



## Ecodistrict Profile

### Ecological Landscape Analysis Summary Ecodistrict 520: **St. Georges Bay**

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 St. Georges Bay Ecodistrict 520. 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 lowlands, wrapping around St. Georges Bay, extend inland to the Mulgrave Plateau Ecodistrict 360 on the mainland and to the Cape Breton Hills Ecodistrict 310 on Cape Breton Island.

Including most of Antigonish County and incorporating the Judique lowlands of Inverness County, this area has been used extensively for farming. Elevations are between 30 to 60 metres above sea level although there is a consistent rise inland from the coast to an elevation of 150 metres.



The unusual prograding (seaward shifting shoreline) sand dunes at Pomquet Beach Provincial Park are one of many sandy beaches along the shoreline of St. George's Bay.

Underlying the ecodistrict are sedimentary rocks of sandstone, shale, and limestone. In some areas, gypsum outcrops and associated karst topography – a landscape of depressions, shafts, and sometimes caves formed by water dissolving rocks such as gypsum and limestone – can be seen. One such area is the cliffs along St. Georges Bay, north of Antigonish.

The ecodistrict contains several significant wildlife habitats and species at risk. For example, the white sand beaches bordering the Northumberland Strait provide nesting and rearing habitat for the endangered piping plover.

Rivers such as the West, Rights, South, Pomquet, Afton, Monastery, and Tracadie sustain annual runs of brook, rainbow and brown trout, as well as Atlantic salmon, and, in some cases, gaspereau.

The extensive agricultural history has modified many of the natural forest communities. Abandoned agricultural lands often revert to stands of white spruce. In Antigonish County, there are more than 10,000 hectares of forest stands where white spruce comprises at least 30% of the cover.

The ecodistrict has an area of 89,295 hectares. Private land ownership accounts for 92%. Only 5% of the ecodistrict is under provincial Crown 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 eight key landscape elements – one dominant matrix element, six smaller patch elements, and a corridor element – in St. Georges Bay.

**Tolerant Hardwood Hills** is the matrix element, representing 60% of the ecodistrict. On the upper slopes, this element naturally supports a forest of shade-tolerant species, such as sugar maple, yellow birch, beech, and white ash. On the lower slopes, the addition of red spruce and hemlock combine with the hardwoods to create mixedwood forests.

**Spruce Pine Hummocks**, representing nearly 22% of the ecodistrict, is the largest patch element with forests dominated by black spruce, white pine, tamarack, and red maple. **Spruce Fir Hills and Hummocks** is the second largest patch, followed by **Floodplain**, which is mainly associated with smooth, level terrain along major rivers. The remaining three patch elements, in order of size, are **Coastal Beach**, **Wetlands**, and **Salt Marsh**, which in total represent less than 1% of the area.

**Valley Corridors**, a linear element associated with major watercourses, accounts for 6% of the ecodistrict.



Sandy beaches surround the St. George's Bay ecodistrict such as this one at Port Hood Provincial Park.