

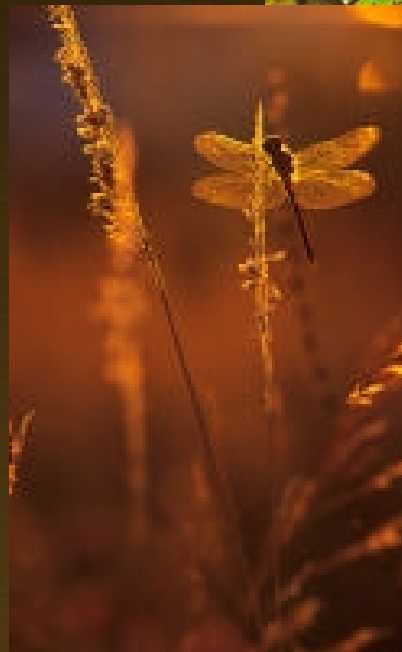


Setting Direction for Conserving British Columbia's Biodiversity

September 10, 2008

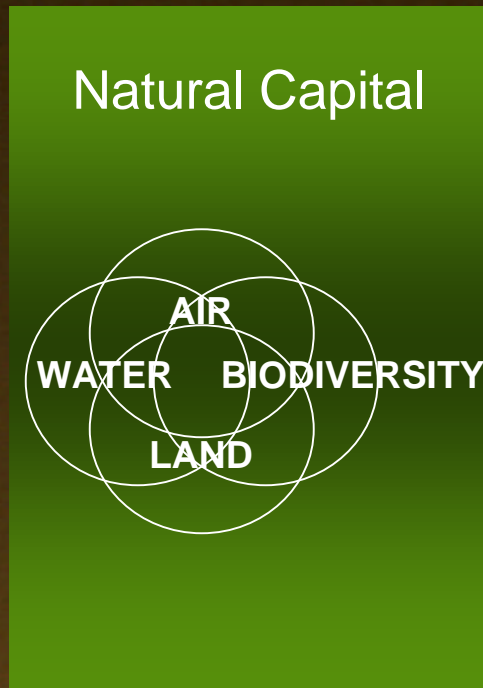
What is Biodiversity?

*...all living things
and the elements
and processes
that sustain
them...*



Benefits of Biodiversity

ECOSYSTEM OUTPUTS & BENEFITS



Goods:

- wood and fibers
- food
- fuel
- genetic resources
- pharmaceuticals
- drinking water
- minerals

Services:

- climate regulation
- water purification
- waste treatment
- erosion control
- pest and disease control
- pollination
- soil formation
- photosynthesis

Context

- Historical Overview 2004 – 2008
 - ◆ BC Trust for Public Lands
 - ◆ BBC Mandate
 - ◆ Membership
- Collaboration & Synergy
 - ◆ unique partnership

Vision

British Columbia is a spectacular place with healthy, natural and diverse ecosystems that sustain and enrich the lives of all.



Goals of Biodiversity BC

1. Conserve the Elements of Biodiversity

To maintain the diversity of genes, species and ecosystems, prevent elements of biodiversity from becoming at risk and contribute to global efforts for biodiversity conservation.

Goals of Biodiversity BC

2. Increase Awareness of the Importance of Biodiversity and Respect for the Natural Environment

To increase awareness and understanding about the importance and value of biodiversity and encourage British Columbians to take action on conserving biodiversity.

Goals of Biodiversity BC

3. Provide Tools and Incentives to Enable Biodiversity Conservation

To provide tools and incentives to enable governments (including First Nations), industry, conservation organizations and citizens to improve conservation of British Columbia's biodiversity.

Achievements

- Science Foundation
 - ◆ Ecological Principles
 - ◆ Atlas of Biodiversity
 - ◆ Background science reports
 - ◆ Status Report
 - ◆ Hectares BC
- Education and Stewardship
- Website www.biodiversitybc.org/



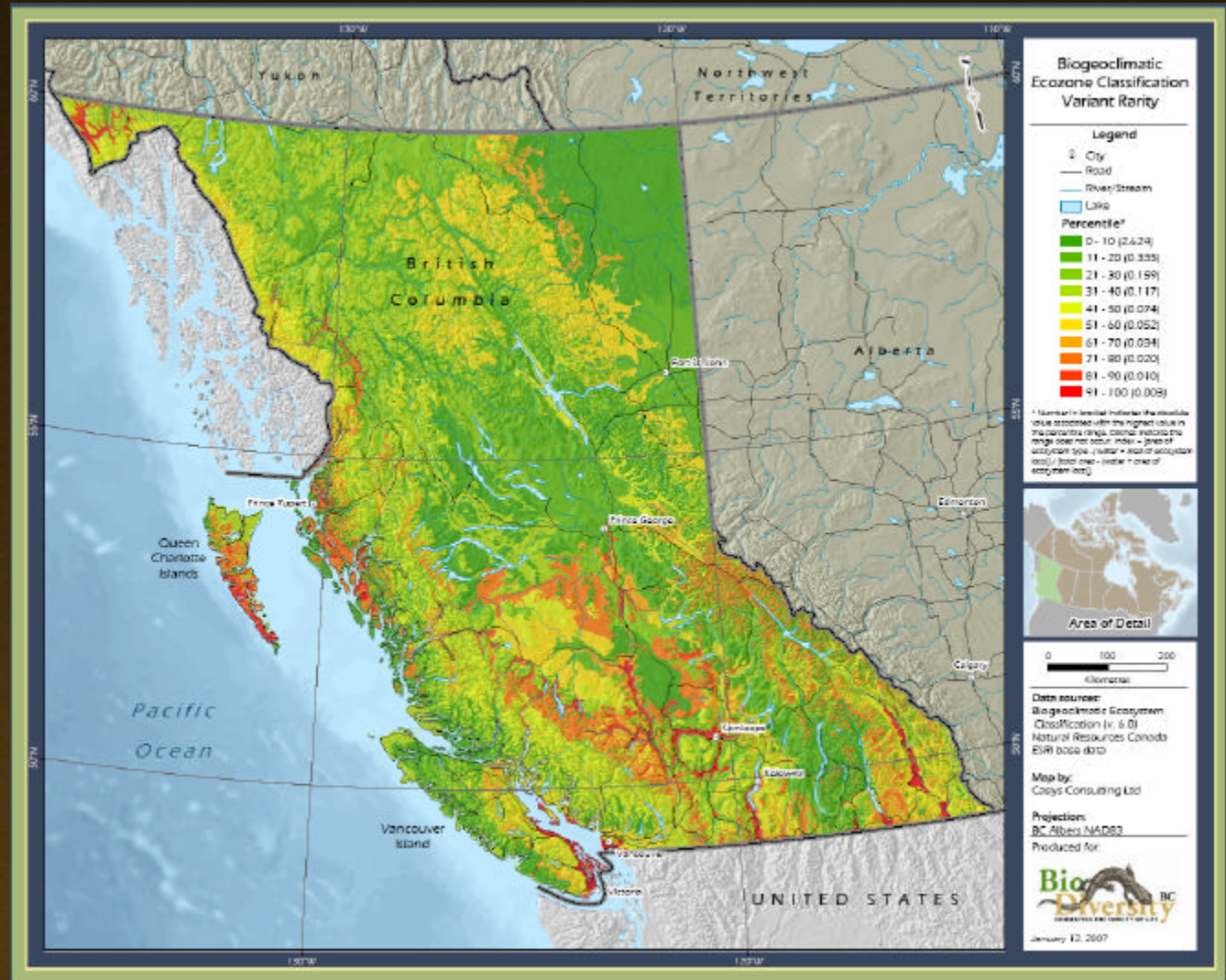
Ecological Principles

- Primer on biodiversity
- Informs the process of developing priorities for conservation



Biodiversity Atlas

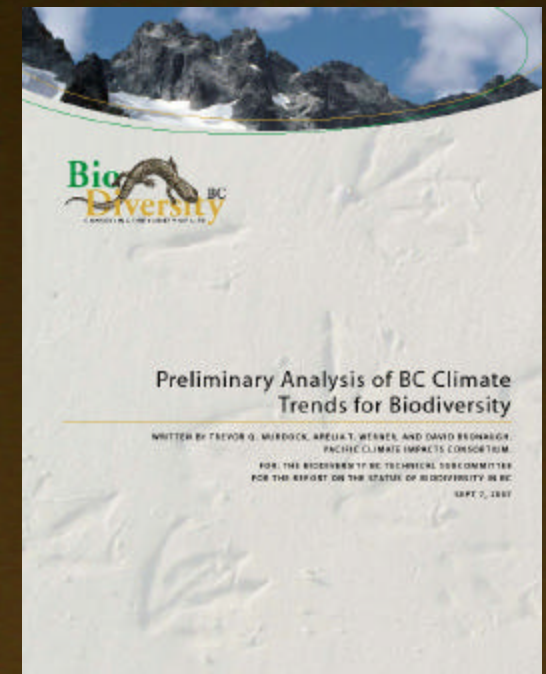
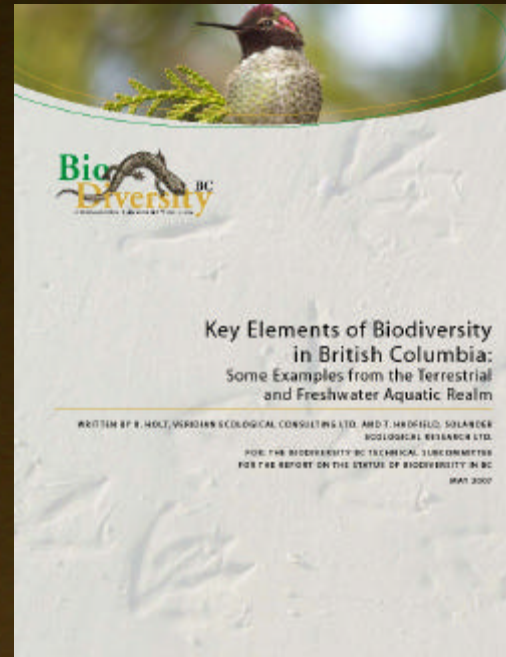
- map-based depiction of British Columbia's biodiversity
- companion to the Status Report (*Taking Nature's Pulse*)



Science Reports

Examples

- First Nations and Biodiversity
- Geologic History
- Ecosystem Status
- Species Status
- Stewardship Responsibility
- Genetic Diversity
- Key and Special Elements
- Safety Net Gap Analysis
- Climate Change

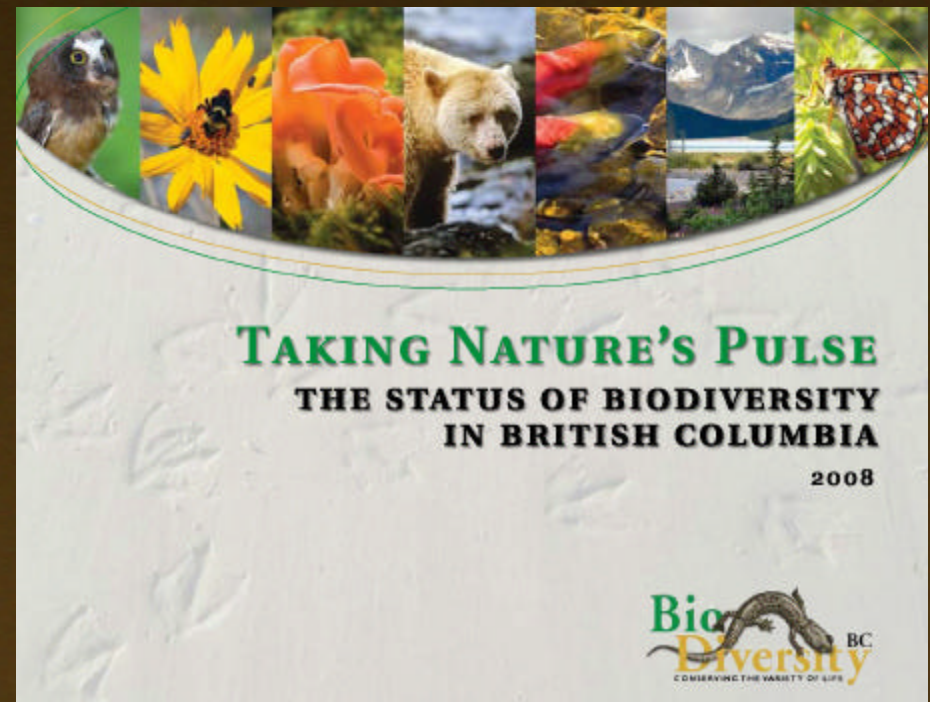


Status Report

Taking Nature's Pulse: The Status of Biodiversity in British Columbia

“As a state of biodiversity report it is as good as any I have seen around the world.”

Dr. Hugh Possingham,
University of Queensland



Status Report Major Findings

B.C.'s biodiversity is globally significant because of its variety and integrity, but without immediate action it is vulnerable to rapid deterioration, especially in light of climate change



Some Major Findings – Ecosystem Diversity

- 4 of 16 BEC zones of conservation concern
- 50% plus of 611 ecological communities of conservation concern
- Significant areas of wetlands converted or degraded
- Low elevation grassland communities are the rarest land cover type in B.C.



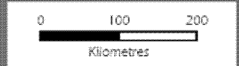


MAP 3
Biogeoclimatic zones
of conservation
concern

- Legend**
- City
 - Road
 - River/Stream
 - Lake
- Zone**
- Bunchgrass
 - Ponderosa Pine
 - Interior Douglas-fir
 - Coastal Douglas-fir



Area of Detail



Data sources:
Biogeoclimatic Ecosystem
Classification (v. 6.0)

Map by:
Caslys Consulting Ltd

Projection:
BC Albers NAD83

Produced for:

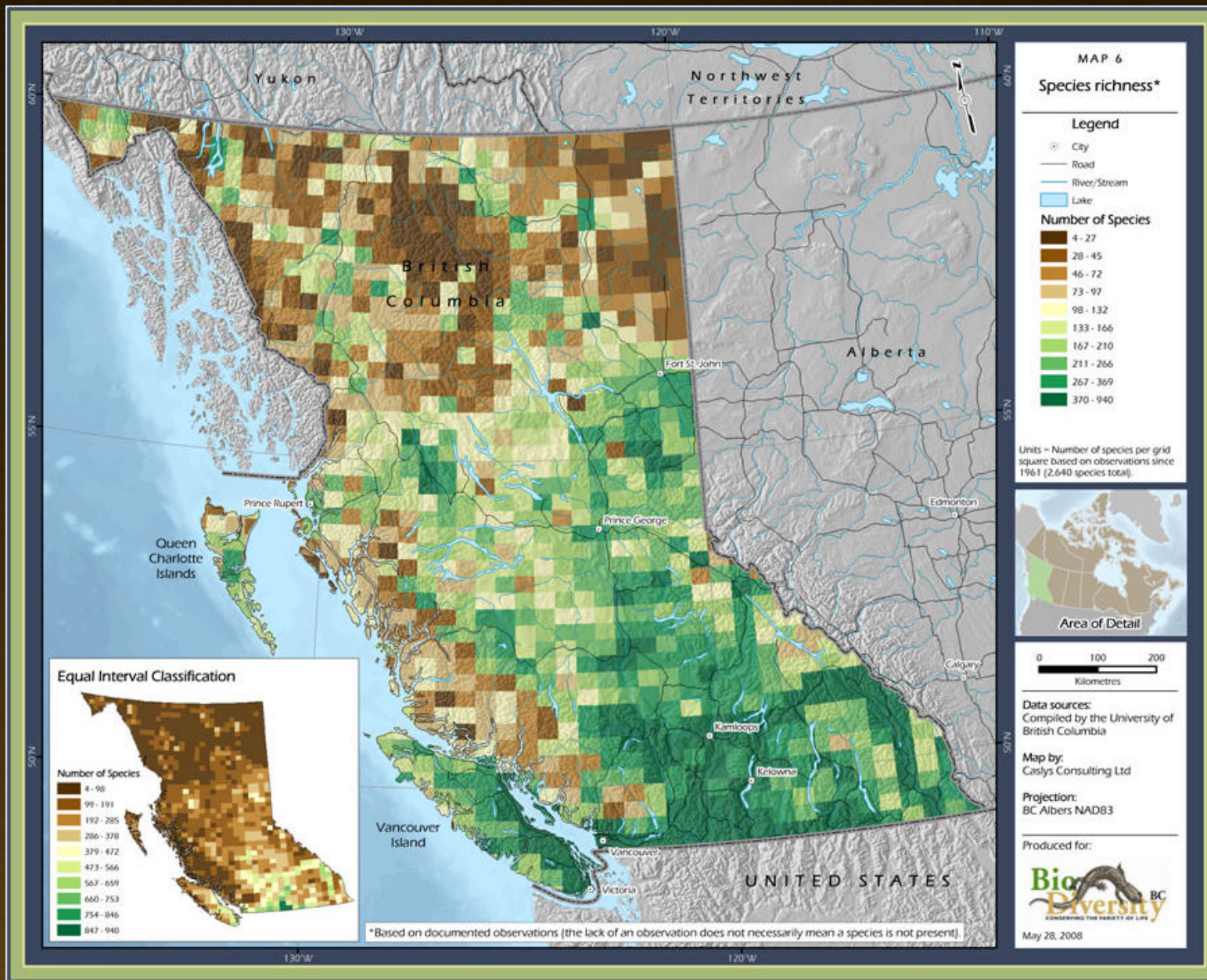


June 17, 2008

Some Major Findings – Species Diversity

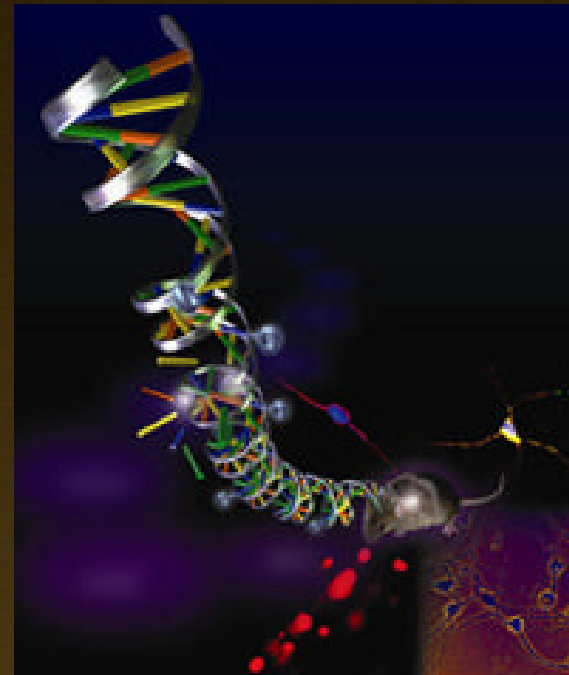
- 43% of species assessed are of conservation concern
- B.C. has a majority of the global range for 99 species





Some Major Findings – Genetic Diversity

- B.C. has high levels of genetic diversity within species which are critical for adaptation and resilience



Some Major Findings – Key and Special Elements

- Water flow in lakes, wetlands and groundwater systems is being seriously affected
- The majority of B.C. has relatively intact predator-prey systems
- B.C. has significant seasonal concentrations of species vulnerable to human impact

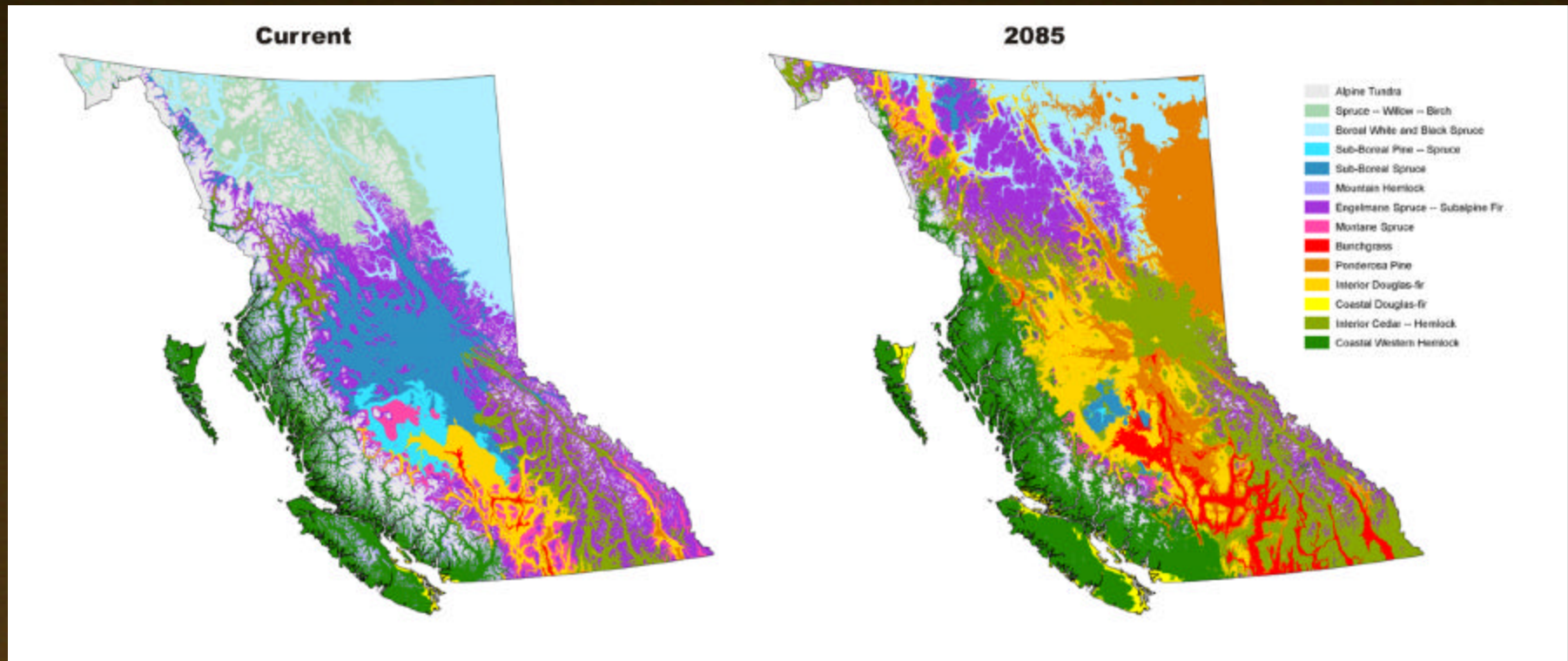


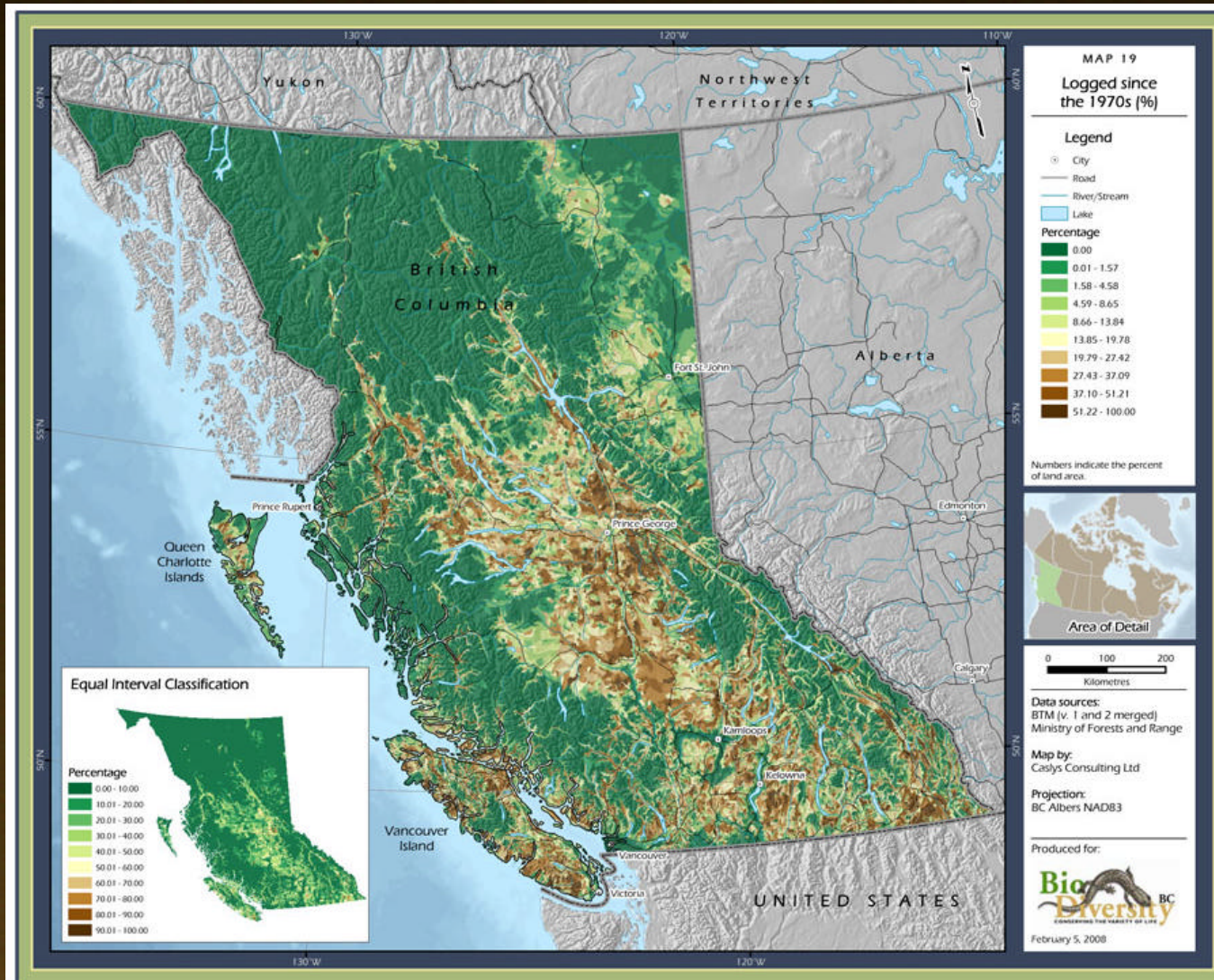
Some Major Findings – Threats to Biodiversity

- Climate change is the foremost threat to biodiversity
- Ecosystem conversion and degradation have seriously impacted biodiversity
- Alien species are seriously impacting biodiversity
- Ecosystem connectivity is being lost and will limit species distribution



Potential shift in BEC Zones by 2085 due to climate change







Path Forward

- increase awareness about the value of biodiversity
- assist with the development of the Conservation Framework
- extension of *Taking Nature's Pulse*
- further analysis to determine conservation priorities arising from *Taking Nature's Pulse*
- encourage action to address major findings in *Taking Nature's Pulse* by governments, First Nations, industry, ENGOs and public
- develop incentives and promote use of conservation tools

The Challenge...

As an independent watchdog for sound forest practices in BC, what role does the FPB have in:

- ◆ building awareness about the value of biodiversity
- ◆ addressing major findings in TNP
- ◆ monitoring progress on biodiversity conservation
- ◆ other...

