

Crown of the Continent Landscape Conservation Design

Ensuring a resilient, connected landscape that supports healthy ecosystems and human communities

Achieving a Landscape Vision

The Crown of the Continent Landscape Conservation Design (LCD) is a means to achieve a resilient, sustainable socio-ecological landscape by bringing stakeholders together to prioritize and coordinate actions on the ground.

Through an iterative process, stakeholders guide development of the LCD. The LCD produces a road map built upon conceptual models, maps, and strategies that supports stakeholders in achieving their collective vision and goals.

LCD Progress & Accomplishments



INITIATE THE LCD

In 2019, the Crown Managers Partnership initiates the Crown LCD to integrate ecological and social goals across the Crown of the Continent geography. This international effort includes portions of Alberta, British Columbia, and Montana.

A Leadership Team comprised of 42 stakeholders is formed to direct the LCD and Technical and Analysis teams are assembled to perform the analytical work.



CONVENE STAKEHOLDERS & FRAME THE LCD

The LCD is framed by delineating the geographic boundary, developing a vision statement with 3 goals, and selecting 15 ecological features (habitat, connectivity, species). Features are selected by the review of 63 management plans, expert opinion, and conservation status.

The Social, Cultural & Economic Team is formed to address additional features important to First Nations, Tribes, and communities. The team selects their first two features, water access and air quality, and is discussing more features.

Landscape Features

Habitat & Connectivity



Forest Grassland Shrubland Riparian

Species



Grizzly Bear Wolverine Canada Lynx Westslope Cutthroat Trout



Water Wetland Connectivity



Bull Trout Mule Deer Rocky Mountain Elk Whitebark Pine

Social, Cultural & Economic



Water Access Air Quality

Goals

Rely upon cutting-edge science, Indigenous knowledge, and modeling to collectively increase the resilience of waters, forests, and grasslands

Sustain healthy ecosystems, communities, and economies through working lands partnerships

Recognize the leadership, history, culture, and traditional territories of Indigenous peoples as we plan for the future

Leadership Team



Conservation without Borders



From mountain peaks to prairie, the Crown of the Continent LCD spans 131,000 sq km (50,500 sq mi) and straddles the United States and Canada in Alberta, British Columbia, and Montana.



The LCD is an iterative process built upon stakeholder guidance, spatial data assessments, modeling, subject matter expert review, and ultimately, the identification of conservation strategies. Three parts of the LCD process are presented below for the Canada Lynx, one of 17 landscape features.

You are invited!

Your participation will help shape the future Crown of the Continent.

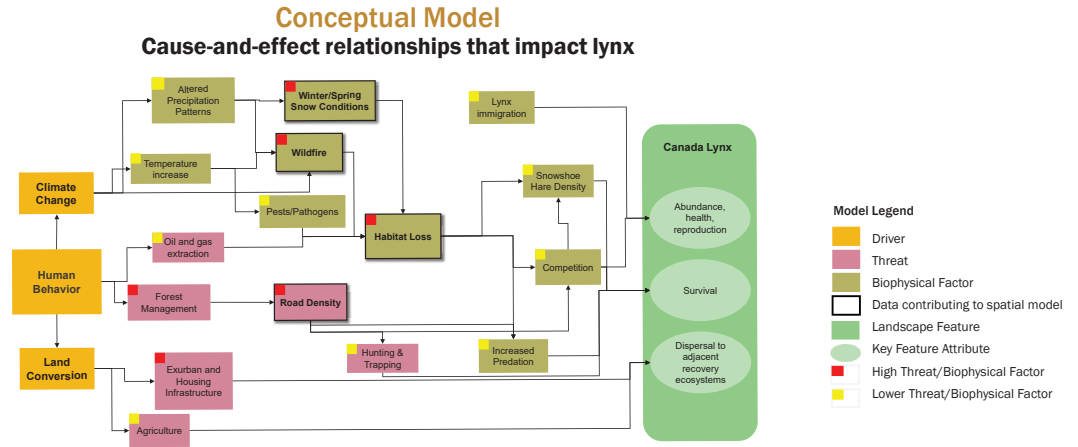
scan with your phone



www.crownmanagers.org/landscape-conservation-design

ASSESS CURRENT & FUTURE DESIRED CONDITIONS

After reviewing 300 data sets, draft conceptual models are built for the 15 landscape features. Models identify threats and biophysical factors that may influence persistence of an ecological feature on the landscape. Draft models are reviewed by 51 subject matter experts and refined.

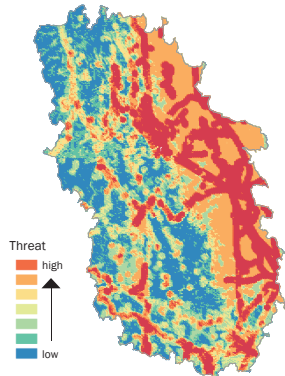


SPATIAL DESIGN - IDENTIFY WHERE OPPORTUNITIES EXIST

Data sets are further assessed and draft spatial designs are developed for the 15 ecological features. Spatial Designs combine spatial data describing the ecological feature with threats and biophysical factors emphasized in the conceptual model to identify to conservation opportunity for the feature.

Where are the threats to lynx?

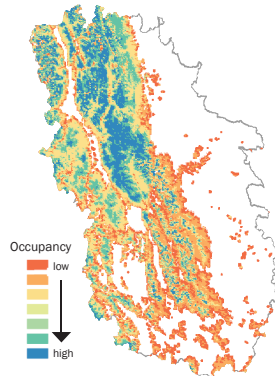
- spatial data:**
- snow conditions
 - wildfire
 - forest landcover
 - road density



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Where do lynx occur?

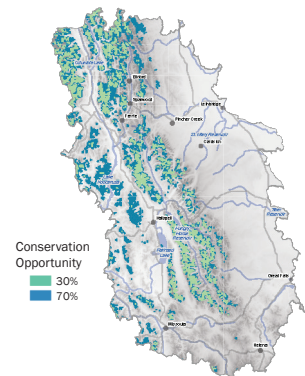
- spatial data:**
- remote camera locations
 - suitability model
 - critical habitat designation
 - spring snow persistence



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Where is there conservation opportunity for lynx?

Stakeholders identify where and how much area should be targeted for lynx conservation. The map shows two plausible scenarios: 30% and 70% of potential conservation opportunity.



STRATEGY DESIGN - ARRIVE AT A DESIGN FOR DECISION MAKING

A strategy design complements the spatial design and describes a cooperative approach toward achieving conservation outcomes. It helps answer the questions: Who does what and where should it be done?

Collaboratively built 'results chains' are a key component of the spatial design. Results chains provide a framework to visualize and think about how threats to ecological features like lynx can be reduced.

Simplified results chain shows how the threat of road density could be reduced for lynx

