SAINT JOHN RIVER ATLAS
USER GUIDE – RELEASE 1

SYSTEM REQUIREMENTS

The minimum browser requirements are:

- Javascript Enabled
- Either Internet Explorer 6 (and higher), Firefox 1.5 (and higher), or equivalent (e.g., Opera 9.x, Safari, Konqueror)
- Pop ups may have to be enabled

RELEASE 1 NOTES

The Saint John River Atlas will be published in multiple releases before going "live" in 2008. The release approach provides the opportunity for the user community to participate in the development of the Atlas by providing valuable information and feedback. We will publish new releases as portions of the site are completed.

Please keep in mind the Saint John River Atlas is a work in progress. Some aspects of the Atlas are not completed yet and there is more work to be done on the content. Areas requiring more work are identified in this manual as red text.

Please be patient with the slow response of the maps. We can significantly improve the performance by creating images of the maps at various scales. Before we do that, however, we want your feedback to make sure they will meet your needs. The maps do not yet include Maine or Quebec.

We have focused on functionality and plan to improve the aesthetics of the site In future releases. Your browser can impact the layout of the Atlas so depending on your software, some buttons or text may appear out of place. We are working on creating a consistent look regardless of the brand and version of browser software. However, let us know if you experience trouble viewing the Atlas.

Note: The search results will list the data sets available for a lake or stream, however only the Fish Stocking data set has links to the associated tabular and spatial data. The next release will implement the view and download of data sets.

Note: Two maps use data from NR Canada's web services – the Topographic Map and NR Canada Topographic Map. We are getting mixed results as their server will not send the data if the map window is too large. The Topographic Map displays SNB's base data, plus NR Canada's elevation data and contour lines. These layers are scale dependent so you will have to zoom in to see them. The NR Canada Topographic Map (images of their 1:50k series maps) should show an index map for their 1:50,000 map series. Sometimes the map will appear blank. Try reducing the size of the browser window.

FEEDBACK

Each page of the website contains a link under the Saint John River Atlas title to send feedback to the development team via an email message. Let us know what you like or dislike and any suggestions to make the site easier to use or more useful. If you encounter an error, please provide us much detail as possible of the actions that lead up to the error.

ATLAS URL

http://gis.mektekdev.com/sjratlas

This is a temporary URL while the Atlas is under development. When completed, the Atlas will be available through the Data Warehouse's existing website.

WEBSITE OVERVIEW

The Atlas website has 6 sections (home, maps, search, forms, reports and about) and can be accessed through the tabs near the top of the home page. The descriptions, including the features of each of page, are as follows:

Home	Provide links to the main features of the Atlas including: • Interactive Maps • Search Functions - Quick and Advanced search; search tools at other websites • Links to Related Websites
Maps	Presents lists of interactive and published maps, along with descriptions and map previews. Also includes a link to advanced map. A snapshot of the map is presented in the Preview box as the mouse is moved over each map description.
Search	Advanced search for querying time series and other tabular data
Forms	Presents list of NB's standardized data collection forms along with download option
Reports	Presents list of downloadable reports and documents
About	Information on the NB Aquatic Data Warehouse and the Saint John River Atlas

INTERACTIVE MAPS

Interactive maps are maps published by the NB Aquatic Data Warehouse using local data as well as layers from other agencies that publish their data through web mapping services (wms). These are not static maps; they display the most current version of the data. And as the name implies, visitors can interact with the maps through map tools and tasks.

ACCESSING INTERACTIVE MAPS

There are several ways of viewing the interactive maps:

1. Click on one of the links on the Atlas' home page
2. Click on the Maps tab on the Atlas' home page to view a list of interactive maps, their descriptions and map previews (see Map page below)
3. Results from a Quick Search will present a list of interactive maps if appropriate (see Search section below)

INTERACTIVE MAP OVERVIEW

All of the interactive maps have the same interface (Figure 1) consisting of a title bar area, tool bar area, a collection of map interaction windows and the map window.

The collection of map interaction windows are to the left side of the map window. Each of these windows can be expanded/collapsed or docked/undocked using the triangle (▼or ▲) and arrow (>> or <<) symbols, respectively, in the smaller window's title bar.

Undocking a window moves the window into the map area so it can be moved elsewhere in the map window.

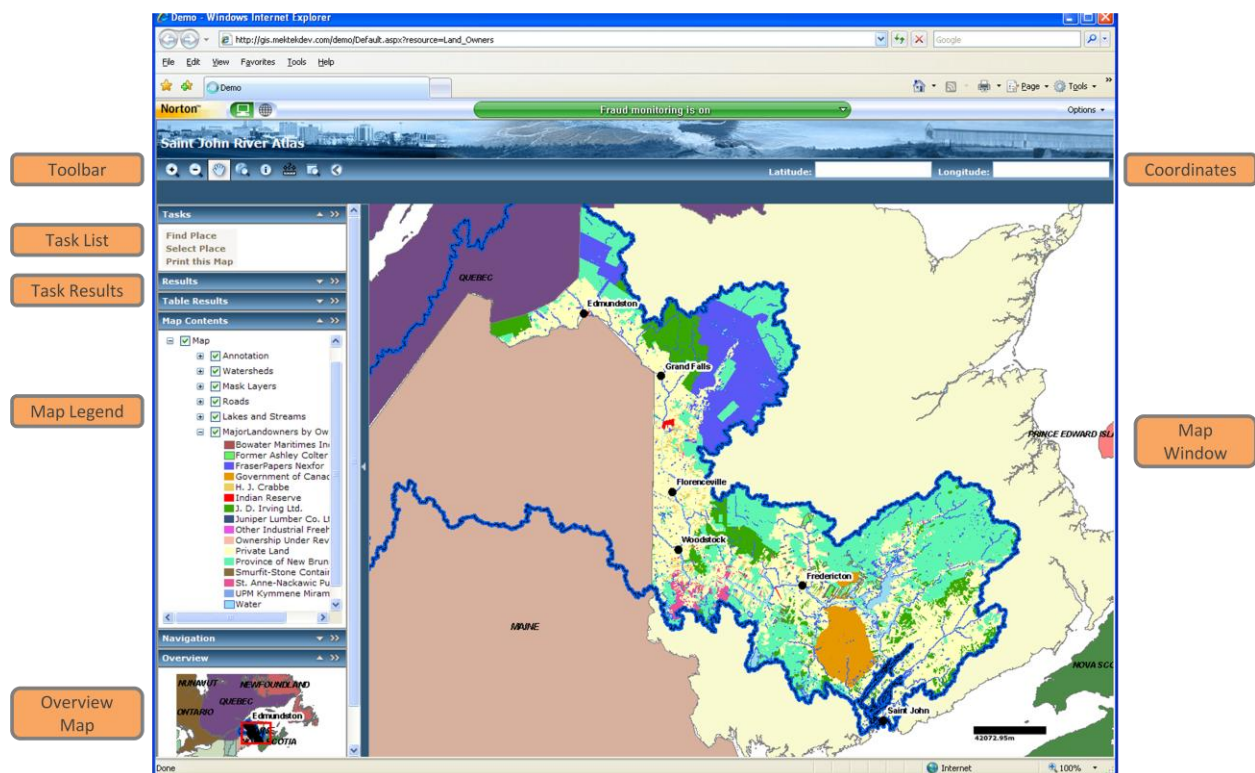Windows can be resized by clicking and holding on the bottom or vertical edges of the window.

The order of the map interaction windows can be rearranged by right clicking on the title bar of one of the windows. A context menu appears; the window can be moved to the top or bottom or up/down one step at a time.

If a larger map window is desired, the collection of map interaction windows (tasks, results, etc.) can be hidden by clicking on the ◄ symbol on the vertical bar to the left side of the map window.

The following provides an overview of the sections of the interactive map window:

Section	Purpose
Tool Bar	Hover the mouse over a tool and the tool name will be displayed Click on the tool to activate the tool Tools include Zoom In, Zoom Out, Pan, Zoom to Full Extent, Identify, Measure, Magnifier, and Return to Previous Extent
Tasks	Presents a list of tasks the user can perform including: Find a Place, Select a Place and Print Map
Results	Area to present task results. User may be prompted to respond to the task results.
Map Contents	Legend for the map contents Layers can be turned on / off
Navigation	A compass that can be used to move the map in specific direction
Overview	A small map illustrating the extent of the current map window in relation to the full extent of the map

Figure 1. Sections of the Interactive Map Window.

USING THE TOOL BAR

Zoom In

Click on the tool (mouse changes to crosshairs) then click on the map to have the map zoom in by a fixed amount and re-center the map on the click point.

Click on the tool (mouse changes to crosshairs) then use the mouse to draw a rectangle around the area of interest. The map will zoom to this area.

Zoom Out

Click on the tool (mouse changes to crosshairs) then click on the map to have the map zoom out by a fixed amount and re-center the map on the click point.

Pan

Click on the tool (mouse changes to crosshairs with arrow ends) then click and hold the mouse to move the map in the desired direction.

Zoom to Full Extent

Clicking on the tool automatically zooms the map out to the maximum extent (e.g. Saint John River basin).

Identify

Click on the tool (mouse changes to a hand) then click on a feature on the map to retrieve information about the feature. The results will be displayed in the Results window and will include information on all layers under the identify point. The results list is nested; the + symbol beside a list item indicates more information is available.

Click the + symbol beside Results: in the results window. The layers under the identify point will be displayed. Click on the + symbol beside the layer to see which features were included in the identify, then click on the + symbol beside the feature to view information on the feature.

Remember the window can be resized.

Measure

Clicking on the Measure tool opens a small window which provides 3 measure options: get the coordinates of a point, get the distance of a line drawn on the map, and get the area of a polygon drawn on the map.

Click the desire option, then click a point or draw a line or polygon as appropriate for the measure option. Double click to finish the end of a line or to close a polygon. The resulting measurements (coordinates, distance or area) are presented in the Measure window. Distance and area results include drop down boxes to change the unit of measure. Coordinates will be in meters, representing New Brunswick's NAD83(CSRS) NB Double Stereographic spatial reference system.

Magnifier

Clicking on the Magnifier tool, opens a magnifier window which can be moved over the map to view the area under Magnifier window in more detail. The magnification factor can be set through a drop down list at the bottom of the window.

Not working properly

Return to Previous Extent

Returns to extent previously viewed in the map window.

USING TASKS

Find a Place

Clicking on the Find a Place task opens a dockable Find Place window meaning the window can be docked with the other map interaction windows like Tasks and Results. Enter a place name, such as Fredericton, NB and click the Find button. The results are presented in the Results window.

The results list presents the place name being searched and the number of occurrences found. Search results are context sensitive, meaning, if you place the mouse over the result and right click, a menu is presented. At this level, the context menu includes Run Task Again, Refresh and Remove.

Click on the + symbol to view place names that were found. To mark one of the places, place the mouse over the desired place and right click. You can zoom or pan to the selected place or remove the result from the list. Selecting zoom to or pan to centers the map on the place and displays a red push pin maker to highlight the location.

This task currently searches ESRI's world place name database and does not contain all of NB's place names. The next release will connect to NR Canada's geographical names database.

Select a Place

Clicking on the Select a Place task opens a Select Place window. Select the layer containing the feature(s) you wish to select (e.g. Water Temperature Logger Sites). Then select one of the 5 tools available for selecting the feature – Select by a Single Click on the feature, Select by Dragging a Rectangle around the feature(s), Select by Drawing a Line through the feature(s), Select by Drawing a Polygon around the

feature(s), and Select by Drawing a Circle around the feature(s). Once selected, the results are presented in the Results window. Click the + symbols to view the associated feature information.

This task, when completed, will be used for selecting features such as data collection sites, then presenting the time series data associated with the site.

Print this Map

Clicking on Print this Map task opens a dialog window for entering a map title and setting other parameters for the map, such as resolution and scale. Click on Create Print Page button to open a new window displaying the map image.

A button to send the map to a printer or to save as a jpg will be added in the next release.

USING MAP CONTENTS

The Map Contents window is more than a legend for the map. For most maps it allows the user to turn on or off some of the layers.

The map contents list is presented as a nested list; clicking on a + symbol will display lower level information. For instance, the highest level in the Map Contents is Map. Clicking on its + symbol displays the individual layers or layer groups in the map. Clicking on the + symbol of a single layer will display the symbology of the layer; clicking on a layer group displays the individual layers within the group.

If a layer name is a light grey rather than black, this means the layer is scale dependent. That is, the layer will not display unless the map is at a scale appropriate for the displaying the layer. For instance, one would not want to view all the roads or all the streams when the map is at a scale showing the entire province.

 The check box beside the layer indicates whether the layer is visible. Checking an unchecked box will cause the map window to refresh and make the layer visible. Clearing a checked layer box will refresh the map and the layer will no longer be visible.

USING NAVIGATION

The Navigation window contains a compass. Click and hold the mouse button to move the map in direction of the compass arrows.

QUICK SEARCH

Quick search is a text search tool found in the top right corner of all Atlas web pages and in the middle section of the Home page.

Enter a place name, lake or stream name, data set name, or other text string to search for maps, reports, data and other information.

Enter the word "watershed" after a water body name if you want the search to include all lakes and streams within a drainage area. Note the water body name must be one of the province's official drainage units. View the Drainage Unit Listing.

The search checks NR Canada's Canadian Geographic Names database and will return official and rescinded place names. Rescinded names are no longer official place names but may still be commonly used. The search results indicate whether the place name has official status.

The search function checks NR Canada's database to determine if the text string is a valid place name. If found and there are more multiple locations with the same name, the list of places are returned so the user can select the desired location. Each location has a View Location link to display the place in a Google map.

If a valid watershed name is entered (e.g. Eel River watershed) and there are multiple watersheds in New Brunswick with the same name, the list is presented and the user must select the desired watershed unit.

Once a place, lake or stream, or watershed is selected, the search results are presented in 4 categories or groups: Interactive Maps, Published Maps, Published Reports and Data.

Interactive Maps	There are several thematic maps that cover the entire Saint John River basin, such as major landowners and topographic maps. Therefore, when searching on any place or water body within the Saint John River basin, these maps will always be listed. The list will also include any maps that are specific to the selected place or water body, such as lake depth and stream habitat maps. However, not all water bodies have these maps. Interactive maps are web maps published by the NB Aquatic Data Warehouse using local and remote mapping services or data. These maps also contain map tools and tasks that allow the user to interact with map. When an interactive map is selected from the search results, the map will zoom to the selected place or water body.
Published Maps	Published maps are static maps prepared by the NB Aquatic Data Warehouse

	and other organizations and presented as PDF documents. Each published map has an associated metadata document describing the map, how it was created and by whom, and the time period of the information or data being presented.
Published Reports	Published reports are reports or documents prepared by the NB Aquatic Data Warehouse and other organizations and presented as PDF documents. Each published report has an associated metadata document describing the document, the author and publication date.
Data	If the selected place is a water body, this section of the results lists the data available for the particular water body. The list presents a description of the data set, plus the options available for viewing the data, e.g. as a map, as tables, as a graph, etc. The data set's metadata may also be viewed.

The search results will list the data sets available for a lake or stream, however only the Fish Stocking data set has links to the associated tabular and spatial data. The next release will implement the view and download of tabular data sets.

ADVANCED SEARCH

Advanced search is for querying and downloading tabular data. It is available through a link adjacent to Quick Search on the top right corner of each Atlas page or as a link under the Quick Search found in the middle section of the Home page.

The advanced search function requires the user to select a data set; area of interest, agency and date range are optional.

Area of interest may be a watershed, a water body, or a specific data collection site.

> If watershed unit is selected, enter the drainage code or the name of the unit. Text auto-complete is used so the system will assist with the completion of the drainage code or watershed name by searching the database for similar entries.

> If a lake or stream is selected, enter the water body ID or the name of the water body. Text auto-complete is used so the system will assist with the completion of the water body ID or name by searching the database for similar entries.

> To search for a specific data collection site, a NBADW assigned Aquatic Site ID must be entered.

To limit the search to data collected by a single agency, select an agency from the drop down list. Or if data from a specific time period is required, enter a single year (e.g. 2001) or a range of years (e.g. 2001-2006). Click the search button to execute the search – not available until the next release.