

Ecological Health Project

A Vision for an Ecologically Healthy Crown of the Continent Ecosystem



Figure 1. Crown of the Continent Ecosystem

The Ecological Health Project (EHP)

The Crown Manager’s Partnership (CMP) is comprised of science and resource management agencies, including federal, state and provincial agency, tribes and First Nations managers from AB, MT and BC, who voluntarily come together in an effort to encourage coordinated management of our shared transboundary environment, landscapes and natural resources. Our common vision is for an ecologically healthy Crown. The CMP has adopted a Strategic Plan whereby the vision of an ecologically healthy Crown of the Continent ecosystem is achieved by the management actions of multiple agencies each exercising their own jurisdiction with common goals in mind. The CMP’s strategic priority is the “Managing for Ecological Health project.”

Managing for Ecological Health

The adaptive management framework entails the following: 1) Select **indicators of ecological integrity**; 2) Establish a **baseline** state by which to measure change over time (**trend**); 3) Identify with the broader community the **desired state** for the CCE; and 4) **Direct collaborative management** across jurisdictions to achieve the desired state (Figure 2).

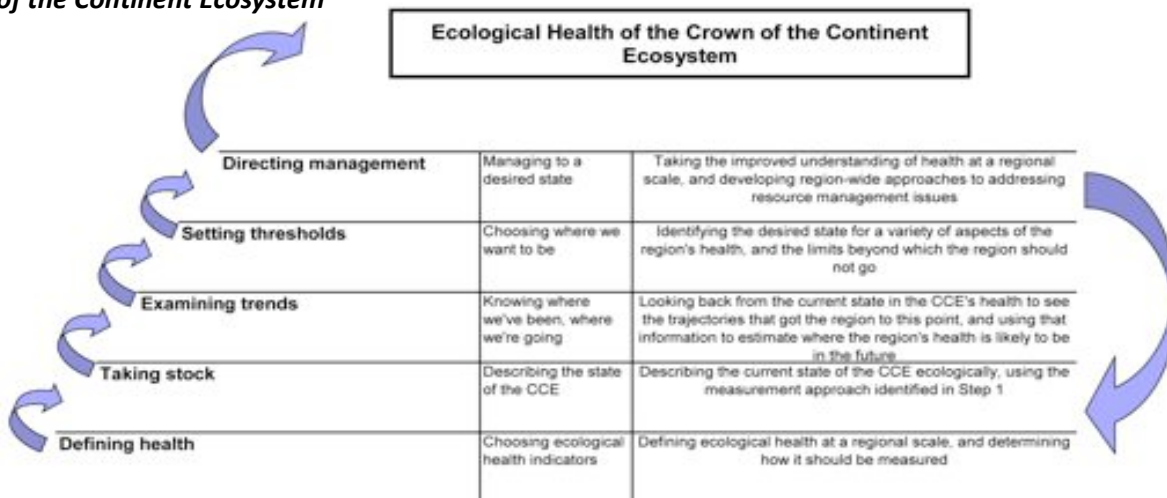


Figure 2: Adaptive Management Framework

The Ecological Health Project (EHP) project is distinguished by its regional transboundary scope, our focus on delivering useable knowledge to assist managers in responding more directly to climate change and shifting human footprint, and our capacity to collaborate at a regional, landscape scale.

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The EHP aims to successfully weave together three key supporting components: the analysis, integration and choice of outcomes amongst indicators of ecological health; connecting communities and stakeholders with our work to ensure awareness and build comfort; and testing and aligning EH outcomes with the mandates, legislation, interests, policy and priorities of agencies.

The Ecological Health Project will look at 6 indicators of regional ecological health: **landscapes, biodiversity, water quantity and quality, air quality, climate change and invasive species.**

Work on the EHP is intended to raise awareness of the current status of these indicators and associated issues and challenges; establish the ability to track and document changes over time; develop cross-jurisdictional development of ecological health measures; and ultimately influence actual management of the CCE to assure desired regional ecological health outcomes.

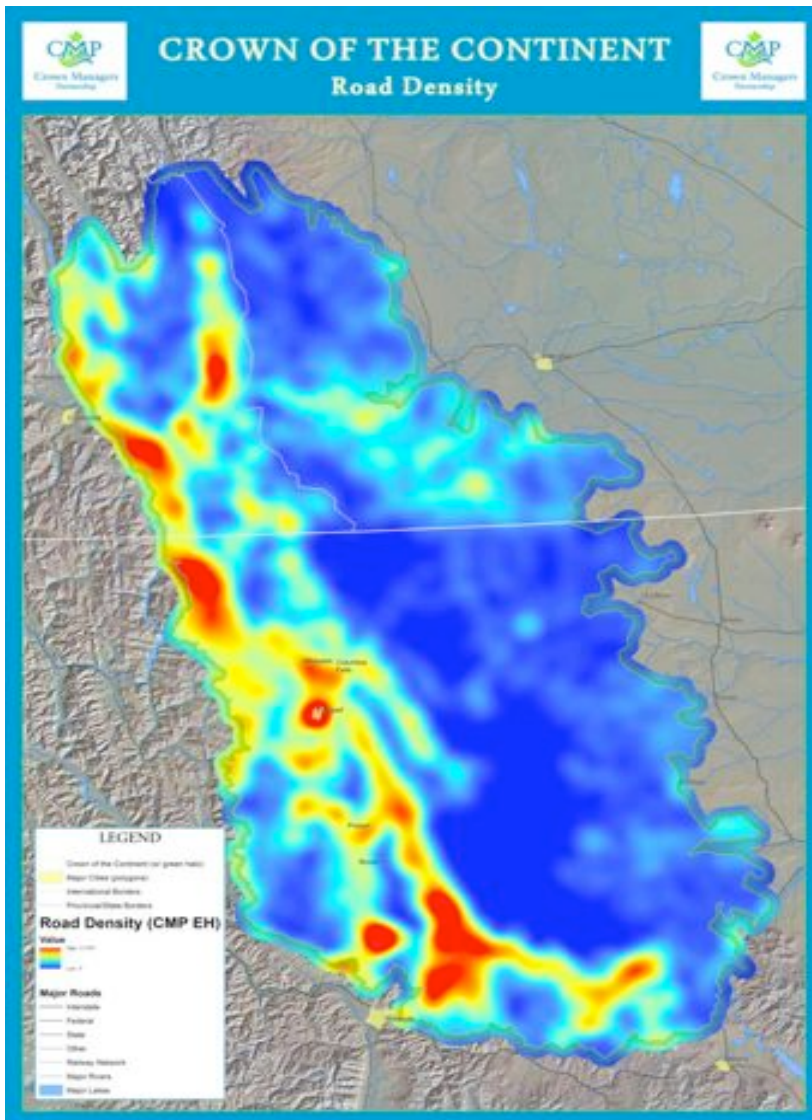


Figure 3. Road Density

In evaluating ecological health indicators the CMP will take a two-pronged approach. Initial emphasis will be placed on landscape analysis, based on the assumption that land use practices and patterns influence multiple ecological health indicators. The landscape analysis will be augmented by further supplemental analysis of individual ecological health indicators.

Crown of the Continent Landscape Analysis

In 2009, the CMP embarked on a partnership with the **University of Calgary Geography Department**, the **National Park Service Rocky Mountain Inventory and Monitoring Network** and the **Great Northern Landscape Conservation Cooperative** to conduct a Landscape Analysis at the scale of the CCE. A strategic focus of this project is cross-boundary data inventory and synthesis. We are currently focused on synthesizing the data to conduct meaningful analysis of land cover, phenology and human-use footprint, including road density (Figure 3).

The ultimate goal of the CMP is to demonstrate a common, collective institutional capacity across borders to effectively manage the cumulative effects of human development activities and land use practices on the entire interconnected landscape. Our strength is in our capacity to act as integrators through a strong, established network of international managers.