

Ecosystem Health

Description

The health of the local ecosystem is essential to communities that depend on it, and is valuable in and of itself. The Pine Beetle epidemic is a local example of the importance of ecology to our economy: it has had a large economic impact, and the loss of pine trees may also significantly alter the local ecology now and over the long term.



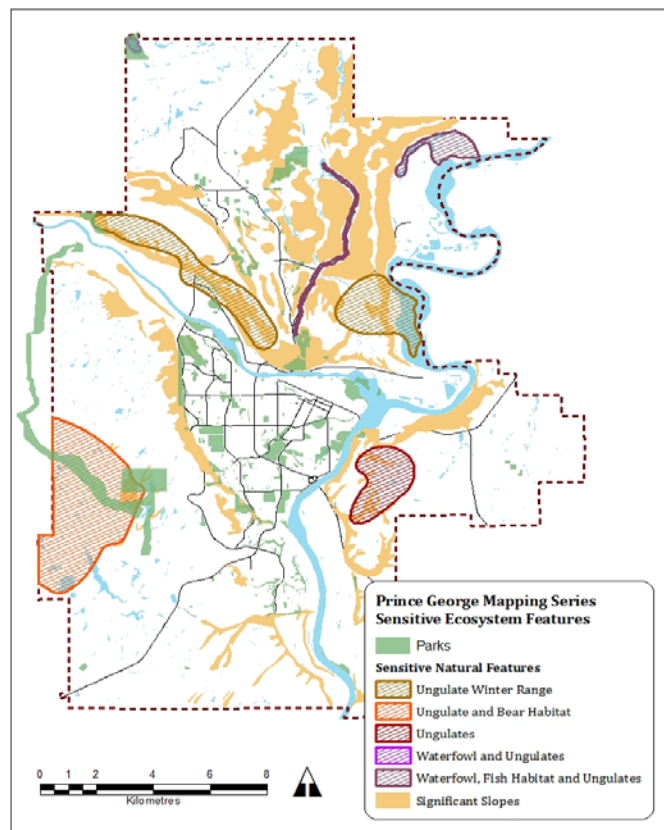
Houses in the Forest. Source: City of Prince George

There is ecological value throughout the City's landscape, from environmentally sensitive areas to farms and even backyards. However, the proximity of developed and natural lands also places pressure on ecosystems and biodiversity, as well as on developed areas, where wildlife-human conflicts happen and wildfires can cause tremendous damage. Finding ways to promote habitat values in and around the City, while reducing risks from wildfires and wildlife, is a continuing challenge for Prince George.

Status and Trends

In Prince George, the public owns significant lands, including public parks and other open spaces, and the community forest. This is an opportunity to have a significant influence over the health of the local ecosystem. The health of the ecosystem is difficult to assess because it is complex. At the same time, it is important to consider the relationship of the ecosystem and human communities. A number of aspects can be considered:

- Protection of environmentally sensitive areas – The City has designated 30 km² sensitive natural areas in its current OCP; 10 km² of this land currently lies within Prince George's Community Forests, and



Currently designated sensitive natural areas in Prince George.

2.5km² is protected within parks. In addition, some privately owned lands in sensitive areas are subject to regulations to minimize impacts.

- Habitat quality and biodiversity in the city – efforts are being made to improve landscaping to reduce irrigation; these often also involve native plants that support native species. Little effort has been made to date to assess the value of non-sensitive areas for habitat.
- Fire risk near the wildland/urban interface – through two major management efforts in the last few years, the fire risk has been evaluated, and the City has made good headway in reducing the risk through effective urban forest management. However, these efforts have focused on public land, where the City has the ability to manage: private lands have not been managed in coordination.

Performance Measurement

Of the potential measures listed below, which should we use to measure and communicate progress? Would you rather use another one? Why?

The following are ways Prince George could measure performance in this area:

- Christmas or spring bird count, as a proxy for biodiversity (counts are already done annually)
- Incidence of wildlife-human conflicts (e.g. # of problem bear incidents/year)
- Percentage of identified sensitive ecosystems and hazard areas that are protected as parks, natural areas, or by City development permit requirements
- Terrestrial habitat quality ratings
- Total tree stand volume and fire hazard rating of forested areas within the wildland/urban interface

Questions for Consideration

Forest management: How can Prince George coordinate efforts between Urban Forest land and private areas to minimize the threat of forest fires, while optimizing protection of biodiversity and the value of open space?

City as part of the ecosystem: Is there value in extending monitoring and habitat enhancement further, into backyards, parks and farms, to make the City as a whole a more valuable part of the overall ecosystem?

Environmentally sensitive areas: under what conditions should development be allowed on private land in these areas?

More Information

[Community Forest of Prince George: Management Plan](#)

[City of Prince George Wildland/Urban Interface Wildfire Management Strategy](#)

[Fraser Basin Council's 2008 Upper Fraser Sustainability Snapshot](#)