Wisconsin DNR - SWIMS Guide

Rev. March 2023

DNR SWIMS Team

DNRSWIMS@Wisconsin.gov

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General Notes to the User

- This version of SWIMS will appear best at 90% zoom on most browsers
- At this time, SWIMS will appear and function best on laptops or larger screened devices. Mobile optimization will follow
- This version of SWIMS and items within may be modified and may change in appearance and functionality

This guide is divided into sections based on each module in SWIMS (different tabs found on the Search page, such as Fieldwork, Stations, Projects and Grants, Documents, etc.). Each section will cover what that module is or contains, how to search/find an item or record in that module, creating and editing an item or record in that module, as well as common situations or practices in that module for a given situation.

Welcome to the Surface Water Integrated Monitoring System (SWIMS)

Welcome to SWIMS

The Surface Water Integrated Monitoring System (SWIMS) is a dynamic database which supports water quality monitoring activities, including planning, preparation, execution, and reporting of water quality monitoring data. SWIMS is the state repository for all lake, river, stream, and aquatic invasive species data. It is an important tool for WDNR staff, partner organizations, and the thousands of volunteers who have done and continue to do their part to protect Wisconsin's lakes, rivers and wetlands by monitoring their health. SWIMS provides data to the Environmental Protection Agency for Clean Water Act requirements.

When you enter data into SWIMS, the information becomes an integral part of what we know about the individual waterbodies, watersheds, and aquatic invasive species (AIS) in Wisconsin. Data associated to a geographically mapped station can be observed from SWIMS or the Surface Water Data Viewer. Depending on the type of data collected and reported on lakes, your data may also be viewable from the Lakes Water Quality site. AIS data and reports, once verified, can be seen on tables and maps on the DNR's website, such as Aquatic Invasive Species by Waterbody or Lakes and AIS Mapping Tool.

General Navigation in the SWIMS interface

You can navigate to view an item if any field in that row of information is highlighted in blue, a lighter shade of grey, or underlined when you hover over the item. Example: Fieldwork Seq No to navigate to a fieldwork event:

Edit	Delete	Fieldwork Seq No	Field Status Code
		322756005	COMPLETE
		322755925	COMPLETE

Edit	Delete	Fieldwork Seq No	Field Status Code
		322756005	COMPLETE
		322755925	COMPLETE

Common Symbols and Icons

Below is a list of common symbols or icons you may see in the SWIMS interface:

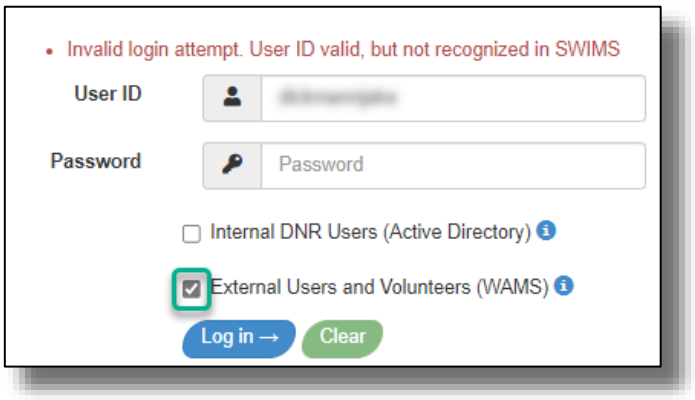
- Edit an item:
- Delete an item:
- Add a new item:
- Download to Excel:
- Download a SWIMS Document:
- Open URL for a SWIMS Document:

Common Error and Message Pages

Below is a list of common error messages or pages you may see when accessing SWIMS, entering data, navigating within or viewing information in SWIMS, or downloading from SWIMS:

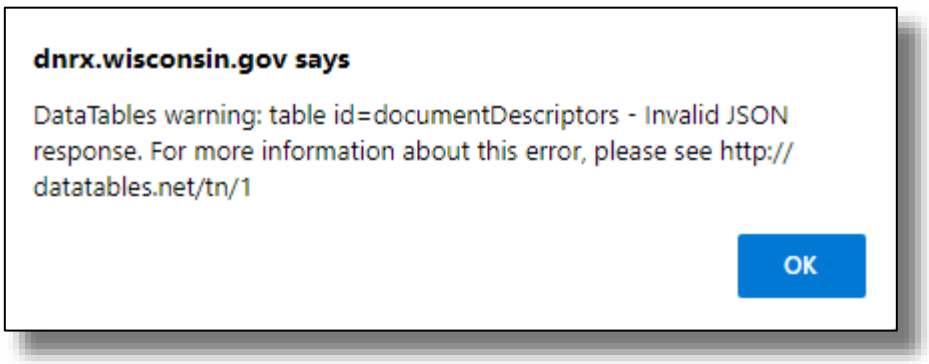
Error message: “Invalid login attempt. User ID valid, but not yet recognized in SWIMS”:

This error will appear if your WAMS username has not yet been added to the SWIMS database. It’s important to keep in mind that WAMS usernames are not automatically associated to the SWIMS database, so please make sure to follow all steps outlined on How to get a WAMS username and password.



Error message: “DataTable”:

This message commonly appears when there is an issue with the data being displayed on the SWIMS interface. If you encounter this message, please email DNRSWIMS@Wisconsin.gov and provide the URL for that specific page.



Error message: “SWIMS Application Error”:

The below message commonly appears when a user tries to perform an action in SWIMS that may result in an error. This may include:

- Uploading too large of a document or photo
- Trying to download too large of a dataset

If this does occur, you might want to try adjusting your search and download criteria (limiting by a date range), splitting and uploading files separately, or compressing a file. If the issue(s) persist(s), email the

DNRSWIMS@Wisconsin.gov with the exact steps taken that resulted in the error.

Where to get help with the SWIMS interface

For general help with the SWIMS Database, send an email to the DNR SWIMS mailbox: DNRSWIMS@wisconsin.gov. If you need assistance with SWIMS regarding a specific program, you can also contact any of the following:

- Purple Loosestrife Biocontrol and AIS Outreach Activities: AISinfo@wisconsin.gov
- Citizen Lake Monitoring Network (CLMN) Statewide Coordinator Paul Skawinski: Paul.Skawinski@uwsp.edu
- Clean Boats, Clean Waters (CBCW) Statewide Coordinator Erin McFarlane: Erin.McFarlane@uwsp.edu
- Water Action Volunteers (WAV): wav@extension.wisc.edu

Getting started with SWIMS

Access to SWIMS is role-based. Everyone who has access can find and browse data. The ability to enter data, edit, and delete are dependent on the assigned user roles and are granted based on the users' needs. People who provide data to SWIMS need to have a **SWIMS profile** (account) so the data you collect can be recorded, whether you do the data entry yourself or it is entered for you. When you have a SWIMS profile, it will include any projects that you participate in. You can be involved in one project or many, but you'll only need one SWIMS profile.

1) New volunteers for the various citizen-based programs (CBCW, CLMN, WAV, etc.) will be provided registration directions from the statewide program coordinators or a partner who is managing the activities for the county.
2) New County Aquatic Invasive Species (AIS) Coordinators (including designated agents for the Lakes Monitoring and Protection Network) and their staff will be provided directions by their WDNR Regional AIS Coordinator for assistance with setting up their profiles and projects.

WAMS ID: All non-DNR SWIMS users who will be entering data or want access to view data directly in the SWIMS database must have a WAMS ID to log in. The WAMS ID comes from the Wisconsin Department of Administration (DOA) and can be used for multiple state purposes.

WDNR cannot assign or troubleshoot ID creation or management issues.

The WAMS ID and password will be your username and password for access to the database. Go to https://on.wisconsin.gov/, the Wisconsin Web Management System (WAMS), to register for a WAMS ID or click here for more detailed directions.

Send your WAMS ID to the person helping you set up your profile. They will not need your password. Additional information they will need is:

- Your full name
- Phone number (Home or Mobile)
- Optional: Address (Home and / or Seasonal)
- The kind of monitoring you are doing / the projects you work on
    - i.e.: CLMN, CBCW, WAV, Grant funded work (and the grant number), etc.
- Where you are monitoring, such as:
    - SWIMS station ID for a specific road/stream crossing
    - Name of waterbody and county location (i.e.: Big Lake, Shawano County)

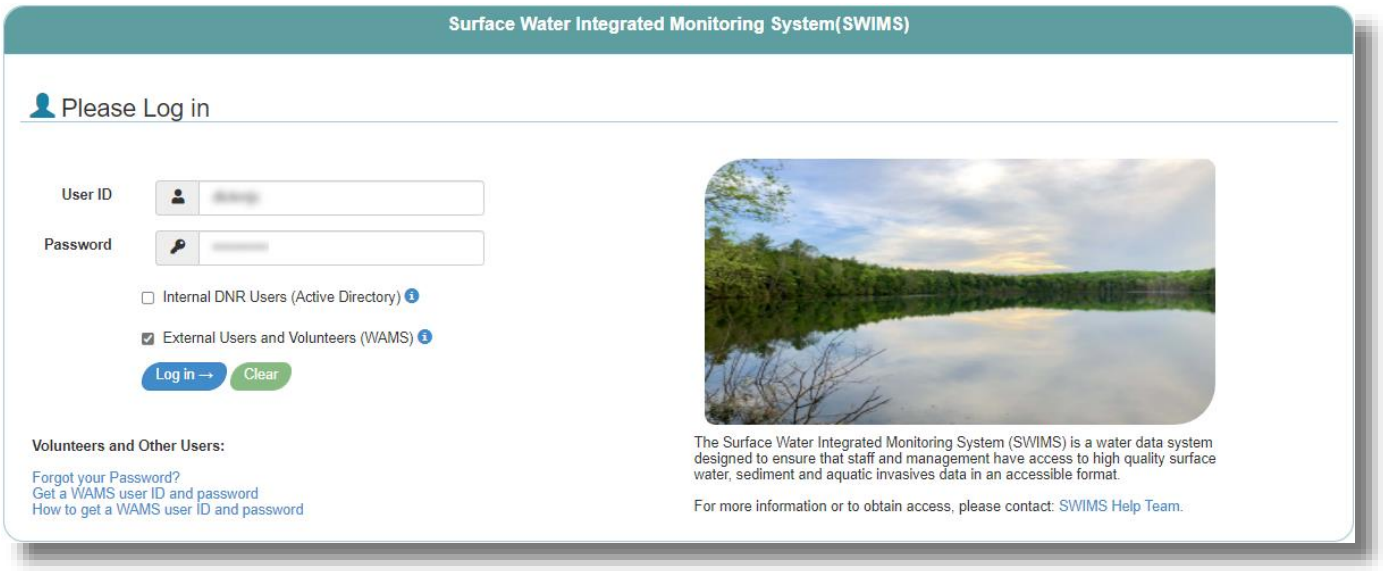
Logging into SWIMS

Once your profile is created and the WAMS ID is associated to your SWIMS profile, you can log into SWIMS and get started! Here's what you'll do and see:

SWIMS link: https://apps.dnr.wi.gov/swims/

DNR Staff: Use your Active Directory username and password to access SWIMS. This is what you use to log onto your DNR computer. Make sure "*Internal DNR Users (Active Directory)*" is selected before clicking Log In.

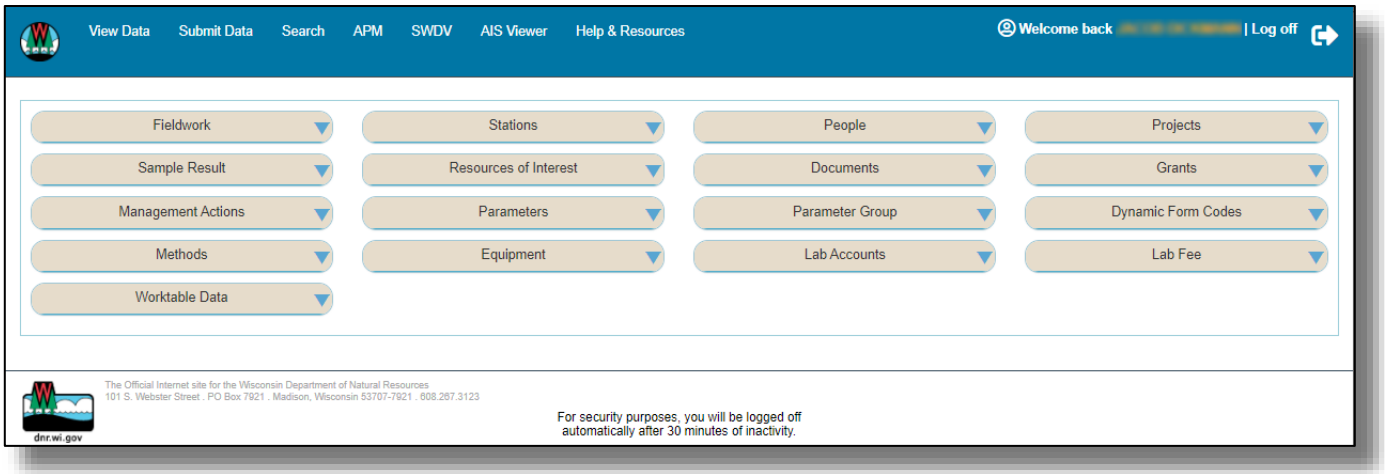
External Users and Volunteers: Use your WAMS username and password to access SWIMS. Make sure "*External Users and Volunteers (WAMS)*" is selected before clicking Log In.



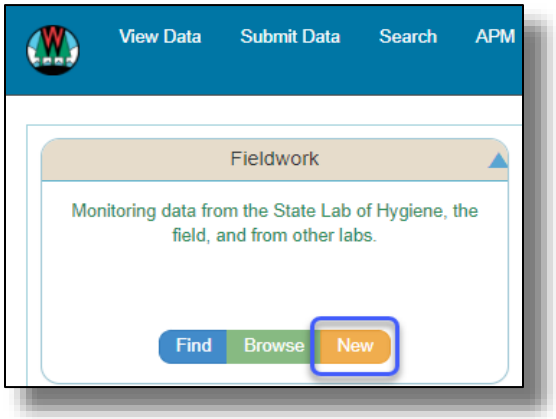
The Search Page

The modules you see on the Search Page will vary depending on the roles assigned in your profile. Your view and ability to use each module may vary depending on your assigned roles.

What you see when you click on a module tab to open it can also vary.



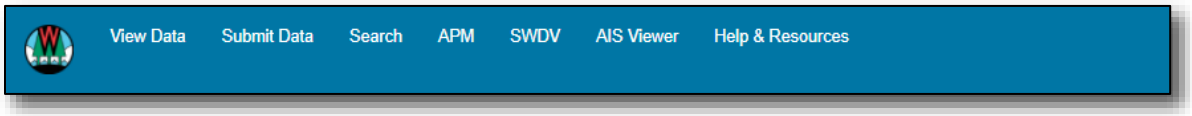
Let's look at the Fieldwork module as an example. The open tab will give you the options to look up and browse through the fieldwork in the system. This will allow any user to look up any fieldwork event by any data collector, on any waterbody, or for a given parameter.



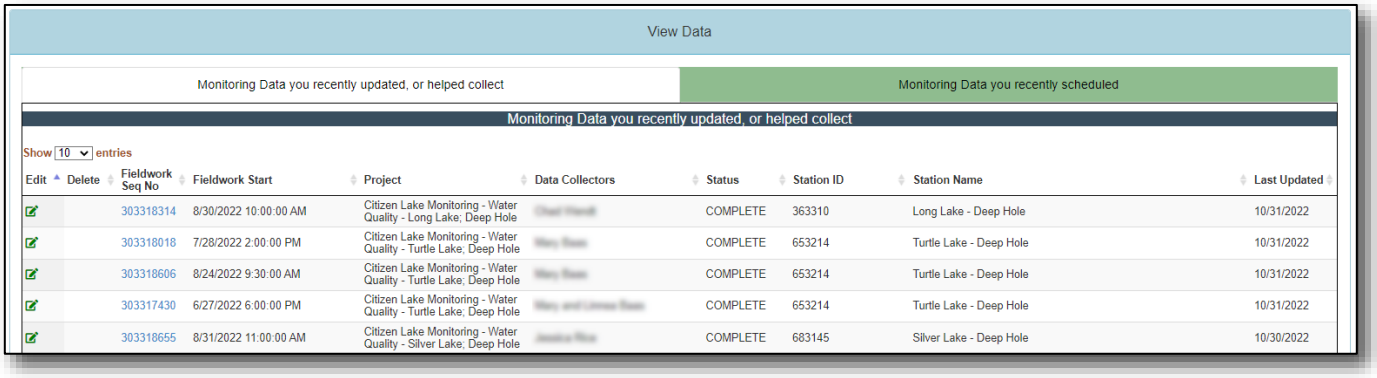
'New' will allow a user to add data into the system. However, this will not be available to all users or the general user just looking to find and browse data and is not tied to a monitoring initiative. Users tied to a monitoring initiative can always find all their prior fieldwork data by clicking on 'View Data' in the blue toolbar with the DNR logo as shown in the next section.

The Toolbar

WDNR Logo: Click on it to return to the Search page / Table view

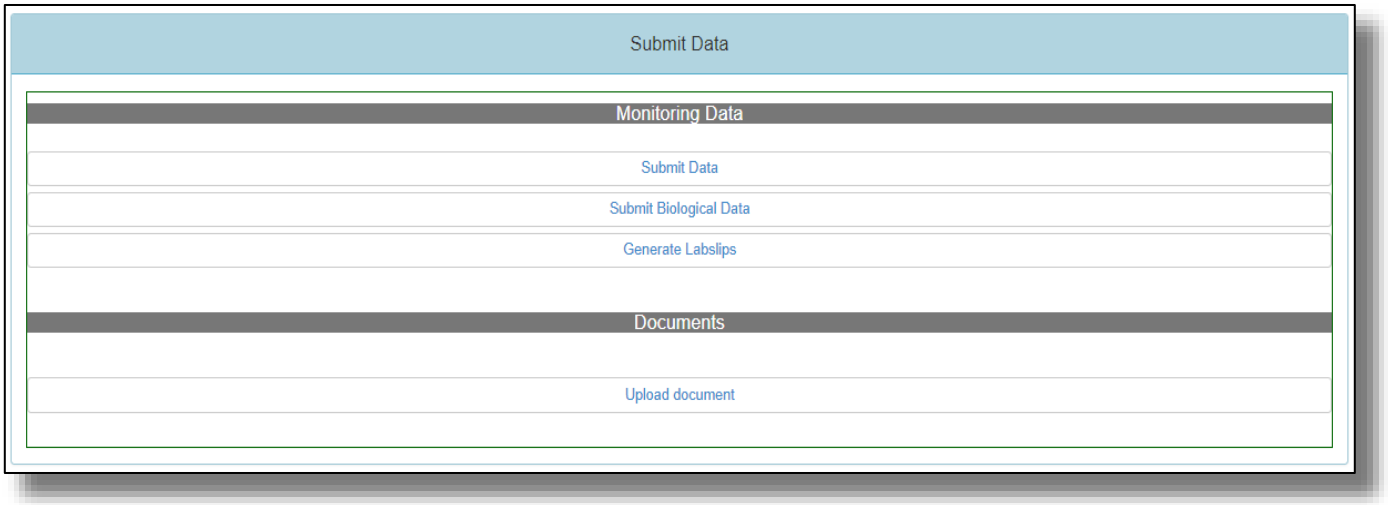


View Data: An area for viewing data you have recently entered, have been associated with, or scheduled



Edit	Delete	Fieldwork Seq No	Fieldwork Start	Project	Data Collectors	Status	Station ID	Station Name	Last Updated
		303318314	8/30/2022 10:00:00 AM	Citizen Lake Monitoring - Water Quality - Long Lake; Deep Hole	[redacted]	COMPLETE	363310	Long Lake - Deep Hole	10/31/2022
		303318018	7/28/2022 2:00:00 PM	Citizen Lake Monitoring - Water Quality - Turtle Lake; Deep Hole	[redacted]	COMPLETE	653214	Turtle Lake - Deep Hole	10/31/2022
		303318606	8/24/2022 9:30:00 AM	Citizen Lake Monitoring - Water Quality - Turtle Lake; Deep Hole	[redacted]	COMPLETE	653214	Turtle Lake - Deep Hole	10/31/2022
		303317430	6/27/2022 6:00:00 PM	Citizen Lake Monitoring - Water Quality - Turtle Lake; Deep Hole	[redacted]	COMPLETE	653214	Turtle Lake - Deep Hole	10/31/2022
		303318655	8/31/2022 11:00:00 AM	Citizen Lake Monitoring - Water Quality - Silver Lake; Deep Hole	[redacted]	COMPLETE	683145	Silver Lake - Deep Hole	10/30/2022

Submit Data: An area to enter data, generate labslips, upload bulk field data, or upload a document



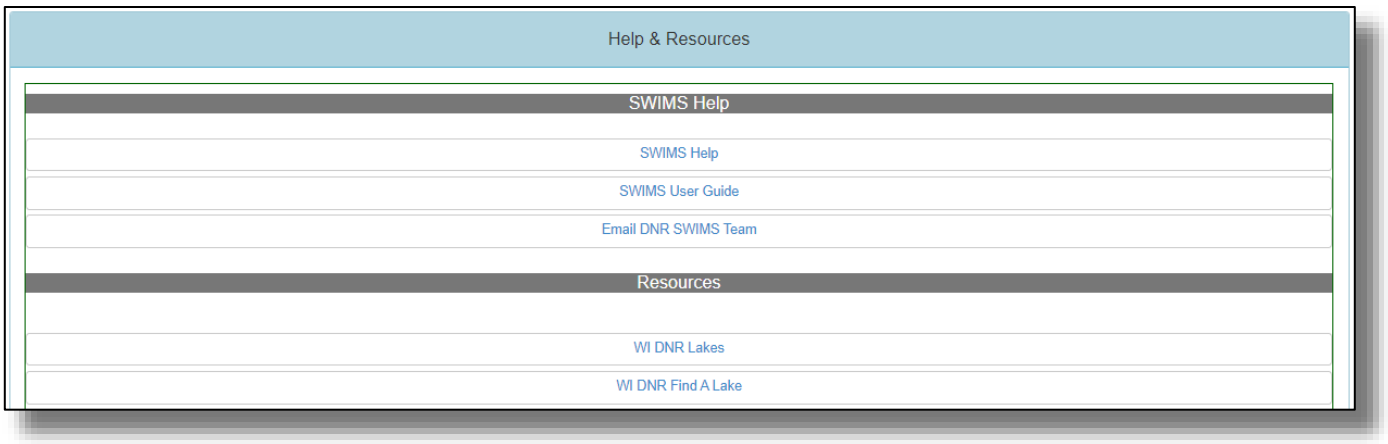
Search: Like the WDNR logo, clicking this will return to the Search page / Table view

APM: An area for management of Aquatic Plant Management permits and treatment records

SWDV: Links you to the Surface Water Data Viewer

AIS Viewer: Links you to the Lakes and AIS Mapping Tool

Help & Resources: An area for resources on SWIMS and SWIMS help as well as links to a variety of DNR and External Partner and Volunteer program resources. The most current version of the guide will always be located here.



Fieldwork and Fieldwork Events

What is a Fieldwork Event?

A Fieldwork Event is any time you go out to collect information/data for your projects or do a reportable activity for AIS Outreach and Prevention. It could be a secchi disc reading on a lake, a discovery of new AIS during river monitoring, checking or putting up boat launch signs, conduct a volunteer training, outreach to bait shops, etc.

Electronic versions of our fieldwork data forms are linked to the projects so that you can add your data to the SWIMS database.

Water chemistry samples sent to the State Lab of Hygiene are entered into SWIMS by the lab staff.

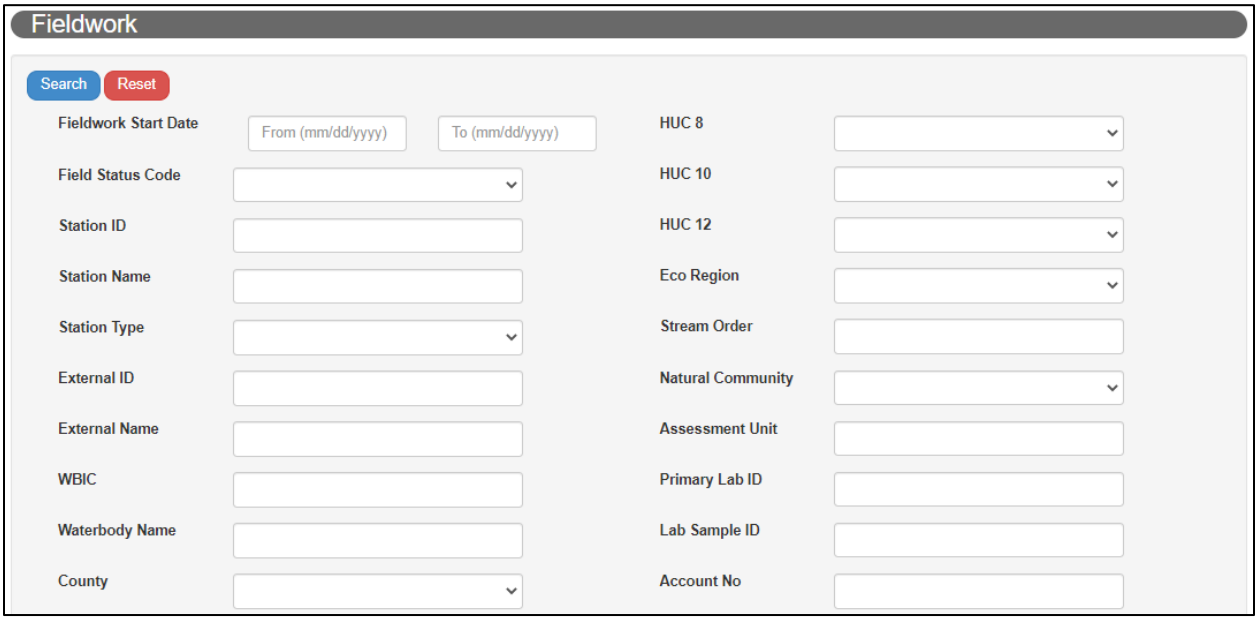
Contained within a Fieldwork Event are Sample Groups and Sample Results. You can find more information on Sample Groups and Sample Results below.

Finding a Fieldwork Event

You may want to search for and find a fieldwork event or a set of fieldwork events for a number of reasons, either to verify data, determine if Total Phosphorus has ever been collected a particular site or waterbody, or for some general information about a system.

To search and find a fieldwork event:

- Click the “Fieldwork” module and click “Find”
- Search by the field(s) most useful to you to get the fieldwork events you’re looking for. Limiting the number of search items to 1-3 items increases the likelihood of finding what you want:
    - County name and waterbody name
    - When using a lake name, leave off the word ‘Lake’
    - Using just the WBIC will give you all fieldwork events associated to that waterbody



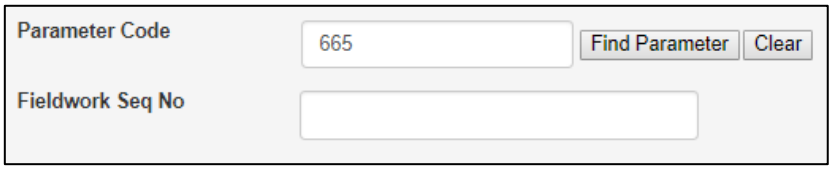
Some options for Fieldwork Event searches:

- Searching for data collected from 2012 to present:
  - Select or type '01/01/2012' in the 'From' fieldwork start date box and leave the 'To' blank. This will search for all fieldwork events and data collected from 01/01/2012 to present

- Searching for data collected since before 1980:
  - Select or type '12/31/1979' in the 'To' fieldwork start date box and leave the 'From' blank. This will search for all fieldwork events and data collected up to 12/31/1979

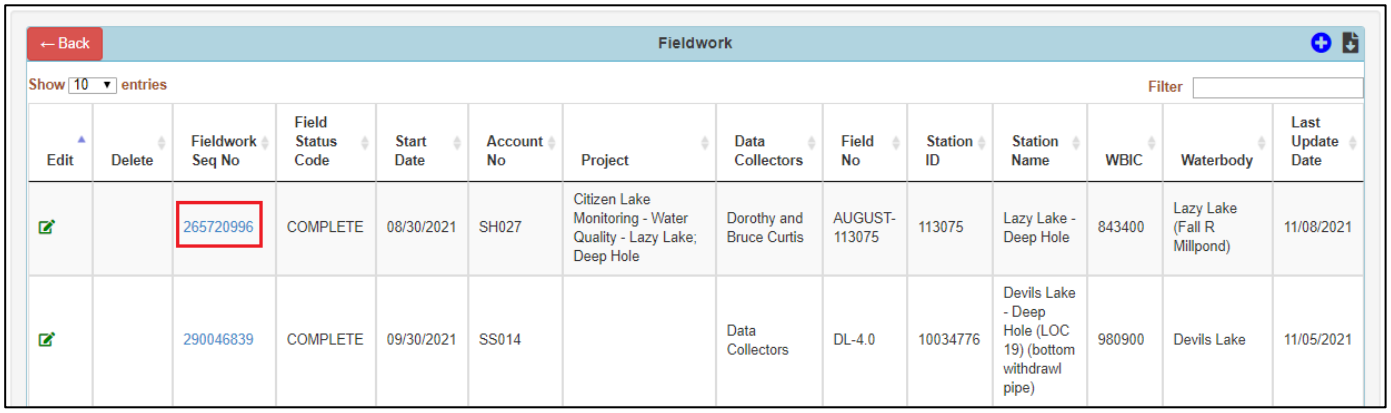
- Searching for data within a specific date range:
  - To search for data within a specific date range, use a start date and end date, such as 06/15/2022 to 06/21/2021

- You can search for fieldwork by specific parameters. Parameters are items in the results section of the fieldwork, such as chloride in a water chemistry results list or 'Boat was leaving landing' for CBCW. In the "Parameter Code" field, you can either type in a known parameter code or click on the **Find Parameter** button to search for parameter codes



- Once the search is processed, select the *Fieldwork Seq No* to navigate to the fieldwork event
- Anyone working from a spreadsheet that already contains the Fieldwork Seq No can simply copy that number and paste it into the query page to find the fieldwork event

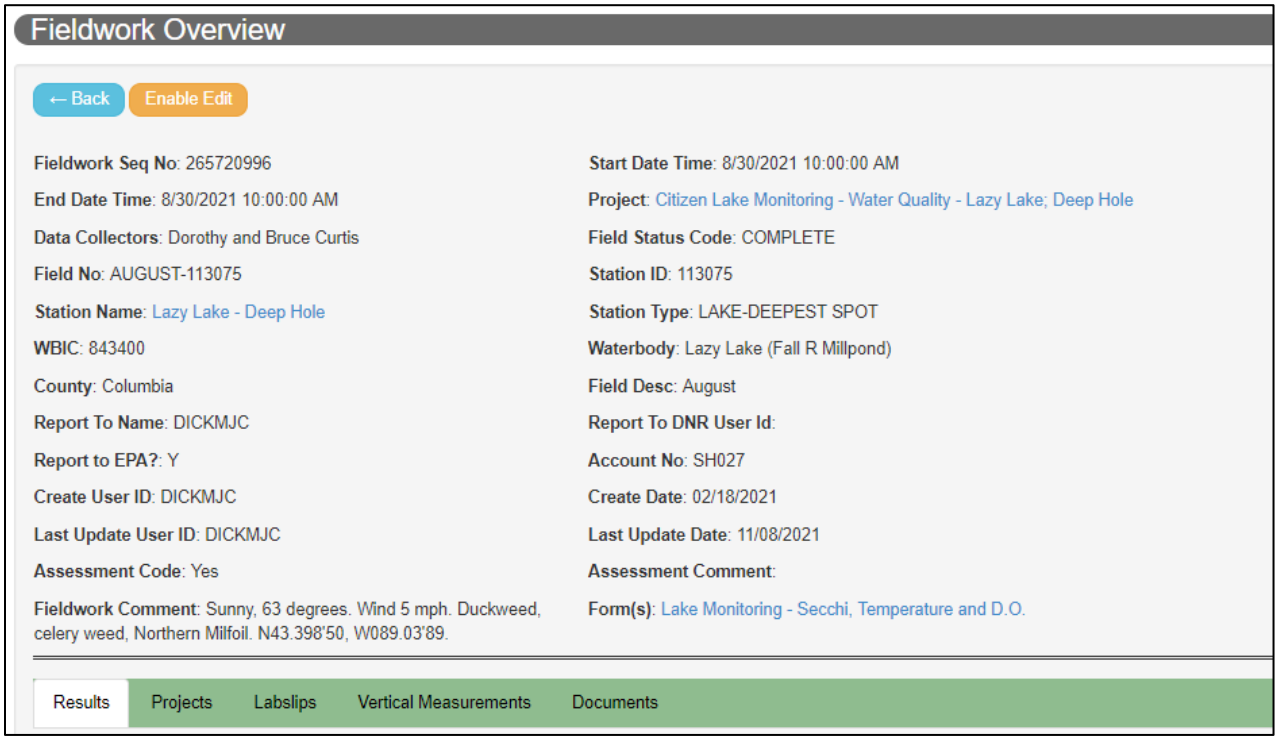
Results for a typical query:



Edit	Delete	Fieldwork Seq No	Field Status Code	Start Date	Account No	Project	Data Collectors	Field No	Station ID	Station Name	WBIC	Waterbody	Last Update Date
		265720996	COMPLETE	08/30/2021	SH027	Citizen Lake Monitoring - Water Quality - Lazy Lake; Deep Hole	Dorothy and Bruce Curtis	AUGUST-113075	113075	Lazy Lake - Deep Hole	843400	Lazy Lake (Fall R Millpond)	11/08/2021
		290046839	COMPLETE	09/30/2021	SS014		Data Collectors	DL-4.0	10034776	Devils Lake - Deep Hole (LOC 19) (bottom withdrawl pipe)	980900	Devils Lake	11/05/2021

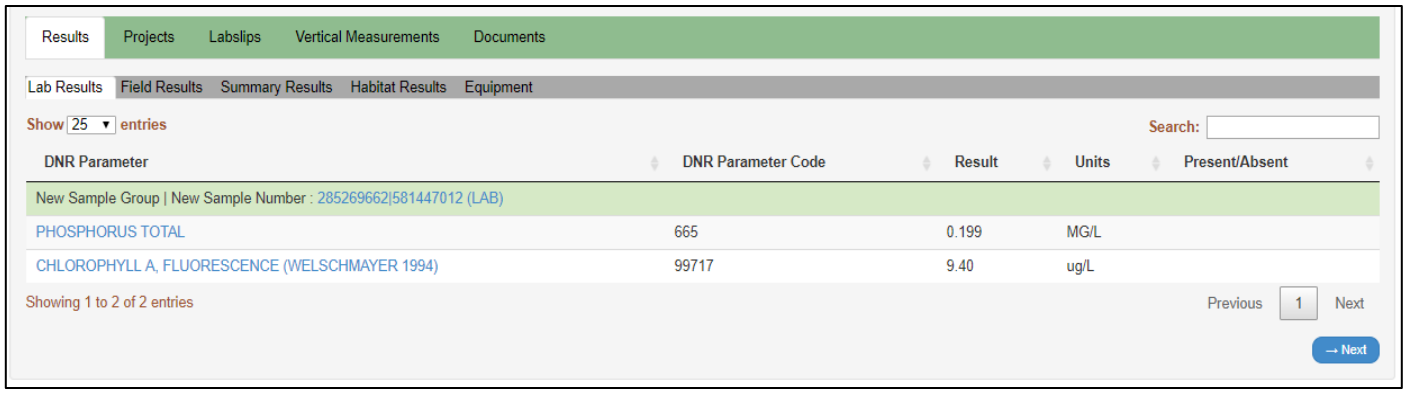
Viewing a Fieldwork Event

You will find the general fieldwork event information above the green bar, such as collection Start/End Date and Time, Data Collectors, Station ID and Name, Fieldwork Comments, etc.

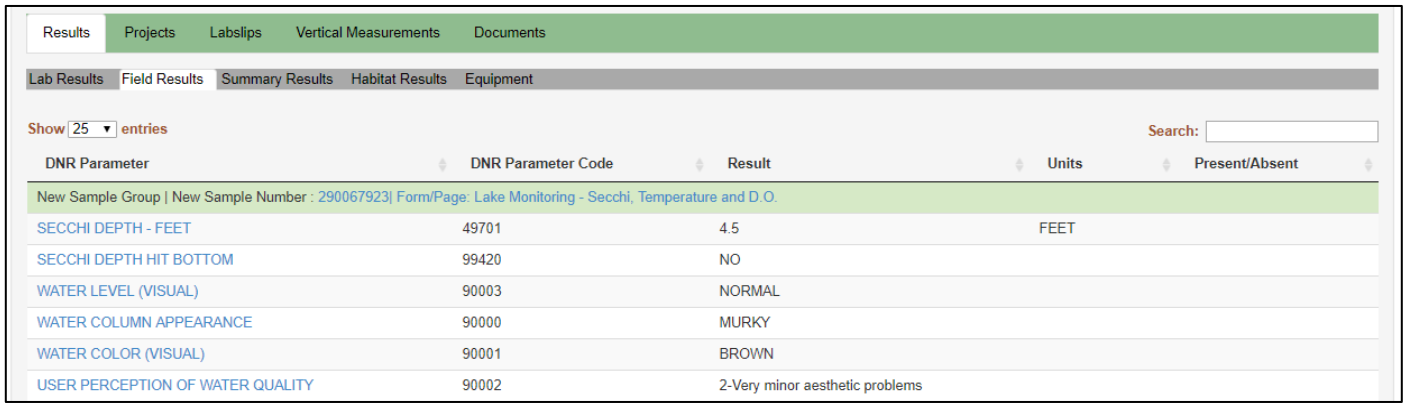


Within the green bar, you will find options for:

Results: Lab, Field, Summary (calculated metrics), and Habitat results as well as any equipment used to collect the data (if reported)



- To navigate to Field Results, you must click on the Field Results tab in the grey bar. You will do the same to view the other results or information in the grey bar



Projects: Additional projects that this fieldwork event is associated to

Labslips: If a labslip was generated in SWIMS for this fieldwork event, you will find that blank labslip here

Vertical Measurements: Depth at which the sample was/were collected (i.e. 0-6 FT / 0-2 M for integrated samples, 3 FT for Van Dorn, etc.). This area pertains mostly to lake collected samples, but river and sediment samples may have this area populated

Documents: Here you will find any documents (i.e. photos of AIS found) associated to this Fieldwork Event (this is a new feature)

Adding a New Fieldwork Event

Data is usually collected on a paper form. In SWIMS, that paper form is replicated electronically for data entry into the system. Entering data will create new **Fieldwork Events** in SWIMS.

Data Entry Basics

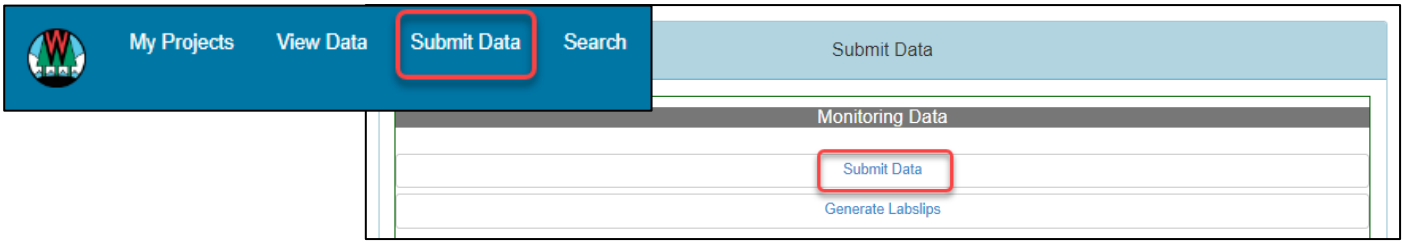
Common buttons found in the data entry process:

← Back	Takes you to the prior page
Save	Saves the entered data and keeps you on the same page
Next	Saves the entered information and takes you to the next page
Save and Return	Saves the entered information and takes you to the View Data page
Save and Enter Temp. D.O. Plus Profile	Saves the entered information and takes you to the next data entry form (if available)
Save and Edit Header	Saves the entered information and takes you to the page to update Fieldwork level information (Data Collectors Station, Date, etc.)

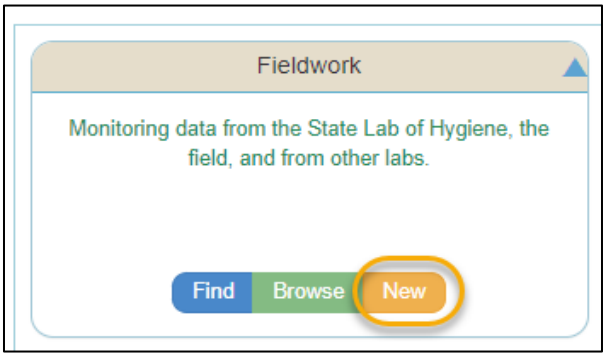
Submitting a New Fieldwork Event

Data is usually collected on a paper form. To enter a fieldwork event to SWIMS, you can (These directions will work whether you are adding data for yourself or someone else.):

- Click on Submit Data in the Toolbar, then on Submit Data under the Monitoring Data portion



- Click the Fieldwork module and select New



The Create Monitoring Data page

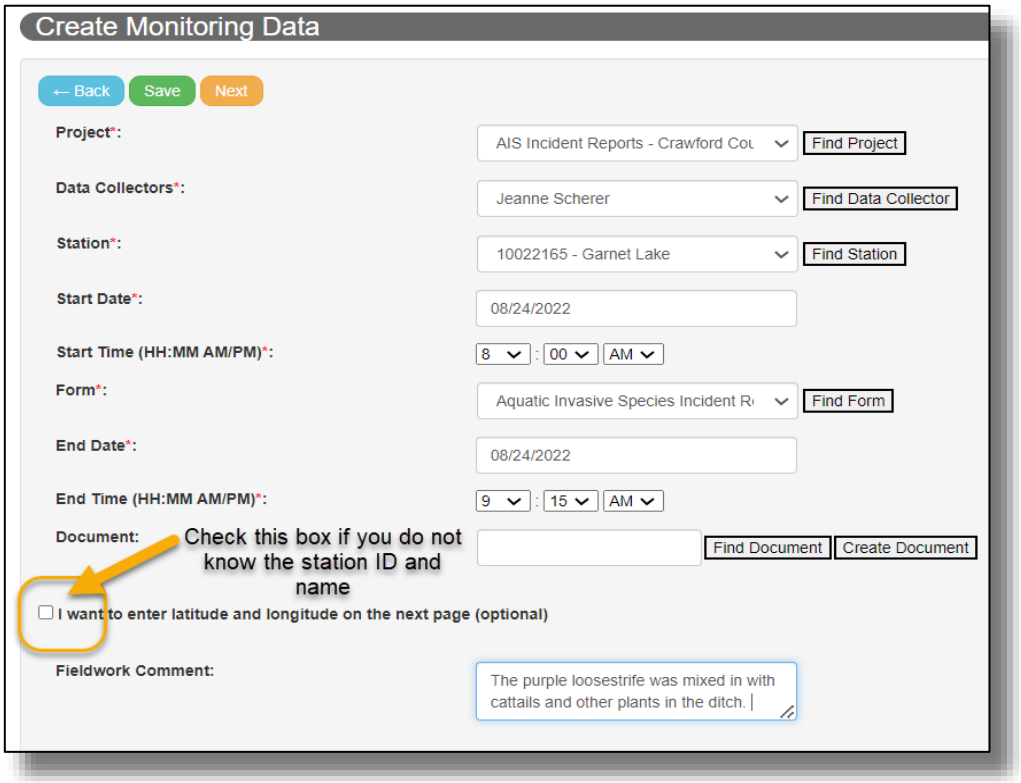
Project: All of your projects should be listed in the dropdown. Volunteers should contact their coordinator to add additional projects

Data Collectors Data Collectors are always the person who collected the data, even if someone else is entering it for them.

Station: The station is where you do the activity. There will be a Station ID # and Name

Form: Usually, there is only one or two per project and project coordinators can explain which to use

Date and Times: Make sure that dates and times are correct. They may autofill with incorrect information. See Tips section about possible data lumping errors.



Document: You can add photos and other supporting documents directly to a fieldwork event. It can be done before you move on to enter your data on the second page or after you have finished data entry. Directions are in the Adding a Document section of the guide. TIP: HAVE THE DOCUMENT (photo, word doc, etc.) ALREADY SAVED TO YOUR COMPUTER SO THAT IT IS READY TO ADD.

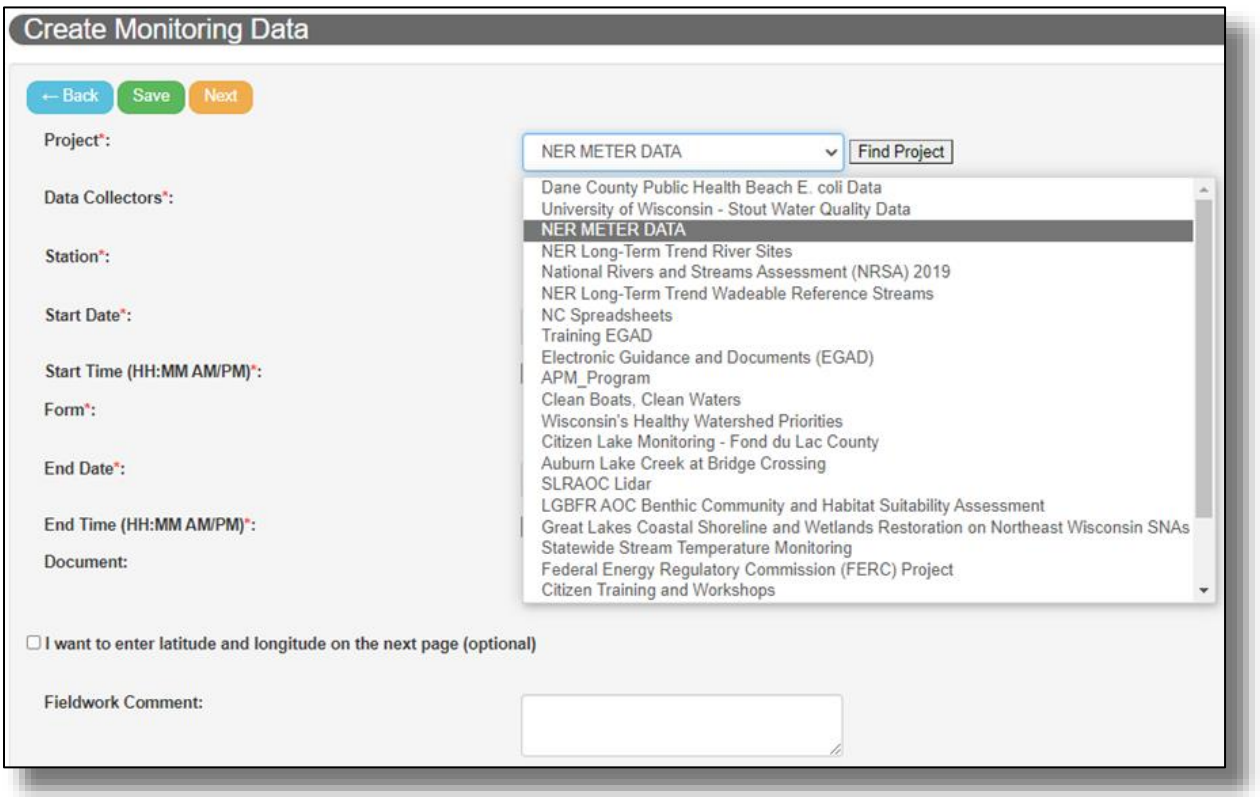
Latitude and Longitude Check box: *Optional*: If your project uses a station titled 'Location Specified On Next Page' (i.e.: wetland, AIS monitoring, Project RED, etc.), you can check this box to enter the specific coordinates

Fieldwork Comments: List anything that stood out. Often ~~times~~, people list weather, unusual circumstances or discoveries they had during their fieldwork. Additional people who assisted but are not necessarily part of regular data collection can also be noted here. You will add more details of the monitoring on the following data entry pages.

You can easily change any pre-filled (default) information by using the dropdown lists:

- Choose the correct Project name
- Choose the correct Data Collector; If they are not yet in SWIMS, DNR and LMPN AIS Coordinators can create a basic profile for them (no need for WAMS ID), so that they can be added to the event.
    - Individuals associated with the project should all be listed in the dropdown. If you do not find the person or groups, follow the directions in the Date Entry Tips at the end of this section to find or create a collector group.
    - Choose the correct Station (if more than one is available)

Example of an opened dropdown list:



NEW: Adding a Document to a Fieldwork Event - Overview

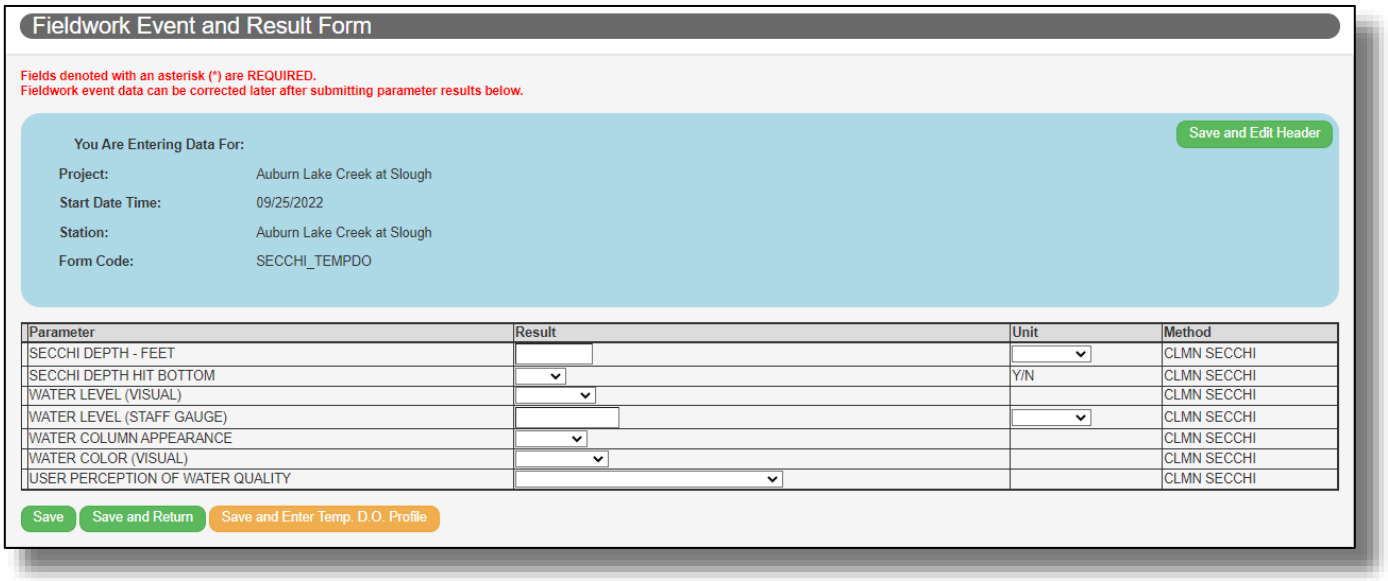
You can add photos and other supporting documents directly to a fieldwork event. It can be done before you move on to enter your data on the second page or after you have finished data entry. Directions are in the Adding a Document section of the guide.

Adding the Data

Once everything on the first page has been completed, you can either click Save or Next. Save will save your data and will keep you on the same page. Next will save the initial information and move you to the next data entry page. The Back button will take you back to the original page but will not save any data on the new page.

There are many project types in SWIMS and each has a form or forms specific to the program they are associated with, but there are some general characteristics you may find. Example: Lake Water Quality data entry form:

For any data entry form, fill out the information you have available. It is ok to skip the boxes when you don't have the information. You can note why if necessary in the comment box usually found at the bottom of the page. If the box has a Unit, such as cm or foot, check that the correct unit is being used. There are frequently dropdown lists to choose from and usually one or more comment boxes for adding additional information.



Save - saves the data you have entered and keeps you on the same data entry page

Save and Return - once you are finished adding your data, the page will close and you will be taken to a page that shows all of the data reports you have entered for yourself or someone else.

Save and… - This button may have different wording depending on the form, however, it simply means there's another page you may need to go to. If you click on 'Next' and find you don't have additional information to add, it will also have a Save and Return button so that you can finish your report.

Viewing and Editing Your Data:

Once you click 'Save and Return', you will be directed to the View Data page where you can see all the fieldwork you have entered or are associated with (i.e.: some other user entered data and associated you and/or others as the data collector(s)). The most recent will be at the top. You can click on a heading to reorganize the list of fieldwork events.

Editing a Fieldwork Event

Once data are entered to SWIMS, it can always be updated to correct errors or make additions. You can edit fieldwork events in one of two ways in SWIMS:

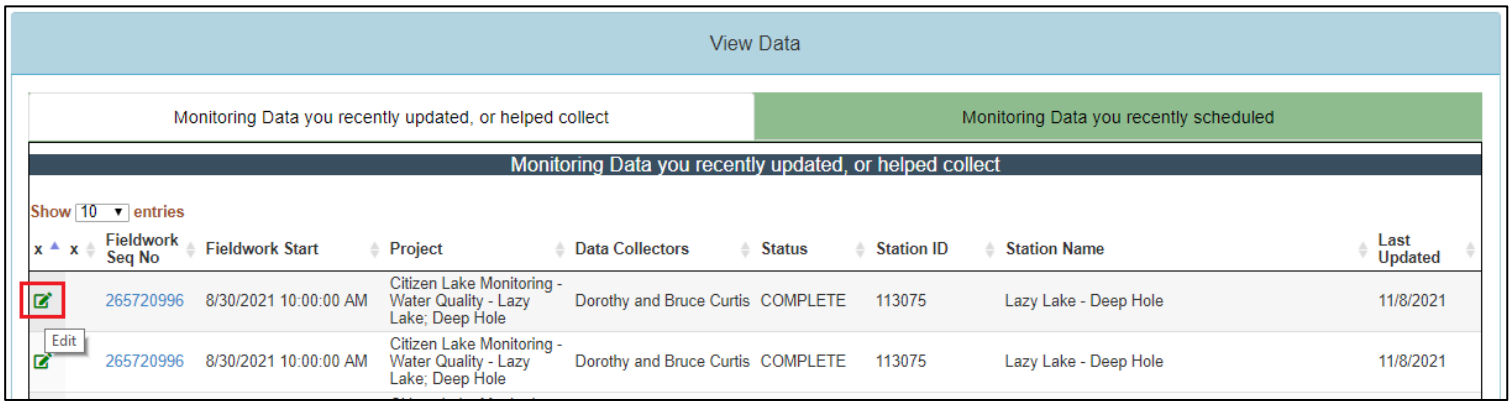
- From the "View Data" page
- While in the fieldwork event itself

If a fieldwork event was entered through the SWIMS interface, we recommend editing that fieldwork event and any data by using the "View Data" page and data entry process outlined above.

Edit Data from the View Data page

While on the "View Data" page, click the green edit icon to navigate through the data entry process for this fieldwork event

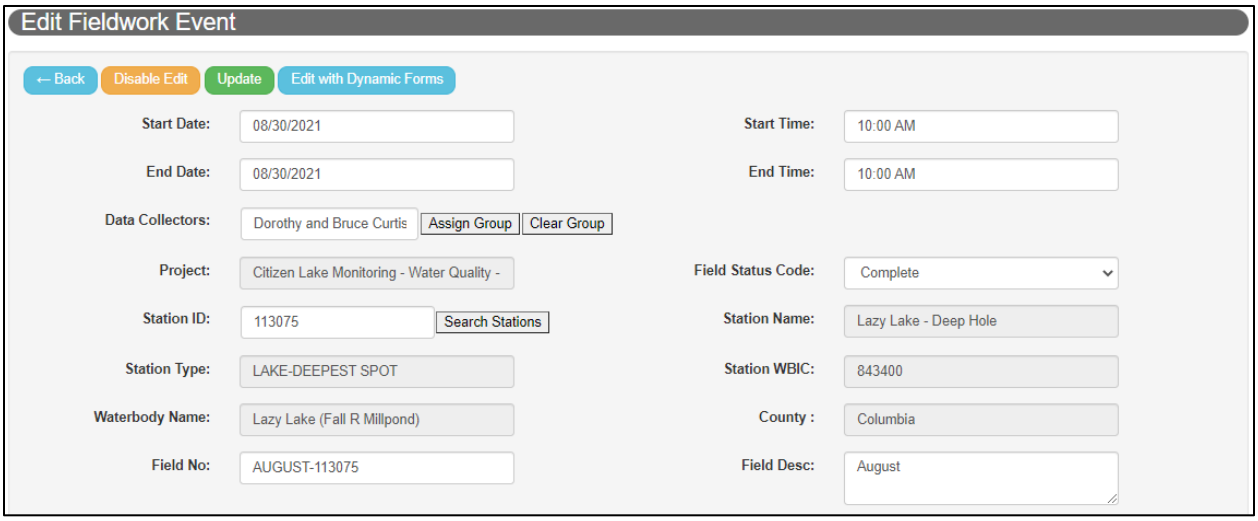
Note: This is only for data you have entered or are associated with; there is no search function



Edit Data from the Fieldwork Event page:

Editing a fieldwork event in this new version of SWIMS is very similar to the old version. To edit:

- Click Enable Edit
- From here, you can update or edit things such as:
  - Data collection Start / End Date and Time
  - Data Collectors
  - Station ID
  - Fieldwork Comments



To save your edits, click Update. If you make edits but don't click Update before viewing, updating, or removing additional information found below the green bar, then your updates will be lost.

You can also click the 'Edit With Dynamic Forms' button, found next to Update button, to navigate to the data entry process as it is seen during initial data entry to edit this fieldwork event.

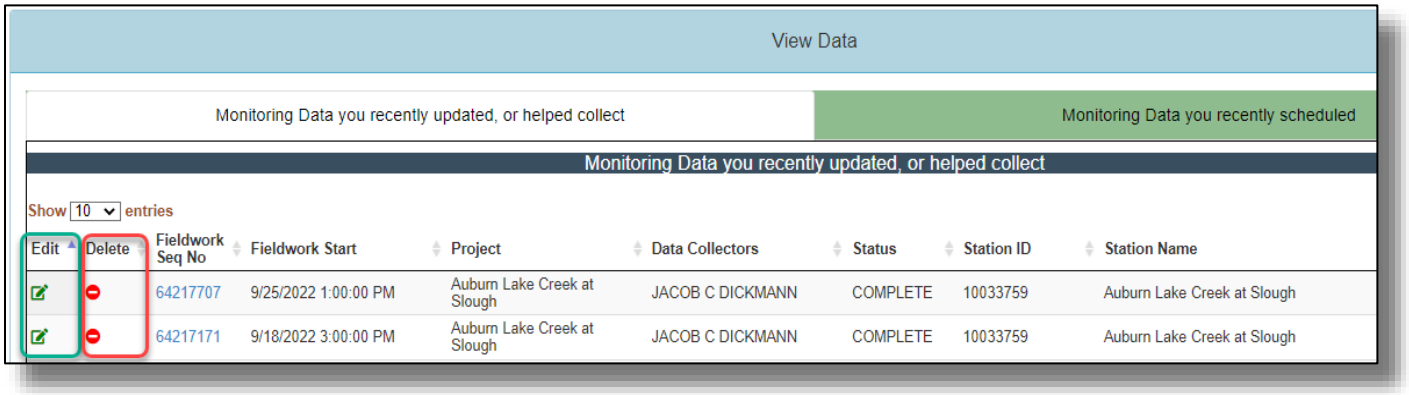
Editing Data:

If you want to return to the data entry pages to check on something or correct a mistake, you can click on the icon in the Edit column circled below. This will allow you to make edits as needed and save the fieldwork event again.

Deleting Data:

If you made major errors and want to start over, you can click the icon in the Delete column. This icon will only appear for Field related data. Lab data cannot be deleted from the SWIMS interface.

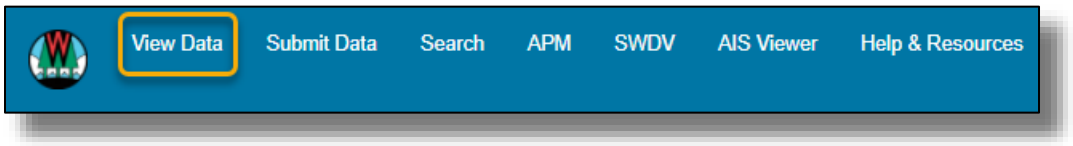
Be very careful to make sure you are selecting the correct fieldwork event to delete.



When in doubt, check with your coordinator or DNRSWIMS@wisconsin.gov.

Viewing Your Data at Any time:

You can look back at data you entered anytime by clicking on 'View Data' in the blue toolbar. It will take you to the same view you will see when you click Save and Return. You can reorganize the order as desired by clicking on the heading. For example, to look at your oldest data first, click on Fieldwork Start.



Need More Help? Reach out to your local program coordinator if you have any questions or encounter minor data record issues regarding data entry or individual results. If they cannot help answer your questions or resolve the issues, contact DNRSWIMS@Wisconsin.gov.

Data Entry: Information for DNR Staff, Coordinators, and Advanced Users

As a DNR staff member, Project or Program Coordinator, or an advanced External Partner, you will still enter data following the steps above following the Data Entry Basics. However, below we will outline how you can enter or manage data for a different project or another user.

Finding Unlisted Projects, Data Collectors, and Stations

Find a Project:

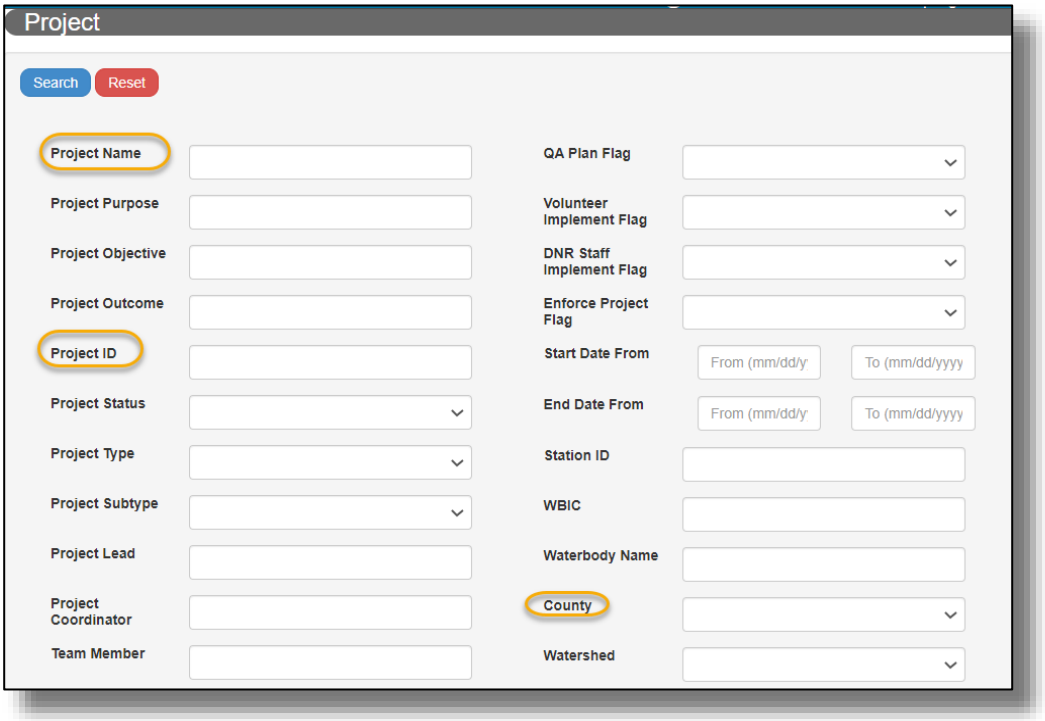
If you are not associated to a project that you need to enter data for, you can search for a project using some common search criteria, including:

- Project Name
- Project ID
- Project Type and Subtype
- WBIC and County

For a more comprehensive overview on finding a project, see the Finding a Project section.

If you know the entire Project Name **OR** Project ID, enter it and click Search.

You can also use just a word or two from a project name in the Project Name box, such as 'purple' or 'purple loosestrife' for a biocontrol project.



You can also choose the county you want from the dropdown.

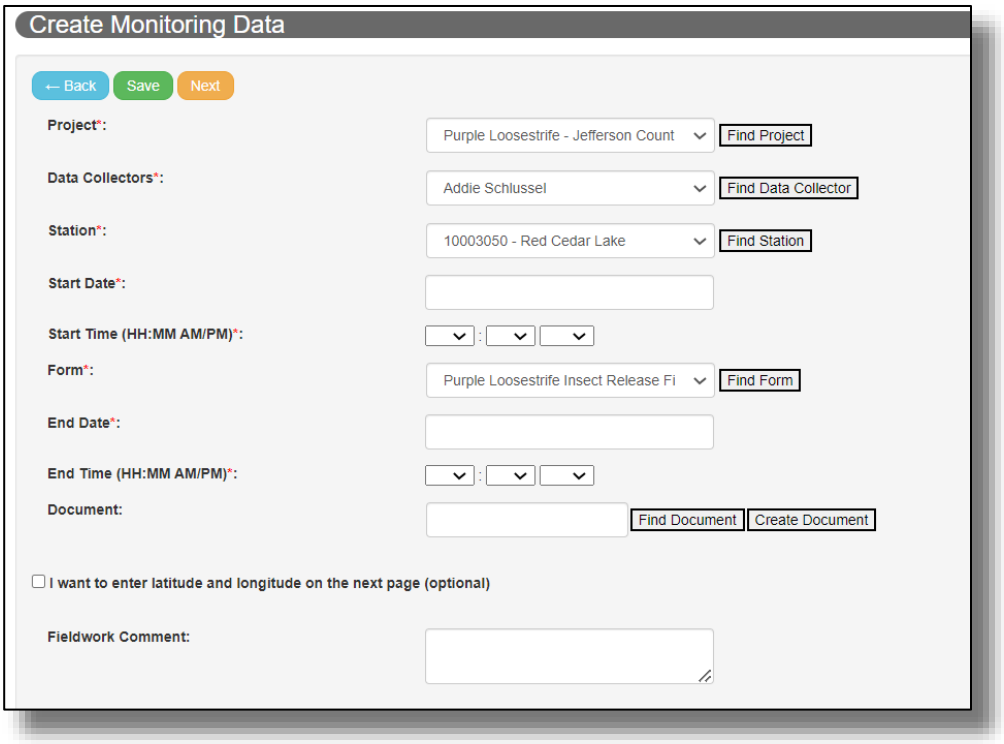
You may get more than one result, but the right one should be available to select.

For the result window below, "*Purple*" was added to the Project Name box and "*Jefferson County*" was selected. Click on the arrow to select the project for data entry.

When the Project is selected, all the data collectors, stations and forms associated with the project will appear in the dropdowns (unless a new collector or station needs to be added). A Form (or set of Forms) should be available in the

←		PL-Insectary	Purple Loosestrife Beetle Insectary Candidate Sites	Purple Loosestrife	2021	Active	Purple Loosestrife Monitoring and Biological Control
←		PL-JeffersonCo	Purple Loosestrife - Jefferson County	Purple Loosestrife	2020	Active	Purple Loosestrife Monitoring and Biological Control
←		PL-LakeKoskonongWetlandAssoc	Purple Loosestrife - Lake Koskonong Wetland Assoc	Purple Loosestrife	2011	Inactive	Purple Loosestrife Monitoring and Biological Control

Forms dropdown; it is not typical for a new form to be added during data entry. If no Form is available, contact your local Coordinator or DNRSWIMS@Wisconsin.gov for help.



Find Data Collectors:

If you cannot find the correct person or are adding data for one or more people working together who do not show up in the dropdown list, you can do the following:

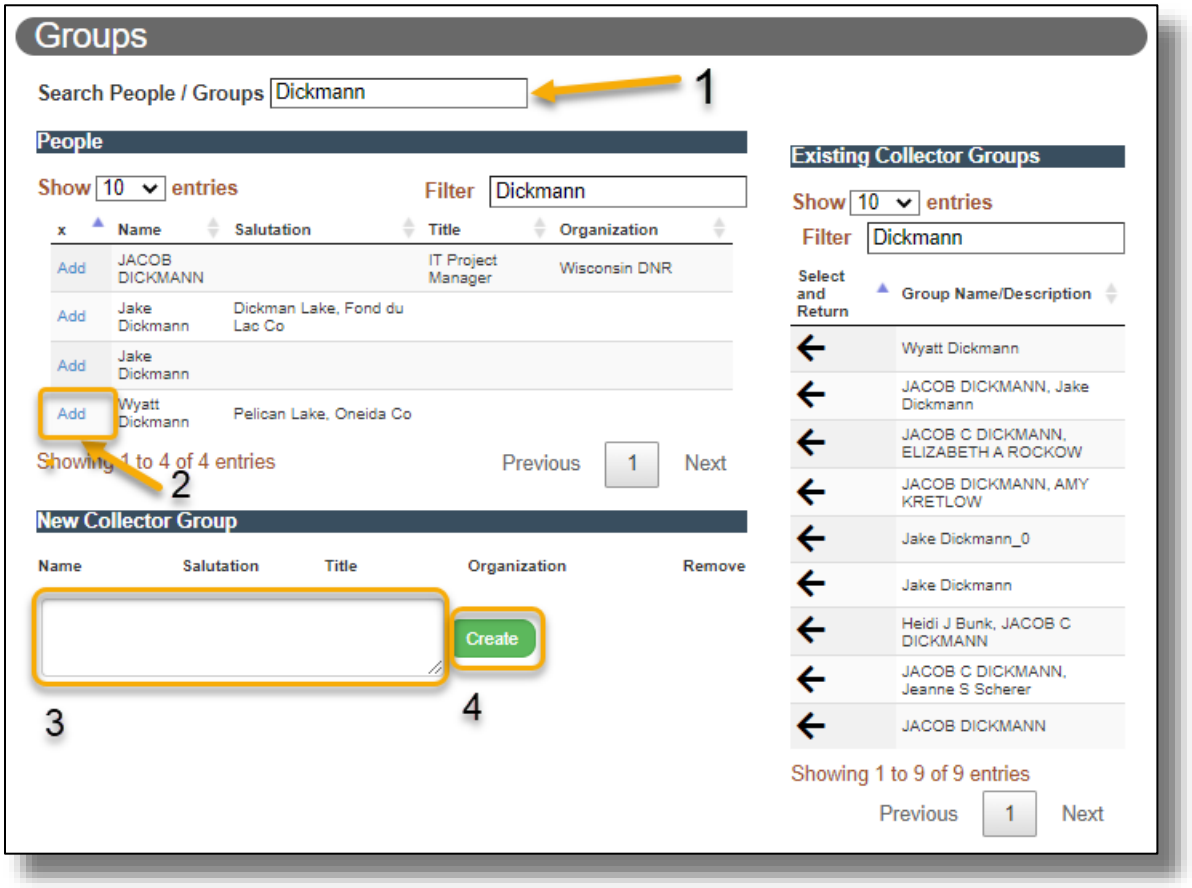
1) Click on ***Find Data Collector*** button next to the dropdown. The query window below will open.

2) Type the last name into the Search People/Groups box. The list will immediately provide options, provided the spelling is the same. You can use portions of a name to search.

3) Click 'Add' next to the person's name when you find it. If additional people should be added for the fieldwork, look them up in the same manner and click 'Add' for each one. As long as they have a SWIMS profile, they should show up. If they help regularly, they should have a profile added. See Creating a New Profile.

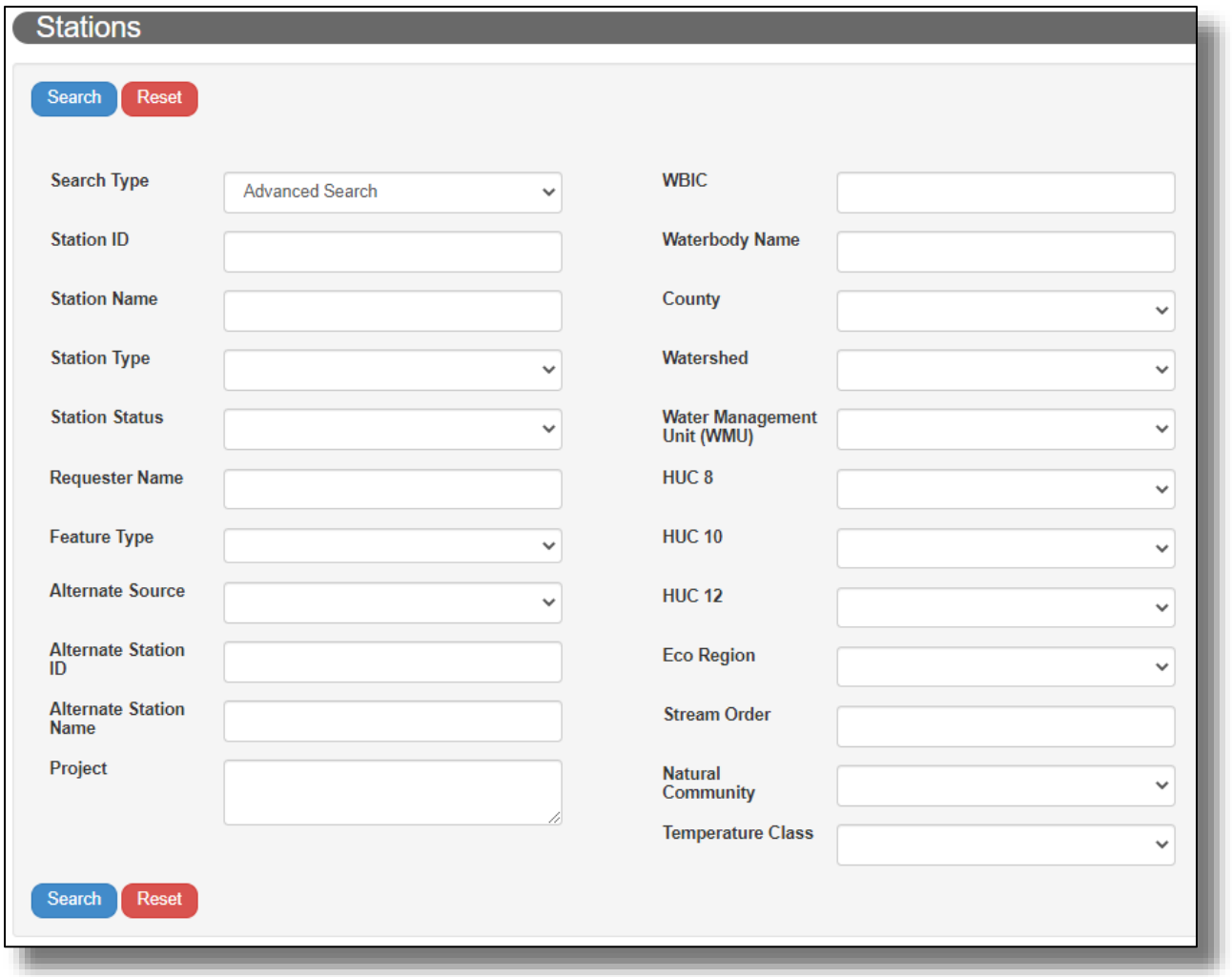
    a) If the help was a onetime event, the other person could be noted in the comments section of the fieldwork. If that is the case, only the actual **Data Collectors** can be searched for and listed as a Data Collector

4) Once all the names you need are in the New Collector Group box at the bottom of the page, click 'Create' to return to the data entry page where you will now see them listed as Data Collectors. The new group should remain in the dropdown for future entries.



Notice that on the right there can be a list of the person paired with other data collectors. Click on the arrow if you want to add one of these existing groups. Be aware that people who have changed jobs may be listed from an old profile. In the example. Matthew Wallrath in all caps was the way his name appeared in an old profile when he worked for WDNR. When you're not sure, start from scratch. Hint: Often, WDNR profile names are in all caps.

Find Station:



Keep the query simple when this window opens.

1) If you already know the Staton ID you want to add, type it into the station ID box and click 'Search'. This will give you one result. Click the arrow in the result list to add it to the report.
2) If you only know the waterbody name, try the name and county in case there is more than one lake by that name or it's a river traveling across multiple counties. If a lake, do not use the word 'lake.' Click 'Search'.
3) If you know the WBIC (Water Body Identification Code), type it in the WBIC box (but not a name) and click 'Search'. You will probably get several results that can include a station for the entire length of a river or area of a lake, as well as stations boat launches and various types of monitoring.

For more searches, you will probably see multiple results unless you already have the Station ID. If you are still unsure which to choose or if there actually is no station, contact your DNR AIS Coordinator, your statewide project coordinator, or DNRSWIMS@Wisconsin.gov. You can also see the Guide's Adding a New Station If you find a station doesn't exist. Only DNR staff and others with access to the DNR's internal mapping tool can create stations.

Data Entry Tips and Notes:

1) **Where is my entered data displayed?**

- **CLMN Water Quality:**
  - WI DNR Lake Water Quality Reports: https://dnr.wi.gov/lakes/waterquality
- **CBCW:**
  - WI DNR CBCW Watercraft Inspection Results: https://dnr.wi.gov/lakes/invasives/WatercraftSummary.aspx
  - WI DNR Boater Movement Tool: https://dnr.wi.gov/boatermovement/
- **WAV:**
  - WAV Stream Monitoring Dashboard: https://data-viz.it.wisc.edu/wav-dashboard/
    - Note: WAV data are uploaded to this Dashboard only a few times a year
- **AIS monitoring data:**
  - AIS By Waterbody: https://dnr.wi.gov/lakes/invasives/AISByWaterbody.aspx
  - Lakes and AIS Viewer (LAV): https://dnr.wisconsin.gov/topic/Lakes/Viewer

Please Note: Allow for 1-2 days for data to show on the WI DNR pages

2) **Why isn't the AIS I found showing up?**
The results of fieldwork for Aquatic Invasive Species Monitoring does not automatically make the species discovered show up on the Lakes and AIS Viewer or DNR webpages for your lake, stream or wetland. Like creating stations, mapping to the viewers and listing on WDNR webpages requires extra steps by the WDNR AIS Coordinators and other staff with specific SWIMS permissions..

3) **Why is some of my data lumped together?**

If you encounter a situation where you are entering data into SWIMS, but once you click Next and are taken to a form that has data already populated, chances are there is a fieldwork event with different Start Data and End Dates. Look at entered fieldwork events to see if this might be the case. You can often override the problem by editing your fieldwork events start and end times so they do not overlap. If you do so, note that you have used placeholder times in the comments. Because some programs may want to keep track of actual time spent on an activity, such as CBCW, add the time spent in the comments, also. Reach out to your Coordinator if you have any further questions.

Sample Groups and Sample Results

What are Sample Groups?

A Sample Group is a set of individual results grouped together under the same Fieldwork Event. A single Fieldwork Event can have multiple Sample Groups. This could be a set of lab analyzed data collected at the same depth (multiple sets of samples at different depths will have different sample groups) or a set of field data entered under the same SWIMS data entry form.

What are Sample Results?

Sample results are the individual data records you will enter into SWIMS or find when looking at a fieldwork event. They are the individual secchi disc readings, the individual latitude or longitude of a found AIS, or the result of a total phosphorus sample submitted to the DNR and SWIMS from the State Lab of Hygiene.

Finding a Sample or Result

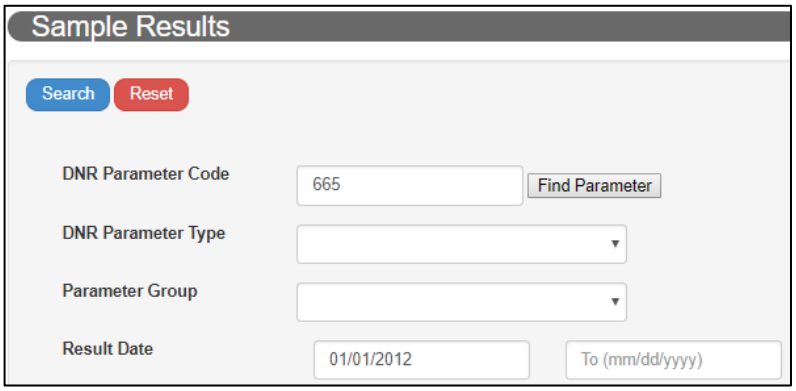
Finding Sample Results is very similar to finding Fieldwork Events:

- Click the "Sample Result" module and click "Find"
- Search by the field(s) most useful to you to get the fieldwork events you're looking for

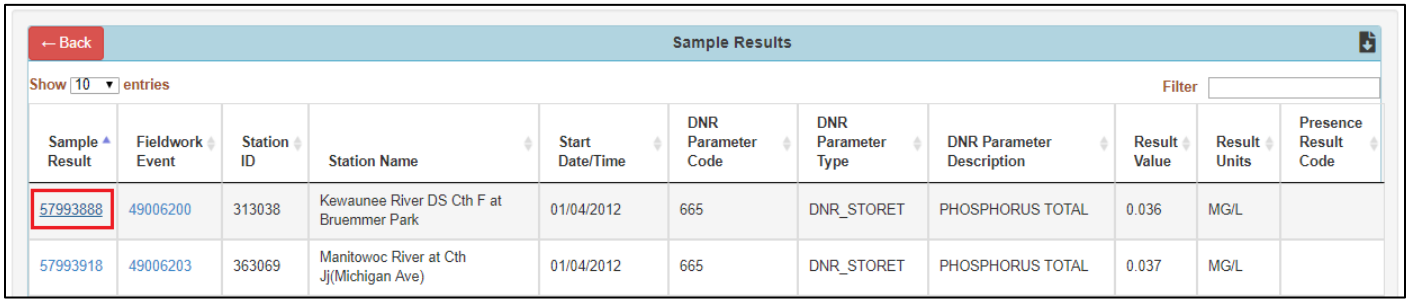
Some options for Sample Result searches:

- Searching for data collected from 2012 to present:
  - Select or type '01/01/2012' in the 'From' fieldwork start date box and leave the 'To' blank. This will search for all fieldwork events and data collected from 01/01/2012 to present

- You can search for fieldwork by specific parameters. In the "DNR Parameter Code" field, you can either type in a known parameter code or click on the Find Parameter button to search for parameter codes



- Once the search is processed, select the Sample Result sequence number to navigate to the individual result
  - Additionally, you can also navigate to the Fieldwork Event by clicking the Fieldwork Event seq no next to the Sample Result seq no



Sample Result	Fieldwork Event	Station ID	Station Name	Start Date/Time	DNR Parameter Code	DNR Parameter Type	DNR Parameter Description	Result Value	Result Units	Presence Result Code
57993888	49006200	313038	Kewaunee River DS Cth F at Bruemmer Park	01/04/2012	665	DNR_STORET	PHOSPHORUS TOTAL	0.036	MG/L	
57993918	49006203	363069	Manitowoc River at Cth Jj(Michigan Ave)	01/04/2012	665	DNR_STORET	PHOSPHORUS TOTAL	0.037	MG/L	

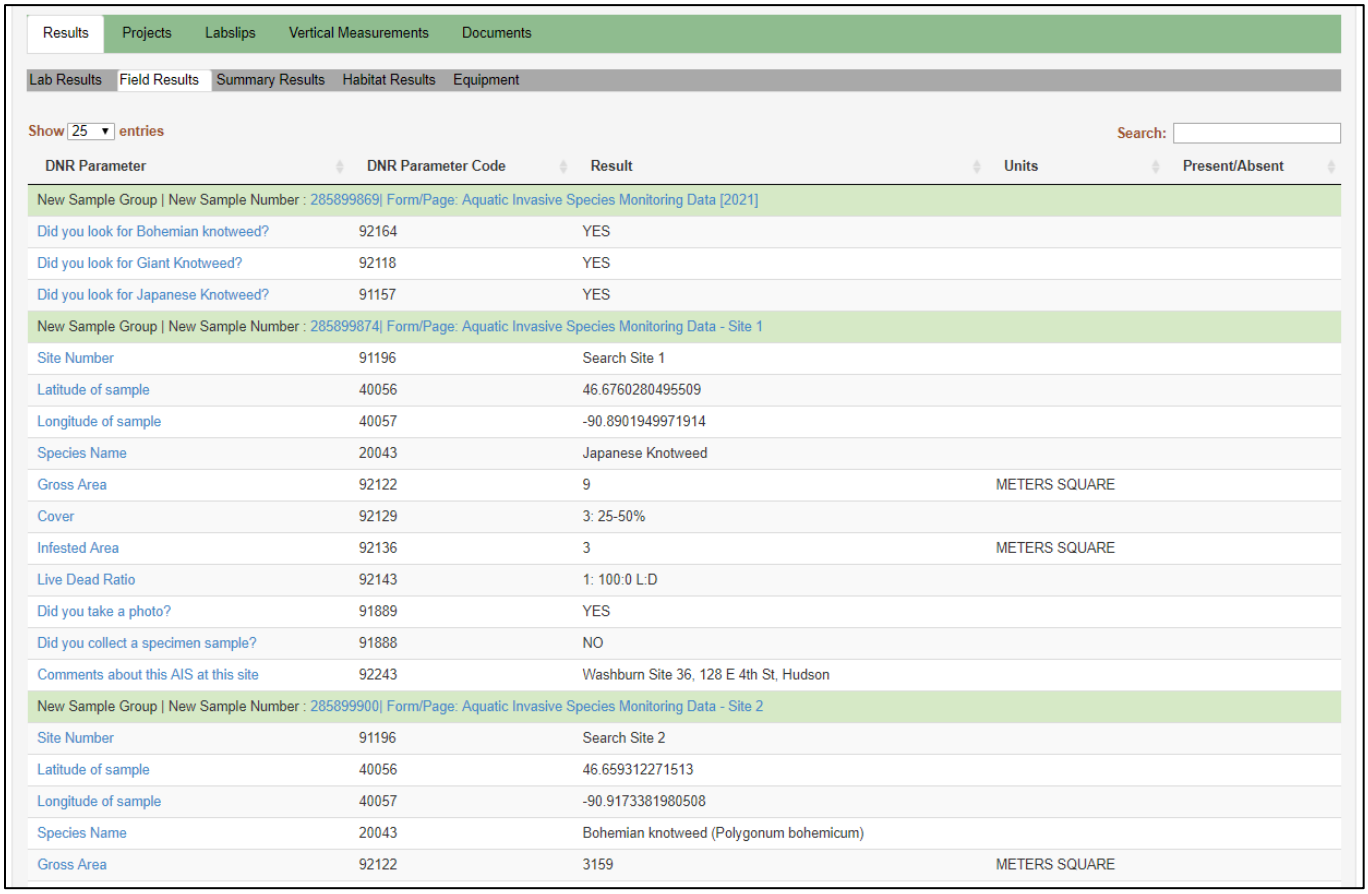
Viewing a Sample or Result

You can view Sample Results in multiple ways in SWIMS:

1. By navigation from the Fieldwork Event pages
2. From the Sample Result search process

Viewing Results from the Fieldwork Event Page:

When viewing a Fieldwork Event and its results, data are grouped together in Sample Groups and will be displayed as such. For example, AIS monitoring data:



Results | Projects | Labslips | Vertical Measurements | Documents

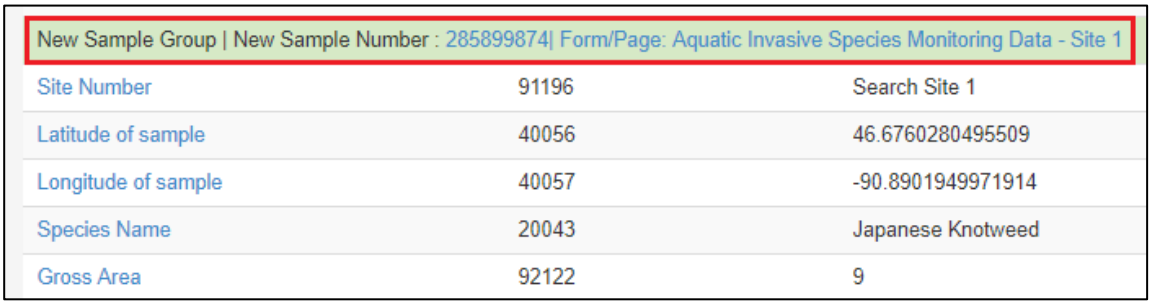
Lab Results | Field Results | Summary Results | Habitat Results | Equipment

Show 25 entries — Search:

DNR Parameter	DNR Parameter Code	Result	Units	Present/Absent
New Sample Group | New Sample Number : 285899869| Form/Page: Aquatic Invasive Species Monitoring Data [2021]				
Did you look for Bohemian knotweed?	92164	YES		
Did you look for Giant Knotweed?	92118	YES		
Did you look for Japanese Knotweed?	91157	YES		
New Sample Group | New Sample Number : 285899874| Form/Page: Aquatic Invasive Species Monitoring Data - Site 1				
Site Number	91196	Search Site 1		
Latitude of sample	40056	46.6760280495509		
Longitude of sample	40057	-90.8901949971914		
Species Name	20043	Japanese Knotweed		
Gross Area	92122	9	METERS SQUARE	
Cover	92129	3: 25-50%		
Infested Area	92136	3	METERS SQUARE	
Live Dead Ratio	92143	1: 100:0 L:D		
Did you take a photo?	91889	YES		
Did you collect a specimen sample?	91888	NO		
Comments about this AIS at this site	92243	Washburn Site 36, 128 E 4th St, Hudson		
New Sample Group | New Sample Number : 285899900| Form/Page: Aquatic Invasive Species Monitoring Data - Site 2				
Site Number	91196	Search Site 2		
Latitude of sample	40056	46.659312271513		
Longitude of sample	40057	-90.9173381980508		
Species Name	20043	Bohemian knotweed (Polygonum bohemicum)		
Gross Area	92122	3159	METERS SQUARE	

In this set of data, multiple data entry forms were used to enter AIS Monitoring data and will be separated out by New Sample Groups / Data Entry Forms

To view a single group of data, click on the “New Sample Group | New Sample Number” link



New Sample Group | New Sample Number : 285899874| Form/Page: Aquatic Invasive Species Monitoring Data - Site 1		
Site Number	91196	Search Site 1
Latitude of sample	40056	46.6760280495509
Longitude of sample	40057	-90.8901949971914
Species Name	20043	Japanese Knotweed
Gross Area	92122	9

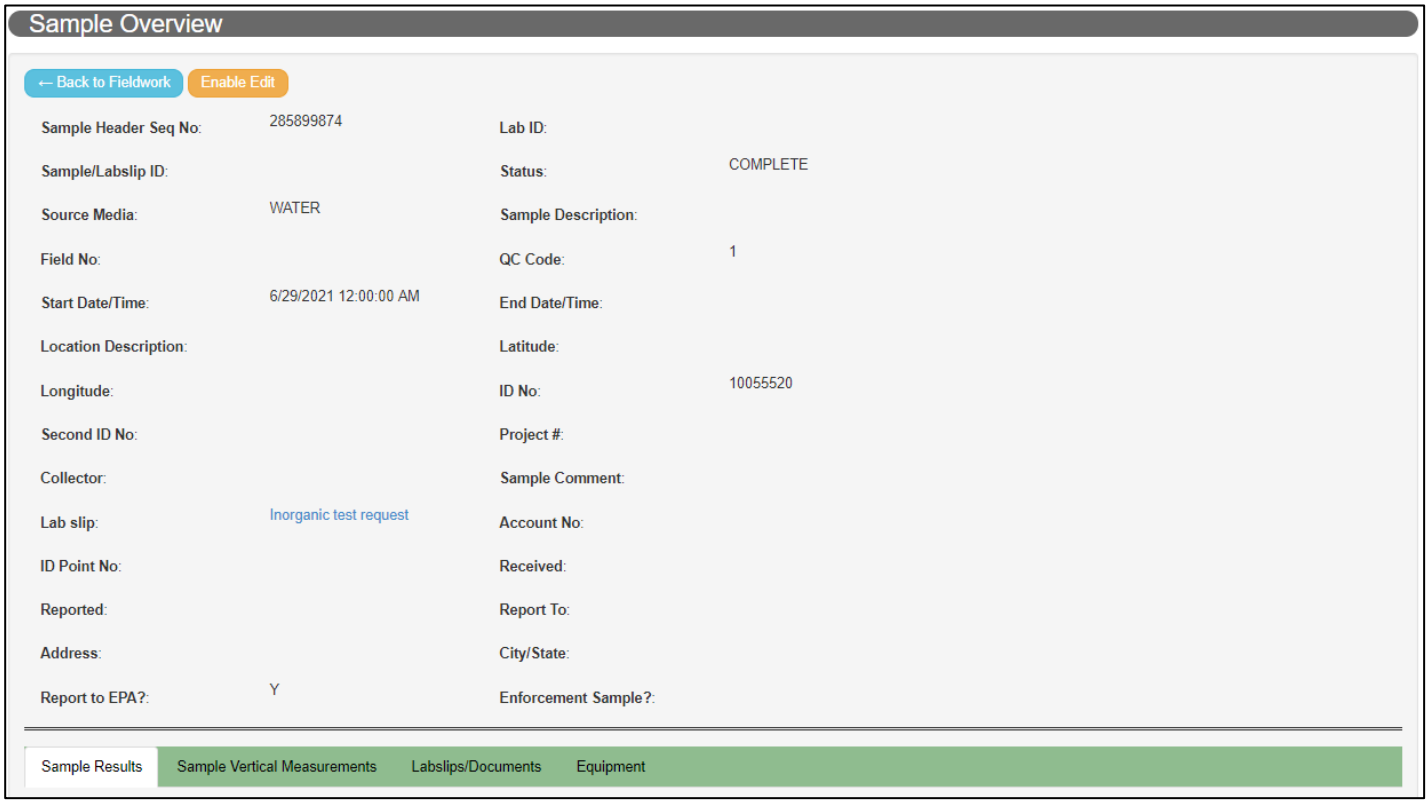
To view individual results from the Fieldwork Event page, click on the “DNR Parameter Description” link for that specific parameter:

New Sample Group | New Sample Number : 285899869| Form/Page: Aquatic Invasive Species Monitoring Data [2021]		
Did you look for Bohemian knotweed?	92164	YES
Did you look for Giant Knotweed?	92118	YES
Did you look for Japanese Knotweed?	91157	YES

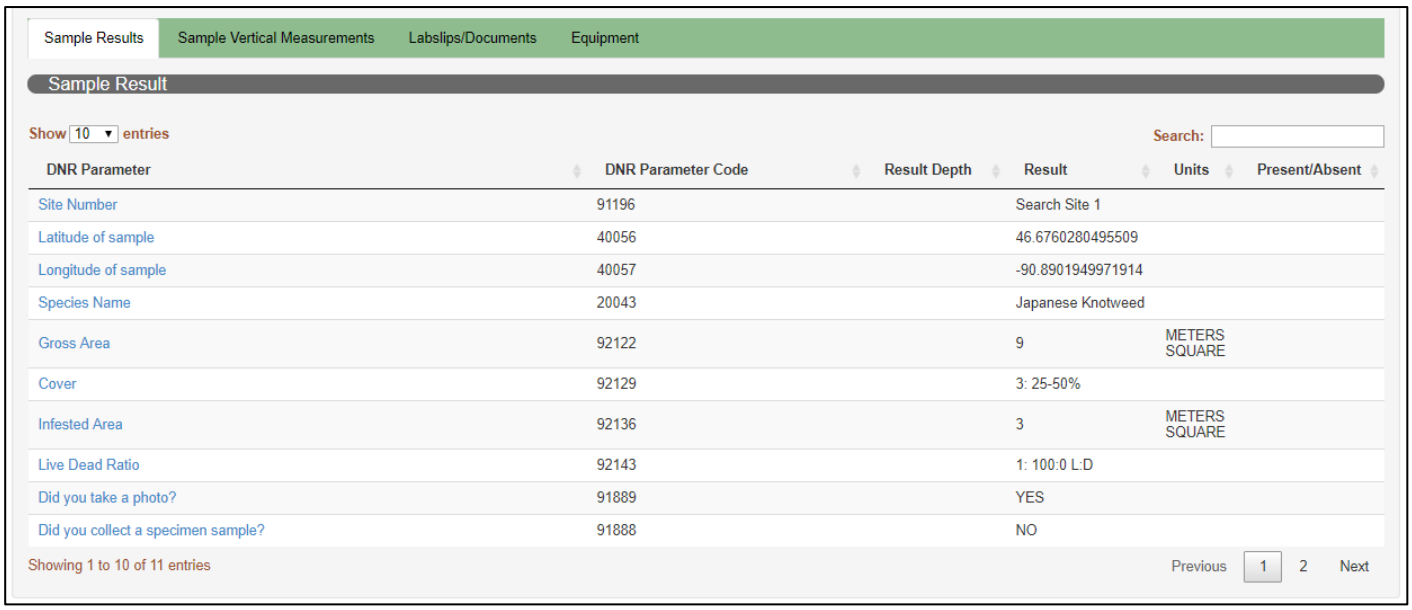
Once navigated from the "New Sample Group | New Sample Number" link, you will see a Sample Detail screen, containing similar data and information as the Fieldwork Event screens. Some of the information you will find:

- Collection Start / End Date and Time
- Sample Collector
- ID No (Station ID)
- Sample Comments

Note: Final layout of this page is still in development and may change slightly



Within the green bar, you will find options for:



Sample Results: An area where individual results will be listed under that Sample Group

Sample Vertical Measurements: An area where individual results will be listed under

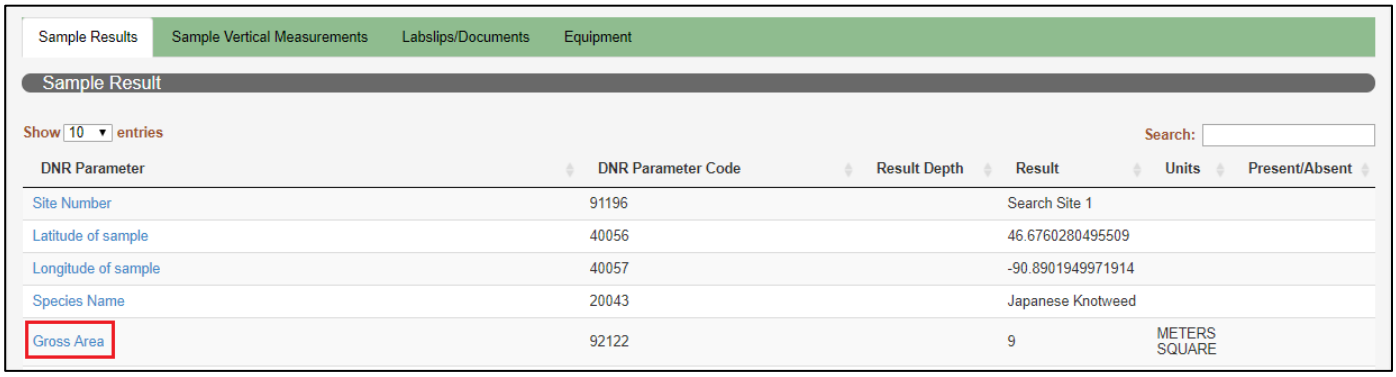
Vertical Measurements: Depth at which the sample was/were collected (i.e. 0-6 FT / 0-2 M for integrated samples, 3 FT for Van Dorn, etc.). This area pertains mostly to lake collected samples, but river and sediment samples may have this area populated

Labslips/Documents: Any scanned labslip or lab report can be found here

Documents: Here you will find any documents (i.e. photos of AIS found) associated to this Fieldwork Event (this is a new feature)

Equipment: Any equipment used to collect the data (if reported)

To view individual results from the Sample Group page, click on the “DNR Parameter” link for that specific parameter:



Editing a Sample or Result

You can edit results in one of two ways in SWIMS:

1. From the “View Data” page and data entry process
2. While viewing the sample result itself

Things to keep in mind when editing individual results:

- If editing data that was entered using a drop down, it is recommended you use the data entry process to updated results
- If editing numeric results, you can use either process
- Users cannot update individual results for lab submitted data. Contact SWIMS support if you encounter values that need updating

Edit Data from the Sample Result page:

Editing a result in this new version of SWIMS is very similar to the old version. To edit:

- Click Enable Edit
- From here, you can update or edit things such as:
    - The DNR Parameter Code (will auto update the DNR Parameter Description and Type)
    - Result Units
    - Result Value
    - Result Comments

To save your edits, click Update

Stations

A Station is a specific point, line, or area where fieldwork events, such as AIS monitoring, CBCW boat inspections, and water chemistry sampling take place. We report work done at the station. Each station is assigned a Station ID number and a descriptive name, such as *10030933, Rock River - Riverview Drive Boat Launch*.

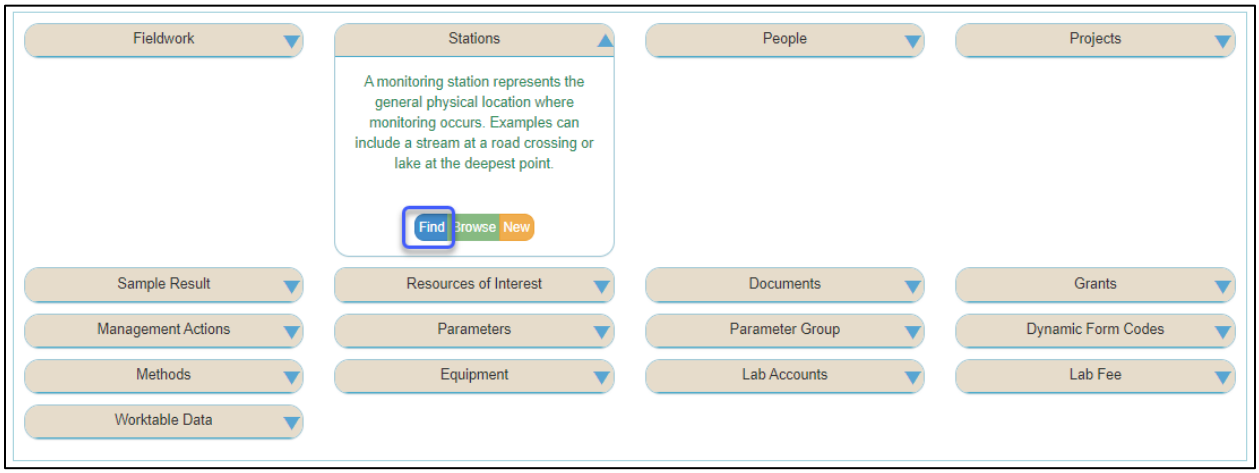
Stations are added to Projects to make it faster to add your data later. However, as you can see in the Fieldwork section of the guide, there are ways to add them at the time of data entry.

Stations are represented a Point, Line, or Area (polygon). Examples:

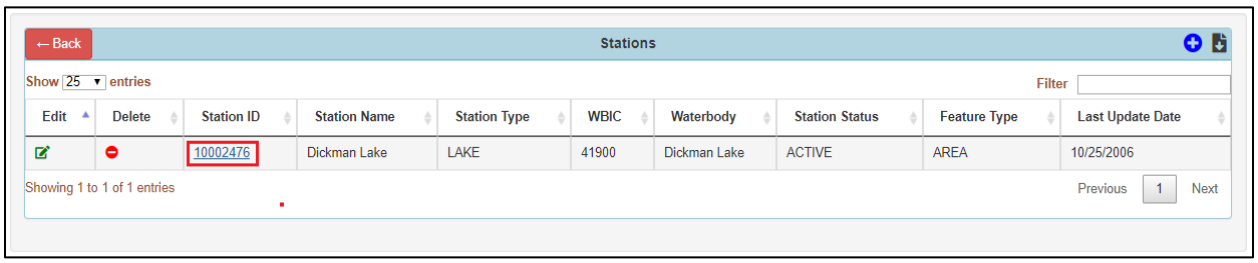
- An entire lake is an Area (polygon) station
- A steam segment or section of ditch along a road is a Line station
- A boat launch, a lake's deep hole, or WAV monitoring site is a Point station

Finding a Station

- On the Homepage, click "Stations"
- Click "Find"



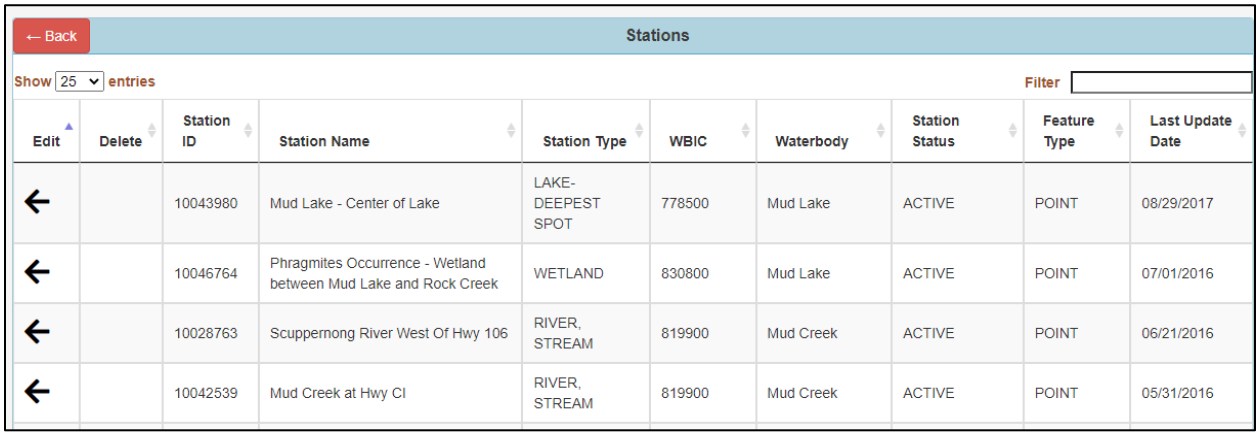
- Search for station based on known criteria. If you know the SWIMS Station ID, then that's all you need to perform a search. We recommend keeping your query simple, limiting it to 1-3 search items at most:
    - Station ID that's all you need
    - County name and waterbody name
    - When using a lake name, leave off the word 'Lake'
    - Using just the WBIC will give you all fieldwork events associated to that waterbody
    - Station Type
        - For boat landing stations and CBCW data, select "Lake - Boat Landing"



    - Click on the Station ID to navigate to the station

- Results can be tricky.
  It's important to remember the purpose of a station you want to find. Below are the results of a station search because the person searching wants to add it to a fieldwork event's data entry page or to add it to a project profile.

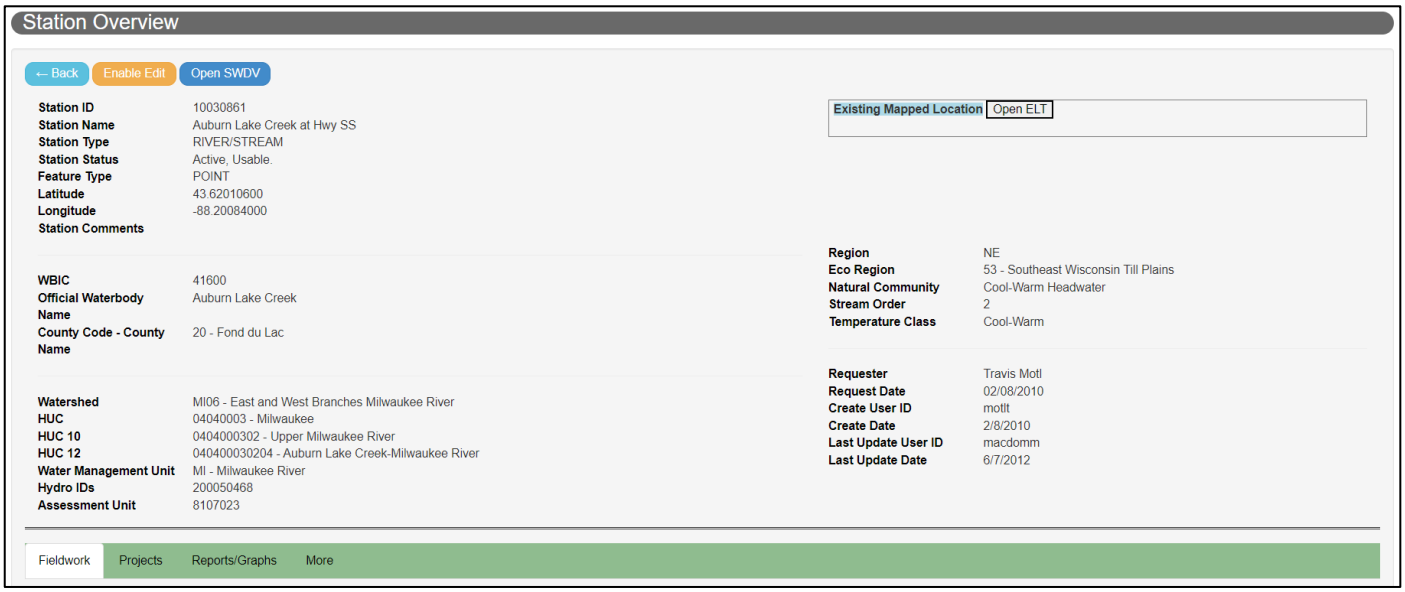
  But beware. This search was for 'Waterbody – Mud' and 'County – Jefferson'. We ended up with a 'Lake-Deepest Spot' Station Type for water quality monitoring in a lake, a wetland site for an AIS report and a stream site which is a point, perhaps for volunteer monitoring. Notice that the first three also have different WBICs, so we know they are not the same waterbodies because every waterbody in the state has it's own unique WBIC. If the screenshot had all the results that came up, you may discover a second Mud Lake with a different WBIC. When in doubt, double check the DNR's lake pages, the Surface Water Data Viewer, or with someone who would have the correct knowledge.



Edit	Delete	Station ID	Station Name	Station Type	WBIC	Waterbody	Station Status	Feature Type	Last Update Date
←		10043980	Mud Lake - Center of Lake	LAKE-DEEPEST SPOT	778500	Mud Lake	ACTIVE	POINT	08/29/2017
←		10046764	Phragmites Occurrence - Wetland between Mud Lake and Rock Creek	WETLAND	830800	Mud Lake	ACTIVE	POINT	07/01/2016
←		10028763	Scuppernong River West Of Hwy 106	RIVER, STREAM	819900	Mud Creek	ACTIVE	POINT	06/21/2016
←		10042539	Mud Creek at Hwy CI	RIVER, STREAM	819900	Mud Creek	ACTIVE	POINT	05/31/2016

Viewing a Station

Once the station page has been opened, you will find the general information on the upper part of the page. Scroll down to the toolbar (green) for further details.



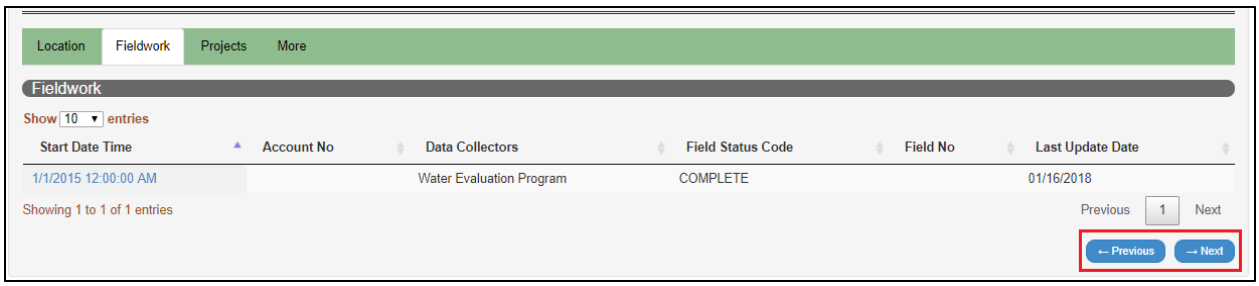
You will find a variety of waterbody information such as Watershed, HUC Codes, Hydro IDs, Assessment Units, and Natural Community above the green tool bar.

Fieldwork: You will find fieldwork associated with this station

Projects: You will find projects associated with this station

More: You will find additional information such as Documents associated to this station

> ***Note***: Clicking the blue "Next" or "Previous" button will move you to topics along the green bar (in this case, Location, Projects, etc.)



Editing a Station

Do you see a problem with a station, such as an incorrect location or name that doesn't make sense? Please do not try to edit it yourself. You may have found an error, but there may turn out to be additional issues with the stations that need to be corrected by DNR staff. Contact your WDNR Regional AIS Coordinator or DNRSWIMS@wisconsin.gov for help or to make suggestions.

Adding a new Station

Only DNR staff and a limited number of other people with DNR computers are able to create stations. When you need a station created, contact your WDNR Regional AIS Coordinator or DNRSWIMS@wisconsin.gov. They will need to know:

1) The location, preferably the latitude and longitude, but if unknown:
    - Waterbody name
    - WBIC (if known)
    - County
    - Road or stream crossings if applicable
    - Project(s) the station is needed for
    - Why an existing station nearby is not adequate (i.e.: new station needed downstream of a drain tile outfall)
    - Any other specifics that could be helpful

A screenshot on the Surface Water Data Viewer or on Google Maps with an indication of where the new station should be located can be very helpful.

Other tips and tricks

Spelling counts but you don't need to write out entire names and phrases

Lakes, ponds and rivers each have a Waterbody Identification Codes (WBIC). The WBIC is an identifier that is important since many waterbodies have the same name. WBICs are unique to each waterbody. Every WBIC can have several Stations.

You can also use the Surface Water Data Viewer to visually zoom into the Wisconsin map to find existing stations if you turn on the Monitoring Sites & Data layer. Right click on the symbol, a triangle if it is a point station, and then click on 'Find data on the map'. Information including station names and ID number will show up in a window to the left.

People

Everyone who accesses SWIMS, either to just look for data and information or to submit data to the database, will be entered into SWIMS through the People module.

Everyone who will be associated with data in SWIMS should have a profile, even if they won't enter data themselves. Without the profile, people cannot be listed as a data collector. If they are a project team member who does not actually collect data, there may still be instances where you will want them to have a basic profile (no WAMS ID needed) and be associated with that project for recordkeeping purposes, such as participants in a special project in support roles. People who are just around to help for a project once can simply be noted in the fieldwork comments.

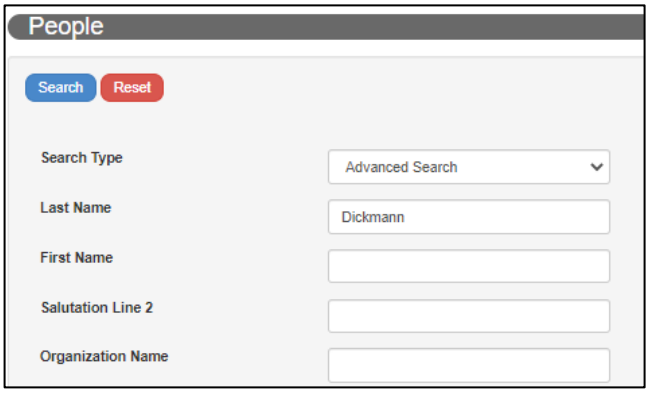
County AIS Coordinators (Lakes Monitoring and Protection Network coordinators) have the ability to manage people's profiles for their projects. See Creating A New Profile and Editing a Profile below.

Finding an Existing Profile

Usual purposes: To determine if a profile already exists or for editing purposes

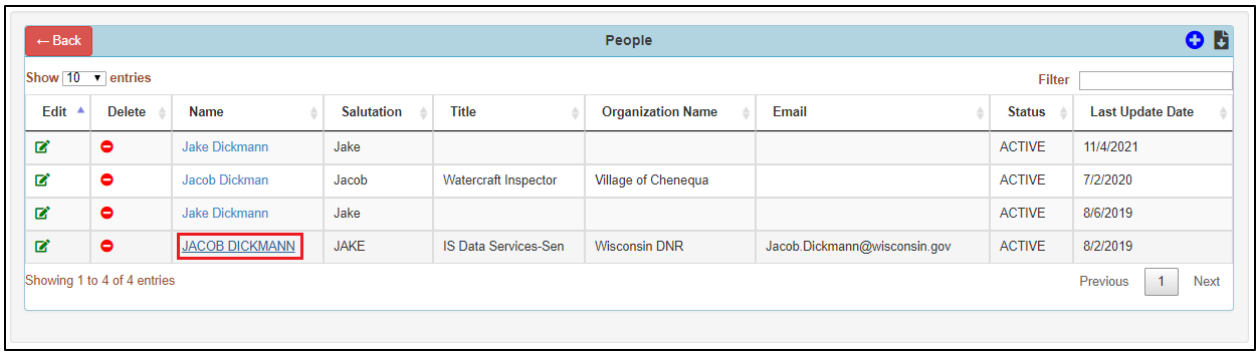
- From the Search page, select People
- Select "Find"

- Type in the parts of the name that you know and click "Search". For names with unusual spellings (first or last), try just that name. In the case below, you might try leaving off the second 'n' in case the name is in SWIMS with a wrong spelling. There are many search options in this window (not shown for space), but as with all SWIMS searches, using a minimal number of items will be most successful.



- Some people may have had profiles created using their nicknames, such as Dick for Richard, Jerry for Gerald; or Margie for Margaret.

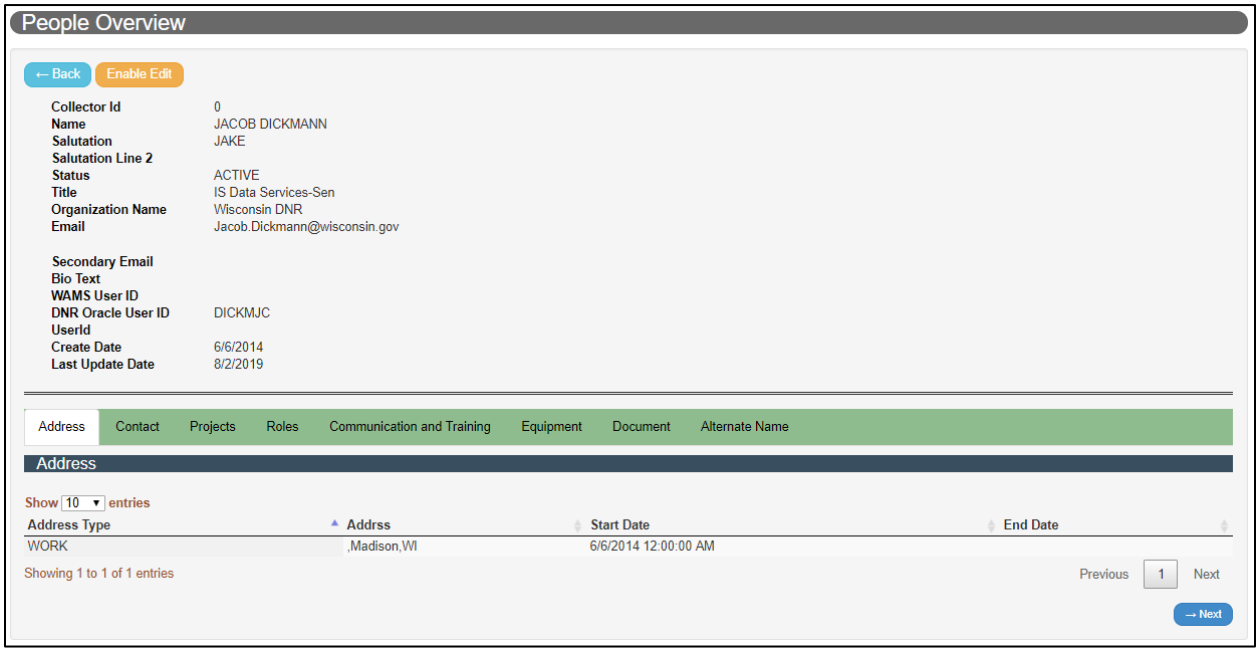
- If your search results in a list, select the name to open the profile: items like the title, organization, email or status (Active or Inactive) can indicate which of the people with the same name is the person you want to find. Clicking on the names will open the profile so that you can check further.



- If the person does not exist in SWIMS, you can create a new profile. If they do, you can update their profile as needed. The directions for both following the 'Viewing a Profile' section.

Viewing a Profile

Below is an example of a completed profile and the information you can find:



Equipment: You can view any equipment issued to this individual

Document: You can view any documents associated to this individual

Alternate Name: Similar to an Alternate Name or ID for a station, you can add in an Alternate Name for an individual or organization

Editing a Profile

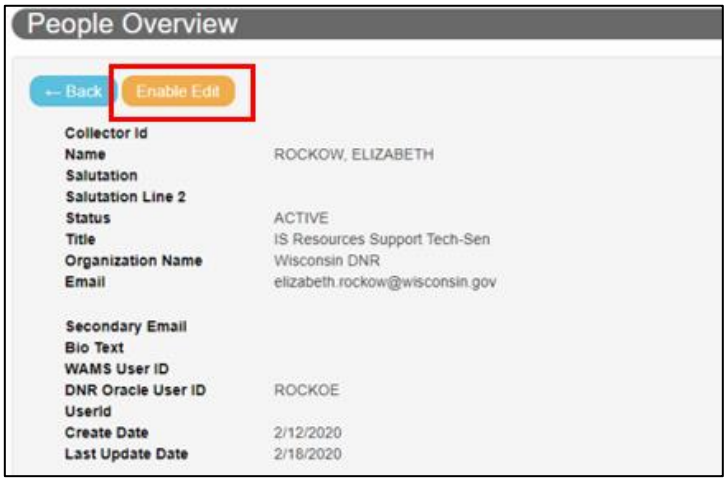
Example: Adding a WAMS to an Existing Profile

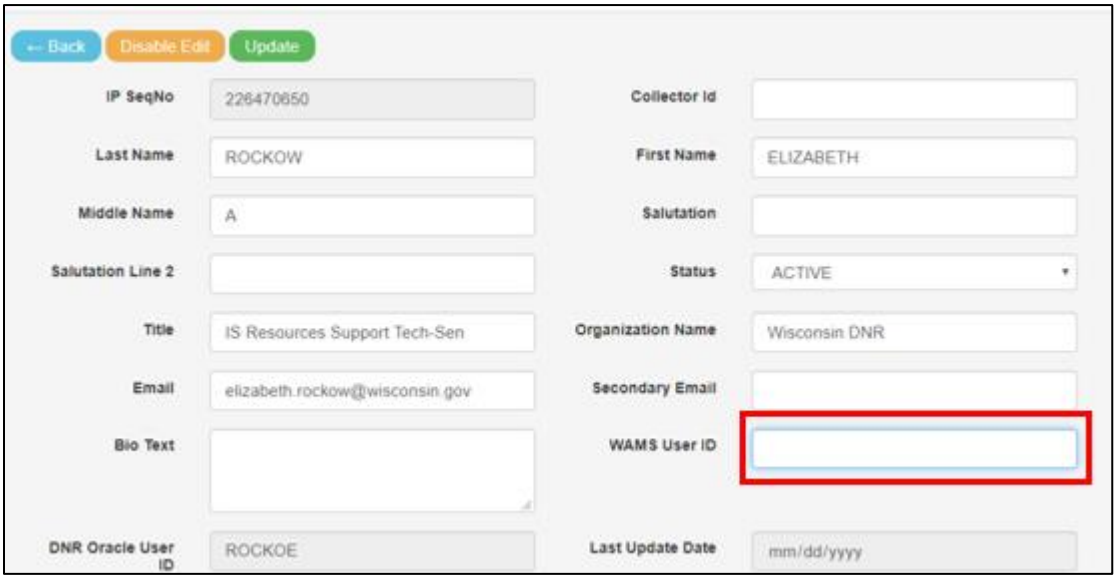
If a user is experiencing issues accessing SWIMS, check if the user has a WAMS ID associated to their profile. If the WAMS ID is entered and correct, have them try clearing the cache on their computer.

If the WAMS ID is not listed or you are editing to replace an old one with a new ID:

Click on "Enable Edit" as shown above

- In the editable page, scroll down to WAMS User ID





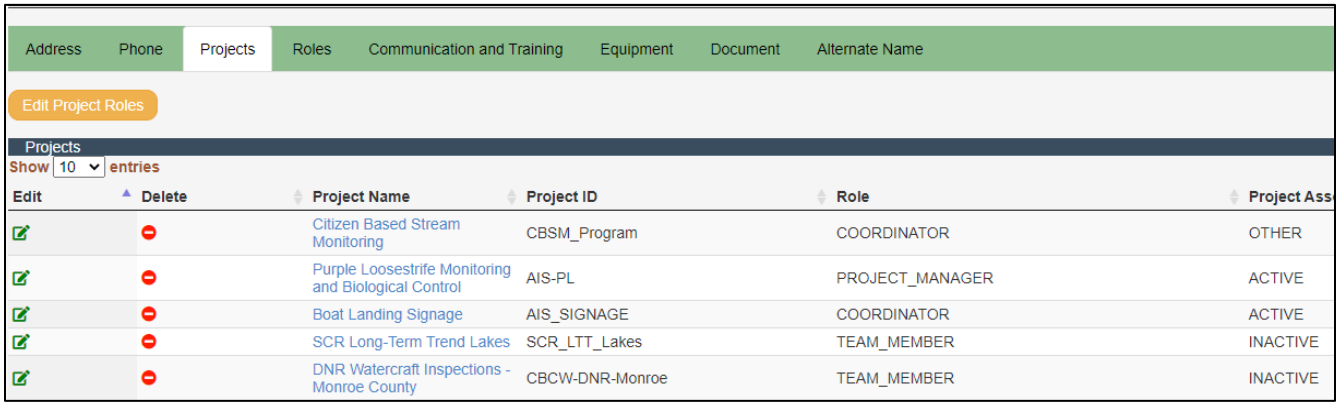
- Enter WAMS username or make a change to a new ID
- Select "Update" at the top of the page to save your changes
- You can edit any additional information also for this part of the profile

To edit other aspects, scroll down to the toolbar (green bar) and choose the part of the profile you wish to edit. One of the most common is Project as described below.

Updating Project Roles

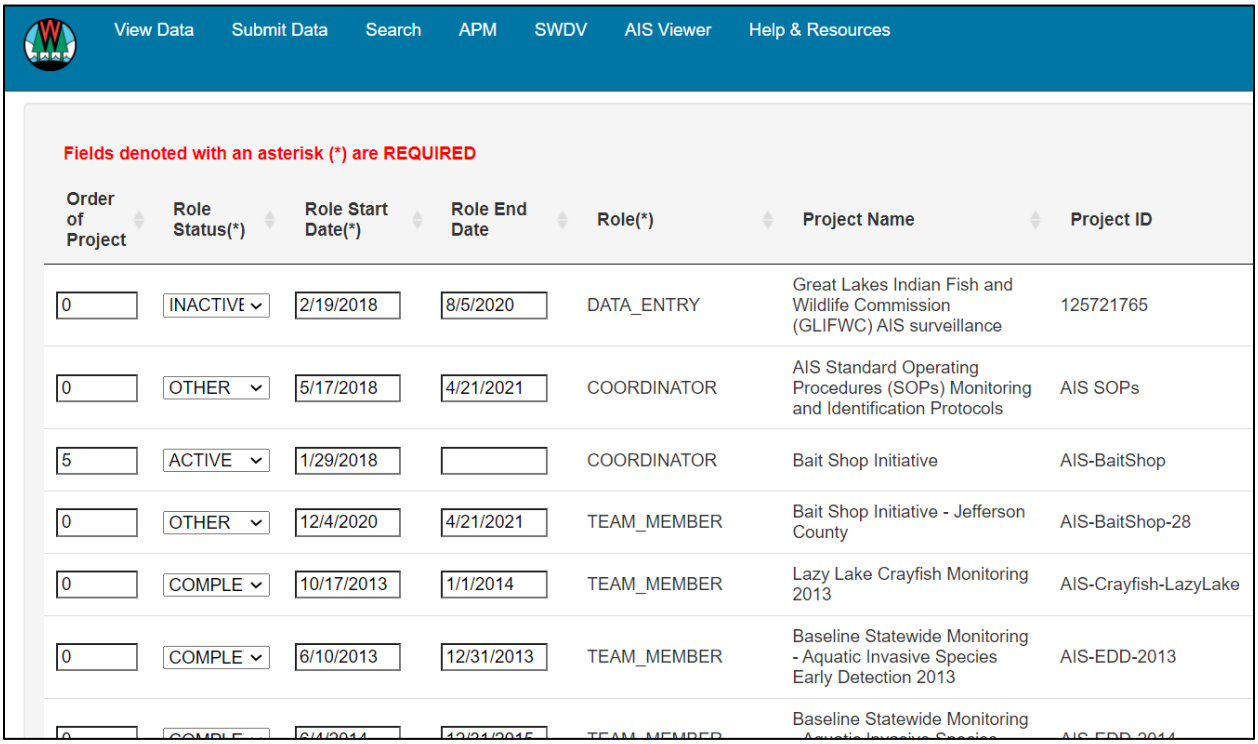
Once in a profile and after clicking 'Enable Edit', scroll down to the bar (green) below the primary information and click on Projects. Then click on 'Edit Project Roles' which is below the toolbar and colored orange. As you can see below, there is an edit button for each project, but by going to 'Edit Project Roles' instead you can work on multiple projects at once.

IMPORTANT: When you first click on Projects, you will see a list of all the projects the person is or has been associated with. There will be an edit icon and some people may see a delete icon. **DO NOT opt to Delete** except in rare instances, such as a person you just assigned a particular project by mistake. These projects are the person's history in SWIMS.



Edit	Delete	Project Name	Project ID	Role	Project Ass
		Citizen Based Stream Monitoring	CBSM_Program	COORDINATOR	OTHER
		Purple Loosestrife Monitoring and Biological Control	AIS-PL	PROJECT_MANAGER	ACTIVE
		Boat Landing Signage	AIS_SIGNAGE	COORDINATOR	ACTIVE
		SCR Long-Term Trend Lakes	SCR_LTT_Lakes	TEAM_MEMBER	INACTIVE
		DNR Watercraft Inspections - Monroe County	CBCW-DNR-Monroe	TEAM_MEMBER	INACTIVE

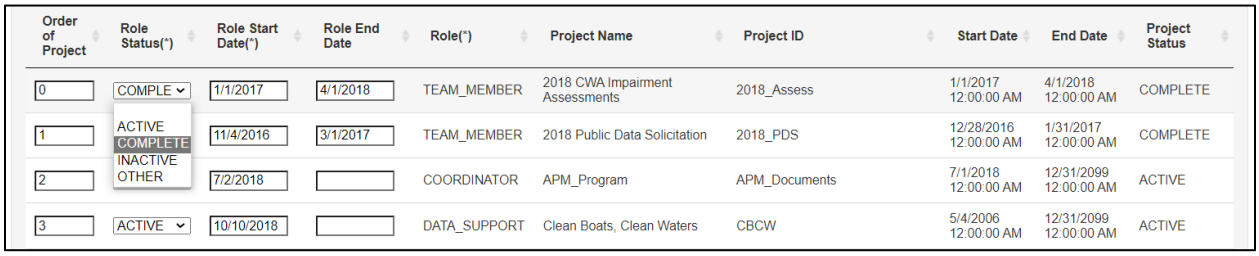
The view when you click on 'Edit Project Roles':



Order of Project	Role Status(*)	Role Start Date(*)	Role End Date	Role(*)	Project Name	Project ID
0	INACTIVE	2/19/2018	8/5/2020	DATA_ENTRY	Great Lakes Indian Fish and Wildlife Commission (GLIFWC) AIS surveillance	125721765
0	OTHER	5/17/2018	4/21/2021	COORDINATOR	AIS Standard Operating Procedures (SOPs) Monitoring and Identification Protocols	AIS SOPs
5	ACTIVE	1/29/2018		COORDINATOR	Bait Shop Initiative	AIS-BaitShop
0	OTHER	12/4/2020	4/21/2021	TEAM_MEMBER	Bait Shop Initiative - Jefferson County	AIS-BaitShop-28
0	COMPLE	10/17/2013	1/1/2014	TEAM_MEMBER	Lazy Lake Crayfish Monitoring 2013	AIS-Crayfish-LazyLake
0	COMPLE	6/10/2013	12/31/2013	TEAM_MEMBER	Baseline Statewide Monitoring - Aquatic Invasive Species Early Detection 2013	AIS-EDD-2013
					Baseline Statewide Monitoring	

- When we update a person's association to a project from Active to Inactive or Complete, the project will no longer show up in their list of projects for entering fieldwork or in the 'My Projects' list, but the will still show up in the list on their profile because it's part of their history in SWIMS.

- When ending a person's role in a specific project
    - Change their Role Status to 'Inactive' or 'Complete'
    - Assign an end date



Order of Project	Role Status(*)	Role Start Date(*)	Role End Date	Role(*)	Project Name	Project ID	Start Date	End Date	Project Status
0	COMPLE	1/1/2017	4/1/2018	TEAM_MEMBER	2018 CWA Impairment Assessments	2018_Assess	1/1/2017 12:00:00 AM	4/1/2018 12:00:00 AM	COMPLETE
1	ACTIVE / COMPLETE / INACTIVE / OTHER	11/4/2016	3/1/2017	TEAM_MEMBER	2018 Public Data Solicitation	2018_PDS	12/28/2016 12:00:00 AM	1/31/2017 12:00:00 AM	COMPLETE
2		7/2/2018		COORDINATOR	APM_Program	APM_Documents	7/1/2018 12:00:00 AM	12/31/2099 12:00:00 AM	ACTIVE
3	ACTIVE	10/10/2018		DATA_SUPPORT	Clean Boats, Clean Waters	CBCW	5/4/2006 12:00:00 AM	12/31/2099 12:00:00 AM	ACTIVE

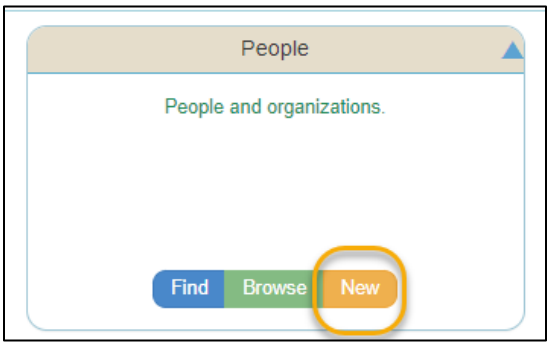
- If you want to put the active list of projects into alphabetical order, assign all active projects '1'
- If you want to group projects by type, not necessarily alphabetically, give each set of projects the same number, such as all CBCW projects '5', all Purple Loosestrife projects '10'
- Projects with a '0' will appear at the top of your list
    - If you want one or more specific projects to show up first, regardless of alphabetical order, you can assign them a '1', '2', etc. and give all other projects a higher number, such as 10. As long as all of the projects you want in alphabetical order have the same number, they will show up in order.

- Tip: You can look across the line to see the project's status to help you determine when to use 'Complete' instead of 'Inactive'. Changing the role of the person does not impact the status of the project.

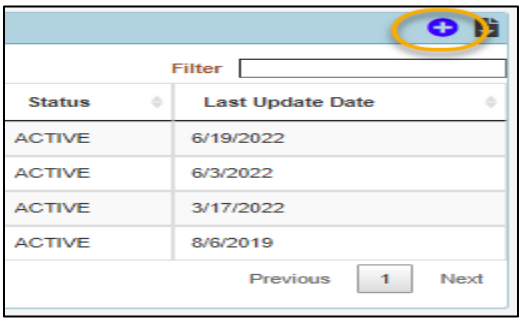
- When you are finished editing, scroll to the bottom and click on 'Save and Return'

Creating a New Profile

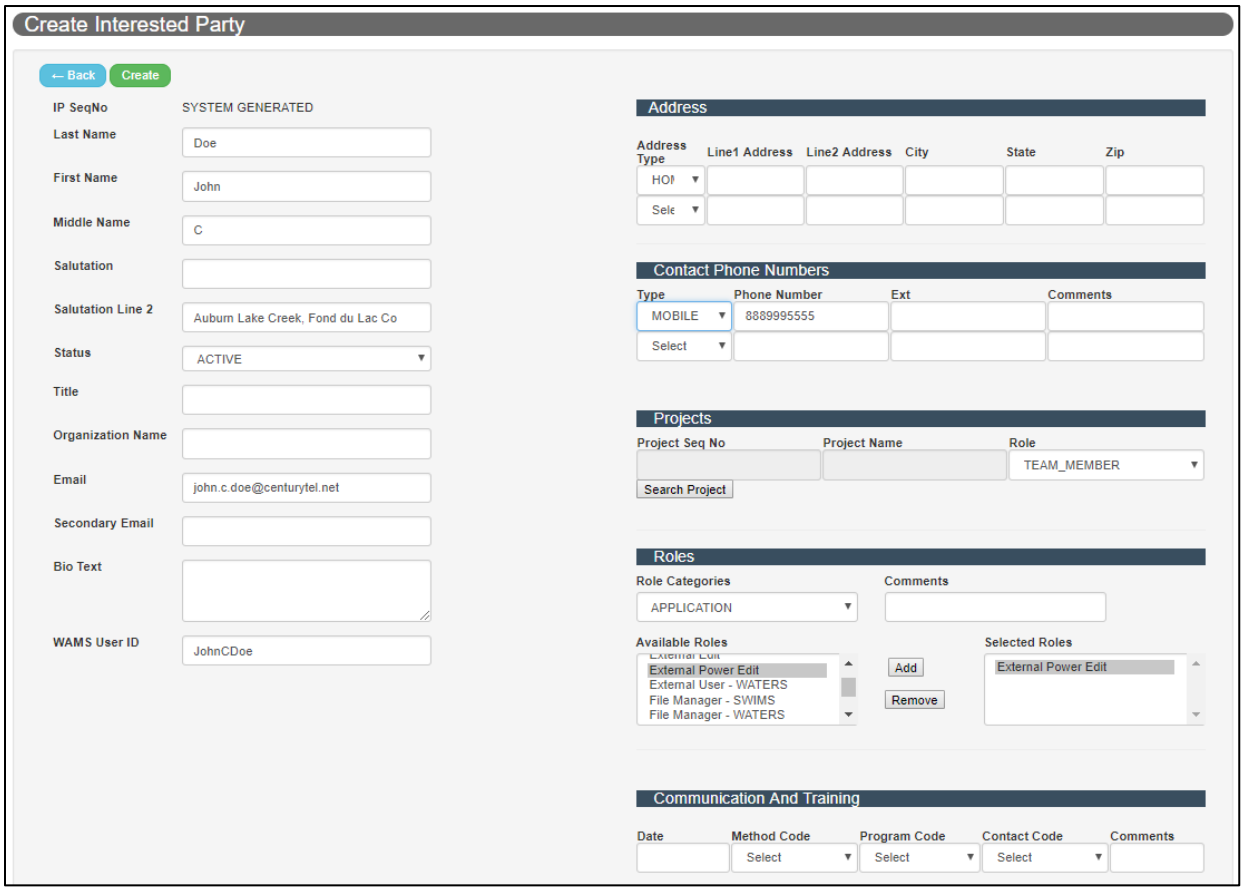
- Once you've determined you need to create a new profile, you can create one by:
  - Home page: click on the People module and then click "New"
    OR
  - From the People search results page, click the blue plus icon



OR



- Fill out as much information as known about the person
  - You want at least first and last name, email, phone number and WAMS (if applicable).



Status: Active or Inactive - if choosing 'Inactive', keep in mind this only applies to the profile. The person will also need to have their role updated to inactive in each of the projects they're associated with in SWIMS.

Address: If known, you can add an address for a variety of locations pertaining to this person, such as Home, Seasonal, Winter, etc. An address is also helpful at times to identify a person or to have it on hand for coordinators who wish to contact their partners by mail.

Contact Phone Numbers: You can enter in phone numbers for a variety of locations, such as Home, Seasonal, Work, Winter, etc. (Note for DNR Staff - The number(s) listed on the DNR staff directory are automatically associated to your SWIMS profile.

Projects: Projects are added during profile creation or editing. A person might also be added by way of the project profile. In either case, all their associated projects will show up in their profile. There are many role options for those involved to be assigned within a project, including DATA_ENTRY, DATA_SUPPORT, or LEAD_EQUIPMENT, however, the default will be TEAM_MEMBER.

Roles: These are the SWIMS Roles, not specific roles in a project. Database roles depend on a person's role in their organization.

1) **Volunteers**: External Power Edit
2) **County AIS Coordinators and Designated Agents**: External Power Edit and Coordinator
3) **Staff for Counties and Designated Agents**: External Power Edit

Communication and Training: You can add any type of training to this user's profile upon creation

- Once all the information is entered, click "Create"

Documents: You can add any pertinent documents. You cannot add documents directly to a profile. The document will have to have already been added to the SWIMS library or to a fieldwork event or project. When you add documents to fieldwork and projects, you can associate the person to the document and it will then become part of their profile, also.

Projects and Grants

In SWIMS, Projects describe the "why" behind monitoring data or a monitoring initiative. A Grant is a particular type of project in SWIMS and can be searched for in a similar way as Projects. Projects contain a lot of information that can be found in SWIMS, but it's specific to that monitoring event or activity, including:

- Stations and Fieldwork
- People involved
- Equipment and Methods used
- Resources of Interest (ROI)OIs
- Documents
- Monitoring Actions

In SWIMS, Projects and Grants are synonymous and look the same way in SWIMS. A lake organization awarded a Clean Boats, Clean Waters grant will have a Project for their CBCW grant in SWIMS.

Many of the projects in SWIMS are housed in a hierarchy of projects:

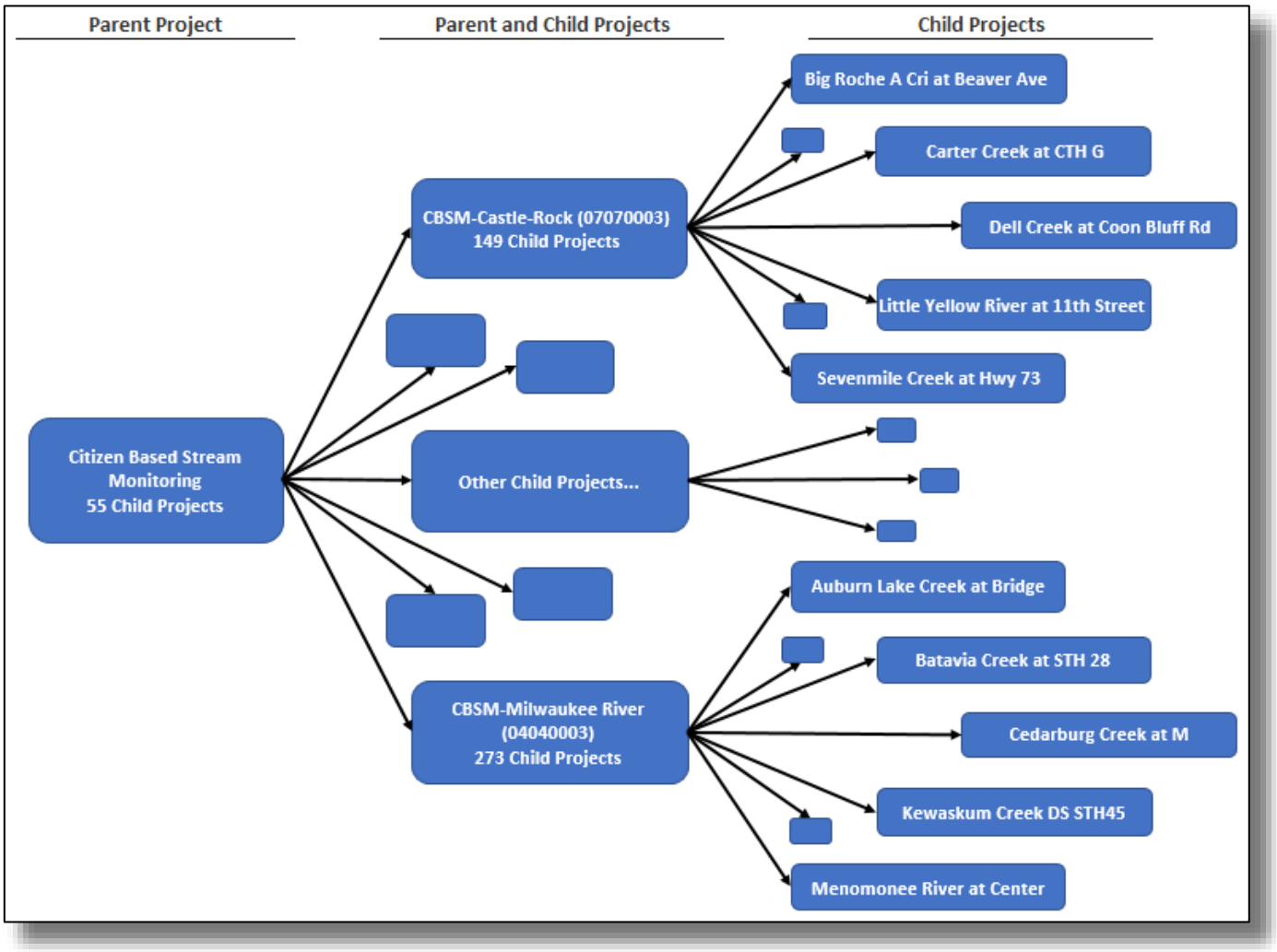
- **Top-Level Project**: a Project at the highest level; it does not have a project above it, known as a 'Parent Project'
- **Parent Project**: This could be a Top-Level Project, but it is also a Project that has a project or a set of projects underneath in the same category, called 'Child Projects'
- **Child Project**: Projects that have a Parent Project are known as a Child Project

In short, Top-Level Projects will never have a Parent Project, but both Parent Projects and Child Projects can have one or many additional Child Projects.

Here is an example using WAV/CBSM projects (**Note**: Historically, Water Action Volunteers were known as Citizen Based Stream Monitoring volunteers, hence the 'CBSM' prefix for various SWIMS items (i.e.: Project IDs, Project Types, Project Names, etc.)):

- The Top-Level Project is titled "Citizen Based Stream Monitoring"
- There are 54 Child Projects. For WAV/CBSM projects, each HUC 8 (a watershed designation) is a project to categorize all WAV/CBSM monitoring sites
- Within each of these 54 HUC 8 projects, each has one to many Child Projects; each monitoring site is its own project in SWIMS
    - CBSM-Castle-Rock (07070003) has 149 Child Projects
    - CBSM-Milwaukee River (04040003) has 273 Child Projects
- Associated to each of these projects could be any number of Stations, People, monitoring reports, along with a variety of other project-level information

Here is an example of that project hierarchy outlined above:



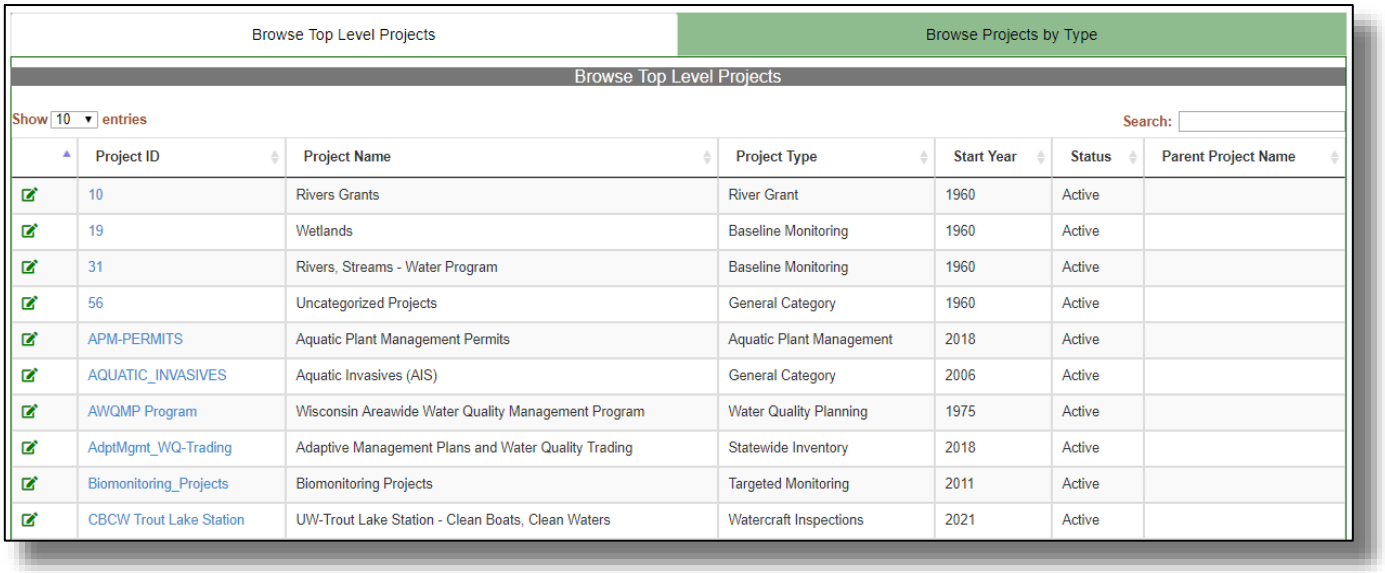
Finding and Browsing Projects or Grants

You can find projects by one of two ways. Either by clicking Browse in the Projects tile of by clicking Find to conduct a search

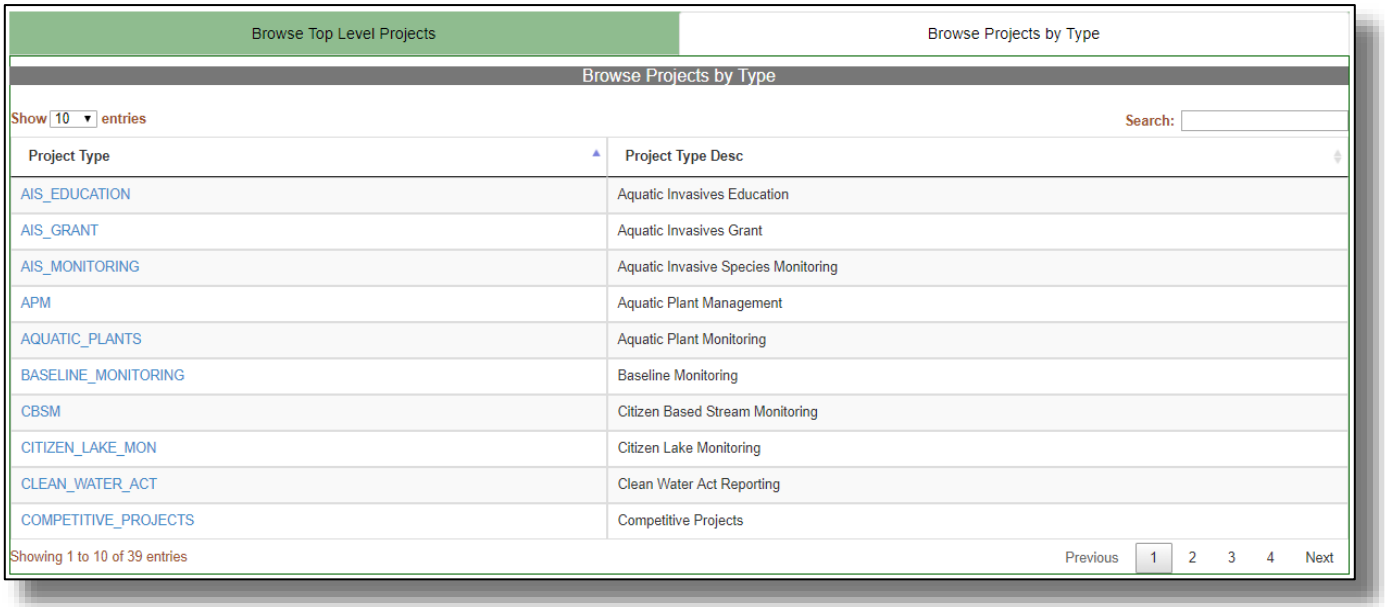
Browse Projects

Browsing projects is different than browsing for stations or fieldwork events. After clicking the “Browse” button, instead of seeing a list of all projects, you will have two different set of project lists:

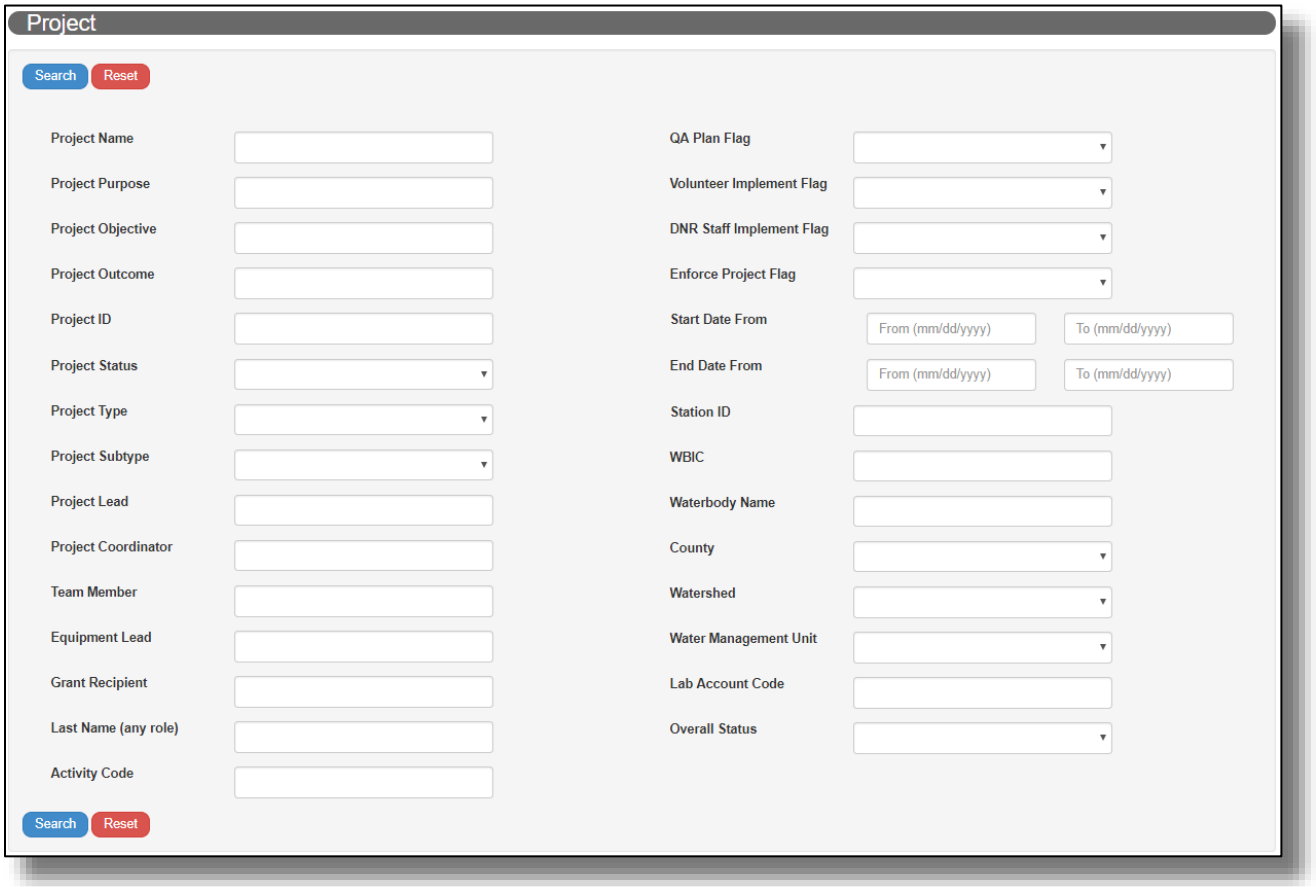
- Browse Top Level Projects: These are projects that do not have a parent project



- Browse Projects by Type:



Find Projects



You can search for projects via a wide range of criteria. The most common criteria to use are:

- Project Name
- Project ID
- Project Type and Subtype
- WBIC and County

Project Name: Project names are specific to that activity/county or monitoring initiative/ waterbody and typically indicate that in the name. For example, a CLMN project for a specific monitoring site on Anvil Lake will have a name like this: Citizen Lake Monitoring - Water Quality - Anvil Lake; Deep Hole

- Typing “Anvil” (or “anvil”; these search boxes are not case sensitive) will return all projects with “Anvil” in the name
- Keep in mind this is a general search, so projects with “anvil” in the name will be returned, including “D**anvil**le” or “Gr**anvil**le”
- An activity such as purple loosestrife biocontrol in Adams County will be called “Purple Loosestrife – Adams County”

Project ID for non-Surface Water Grant projects: Like Project Name, Project IDs are specific to that monitoring project. For example, the same CLMN project above will have a project ID specific to the monitoring location: CLMN-643401.

- CLMN Water Quality projects will always have “CLMN-” followed by the SWIMS Station ID
- WAV projects will always have “CBSM-” followed by the SWIMS Station ID
- CBCW volunteer projects will always have “CBCW-” followed by the WBIC

- Purple Loosestrife Biocontrol projects have “PL-” followed by the County name
    - Note that are older projects that vary for both the project names and IDs

Project ID for Surface Water Grant projects: Surface Water Grant projects will have the Grant Number as the Project ID, such as “CBCW93921” for the “DANE COUNTY: Dane County 2021 CBCW”

Project Type and Subtype: Each project will have a Project Type and, if applicable, a Project Subtype. This helps to dictate what type of project and monitoring initiative that this project is for and the data and information it contains. Within SWIMS, there are numerous Project Types and Project Subtype combinations:

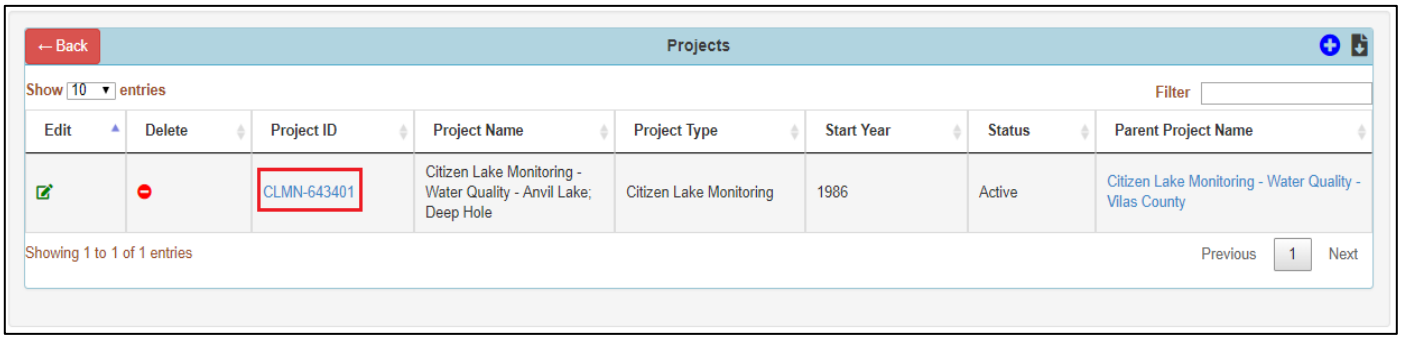
- Project Type: There are 39 different Project Types in SWIMS, including types for:
    - Aquatic Invasives Grant
    - Citizen Based Stream Monitoring
    - Citizen Lake Monitoring
    - Directed Lakes
    - Lakes Grant
    - River Grant
    - Targeted Watershed Approach
    - Watercraft Inspections

- Project Subtype: Each Project Type can have many Project Subtypes. There are 239 different Project Subtypes in SWIMS. Here are just a few of the Project Subtypes for CLMN projects:
    - AIS Presence Monitoring
    - Aquatic Plants
    - Crayfish Monitoring
    - Ice Observations
    - Quality Assurance
    - Water Level Monitoring
    - Water Quality Monitoring
    - Zebra Mussel Monitoring

If searching by both Project Type and Project Subtype, your results may be limited. Instead, try searching by just Project Type to see what types of projects are returned and then use that to adjust your search criteria.

County and WBIC: Like Stations, you can search for projects based on County or WBIC association. Results will only appear if Stations are added to the project that are linked to that County or waterbody / set of waterbodies.

To search for a project, you can use any combination of the criteria explained above or use other criteria you may want to search by.

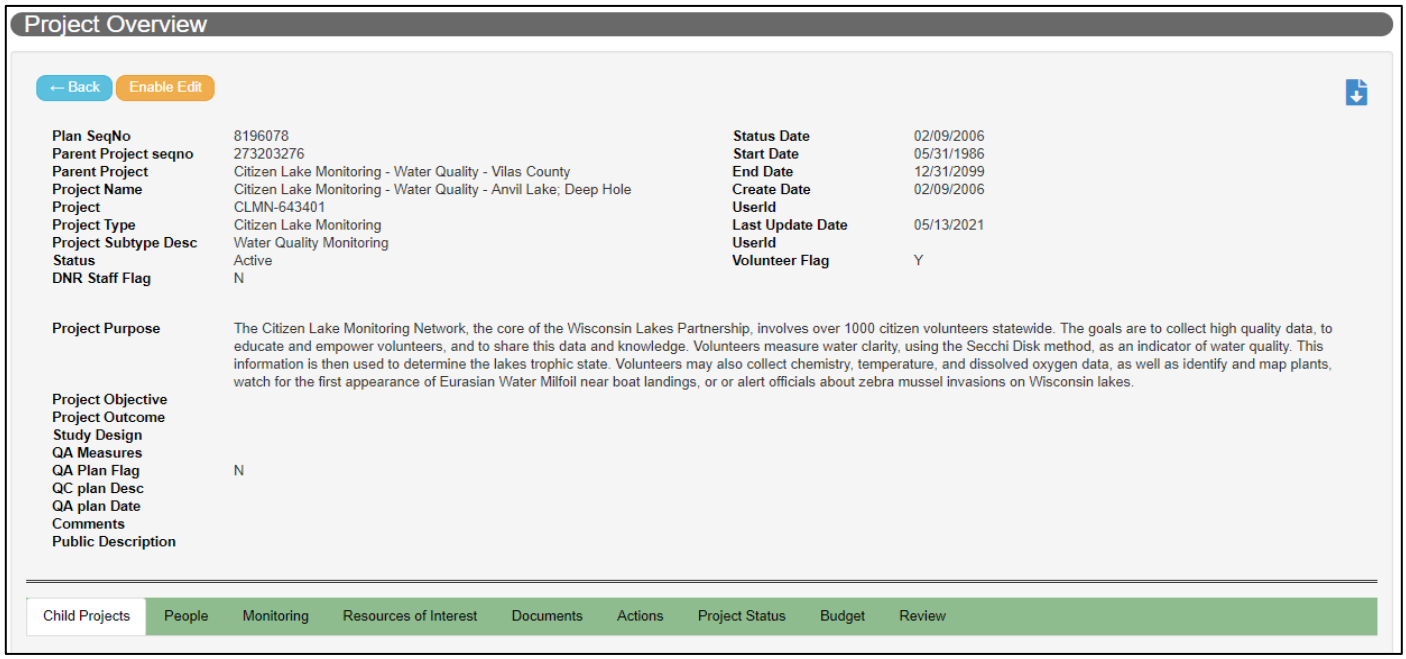


Once search results are returned, click on the Project ID to navigate to the project

Viewing a Project

Like Fieldwork Events, this is a portion that has undergone some substantial layout changes.

Note: Final layout of this page is still in development and may change slightly



Within the green bar, you will find options for:

Child Projects: You will find any projects (child projects) housed underneath this project (parent project)

People: You will find any people associated with the project here

Monitoring: You will find stations, forms, methods, equipment, parameters, lab accounts, fieldwork, and the ability to generate labslips

Resources of Interest: You will find any ROIs associated to the project

Documents: You will find any documents associated to the projects and the ability to add a document

Actions: You will find any existing actions under this tab with the ability to add an action

Project Status: You will find the current project status of the project and the ability to update it. You will also find Project Status Detail giving further details on the project

Budget: This section is primarily used by DNR staff only. You will find the current budget information on the project. You will be able to update the budget. Project Funding will show any funds and their status

Review: Under the review tab, you will be able to see any reviewed notes etc.

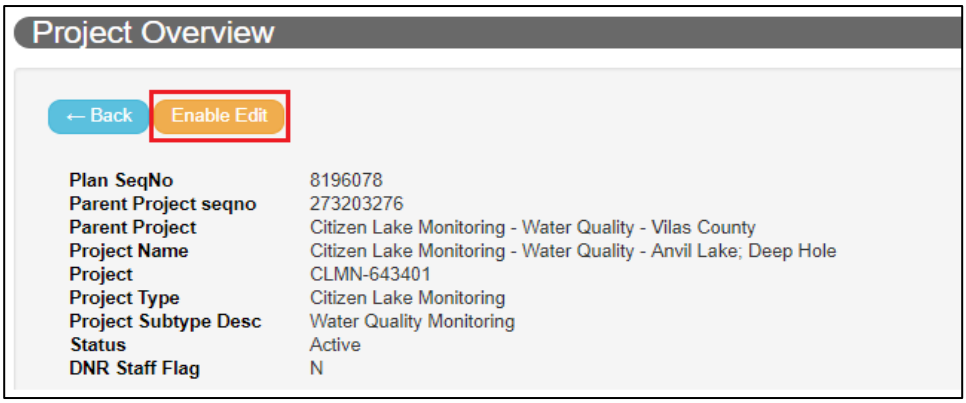
Editing a Project

Your ability to edit a project is based on assigned roles. Reasons for updating a project may include updating a project name for correcting a spelling error, adding or editing any number of items to the project (i.e.: a station, a person, a document, etc.), or updating the status of the project itself.

Example: Adding a Station to A Project

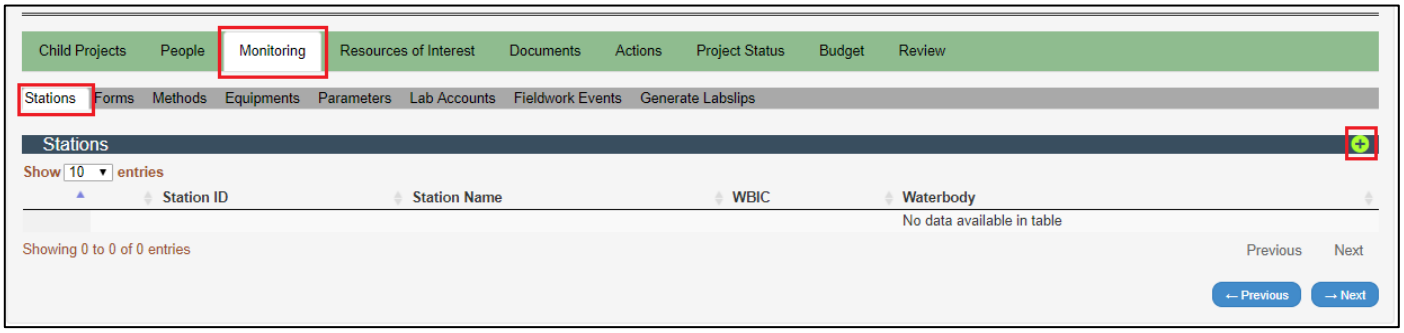
To quickly add data or activity reports to SWIMS for any given project, you might first want to make sure stations are added before data entry

- Once navigated to the project select "Enable Edit"

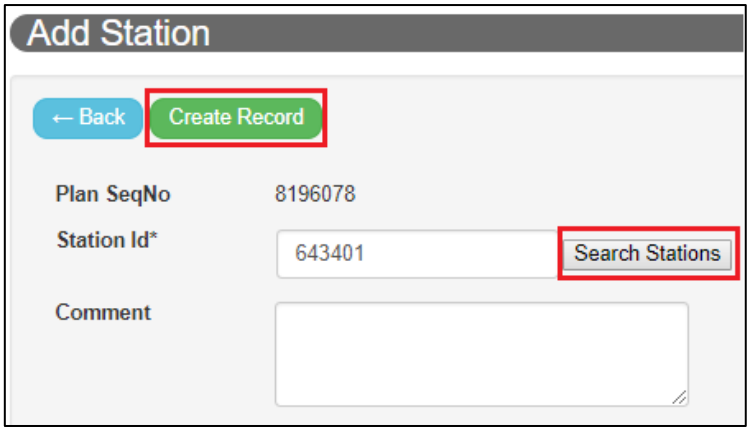


- Scroll down and select "Monitoring" from the green tab
  - If needed, select the Stations sub-tab

- Click the green plus icon to initiate connecting a station to a project



- Either click the **Search Stations** button to search for a station or, if known, type in the station ID in the Station ID field
- Once found, click "Create Record"
- The station will then appear in the list of stations associated to the project



Adding a New Project

In general, contact DNR SWIMS staff if a new project is needed.

Forthcoming Appendices: Creating new CLMN, CBCW (volunteer), WAV projects and what is required information

Resources of Interest (ROI)

A Resource of Interest (ROI) is created in SWIMS to link data to WDNR webpage tables, such as the AIS Locations table, and map viewers, such as the Lakes and AIS Mapping Tool. ROIs cover a range of items. Although the majority are invasive aquatic and wetlands species, ROIs also exist for beaches, dams, boat ordinances, Surface Water Grant locations, and more.

When you report an AIS discovery in a fieldwork event, the ROI is not created immediately. Regular spreadsheets run by the DNR Central Office for new monitoring fieldwork reports are shared with the DNR Regional Coordinators. They then review them and go through ROI creation or adding the new fieldwork to existing ROIs. If people report directly to DNR, the Regional Coordinator will also take steps to create the ROI or update one.

Several factors may impact how quickly you see reports show up on the WDNR tables and viewers. Two common reasons are:

1) Time of year - It can be difficult to keep up with new ROI creation during field season.
2) Species status of Verified vs Observed: Verified species show up on the maps and tables within 24 hours of the ROI being created. Species that are reported as observed will not show up until their status is formally verified as present.

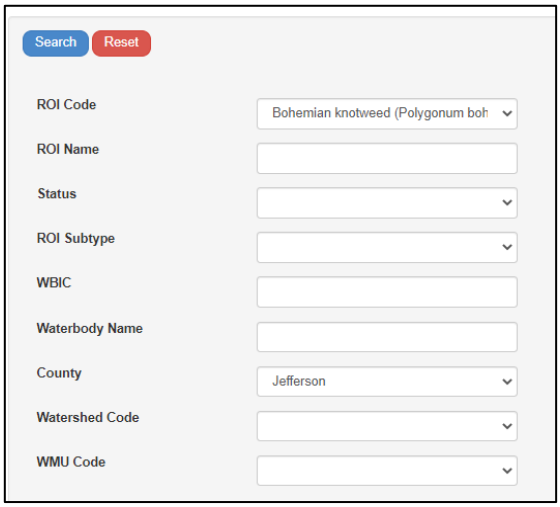
Although you may not find a species listed on one of the WDNR pages or maps, you can find all ROIs and related reports in SWIMS as soon as they are created. This is a valuable resource, especially for AIS Coordinators determining sites they want to monitor, or areas being considered for management project development.

Finding a ROI

On the homepage, click on Resources of Interest and then 'Find.'

Use the ROI Code (simply the name of the species in the dropdown) to choose the species you are looking for.

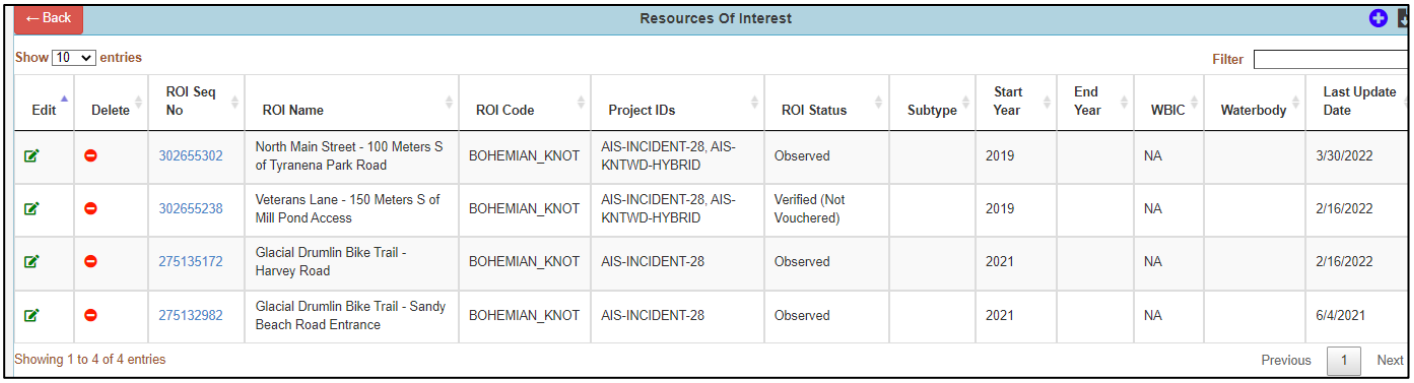
1) If you are interested in learning if a species has been reported in a specific waterbody, add the WBIC (preferred) or Waterbody name. If the waterbody name is common, also choose the county. Click on Search.



2) If you are interested in seeing all of the ROIs in a county for the species, only use the ROI Code and County and then click Search.

This search is for Bohemian knotweed reports in Jefferson County:

Search results:



Edit	Delete	ROI Seq No	ROI Name	ROI Code	Project IDs	ROI Status	Subtype	Start Year	End Year	WBIC	Waterbody	Last Update Date
		302655302	North Main Street - 100 Meters S of Tyranena Park Road	BOHEMIAN_KNOT	AIS-INCIDENT-28, AIS-KNTWD-HYBRID	Observed		2019		NA		3/30/2022
		302655238	Veterans Lane - 150 Meters S of Mill Pond Access	BOHEMIAN_KNOT	AIS-INCIDENT-28, AIS-KNTWD-HYBRID	Verified (Not Vouchered)		2019		NA		2/16/2022
		275135172	Glacial Drumlin Bike Trail - Harvey Road	BOHEMIAN_KNOT	AIS-INCIDENT-28	Observed		2021		NA		2/16/2022
		275132982	Glacial Drumlin Bike Trail - Sandy Beach Road Entrance	BOHEMIAN_KNOT	AIS-INCIDENT-28	Observed		2021		NA		6/4/2021

Depending on your role in SWIMS, you may not see the edit or delete columns. ROIs are rarely deleted and *only with permission* from the WDNR Statewide AIS Monitoring Coordinator.

ROI Seq No (sequence number)- clicking on the number will take you to the ROI's Overview page.

ROI Name - a name for the location, not the species

ROI Code - the species name

Project IDs - any project associated with the ROI: There can be more than one. These are usually the project(s) associated with the fieldwork that led to the ROI creation or any other related reports.

ROI Status - for AIS, the most common are:

- Verified and Vouchered
- Verified (Not Vouchered)
- Observed - does not show up on tables and viewers
- Removed due to insufficient evidence
- No longer observed

Subtype - Some ROIs may have a subtype. Not all ROIs will have a subtype

Start Year - the first year the species or other ROI item was reported or designated

End Year – Not always populated or applicable, but could be the end year of a specific designation

WBIC (Waterbody Identification Code) - A WBIC may be for a lake, river, stream, or combination if they are connected hydrologically. When the ROI is mapped during creation, it will be associated with waterbodies in the hydro layer used by the DNR's internal mapping application. NA - not applicable - indicates a location is not a waterbody, such as a ditch or wetland.

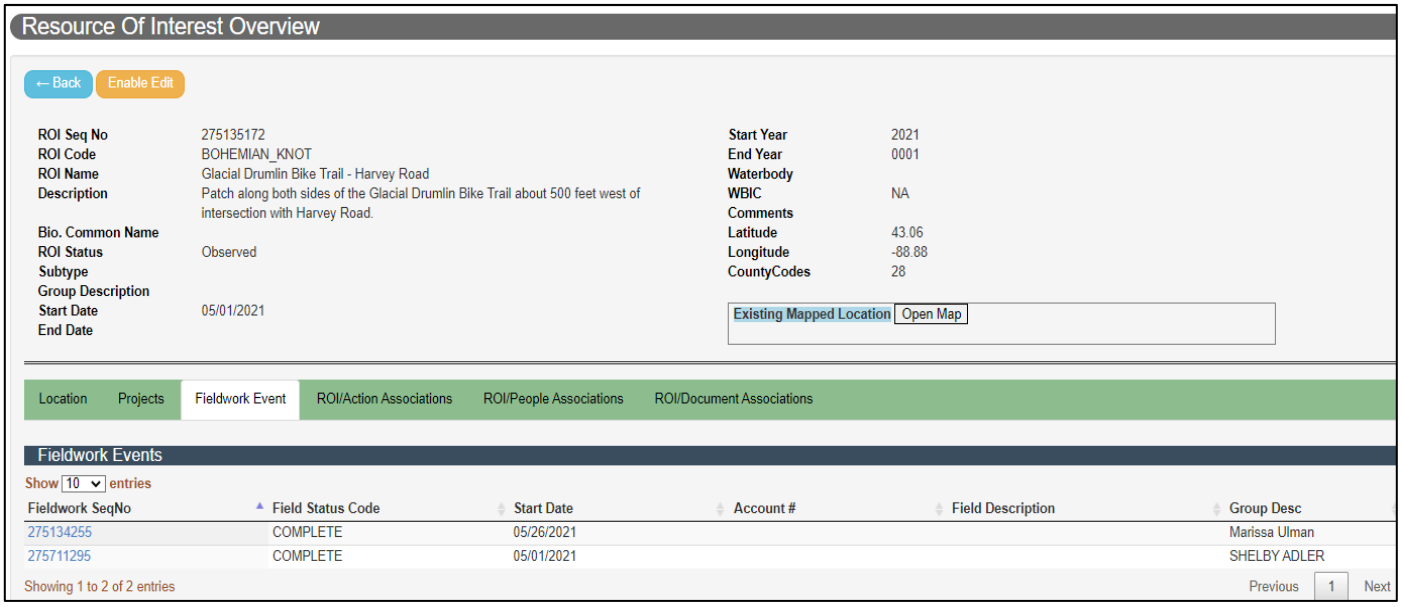
Waterbody - any within the mapped area of the ROI will be listed here

Last Update Date - may be the date of creation or of any updates made later

Viewing a ROI

Once you click on the ROI Seq No, the ROI Overview will open as shown below.

In the overview, you will see a Description and Comments if they were added by the person who created or updated the ROI. In the toolbar (green) at mid-page, you can click on each heading for more detail. One of the most used is 'Fieldwork Event'. Any fieldwork related to the ROI will be listed here. Those with the ability to edit the ROI can add additional fieldwork as they occur. Clicking on the Fieldwork Seq No, will take you to the fieldwork event where you can find more detailed information.



Editing a ROI

If you have a role that allows you to edit ROIs, the steps are similar to all editing in SWIMS.

Map: Only DNR staff are able to edit locations, if it's determined to be necessary.

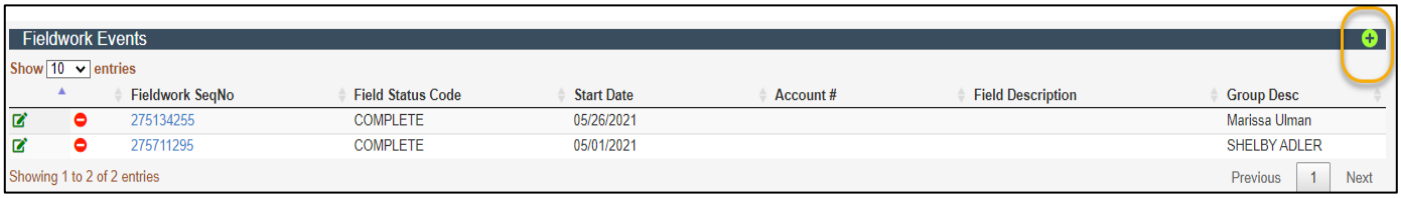
TIP: Open a second screen with SWIMS open on it. This will allow you to search for information you need to copy and paste into your editing screens.

1) With the ROI Overview open, click on 'Enable Edit'
2) For each of the editable fields that are text boxes, edit as necessary. Unless you are WDNR Staff approved to update the status, DO NOT change it.
3) If there are comments that relate to the history of the ROI, add your comments, name, and a date rather than deleting the original comments.

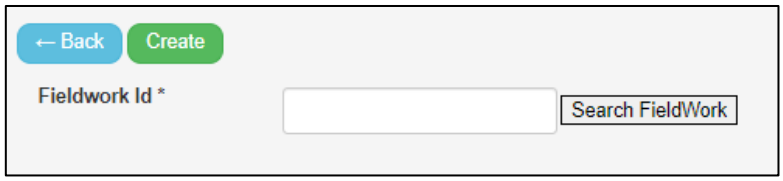
If you are finished editing, click on 'Update' and then 'Disable Edit' at the top of the page. If you need to do more editing just click 'Update' and then continue as shown below.

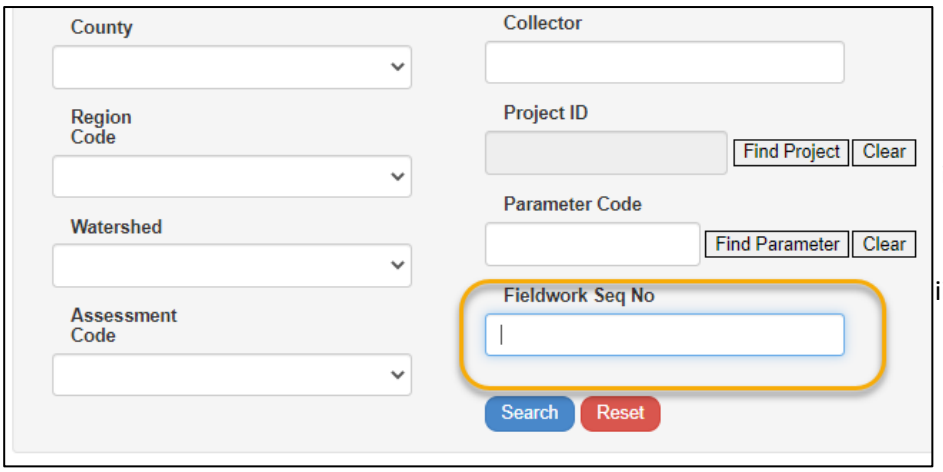
1) To edit items in the toolbar (green) located about mid-page, click on the header for the item to be updated. Fieldwork is the area most frequently updated, so we will use that as an example.

a) Click on the plus sign at the end of the Fieldwork header.



b) On the next page, click on 'Search Fieldwork.'





c) There are many options in the new window for finding your fieldwork event. We cover three common methods below.

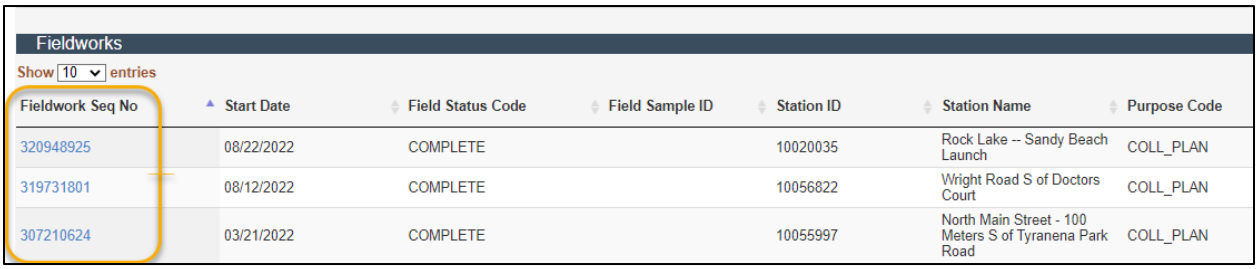
i) **Station ID** option (near top of screen)

ii) **Project option** - Scroll to the bottom of the page to the Project ID option. Click on 'Find Project'.

iii) **Fieldwork Seq No** (sequence number) option - found at the bottom of the query window. Using the Fieldwork Seq No can guarantee you will add the correct fieldwork event. If you have the Fieldwork Seq No, no other search items are needed. Directions for finding it follow below.

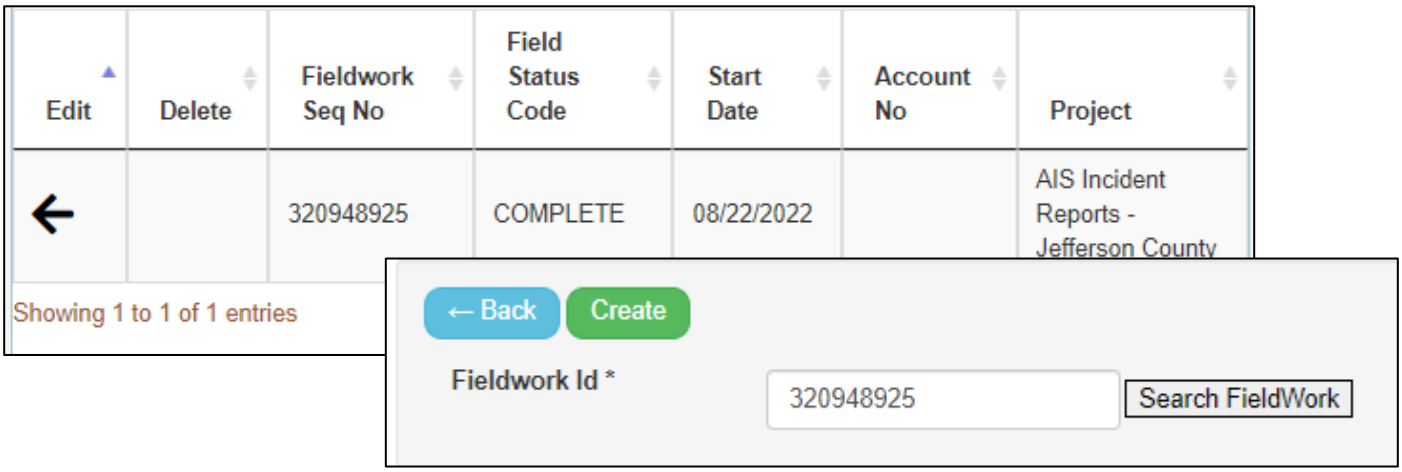
Finding the Fieldwork Seq No

Method One: Open a second window for SWIMS on your computer and look up the project (See the Project Section if needed) associated with the fieldwork you want to add. Open the fieldwork list for the project. The Fieldwork Seq No is in the first column.



Method two: Open a second window for SWIMS on your computer and use any method to open the fieldwork event (see Fieldwork section for directions on finding fieldwork). The number in the URL is the fieldwork sequence number. Copy it to use in the next step.

1. With either method, once you have the number, paste it into the Search window as shown above and click 'Search'. You should only get one result. Click on the arrow and it will move the number into the search box. Now click 'Create.'



d) If you are working from a spreadsheet that already has the Fieldwork Seq No, simply copy and paste it into the Fieldwork Seq No box in the original search window and click on Search. It will pop up with an arrow to add it to the search window. Click on 'Create' and it will be added.

Adding a New ROI

Although only WDNR staff can create ROIs, largely because they are the only ones who can utilize the specific mapping application that ties the ROI to publicly accessible maps and tables, you can help improve ROIs in several ways. The following tips are just a few among those you will find in monitoring specific guidelines for our AIS programs.

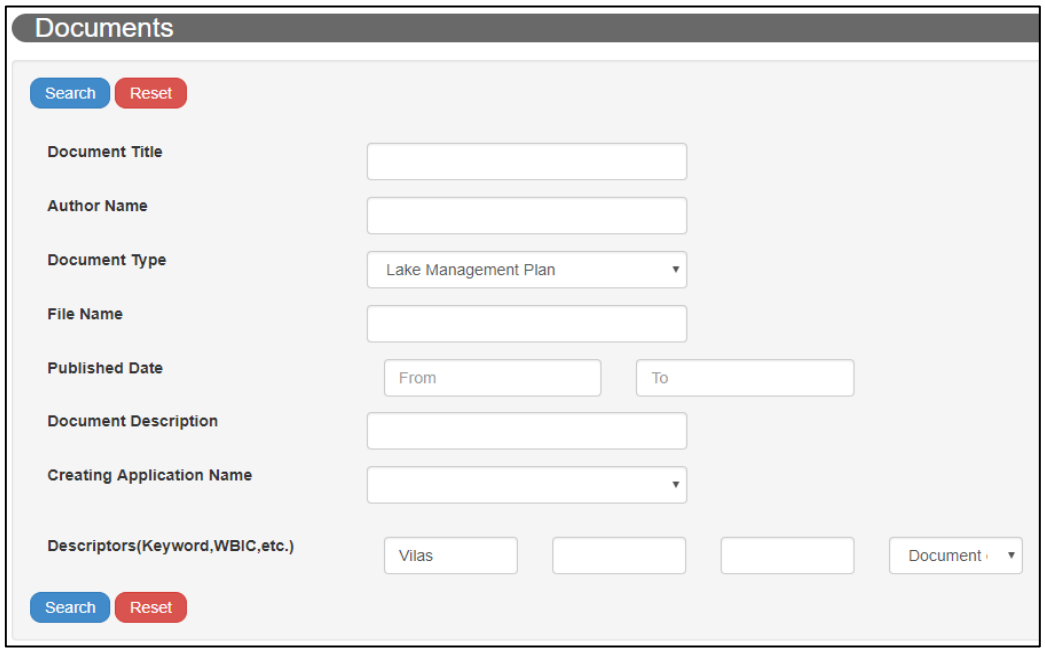
1) When you report AIS, whether on a form or contacting a DNR AIS Coordinator directly, provide a specific location. Like a Station, a ROI can be a point, line or area. If a Station ID exists, use it. If there is not an existing station, GPS coordinates are ideal for reporting. A verbal description of the location, such as a road crossing is also very valuable, especially if it turns out that the GPS coordinates are incorrect.
2) If the ROI only exists for a particular stretch of stream or roadside, give start and end points.
3) Provide photos for verification, either by adding them to your fieldwork event or sending directly to the DNR AIS Coordinator. Follow the AIS Monitoring Photo guidance.
4) Many AIS reports are Early Detection or AIS Incident Reports. They might also result from CLMN or WAV monitoring. If you aren't sure which project the discovery should be reported to, your coordinator can assist
5) If you are exploring ROIs and find that one you expect to exist is missing, fieldwork in an existing ROI isn't associated, or the status is not current, let your DNR AIS Coordinator know. They may still be in the process of creating and updating ROIS, or you may have come across a correctable oversight.

Documents

In SWIMS, documents can be photos of a waterbody, a found AIS, a link to a webpage, a grant deliverable, or lake, river/stream, or watershed report.

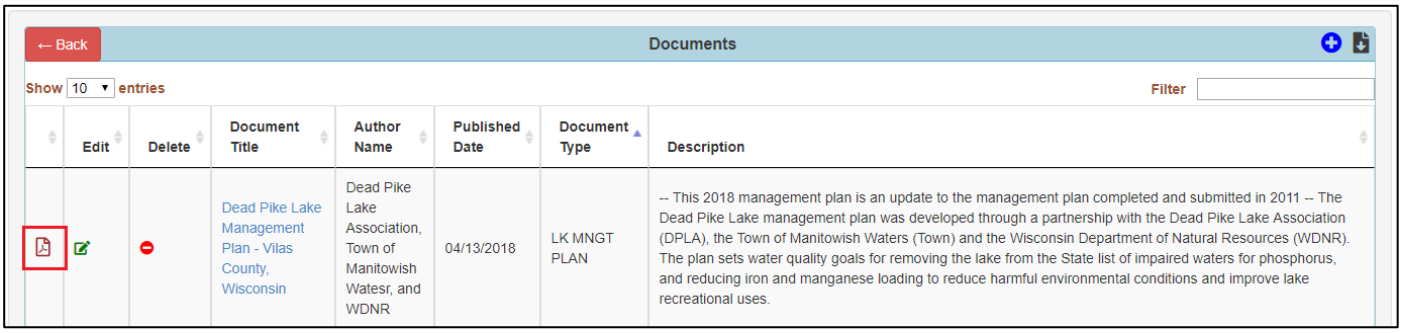
Finding a Document

- From the Search page, click on "Documents"
- Click "Find" in the dropdown
- Search for a document based on known criteria and click Search

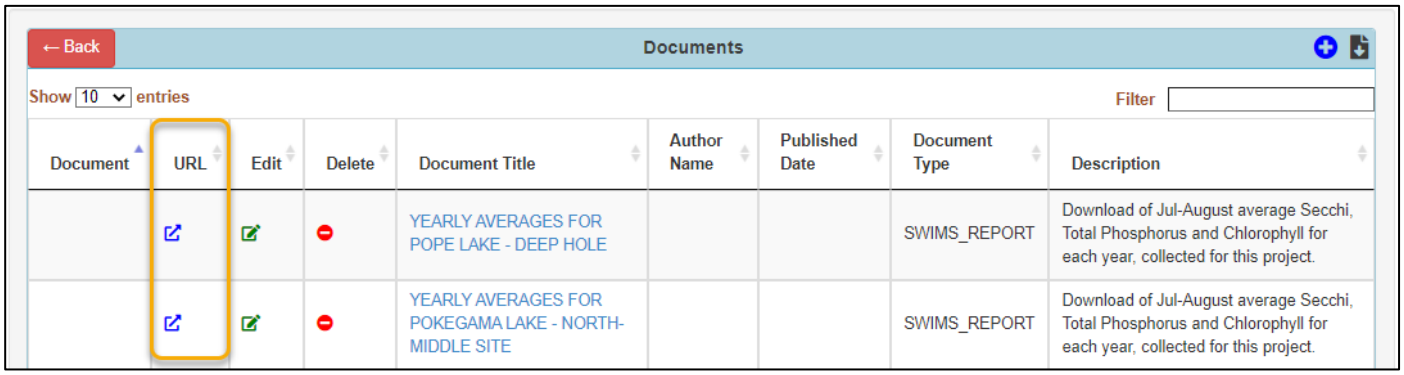


Viewing and Downloading a Document

To download and view the document, click on the icon to the left of the edit column

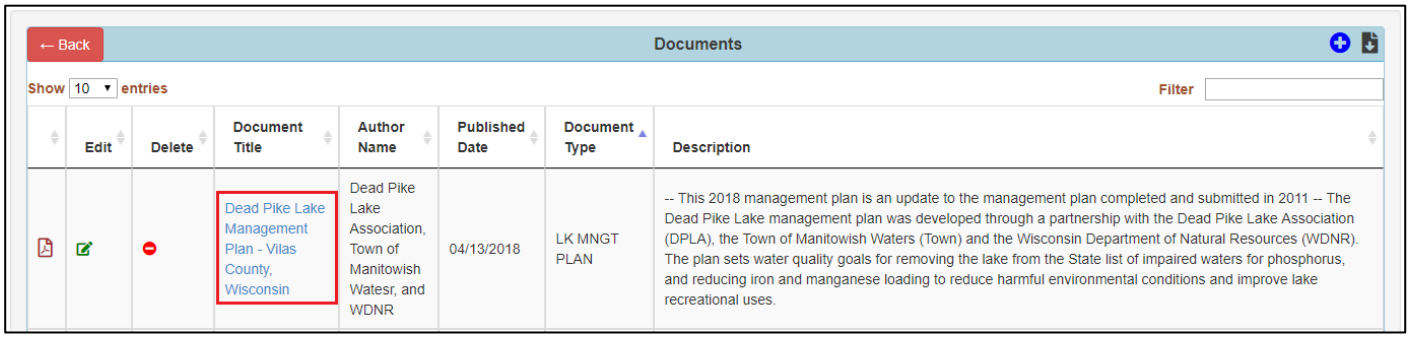


If the document has a URL instead of an uploaded file, click the blue icon in the URL column



Each of the links found when hovering over the Document or URL icons can be copied and pasted to use for future downloads with no login required. When clicked on, those links will automatically download or direct you to that webpage.

To view the information tied to the document, such as Author, Create Date, or file name, click the Document Title



Adding a New Document

SWIMS users can add documents directly to fieldwork events when you enter your data. For example, if you took photos of a population of invasive species you are reporting for a WAV or AIS Monitoring event, you can upload one at the same time you enter the rest of your data. Additional photos can be added to the fieldwork after initial entry. We will look at the general process first.

Basics

Before you start, have the document to be uploaded saved to a file or have a URL you will use available to copy and paste. If your program wants the file named in a specific way, do so. For example, AIS photos are to be named like this:

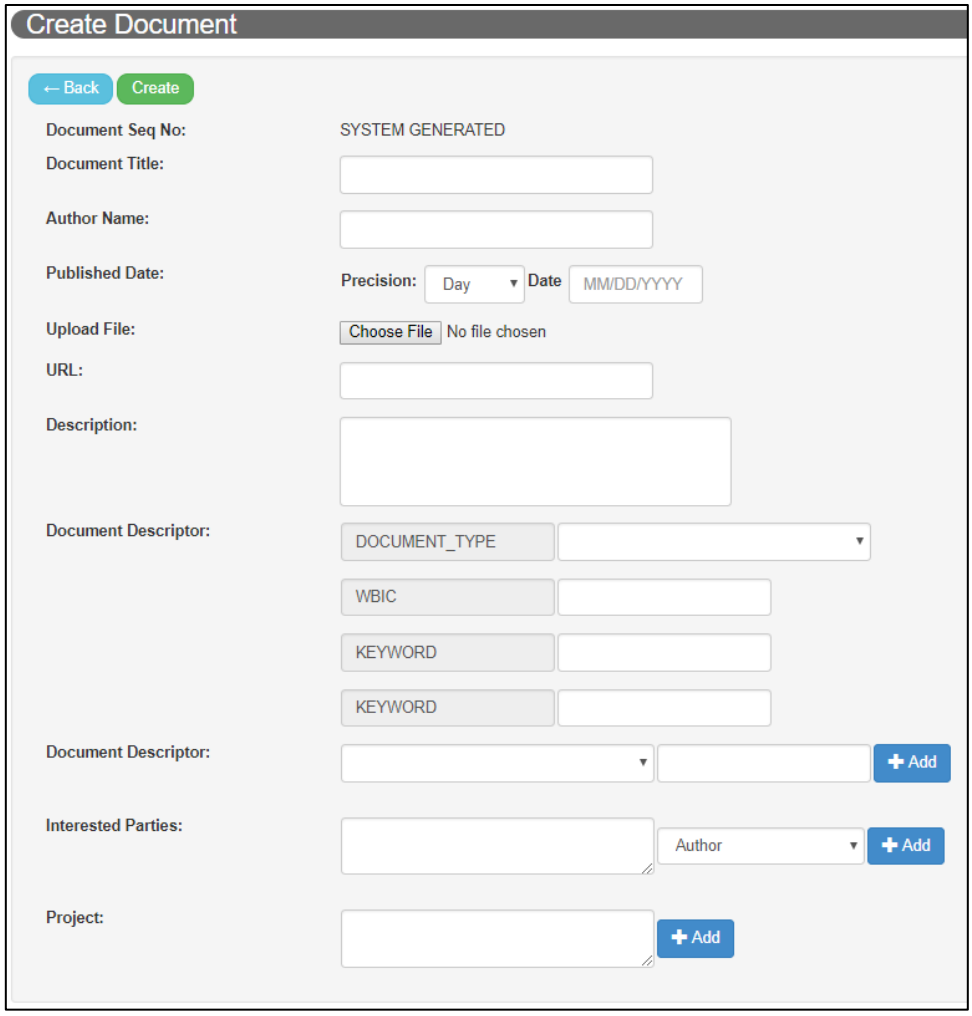
SPSCODE_ COUNTY_YYYYMMDD_ WATERBODY NAME_(WBIC or STATIONID or LATITUDE_LONGITUDE)_COLLECTOR NAME)

Ex: ZM_ Dane_20160805_ Lake Delton_1295200_Graham

Either of these methods will add your document to the SWIMS Digital Library directly. Below, we'll go over how to add documents directly to fieldwork and projects.

1. Click on the Submit Data tab on the homepage toolbar and then on Upload Document OR
2. Click on the Documents module tab and then on 'New.'
3. Once all the information is complete, click on 'Create.' The document will then be added to the SWIMS Document Library.

Fill in as much information as possible when uploading a document to SWIMS:



- **Document title**. Be exact when typing in the title of the document and if you need to ad-lib use brackets (i.e.: [ ]). This helps us find the document more easily. You can use the file name of your document as a title.

- **Author Name**. Use the name of the author, photographer, etc. Don't use the name of the submitter unless they are also the author. This will probably be a person. In some cases, it may be city, town, lake group, or a consultant. If you aren't sure, type "Unknown".

- **Published Date:** Determine if there is an actual date associated with the document. If not, use the date of upload and note in the comments section, that the actual date is unknown. For example, "Publication date used is a placeholder. Estimated date of actual publication is June 2022."

- **Upload File or URL**: Find the correct file on your computer to upload or paste in a URL.

- **Description**: General description of the document; it should be short and have pertinent information: What is contained in this document? Is it a report, photo, a map, water quality data?

- **Document descriptors**: These label a document in a way that makes the document more easily found in a search. To add more options, click the "Add" button
    - **WBIC**: If a document is associated with a particular waterbody then the WBIC (Waterbody Identification Code) should be entered.

- **Keywords**: These are text labels that can be the name of a species, lake or river name, or any word that people are likely to use in a search
- Other commonly used descriptors available in the dropdown:
    - Species
    - County
    - Document type (for reports, emails, spreadsheets, etc.)
    - Resource of Interest Code (i.e.: **SWF** for spiny waterflea)

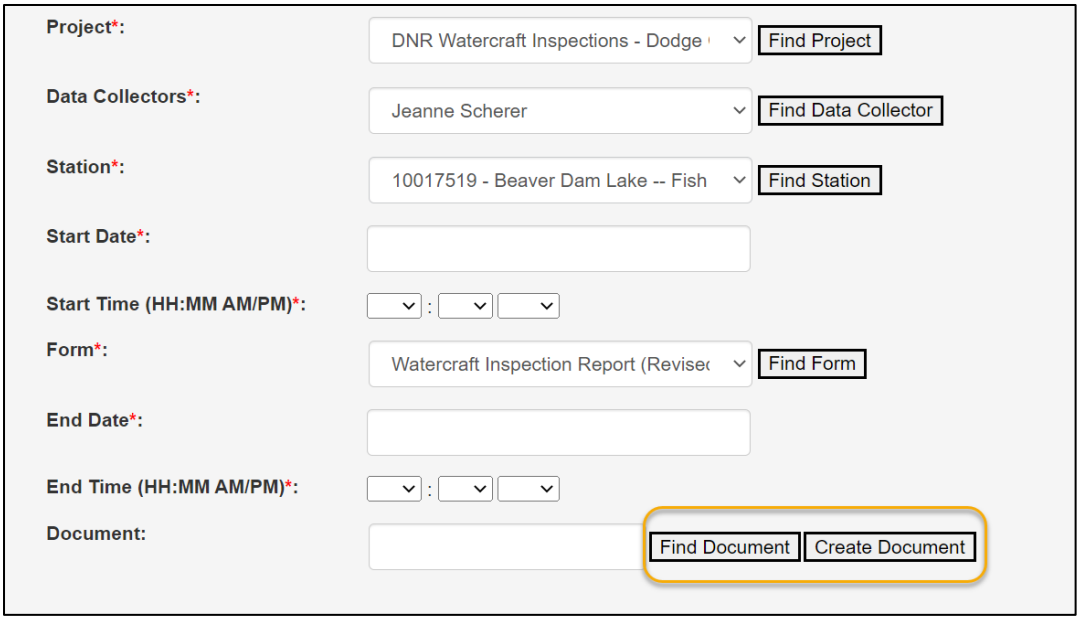
- **Interested Parties:** this is often used for identifying the person who verified an AIS identification, a DNR staff person or a program coordinator, the author, etc. The person must have a SWIMS profile to be added. If you wish to list people who are not in SWIMS, do so in the comments or description sections.

- **Project:** Adding a project here will associate the document to it. Once associated, you will be able to see the document listed on the project profile page. If adding the document while entering a fieldwork event, it should be the same project associated with that fieldwork.

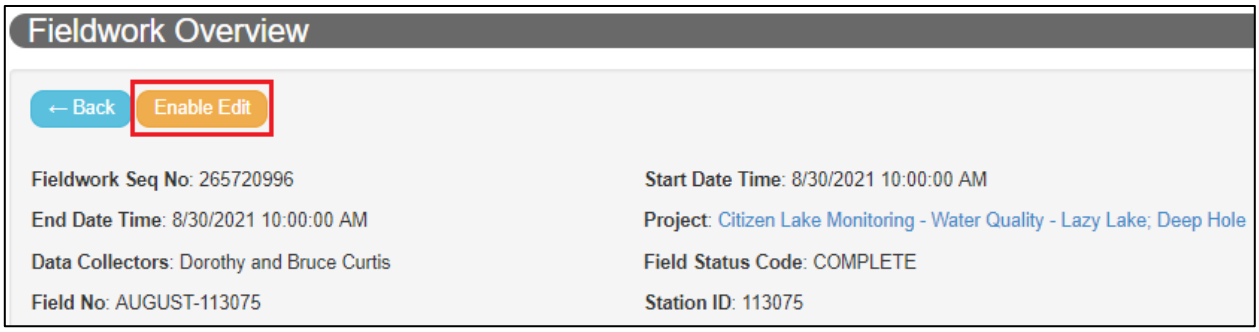
NEW: Adding a Document to a Fieldwork Event

During Data Entry, assuming you have your photo or other document already saved to a file, click on 'Create Document' and follow the same steps as listed above to complete the form.

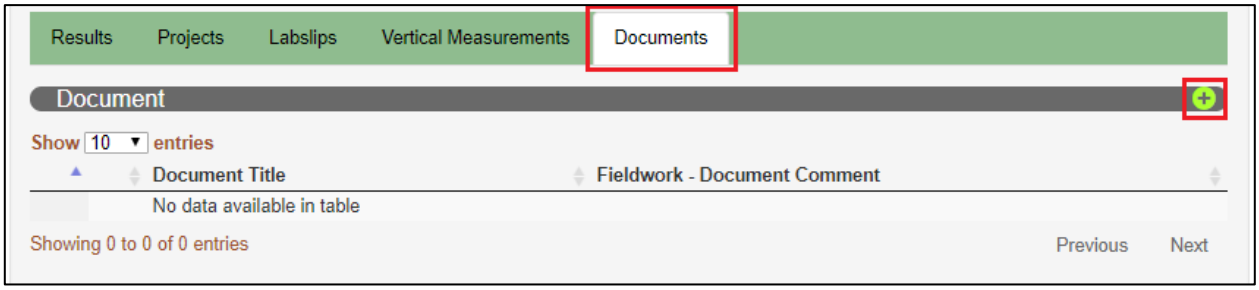
- If there is a document already saved to the SWIMS digital library that you wish to use, you can click on 'Find Document' and use the query window to find and add it.



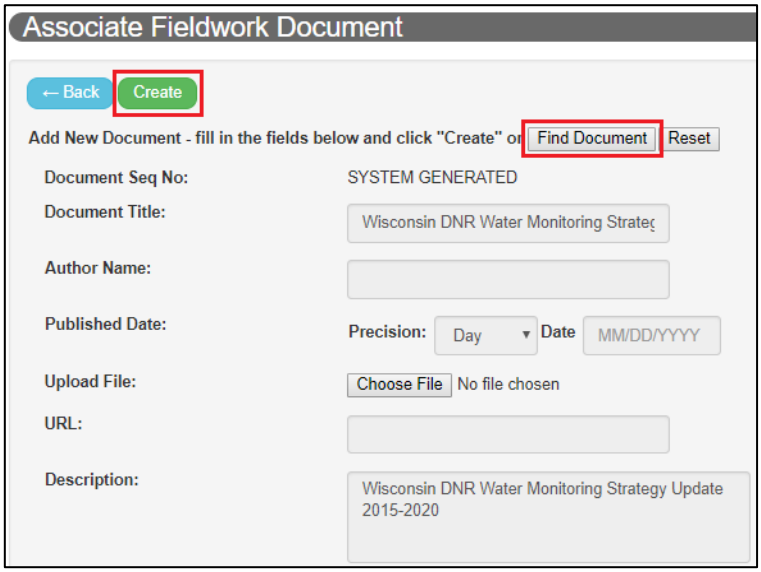
- To add a document to an existing fieldwork event, navigate to the fieldwork event by finding it on the related project page or your list of submitted fieldwork (see Fieldwork section). Click on the fieldwork event to open it and then click 'Enable Edit'.



- Scroll down and select "Documents" and click on the green "plus sign" button



- You can either enter a new document from this screen or search for an existing document by clicking the "Find Document" button



- Click "Create" to save that Fieldwork Document association. You will now find it under the Documents tab.

Adding documents to a project

Many documents can be valuable when added to a project: reports, photos, training lists, etc.

1. Navigate to your project
2. Click on 'Enable Edit'
3. Scroll down to the toolbar under the Public Description and click on 'Documents'
4. Click on the plus sign at the end of the Documents toolbar and add your document as described above