

# THE CROWN OF THE CONTINENT HIGH-FIVE WORKING GROUP

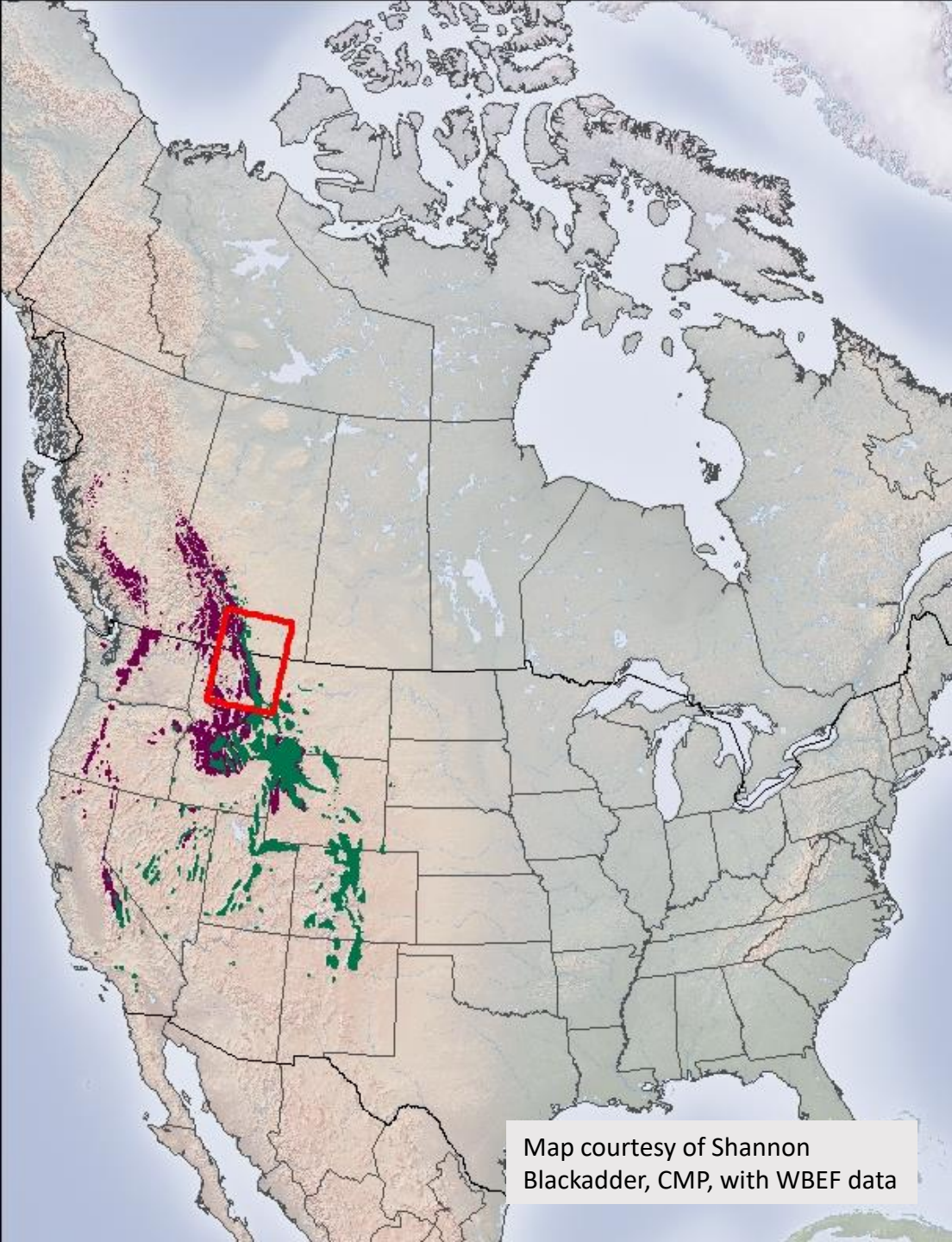
## A Multi-Stakeholder Approach to Cross-Border Collaboration

Regan Nelson, Crown Conservation Initiative



# CROWN OF THE CONTINENT







Map courtesy of Shannon Blackadder, CMP, with WBEF data

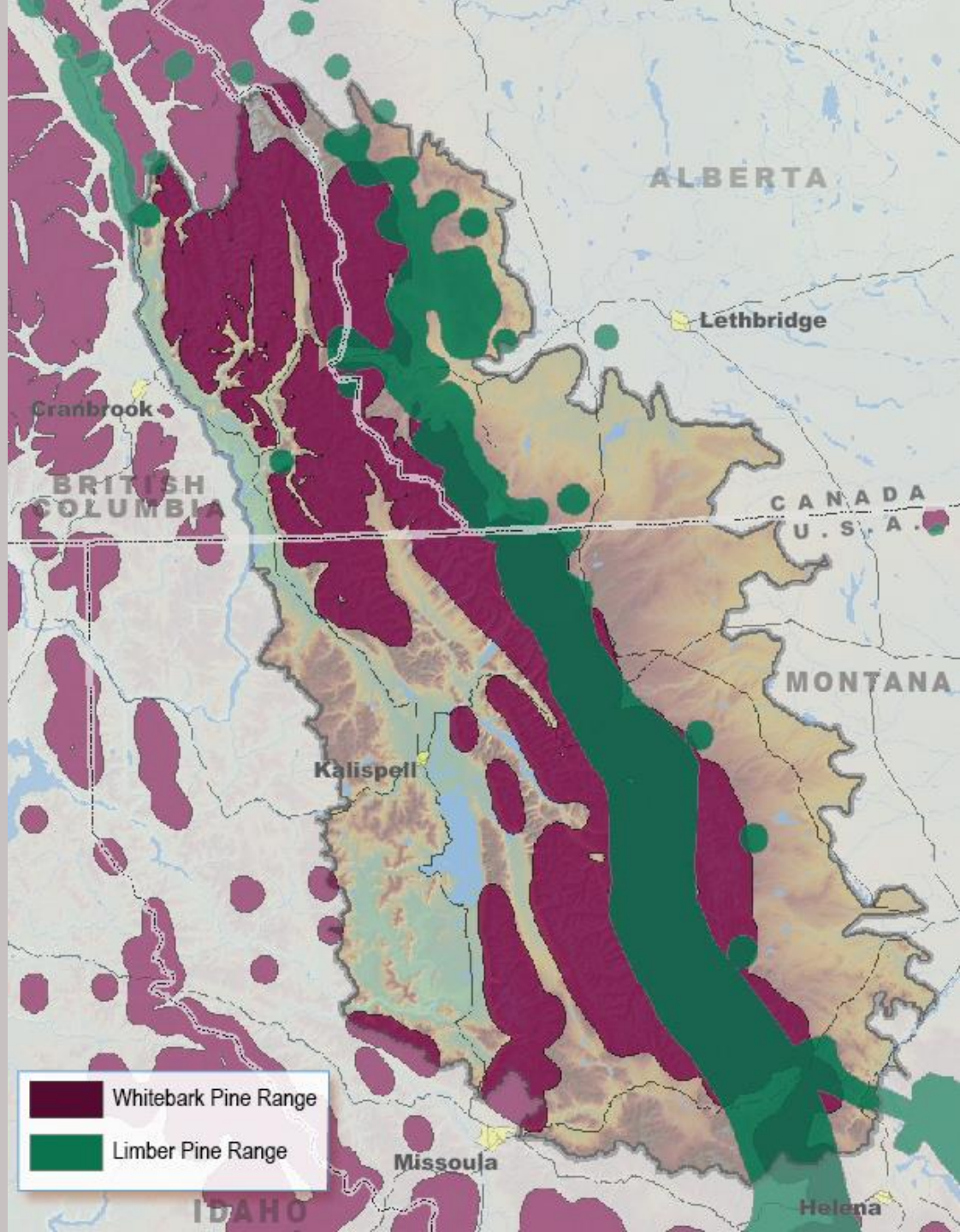
## CROWN OF THE CONTINENT



-  Limber Pine Range
-  Whitebark Pine Range

## CROWN OF THE CONTINENT

- Whitebark Pine:
  - 29,824 km<sup>2</sup>
  - 41% of CCE
- Limber Pine
  - 15,017 km<sup>2</sup>
  - 20% of CCE



Map courtesy of Shannon Blackadder, CMP, with WBEF data

# 5NP HEALTH STATUS AND TRENDS IN THE CROWN

## BLISTER RUST (Smith et al. 2013)

- Infection levels ~80% for both species
- Infection levels increased twice as fast in limber vs. whitebark over the last decade

## MOUNTAIN PINE BEETLE

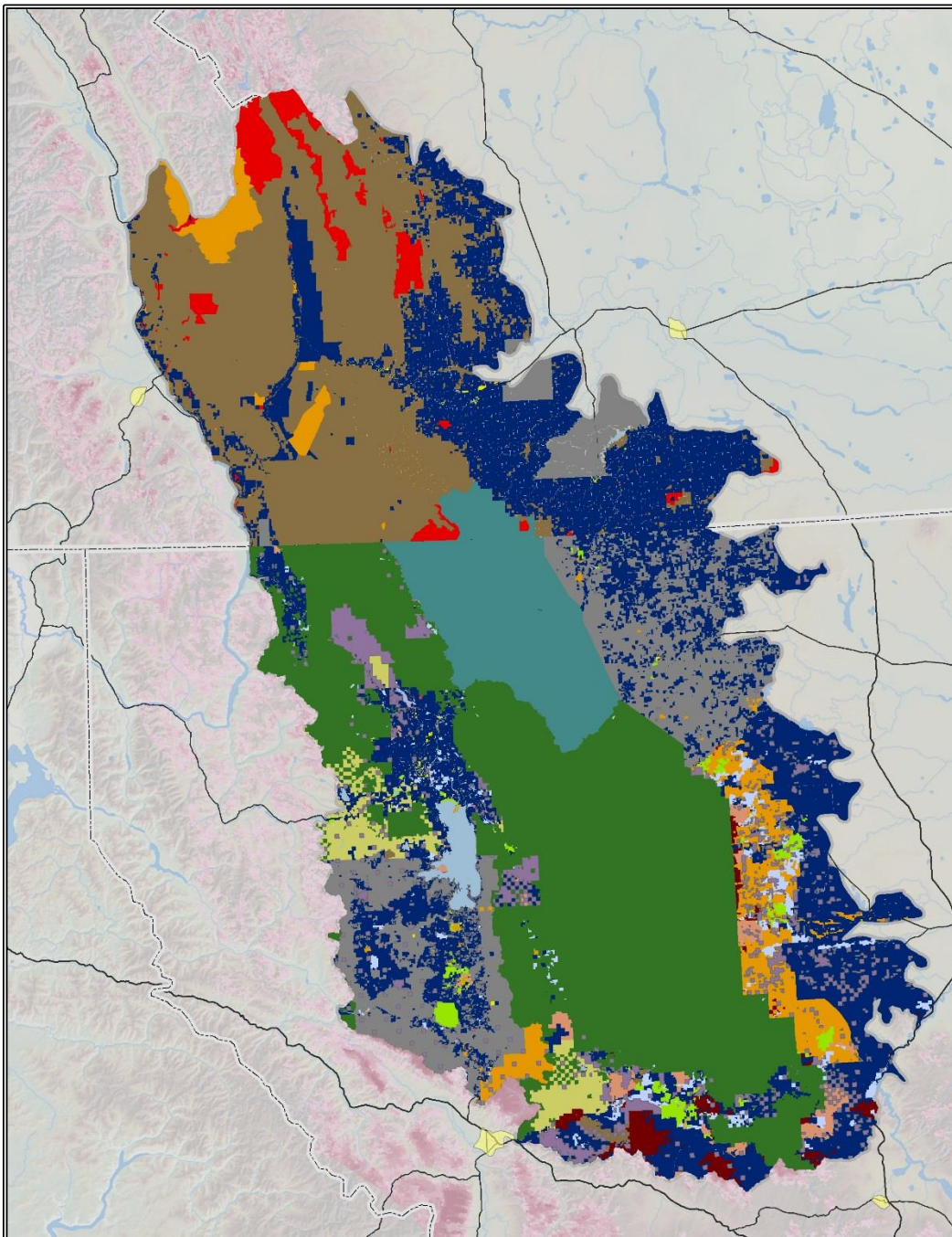
- Mountain pine beetle mortality peaked 2009-2011 and is on downward trend (very low mortality over the last 3 years).



# HUMAN-DRIVEN THREATS

- Oil and Gas Development
- Coal Mining
- Wind Farms
- Logging
- Ski Area Development
- Heli-Ski Development
- Climate Change
- Fire Suppression





## Jurisdictions in the CCE

First Nations & Tribal Lands

National Parks

US Bureau of Land Management

Relative Probability of Occupancy

Municipal Government

Montana Fish, Wildlife & Parks

Federal

Plum Creek (Weyerhaeuser)

Private Land

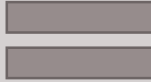
Private Conservation

Provincially Protected

State Trust

US Fish & Wildlife

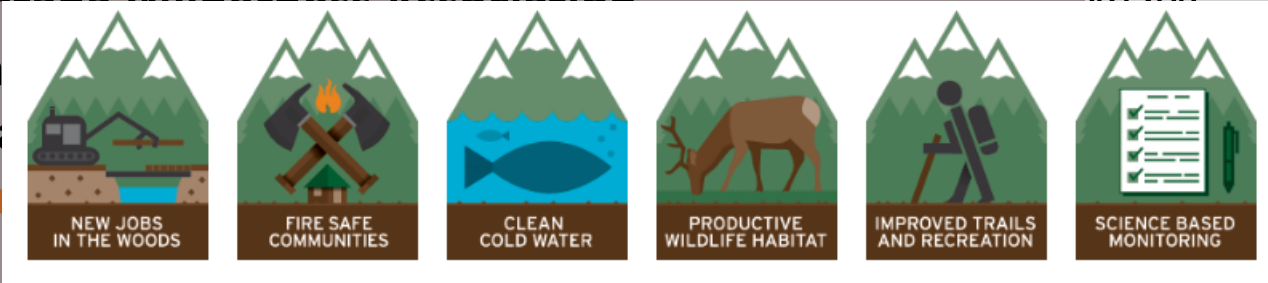
US Forest Service



Ar  
Canadian Park  
C  
Heart of the Rockies Conservation Initiative  
Montana Wilderness Association

onids  
vasive

National  
N  
South



Wildsight

hivores

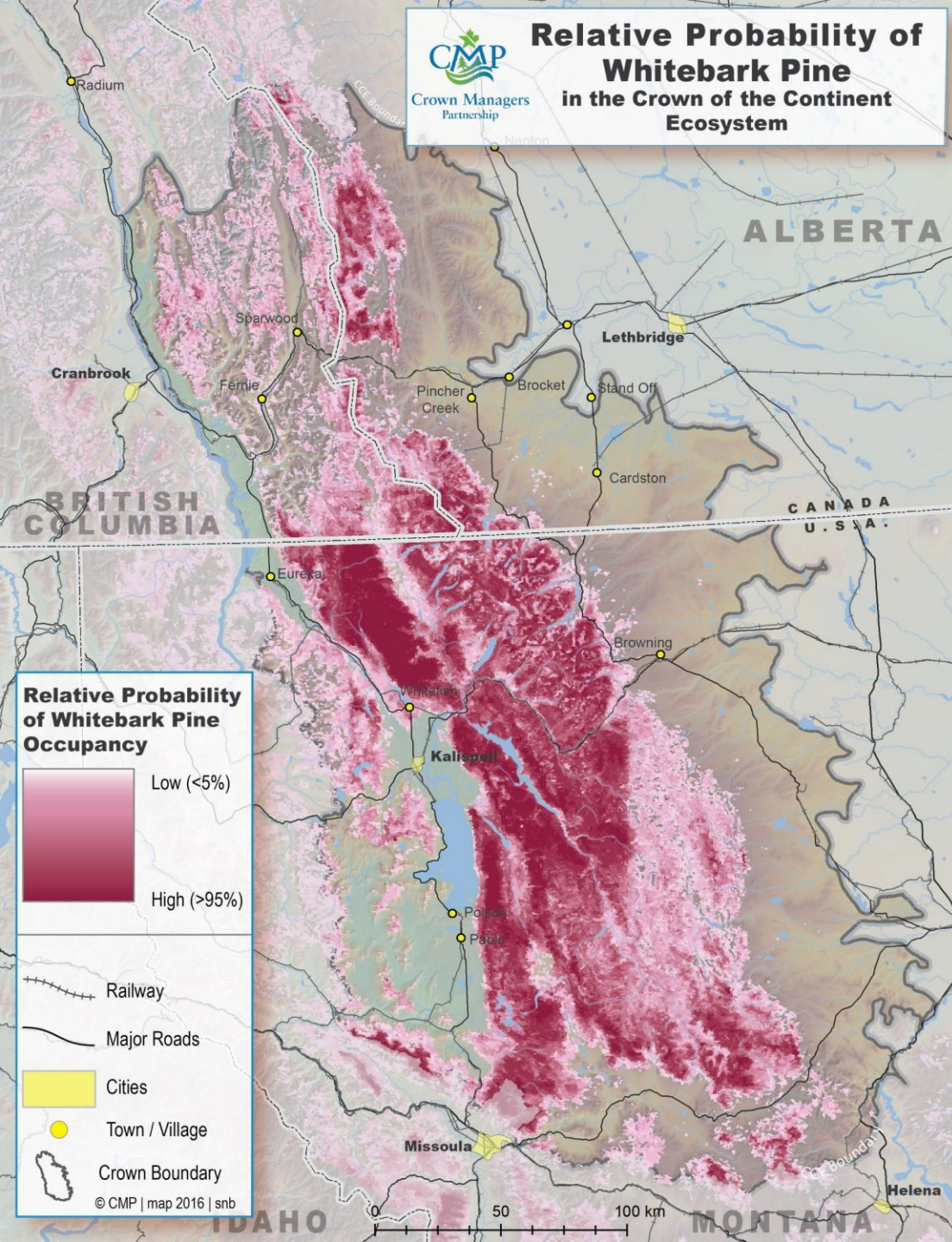
Yellowstone to Yukon Conservation Initiative  
Individuals with University of Montana



# WE NEED THE NEEDLES: Coordinating Action to Conserve 5-Needle Pine Forests in the Crown of the Continent



# Relative Probability of Whitebark Pine in the Crown of the Continent Ecosystem



## ScienceBase.gov

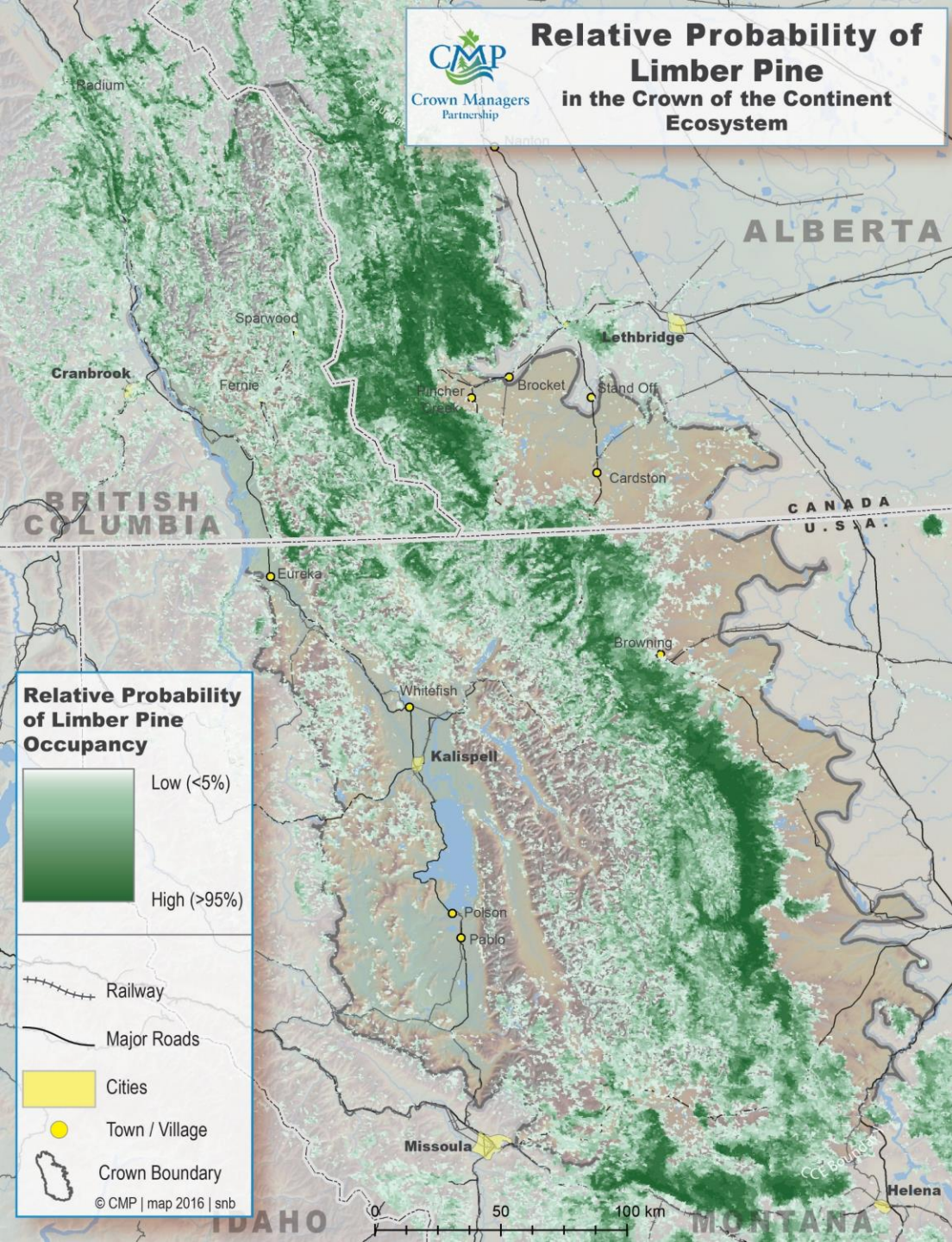
Search for Crown Managers  
Partnership: Transboundary  
Conservation Initiative

or

<https://www.sciencebase.gov/catalog/item/51102e04e4b048b5cead853b>

Credit: Shannon Blackadder, CMP

# Relative Probability of Limber Pine in the Crown of the Continent Ecosystem



## ScienceBase.gov

Search for Crown Managers  
Partnership: Transboundary  
Conservation Initiative

or

<https://www.sciencebase.gov/catalog/item/51102e04e4b048b5cead853b>

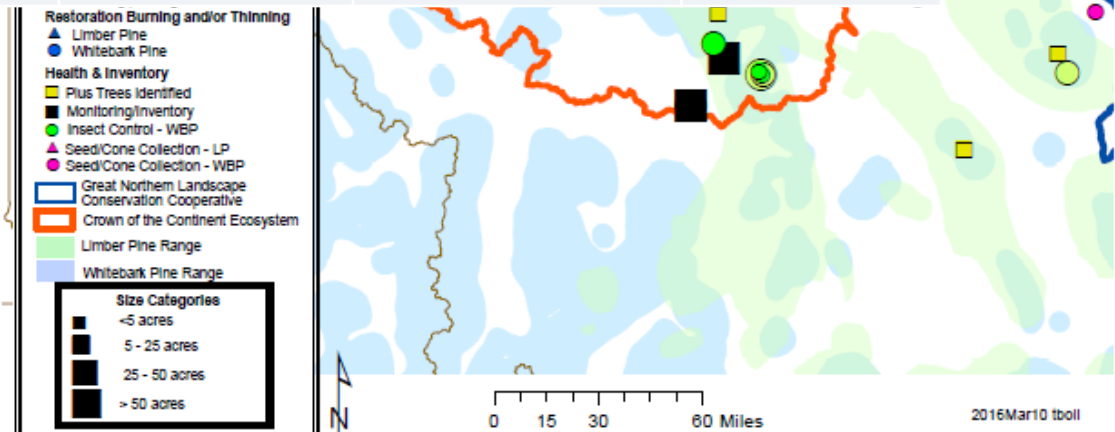
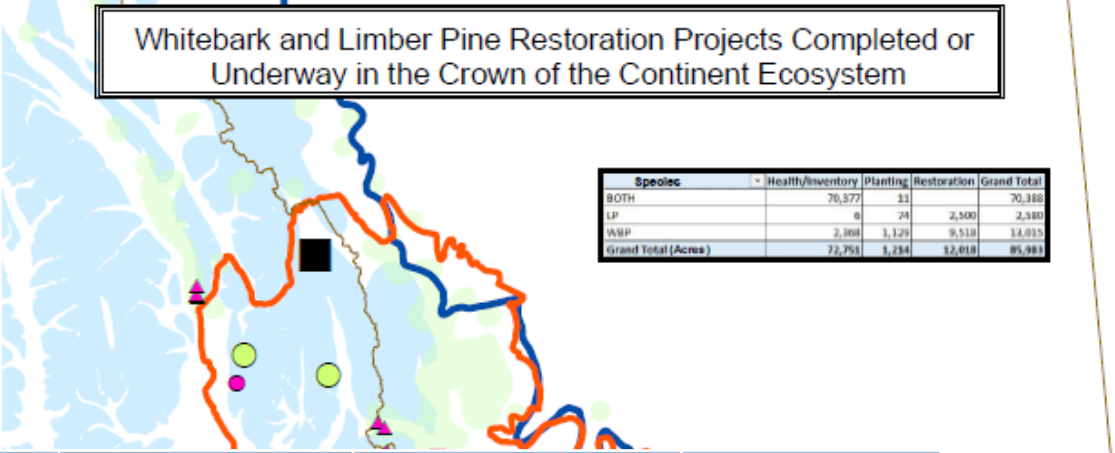
Credit: Shannon Blackadder, CMP

# Whitebark and Limber Pine Restoration Projects Completed or Underway in the Crown

Whitebark and Limber Pine Restoration Projects Completed or Underway in the Crown of the Continent Ecosystem

Species	Health/Inventory	Planting	Restoration	Grand Total
BOTH	70,377	11		70,388
LP	6	74	2,500	2,580
WBP	2,368	1,129	9,518	13,015
<b>Grand Total (Acres)</b>	<b>72,751</b>	<b>1,214</b>	<b>12,018</b>	<b>85,983</b>

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Credit: Trisha Boll, Flathead National Forest



# Ecological and Cultural Value of Five-Needle Pine in the Crown





Handwritten notes on a flipchart:

- High amount of knowledge
- Good will amongst local
- Address how to manage?
- Frame work used for
- for location + other
- Supportive approach to
- planning



Handwritten notes on a flipchart:

Johns, Lee

Handwritten notes on a flipchart with sticky notes attached.

Handwritten notes on a flipchart.

CHALLENGES FOR ACCELERATING THE PACE AND SCALE OF RESTORATION	MULTI-STAKEHOLDER RECOMMENDATIONS FOR ACTION
Jurisdictional complexity and lack of formal means for coordination	Establish a Crown-Wide High Five Working Group
Need for increased public awareness of the severity of the problem	Develop and implement a Crown-Wide Communications Strategy; Consider a citizen science initiative
Need to prioritize restoration investments in high priority areas across the Crown	Develop and implement a Crown-Wide Restoration Strategy and Action Plan
Uncertainty about how climate change will affect restoration effectiveness	Work with scientists to develop a Best Practices Guide to the Management of Fire in Five-Needle Pine Forests
Lack of consistent guidance about restoration in Wilderness/Highly Protected areas	Work with the Aldo Leopold Wilderness Research Institute on decision framework to identify triggers/thresholds for action
Continued loss of 5NP to development	Develop a Crown-wide Mitigation Strategy and Best Management Practices to avoid loss of individuals and stands



# Introducing: The Crown High-Five Working Group!!!





Fire Best Management Practices Sub-committee

# Crown-Wide Restoration Strategy Sub-committee



# MILESTONES FOR YEAR 1

- By March, peer-reviewed guide to Best Practices of Fire Use and Management in 5NP Forests
- By early spring, a peer-reviewed 5NP Mitigation Strategy, including Best Management Practices related to avoiding, minimizing, restoring or offsetting loss of 5NP
- By January, a scoping document for a Crown-wide Restoration Strategy, and a first subcommittee meeting to draft the elements of the plan



# MILESTONES FOR YEAR 1

- In 2017, a users needs assessment for developing a Crown-wide Inventory and Monitoring database
- This fall, the first convening of the Communications Strategy subcommittee
- Two High Five Working Group Conference Calls (January and April), and our next in-person High Five Working Group meeting in Jasper next year, in concert with WBEF Annual Meeting.



# Introducing: The Crown High-Five Working Group!!!

