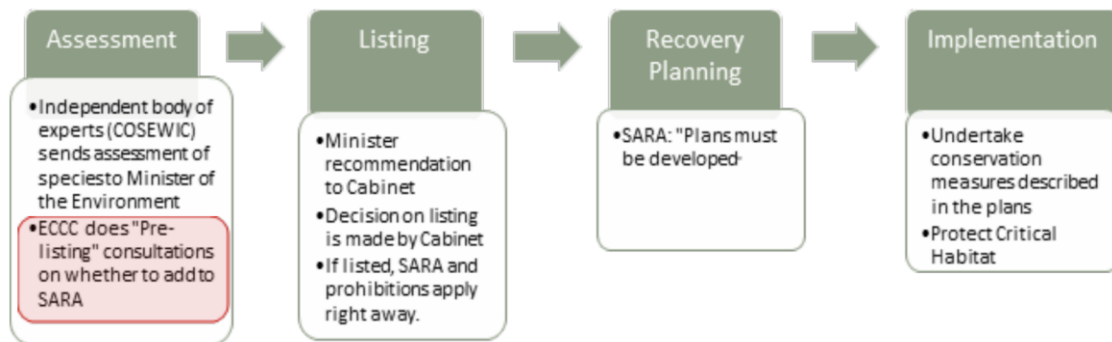


Overview of WBP Presentations

Whitebark Pine Federal Recovery Planning – Where we've been and where we're going:

A SARA overview on WBP federal recovery planning was presented by Undiné Thompson, Sr. Consultation and Integration Biologist with ECCC-CWS and Kimberly Dohms, Sr. Species at Risk Biologist with ECCC-CWS. In addition to a history of SARA federally, the presentation focused on the amendment: *Population and distribution objective* (PDO's) – new ECCC policies guiding recovery feasibilities and developing PDO's. New information on population trends was presented including the threat assessment completed in 2013. The critical habitat and schedule of studies under the International Union for Conservation of Nature (IUCN) Assessment Framework has been revised, which includes ECCC guidelines for the Critical Habitat (CH) process and direct linkages to support PDO's. Significant updates in base landscape layer resolution plus distribution and occurrence data will help support the recovery strategy, activities and planning table. Many updates to recovery work have been completed since 2014. Recovery work related to the threats assessment will be updated in 2023.

SARA is designed to protect individuals and habitat, allow for recovery of species, and work in a complementary fashion with provincial legislation. The diagram below shows the SARA Process:



*Figure adapted from ECCC SARA101 presentation by Victoria Leck.

When deciding whether to list a species, the Minister considers:

- Recommendations from the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and the Aboriginal Traditional Knowledge sub-committee;
- If the species supports livelihoods (e.g., through harvesting, subsistence, or medicine);
- Potential impacts to people's activities with the species and potential cultural, social, or economic costs or benefits to individuals, communities, or organizations;
- Any current/planned activities that may overlap range or harm the species and/or destroy part of its habitat; and,
- Any other information people choose to share during consultation.

WBP Recovery in the Mountain National Parks:

A SARA overview on WBP in the Mountain National Parks was presented by Elizabeth Vincer, Species Conservation Specialist with ECCC-CWS. WBP is found in seven of Canada's National Parks: Jasper, Banff, Mount Revelstoke, Glacier National Park, Kootenay, Yoho, and Waterton Lakes National Parks.

Implementing WBP Recovery:

A SARA overview on Implementing WBP recovery was presented by Francis Iredale, Sr. Species at Risk Biologist, British Columbia Ministry of Water, Land, and Resource Stewardship. ECCC is undergoing an amendment review of the current plan for Whitebark Pine recovery in British Columbia to establish a suite of recovery actions for WBP that are supported by Indigenous nations and governments.

Recovery Planning and Implementation for Whitebark Pine in Alberta:

A SARA overview on recovery planning and implementation for WBP in Alberta was presented by Robin Gutsell, Wildlife Status Biologist, Alberta Environment and Protected Areas.

- 1) Situational Analysis – Provincial Status, Threats, Planning;
- 2) Accomplishments – Measuring, Collecting, Monitoring;
- 3) Ready for the Future.

There were no questions from participants on the material presented above, but a quote was recorded as seen in the next section.

Cultural Significance

The cultural significance of WBP, like many conifers, is immense. They are sacred for their ability to provide a number of important foods and medicines. The trees are long-lived and found at high elevations which helps shade snowpack and prevent it from melting. WBP is featured in legends, provides habitat for wildlife, and is a prominent part of the cultural landscape. Their seeds are an important protein source for grizzly bears and many other animals, and the conifer holds a special cultural meaning for its unique symbiotic relationship with the Clark's Nutcracker.

"Whitebark Pine was a supplement to the original diet of our ancestors. We want to keep our culture and our language and lifestyle in our younger generations. It's a keystone species, it has over 100 different species that are reliant upon it. If we lose Whitebark Pine, it's going to eliminate that ecosystem and habitat at the higher elevations, and that will have an effect on everything down below."

- ShiNaasha Pete, Reforestation Forester with the Confederated Salish and Kootenai Tribes

Threats

There are four main range-wide threats to WBP: white pine blister rust, climate change, fire and fire suppression, and Mountain Pine Beetle. These factors also interact, often worsening or accelerating impacts to WBP. White pine blister rust by itself is projected to lead to a decline in WBP of more than 50% over a 100-year period and Mountain Pine Beetle infestations and climate change can increase this rate of decline. Additional human-activity related threats also affect WBP populations on a local scale. All threats should be considered in a context of cumulative effects when examining local population impacts. The threats outlined below are generally consistent across the Alberta-B.C. range of the species.

White Pine Blister Rust

Identified as an exotic fungus, white pine blister rust on its own is enough to list WBP under Schedule 1 of SARA. Blister rust is currently found in almost all WBP populations with general trends showing high levels range-wide. Of the four main threats, white pine blister rust is projected to cause the greatest population declines.

Climate Change

Temperature extremes have potential effects on seed viability and may cause direct death due to changes in natural cold stratification. Temperature extremes may also exacerbate other stressors such as insects and fire. Storms and flooding cause increased blowdown and mechanical damage.

Fire and Fire Suppression

WBP can be destroyed by severe forest fires, and depending on site-specific factors, trees stressed by fire may be more susceptible to Mountain Pine Beetle.

Mountain Pine Beetle

The epidemic has subsided through much of WBP's range, but endemic native beetle populations may still kill some stressed, particularly weakened, rust-infected trees. Based on a three-year regeneration time to a maximum of 100 years and estimating beetle epidemics at 30-year intervals, severity was rated as serious. Five needled pine trees stressed from rust infection are more susceptible to beetle infestation.

Recovery Strategies and Next Steps

To access the proposed recovery strategy, please click [here](#).