



“ALASKA DEC DRINKING WATER PROTECTION AREAS” PUBLIC WEB MAP Basic Instructions

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Department of Environmental Conservation (DEC)

Drinking Water Protection

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How to Open Web Map

- Visit DEC Home, <http://dec.alaska.gov/>
 - Click on “DEC Maps” icon; or
 - Click on “Find Interactive Map” link

How Do I...

- ★ Contact a Program Representative
- ★ Access a Public Database
- ★ Comment on Regulations
- ★ Use DEC Online Services
- ★ Appeal a DEC Decision
- ★ Obtain a Food Worker Card
- ★ Find an Interactive Map

State of Alaska
myAlaska My Government Resident Business in Alaska Visiting Alaska State Employees

Alaska Department of Environmental Conservation

State of Alaska > DEC > Home

HIGHLIGHTS

- Clean Water Actions Grants Awarded Totalling More Than \$424,000
- DEC has just initiated Phase 2 of the Alaska Water and Sewer Challenge for rural communities
- State Review Framework - EPA's review of the Division of Water, Compliance and Enforcement Program

Commissioner Larry Hatig
Deputy Commissioner Alice Edwards

Commissioner's Office

- Press Releases
- Public Service Announcements
- Public Notices
- Regulations

Air Quality

- Air Non-point Mobile Source
- Air Permit Program
- Monitoring and Quality Assurance

Spill Prevention & Response

- Contaminated Sites
- Industry Preparedness
- Prevention & Emergency Response
- Response Fund Administration

Administrative Services

Water Quality

Environmental Health





How to Open Web Map (cont'd.)

- Map Title: "Alaska DEC Drinking Water Protection Areas"
 - *Includes some map layers from other DEC Programs (i.e., DEC Contaminated Sites)*



A screenshot of the Alaska Department of Environmental Conservation's Geographic Information Systems (GIS) web page. The page has a yellow header with "State of Alaska" and navigation links like "myAlaska", "My Government", "Resident", "Business in Alaska", "Visiting Alaska", and "State Employees". Below the header is a dark blue banner with the DEC logo and the text "Alaska Department of Environmental Conservation Geographic Information Systems". A search bar is on the right. The main content area has a breadcrumb trail: "State of Alaska > DEC > Geographic Information System > DEC Web Maps". A "WELCOME TO DEC WEB MAPS" section contains introductory text and a "here" link. Below this is a search bar and a "All Maps" dropdown menu. A grid of map thumbnails is displayed, each with a title. The thumbnail for "Alaska DEC Drinking Water Protection Areas" is highlighted with a red border. Other thumbnails include "Alaska DEC Air Quality Advisories", "Alaska DEC AWS Challenge Communities", "Alaska DEC Boil Water Notices-Open", "Alaska DEC Contaminated Sites", "Alaska DEC Fish Tissue Mercury Samples by Site", "Alaska DEC FNSB PM2.5 Nonattainment Area", and "Alaska DEC Impaired Waters". A "MAPPING RESOURCES" sidebar on the right lists links for "Web Maps", "ArcGIS Services Directory", "Links to other State mapping sites", and "About Our GIS".



How to Open Web Map (cont'd.)

- **READ Description Page**
- Open in map viewer

ArcGIS Features Plans Gallery Map Scene Help Sign In

Alaska DEC Drinking Water Protection Areas



This map displays Public (regulated) Drinking Water Protection Areas for known public water systems. The data is continuously being revised.

Web Map by adecadmin
Last Modified: March 9, 2016
★★★★☆ (6 ratings, 25,539 views)
Sign in to rate this item.

[f](#) Facebook [t](#) Twitter

OPEN ▾

Open in map viewer

Open in ArcGIS for Desktop

Note: The Regional Area layer displays the approximate location of Drinking Water Protection Areas for ground water and surface water sources. This layer will turn-off at 1 : 3,000,000 scale, Drinking Water Protection Areas are displayed at 1 : 3,000,000 scale.

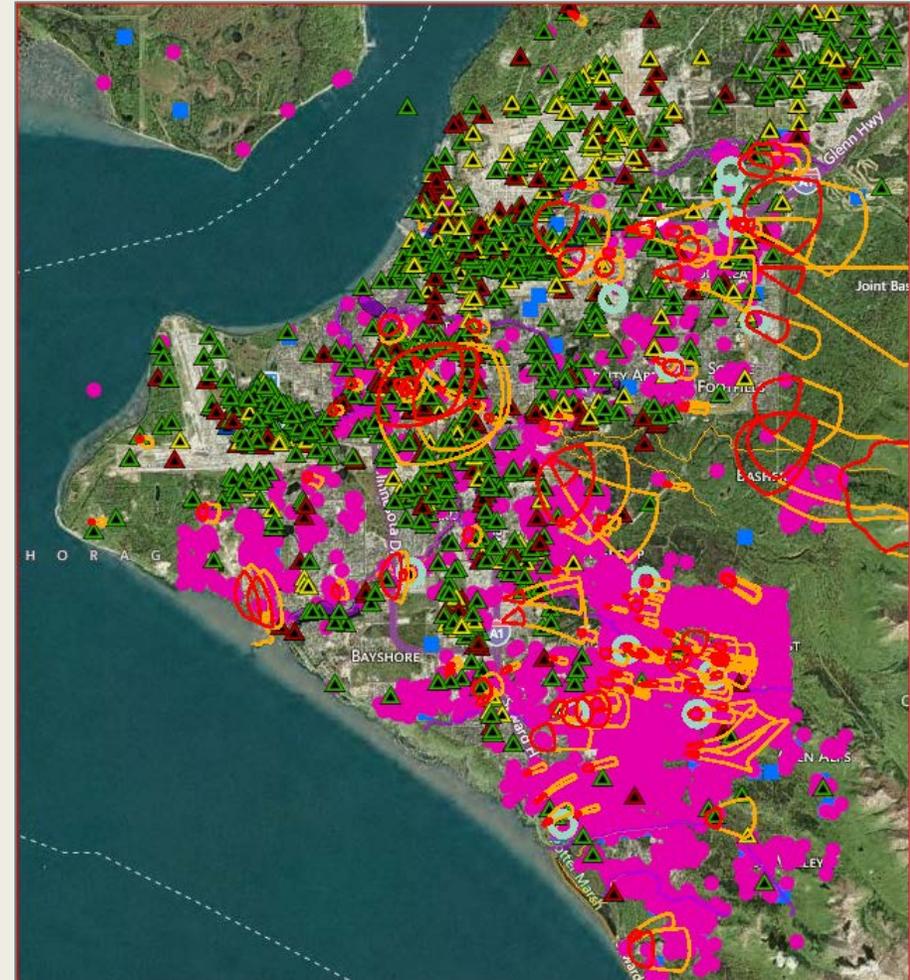
This map was created by the State of Alaska Department of Environmental Conservation-Drinking Water Program to assist the public identify known public Drinking Water Protection Areas in the State of Alaska. Please note: there are some known inaccuracies included in the data set and it is continuously being updated and corrected.



How to Open Web Map (cont'd.)

■ Error messages

- *This map uses data from various sources, some which we don't control.*
- *Some of these layers break occasionally, but usually only temporarily.*
- *If you receive an error message, click "OK".*
- *The map will still work, but that layer may be down temporarily.*
- *If it is a layer critical to your work, please let us know, and we can try to track down the issue.*





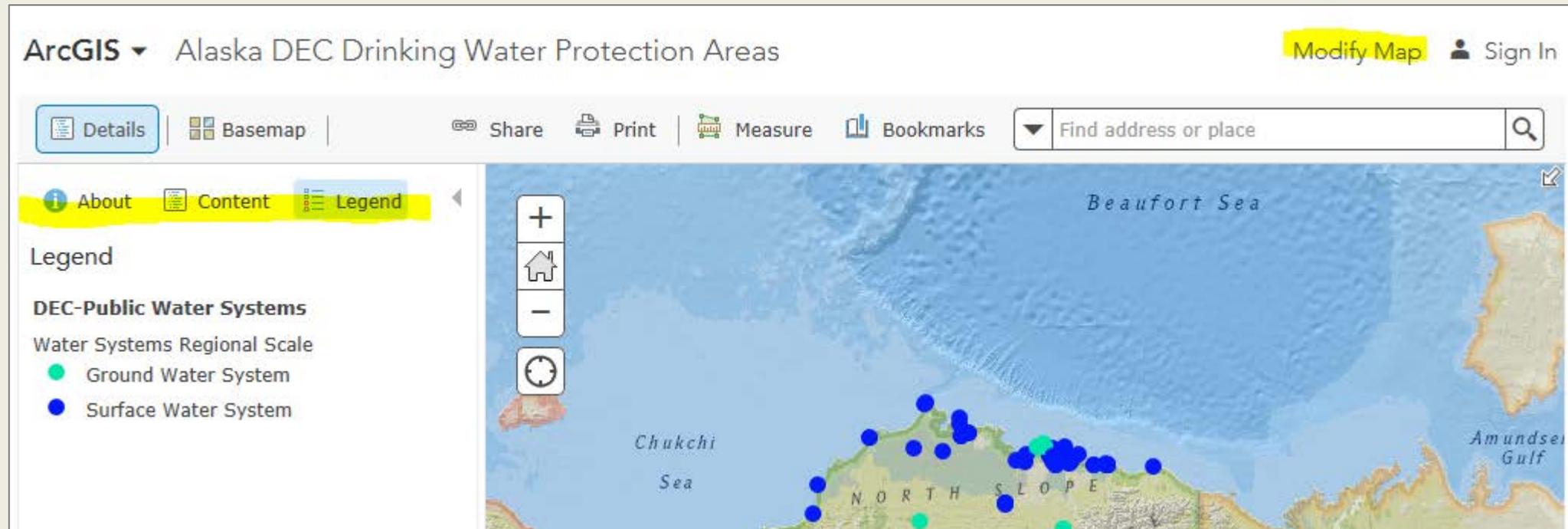
Basic Map Functions

■ About – Content – Legend

- *Content: Can go here to turn layers ON/OFF*
- *Legend: Can show this for printing/copying*

■ Modify Map

- *Enables additional functions, such as adding map notes (i.e., text, points, lines, areas)*
- *Will discuss in more detail later*



Content Layers

- Visibility and scale-dependencies
 - Layers at top draw over those below
 - Checked = will draw (when at right scale)
 - Gray = Not visible until zoomed in to right scale
- DEC data
 - Includes layers from other DEC Divisions and Programs
- DNR data
 - Water Rights/Reservations, PLSS* (Township/Range/Section)
- Imagery base layers
 - Best imagery depends on region
 - Try other imagery layers if not good in your area
- Other basemaps
 - Always at bottom of list and drawn underneath other layers
 - Topographic, roads, terrain, NOAA charts, etc.

*PLSS = Public Land Survey System

[About](#) [Content](#) [Legend](#)

Contents

- Sections
- Meridian Township Range
- DEC-Pul
- DEC-Id
- DEC-Co
- DEC-Im
- DEC-Sol
- DEC-Wa
- DEC-Se
- DNR-Wa
- Imagery (1ft)
- Imagery
- Imagery (GINA)
- Imagery
- USA Top
- National Geographic World Map



Basemap

Select a basemap

Imagery	Imagery with Labels	Streets
Topographic	Dark Gray Canvas	Light Gray Canvas
National Geographic	Oceans	Terrain with Labels
OpenStreetMap	USA Topo Maps	USGS National Map



Searching Map

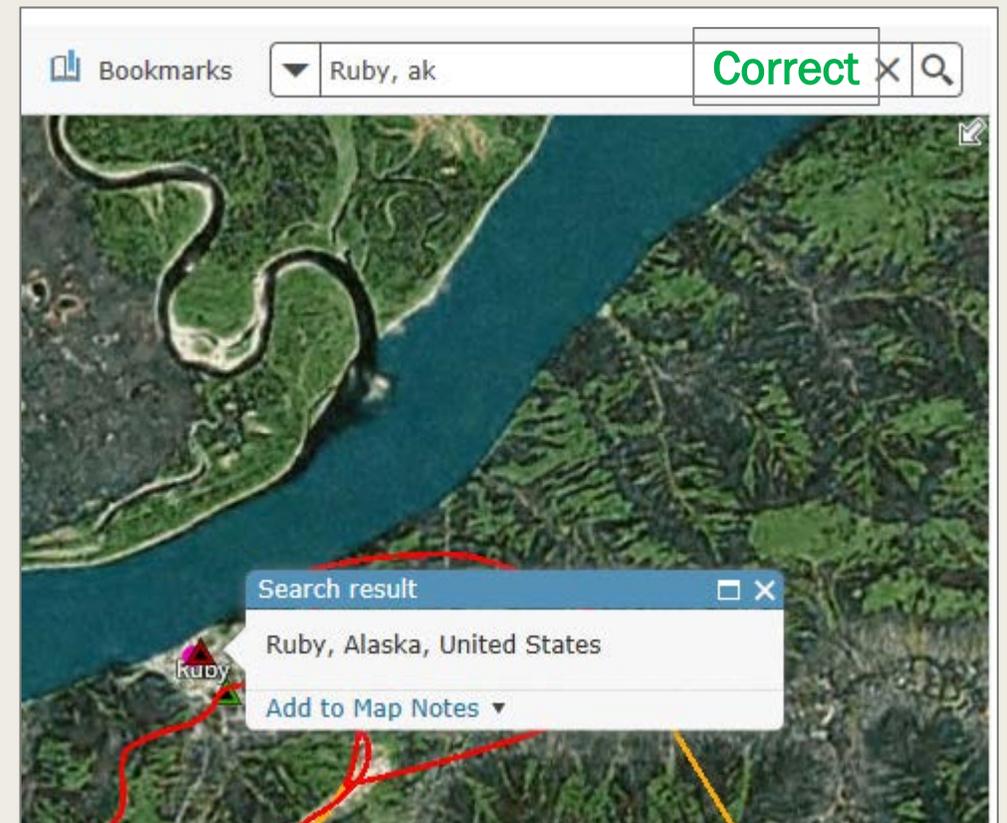
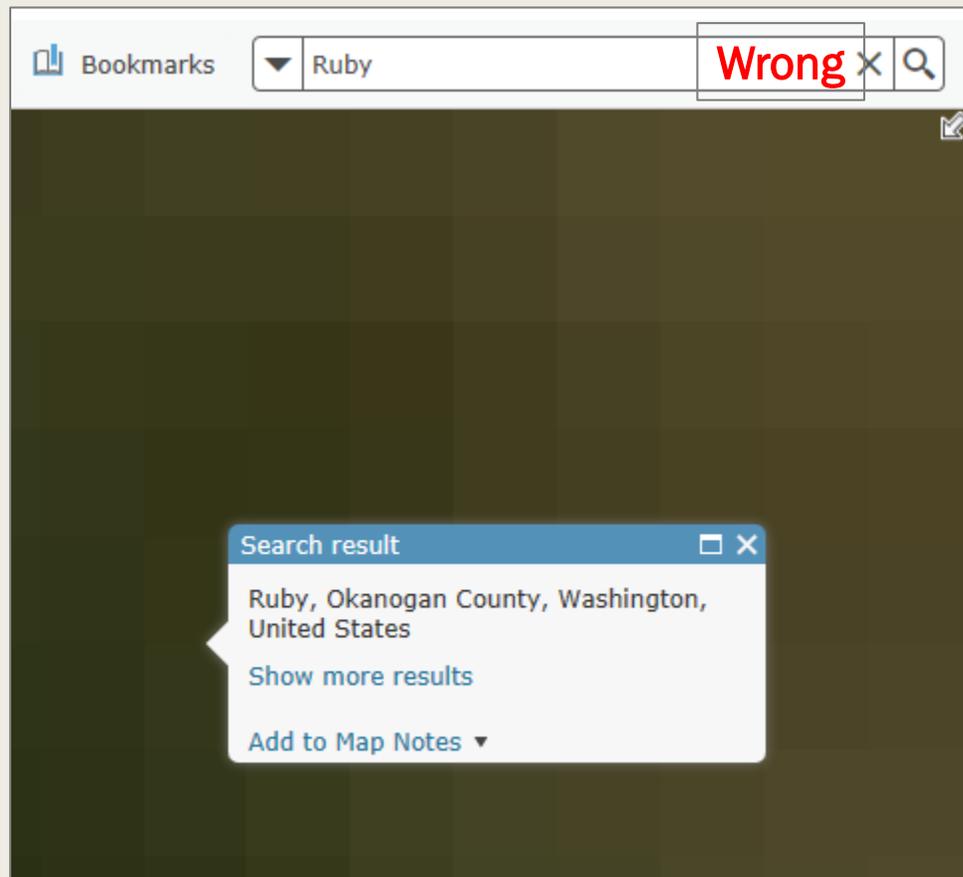
■ Searching: Using Bookmarks

A screenshot of the ArcGIS web interface for "Alaska DEC Drinking Water Protection Areas". The interface includes a top navigation bar with "ArcGIS" and "Alaska DEC Drinking Water Protection Areas", and "Modify Map" and "Sign In" options. Below this is a toolbar with "Details", "Basemap", "Share", "Print", "Measure", and "Bookmarks" (highlighted in yellow). A search bar contains the text "Find address or place". On the left, there is a legend panel titled "Legend" with "DEC-Public Water Systems" and "Water Systems Regional Scale" sections. The legend lists "Ground Water System" with a green dot and "Surface Water System" with a blue dot. The main map area shows a map of Alaska with a "Bookmarked places" popup window. The popup window lists "Full Extent", "Anchorage", "Barrow", "Bethel", and "Dillingham". The map also shows labels for "Chukchi Sea" and "Amundsen Gulf".



Searching Map (cont'd.)

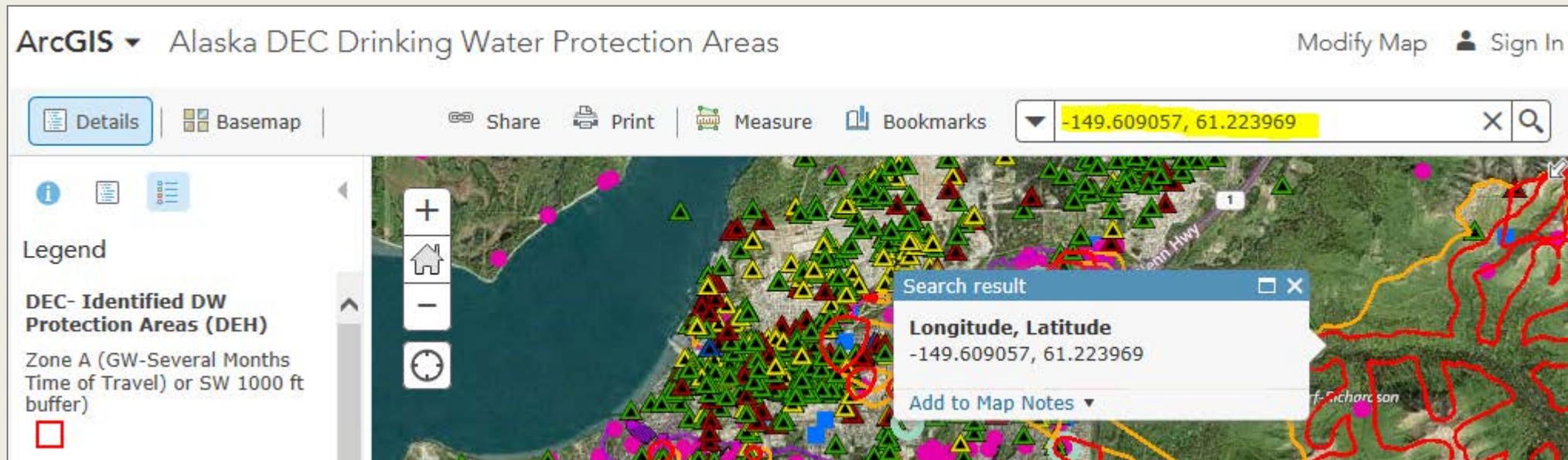
- Searching: By City
 - *Important* Include "AK" in search (searches entire globe)





Searching Map (cont'd.)

- Searching: By Location Coordinates
 - *Format: Decimal Degrees (ex. -149.609057, 61.223969)*
 - **Important:** Longitude first, including “negative” sign (unless west of the International Dateline, such as for Shemya)



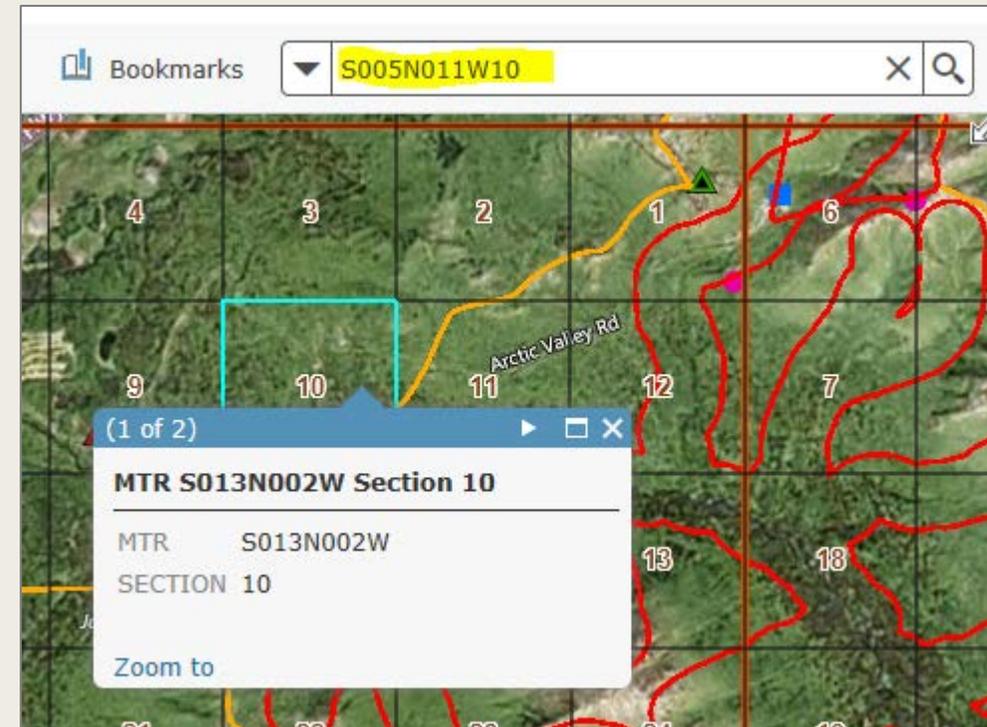


Searching Map (cont'd.)

- Searching: By PLSS in **MTR** or **MTRS** format
 - **M** = 1-letter meridian (ex. "S" = Seward Meridian)
 - **T** = 3-digit township + 1-letter cardinal direction (ex. "013N" = Township 13 North)
 - **R** = 3-digit range + 1-letter cardinal direction (ex. "002W" = Range 2 West)
 - **S** = 2-digit section (ex. "10" = Section 10)

MTR ex. *S013N002W*

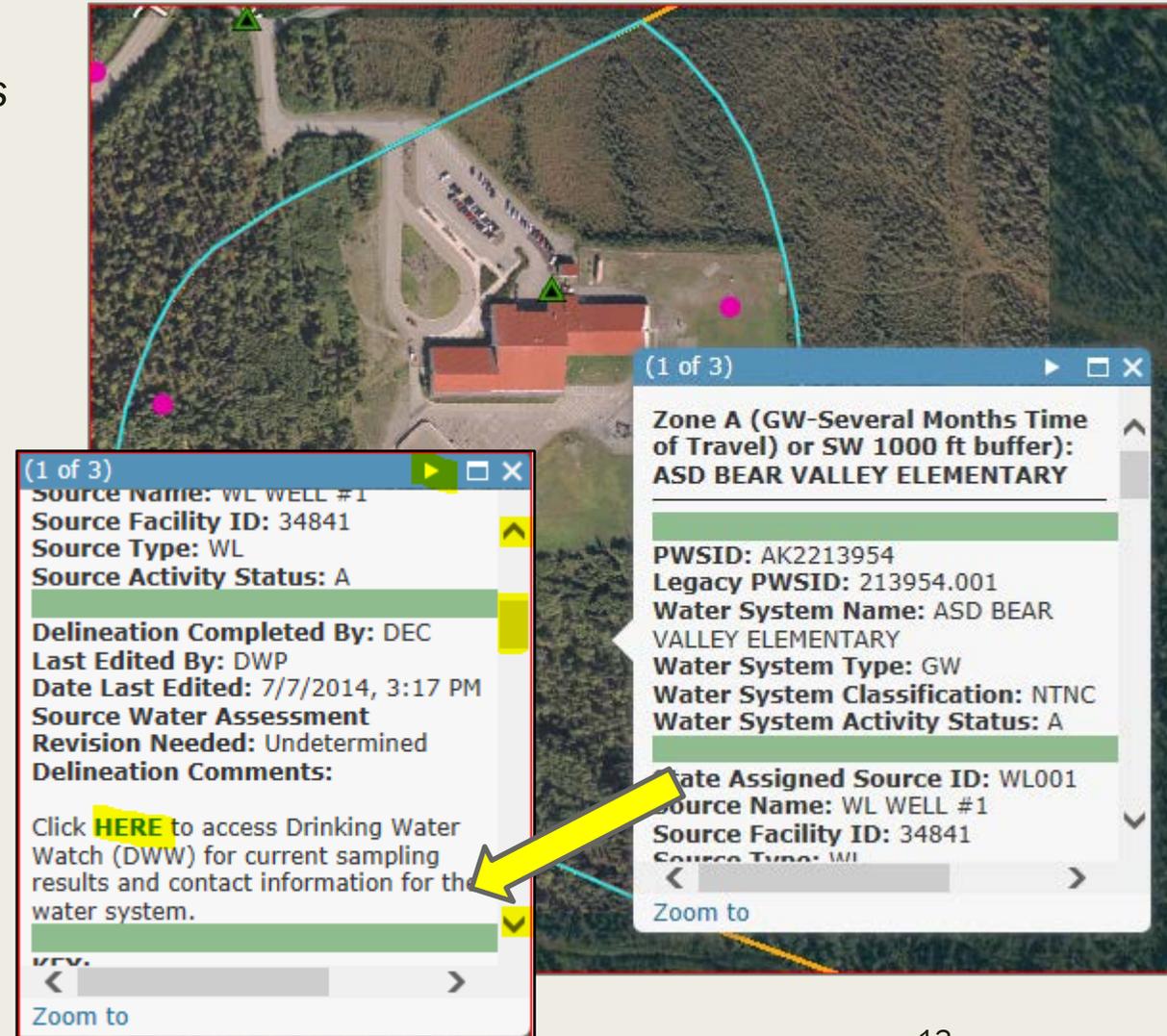
MTRS ex. *S013N002W10*





Pop-Ups

- Pop-Ups
 - Use page-through arrow for multiple pop-ups
 - Scroll down to see more pop-up info
- PWS info (e.g. AK2213954)
 - Key at bottom of pop-up
 - Classification: C = CWS*, not Class C
 - Activity: A = Active.
 - This map only shows active PWS**.
 - Link to Drinking Water Watch (DWW)
 - For more detailed PWS info, such as PWS contact info and water quality results
 - Can also directly access DWW
 - <http://dec.alaska.gov/DWW/>



*CWS = Community Water System

**PWS = public water system



Drinking Water Watch: PWS Info

State of Alaska myAlaska My Government Resident Business in Alaska Visiting Alaska State Employees

Alaska DEC Division of Environmental Health Drinking Water Program

search

DEC State of Alaska

DEC > Drinking Water Watch > Water Systems > Water System Details

DRINKING WATER WATCH

WATER SYSTEM DETAILS

Water System Facilities	Source Water Assessment Results	Non-Coliform Samples/Results
Coliform/Microbial Sample Results	Source Water Assessment Web Map	Non-Coliform Samples/Results by Analyte
Coliform Sample Summary Results	Lead And Copper Sample Summary Results	Violations/Enforcement Actions
Sample Schedules	Site Visits	Milestones
		Current Monitoring Summary

SYSTEM

Water System No. :	AK2213954
Water System Name :	ASD BEAR VALLEY ELEMENTARY
Principal County Served :	ANCHORAGE
Status :	A

POINTS OF CONTACT

Name	Job Title	Type	Phone
LUNDEVALL, SIMONNE	ADMIN ASSISTANT	AC	907-348-5111

ANNUAL OPERATING PERIODS & POPULATION SERVED

Start Month	Start Day	End Month	End Day	Population Type	Population Served
9	1	6	1	NT	524

SOURCE WATER ASSESSMENT RESULTS

The **RUBY WATER SYSTEM (AK2360866)** located in **Alaska** is a **Community** public water system consisting of **[1]** active sources, intakes, or wells.

WL2 RUBY PRIMARY WELL - WLo02 (GROUNDWATER)

The Source Water Assessment for this **Well** was completed in **2011** and the results of the assessment are:

Wellhead/Surface Intake Susceptibility			Aquifer Susceptibility		
Low			Very High		
Overall Vulnerability to Potential Contaminants					
Bacteria & Viruses	Nitrates/Nitrites	Volatile Organic Chemicals	Inorganics/Heavy Metals	Synthetic Organic Chemicals	Other Organic Chemicals
Very High	Very High	Very High	Very High	Very High	Very High

SERVICE CONNECTIONS

Type	Count	Meter Type	Meter Size	Measure
RS	1	ME	0	



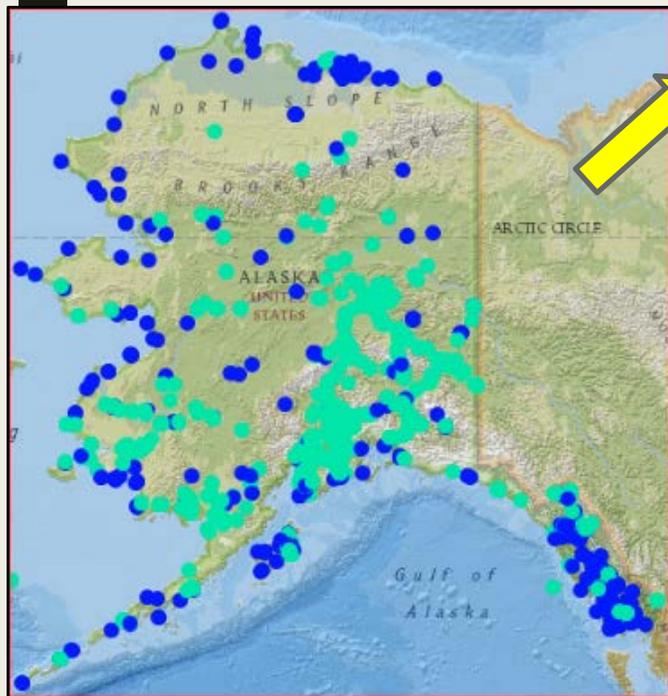
Pop-Ups: Others

- DEC Contaminated Sites – Site Reports
- DEC Impaired Waters – TMDL Reports
- DEC Solid Waste – Facility Reports
- DEC Seafood Processing Facilities – APDES Permit Documents
- DNR Water Viewer/ Water Rights – Case Files



Filtering

- Ex. DEC-Public Water Systems: Filter by Federal Classification: i.e. Community [only]
- Ex. DEC-Public Water Systems: Filter by Federal Classification AND Water Type Code: i.e. “C” AND “GW”



Filter: DEC-Public Water Systems - Water Systems Regional Scale

View Edit

+ Add another expression Add a set

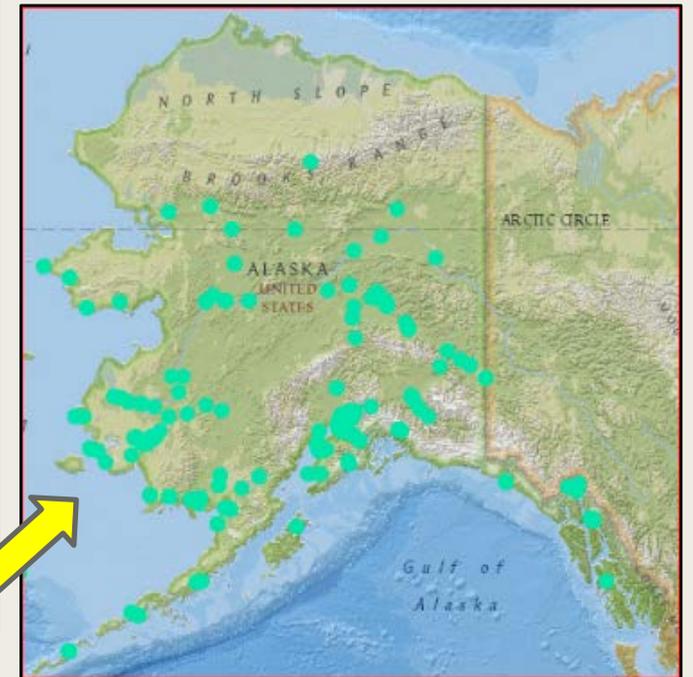
Display features in the layer that match **All** of the following expressions

Federal_Classification is C Ask for values Value Field Unique

Water_Type_Code is GW Ask for values Value Field Unique

GW
GU
GW
SW

APPLY FILTER CLOSE

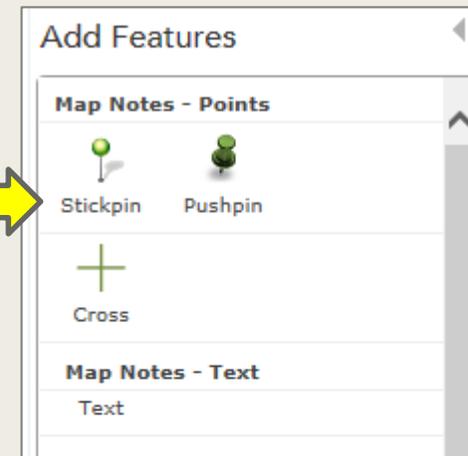
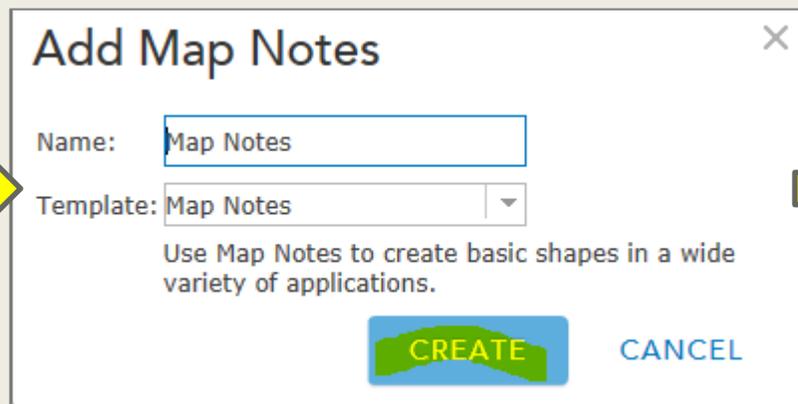
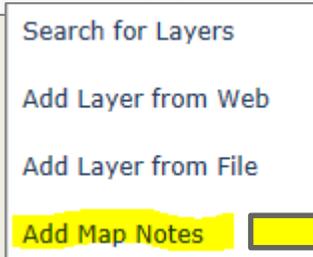
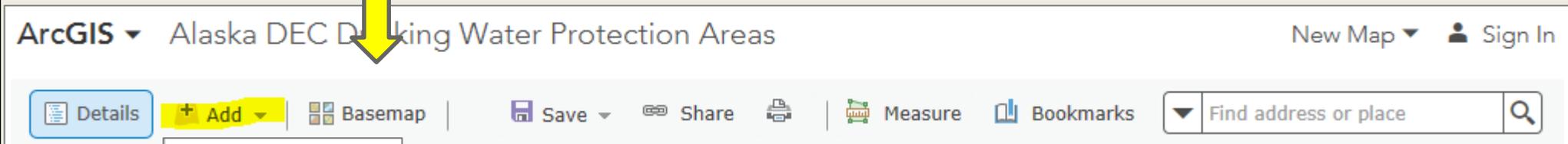
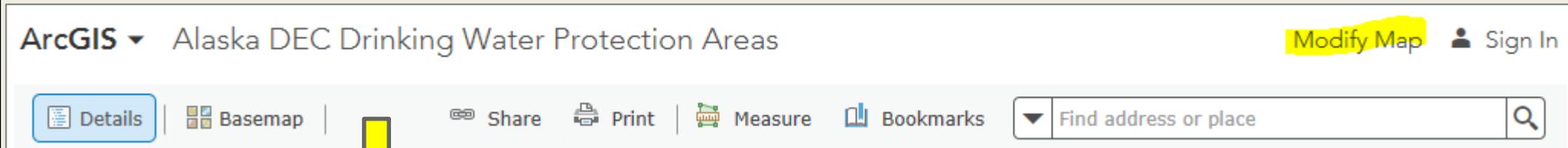




Adding Map Notes (graphics)

■ Modify Map

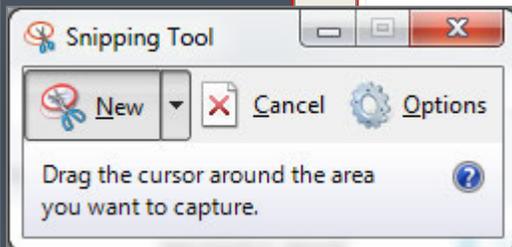
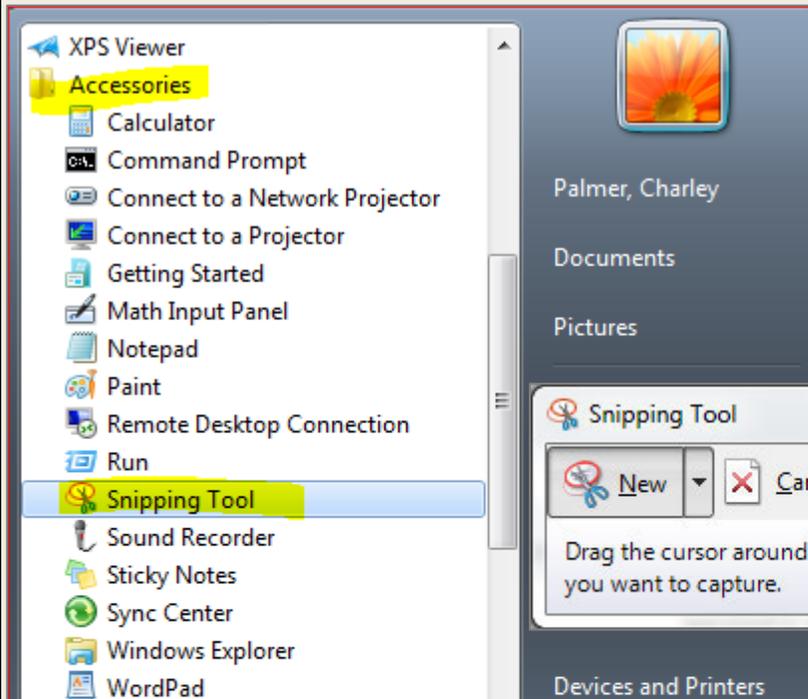
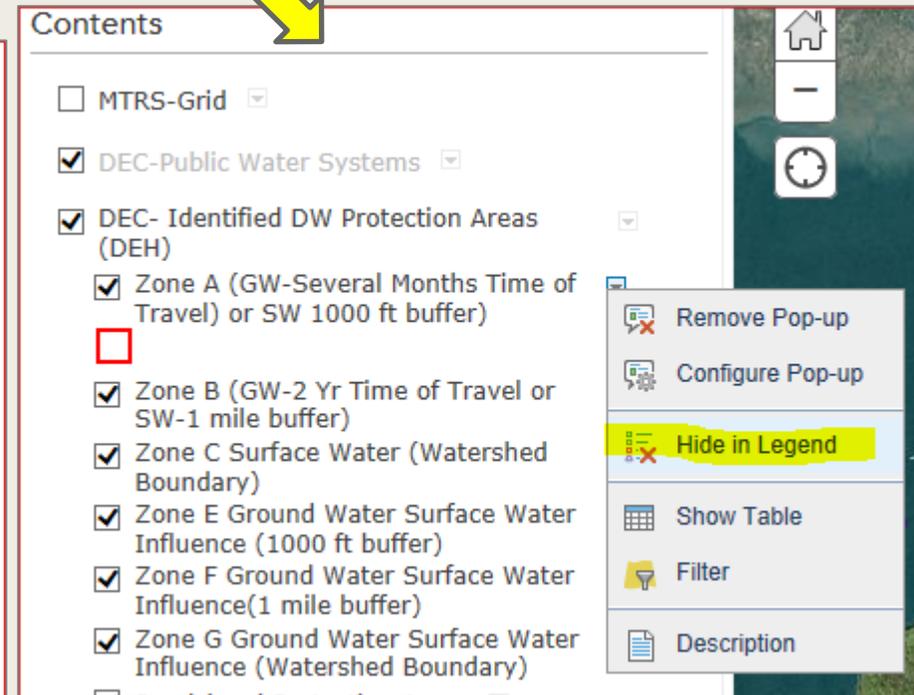
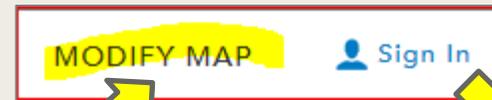
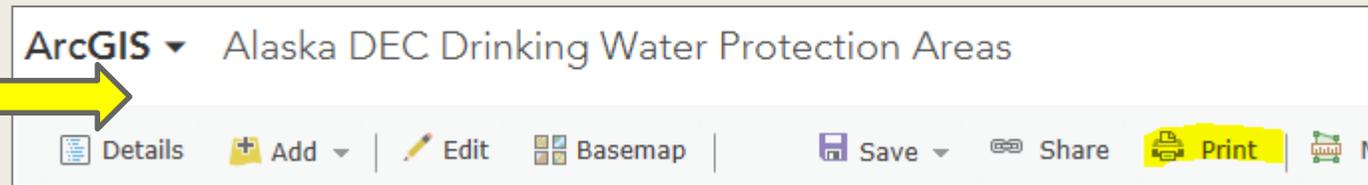
- Enables Map Notes tool for adding text, points, lines, areas, etc.
- ***IMPORTANT:*** Need an account in order to save/share changes





Printing Maps

- Default 'Print' button
 - No legend (*Not preferred method*)
- Screenshot method (*Preferred*)
 - Legends can be slightly modified





Services

- ArcGIS Services Directory
 - <http://dec.alaska.gov/arcgis/rest/services>
 - Can view data in ArcGIS, Google Earth, etc.

MAPPING RESOURCES

- ★ Web Maps
- ★ **ArcGIS Services Directory**
- ★ Links to other State mapping sites
- ★ About Our GIS



ArcGIS REST Services Directory

[Home](#) > [services](#)

[JSON](#) | [SOAP](#)

Folder: /

Current Version: 10.31

View Footprints In: [ArcGIS Online map viewer](#)

Folders:

- [Air](#)
- **[EH](#)**
- [SPAR](#)
- [Utilities](#)
- [Water](#)



ArcGIS REST Services Directory

[Home](#) > [services](#) > [EH](#)

[JSON](#) | [SOAP](#)

Folder: EH

Current Version: 10.31

View Footprints In: [ArcGIS Online map viewer](#)

Services:

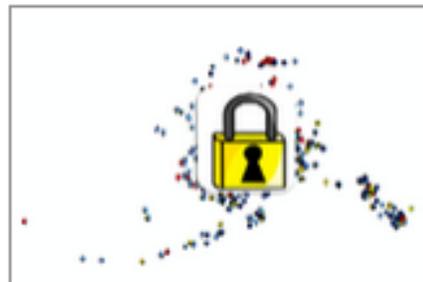
- [EH/Boil Water Notice](#) (MapServer)
- **[EH/Drinking Water Protection Areas](#)** (MapServer)
- [EH/Fish Tissue Sample Sites](#) (MapServer)
- [EH/Fishing Areas](#) (MapServer)
- [EH/Fishing Regions](#) (MapServer)
- [EH/JTMD Aerial Survey](#) (MapServer)
- [EH/JTMD Cleanup Photos](#) (MapServer)
- [EH/Salmon by Site](#) (MapServer)
- [EH/Solid Waste Sites](#) (MapServer)
- [EH/Water Systems Regional Scale](#) (MapServer)
- [EH/WEAR Site Erosion](#) (MapServer)
- [EH/WEAR Sites](#) (MapServer)



Services (cont'd.)

- [Secure] service
 - *Dynamic PWS source (i.e., wells and intakes) locations*
 - *Requires public AGOL Organizational Account*
 - *Contact DEC for access*

SDWIS Facilities (Secure)



To provide spatial representation of all regulated Drinking Water Protection We

Feature Layer by adecadm

Source: [Feature Service](#)

Last Modified: March 18, 2015

☆☆☆☆☆ (0 ratings, 14 vi

[Facebook](#) [Twitter](#)

OPEN ▾

- Add layer to map
- Add layer to new map
- Add layer to scene
- Open in ArcGIS for Desktop

Data displays source facility locations for WL, IN, IG, RC facility types.



SDWIS External Users

Group

This group exists to provide users of sensitive drinking water source data access outside of the DEC network.

created by adecdwp on March 9, 2015

[Details](#)



SDWIS Facilities (Secure)

Feature Layer

To provide spatial representation of all regulated source facilities entered in the Safe Drinking Water Information System (SDWIS) State database. This data is displayed in the Drinking Water Protection Web Map and used by Drinking Water Protection staff to complete Source Water Assessment Reports.

Feature Layer by adecadmin

Last Modified: March 18, 2015

☆☆☆☆☆ (0 ratings, 0 comments, 8 views)

[Open](#) ▾ [Details](#)

