Working towards a Water Strategy for New Brunswick:

GeoNB



GeoNB is an online source of geographic information that is assessable to everyone. It provides a free,

easy-to-use, Internet based applications for viewing map layers and aerial photos of the province of New Brunswick.

The GeoNB service is available at the following link:

http://www.snb.ca/geonb1/e/index-E.asp

Various types of information available through GeoNB including information on past floods, protected watersheds, protected wellfields, River Watch and watercourse and wetland mapping. In many cases, users can search for particular property, locate designated areas and overlay them on top of the GeoNB base map. The map layers can also provide visuals of forecasted flows, monitoring, areas at risk of potential flooding, and locations of regulated wetlands.

How to use the GeoNB Map Viewer

The GeoNB Map Viewers are available by following this <u>link</u> and clicking on:

GeoNB Map Viewer or by clicking on the applications link (http://www.snb.ca/geonb1/e/apps/apps-E.asp) and choosing one of the custom map viewers.

When the GeoNB Map Viewer is opened, you will see a map of New Brunswick along with map navigation, map options, tools, overview map and a scale bar (see figure 1).



Figure 1 - GeoNB Map Viewer

Map Navigation

The map navigation tool is located in the upper left side of the map view and allows the user to zoom in and out of the map.

Maps

Under the Basemap tab:

There are three options of basemaps to choose from:

- Topo the default map that shows topographic features, administrative boundaries, transportation and utilities.
- Aerial displays aerial imagery.

- Grey – displays a generalized basemap in shades of grey

Under the More tab:

There are lists of different map layers that can be displayed on the map. To add a layer, check the box next to the layer



The Map Viewer has the following layers in the default viewer:

- Parcels: Property boundaries for New Brunswick.
- Civic Address: Civic Address numbers and addresses.
- Environment Canada Weather Radar: Weather radar service provided by Environment Canada.
- Wetlands: The Regulated Wetlands Map intended to indicate the location of regulated wetlands including Provincially Significant Wetlands.
- Flood Information: Indicates some areas that have a higher risk of flooding.

Water Related Tools



Flood Information

This tool displays information, including flood lines, extents, flood risk areas, and areas flooded in particular events. Clicking on each layer in the tool will provide a description of each data set.

Clicking on the check boxes beside the layers will turn the layers on and off.

Flood Risk Areas are presented in layers for three categories:

- 1 in 20 Year Flood Zone: This represents the area that has a probability of 5% of being flooded in any given year.
- 1 in 100 Year Flood Zone: The area that has a probability of 1% of being flooded in a given year.
- Other Flood Risk Zone: Areas with a known history of flooding.



Historical flood information is presented based on two floods:

- The 2008 Flood Zone: Represents the approximate highest water level reached during this flood event. In many communities on the Saint John River the 2008 flood was one of the highest flood levels reached in the past 50 years.
- The 1973 Flood Zone (Fredericton): Represents the area affected by the 1973 flood, one of the highest floods to affect the Saint John River valley.



Wetlands

This tool displays areas for Regulated Wetlands and Provincially Significant Wetlands.

The Regulated Wetlands Map is intended to indicate the location of regulated wetlands including Provincially Significant Wetlands.



Wetlands are presented in the following layers:

- Provincially Significant Wetlands (PSW): These are all coastal welands, wetlands associated with the Lower Saint John River flood plains, as well as other ecologically important wetlands in the inland area of the province.
- Regulated Wetlands Map (RWM): This map shows wetland areas that are regulated under the Watercourse and Wetland Alteration Program.
- PSW and RWM 30 m buffer layers: This line indicates the regulated area within 30 meters of a Regulated Wetland and including Provincially Significant Wetlands. Any activity in these areas requires a Permit.

Information is also available through GeoNB on the following water related topics:

- Protected Watersheds: Provides the location of protected watersheds in New Brunswick.
- Protected Wellfields: Provides location of protected wellfields in New Brunswick.



Data Extract

This tool allows the user to download data that can be used with GIS software. There is a data catalogue

available with many more downloadable GIS layers available at:

 $\frac{http://www.snb.ca/geonb1/e/DC/catalog}{ue\text{-}E.asp}.$

For information on GeoNB, contact Service New Brunswick at geonb@snb.ca.