



Ecodistrict Profile

Ecological Landscape Analysis Summary Ecodistrict 450: **Governor Lake**

An objective of ecosystem-based management is to manage landscapes in as close to a natural state as possible. The intent of this approach is to promote biodiversity, sustain ecological processes, and support the long-term production of goods and services. Each of the province's 38 ecodistricts is an ecological landscape with distinctive patterns of physical features. (Definitions of underlined terms are included in the print and electronic glossary.)

This Ecological Landscape Analysis (ELA) provides detailed information on the forest and timber resources of the various landscape components of Governor Lake Ecodistrict 450. The ELA also provides brief summaries of other land values, such as minerals, energy and geology, water resources, parks and protected areas, wildlife and wildlife habitat.

The Governor Lake Ecodistrict, located in the centre of the eastern mainland at the junction of the Guysborough, Halifax, Colchester, and Pictou county lines, is an upland underlain by granitic bedrock. To the north, the ecodistrict drops sharply to the West River St. Marys, but on the other three sides it is less abrupt in its rise above the shales and quartzites of the Eastern Interior Ecodistrict. Governor Lake has an area of 63,300 hectares.

At its highest point, the ecodistrict is 200 metres above sea level. The ecodistrict has hot summer temperatures, cold winter temperatures, and a short frost-free period.

The ecodistrict is underlain by intruding Meguma Group granite similar to that found in the South Mountain 720 and Eastern Granite Uplands 420 ecodistricts. The granite is resistant to erosion. Some glacial activity has created drumlins and eskers, which can be found scattered throughout the ecodistrict.



Hardwood forests occur on hills and drumlins with red spruce and yellow birch on lower slopes and hummocky terrain at South Loon Lake.

Large mammals such as black bear and deer are found in the ecodistrict. Black bear are widespread and their numbers are healthy. White-tailed deer numbers increase from east to west.

Species at risk in the ecodistrict include the nationally threatened wood turtle.

Approximately 84% of the Governor Lake Ecodistrict is forested.

On the well-drained upper slopes and crests of hills and drumlins, tolerant hardwood forests are found, dominated by yellow birch and red maple and lesser amounts of sugar maple and beech. Elsewhere, softwood forests dominate, with stands of red spruce.



A portion of the Liscomb Game Sanctuary occurs in the ecodistrict providing refuge for black bear, white-tailed deer and species at risk such as the mainland moose.

Private lands account for 74% of the Governor Lake Ecodistrict, with provincial Crown lands at 20% and the remainder in other ownership.

Landscapes are large areas that function as ecological systems and respond to a variety of influences. Landscapes are composed of smaller ecosystems, known as elements. These elements are described by their physical features – such as soil and landform – and ecological features – such as climax forest type. These characteristics help determine vegetation development.

Element descriptions promote an understanding of historical vegetation patterns and the effects of current disturbances. This landscape analysis identified and mapped six key landscape elements – one dominant matrix element, four smaller patch elements, and a corridor element– in Governor Lake.

Red and Black Spruce Hummocks is the matrix element, representing 72% of the ecodistrict area. On well-drained slopes, forests are dominated by red spruce and white pine. Other species common in the element include black spruce, balsam fir, red maple, and white birch.

Tolerant Hardwood Hills is the largest patch element, representing 18% of the ecodistrict. Yellow birch is a dominant species followed by sugar maple and red maple. Mixedwood forests of balsam fir, red spruce, and yellow birch are also found in the element on lower slopes.

The other patch elements, in order of size, are **Tolerant Hardwood Drumlins and Hummocks**, **Wetlands**, and **Spruce Pine Flats**.

Valley Corridors is a linear element associated with the major watercourses in the ecodistrict.