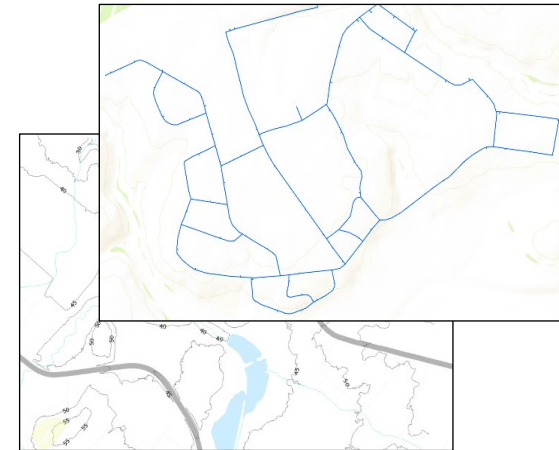


# ArcGIS Online Platform Overview

**AFNWA Operators Workshop**

**February 16 – 17, 2023**

**Legends, Millbrook Power Centre**



# Presentation Outline

- The ArcGIS online platform
- Access to ArcGIS online
- ArcGIS Online Content
- How the map was created and how accurate it's
- Layers shared by other organizations
- Accounts distribution and a demo session
- Where to find learning material
- The plan for future improvement



# The ArcGIS online platform

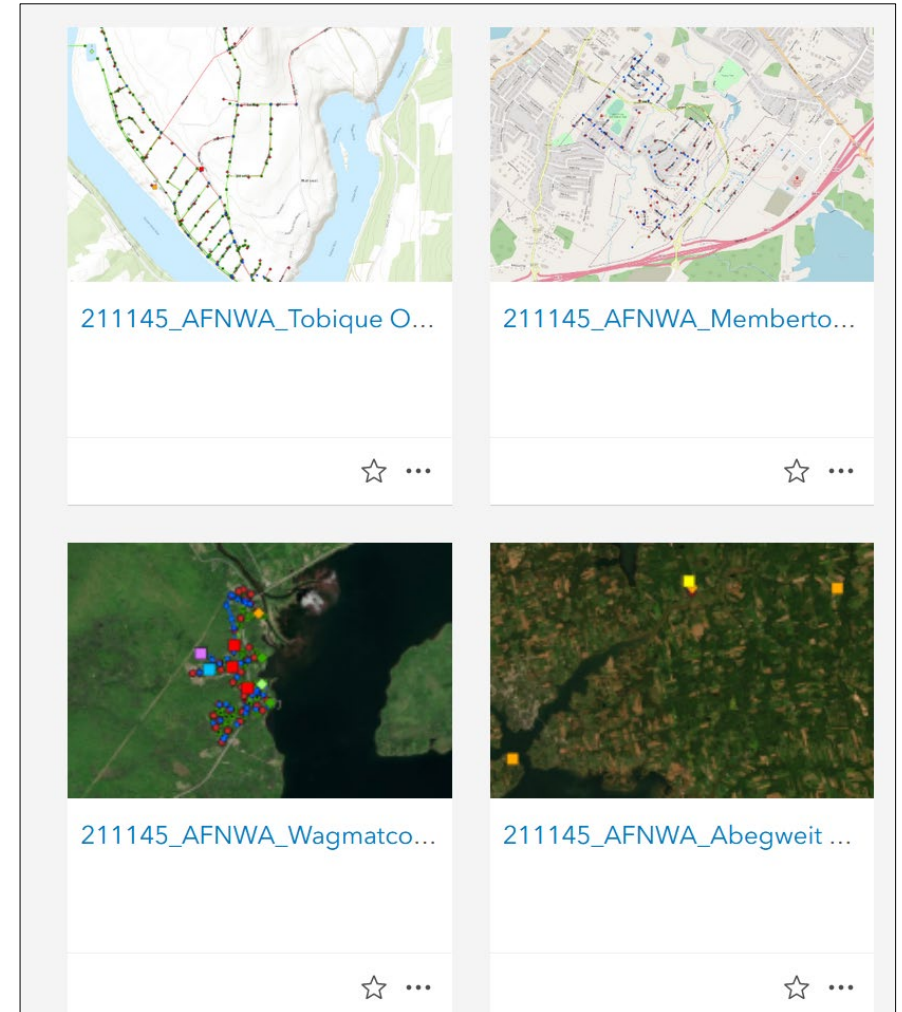
- ArcGIS Online is a cloud-based, collaborative platform for creating, managing, and sharing maps, applications, and data.
- It is part of the ArcGIS platform developed by Esri, a leading provider of geographic information system (GIS) technology.



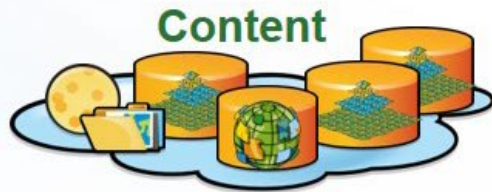
Credit: wiki.gis.com

# The ArcGIS online platform

- ArcGIS Online enables users to access maps, data, and tools to create their own custom maps, conduct spatial analysis, and build location-based applications
- The platform also supports collaboration and sharing, allowing users to work on projects together, share data and maps with others, and publish their work to a wider audience







**Content**

- Online basemaps
- Cached basemaps
- Worldwide coverage
- World imagery
- World Street Map
- Boundaries
- Places
- Transportation layers
- Community maps

**Online licensing**  
 Named users  
 Service credits



**Services**

- Business Analyst
- Community Analyst
- Spatial analysis
- Network routing
- World geocoding
- Landscape services



**Organization**

**Home**

Personalized  
Home page

**Gallery**

Most viewed  
Recently added  
Groups

**Map**

- Make a map
1. Choose an area
  2. Add layers
  3. Edit layers
    - Descriptive text
    - Add images
    - Add features
    - Configure pop-ups
    - Spatial analysis
    - Network analysis
  4. Save and share

**Groups**

All my groups  
Owned by others  
Membership requests

**My Content**

Add maps and apps  
Share with others

- Downloadable apps**
- Collector for ArcGIS
  - Explorer for ArcGIS
  - Esri Maps for Office
  - Operations Dashboard for ArcGIS
  - Esri Maps for SharePoint
  - WebApp Builder configuration apps
  - Web Application Templates
  - AppStudio for ArcGIS applications
  - .... many more



# Access to ArcGIS online

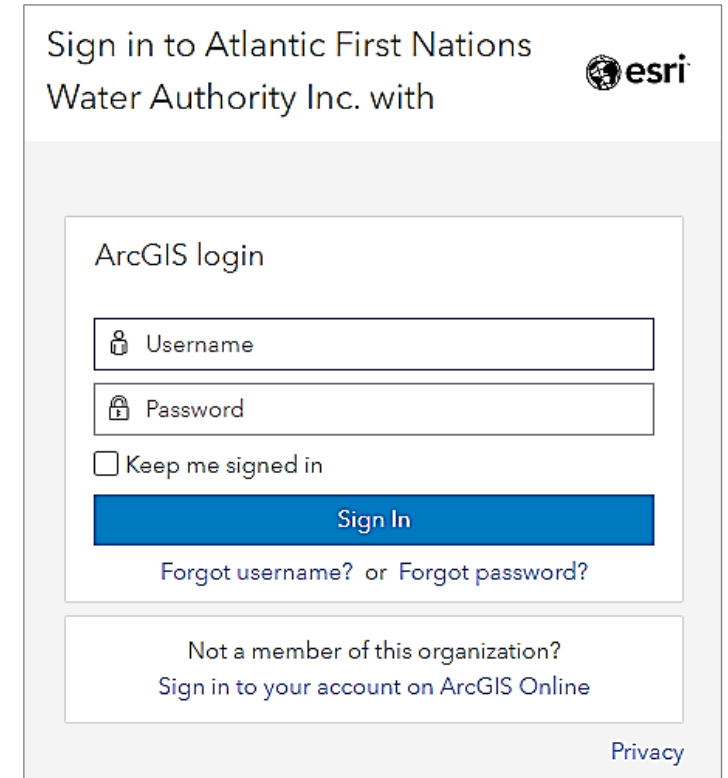
- ArcGIS Online is accessible from any device with an internet connection
- Users are subscribed to the platform on a monthly/annual basis



Web browser



Field Maps app



<https://AFNWA.maps.arcgis.com>



# The User Types

- **Viewer**
  - Views maps and apps to inform, make better decisions, and monitor performance
- **Mobile Worker**
  - Connects the field to the office using apps for real-time data collection, tasking, and operations
- **GIS Professional**
  - Builds advanced maps, visualizations, and analyses

# ArcGIS Online Content

- Layers
  - All web maps and scenes include layers
- Maps
  - Each layer references a **dataset** and specifies how that **dataset** is represented using symbols and text labels
- Scenes

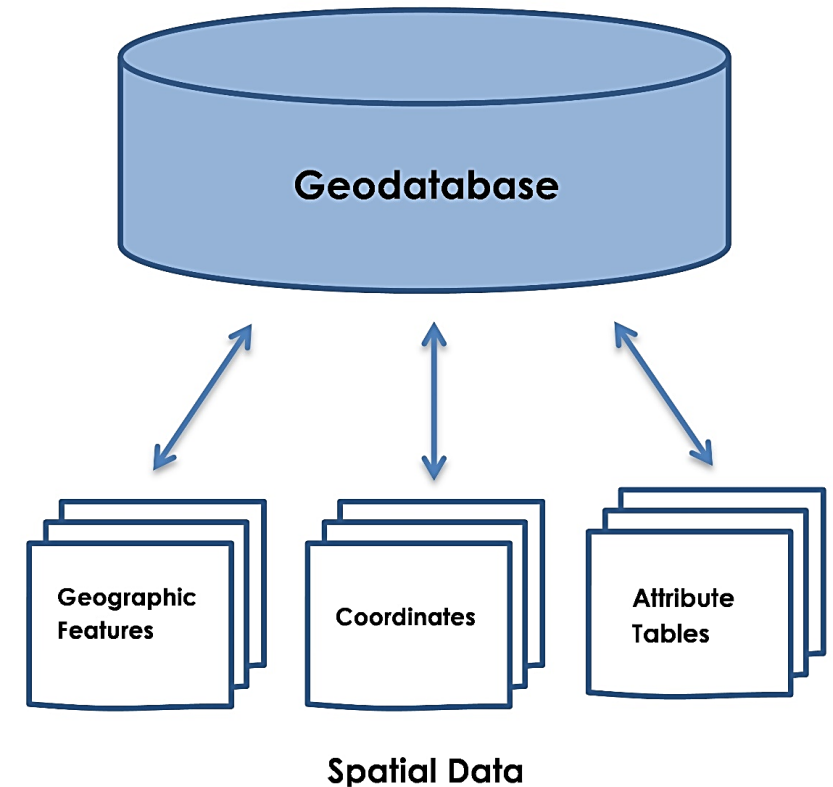
The screenshot displays the ArcGIS Online interface. On the left is a dark sidebar with navigation options: Add, Layers, Tables, Basemap, Charts, Legend, Bookmarks, Save and open, Map properties, Share map, and Create app. The main area shows a map with a water distribution network overlaid on a street map. The network consists of green lines (pipes), blue lines (main piping), and red dots (valves). Labels like 'Highway 102 SB', 'Highway 102 NB', and 'Abundant Way' are visible. On the right side of the map, there is a vertical toolbar with various configuration options: Properties, Styles, Processing templates, Image display order, Filter, Effects, Clustering, Configure pop-ups, Configure fields, Labels, and Configure charts. At the bottom right corner, there is a circular logo for 'ATLANTIC FIRST NATIONS WATER AUTHORITY INC.' with a stylized water drop and gear icon.



# Geographic Data

- Collection of geographic datasets of various types stored in a file or database system
- Geographic datasets
  - Features
    - Point – valve
    - Line – Pipe
    - Area/Polygon – Lagoon
  - Coordinates
  - Attributes
    - Stored in a table and linked to the feature
    - For example, attributes of a pipe might include its ID, Length, Diameter, Material, Year of Construction, etc.

GIS Map



Credit: Wiki.GIS.com

# Attribute Table

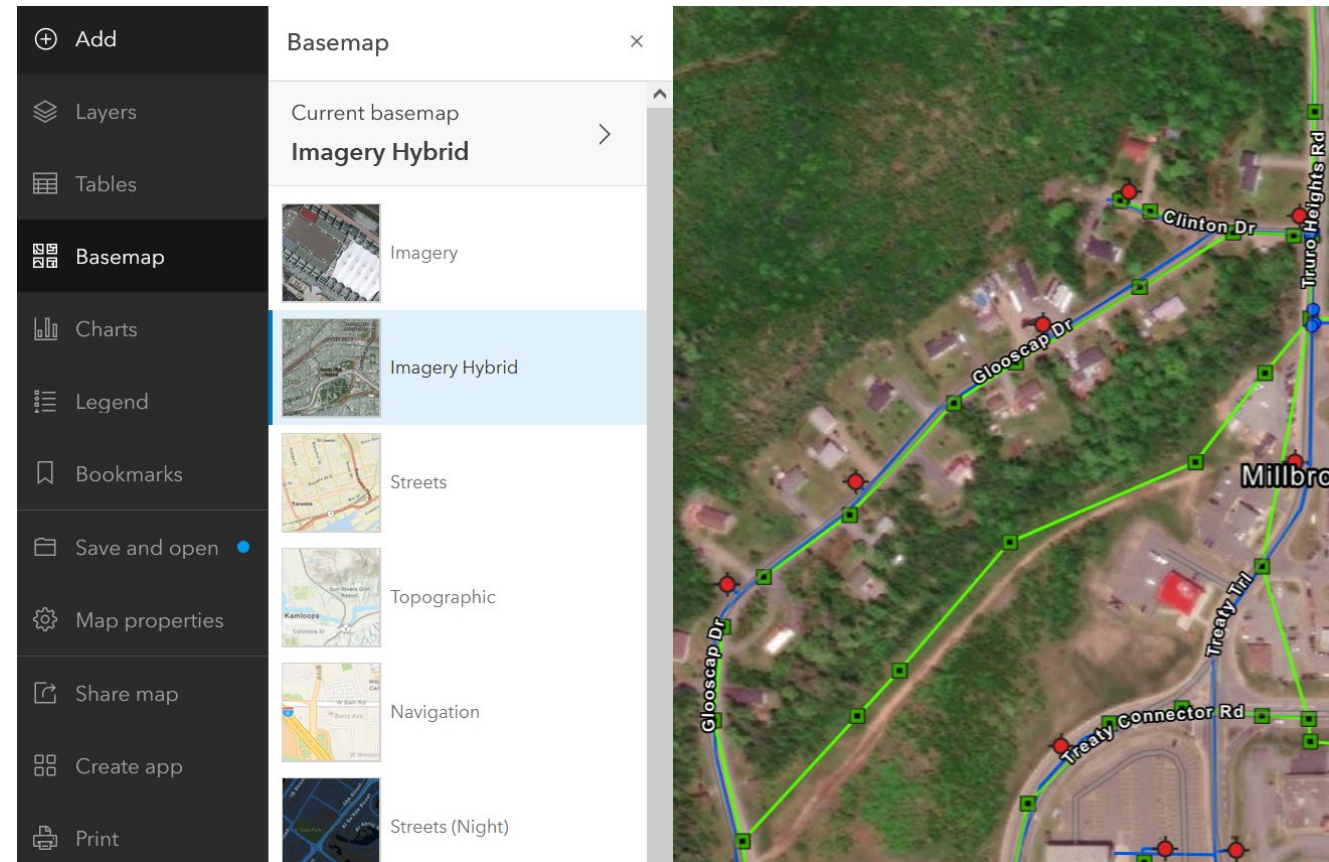
The screenshot displays a GIS application interface. On the left is a dark sidebar with navigation options: Add, Layers, Tables, Basemap, Charts, Legend, Bookmarks, Save and open, Map properties, Share map, Create app, and Print. The main area is divided into a 'Layers' panel and a map. The 'Layers' panel lists several layers, with 'Collection System - Manhole' selected. The map shows a network of pipes and manholes, with a specific manhole highlighted. A popup window titled 'Collection System - Manhole' is open, displaying the following attribute table:

Attribute	Value
Asset Name	MH65
Asset Condition	3
Material	Concrete
Size (Internal Dimensions in mm)	1050
Accessible?	No
Should be cleaned?	
Risers required/risers to be straightened?	
Evidence of leaks/infiltration (sealing)?	
Benching present?	
Other comments	Cover stuck, assumed condition based on other MH observations in the area (same ace).

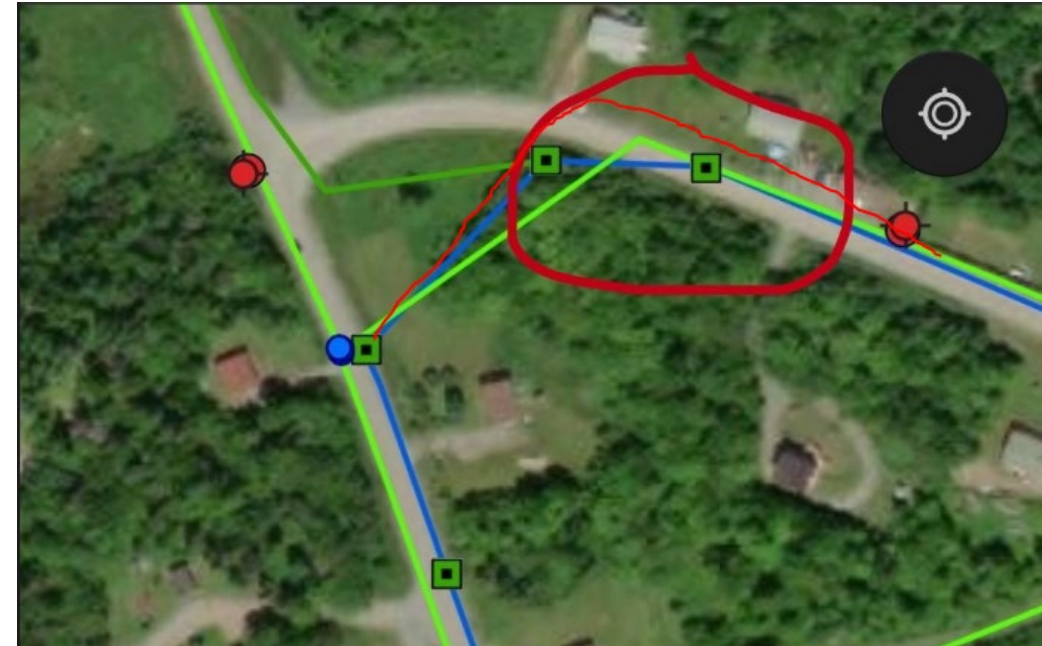
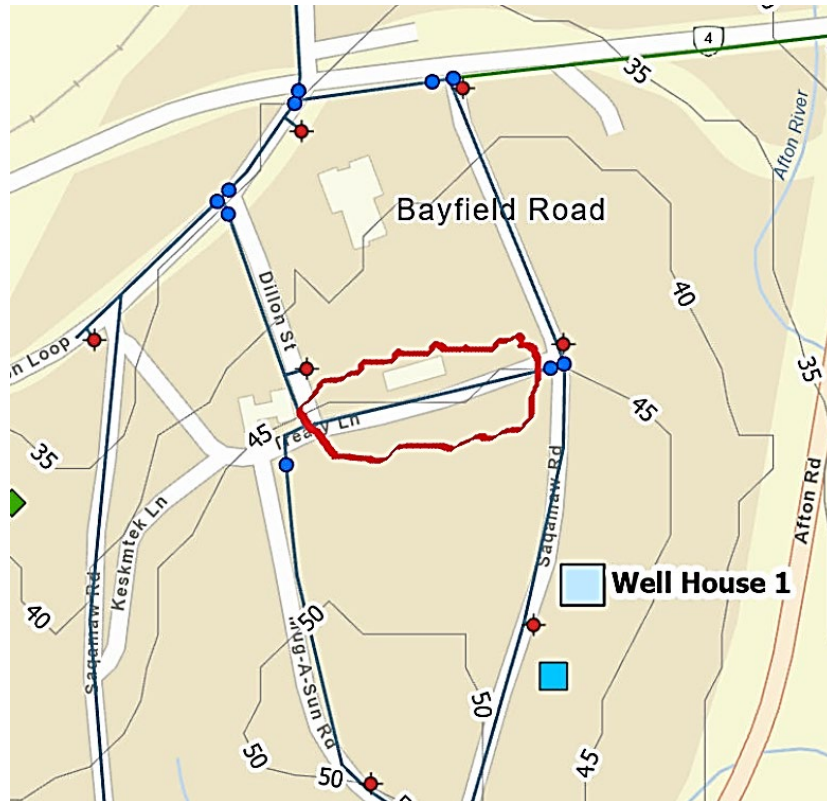
At the bottom of the popup, there is a 'Zoom to' button and a page indicator '1 of 2'.

# Operational Layers and Basemap Layers

- Basemap layers
  - Static layers that provide geographic context
  - Imagery, street, or topographic
- Operational layers
  - The layers are drawn on top of the basemap
  - Made up of either features or imagery.
  - Interact with operational layers



# How the map was created and how accurate it's



## Disclaimer

The location of the water lines is not 100% accurate. The map was built by locating the valve in the ground, and then by comparing some digital/paper maps, the water lines were drawn by connecting the line between valves. As a result, you can expect some errors in the exact location of the pipe underground.



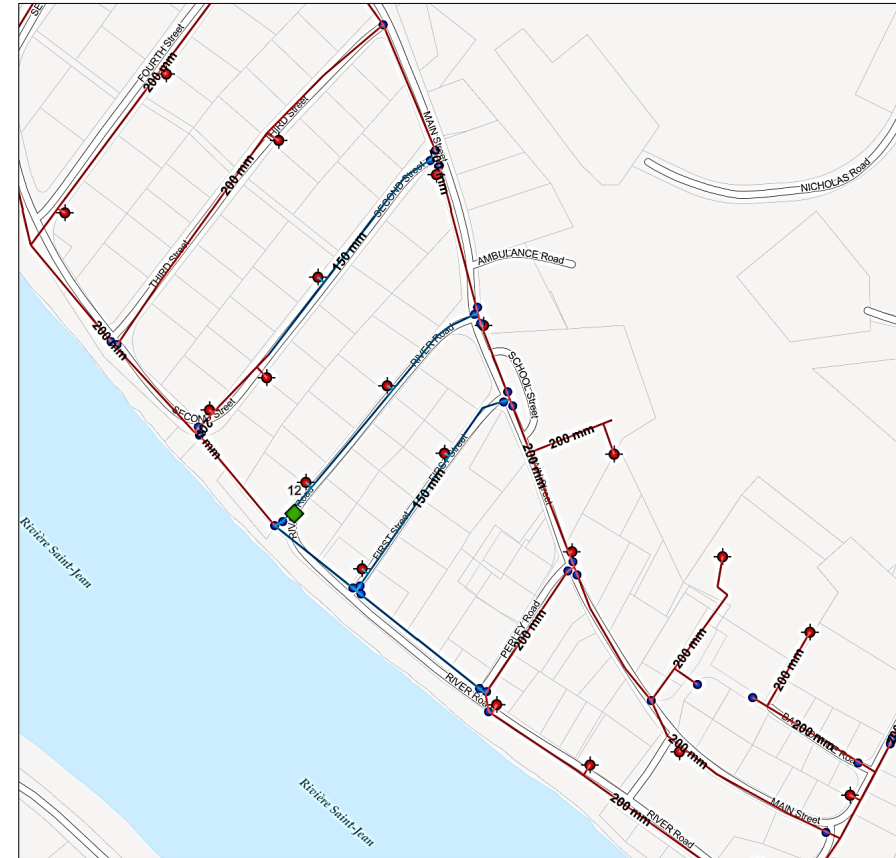
# Our expectations about the maps

## Operator needs:

- Storing information about the system and easy access when needed
- Closing part of the water distribution system
- Planning for water main flushing

## Improving the map

- When an error is noticed, inform the Engineering team





# Layers shared by other organizations

Untitled map

+

< Add layer

ArcGIS Online ▾

- My Content
- My Favorites
- My Groups
- My Organization
- Living Atlas
- ArcGIS Online

Government of C

Items: 3,425

Top  
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Vegetation Zones of Canada: a Biogeoclimatic Perspective

by cgpa\_aafc

Updated: 3/4/22

+

Land Cover for Agricultural Regions of Canada, circa 2000 / Couverture des terres des régions agricoles du Canada, vers l'an 2000

by AgCanada

Updated: 9/30/20

## Owner



Government\_of\_Canada

## Tags

NHN, GeoBase, Hydrographic Network, Earth Sciences, Geography, Hydrology, Water, Network, Hydrography, Hydro, Rivers, Lakes, Coastline, Geographic information systems, Cartography, Geographic data, Watersheds, Watercourses, Natural resources, Drainage, Surface water, nrcan, Canada, Government of Canada, lang-en

## Credits (Attribution)

Government of Canada; Natural Resources Canada; Strategic Policy and Results Sector

## URL






[View](#)

[http://maps.geogratis.gc.ca/wms/hydro\\_r](http://maps.geogratis.gc.ca/wms/hydro_r)



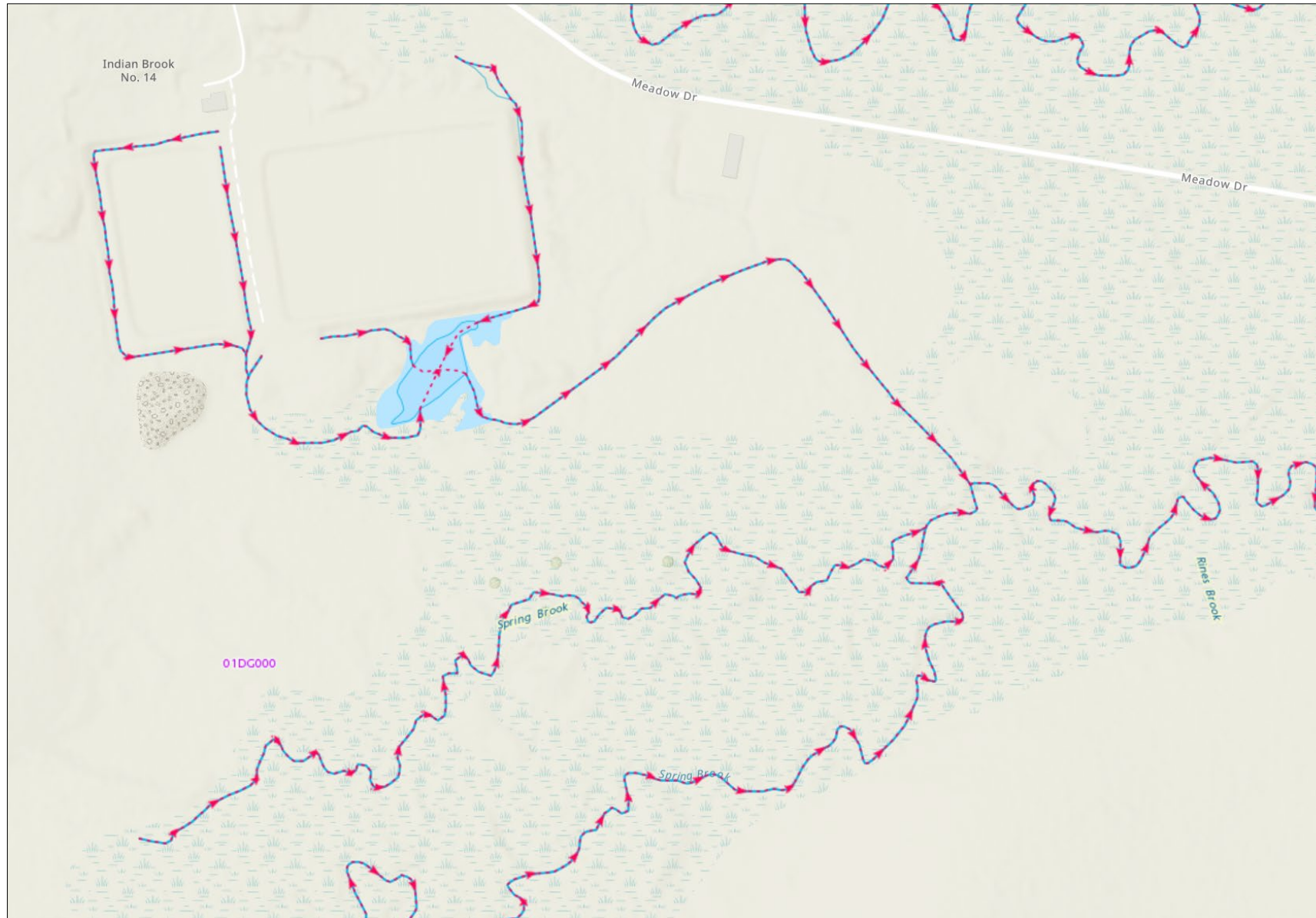
# Layers shared by other organizations

## Layers

-  **BASE\_NSODB\_10k\_WM84**  
Tile Layer
-  **GeoNB Basemap Imagery**  
Map Image Layer
-  **National Hydro Network - NHN - GeoBase Series**  
WMS
-  **Secondary Watershed Boundaries**  
Feature Layer
-  **NS Aerial Photo Mosaic**  
Tile Layer



# National Hydro Network - NHN - GeoBase Series





# Accounts distribution and a demo session

Viewer	Mobile Worker	GIS Professional
<ul style="list-style-type: none"><li>• View contents</li></ul>	<ul style="list-style-type: none"><li>• View contents</li><li>• Edit data</li><li>• Data collection, surveys, and inspections</li></ul>	<ul style="list-style-type: none"><li>• Administer the platform</li><li>• Create maps and apps</li><li>• Perform analysis</li><li>• Share maps</li></ul>
<ul style="list-style-type: none"><li>○ Operators</li><li>○ Managers</li></ul>	<ul style="list-style-type: none"><li>○ Hub supervisor</li><li>○ Operation engineer</li><li>○ Utility technologist</li></ul>	<ul style="list-style-type: none"><li>○ Engineering team</li></ul>

# ArcGIS online training

The screenshot displays the Esri Academy website interface. At the top, there is a navigation bar with the Esri logo and links for Products, Industries, Support & Services, Stories, and About. A secondary navigation bar includes a home icon, Esri Academy, About, Catalog, Certification, My Academy, and Help. The main heading is "Courses for ArcGIS Online" with a subtext: "ArcGIS Online training options accommodate different schedules, learning styles, and experience levels." Below this, a paragraph states: "Whether you have an ArcGIS Online public account or you're a member of an ArcGIS Online Organization with a curated collection of mapping capabilities and content at your fingertips, the right course can help you be more productive, faster." A "Get Started" section follows, with the text: "Gain the skills you need to author and share informative web maps, explore data, and perform analysis." Three course cards are shown, each with a topographic map background:

- Course 1:** "Creating Stories with ArcGIS" (INSTRUCTOR-LED), 2 Days (16 Hours), \$1,790 USD, 91 reviews.
- Course 2:** "Get Started with ArcGIS Dashboards" (INSTRUCTOR-LED), 1 Day (8 Hours), \$895 USD, 328 reviews.
- Course 3:** "ArcGIS Online: Essential Workflows" (INSTRUCTOR-LED), 1 Day (8 Hours), \$895 USD, 517 reviews.

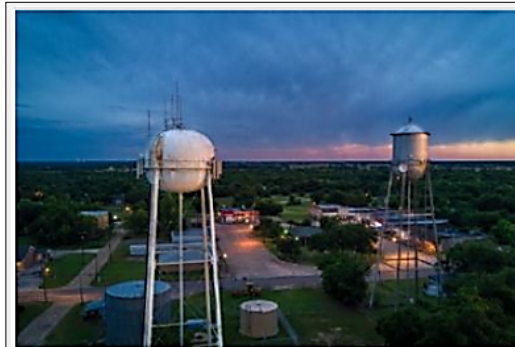
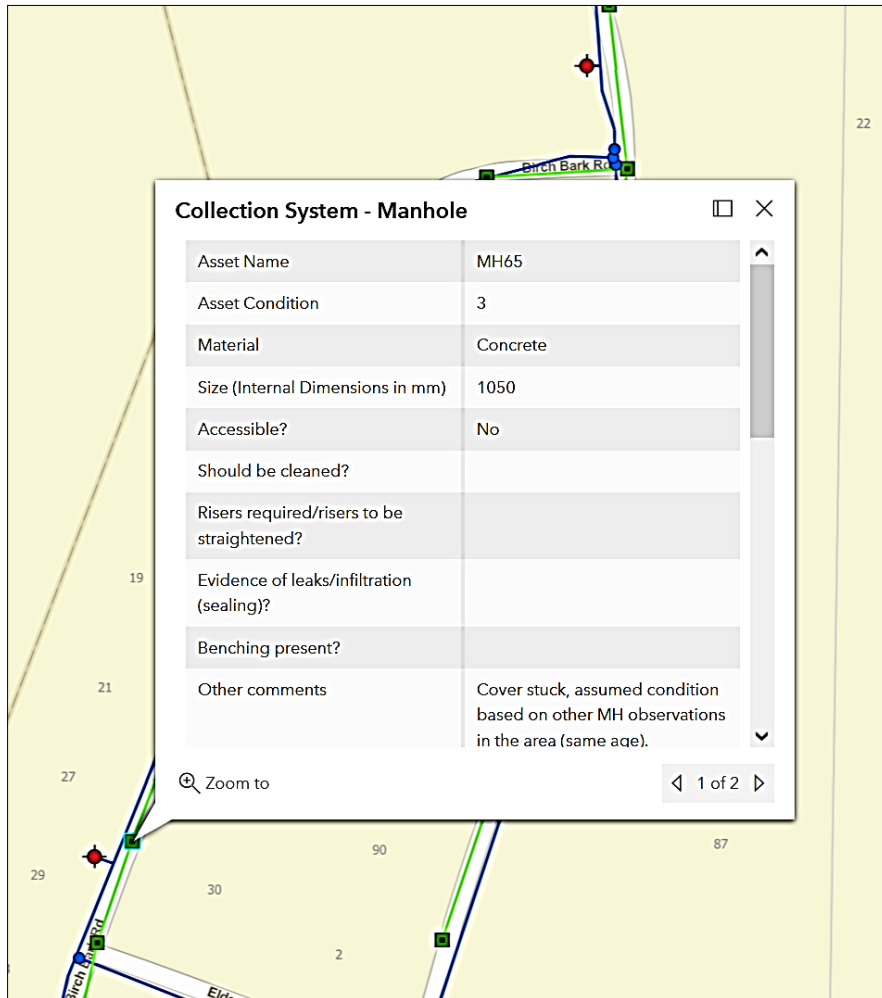




# The plan for future improvement

## ArcGIS Solutions

- Water Distribution Data Management
- Sewer Data Management



### Water Distribution Data Management

Water Distribution Data Management can be used to map water distribution assets, edit data, view system maps in the field and office, view asset reports, and collaborate with map notes.



### Sewer Data Management

Sewer Data Management can be used to map sewer assets, edit data, view system maps in the field and office, view asset reports, and collaborate with map notes.

Thank you!



Abegweit



Acadia



Elsipogtog



Esgenoopetitj



Eskasoni



Glooscap



Kingsclear



Lennox Island



Membertou



Millbrook



Oromocto



Paqtnkek



Pictou Landing



Potlotek



Sipeknekatik



St Marys



Tobique



Wagmatcook



We'koqma'q

