

**British Columbia Historic and Operating Mines
(version 2.01)**

Virtual Atlas

March 2004
Revised May 2007

see:

http://webmap.em.gov.bc.ca/mapplace/historicMines//mines_entry.htm

Prepared for:

Environment Canada
Pacific and Yukon Region
Environmental Protection Branch

and

BC Ministry of Energy and Mines

Prepared by

Suzanne Richer
Community Mapping Network

For further information contact:

Robert McCandless	Environment Canada	604.666.2199
Gregg Stewart	Ministry of Agriculture and Lands	250.387.1528

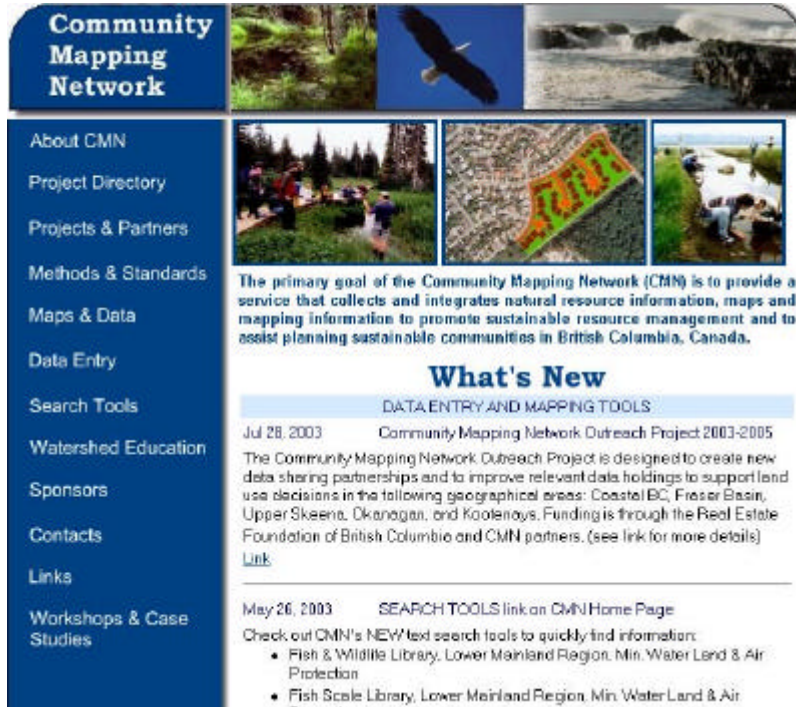
TABLE OF CONTENTS

1	THE BRITISH COLUMBIA HISTORIC MINES ATLAS	1
1.1	THE COMMUNITY MAPPING NETWORK (CMN)	1
1.2	GIS DATA LAYERS AND DATA GROUPS	2
2	USING THE BC HISTORIC MINES ATLAS	3
2.1	MANUAL ACCESS TO THE BC HISTORIC MINES ATLAS	3
2.2	AUTOMATIC ACCESS TO THE BC HISTORIC MINES ATLAS	6
2.3	OPENING THE BC HISTORIC MINES ATLAS	7
2.4	HELP	9
2.5	METADATA.....	9
2.6	OPTIONS	9
2.7	LOG OUT	9
2.8	BC HISTORIC MINES ATLAS DATA GROUPS AND DATA LAYERS.....	9
2.9	ZOOMING TO SPECIFIC FEATURES USING THE “ZOOMGOTO” TOOL:.....	15
2.9.1	<i>Mine Name</i>	16
2.9.2	<i>MINFILE Number</i>	17
2.10	BC HISTORIC MINES ATLAS MAPPING TOOLS.....	18
2.10.1	<i>Return</i>	18
2.10.2	<i>Digitize a point by clicking on the map</i>	19
2.10.3	<i>Digitize a point by entering UTM coordinates</i>	24
2.10.4	<i>Edit information</i>	25
2.10.5	<i>Move a point</i>	26
2.10.6	<i>Delete a point</i>	26
2.10.7	<i>Report</i>	27
2.10.8	<i>Attach a file (only for MMER Discharge points)</i>	27
2.10.9	<i>Collapse all layers</i>	28
2.10.10	<i>Expand all layers</i>	28
2.10.11	<i>Print the Map</i>	28
2.10.12	<i>Go to the CMN home page</i>	28
2.10.13	<i>Help</i>	29
2.11	VIEWING REPORTS.....	29
2.11.1	<i>Mines Report:</i>	30
2.11.2	<i>Point Report</i>	30
2.11.3	<i>Flow Station Report</i>	31
2.11.4	<i>Climate Station Report</i>	32
2.11.5	<i>FISS and Fisheries Data Inventory Report</i>	33
3	TROUBLESHOOTING THE ATLAS.....	36
4	CONTACT INFORMATION	38
4.1	ENVIRONMENT CANADA:.....	38
4.2	COMMUNITY MAPPING NETWORK:.....	38
4.3	MINISTRY OF ENERGY AND MINES:.....	38

1 The British Columbia Historic Mines Atlas

1.1 The Community Mapping Network (CMN)

The BC Historic Mines Atlas is located on an Internet site called the Community Mapping Network.



The Community Mapping Network (www.cmnbc.ca) was created to share natural resource information and mapping amongst communities in British Columbia, Canada.

The Community Mapping Network (CMN) uses a network of servers to provide Internet access to resource information, base maps and imagery. Many types of information are integrated on CMN project web sites, including fish and wildlife distributions, mapped

and unmapped streams, and wetlands, rare and endangered species, biodiversity; and possible restoration sites.

The CMN houses data on its server in Squamish, British Columbia. This server contains all of the GIS data layers and digital database layers for all of the Atlases and Mapping Tools available on the CMN. A server does exactly what its name implies, it **serves up** Internet Maps to users all across the province of BC and Canada.

The CMN is aimed at local communities, First Nations, municipalities, planners, and managers. The information available on the CMN web site can be used for many applications, including:

- Community planning
- Storm water management
- Emergency response
- Habitat restoration and enhancement
- Watershed and coastal planning
- Development referrals
- Impact assessment
- Research
- Education and awareness

The key objectives of the network are to build local capacity and expertise, share ideas and link all community data across administrative boundaries. Natural resource information is integrated on the CMN network in order to:

- Assist communities and local governments with sustainable land use planning
- Develop common methods and standards for data collection
- Share ideas and project information locally and internationally
- Promote active and continuous stewardship and conservation
- Create an open forum for discussing the use and management of natural resources
- Promote planning of sustainable communities
- Protect sensitive habitats
- Raise awareness and respect for ecological values.

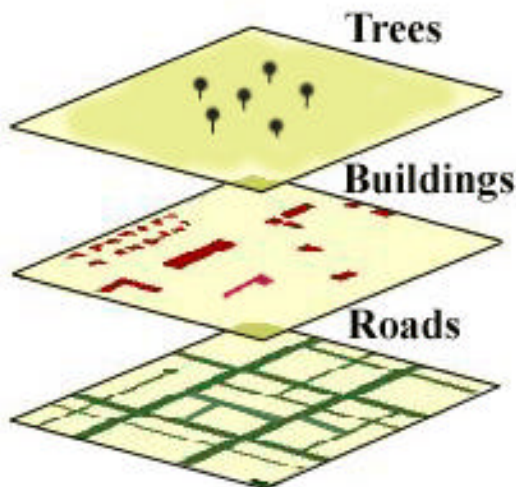
1.2 GIS Data Layers and Data Groups

A GIS contains data layers. Data layers are an important component of a GIS. Layers are like transparencies; they are different kinds of information that can be displayed 'stacked' one on top of the other. Data layers can be viewed separately or viewed all together at one time.

In a GIS, there are **three different kinds of data layers - points, polygons and lines.**

- **Point** features may include birds, trees, mines, observations, people or cities (population centers).
- A **polygon** feature may include buildings, soil types, lakes and provinces.
- A **line** feature may include roads, rivers, bird migration routes and topography.

Consider the example of soils and vegetation. The soil lies underneath the vegetation in the real world. A GIS is built this way as well, the soils data layer lies underneath the vegetation data layers. Both soils and vegetation exist in the same spatial context, these layers overlap each other. This allows them to be displayed and queried in the GIS.



Below is an example of how roads, buildings and trees are all spatial elements that lie one on top of another as data layers in a GIS.

A GIS map can also contain groups of layers, which are called **layer groups**. All the layers in a layer group can be turned on or off at one time. In the graphic shown

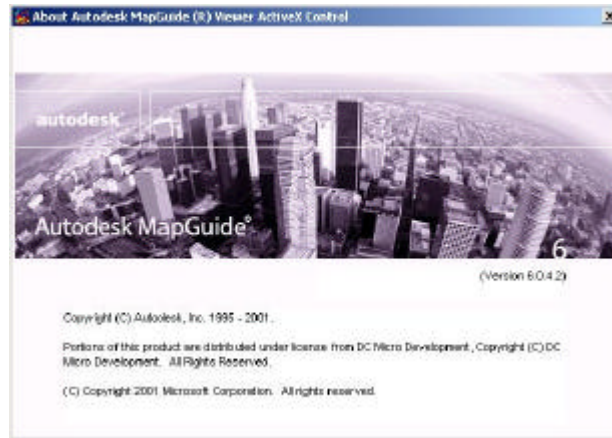


a **layer group** that contains the **data layers** Major Cities and BC Communities.

2 Using the BC Historic Mines Atlas

The BC Historic Mines Atlas was built to run on Internet Explorer and **WILL NOT WORK** on Netscape Explorer. To learn more about Internet Explorer, and **download a free copy**, go to <http://www.microsoft.com/windows/products/winfamily/ie/default.mspx>.

If you have installed a previous version of the MapGuide viewer, ensure that the version is 6.0.2.4 or newer. To view the Version Number of your MapGuide application, right mouse click and select About in the pull down menu, and View Version Number.

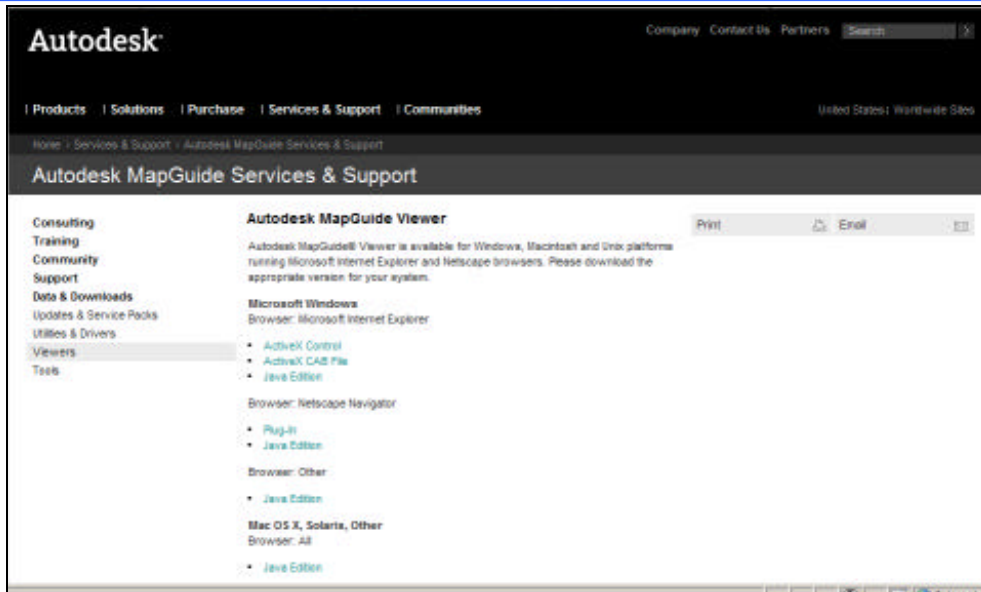


The About Autodesk MapGuide Viewer ActiveX Control screen will appear with the version number on the right hand side of the viewer.

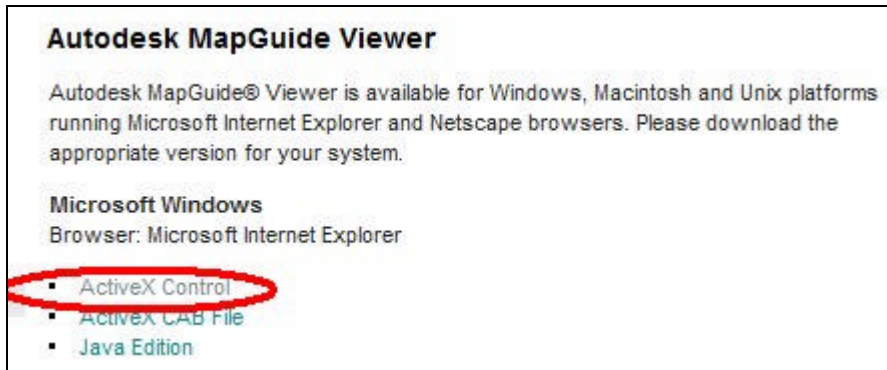
2.1 Manual Access to the BC Historic Mines Atlas

You **manually** install the **Autodesk MapGuide Viewer** on your computer as follows:

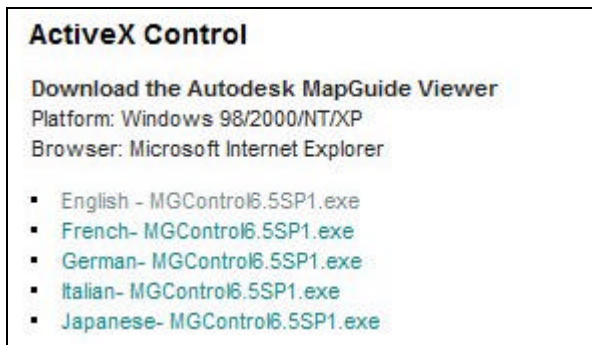
- Access the Autodesk MapGuide web site to download the viewer through <http://usa.autodesk.com/adsk/servlet/item?siteID=123112&id=9454886&linkID=9242099>
- The CMN site also has a link that will take you to the Autodesk web site.



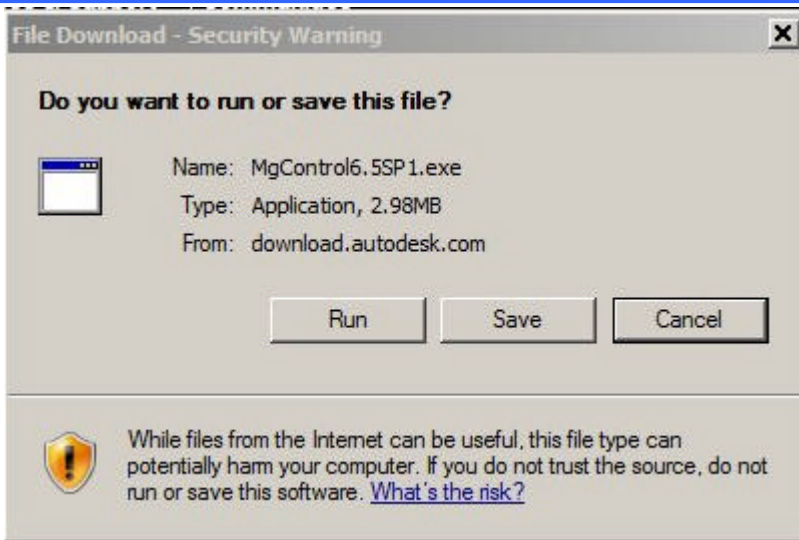
At the Autodesk MapGuide Map Viewer download site, you select “ActiveX Control” under the section “Microsoft Windows”.



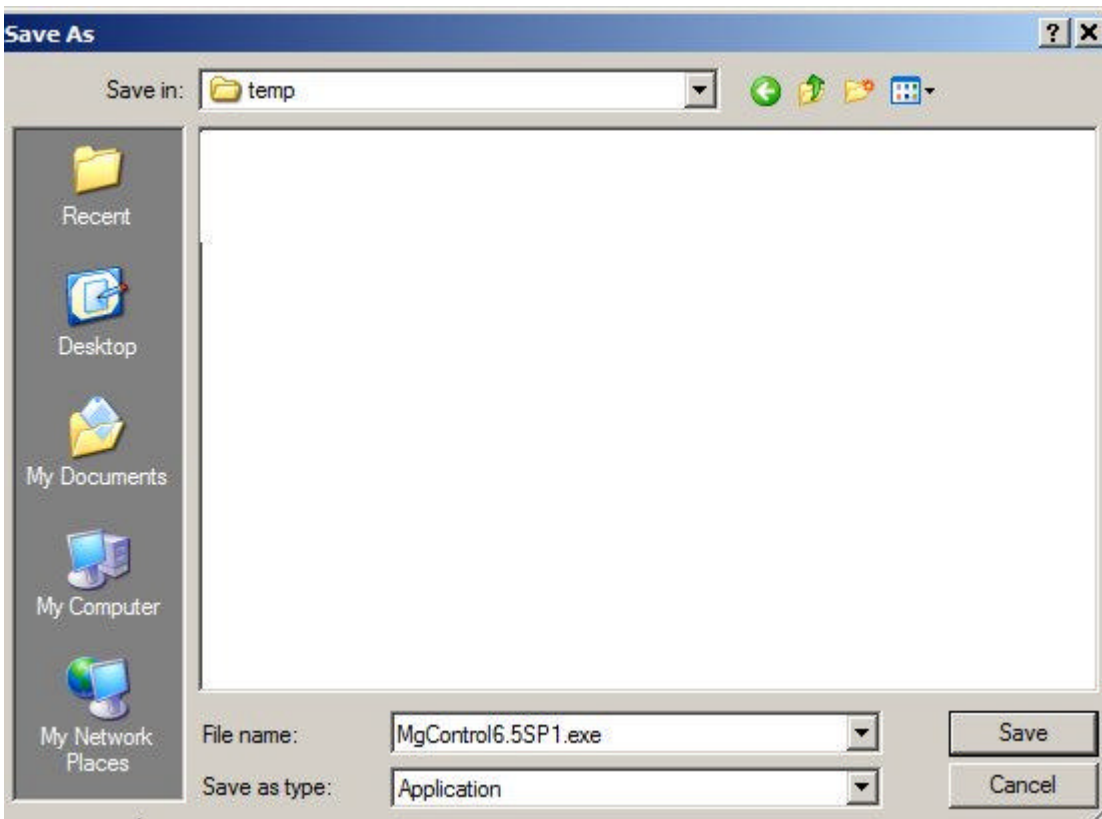
Then click on the language of your choice:



A window will pop-up to ask you if you want to “Run” the installation or “Save” it on your hard drive. If you select “Run”, the installation will start automatically.



If you select “Save”, you will be asked for the folder where you want to save the installation file.



When the download is complete, open Windows Explorer and browse to the folder where you downloaded the application.

Double click on the file called “**MgControl6.5SP1.exe**” to start the installation process. The installation software will guide you through the installation process.

When you have completed either the automatic or the manual download option, you will be able to view the **BC Historic Mines Atlas** and any other Mapguide projects.

2.2 Automatic Access to the BC Historic Mines Atlas

The **Autodesk MapGuide Viewer** will be **automatically** downloaded to your computer the first time that you attempt to access the maps and mapping tools.

When you click on the BC Historic Mines Atlas entry access portal found at www.cmnbc.ca, select the **BC Historic Mines Atlas** option and **Login**.

If you don't already have the viewer, you will be prompted "Do you want to install and run Autodesk MapGuide Viewer ActiveX Control?" Accept this download option by clicking the **Yes** button.



The Autodesk MapGuide Viewer will be automatically installed. Once you have installed the map viewer for the first time, the window pop-up will not reappear.

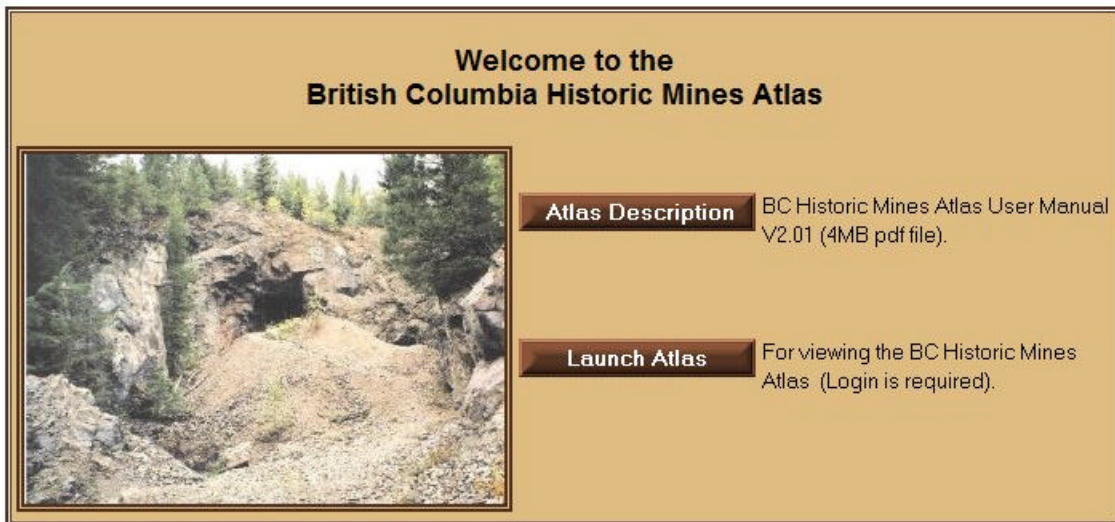
2.3 Opening the BC Historic Mines Atlas

You can access the BC Historic Mines Atlas in three ways:

- 1- From the Energy, Mines and Petroleum Resources website under “MapPlace”:
http://webmap.em.gov.bc.ca/mapplace/minpot/new_xmap.cfm (Item #58 in the list)
- 2- From the Community Mapping Network site: <http://www.shim.bc.ca>. Select “BC Historic Mines Atlas” from the list of atlases in the center of the homepage.
- 3- Go directly to the atlas at:
http://webmap.em.gov.bc.ca/mapplace/historicMines/mines_entry.htm

You will be directed to the Welcome web page for the BC Historic Mines Atlas.

Note: Although the atlas can be viewed with a screen resolution of 800 X 600, it is best viewed with a higher resolution such as 1280 X 800 since a larger spatial extent can be displayed on the screen.



You can review information about the atlas and access this document by clicking on the Atlas Description button.

You must enter a username and password to browse the atlas, and enter new data. Casual users may enter <VIEW> as both the User Name, and Password, to study the atlas and read posted data at all scales. Anyone wishing to post or edit data in the Atlas should contact Robert McCandless at Environment Canada. The contact information is at the end of this document.

Once you have an account, you can return to the entry page. There are three kinds of accounts:

- 1- to browse the atlas;
- 2- to add or remove your own information to the atlas; and
- 3- to edit all historic mines atlas information.

BC HISTORIC AND OPERATING MINES ATLAS - USER MANUAL V2.01

The Project Coordinator will let you know what type of account was assigned to you. Click on the “Launch Atlas” button to access the atlas. You will be presented with a login screen. Type in your username and password and press **Login**.

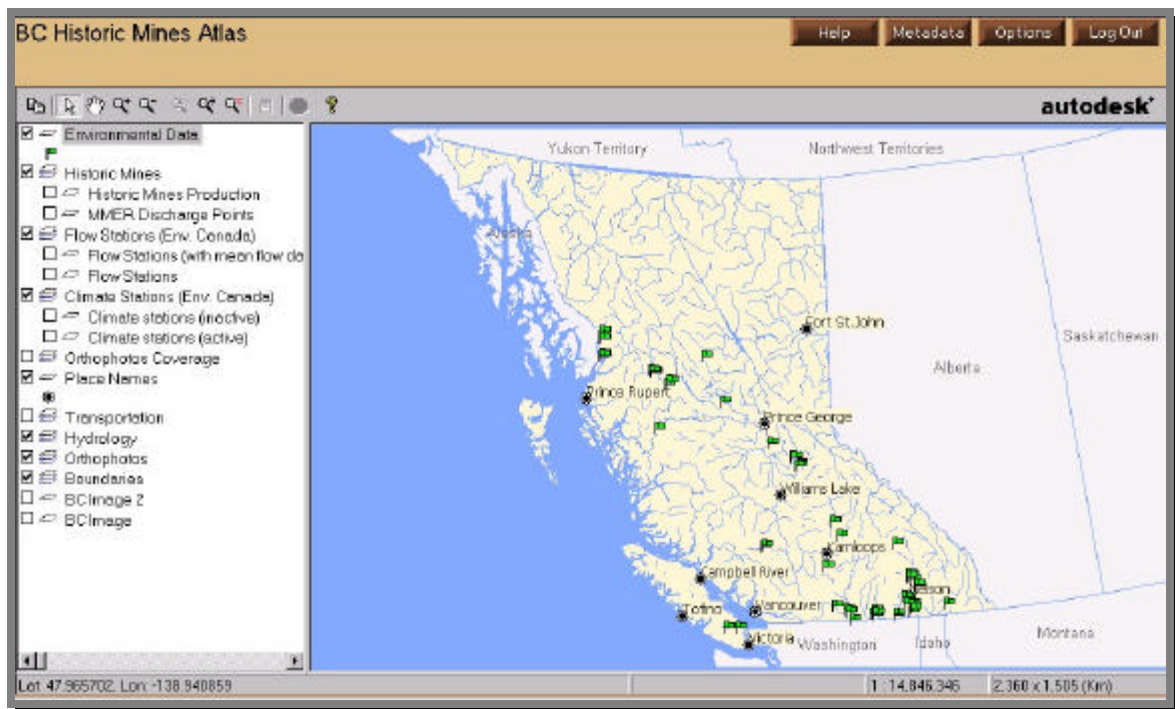


A login form titled "LOGIN" with a brown header. It contains two input fields: "UserName" and "Password". Below the fields are two buttons: "Login" and "Reset".

If the login is successful, you will see the Proceed button appear. Click on the **Proceed** button to take you to the online mapping application.



The BC Historic Mines Atlas will load and should look like the image below:




The **BC Historic Mines Atlas** main page has several different tools to assist map users.


The **Map Viewer** is available, including the **Map Viewer Toolbar**, the **Map Legend**, and **Status Bar**.

The Map Access Tools link users to the **Options** and **Help** functions.

2.4 Help

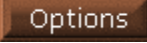
 The **Help** Access button displays a brief help tool to using the BC Historic Mines Atlas functions. It also explains some general notes about the Autodesk MapGuide map viewer. The Help tool will link to a PDF version of this training manual.

2.5 Metadata


 Metadata is 'data about data'. The metadata for the BC Historic Mines Atlas is a list of all of the data groups and the pertinent information about these data groups. Metadata contains a data description and a scale range.

You can scroll down through the metadata report or select the layer from the list at the top. Below is an example from the Metadata report. A description of the data group is given, and an applicable scale range is also indicated.


2.6 Options

 This button will launch the browsing and mapping tools in the top frame. Each tool will be described in details in section 2.10

2.7 Log Out

 Press this button to log out.

2.8 BC Historic Mines Atlas Data Groups and Data Layers

Below is a list of the data groups and data layers and review what each layer represents, and the proper scale at which to use the data layer. You may want to zoom in and out of the map a little closer at some points through this exercise to see the data layers. Use the zoom tool located in the map viewer tool bar at the left-hand side of your screen. You will have to zoom in below 1:100,000 scale to view the different types of environmental data that are available in the atlas. 

Posted Environmental Data: This data group contains all of the data that is used for on-line data entry. When you digitize or add a point to the map to represent the location of an observation, the data will be added to this data group The **BC Historic Mines Atlas** displays the environmental data differently based on the current scale:

At 100,000 scale and above (up to BC level), the environmental data is displayed with a unique green flag symbol. No report is attached to these points at that scale. If you move the mouse over the point, a yellow “tooltip” will appear showing the point type (Water Quality, Photograph, Biological / Tissue, Report, Web Link).



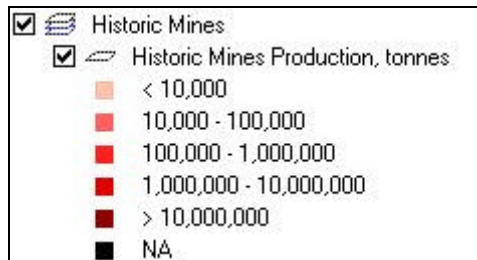
If you zoom in below 1:100,000 scale, the environmental data will be shown with a different symbol for each point type.

<input checked="" type="checkbox"/> Posted Environmental Data	Type of environmental data.	Symbol
<input checked="" type="checkbox"/> Regulated (MMER) Discharge Points	Regulated (MMER) Discharge Points	Inverted orange triangle
<input checked="" type="checkbox"/> Water Quality	Water Quality	Purple triangle
<input checked="" type="checkbox"/> Geochemistry or Sediment	Geochemistry or Sediment	Red triangle
<input checked="" type="checkbox"/> Biological / Tissue	Biological / Tissue	Green diamond
<input checked="" type="checkbox"/> Photograph	Photograph	Pink star
<input checked="" type="checkbox"/> Report	Report	Half red square
<input checked="" type="checkbox"/> Web Link	Web Link	Blue globe
<input checked="" type="checkbox"/> Water Chemistry	Water Chemistry	Star
<input type="checkbox"/> ☆ 0.5 mg/l total heavy metals		
<input type="checkbox"/> ☆ 0.5 - 1.00		
<input type="checkbox"/> ☆ 1.00 - 5.00		
<input type="checkbox"/> ☆ 5.00 - 10.00		
<input type="checkbox"/> ☆ > 10.00 mg/l total heavy metals		

At 1:100,000 scale and below, a report is available by “double-clicking” on the point (see “Report section for more information).

Historic Mines:

- Historic Mines Production:** this layer displays mines by range of production. A detailed report is available by “double-clicking” on these points (see “Report” section for more information).



Watersheds Ranking:

This data group shows the watersheds based on various ranking types:

- Community Watershed
- Wildlife Habitat
- Water Well
- Water License
- Population
- Water Diversion
- Red Listed Fish
- Masked Ecologically Sensitive Sites
- Blue Listed Fish
- Watershed Sensitivity
- Fish Score
- Ecological Sites

The legend is organized into three columns and lists the following categories and their ranking levels:

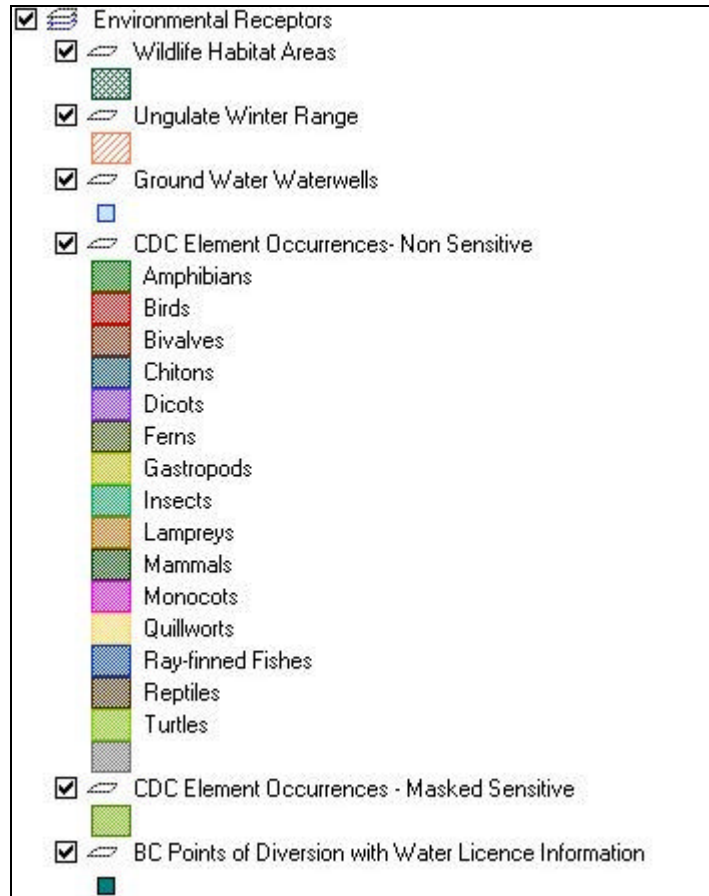
- Community Watershed:** Bottom 25% (light red), Moderate (red), Top 25% (dark red), Not Ranked (white)
- Wildlife Habitat:** Bottom 25% (light green), Moderate (green), Top 25% (dark green), Not Ranked (white)
- Water Well:** Bottom 25% (light blue), Moderate (blue), Top 25% (dark blue), Not Ranked (white)
- Water License:** Bottom 25% (light pink), Moderate (pink), Top 25% (dark pink), Not Ranked (white)
- Population:** Bottom 25% (light purple), Moderate (purple), Top 25% (dark purple), Not Ranked (white)
- Water Diversion:** Bottom 25% (light blue), Moderate (blue), Top 25% (dark blue), Not Ranked (white)
- Red Listed Fish:** Lowest (light red), .. (red), (dark red), Highest (darkest red), Not Ranked (white)
- Masked Ecologically Sensitive Sites:** Bottom 25% (light green), Moderate (green), Top 25% (dark green), Not Ranked (white)
- Blue Listed Fish:** Lowest (light blue), .. (blue), (dark blue), Highest (darkest blue), Not Ranked (white)
- Watershed Sensitivity:** Bottom 25% (light yellow), Moderate (yellow), Top 25% (dark yellow), Not Ranked (white)
- Fish Score:** Bottom 25% (light yellow-green), Moderate (yellow-green), Top 25% (dark yellow-green), Not Ranked (white)
- Ecological Sites:** Lowest (light green), .. (green), (dark green), Highest (darkest green), Not Ranked (white)

Environment Receptors:

This data group various environment receptors such as:

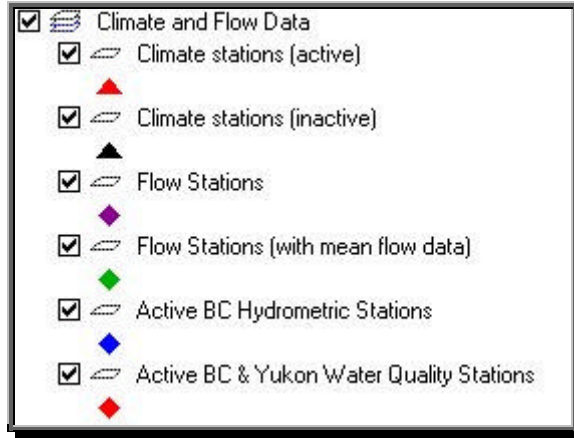
- **Wildlife Habitat Areas** (view metadata at: <http://aardvark.gov.bc.ca/apps/metastar/metadataDetail.do?recordUID=36172&recordSet=ISO19115>)
- **Ungulate Winter Range** (view metadata at: <http://aardvark.gov.bc.ca/apps/metastar/metadataDetail.do?recordUID=36173&recordSet=ISO19115>)
- **Ground Water Waterwells** (view metadata at: <http://aardvark.gov.bc.ca/apps/metastar/metadataDetail.do?recordUID=3845&recordSet=ISO19115>)
- **CDC Element Occurrences – Non-Sensitive**

- **CDC Element Occurrences – Masked Sensitive** (view metadata at: <http://aardvark.gov.bc.ca/apps/metastar/metadataDetail.do?recordUID=3653&recordSet=ISO19115>)
- **BC Point of Diversion with Water License Information** (view metadata at: <http://aardvark.gov.bc.ca/apps/metastar/metadataDetail.do?recordUID=47674&recordSet=ISO19115>)



Climate and Flow Data:

- **Flow Stations (with mean flow data):** this is a sub-set on the Flow Stations layer. A mean flow report is attached to these points.
- **Flow Stations:** all flow stations are displayed under this layer and each point is linked to the Environment Canada’s web site for access to report.
- **Active BC Hydrometric Stations:** each point is linked to the Environment Canada’s web site for access to report.
- **Active BC & Yukon Water Quality Stations:** each point is linked to the Environment Canada’s web site for access to report.
- **Climate Stations (Env. Canada):** This layer group contains the climate stations linked to the Environment Canada’s web site for access to reporting features. The stations are separated into 2 layers:
 - Climate stations (active).
 - Climate stations (inactive).



Water Licenses: This layer is only available below 1:1,000,000 scale. It shows the water licenses color-coded as follows:



Place Names: This data group contains place names for BC Communities. There are two separate layers available, **Major Cities** and **BC Communities**. Major Cities is a point file of cities and city name labels are automatically displayed above scales of 1:6,000,000, but at scales below 1:6,000,000 this layer is not available. When you turn the data layer on, you will see the names of all the **BC Cities** display, as shown on the map below.

Transportation: This data group includes Railroads and Roads data layers. Roads are available at scales below (i.e. larger than) 1:3,000,000. Below 1:500,000 the road layer becomes more detailed (you will have to turn it on again) and at 1:50,000, road names will display. Railroads appear only at scales larger than 1:1,000,000; note that some railroads appearing at larger scales may be abandoned.

Boundaries: MWLAP (Ministry of the Environment) Regions, Regional Districts and Parks are all available at any scale.

Orthophotos: This data layer will display imagery – either ortho photography (3D registered air photos) or Satellite photos (Landsat) for certain areas. The following data layers are a part of the orthophotos data group:

- Langley color ortho (April 2001)
- SeaToSky ortho (1999)
- FREMP Color Ortho (2002)
- Fraser Valley (1999)
- 1m pixel B&W Vancouver Island

- Kelowna Area
- High Resolution color orthos
- 1m pixel color - Chiliwack / Hope
- 1m pixel color - Hatsic Valley
- 2m pixel B&W - Vancouver Island
- 4m pixel B&W - Set 1
- 4m pixel B&W - Set 2
- 5m pixel color - Lower Fraser

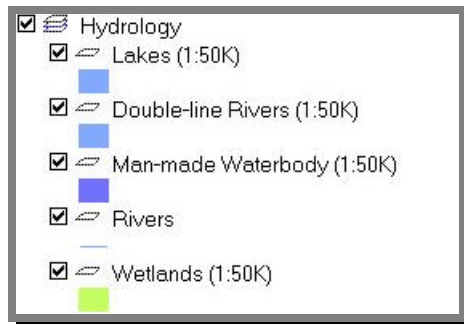
Some data layers are available for the whole province and others for just specific areas. To see the area of the province covered by air photos, turn on the orthophoto coverage area data layer to view the coverage extent.

Some data groups and data layers will become available as you zoom in closer to the map. The following data groups are visible as you view the map at finer scales.

Hydrology: This data group contains many data layers that are selectively displayed based on scale:

- Rivers with FISS Reports (1: 50K)
- Wetlands (1:50K)
- Man-made Water body (1:50K)
- Land (1:50K)
- Lakes (1:50K)
- Double-line Rivers (1:50K)
- Rivers (1:50K)
- Lakes (1:250K)
- Double-line Rivers (1:250K)
- Rivers (1:250K)
- Lakes (1:2m)
- Rivers (1:2m)
- Lakes (1:6m)
- Rivers (1:6m).

The image below shows the hydrology layers at 1:200,000 scale and below. These layers are linked to Fisheries Information Summary System (FISS) reports (see Reports section for more information):



BC Watersheds Groups: This data layer is available below 1: 3,000,000. This data layer displays the major Watershed Atlas groups for BC.

Watersheds: this data layer is available at scales below 1: 300,000. This data layer is comprised of sub-watersheds within each major watershed group as defined by the Watershed Atlas (1: 50,000).

Fish Presence: This data group contains data on rivers that have fish presence as noted by the Fisheries Information Summary System (FISS). There are two data layers available for viewing, Salmonids Present and Steelhead Distribution.

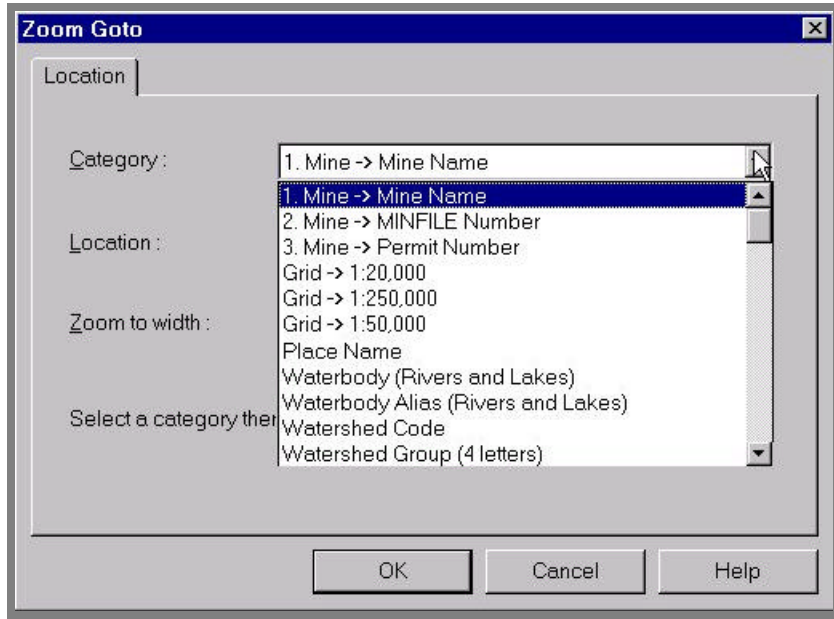
1: 20K features: This data group contains the Terrestrial Resource Information Mapping (TRIM) created for the Province of BC. There are 10 data layers that contain detailed information captured at a 1: 20,000 scale on resources and terrestrial data. This includes:

- Land Cover
- Contours west
- Contours east
- Water bodies (marsh, swamp, ice)
- Lakes
- Rivers
- Roads
- Rail
- Coastline
- Transport Structures

2.9 Zooming to specific features using the “ZoomGoTo” Tool:

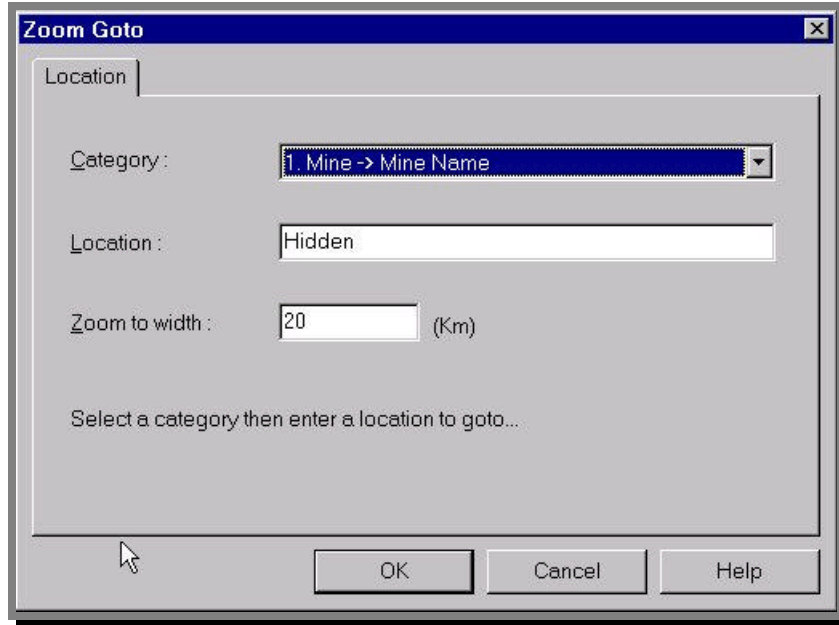


You can quickly locate a feature by using the “ZoomGoTo” tool. You can make a search and zoom to the following categories:

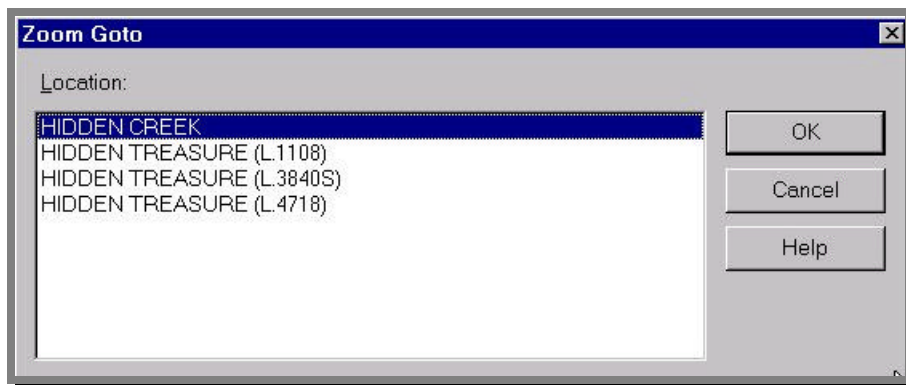


2.9.1 Mine Name

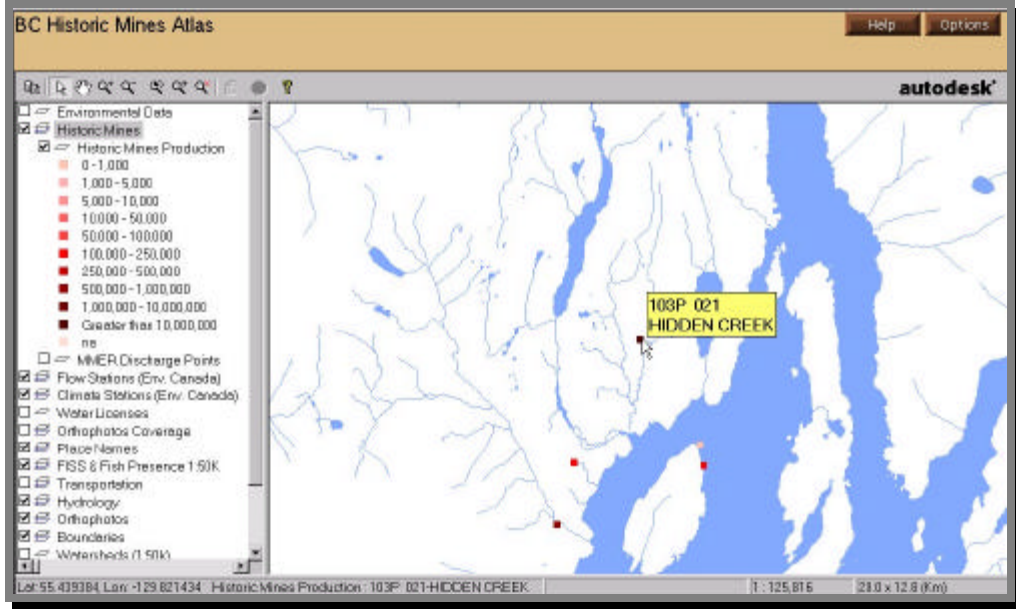
This function can be used to zoom to the primary name of a mine. The following example demonstrates how to zoom the mine called "Hidden Creek":



Enter the mine name partially or completely in the "Location" field. Set the "Zoom to width" (this is the width of the map window). The query above will return four records:



Select one of the records and the map will zoom to the location of the point as below (note the map width at the lower right corner). Make sure that the layer "Historic Mines Production" is turned on.



2.9.2 MINFILE Number

You can locate a mine using its MINFILE number. Please read carefully the paragraphs below regarding the format of the MINFILE number. This information was extracted from the Energy Mines and Resources' web site. More information is available [here](#).

Each mineral occurrence has a unique 9-character MINFILE number used to identify it within the computer database, in hard-copy printouts and on location maps. The MINFILE number begins with a three-digit NTS (National Topographic System) location number used to identify the appropriate 1:1 000 000 map sheet (from 082 to 114), followed by a single alphabetic character (A to P) used to identify the appropriate 1:250 000 map sheet.


Due to a high density of occurrences, NTS map sheets 082E, F, K, L, 92H and I are plotted at a 1:100 000 scale. In these cases, a two-character (NE, NW, SE, SW) designation identifies the appropriate quadrant on the map sheet. The other map areas are plotted at a 1:250 000 scale and two blank spaces must be input in place of the two-character quadrant designation. An exception is 092IW.

The final three-character segment of the MINFILE number is a sequential three-digit number from 001 to 999, identifying the unique number on the map sheet. For example, 082FSW100 is the 100th occurrence documented in the 082FSW 1:100 000 scale NTS area. If a new occurrence is documented, an occurrence number will be assigned by the MINFILE Team.

Examples: 082FSW100 at 1:100 000 scale
093M 014 at 1:250 000 scale
092JW 002 is an exception

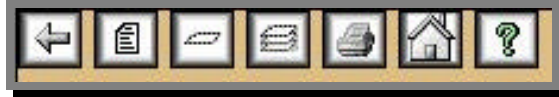
Failing to add the two spaces in the MINFILE number when using the “zoomgoto” tool will result in an unsuccessful query.

2.10 BC Historic Mines Atlas Mapping Tools

The **Options** Access button  will display the **Mapping Tools**. These tools can be used to view a report, attach a document, print maps...and more.




Note: Users that received a “viewer” account will only have access to viewing and browsing tools. The toolbar will look like:



The Mapping Tools are described below in detail. Short explanations will display by hovering the mouse over each icon in the web browser version of the BC Historic Mines Atlas.

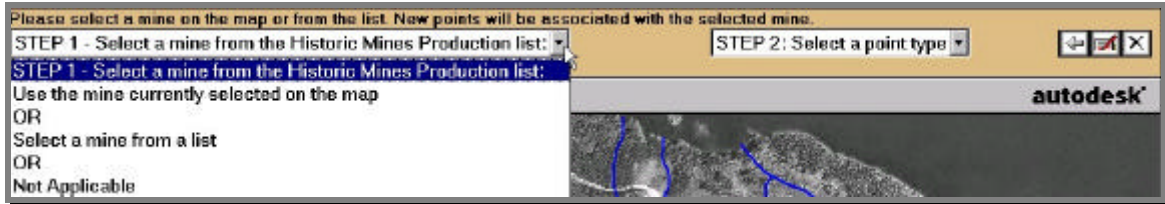
2.10.1 Return

 This button will return you to the main map page. The Mapping Tools will disappear.

2.10.2 Digitize a point by clicking on the map

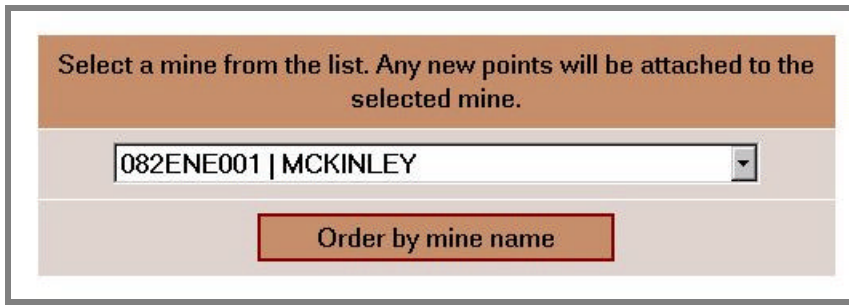



This will launch a menu where you will be able to digitize new points directly on the map and attach a document to the point. Below is the menu that will be launched upon clicking on the point icon (*Note: you must zoom in below 1:100,000 scale in order to add new points on the map*):

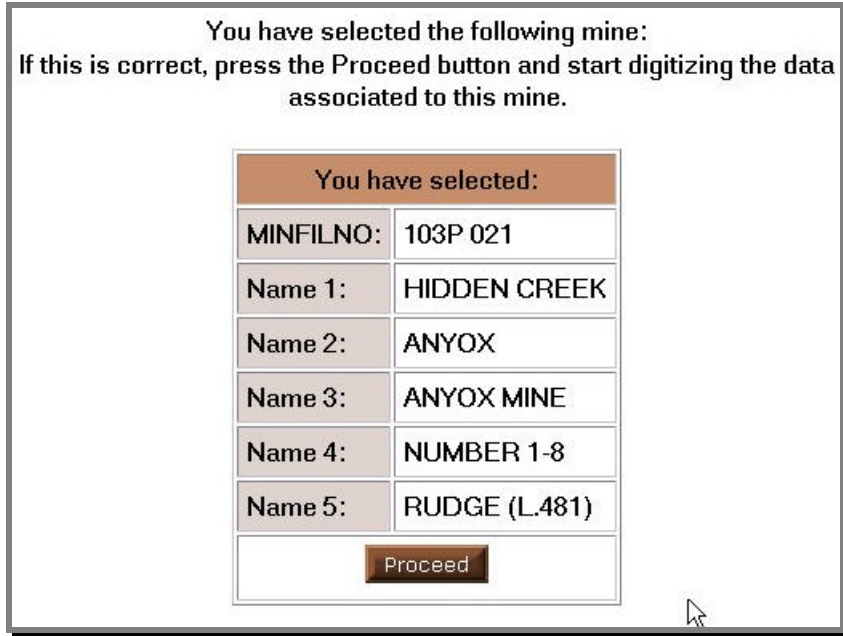


STEP 1: The first thing that you have to do is to select a mine to which you want to attach the new point. Click on the drop-down menu to see the three choices:

- Use the mine currently selected on the map: you must turn on the Historic Mines Production layer, select a mine on the map and click on this choice.
- Select a mine from a list: If you select this option, a new window will appear:



Click on the down arrow  to see all the mines and make a selection. By default, the mines are ordered by MINFILE number. You can click on the “Order by mine name” if you are not sure of the MINFILE number but know the mine name. Once you have selected a mine, a message will appear to give you more information about the mine that you have selected to ensure that this is the mine that you want.



Click on the Proceed button. The top frame will be updated and will show the current selection. Any new points will be attached to this mine until you make another selection in Step 1.

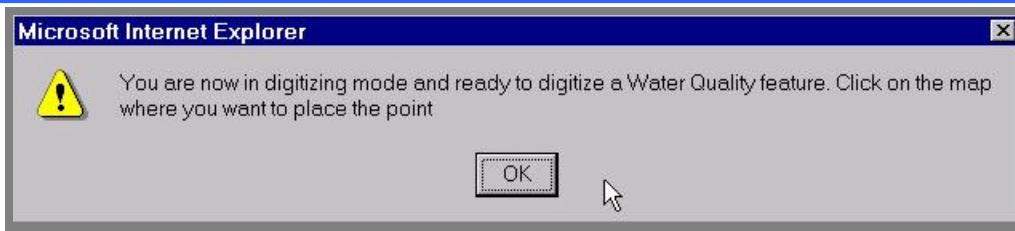


- Not Applicable: This third choice is when a point doesn't need to be attached to a particular mine.

STEP 2: You then need to select a feature type (in the following example, we will upload a Water Quality document):



Once you have made a choice, you will see a message:



The mouse will change to a hand tool when over the map area. Simply move the hand to where you want to add the point and click on the map (note that you must zoom in below 1:100,000 scale before you can start digitizing). This is to ensure that your point is as accurate as possible. Once you have digitized the point location, you will need to fill out a data entry form. The snapshot below shows the data entry form for a Water Quality document:

Uploading a Water Quality Spreadsheet	
MINFILE Number: 103P 021	
Secondary MINFILE number: <input type="text" value="NA"/>	Look-up Table
Date (mm/dd/yyyy): <input type="text"/>	
Name of observer: <input type="text"/>	
Title: <input type="text"/>	
Method of Coordinates Collection: <input type="text" value="Select One"/>	
Comments: <input type="text"/>	
To upload a spreadsheet, press the Browse button to find the file on your computer and click on the "Start Uploading" button:	
<input type="text"/>	<input type="button" value="Browse..."/>
Note: only files with the extensions ".xls" are allowed.	
<input type="button" value="Start Uploading"/>	

The form will show the MINFILE number currently selected and to which this new point will be linked. You have the option to attach this point to a secondary mine. To do so, click on "Look-Up Table". A listing of all mines will appear, the MINFILE number id hyperlinked and if you click on the MINFILE number of your choice, your selection will be

automatically transferred into the main data entry form. Below is a snapshot of the look-up table:

Look-Up Table	
MINFILNO	NAME
082ENE001	MCKINLEY
082ENE002	BANNER
082ENE003	UNION
082ENE004	LITTLE
082ENE005	GLOUCESTER
082ENE006	G.H.
082ENE007	AVERILL
082ENE008	BUFFALO
082ENE009	MAPLE LEAF
082ENE011	COPKET
082ENE014	ALCO
082ENE017	WATERLOO
082ENE019	PINTO
082ENE022	MORNING
082ENE023	DICTATOR
082ENE027	AU
082ENE029	SILVER SPOT NO. 4
082ENE031	LUMPY
082ENE032	RAMPAL O

If the point is associated to more than two mines, please enter the name or the MINFILE number of the other mines in the comments section. Fill in the form. For a Water Quality point, you can upload a spreadsheet with the .xls only. Your file should not be larger than 500Kb.

Click on the “Browse” button to locate the file on your computer, then click on the “Start Uploading” button. You will see a message:



Depending on the size of the file and your internet connection, this could take several seconds. The confirmation message will appear:

Uploading a Spreadsheet

You have uploaded the spreadsheet "Anyox Adit.xls" successfully.
Press the "Proceed" button to complete the operation.

The data point will then display on the map and be part of the Environmental Data layer group. You can “double-click” on it to view the information that you have just entered. The MINFILE number of the two associated mines are hyperlinked to the complete Mine Report (see Reports section for more information).

Point Information	
Primary MINFILNO	103P 021
Secondary MINFILNO	103P 226
Date	12/21/03
Name of observer:	MEM
Title:	Water Quality results for Hidden Creek and Rambler
Method of Coordinates Collection:	Estimated
Comments:	Heavy iron staining.
View attached document	

If you click on “View attached document”, the document will open in a new window:

The screenshot shows an Excel spreadsheet with the following data:

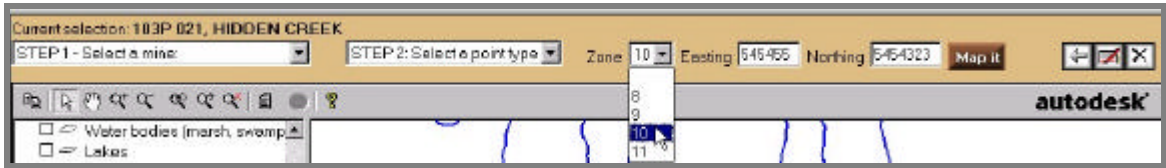
Sample	May-84	6/7/90	3/8/96	21/06/2000
Acidity total&pH4.5				
Acidity to pH 4.5				
Acidity, Total				
Alkalinity Tot-pH4.5				
Alkalinity to pH 4.5				
ICA (Cl F SO4)				
Chloride (Cl)			3.5	3.56
Fluoride (F)			0.92	0.8
Sulphate (SO4)			1995	3524
ICA (NO2 NO3 PO4 Br)				
Bromide (Br)			< 0.05	< 0.05
Nitrogen, Nitrate as N			< 0.002	< 0.002
Nitrogen, Nitrite as N			< 0.005	< 0.005
Phosphorus, Ortho as P				
pH				
pH				

Alternatively, you can zoom to the Hidden Creek Mine on the map. Select it and view a more complete report about the mine. The newly uploaded document will show up in the report as part of the documents attached to this mine (view Reports section for more information).


2.10.3 Digitize a point by entering UTM coordinates

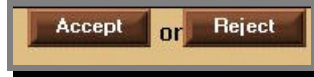


If you have the exact UTM coordinates for the point, you can type in the UTM coordinates in the boxes. Follow Step 1 and 2 as demonstrated in the previous section and enter the UTM easting and northing as well as the UTM zone:



DO NOT use commas to separate the units in the Easting and Northing boxes, otherwise you will get an error and your point will not load. (Note that a valid easting will have 6 digits and a valid northing will have 7 digits). Click on the "Map it" button.

You will see the preliminary point on the map  and you will have the choice to either Accept Point or Reject Point.



Upon accepting the point, a data entry form will pop up.

2.10.4 Edit information



This tool allows you to edit information that you have previously entered. Note that only the text attributes can be edited (date, title, observer, comments, etc). If you have uploaded the wrong file or positioned the point in a wrong location, you must delete the point and start over again. Select the point on the map and clicking on the update icon. An update form will appear. The previously entered fields will be displayed. You can change them and re-submit; the changes will take place immediately.

Update Form	
Primary MINFILE Number:	<input type="text" value="103P 021"/>
Secondary MINFILE number:	<input type="text" value="103P 226"/> (Look-up Table)
Date (mm/dd/yyyy):	<input type="text" value="12/21/03"/>
Name of observer:	<input type="text" value="MEM"/>
Title:	<input type="text" value="Water Quality results for Hidden Creek and Rambler"/>
Method of Coordinates Collection:	<input type="text" value="Estimated"/> ▼
Comments:	<input type="text" value="Heavy iron staining."/>
View attached document	
<input type="button" value="Submit"/>	


2.10.5 Move a point



This function is restricted to the atlas administrators. To move an existing point, zoom in below 1:100,000 scale and select the point on the map (Environmental Data only). Click on the “Move a Point” icon. The following menu will appear in the top frame:



You can move the point using two options:

Option 1: Enter Coordinates: Enter the UTM zone, easting and northing and click on the first “Map it” button. The map will zoom to the coordinates that you have entered and place a temporary crosshair symbol . If the location is correct, click on the “Move Point” button. The map will redraw and the point will be moved to the new location.

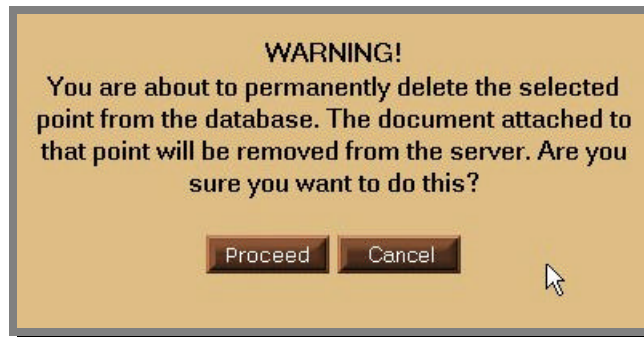


Option 2: Digitize Point on Map: Click on the second “Map it” button and digitize the new location on the map. Click on the “Move Point” button to confirm the location.

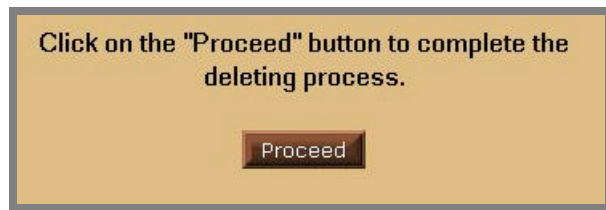
2.10.6 Delete a point



If you want to remove a point (Environmental Data only) and delete its attached document, you can select the point on the map and click on the delete icon. A confirmation message will appear:



If you chose to proceed, another message will appear to complete the delete operation:



Note: Deleting points is FINAL. The document attached to the point will also be removed from the server.

2.10.7 Report



This tool is the same as “double-clicking” on a feature on the map. It will launch a report about the feature. Refer to section 2.9 for more information about the various reports available. HINT: use the arrow button to select a feature.

2.10.8 Attach a file (only for Regulated (MMER) Discharge points).



This tool is only for the MMER Discharge points. Select a discharge point on the map and click on this symbol. A data entry form will pop up. Fill in the form and select the file to upload (note that you can upload files with the following extensions: xls, .pdf, .doc, .txt, .gif, .jpg. Make sure that the file is less than 500kb).

Uploading File	
MINFILE Number:	104B 008
Station Name:	D7: Treatment Pond Discharge Point
Station Description:	at outlet of pond 3 of 3-pond treatment system; flow by V-notch weir
Date (mm/dd/yyyy):	<input type="text" value="12/21/03"/>
Name of observer:	<input type="text" value="MEM"/>
Title:	<input type="text"/>
Comments:	<input type="text"/>
To upload a file, press the Browse button to find the file on your computer and click on the "Start Uploading" button:	
<input type="text"/>	<input type="button" value="Browse..."/>
Note: only files with the following extensions are valid: .xls, .pdf, .doc, .txt, .gif, .jpg	
<input type="button" value="Start Uploading"/>	

2.10.9 Collapse all layers



Click on this tool to collapse all the data groups and layers in the legend.

2.10.10 Expand all layers



Click on this tool to expand all the data groups and layers in the legend.

2.10.11 Print the Map

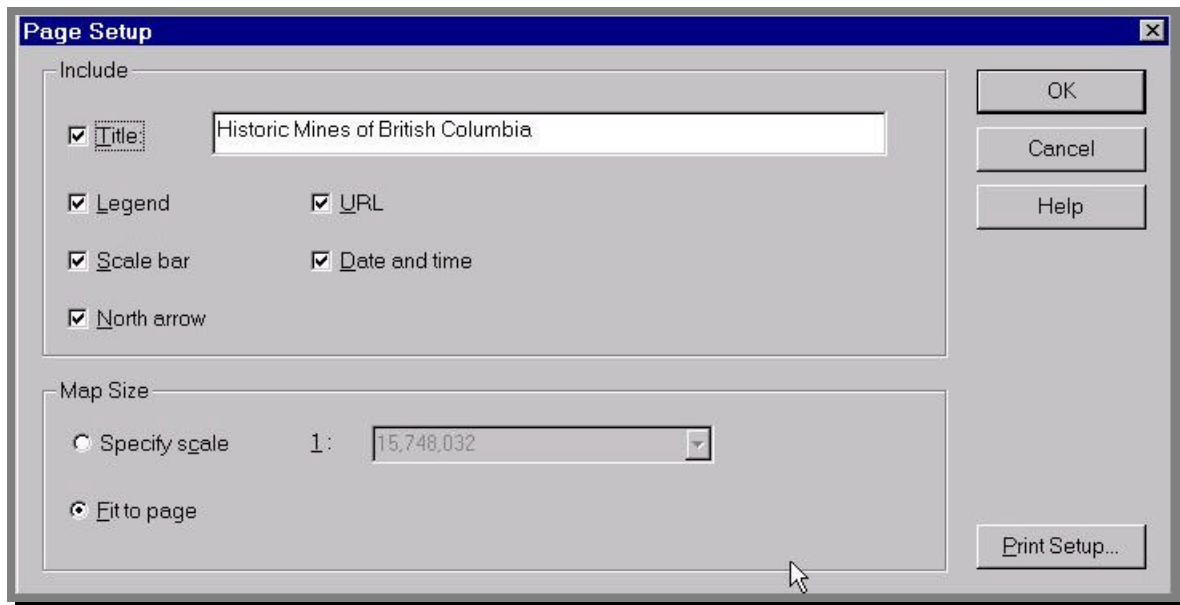


This tool will allow you to print your map display.

This button will bring up the **Page Setup** menu. Here you can create a title for your map, include or exclude a legend, scale bar, north arrow, the web site URL, and the date and time. You can specify the map size by map scale, or to fit to page.

Use the **Print Setup** button to access your printer setup parameters. This will include whether you want to print to a portrait or landscape orientation, or if you want to print to a legal or letter size sheet.

When you are happy with your **Print Setup** parameters, click **OK**. This will initiate your computers **Printer** dialogue box. Select **OK** to print the map.



2.10.12 Go to the CMN home page



This button will return you to the CMN web site home page. If you want to return to the BC Historic Mines Atlas Mapping site, press your browser's **Back** button, and you will be returned to the main mapping page.

2.10.13 Help



View the Autodesk MapGuide help features.

2.11 Viewing Reports

Reports can be accessed using two methods:

- a) “Double-click” on a feature on the map;
- b) Select a feature on the map and clicking on the Report icon.

Below is a list of reports available:

2.11.1 Mines Report:

The layer called “Historic Mines Production” is linked to this report. The report provide general information about the mine and also links to the MEM’s web site for more detailed reporting and searching functions. At the bottom of the report, the environmental data will be listed by feature type (Water Quality, Photograph, Biological / Tissue, Report, Web Link). You can quickly review the various documents attached to a specific mines, by clicking on the buttons “View Photo”, “View Report” or “View Details”.

Report			
MINFILE and Permitting Information			
MINFILE Number	103P 021	Permit Number	M-090
Status	PAPR		
Mineral Occurrence Name(s) and Associated Data			
MINFILE Name(s)	HIDDEN CREEK		
	ANYOX		
	ANYOX MINE		
Geographic Location			
Latitude	55.44	NTS Map	103P05W
Longitude	-129.82	Elevation	122
Geological Information			
Report from Ministry of Energy and Mines			
Production Information			
Report from Ministry of Energy and Mines			
Environmental Reports			
Photographs:			
06/18/96	Robert McCandless	Flow from main adit	View Photo
04/04/03	MEM	Hidden Creek overview photograph	View Photo
Water Quality:			
06/20/00	Gerry Mitchell	Anyox Creek water quality	View Details
06/22/00	Gerry Mitchell	Flow from adit into Rogers Creeek	View Details
Biological/Tissue:			
Not available			
Reports:			
06/20/00	Robert McCandless	Anyox summary	View Report
Web Links:			
Not available			
Close			

2.11.2 Point Report

This report is linked to each “Environmental Data” points. It provides information about the point and a link to the document that was uploaded with it. If the point refers to a specific mine, the MINFILE NO will be displayed and hyperlinked to the Mines Report.

Point Information	
Primary MINFILNO	103P 021
Secondary MINFILNO	NA
Date	06/18/96
Name of observer:	Robert McCandless
Title:	Flow from main adit
Method of Coordinates Collection:	
Comments:	Heavy iron staining
View attached document	
<input type="button" value="Close"/>	

2.11.3 Flow Station Report

The “Flow Stations (with mean flow data)” layer is linked to this report.

Mean Flow Data Report													
Station: KELLY CREEK NEAR STEWART													
Monthly mean flows by year. (The monthly mean is the arithmetic mean of all the daily values during a particular month. It is only computed if the daily values for the month are complete).													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1997	0.0	0.0	0.0	0.19	0.79	0.73	0.17	0.03	0.05	0.15	0.06	0.03	0.19
1998	0.02	0.04	0.03	0.16	0.77	0.33	0.09	0.14	0.25	0.32	0.1	0.03	0.19
1999	0.01	0.01	0.01	0.14	0.64	0.99	0.28	0.11	0.19	0.4	n/a	n/a	n/a
2000	n/a	n/a	n/a	0.23	0.56	0.74	0.34	0.26	0.31	0.25	n/a	n/a	n/a
Source: Environment Canada													
<input type="button" value="Close"/>													

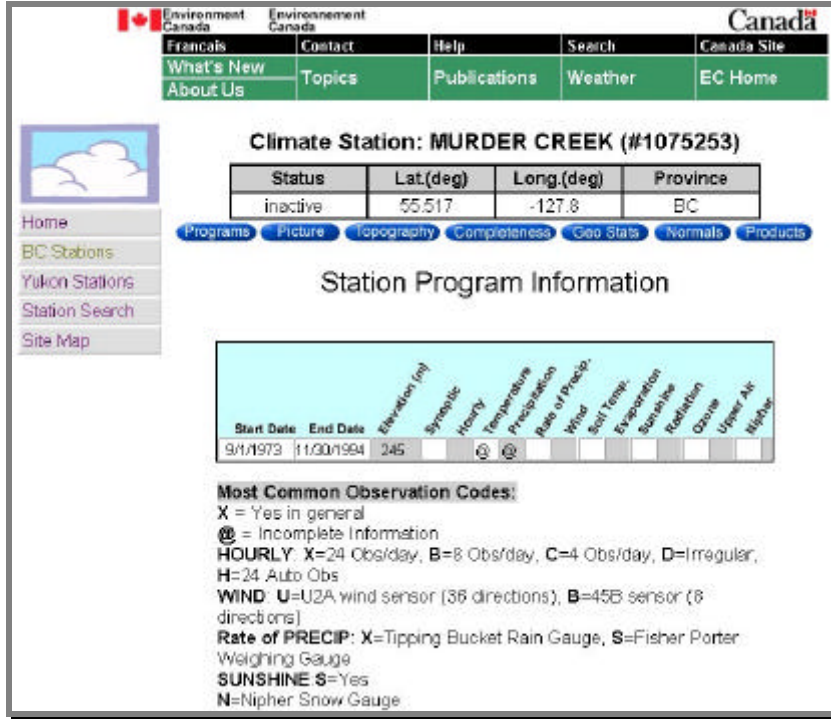
The “Flow Stations” layer is linked to the Environment Canada’s web site for real-time hydrometric data reporting. Below is a partial snapshot of this report:

The screenshot shows the Environment Canada website interface. At the top, there are navigation links in French and English, and the Canada logo. The main content area is titled "CHILANKO RIVER NEAR REDSTONE (08MB004)". Below the title, there is a "Data Category" dropdown set to "Real Time" and a "Go" button. A "Parameter Type" section is present but empty. A large grey box in the center of the page displays the message "Sorry, no data available for this graph". Below this, there are controls for "Y-Axis View" (min, max), "Start Date" (Dec 9, 2003), and "End Date" (Dec 17, 2003), along with a "Redraw" button. The "Station Information" section provides details such as "Active or discontinued", "Latitude", "Longitude", "Gross drainage area", "Record length", and "Regulation type". A table titled "Hydrometric measurement" lists the "Period of record", "Type", "Operation schedule", and "Gauge type" for various years.

Period of record	Type	Operation schedule	Gauge type
1961 - 1965	Flow	Seasonal	Manual
1966 - 1970	Flow	Continuous	Manual
1971 - 1971	Flow	Seasonal	Manual
1972 - 1974	Flow	Miscellaneous	Manual

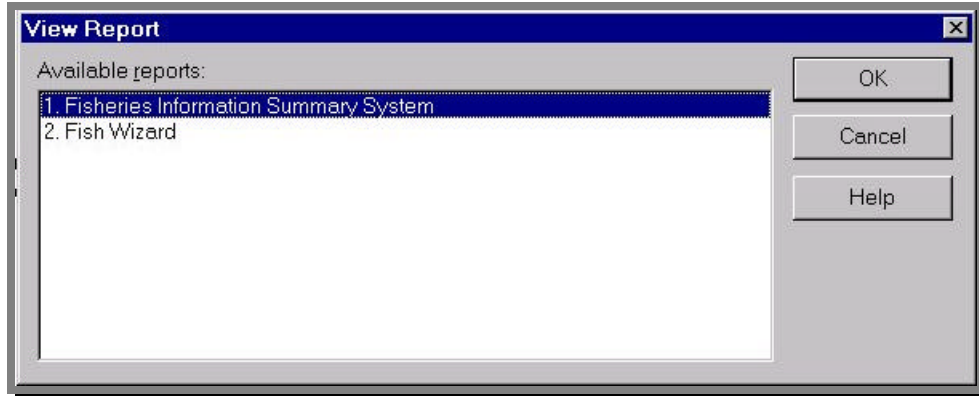
2.11.4 Climate Station Report

The layers use the grouping "Climate Stations (Env. Canada)" are linked to the Environment Canada's web site for reporting. Below is a partial snapshot of this report:



2.11.5 FISS and Fisheries Data Inventory Report

The hydrology layers available at 1:200,000 scale or below are linked to two off-site reports:



1. Fisheries Information Summary System:

This report is generated on the Ministry of Sustainable Resource Management's web site. The report can be customized to include only the relevant sections:

Ministry Home | Government of British Columbia

Fisheries Inventory Data Queries | Ministry of Sustainable Resource Management

[Main queries page](#) | [Help](#)

Select or Deselect the options to customize the FISS Report then click SUBMIT.

Stream/Lake Specific Info	<input checked="" type="checkbox"/>	Land Uses	<input checked="" type="checkbox"/>
Management Objectives	<input checked="" type="checkbox"/>	Potentials & Constraints	<input checked="" type="checkbox"/>
Enhancement & Management	<input checked="" type="checkbox"/>	Obstructions	<input checked="" type="checkbox"/>
Harvest & Resource Uses	<input checked="" type="checkbox"/>	Escapements	<input checked="" type="checkbox"/>
Resource Use	<input checked="" type="checkbox"/>	Species Life History	<input checked="" type="checkbox"/>
Resource Values	<input checked="" type="checkbox"/>	Fish Distributions	<input checked="" type="checkbox"/>
Resource Sensitivities	<input checked="" type="checkbox"/>	References	<input checked="" type="checkbox"/>
Show Georeference info	<input checked="" type="checkbox"/>		

2. Fish Wizard:

This report is the same one that you would get by doing a search on the FishWizard web page:

Home | BC Fisheries | DFO | E-mail | Help

FISHWizard

FishWizard is a co-operative presentation of
[BC Fisheries](#) and [Fisheries and Oceans Canada](#)

Use the FishWizard to find our most recent information about British Columbia lakes and streams and the fish in them, including salmon escapements, fish stocking records and depth maps for over 2,500 lakes. With the FishWizard, you can create maps or summary reports by following a few simple steps in sequence:

1. Define a lake or stream or geographic area of interest.
2. Select a single fish-related information theme.
3. Use the map tools to get information about the selected "theme".
4. Add optional layers to the lakes and streams base map.

The Fish Wizard and the material in it is owned by the Government of British Columbia and protected by copyright law. **Single maps generated by the Fish Wizard may be printed for personal use only.** Material may not be otherwise reproduced or redistributed without the prior written permission of the Province of British Columbia. To request permission to reproduce all or part of the material on this web site please complete the [Copyright Permission Request Form](#) which can be accessed through the [Copyright Information Page](#).

CAUTION: Maps obtained using the FishWizard are not designed to assist in navigation. These maps may not reflect current conditions. Uncharted hazards may exist. **DO NOT USE THESE MAPS FOR NAVIGATIONAL PURPOSES.**

Stream Report

If you are using Netscape or Microsoft Internet Explorer and would like to print this page use [CTRL+P] on your PC or [Command+P] on your Mac.

REFERENCING INFORMATION

Name: ISLE SLOUGH
Watershed Code: 100-047100-17100
Stream Length: 3.5 km.
Stream Order: 1
Stream Magnitude: 1

FISH SPECIES PRESENT IN STREAM

Species Names: Cutthroat Trout, Lamprey (General), Largescale Sucker, Northern Pike/minnow (formerly N. Squawfish), Redside Shiner, Sculpin (General), Stickleback (General), Threespine Stickleback

Note: The above list represents the species recorded in the Fisheries Data Warehouse and should NOT be considered a comprehensive list. The distributions should also be considered incomplete at this time.

OBSTRUCTIONS

Falls: Height: 0 Length: 0 Comments: (BARRIER FALLS OBSTRUCT MIGRATION TO THE UPPER END OF THE WATERSHEDS LOCATED IN REACH 2. REF# = P1016) [\[P1016\]](#)
Falls: Height: 15 Length: 60 Comments: (IMPASSABLE FALLS/CHUTE. UPSTREAM LIMIT OF CUTTHROAT TROUT. REF# = SRS01) [\[SRS01\]](#)
BEAVER DAM: Height: 0.5 Length: 0 Comments: (UNCONFIRMED OBSTRUCTION. FISH FOUND BOTH UPSTREAM AND DOWNSTREAM. REF# = SRS01) [\[SRS01\]](#)

REFERENCES

2FBSRY: FISHERIES BRANCH, SURREY: FISHERIES FILES: INVENTORY; ENHANCEMENT; BIOPHYSICAL DATA; & RECORDS OF PERSONAL COMMUNICATION [\[2FBSRY\]](#)

2PUB108: SUMMARY REPORT RECONNAISSANCE-LEVEL AQUATIC BIOPHYSICAL INVENTORY OF THE TRIBUTARIES TO STAVE [\[2PUB108\]](#)

3 Troubleshooting the atlas

Much work has gone into creating this atlas as a trouble-free product, however, sometimes issues do arise. This section of the report attempts to address some of those issues. For all others, please read this section to learn how to report an issue with the Wildlife Stewardship Atlas.

First of all, the BC Historic Mines Atlas is built to run in Windows Explorer. You WILL NOT be able to view all the functionality of the BC Historic Mines Atlas using Netscape Communicator or any other type of Internet browser. To download a free version of Microsoft Internet Explorer, please go to:

<http://www.microsoft.com/windows/ie/downloads/critical/ie6sp1/default.asp>

If you have the correct Internet browser installed, but you don't see a map appear in the lower frame of this page, it means that you haven't installed the Autodesk Mapguide Viewer. Please see Section 2 of this document for a detailed explanation of how to download and install the MapGuide viewer.

If you have installed the Viewer previously, it is very important that you ensure that you have the **correct version** of the Viewer. You must have version **6.0.2.4** or newer. You can check the version number by moving your mouse over the map and clicking on the right mouse button. A menu will appear. Select About -> About Autodesk Mapguide. If your version is older than 6.0.2.4, you will have to download the installation file for the Autodesk web site and re-install the Viewer.

If, after having installed the MapGuide Viewer, you still don't see a map appear in the lower frame of this page, it is possible that a **firewall** prevents you from accessing the map.

If you encounter an error once, log out of the BC Historic Mines Atlas, close your Internet Explorer and log back in again to the map server. Try the same procedure to see if you get the same error.

When you are experiencing slow refresh of data layers, such as orthophotos or other imagery, be patient. These are very large files and do take time to load.

If you encounter other errors that persist, please report the error directly to Suzanne Richer at sricher@hfx.eastlink.ca. Make sure to describe the action that caused the error to occur **in detail**, including copying and pasting error messages into your e-mail correspondence.

To copy and paste an error message into your e-mail:

- Open the BC Historic Mines Atlas and re-create the error and the error message(s). With the error messages up on your screen click the Print Screen button on the top of your computers keyboard.

- Open up a graphics program such as Paint. Click File – Paste. The screen capture output should now paste into the Paint program. If not, re-do and try again!
- Clip the image if necessary using the crop or clip tool.
- Save the file (as a Bitmap (bmp) or a JPEG (jpg)).
- Attach the file to your e-mail you have composed describing the error by clicking Insert Attachment or Attach File in your e-mail program.

Also, be sure to add other relevant information such as what version of Internet Explorer you are using.

To check your version of Internet Explorer:

- Open up Internet Explorer and click on Help.
- At the bottom of the pull-down menu you should see About Internet Explorer.
- Click this option and a box should appear that will tell you the version number of Internet Explorer that is currently installed on your machine.

You could also include information on your Operating System (such as Windows 98, 2000 or XP). Include any other relevant information that you think is important and should be conveyed to assist with the problem. We will get back to you as soon as possible.



4 Contact Information

4.1 Environment Canada:

Robert McCandless P. Geo
Environment Canada
5th Floor, 401 Burrard Street
Vancouver, BC, V6C 3S5
(604) 666-2199
Rob.McCandless@ec.gc.ca

4.2 Community Mapping Network:

Brad Mason
Project Coordinator
Department of Fisheries and Oceans
Habitat and Enhancement Branch
Suite 200 - 401 Burrard Street
Vancouver, BC V6C 3S4
(604) 666-7015
masonb@dfo-mpo.gc.ca

Rob Knight
Project Coordinator
Ministry of the Environment
Lower Mainland Region
10470 152 St.
Surrey, B.C. V3R 0Y3
(604) 582-5293
Rob.Knight@gov.bc.ca

Suzanne Richer
CMN MapGuide Application Developer
33 Inverary Court
Porters Lake, N.S. B3E 1M8
(902) 827-3746
sricher@hfx.eastlink.ca

4.3 Ministry of Agriculture and Lands:

Gregg Stewart
Manager
Crown Contaminated Sites Branch
Ministry of Agriculture and Lands
(250) 387-1528
Gregg.Stewart@gov.bc.ca