



## Ecodistrict Profile

### Ecological Landscape Analysis Summary Ecodistrict 710: **Valley Slope**

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 Valley Slope Ecodistrict 710. 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.

Valley Slope, a narrow ecodistrict that stretches from the Acacia and Bear River valleys in Digby County east to Mount Denson in Hants County, has some of the most fertile soils in the province.

The slopes of the ecodistrict, protected from the cooler climate associated with the Bay of Fundy by its inland location, have been used extensively for apple orchards, mixed farming, and vineyards.

The soils and climate that are favourable for agriculture are also good for forests. In Valley Slope, about two-thirds of the land has a growth rating for forested land higher than the provincial average.



The Gaspereau River cuts through the ecodistrict on its way to the Minas Basin.

This ecodistrict has the lowest area of freshwater of all ecodistricts in the Western Ecoregion, with only half of 1% comprising lakes and rivers.

The total area of the Valley Slope Ecodistrict is 88,490 hectares. Private land ownership accounts for about 95%. Provincial Crown land accounts for 2.6% of the area while aboriginal lands represent 0.3%. Federal and other lands account for the rest. *Nova Scotia's purchase in 2013 of former Bowater Mersey Paper Company Limited lands has increased Provincial Crown land ownership to 8.5% of total area.*

Legally protected reserves within Valley Slope include the Grand-Pré National Historic Site and a small portion of the Cloud Lake Wilderness Area.

Valley Slope provides excellent habitat for red-tailed hawks, which favour mixed open and wooded habitat, as long as there are suitable nest trees near feeding areas. There are reports of goshawks nesting in this ecodistrict, and one area at the northeastern end of the Valley Slope is recognized as a consistently important nesting site.

A significant number of wintering bald eagles congregate at the northeastern end of the Valley Slope and in the adjoining Annapolis Valley Ecodistrict. Eagles use stands of large mature trees on the steep ravine along the Gaspereau River for night roosting.

Eastern white cedar, designated vulnerable in Nova Scotia, is the only Valley Slope plant species listed under the Nova Scotia Endangered Species Act as of 2008. Eastern white cedar has been identified at several sites in the ecodistrict.



Hemlock forests are common along the ravines leading to the Valley floor.

A little more than three-quarters of the ecodistrict is forested. On the upper slopes of well-drained areas, the climax forests are shade-tolerant hardwoods. Sugar maple, beech, and yellow birch, with scattered white pine, dominate these sites. Farther down the slope on the deep moist soils and in the shaded ravines, a climax forest of hemlock, red spruce, and white pine is found. The lower slopes often support characteristics of forest elements that would be present in the adjacent Annapolis Valley Ecodistrict.

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 seven key landscape elements – one dominant matrix element, five smaller patch elements and a corridor element – in Valley Slope.

**Spruce Hemlock Pine Hummocks and Hills** is the matrix element, representing more than 72% of the ecodistrict. This element naturally supports climax forests of long-lived species that generally grow well in shade, such as red spruce, hemlock, white pine, sugar maple, yellow birch, and white ash. About one-quarter of the matrix has been converted to agriculture or settlement.

**Tolerant Hardwood Hills**, representing nearly 19% of the ecodistrict, is the largest patch element. The climax forest community is sugar maple, yellow birch and beech, and this hardwood component is similar to the second largest patch element, **Tolerant Mixedwood Slopes**, representing a little over 6%. The remaining three patch elements – **Spruce Pine Flats, Wetlands and Pine Oak Hills and Hummocks** – and **Valley Corridors**, a linear element associated with the major watercourses in the ecodistrict, are each less than 1% of the area. *A tiny Floodplain element is also part of the ecodistrict.*