Sensitive Ecosystem Inventories (SEIs)

Balancing biodiversity and development in the Central Okanagan

The Central Okanagan basin is of great ecological significance due to its high biodiversity and many rare and endangered ecosystems, plants, and animals. While the region has experienced significant development over the recent two decades, rates of growth are expected to further accelerate in the coming years. The Okanagan is at a critical juncture with a complex dynamic of competing needs. With few remaining sensitive ecosystems in the area, along with additional pressure from climate change, it is imperative that local governments work together to balance habitat retention with sustainable land development in stewarding community growth.

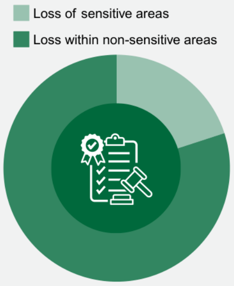
Sensitive Ecosystem Inventories (SEIs) have facilitated environmental protection during land use management since the early 2000s in the Central Okanagan. In BC, SEIs systematically identify and map unique and fragile ecosystems to help conserve and manage biodiversity and habitat protection. SEIs identify sensitive ecosystems and provide scientific information and support to local governments and others who are working to maintain biodiversity.

Central Okanagan Sensitive Ecosystem Inventory update & key findings

The 2021 Central Okanagan Sensitive Ecosystem Inventory Update provides a snapshot of land use changes over the past two decades. The update improves our knowledge of the status and location of the remaining rare and fragile ecosystems, and quantifies how land cover has changed in natural ecosystem areas that have experienced loss. This offers important insights in adapting and improving future policy development and land use management at a municipal and regional scale.

Did you know?

There are 53 species listed as endangered or threated that depend on the remaining sensitive ecosystems and habitats in the Central Okanagan.



Policy influence

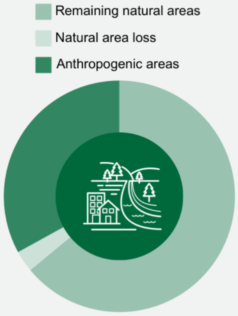
Majority (80%) of development occurred in non-sensitive areas due to effective policy implementation.

Gains

in Wetland were due to natural expansion and improve mapping, in Mature Forest as stands of younger forests aged (structural stage change).

Losses

were most notable in Grassland and Coniferous Woodland.



4.2%

Loss of natural areas due to development (2,342 ha)

Main drivers

of anthropogenic change were due to agriculture and residential expansion.

Wildlife habitat values

indicate that remaining natural elements, urban greenspaces and intact corridors are critical biodiversity hotspots.

Sensitive Ecosystem Inventories (SEIs)

What's next?

Development guided by local government is key for communities to actively engage in conservation efforts to address the challenges of growth on sensitive ecosystems. RDCO will work to establish region-based methodologies for updating Environmental Development Permit Areas (DPAs) and relevant supporting policies in light of anticipated climate change impacts and accelerated regional growth during the next phase of its environmental planning work (2025).

Additional recommendations from the SEI update

Conservation focus

Terrestrial ecosystems (Grasslands and Broadleaf Woodland) and rare habitat types (Wetland and Seasonally Flooded) are critical ecosystems that require prioritization for retention targets.

Climate and growth

Intact natural areas provide valuable ecosystem services irrespective of their categorial status as Sensitive, Important, or Not Sensitive per SEI definition. Additional ecosystem categories may warrant inclusion and additional consideration given the reality of climate change and anticipated growth.

Sustained data

Continued data collection and comprehensive updates are critical in maintaining understanding of ecosystem status and development impacts while ensuring effective land use management.

Regional District of Central Okanagan

rdco.com/SEI