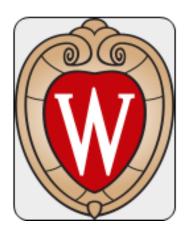
SWIMS User Guide - WAV Basics

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Welcome to the Surface Water Integrated Monitoring System (SWIMS)

Maybe you've just put in your boat inspection hours at the boat launch, spent a couple of hours enjoying a cool stream where you measured transparency and flow, or boated out to the center of your favorite lake to get a Secchi disc reading and collect a water sample. You carefully noted the data you've collected on your program's recording form, and now it's time to enter it into SWIMS.

When you visit the SWIMS database and enter your data, you are recording your work the same way as the statewide Aquatic Invasive Species (AIS) County Coordinators, regional Stream or Lake Biologists, and other paid staff. Just like those folks, your efforts contribute to a knowledge base that, through the database, becomes available to professionals and the general public on the DNR website in the form of tables of information and interactive maps. The data collected in SWIMS is also crucial to federal scientists and regulators because the data are shared through SWIMS with the Environmental Protection Agency for Clean Water Act required reporting.

Let us reassure you about some top concerns we often hear from volunteers and even some professionals:

- 1) You can't break the database
- 2) If you make a mistake, it can be corrected 99% of the time

Getting Started with SWIMS

Access to SWIMS is role-based. Everyone who has access to SWIMS can find, view and browse data. The ability to submit, edit and delete data depend on the assigned user roles and are granted based on the users' needs.

SWIMS profile: Everyone who submits data to SWIMS needs to have a SWIMS profile (account). Your SWIMS profile connects you to your monitoring projects, such as the one for your specific waterbody or specific grant. You can be involved in one project or many, but you will only need one SWIMS profile. You will need to provide your name, address, phone number, email address, and, most importantly, a <u>WAMS ID.</u>

WAMS ID: The WAMS ID and password will be your SWIMS ID (username) and password for access to the database.

Step 1: Go to the and register for a WAMS ID. For more detailed directions, click here

Step 2: Send your new WAMS ID (username) to your program coordinator, local coordinator or the DNRSWIMS@Wisconsin.gov inbox to create or set up your SWIMS account. You will be able to log in to SWIMS once your account/profile is created and linked to your new WAMS ID. They will not need your password.

Note: If you have issues with getting or using the WAMS ID and password, you must use the WAMS website's HELP feature to get assistance. DNR Staff and program coordinators cannot change your WAMS ID or password.

Step 3: You are ready to log in to SWIMS!

Because this guide is focused on Volunteer Basics, we will focus on what's most important to you: Submitting Data, Editing Data, and Viewing Data. If you are interested in exploring SWIMS further, contact your program coordinator for more information about our detailed guide.

Logging In and Your First Visit To SWIMS

Once your SWIMS profile is created and linked to your WAMS ID, you can log into SWIMS and get started. *If you try to sign in and get an error message*, it is probably because the WAMS ID still needs to be added to your profile. You can contact your program coordinator to check.

Tips:

- 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.

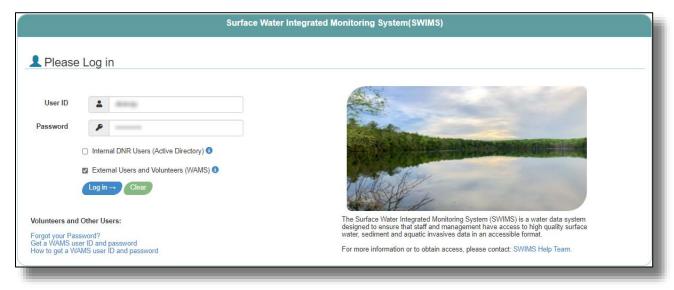
Logging into SWIMS

Click on this https://apps.dnr.wi.gov/swims/

Type your username and password, check the box for 'External Users and Volunteers (WAMS),' and click Log in.

You may also want to save the page to your favorites or bookmark it in your browser.

If you see "Invalid login attempt," it is generally because you forgot to click the "External Users" box.



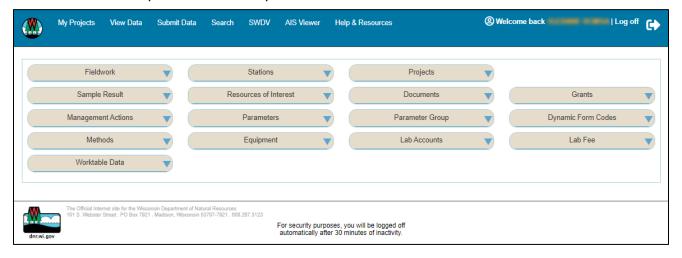
If you can't sign in and know your WAMS has been added, try clearing your browsers cache using the following steps:

- Process 1
 - o Clear your browser cache
 - o Attempt to sign into SWIMS again
- **Process 2** (If process 1 does not work.)
 - Clear your browser cache
 - o Reset your WAMS password
 - o Attempt to sign into SWIMS again

When you need help, start with your coordinator. For general assistance, you may also contact DNRSWIMS@Wisconsin.gov.

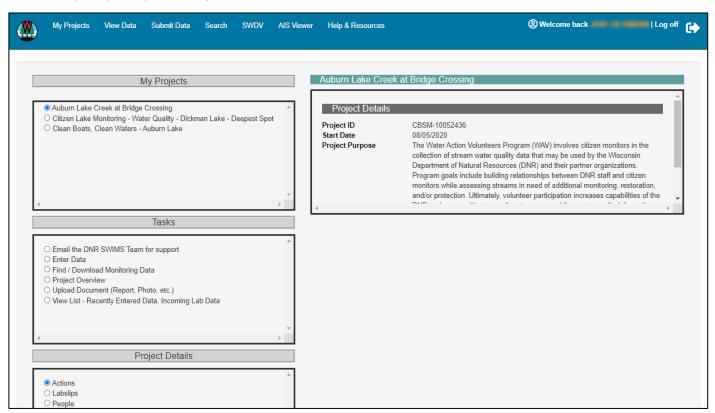
The Search Page - The main landing page

The Search page will be the first think The tabs on the table may vary from what is shown below. When a user's profile is set up, they are assigned a SWIMS User Role that gives them access to various functions in the database. Your role also determines your view and ability to use some tabs.



The My Projects Page

An area where you can see a listing of your current and active projects in SWIMS with the ability to perform certain Tasks and quickly see specific Project Details



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
ď	•	<u>322756005</u>	COMPLETE
E	•	322755925	COMPLETE

Edit	Delete [‡]	Fieldwork Seq No	Field Status Code
ď	0	<u>322756005</u>	COMPLETE
ď	0	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 Errors and Messages

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:

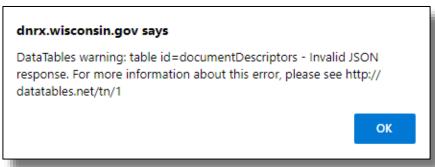
Error message: "Invalid login attempt. User ID valid, but not yet recognized in SWIMS":

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.

Invalid login attempt. User ID valid, but not recognized in SWIMS						
User ID	▲ (filteranspla)					
Password	Password					
☐ Internal DNR Users (Active Directory) 1						
External Users and Volunteers (WAMS) 1						
Log in → Clear						

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.

SWIMS Application Error

An error occurred while processing your request

You may not be authorized to view this area, need to adjust your search criteria, or have encountered a database error. If this error persists, please reach out to the DNR SWIMS Team at DNRSWIMS@Wisconsin.gov with the exact steps taken that resulted in this error.



The Official Internet site for the Wisconsin Department of Natural Resources

For security purposes, you will be logged off automatically after 30 minutes of inactivity.

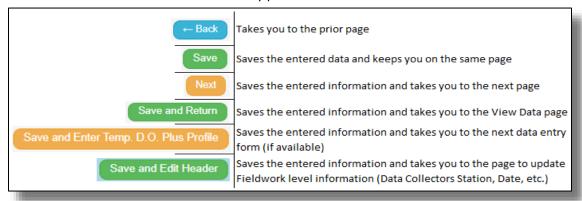
Water Action Volunteer Data Entry

Volunteers usually collect data in the field on a paper form. In SWIMS, that paper form is replicated electronically for data entry into the system. Each time you submit data to SWIMS, a new **Fieldwork Event** is created.

These directions will work whether you add data for yourself or someone else.

Data Entry Basics

Example of common buttons found in the data entry process:



Adding a New Stream Monitoring Event

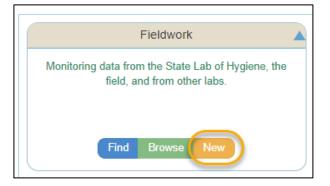
1. Creating a new Fieldwork Event

To enter a new fieldwork event to SWIMS, you can either:

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



- Click the Fieldwork module and select New



2. Select Project, Data Collectors, Station, and Date / Time

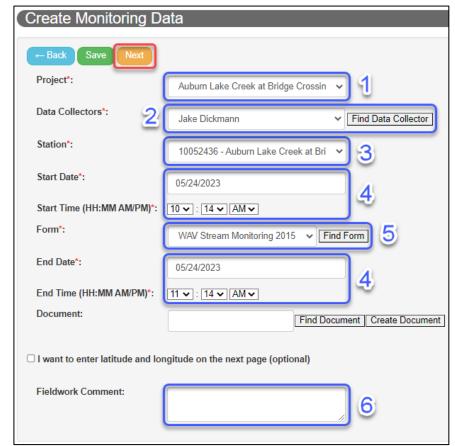
This is the standard view once you click on 'New' to submit your data. The default information will vary for each person and is based on your projects, where they take place, and who generally collects the data. If the information fields are empty or the information shown is not for the project you want, you need to use the dropdown arrows to select the correct project, data collectors, station, etc.

- 1. Select the correct project from the **Project** dropdown box. This should be the same as the name of your monitoring site(s)
- 2. Select the data collectors (stream monitors) from the **Data Collectors** dropdown
 - a. If not located, see the section on <u>How to add Data Collectors and create new Data Collector Groups</u> for more information
- 3. Confirm that the monitoring station from the **Station** dropdown is the same as the **Project** name
 - a. Report missing or incorrect station information to the WAV program and wait until the correct project and station information are available before entering your monitoring data
- 4. Enter the **Start Date** and **Start Time** of the monitoring event
 - a. Once the **Start Time** is entered, the **End Date** will auto populate to the same **Start Date**, but **End Time** will default to 11:59 PM. Change the End Time
- 5. Make sure the "WAV Stream Monitoring 2015" form is selected from the Form dropdown
- 6. Enter any comments into the **Fieldwork Comment** box (i.e. weather, wildlife, additional names of inspectors, etc.)

NEW: 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.

Once everything on the first page has been completed, you can either click 'Save' or 'Next'



- 'Save' will save your data and keep you on the same page
- 'Next' will save your data and move you to the next data entry page

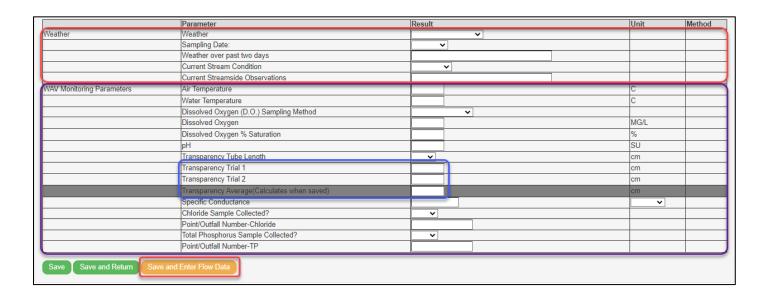
3. Enter your Weather, Temp., D.O., etc. Data

Enter your monitoring data from the red (Weather) and purple (WAV Monitoring Parameters) boxes in the *Result* column

- Enter the values recorded for each measured parameter. If you did not monitor the parameter, LEAVE IT BLANK! Entering a '0' into SWIMS does not indicate that you did not monitor it; it indicates that you got a result of '0'!
- Use the dropdown menus when available to record your response
- Values in the grey lines will auto calculate as you enter data throughout the form
 - As you type your second transparency trial (Transparency Trial 2), the value in the Transparency
 Average column will auto calculate

After all the monitoring data is entered, you can either click:

- 'Save'; will save your data and keep you on the same page
- 'Save and Return'; will save your data and direct you to the *View Data* page
- 'Save and Enter Flow Data'; will save your data and move you to the next data entry page



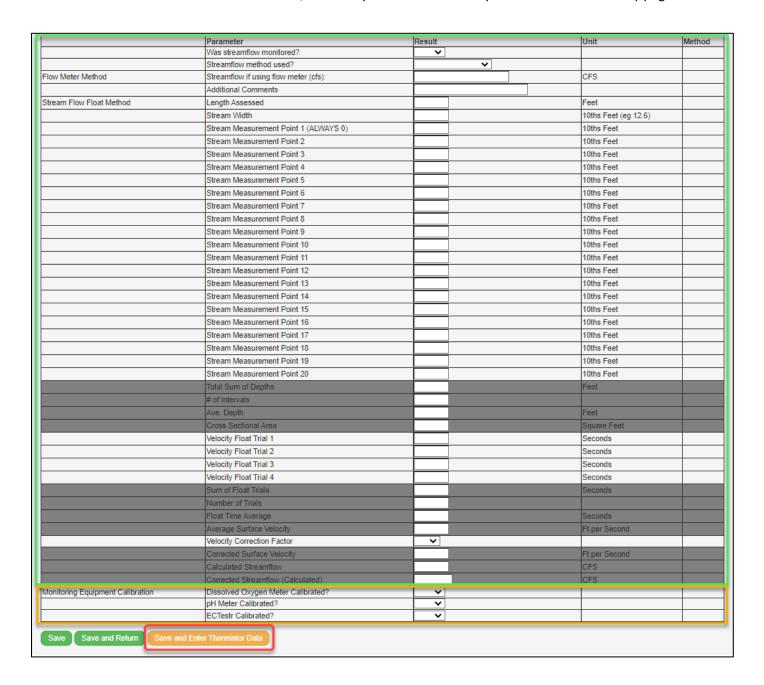
4. Enter your Streamflow and Equipment Calibration Data

On this page, you can enter data from the green box (Streamflow Data) and data from the orange box (Calibration information).

- If you did not monitor the streamflow, answer 'No' to the 'Was streamflow monitored?' question at the top of the page and LEAVE THE REST BLANK!
- Values in the grey lines will auto calculate as you enter data throughout the form
- Use the dropdown menus to indicate if your meters were calibrated or not
- If you did not monitor for road salt, leave the ECTestr line blank

REMEMBER, 0 cannot be the last value for a stream measurement point

- 'Save'; will save your data and keep you on the same page
- 'Save and Return'; will save your data and direct you to the View Data page
- 'Save and Enter Thermistor Data'; will save your data and move you to the next data entry page

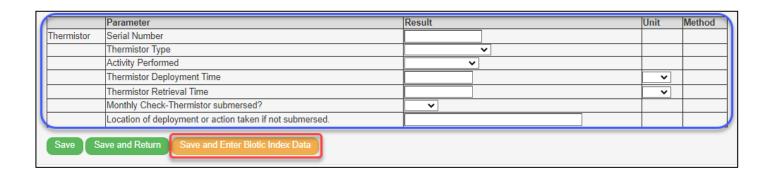


5. Enter your Thermistor Data

On this page, you can enter data from the blue box (Continuous Temperature Monitoring Device) from the back of the datasheet

- Use the dropdown menus (when available) to record your responses
- Please remember to enter the time of deployment or retrieval of the thermistor (be sure to enter AM or PM using the dropdown menu to the right)
 - o If you are doing the monthly check, LEAVE THOSE BLANK!

- 'Save'; will save your data and keep you on the same page
- 'Save and Return'; will save your data and direct you to the View Data page
- 'Save and Enter Biotic Index Data'; will save your data and move you to the next data entry page

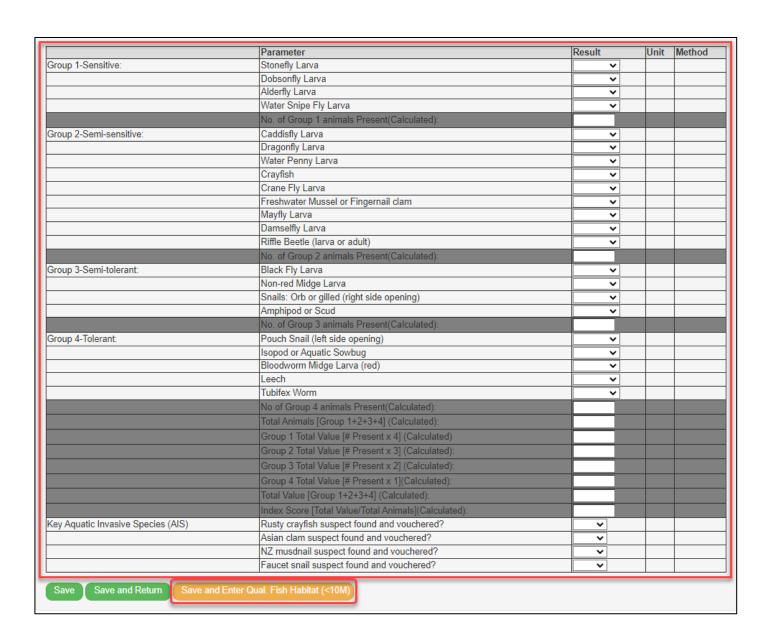


6. Enter your Biotic Index Data

On this page, you can enter data from the red box (Biotic Index Data) from the back of the datasheet

- Enter the values recorded for each measured parameter. If you did not monitor the parameter, LEAVE IT BLANK!
- Use the dropdown menus when available to record your response
- Values in the grey lines will auto calculate as you enter data throughout the form

- 'Save'; will save your data and keep you on the same page
- 'Save and Return'; will save your data and direct you to the View Data page
- 'Save and Enter Qual. Fish Habitat (<10M)'; will save your data and move you to the next data entry page



7. Enter your Stream Habitat Data

7a. Streams < 10m Wide

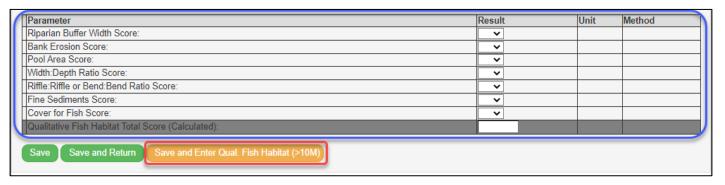
If your stream is >10m wide, then do not enter any data into this form and click the 'Save and Enter Qual. Fish Habitat (>10M)' button

This page is for entering habitat data for streams <10m wide (separate data sheet)

- Enter the values recorded for each measured parameter. If you did not monitor the parameter, LEAVE IT BLANK!
- Use the dropdown menus when available to record your response
- Values in the grey lines will auto calculate as you enter data throughout the form

After all the monitoring data is entered, you can either click:

- 'Save'; will save your data and keep you on the same page
- 'Save and Return'; will save your data and direct you to the *View Data* page
- 'Save and Enter Qual. Fish Habitat (>10M)'; will save your data and move you to the next data entry page

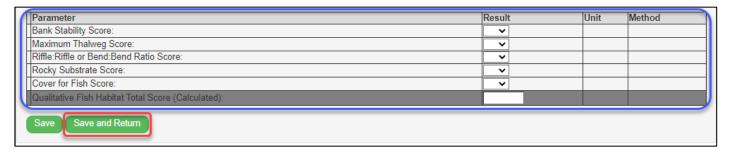


7b. Streams > 10m Wide

This page is for entering habitat data for streams >10m wide (separate data sheet)

- Enter the values recorded for each measured parameter. If you did not monitor the parameter, LEAVE IT BLANK!
- Use the dropdown menus when available to record your response
- Values in the grey lines will auto calculate as you enter data throughout the form

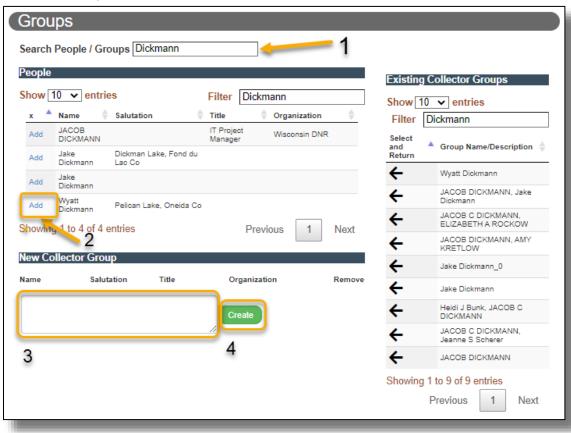
- 'Save'; will save your data and keep you on the same page
- 'Save and Return'; will save your data and direct you to the View Data page



How to add Data Collectors and create new Data Collector Groups

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:

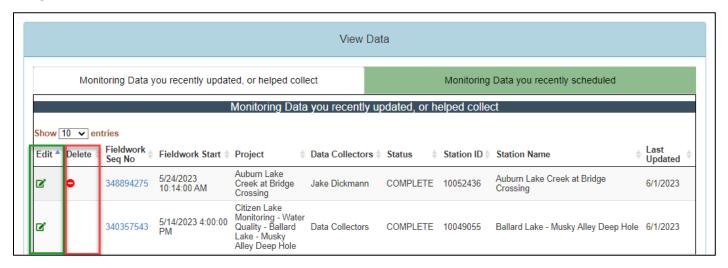
- 1) Click on the *Find Data Collector* button next to the dropdown. The query window below will open.
- 2) Type the last name into the Search People/Groups box. The system will immediately give search results, provided the spelling is the same. You can also use portions of a name to search.
- 3) Click '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.
 - a) If the person does not show up on the list and helps regularly, they should have a profile added. If you are still looking for the person, contact your statewide program, county or DNR coordinator to have them added to SWIMS.
 - b) If the help was a one-time 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 Data Collectors.
- 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.



Tip: Notice that on the right, there can already be a list of the person paired with other data collectors that you can use. Click on the arrow to add one of these existing groups. People who have changed jobs may be listed from an old profile. DNR profile names are in all caps.

Viewing and Editing Your Recently Entered Data

Once you click 'Save and Return,' the **View Data** page will display rows of all the fieldwork you have entered data for or are associated with. The fieldwork event you just entered will be at the top. You can click on any table heading to reorganize the list of fieldwork events.



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 pencil icon in the *Edit* column. This will allow you to edit as needed and save the fieldwork event again. If you run into an issue, contact your program coordinator.

Deleting Data:

If you made major errors and want to start over, you can click the delete icon in the *Delete* column. This icon will only appear for Field 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. As mentioned above, the order will change each time you open one of your fieldwork events and close it again, moving it to the top regardless of where you first found it. In other words, if you opened the fieldwork listed fourth, once you close it, it will be listed first.

When in doubt about editing or deleting, check with your program coordinator or email DNRSWIMS@wisconsin.gov.

You can access the View Data page at any time by clicking the 'View Data' tab near the top



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 questions, or resolve the issues, contact DNRSWIMS@Wisconsin.gov.

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.

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

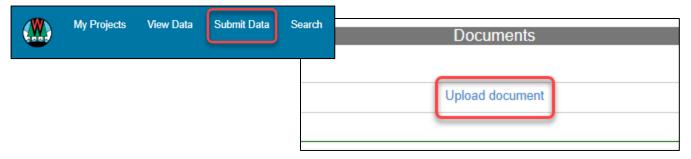
Before you start, have the document to be uploaded saved to a file or have a URL you will use available to copy and paste. If your program wants the file named in a specific way, do so. For example, AIS photos are to be named like this:

SPSCODE_COUNTY_YYYMMDD_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 SWIMS. Below, we'll go over how to add documents directly to fieldwork

1. Click on Submit Data in the Toolbar, then on Upload Document under the Documents portion



2. Click the Fieldwork module and select New



Fill in as much information as possible when uploading a document to SWIMS. Below are the most important parts to include:

SYSTEM GENERATED

Day

Choose File No file chosen

DOCUMENT TYPE

WBIC

KEYWORD

KEYWORD

▼ Date

MM/DD/YYYY

Precision:

Create Document

← Back Create

Document Seq No:

Document Title:

Author Name:

Published Date:

Upload File:

Description:

Document Descriptor:

Document Descriptor:

URL:

- **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.
- **Published Date:** Typically, the date of your monitoring event
- 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

Interested Parties: + Add Author Project: + Add is contained in this document? Is it a report, photo, a map, water quality data?

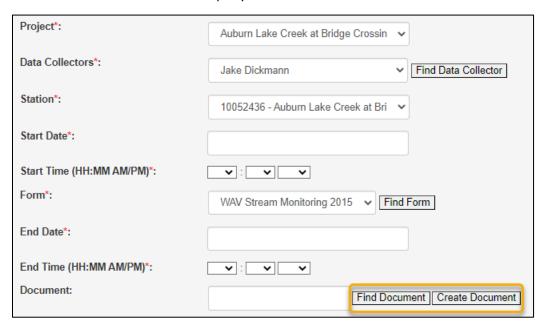
- **Document descriptors**: These label a document in a way that makes the document more easily found in a search. To add more options, click the "Add" button
 - WBIC: If a document is associated with a particular waterbody then the WBIC (Waterbody Identification Code) should be entered.
 - Keywords: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

+ Add

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.

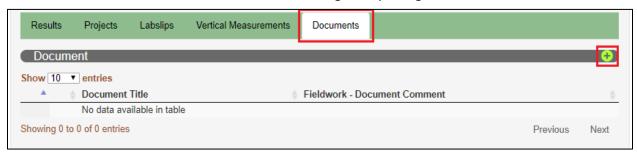
o If there is a document already saved to the SWIMS digital library that you wish to use, you can click on 'Find Document' and use the query window to find and add it.



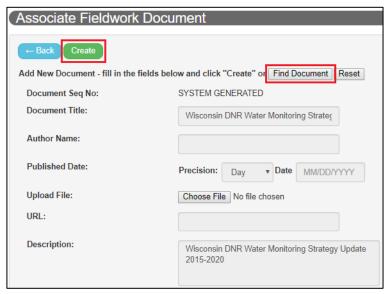
• To add a document to an existing fieldwork event, navigate to the fieldwork event by finding it on the related project page or your list of submitted fieldwork (see Fieldwork section). Click on the fieldwork event to open it and then click 'Enable Edit'.



• 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.



Where to View WAV Data

The best way to view WAV data is through the <u>WAV Stream Monitoring Dashboard</u> found on the <u>WAV Webpage</u>. This dashboard will allow you to explore WAV collected data through a dynamic interface. Contact the WAV program staff at <u>wav@extension.wisc.edu</u> for help with this dashboard.

