Surface Water Integrated Monitoring System
(SWIMS)

Advanced User Guide

May, 2007

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Topic Pages

Introduction

The Surface Water Integrated Monitoring System (**SWIMS)** is a dynamic database which supports water quality monitoring activities, including planning, preparation, execution and write up of water quality monitoring work.

SWIMS hosts a variety of functions:

- Establish new monitoring stations or look up information and data on existing monitoring stations.
- Map precise locations of monitoring stations on a GIS hydro layer.
- Generate printed lab slips to accompany collected monitoring samples.
- Download monitoring data from a comprehensive statewide database system.
- Edit project information.
- Store monitoring plans, quality assurance plans, data analyses, related reports, photos and maps.
- Upload monitoring results using different forms, including archiving continuous meter data (temperature only plus multi-parameter units)
- Support complex monitoring work involving multiple horizontal and vertical measures, such as sediment cores and/or transect surveys for plants, sediment or other data.

The Surface Water Data Viewer database (**SWDV**) contains additional features related to monitoring station activities:

- Obtain/Identify the location of your monitoring station without logging in to the SWIMS system.
- Identify the latitude and longitude for your monitoring station.
- View available data in SWIMS through the internal Surface Water Data Viewer.

This "Advanced User Guide" explains how to use the features of the SWIMS for advanced user functions.

Getting Help

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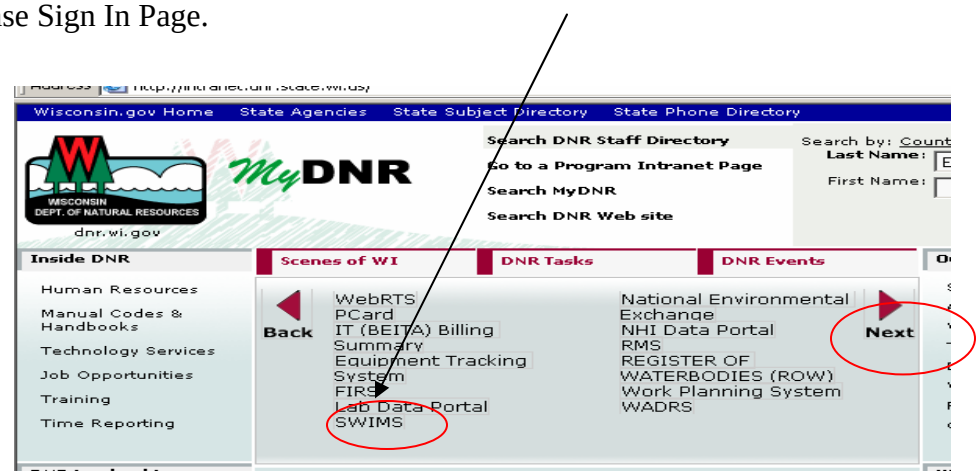
Using the Surface Water Integrated Monitoring System (SWIMS)

Access SWIMS

Use Internet Explorer to access "My DNR." Click on the "**DNR Tasks**" and then click on the "**Next**" arrow. Click on the "**SWIMS**" link to access the SWIMS database Sign In Page.



Enter your User Name and Oracle ID (the one you use for timesheets) and click the "**Sign In**" button.

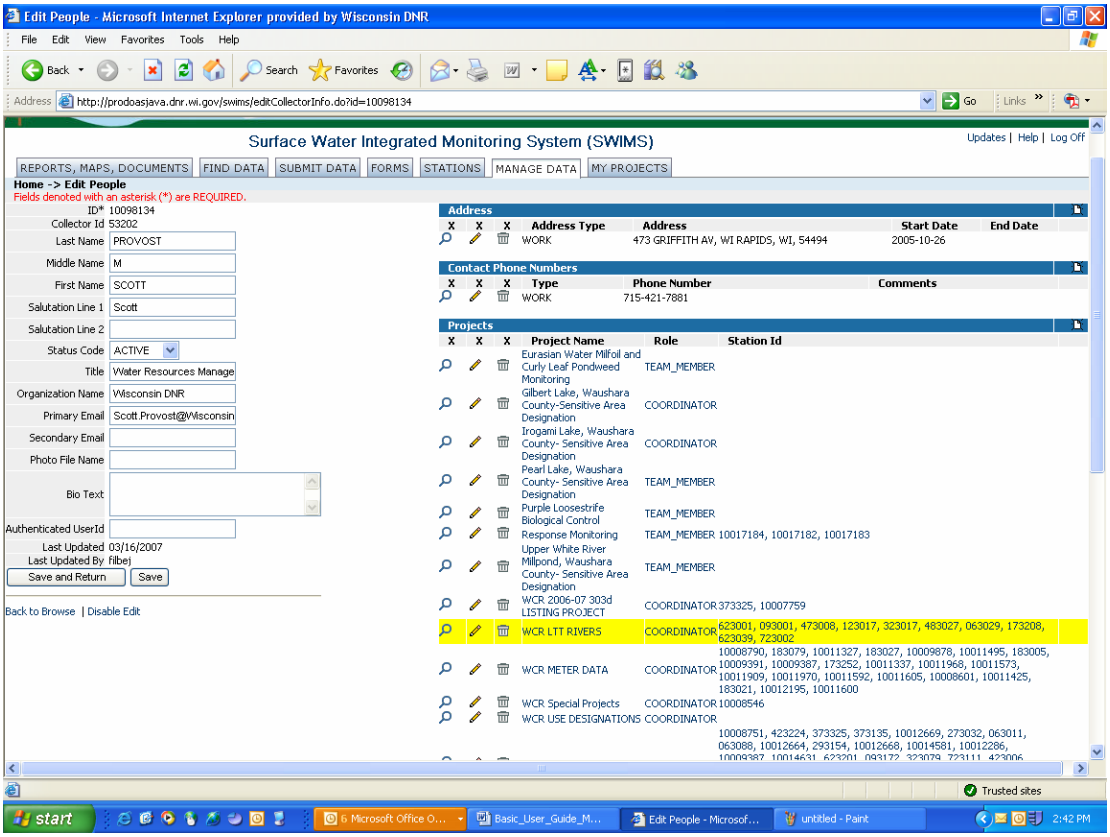
User Roles in SWIMS

The SWIMS system security is role-based. All DNR users, which include all DNR staff in the Water Division and in Science Services, are able to search, view, and download data, as well as submit data. This role is "SWIMS Staff User Edit Role." This user role allows people to schedule and complete fieldwork events and subsequent to the creation of these events, people can edit related information. No role allows DNR staff to edit results in SWIMS directly submitted by a laboratory,

but users can enter and edit field results collected in conjunction with monitoring that passed through a laboratory.

Additional roles which provide access to advanced functions include project coordinator and data manager, which provide more flexibility to link data to a specific project, including people, stations, account codes, or linking fieldwork completed or scheduled to a specific project.

User roles are assigned at the level of the individual. The screen shot below shows how individuals are represented in the system:



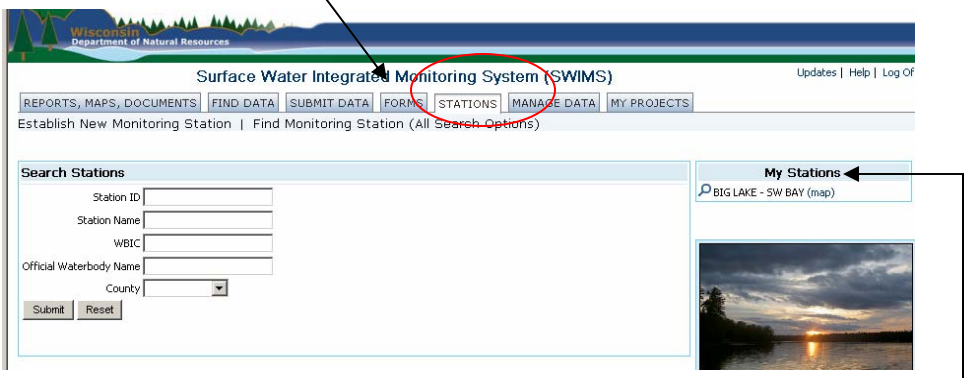
The SWIMS Team tracks key information including project responsibilities, roles, communication and training and assigned equipment. This information can be updated by a file manager (see page 3).

Find Monitoring Stations in SWIMS

o Simple Searches

Simple searches include searching by one or more of the following categories: SWIMS Station ID, SWIMS Station Name(s), WBIC – Waterbody Identification Code, Waterbody Name, and/ or County.

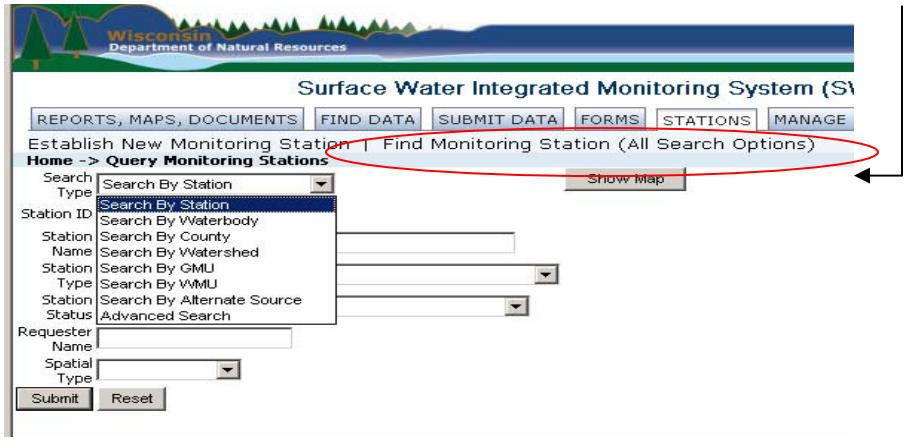
Step 1: Navigate to Stations
Click on the "**STATIONS**" tab.



Step 2: Enter Information
Enter in a Station ID, Station Name, WBIC or Waterbody name and/or County and click "**Submit**". Or select your station from the list under "**My Stations**."

o All Search Option

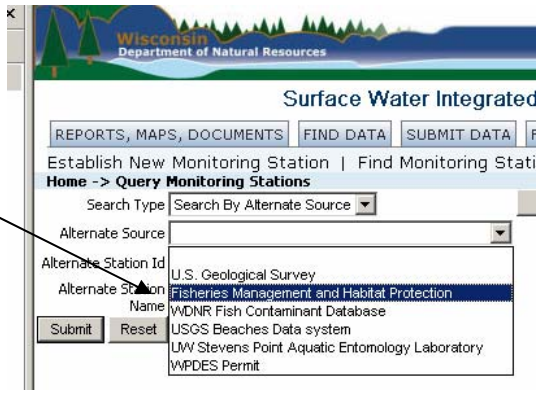
Click on the "**Find Monitoring Station *(All Search Options)***" link. Click the arrow on the "**Search Type**" box for the drop-down menu. Select the type of search by: Station, Waterbody, County, Watershed, GMU, WMU, Alternate Source, or Advanced Search. Enter search information. *TIP: Find Great Lakes by Station Name. WBIC and other location information are not always available for Great Lakes stations.*



o Alternate Source Options - Fish Monitoring Stations

The "**Search by Alternate Source**" searches for monitoring stations in these other databases: U. S. Geological Survey, Fisheries Management, WDNR Fish Contaminant Database, USGS Beaches Data System, UW Stevens Point Aquatic Entomology Laboratory, and WPDES Permit.

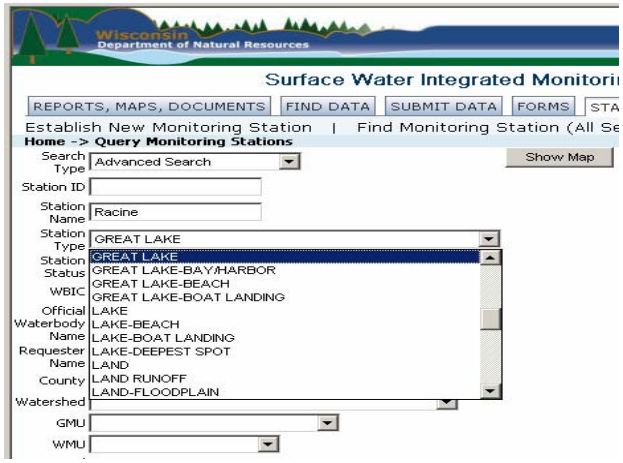
Search "**Alternate Source**" for Fish Monitoring Stations:
Select the "**Fisheries Management and Habitat Protection**" option to find Fish Monitoring Stations. Type in the Alternate Station ID number of Alternate Station Name to refine your search.



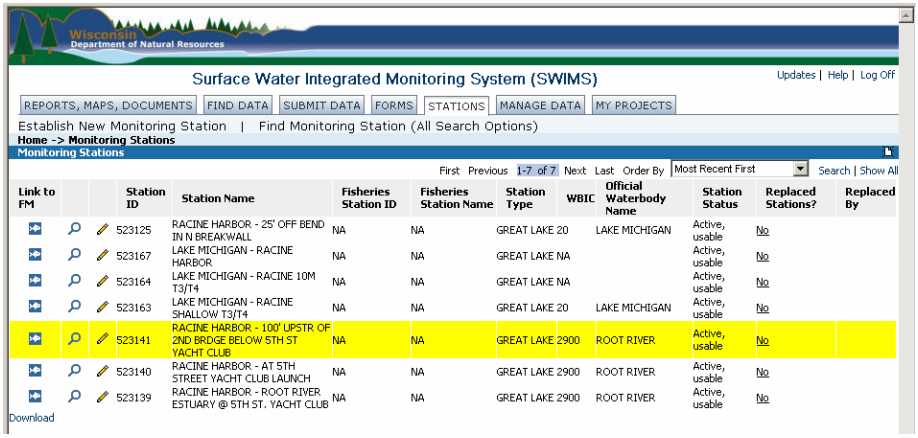
o Advanced Search Option

Use the "**Advanced Search**", to search by different databases, a variety of criteria, or other variables such as "**Station Type**" or "**Status**" (Active, Useable). You can use this option to create a list of monitoring stations that meet the specific search criteria you enter. Click on the "**Submit**" button once you have entered your search information.

In this example, Racine was typed in the "**Station Name**" and "**Great Lake**" was selected from the "**Station Type**" drop-down arrow list.



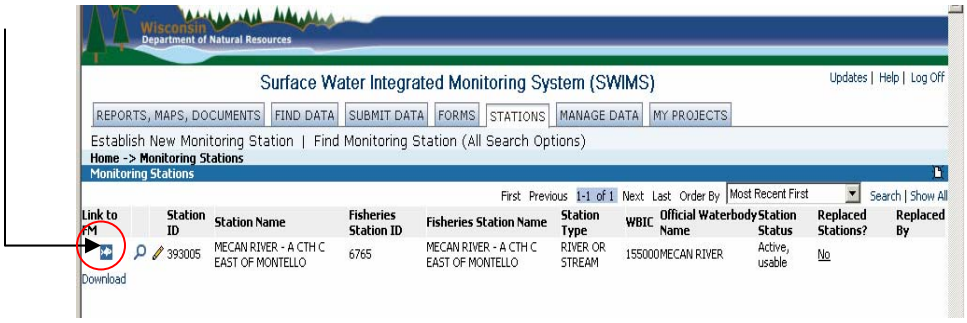
The Racine/Great Lake search produced this list of monitoring stations meeting the search criteria.



Verify SWIMS Monitoring Station Location

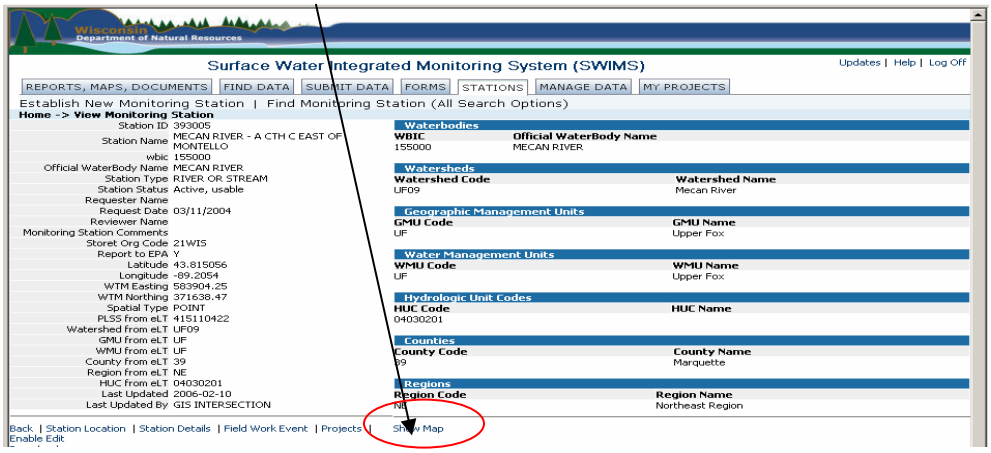
Step 1: Search for a Monitoring Station
Search for a monitoring station using one of the search methods described above in the section: “Find Monitoring Stations in SWIMS”.

Step 2: Select a Monitoring Station
The Search function returns you to a set of search results (stations) in the browse screen that matches your query. In this example, a station was searched by Waterbody Name: Mecan River. A list of monitoring stations matching this variable was returned. To view station details, including a map of the site, click on the “**magnifying glass**” icon. You can also use stations that do not currently have cross-referenced fisheries station information. When you use a specific SWIMS station for your fisheries work, this data is automatically updated. For example, if you use a SWIMS station with no alternate fisheries information, a cross link (as shown above) is automatically created by the process of your backfilling the station into your Fisheries Form.



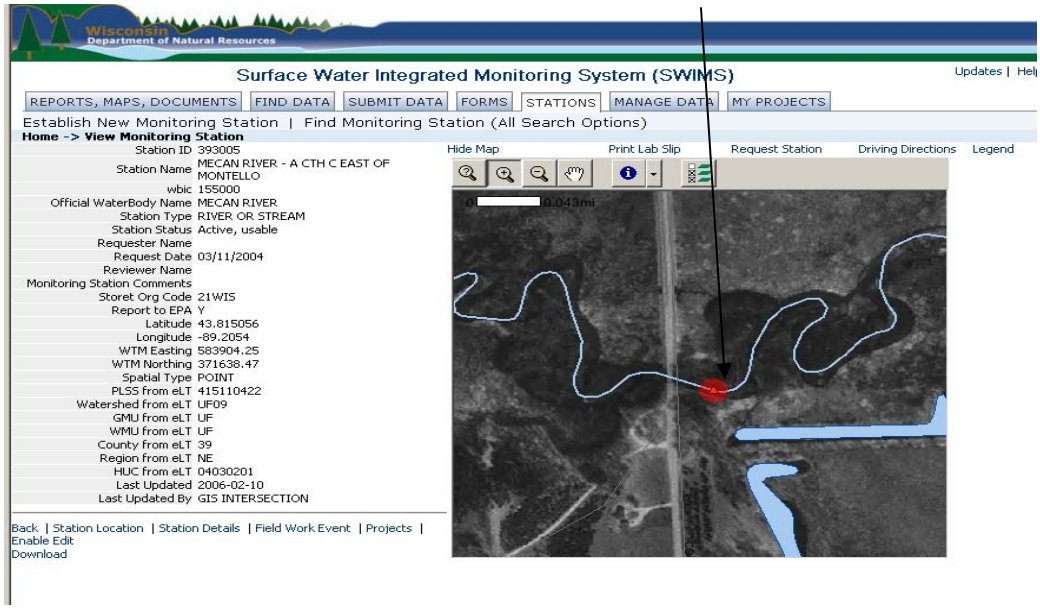
Step 3: Review Monitoring Station Information

The "**magnifying glass**" icon opens this screen for the detailed information on the selected monitoring station. Click on the "**Show Map**" link to view a map of the monitoring station. *NOTE: The latitude and longitude and other geographic data for the station are displayed.* The WBIC code and Watershed Code are also identified.



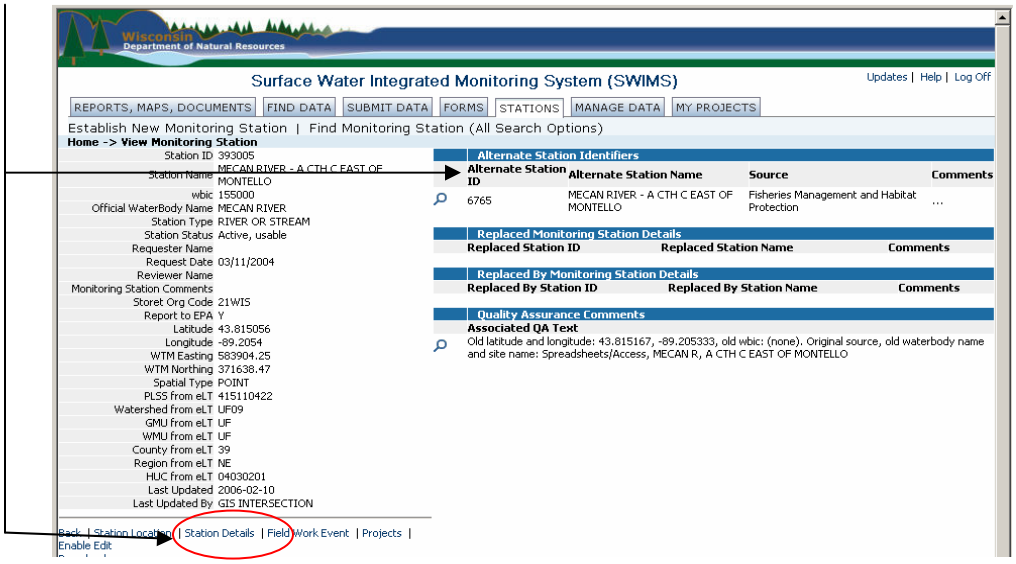
Step 4: Review Monitoring Station Map

The map shows the monitoring station in red:



Cross-Referencing the Fisheries Management Database

Click on the "**Station Details**" link to see if there is a cross-referenced Fisheries Station. In this example, Mecan River at CTH C East of Montello, the SWIMS Station ID is 393005 and the Fisheries Management Station ID is 6765.

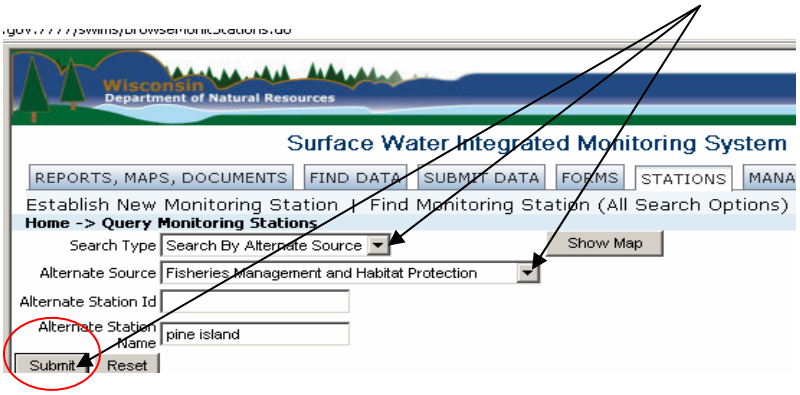


Use SWIMS Stations in Fisheries Forms

SWIMS and the Fisheries Management Database are linked to allow users access from one database to the other. Follow these steps to find and use stations in SWIMS for Fish forms.

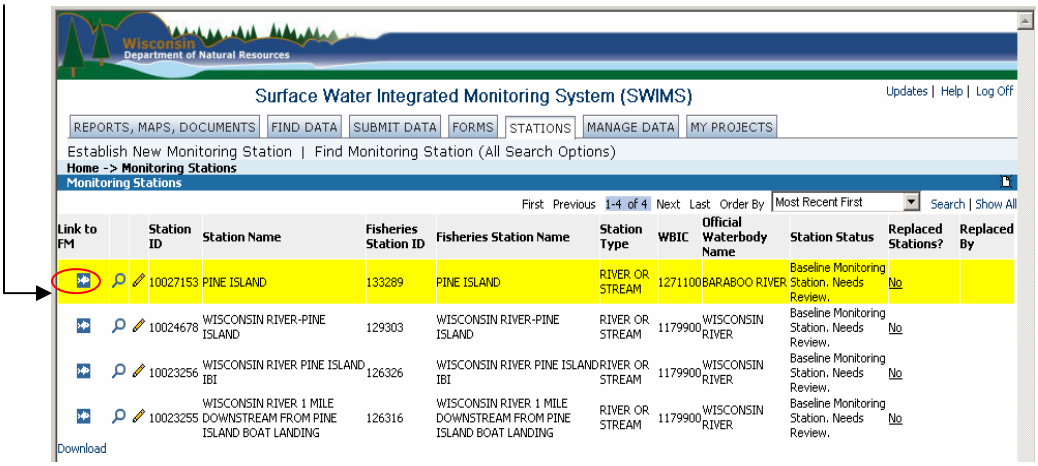
Step 1: Find Your Station

Click on the "**Search Type**" drop-down arrow and select the "**Search by Alternate Source**" option. Select the "**Fisheries Management and Habitat Protection**" option. *NOTE*: *If you click on the "**Fisheries Management and Habitat Protection**" option without additional information, all 12,000 stations in SWIMS with a cross-reference fisheries identifier will be returned. Type in the alternate station name or alternate station identification number to narrow your search.* Click on the "**Submit**" button.



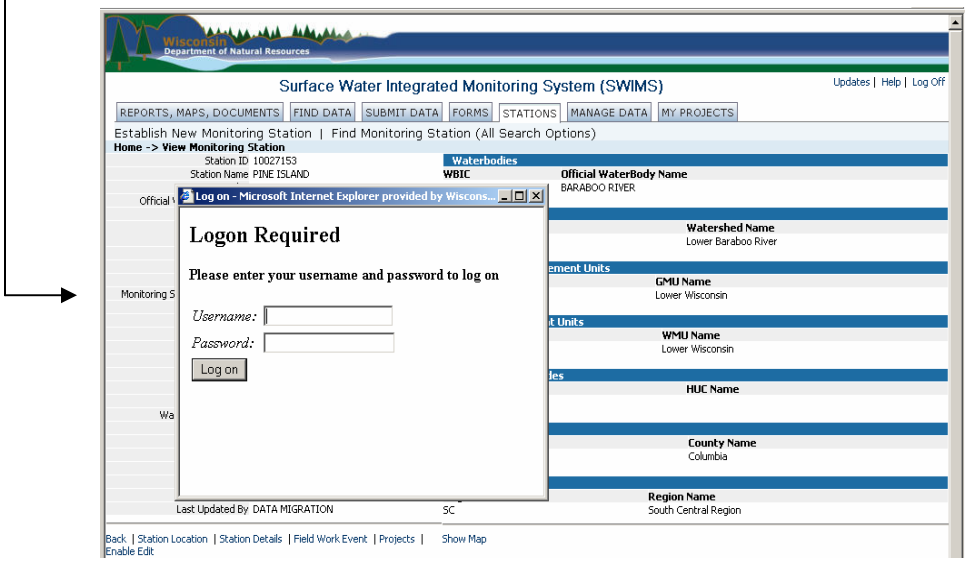
Step 2: Select Your Station

A set of stations is returned that match the alternate station name of Pine Island. The Fisheries Station ID, SWIMS Station ID, and WBIC are listed. Locate your desired station and click on the "**Fish symbol**" icon located in the left-hand column of the SWIMS "**Monitoring Station**" screen to backfill that station's information into the Fish Form.



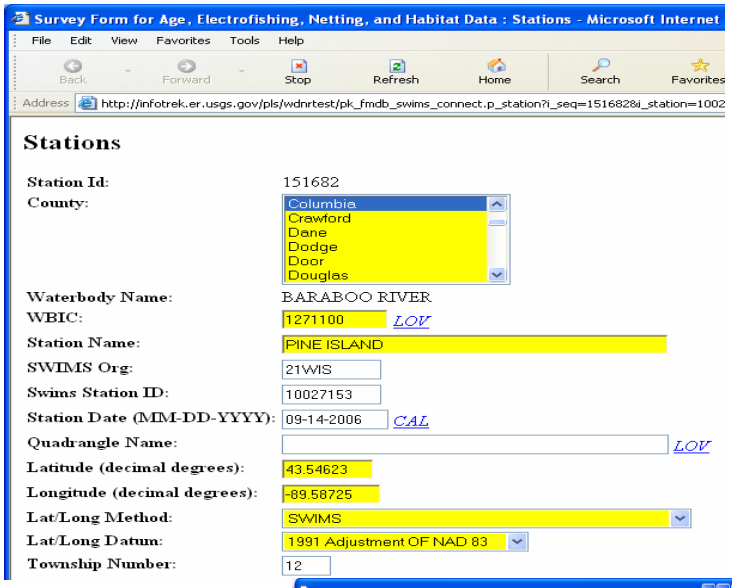
Step 3: Log into the Fisheries Management Database System

Type in your username and password in the "**Logon Required**" screen to access the Fish Management Database.



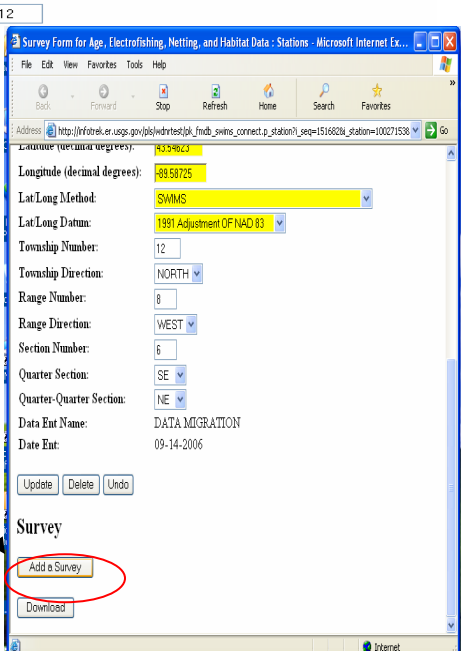
Step 4: View Your Backfilled Station Data:

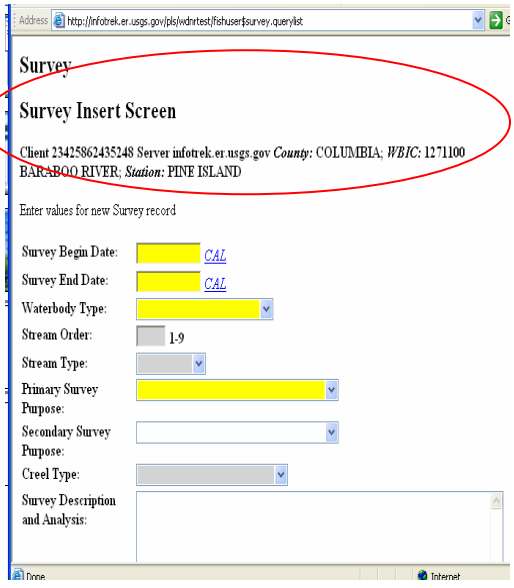
When you enter monitoring station information or select a station, the information is backfilled into the Fisheries Management Database.



Step 5: Select Survey:

To add survey information, scroll to the bottom of the "**Stations**" screen and click on the "**Add a Survey**" button in the Fisheries Management Database system.





This example shows the survey form with the backfilled Pine Island monitoring station location information.

Establish a New Monitoring Station with the eLT

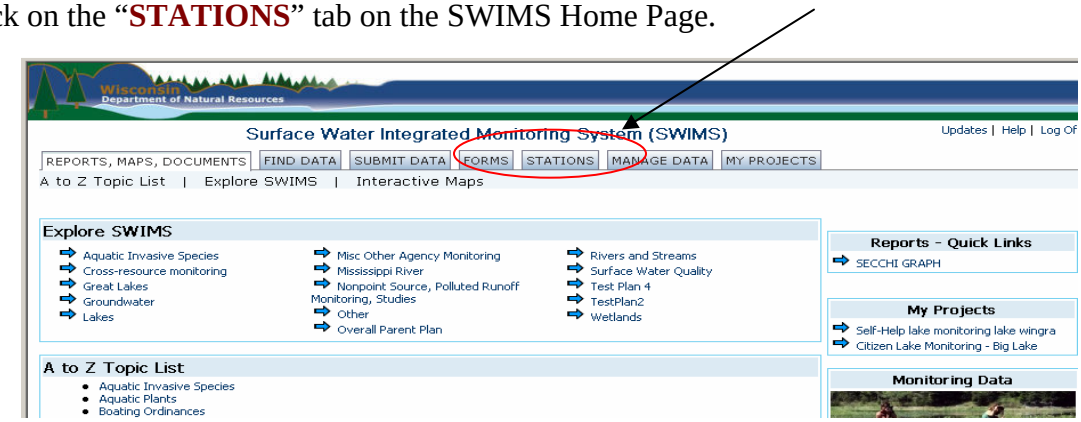
If you are establishing a new monitoring station for a **new project**, contact a file manager (see page 3) to add your new project information to the SWIMS database. Appendix A shows the database relationships that create the connections between monitoring projects, stations, fieldwork events, collectors and lab data.

DNR Staff are strongly encouraged to use SWIMS or the SWDV to investigate if an existing station is available to use before establishing a new monitoring station location in the SWIMS database. Use the procedures described in the section: "Verify SWIMS Monitoring Station Location", or follow the section: "Using the Surface Water Data Viewer – Look Up Monitoring Stations" in the Basic User Guide to identify if an existing station is available to use as a location for your monitoring.

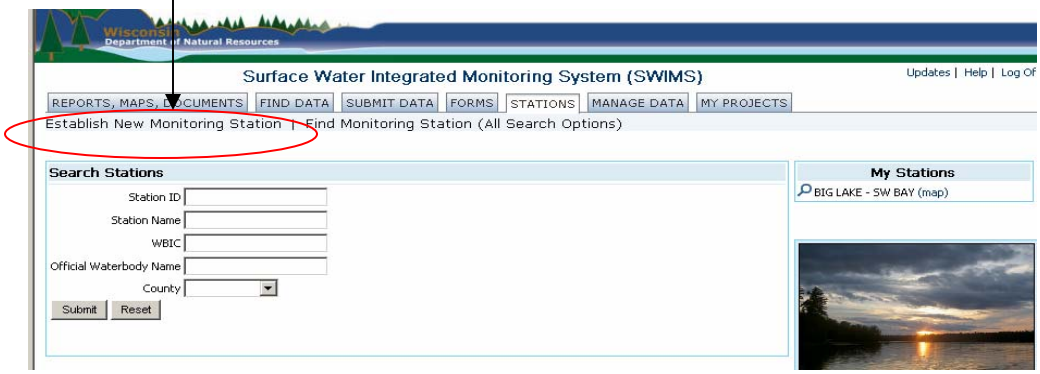
Establishing a new station in SWIMS requires that you have a GIS tool on your computer (the embedded locator tool (eLT). This mapping tool allows you to put a "dot" on the map where you monitored. Directions on how to use this tool are outlined below. DNR staff will be provided the eLT edit role to create monitoring stations at the point of data entry. Hands-on-training is highly recommended prior to use of the eLT to create new monitoring stations.

Latitude and longitude values must be entered into the eLT tool to establish a new monitoring station. See the directions in the section: "Using the Surface Water Data Viewer – Look Up Latitude/Longitude to Establish a New Station" in the Basic User Guide on how to obtain lat/long values.

Step 1: Navigate to the Stations Pages
Click on the "**STATIONS**" tab on the SWIMS Home Page.



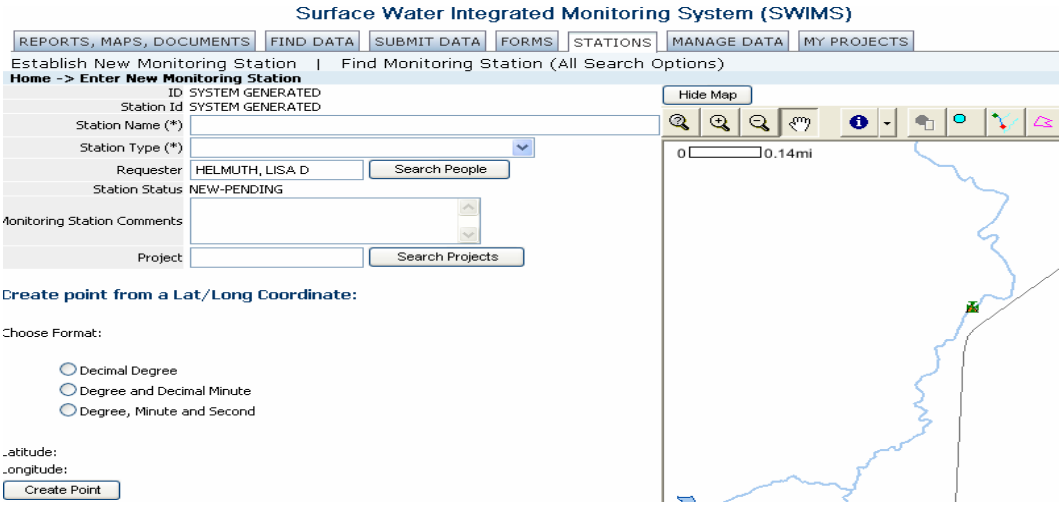
Step 2: Open "Establish New Monitoring Station" Screen
Click on the "**Establish New Monitoring Station**" link.



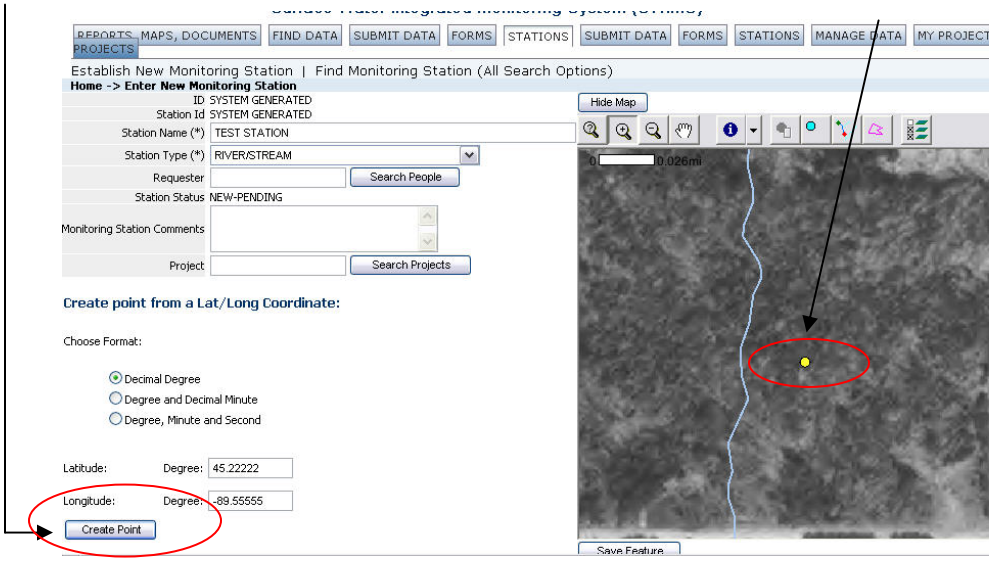
Step 3: Fill in Requested Information, Including Location (lat/long values)
Type in the information in the "**Enter New Monitoring Station**"screen. Your user name will automatically be inserted in the "**Requester**" field.

- Waterbody Name – Landmarks (i.e., Pine River At HWY B).
- Station Type (River, Lake, Flowage, Canal, etc.)
- Monitoring Station Comments: Note details regarding this station
- Project (Optional): This field will associate your station with a specific project.
- Location data – Latitude/Longitude (the eLT uses Datum WGS83/91)

Select a format for your Lat/Long coordinates under "**Choose Format**:".



Step 4: Create Monitoring Station Location Point
Click on the "**Create Point**" button. A yellow dot marks the location of the new monitoring station. If the location is not correct, follow the editing instructions in the section: "Edit a Monitoring Station Location with the eLT." In this example, the yellow dot is not located on the stream and needs editing to move it to the proper location. If the feature is connected properly to the hydro layer, click on the "**Save Feature**" button. If you do not get a map, see "Appendix B: Embedded Locator Tool (eLT) Troubleshooting Tips.

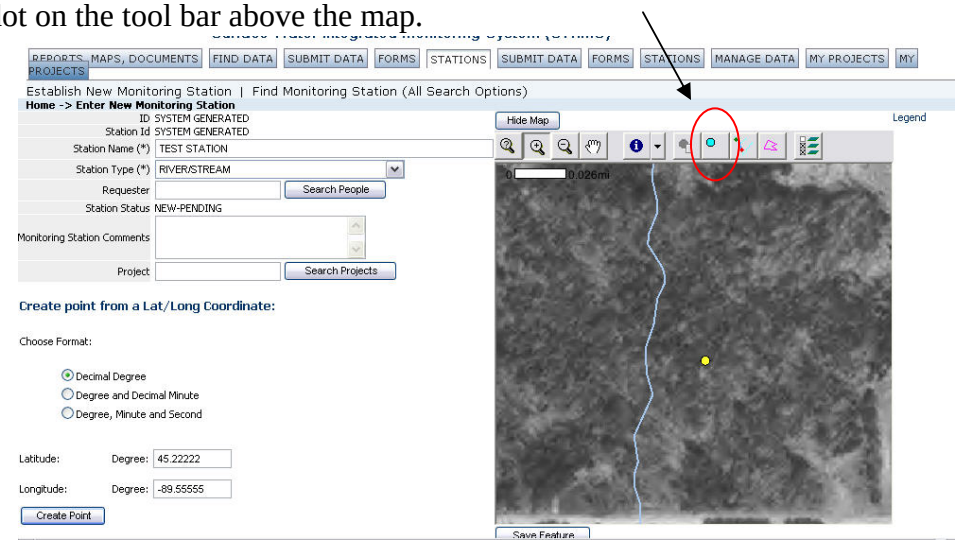


Edit a Monitoring Station Location with the eLT

You may need to edit the monitoring station location if the station point you created did not connect to the hydro layer or there is no Waterbody Identification Code (WBIC) noted.

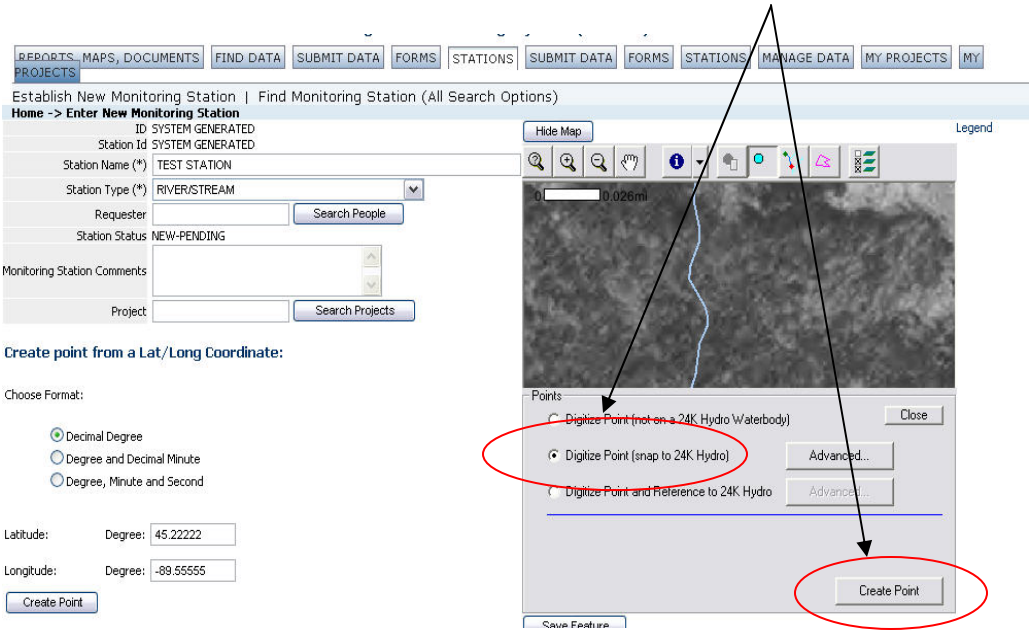
o Connect Location to the Hydro Layer

Step 1: Connect the Monitoring Station to the Hydrolayer
If the yellow dot is not the accurate location of the new monitoring station, click the blue dot on the tool bar above the map.



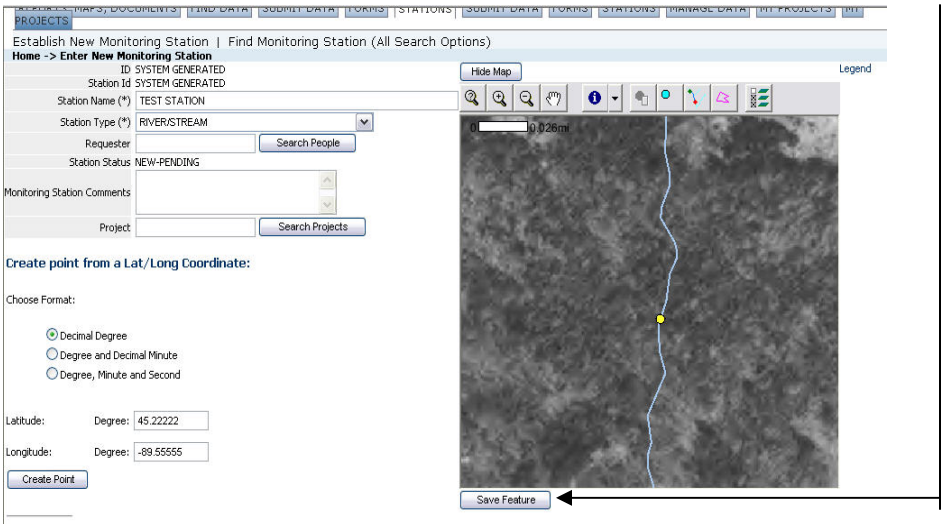
Step 2: Snap the Station to Hydrolayer

Select the "**Digitize Point (snap to 24K Hydro)**" option. The WBIC information will be linked to the station. Then click on the "**Create Point**" button.



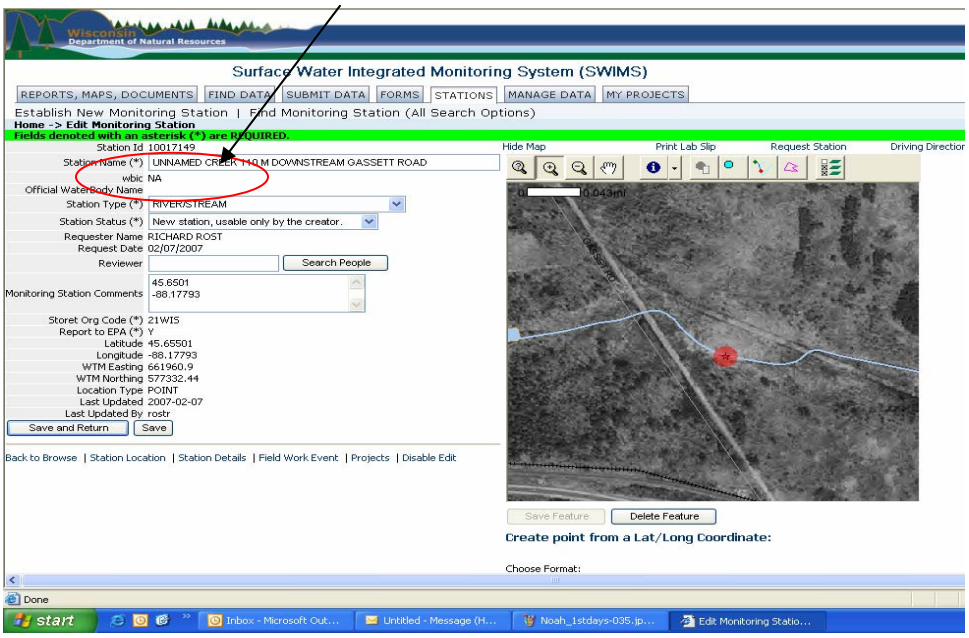
Step 3: Move Station

Click your cursor on the stream where you sampled (a purple dot will appear). The screen will then show a yellow dot where the purple dot was. Click on the "**Save Feature**" button. Wait a few minutes and the monitoring station information will be updated with the correct latitude and longitude values, county, WBIC, etc. Review the station information. If there is a "**NA**" in the "**wbic**" field, follow the steps below to connect the WBIC information to the location.



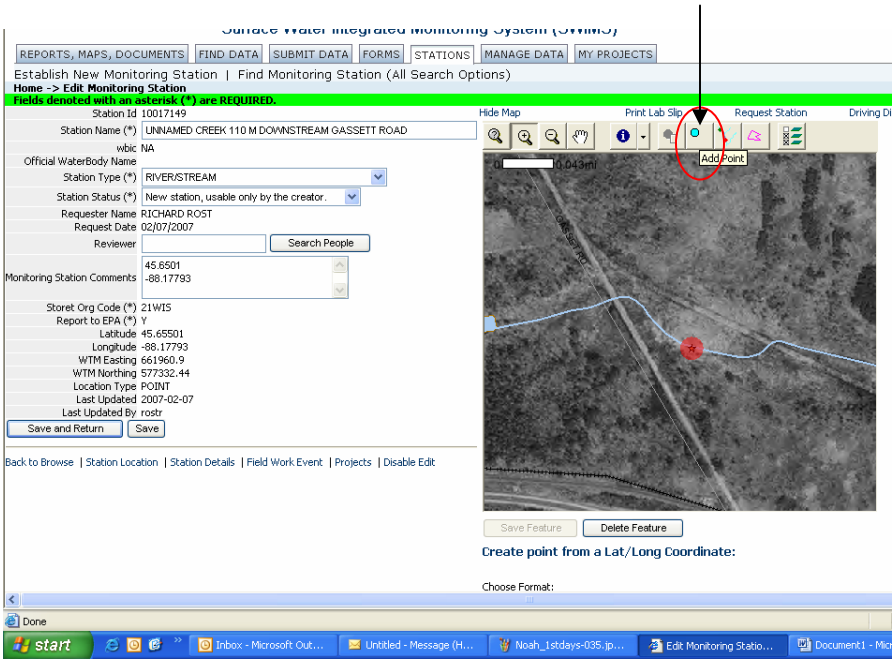
o Connect WBIC Information to the Location

If there is no Waterbody Identification Code (WBIC) identified in the "**Enter New Monitoring Station**" screen after you create your monitoring point, you will need to follow these additional steps.



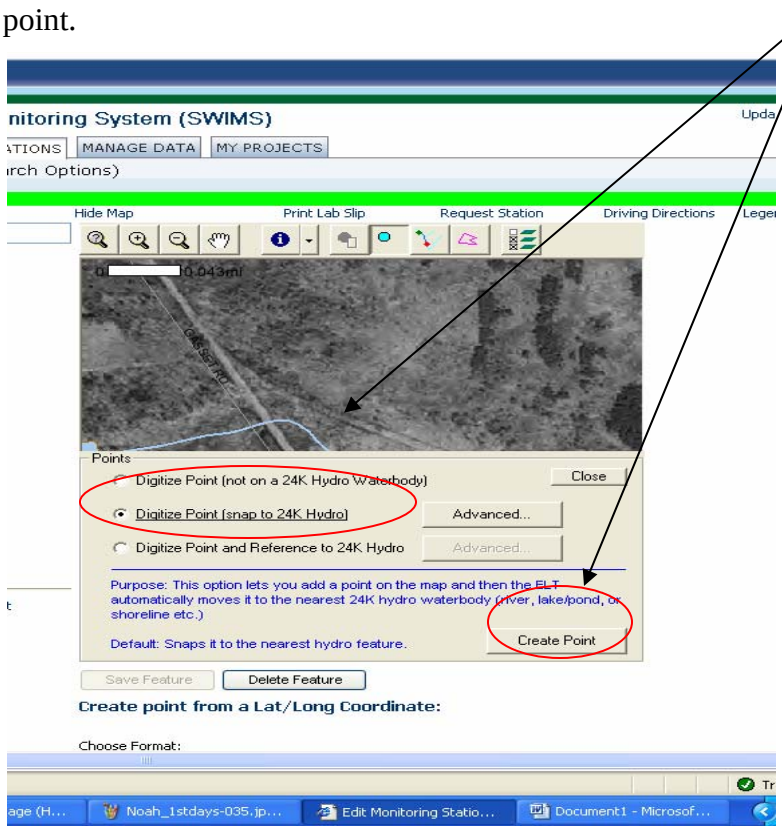
Step 1: Edit Station Info

Click on the blue point to edit your monitoring station location information.



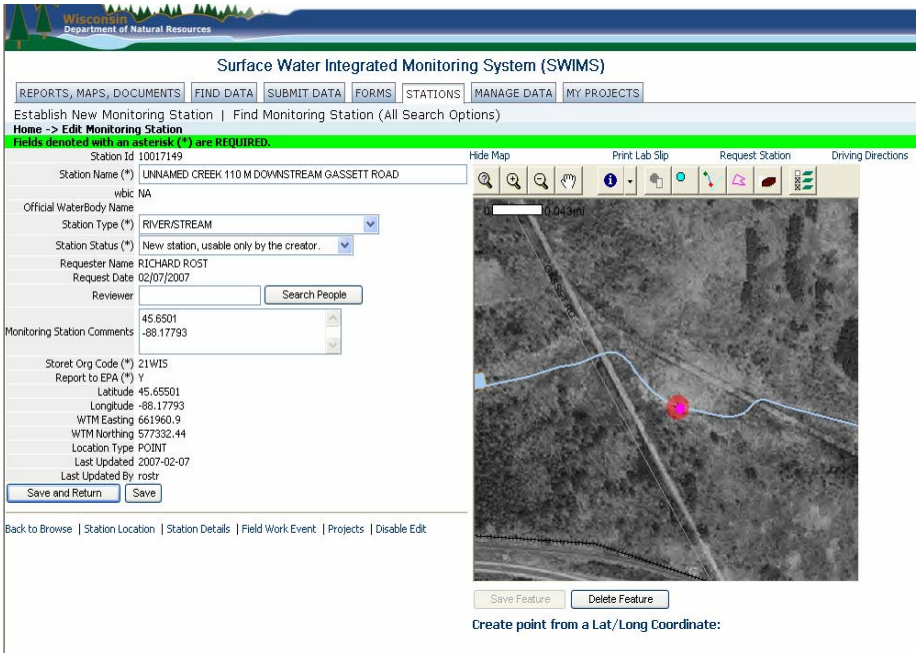
Step 2: Create Point

Select the "**Digitize Point (snap to 24K Hydro)**" option. Click the "**Create Point**" button. The directions will disappear and then you can "redigitize" your point.



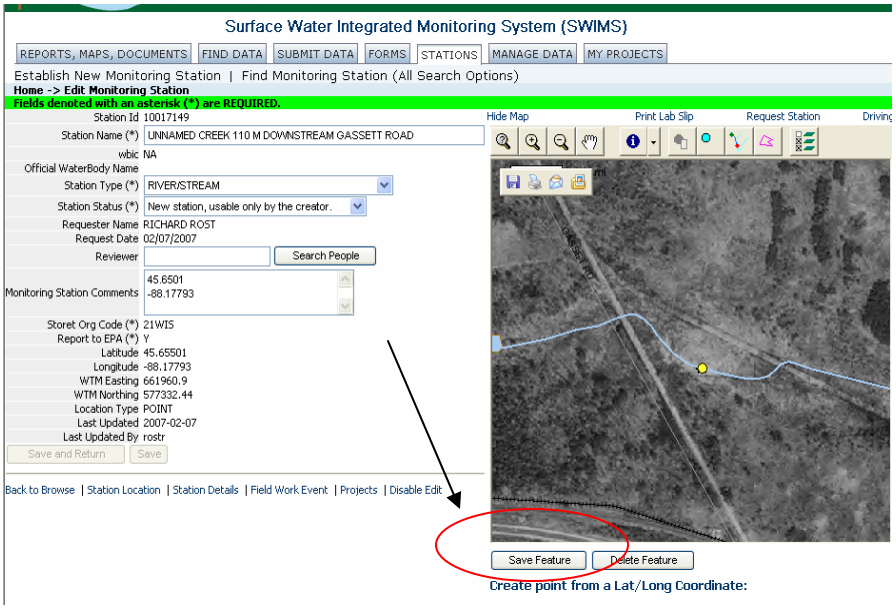
Step 3: Re-Intersect Hydro Layer

Click on the existing monitoring station point to place a pink dot on top of it and re-intersect the hydro layer where the WBICs are stored. The spatial location point should connect with the waterbody data.



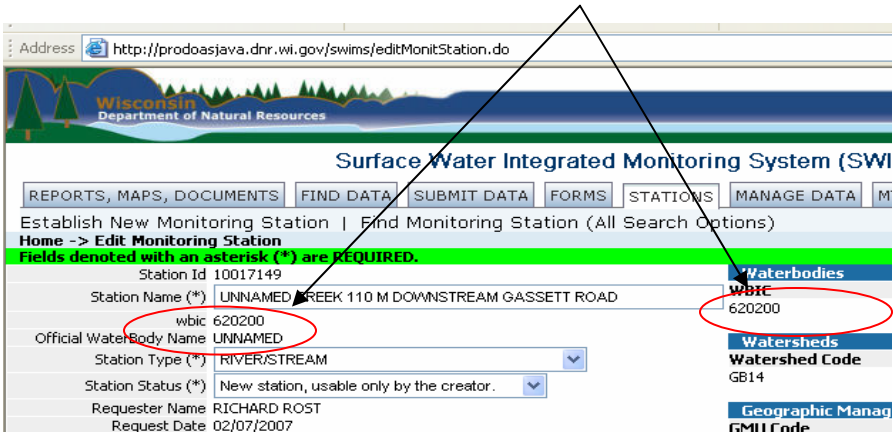
Step 4: Save Feature

Your "redigitized" monitoring station point should appear as a yellow dot. Click on the "**Save Feature**" button. Click on one of the tool bar icons in the upper left-hand corner of the map to save the map on your computer's hard drive, email, or print the map.



Step 5: Verify WBIC

The page shows the WBIC information in two places.



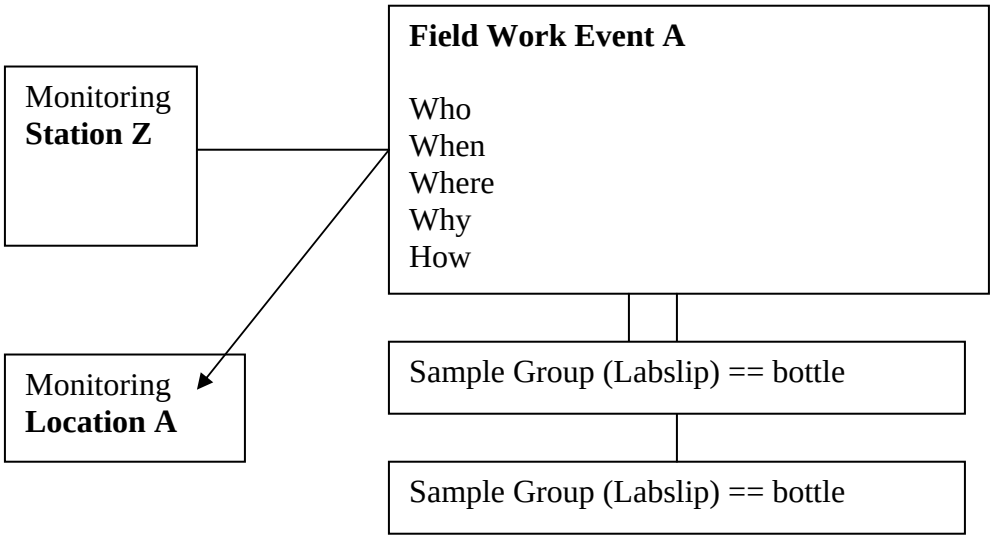
Monitoring Locations and Transect Surveys

The location of your Fieldwork may be more precisely documented through the use of "Monitoring Locations" and in the future, through the use of the transect survey locational data tools.

o Monitoring Location

Monitoring Location allows you to reuse a station, yet continue to document the precise latitude and longitude of your sample in the SWIMS system in a GIS format for more immediate use in map making and data verification.

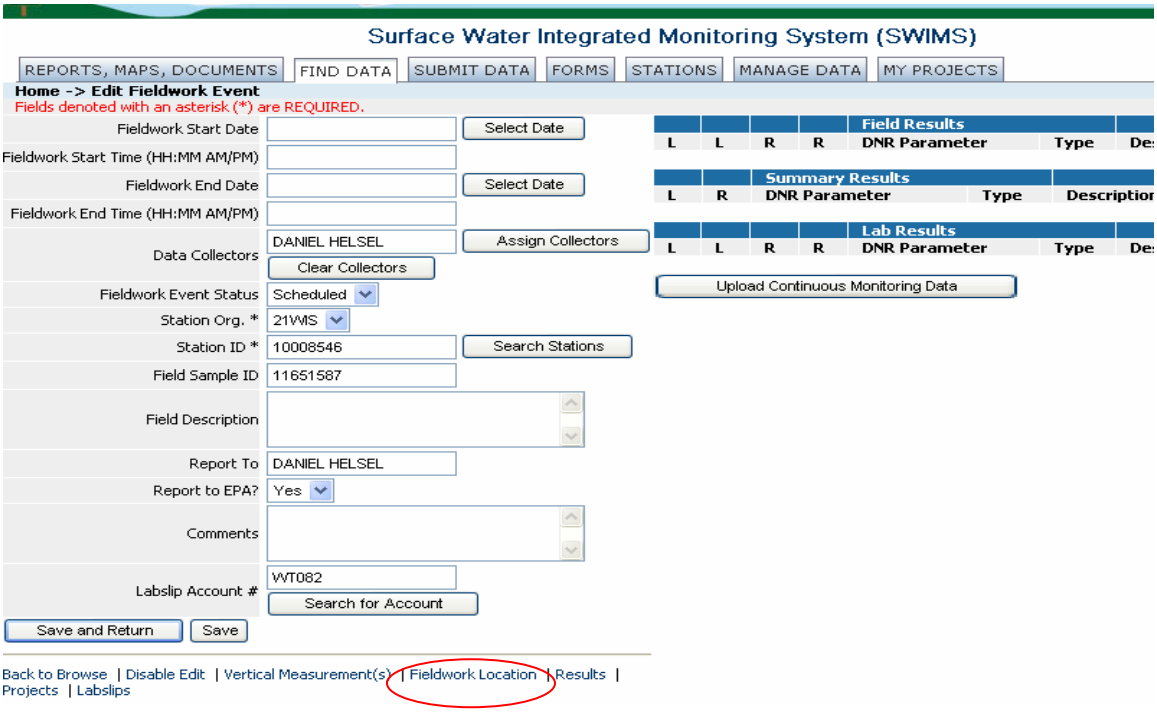
Connected with each fieldwork event you have the following information:



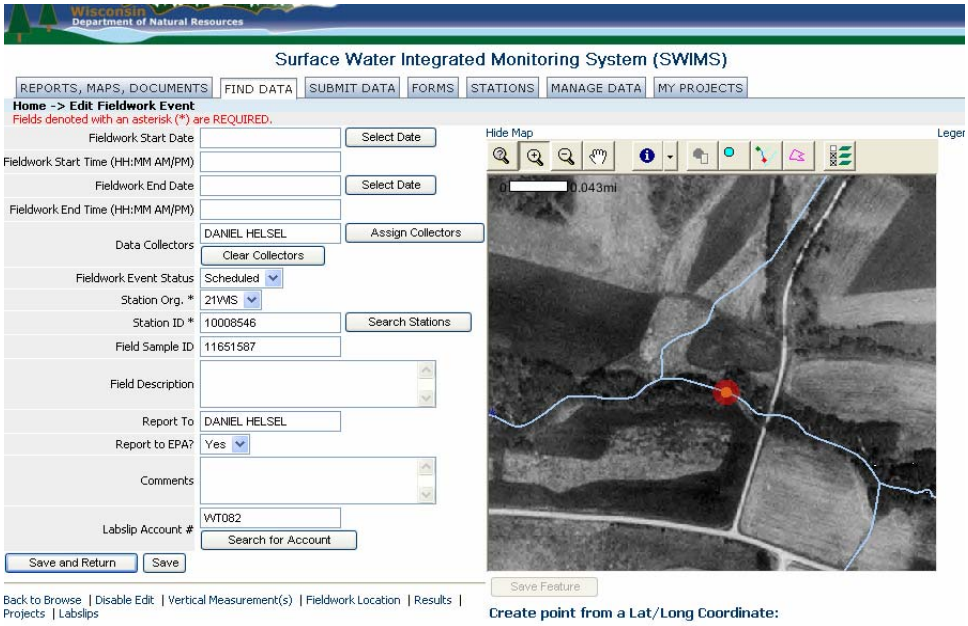
This diagram shows that Fieldwork Event "A" can reuse existing Monitoring Station "Z" but refine the documentation of the site through digitizing a slightly different "monitoring location ('A').

If you do nothing to document the monitoring location, SWIMS will automatically use the station location for the monitoring location (the data is copied over each night). However, if you document the monitoring location, SWIMS will preserve that data, which will be available for mapping and other purposes.

Step 1: Click on the "FIND DATA" tab to find your Fieldwork Event in SWIMS. Click on the **"Fieldwork Location"** link at the bottom**.**



Step 2: Edit the location just as you would a monitoring station. See the section: "Edit a Monitoring Station Location with the eLT."



Documenting Result Locations

Similarly, there may be situations were you would have taken multiple samples on the same fieldwork event but would like to differentiate each of the specific locations for each "result". In the example above, the 2 sample groups could be represented by the same monitoring location (A) (i.e., inorganics and organics labslip data or bugs and inorganics, or inorganics and secchi/d.o. profile data…)

o Transect Surveys

When more complex situations arise, SWIMS will allow you to document the location of the specific sample result. The eLT will be available for this purpose but only in a "read only" mode. The lat/long values will be entered at the time of the transect survey data entry, which will be done through the "forms" area.

For example:

At Station Z

Results for Point 1: **Lat _____ Long_____**

Plant A_____ **Presence/Absence**
Plant B_____ **Presence/Absence**
Plant C_____ **Presence/Absence**

Results for Point 2: **Lat _____ Long_____**

Plant A_____ **Presence/Absence**
Plant B_____ **Presence/Absence**
Plant C_____ **Presence/Absence**

Results for Point 3: **Lat _____ Long_____**

Plant A_____ **Presence/Absence**
Plant B_____ **Presence/Absence**
Plant C_____ **Presence/Absence**

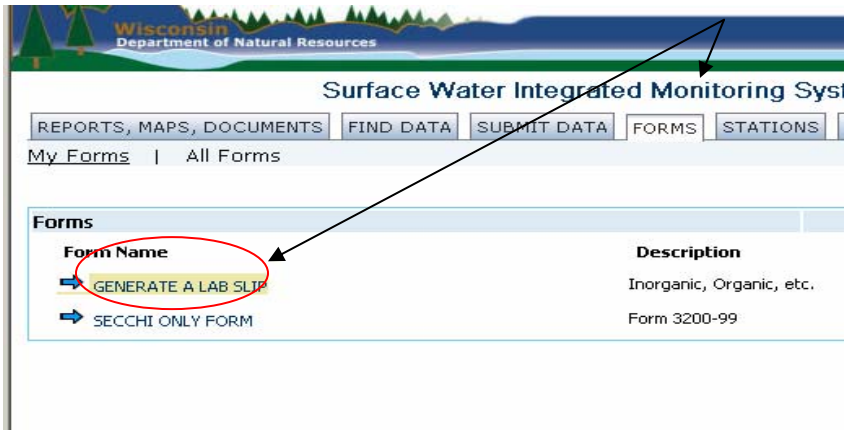
Use the Lab Slip Generator

The Lab Slip Generator feature of SWIMS creates pre-printed forms to accompany monitoring samples submitted for analyses to the Wisconsin State Laboratory of Hygiene. The pre-printed forms identify the project name, collectors, lab account code, monitoring station id, and other important information. Features of the Lab Slip Generator include:

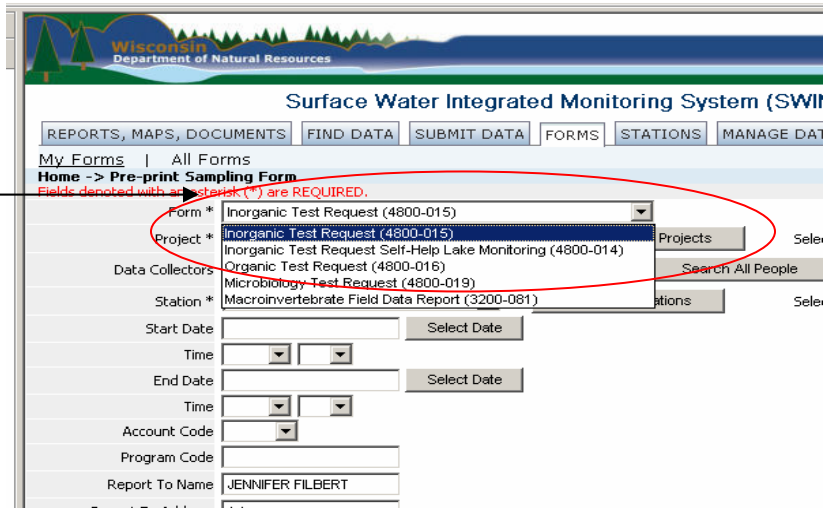
- Links sample data to monitoring stations with GIS location identifiers
- Automatic charge back of laboratory services to lab account codes
- Automatic entry of data results from the State Laboratory of Hygiene into the SWIMS data system
- Tracks fieldwork events at project monitoring stations

o Select a Form

Step 1: Choose the Lab Slip Link
Click on the "**FORMS**" tab, then the "**Generate a Lab Slip**" link.



Step 2: Select a Form
Click on the "**Form***" drop-down arrow, and select the form you wish to use.



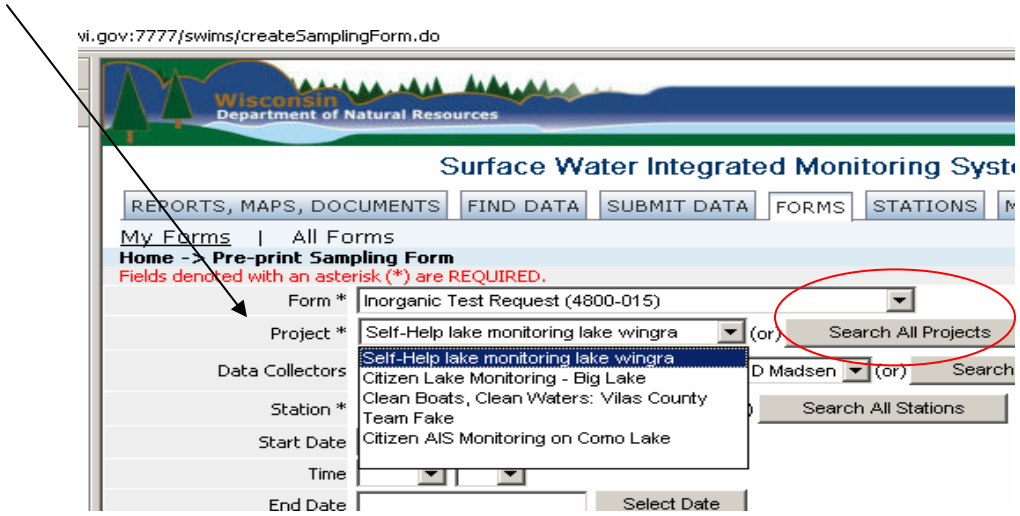
o Select a Project

Matching the correct project name to your lab sample is an important step in the Lab Slip Generation process. Your data will be stored in the SWIMS database under the project name that you select when you generate the lab slip.

Projects are hierarchical: project names may be listed generally, regionally (ie., TMDL SER Project), or specifically (Bark Creek TMDL Project). Data should be linked to the most specific project name possible because it provides the most specific description of why the data was collected.

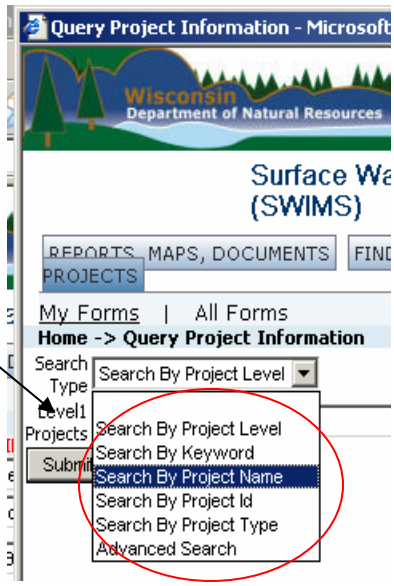
*NOTE: If you want to create a lab slip for a **new project**, contact a file manager (see page 3) to set up your project information in SWIMS. Appendix A shows the database relationships that create the connections between monitoring projects, stations, fieldwork events, collectors, and lab data.*

Step 1: Select a Project
Click on the "**Project***" drop-down arrow. All projects that have your name will show up in the dropdown. Click on the project that corresponds to the most specific location of the monitoring samples you've collected. If you do not see your project listed, you can search for your project (see Step 2 below).

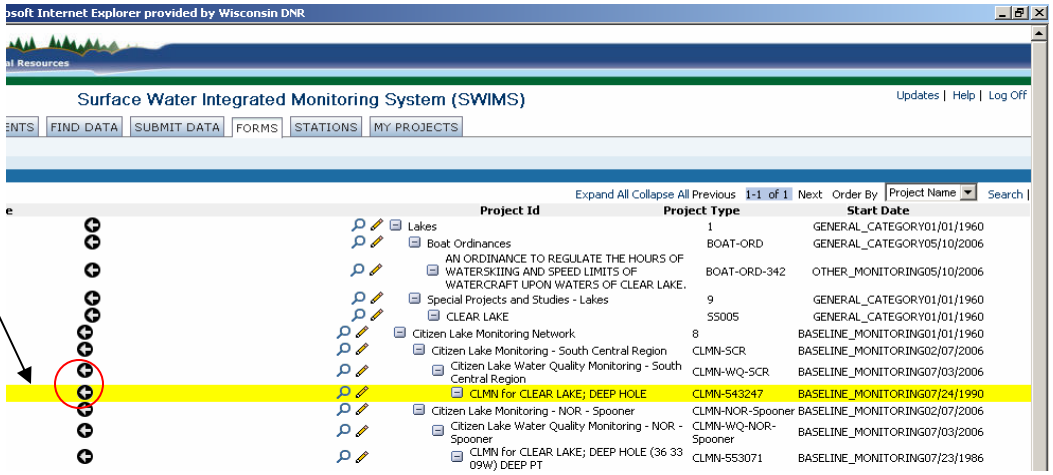


Step 2: Search for a Project
If you do not see your project in the "**Project***" drop-down arrow list, click on the "**Search All Projects**" button.

Step 3: Choose Your Search Type
Click on a search category and type in the requested information. Click on the "**Submit**" button.

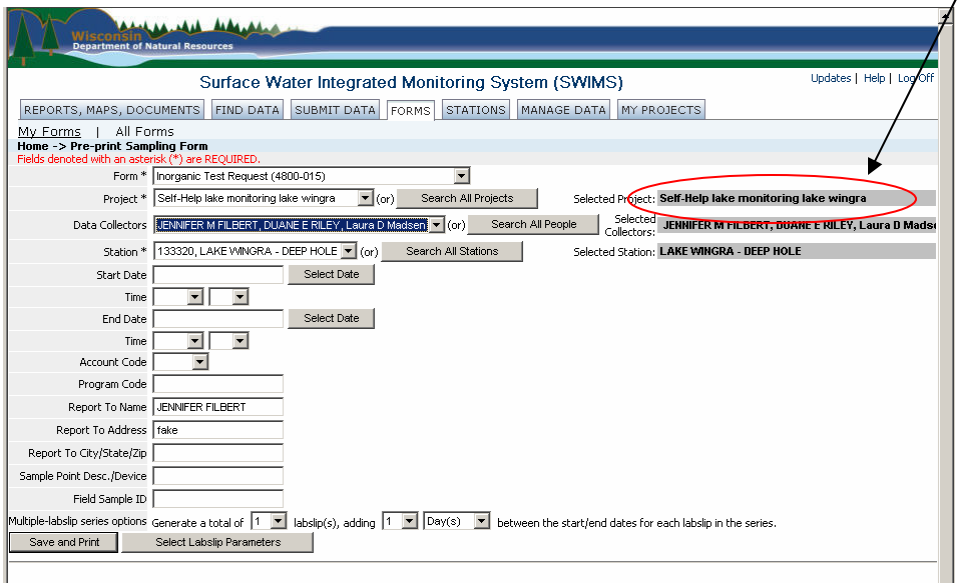


In this example, Clear Lake was entered as the project name. Scroll down the listing and select the project name that you wish to use. Use the black "**back arrow**" icon to select and return.



Step 4: Verify Project Name

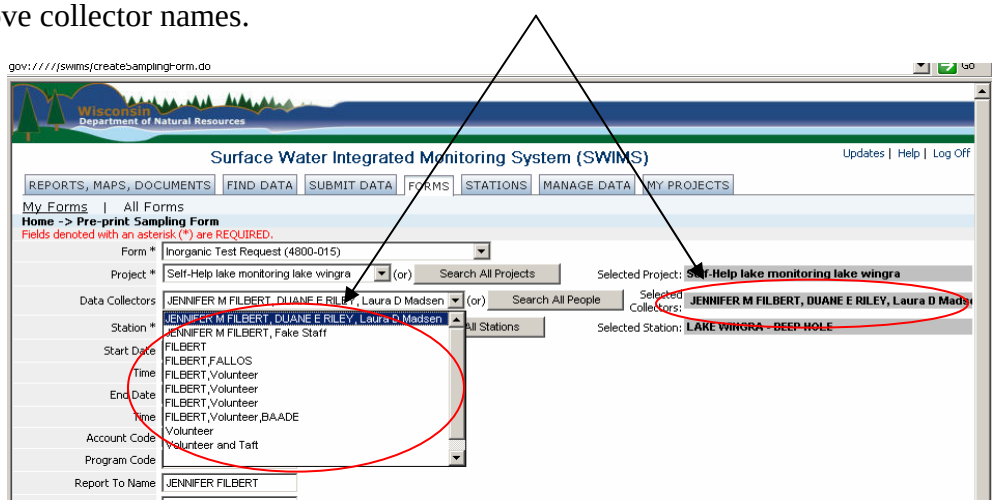
Verify that the correct project has been selected. The project name is listed in the right-hand column. If your project is not listed, contact a file manager (see page 3) to have your project entered into the SWIMS database.



o Select the Sample Data Collectors

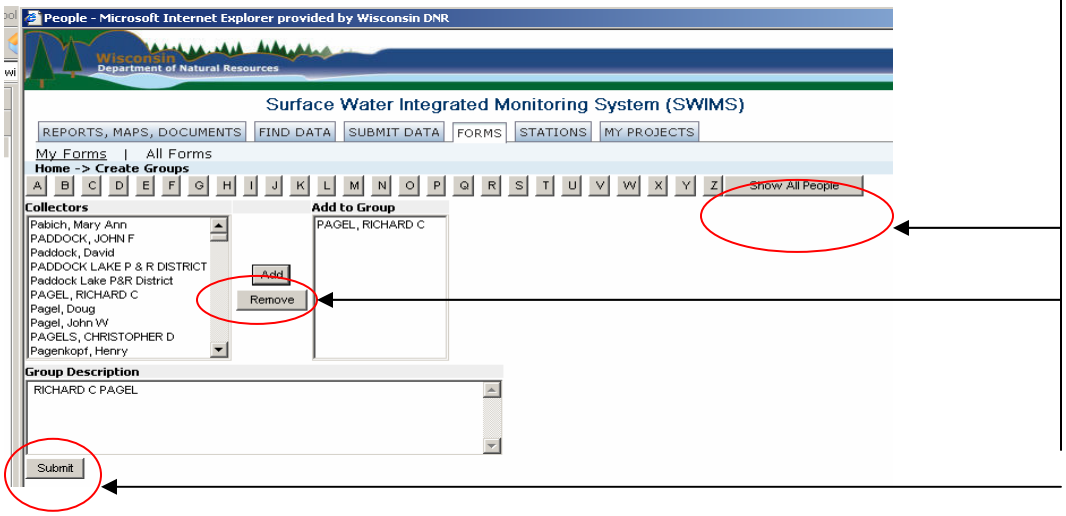
Step 1: View and Select Collectors

Click on the "**Data Collectors**" drop-down arrow list to view and select the collectors for the monitoring sample. The selected collectors are listed in the right-hand column. If there are collectors which need to be added, follow Step 2 below. You can also contact a file manager (see page 3) to have them add or remove collector names.



Step 2: Search All People

Click on the "**Search All People**" button in the "**Pre-Print Sampling Form**" screen (see previous example). The "**Create Groups**" screen will appear. The people listed under the project will automatically appear under "**Collectors**". If there is someone else you need to add that is in the database, but not listed under the project, click on the "**Show All People**" button to obtain an alphabetical list of all collectors in the SWIMS database. Use the scroll bar to move up and down the list, or click on the letter of the alphabet to move to that part of the alphabet. Click on the collector name you want to add to highlight it, and then click on the "**Add**" button. Use the "**Remove**" button to remove collectors from the "**Add to Group**" box. Once you have added all the collector names that collected the monitoring samples, click on the "**Submit**" button.

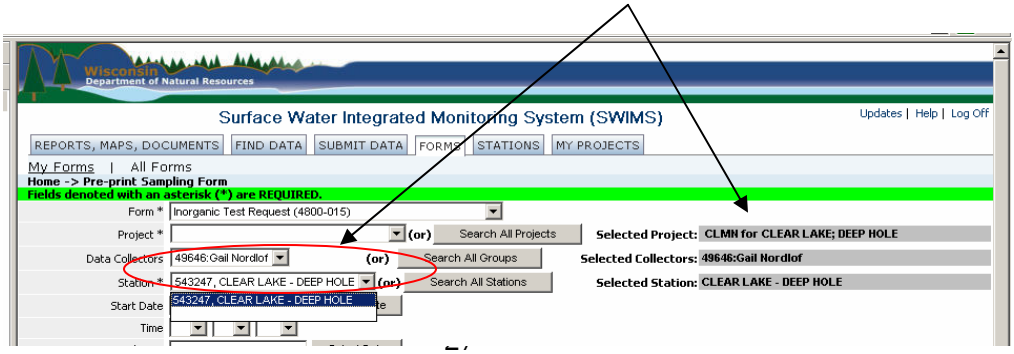


o Select the Monitoring Station

*NOTE: If your samples are for a new monitoring station, you have edit permissions, and training on how to use the embedded Locator Tool (eLT), follow the steps listed in the section: "Establish a New Monitoring Station with the eLT". If you don't have eLT training or just need help, contact one of the file managers (see page 3) for assistance in establishing the new monitoring station. You may also use the request form on the "**Stations**" page to request establishing a station if you don't have the eLT training.*

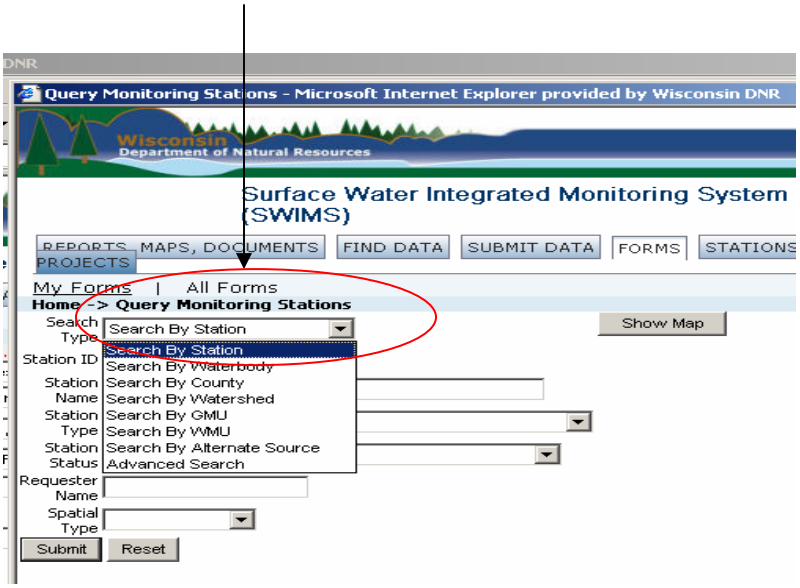
Step 1: Review Monitoring Station Name

Click on the "**Station***" drop-down arrow to review the monitoring stations associated with the project. Click on the monitoring station for the collected sample(s). The selected monitoring station name will appear in the right-hand column. If the correct monitoring station isn't listed, follow Step 2 below.



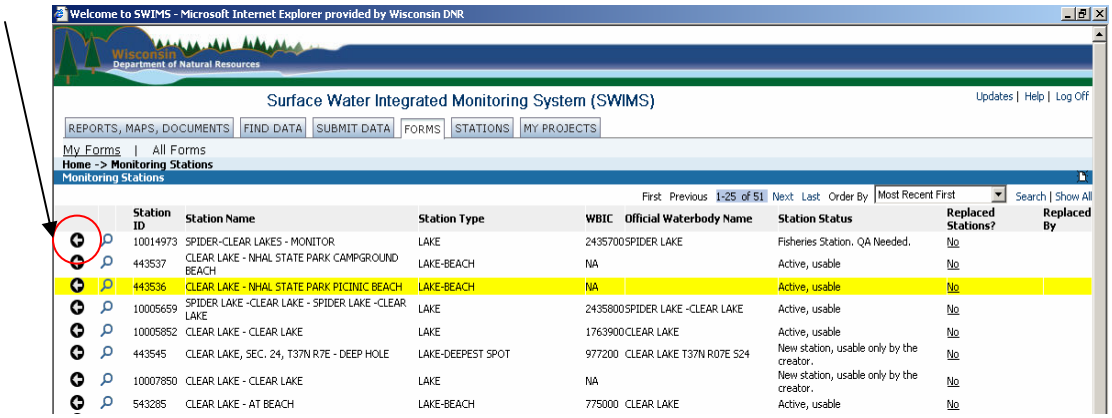
Step 2: Search All Stations

Click on the "**Search All Stations**" button in the "**Pre-print Sampling Form**" Screen. The "**Query Monitoring Stations**" screen will appear. Click on the "**Search**" drop-down arrow and click on a search option. Type in the information requested.



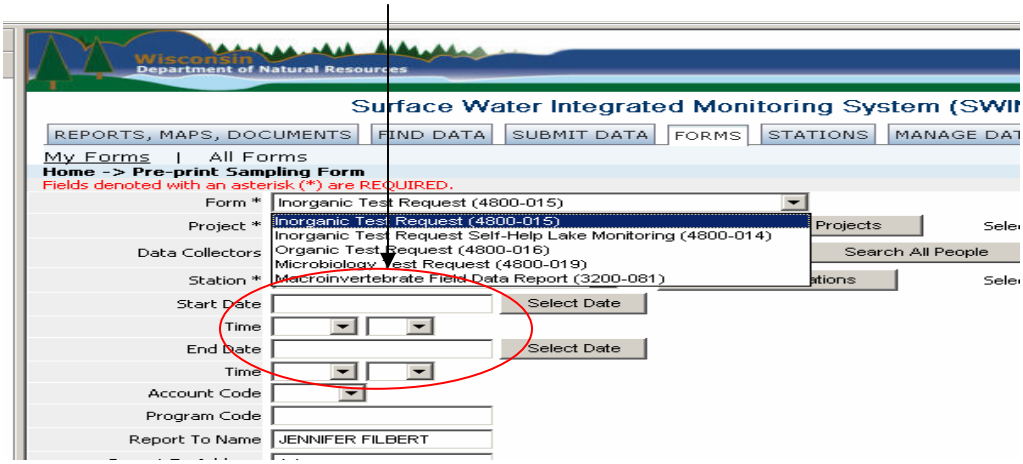
Step 3: Select the Monitoring Station

Clear Lake was entered as the search station by name in the example below. Click on the correct monitoring station to highlight it, and then click on the black "**back arrow"** icon to select the station. The station name will appear on the "**Pre-print Sampling Form**" screen on the left-hand side.



o Enter the Date and Time (optional)

You may leave the Start Date/Time and End Date/Time information blank if you don't know what day you will be conducting the sampling. When you enter Date/ Time information on the lab slip by hand the Lab types in the data and this passes through the state lab of hygiene and right into SWIMS.
If you are printing out the lab slip and you've already collected the sample or know your planned fieldwork date, enter the monitoring Start Date/Time and End Date/Time.



o Select the Account Code

Use the "**Account Code**" drop-down arrow to select the proper account number to charge the monitoring sampling analyses to. If the project's account code is not listed, contact one of the file managers (see page 3) to add this information to your project's database.

o Enter the Program Code

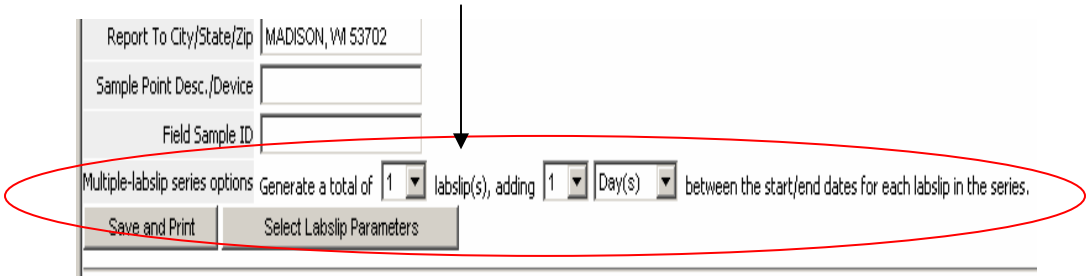
The program code is WT, FH, etc. *NOTE: The "**Report to Name**" information should be generated by the database based upon the user who signed into SWIMS. If this information is not filled in, contact a file manager to add this information to the project database.*

o Enter the Field Sample Id

Enter the field sample ID.

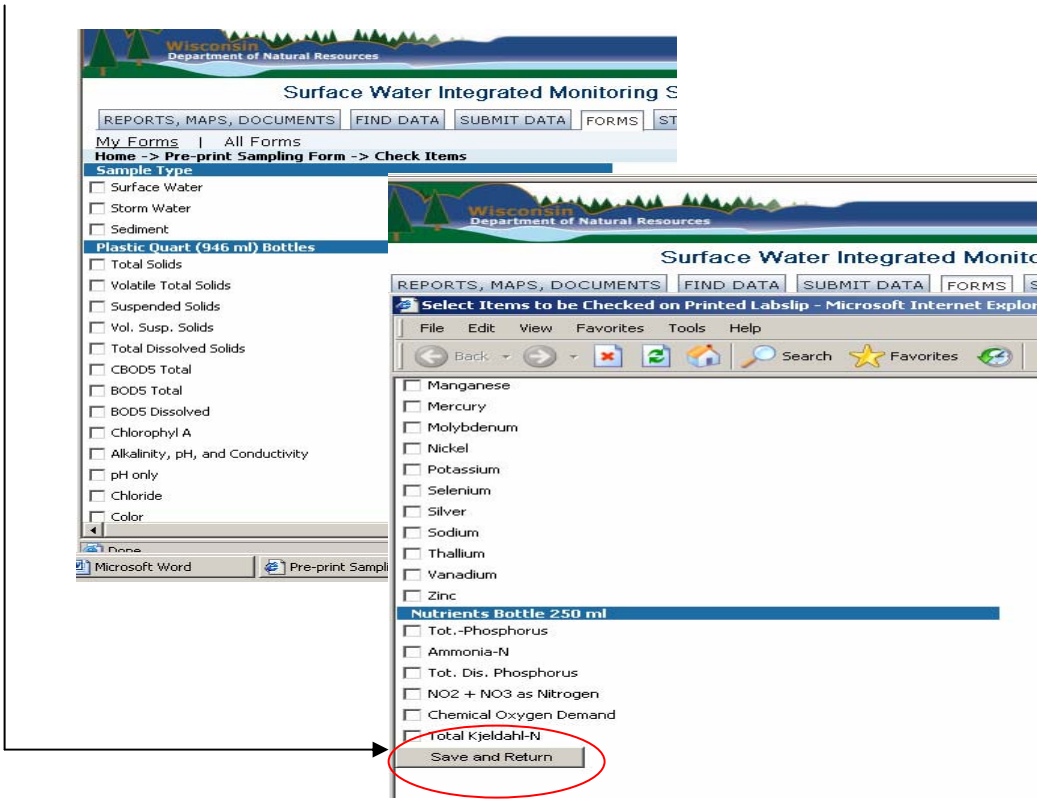
o Select the Number of Lab Slips

Enter the number of lab slips you want to generate. If you anticipate multiple fieldwork events for a project, you can print out multiple lab slip forms in one batch and keep them for your use as you need them – remember to keep the date and time fields blank so you can fill this information by hand later to submit with the monitoring samples for laboratory analysis. It is important to generate individual lab slips (rather than photocopying one to use for multiple events), because each lab slip has a unique, SWIMS-generated ID that corresponds to one fieldwork event.



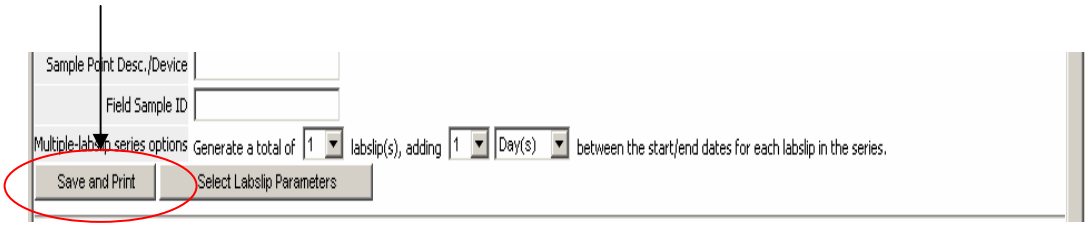
o Select Lab Slip Parameters

Click on the "**Select Labslip Parameters**" button in the "**Pre-print Sampling Form**" screen and the "**Check Items**" list screen will appear. Use the checkboxes to identify the monitoring sample type and types of laboratory analyses to be performed for each sample. Click on the "**Save and Return**" button at the bottom of the list.



- **Save and Print**

  Click on the "**Save and Print**" button at the bottom of the "**Pre-print Sampling Form**" to print out your lab slips.



Retrieve and Move Sampling Data in Worktables

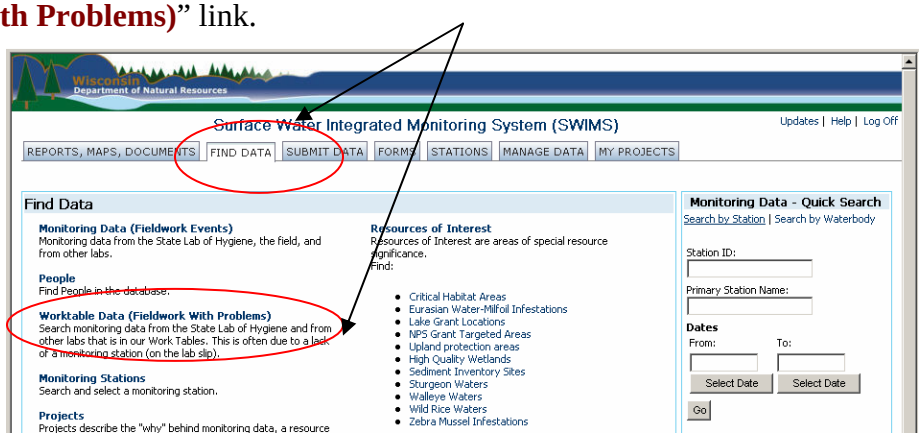
Sometimes the lab results for the monitoring samples you collected and submitted to the State Lab of Hygiene (SLH) don't get linked to your project. If you did not assign a SWIMS Station ID (formerly STORET Station ID) to a lab slip when you took a sample in the field, then your data will not automatically be returned to SWIMS from the SLH. Instead, your sampling data is placed in worktables in the Lab Data Entry System (LDES).

Data in LDES worktables is essentially unavailable electronically until it can be migrated and linked to a fieldwork event in the SWIMS data system (i.e., station assignment must occur). It is the collector's responsibility to retrieve the data from the LDES worktables, assign a SWIMS Station ID to the data, and migrate the data to SWIMS. Since collectors are now assigning SWIMS Station IDs to lab slips, the need to retrieve and move data from LDES worktables should diminish over time. However, there may be the occasion where you tend to an emergency spill or fish kill and don't have time to establish a station until later. It is still important to establish a station! Until you get a SWIMS Station ID assigned to your submitted data, lab results will remain in the LDES worktables.

The following set of instructions will help you through the process of retrieving your lost or missing sampling data in the LDES worktables and migrating it into SWIMS, which you can do entirely through the SWIMS data system. You are strongly encouraged to do a search with your name as the collector so that you can retrieve and migrate all your outstanding sampling data that is currently stranded in the LDES worktables. You may be surprised at how many results you get! These data records go back to 1986!

o Retrieve Data in Worktables

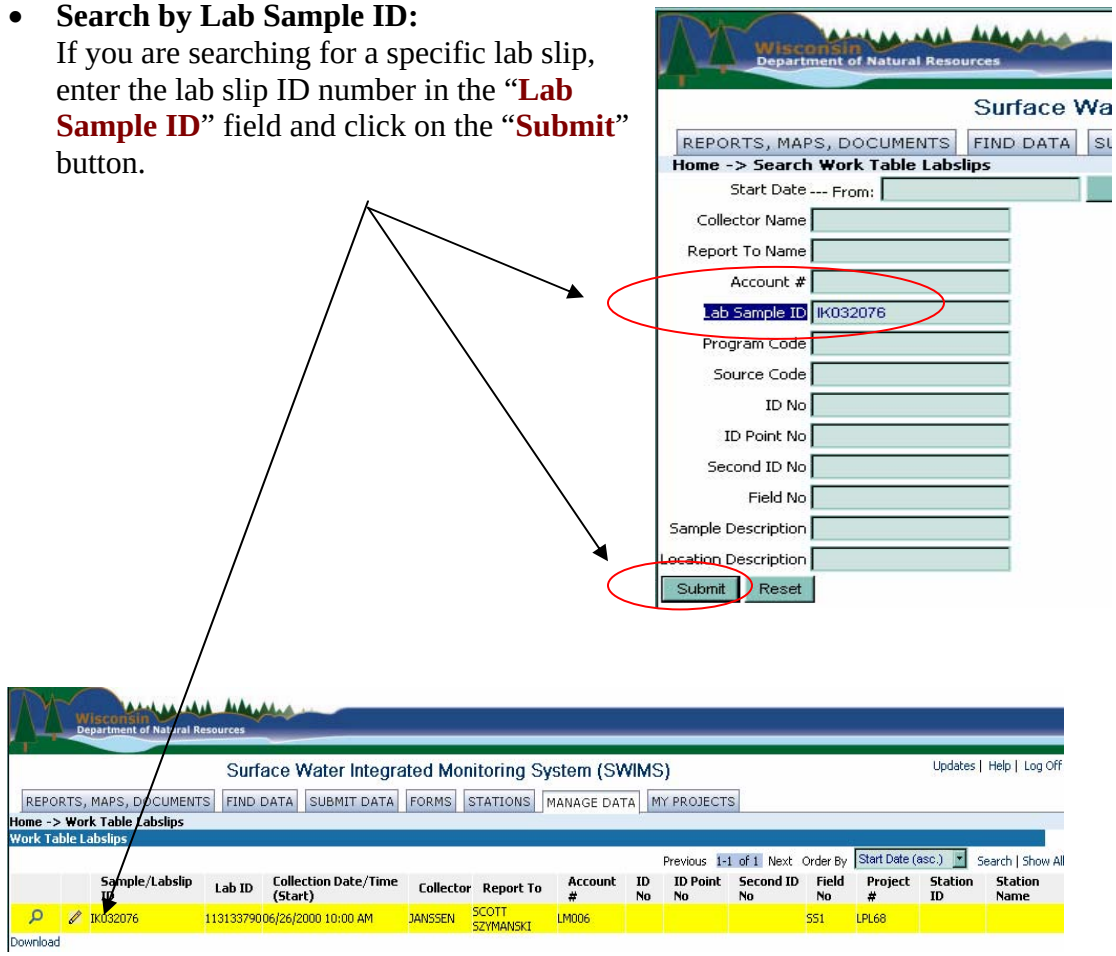
Step 1: Search for Data with Problems
Click on the "**FIND DATA"** tab; then click on the "**Worktable Data (Fieldwork With Problems)**" link.



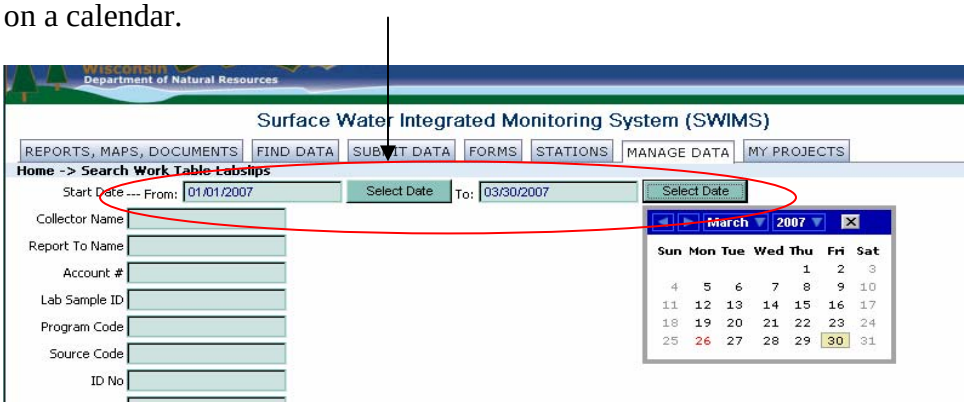
Step 2: Search for Existing Fieldwork Data in LDES Worktables
You can search for lab sample data that is stored in LDES worktables by one or more of the following: Start and/or End Date, Collector Name, Report To Name, Account #, Lab Sample ID, Program Code, Source Code, ID#, ID Point #, Second ID #, Field #, Sample Description, and/or Location Description. The more information you enter for your search, the more refined the results you will receive. Follow these search tips:

- **Search by Collector Name:**
  When searching by collector name, enter the collector's last name between % symbols, (for example: %Janssen%). SWIMS will retrieve a complete list of fieldwork data in LDES worktables that is associated with anyone listed as a collector by the name of Janssen to include instances where there is more than one collector listed in the database.

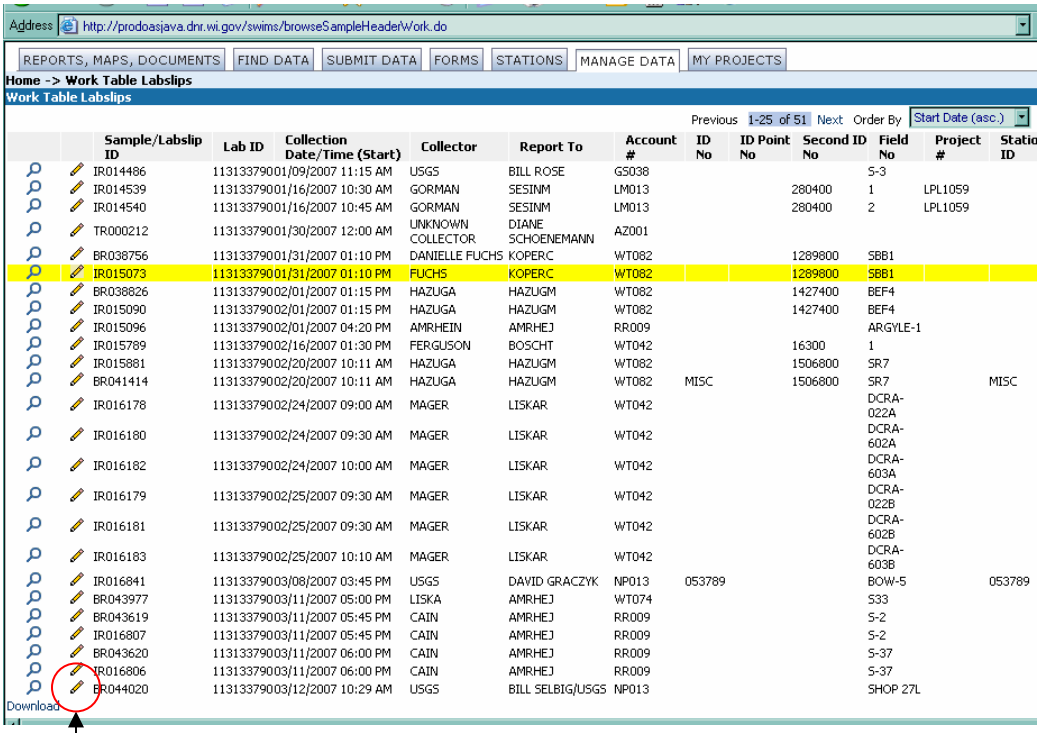
- **Search by Lab Sample ID:**
  If you are searching for a specific lab slip, enter the lab slip ID number in the "**Lab Sample ID**" field and click on the "**Submit**" button.



- **Search by Date:**
  You can search by the sampling date to retrieve all data from a specific time period. Click on the "**Select Date**" buttons to help you pick start and end dates on a calendar.



The above search resulted in a listing of 51 lab samples collected between 1/01/2007 and 03/30/2007.

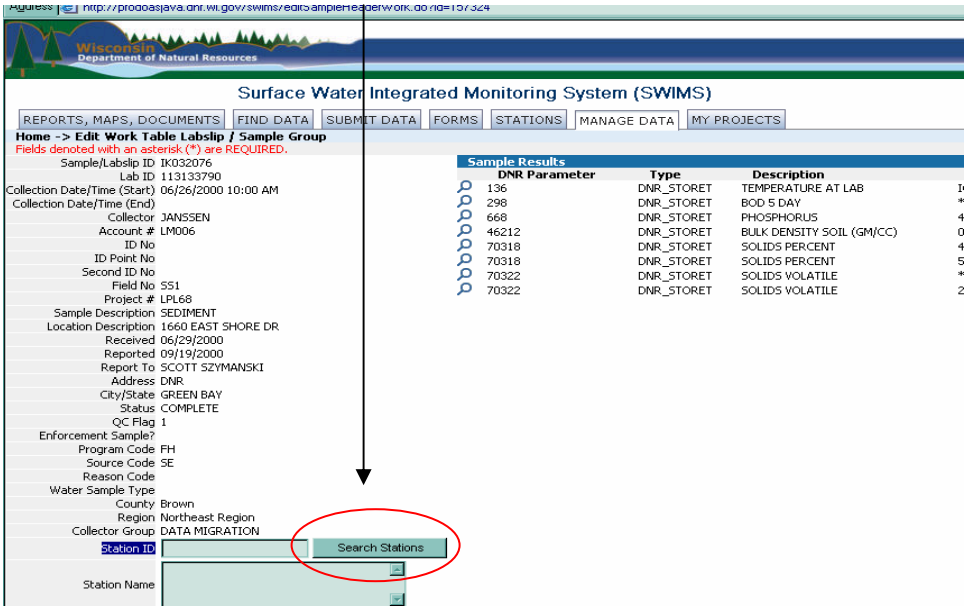


Step 3: View/Edit Sample Results
Click on the "**pencil**" icon to view (and later edit) sampling data from a fieldwork event in the "**Work Table Labslips**" page.

o Move Data in Worktables

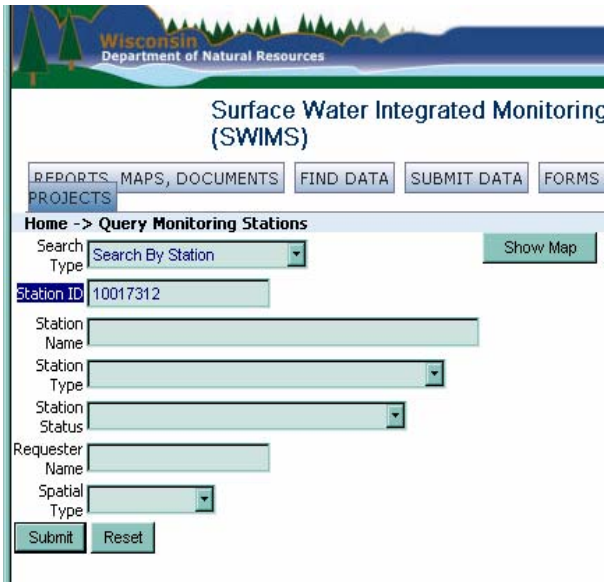
Step 1: Search for the Monitoring Station

Notice that in the "**Edit Work Table Labslip/Sample Group**" screen example below, the sample results show the lab slip ID, collection date, collector name, account #, and other sampling information, but not the monitoring station ID number. This data is in an LDES worktable (and not yet linked to a monitoring station ID in SWIMS) because the station ID field on the lab slip was left blank. If a station ID was entered for the fieldwork event but it is not a valid SWIMS station ID, the invalid ID will appear in the station ID field. Either way (Station ID is blank or invalid), in order to process your data and migrate it into SWIMS, you must assign a SWIMS station ID to your fieldwork event. To begin your search, click on the "**Search Stations**" button.



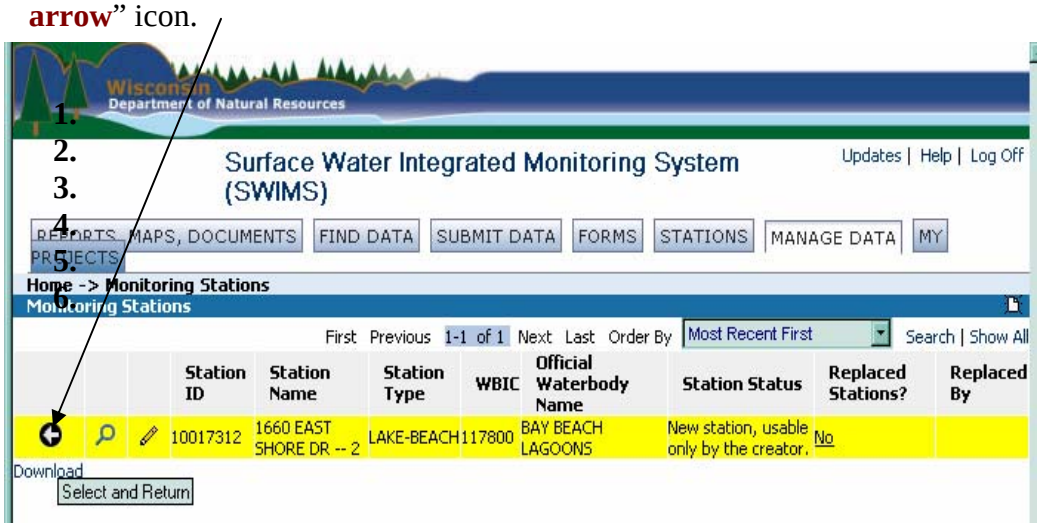
Step 2: Enter Search Information

Follow the steps outlined in the section: "Find Your Monitoring Station in SWIMS" to search for the correct station for your data. Remember that you can search by Station ID (quickest way), Station Name, WBIC, Waterbody Name, County, or Alternate Source ID in addition to other search options. Choose the method you want to use to search, enter the information, and click on the "**Submit**" button.



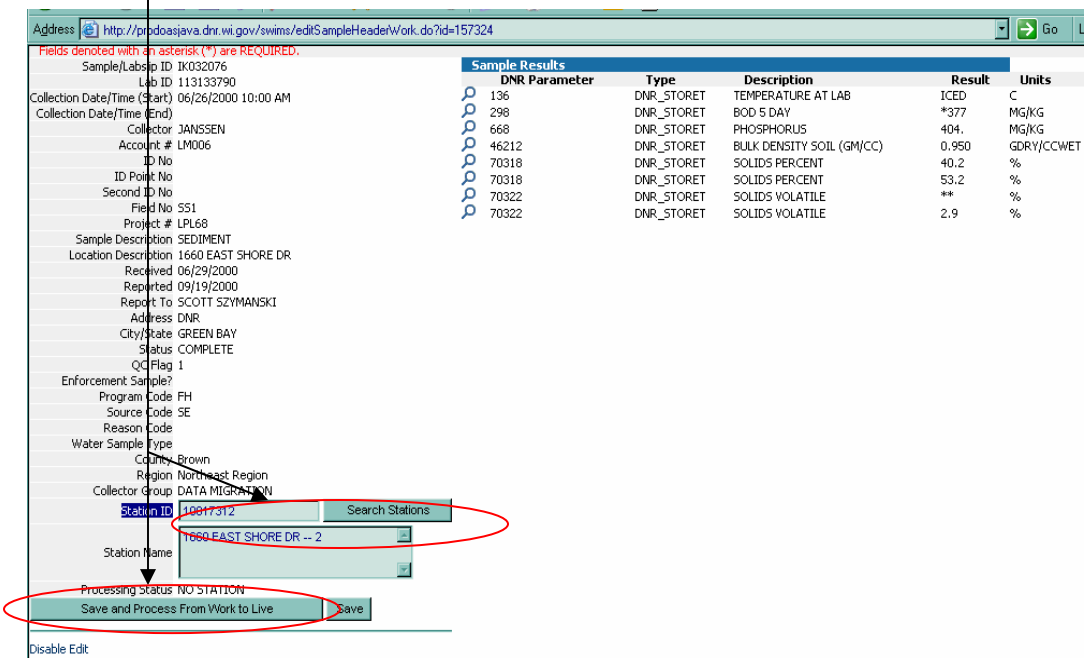
Step 3: Select Station

When you have found the station, select it by clicking on the black "**back arrow**" icon.

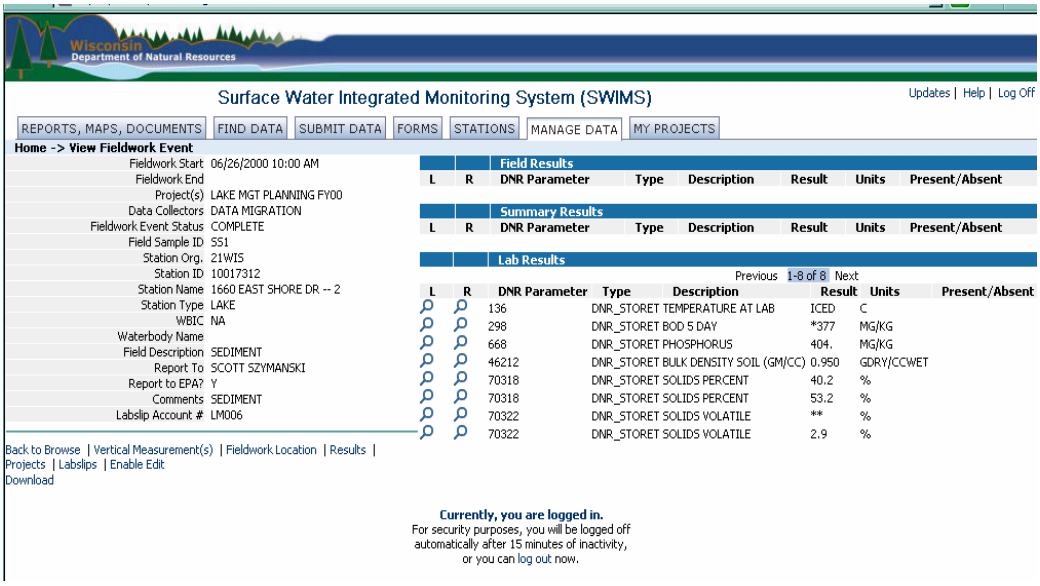


Step 4: Save and Process From Work to Live Tables

The station ID you chose now shows up in the Station ID field, and its name shows up in the Station Name field. You can now click on the "**Save and Process From Work to Live**" button.

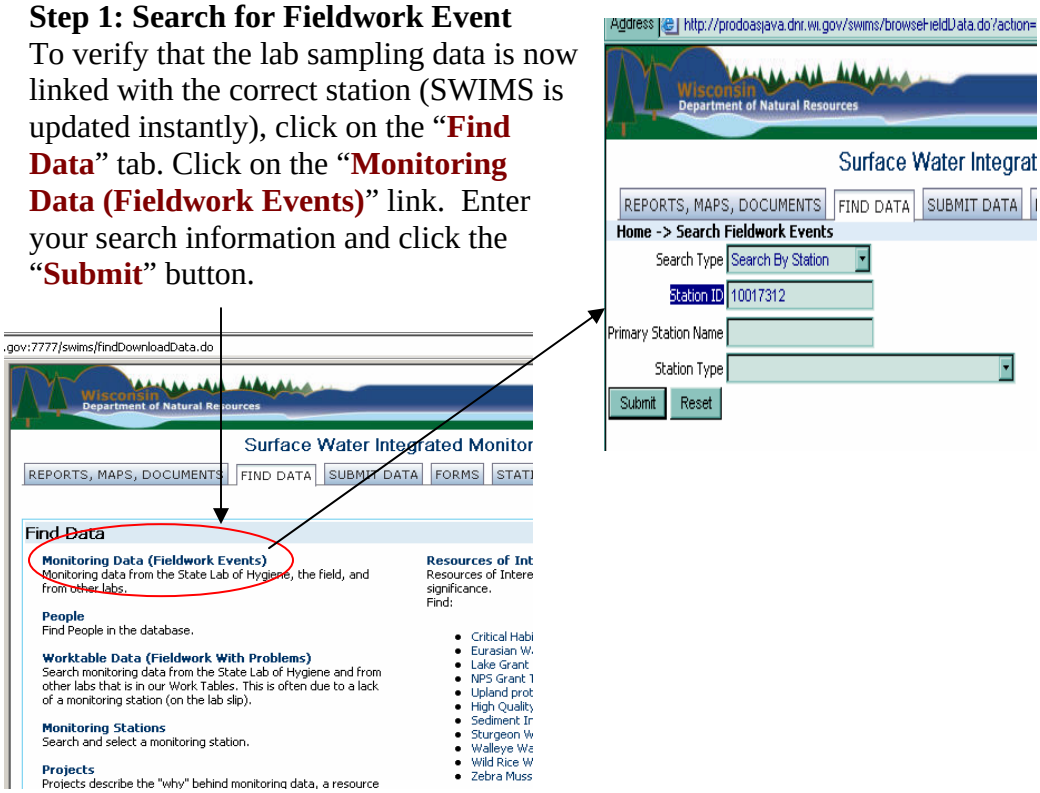


Step 5: Review Sampling Data
Congratulations! Your sampling data has successfully been assigned to a monitoring station in SWIMS. You can review the lab slip information and sampling data results on the "**View Fieldwork Event**" screen.



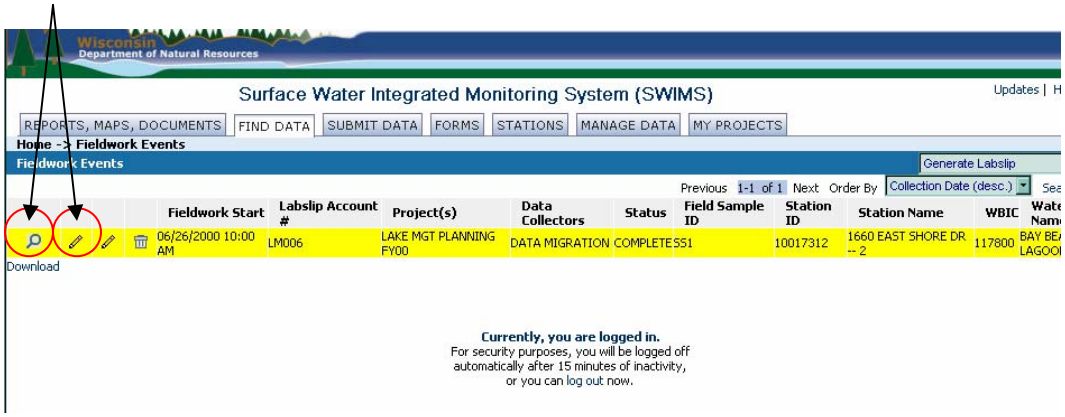
o Verify Fieldwork Event Information

Step 1: Search for Fieldwork Event
To verify that the lab sampling data is now linked with the correct station (SWIMS is updated instantly), click on the "**Find Data**" tab. Click on the "**Monitoring Data (Fieldwork Events)**" link. Enter your search information and click the "**Submit**" button.



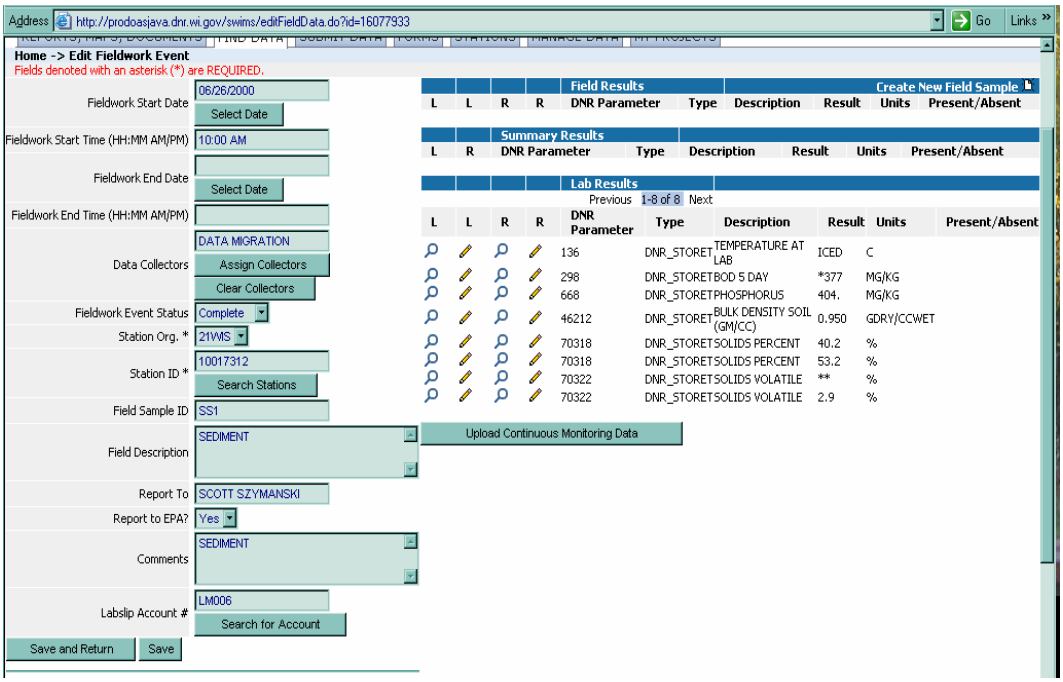
Step 2: Select Fieldwork Event

Click on the "**magnifying glass**" icon (or the first "**pencil**" icon) to select the fieldwork event.



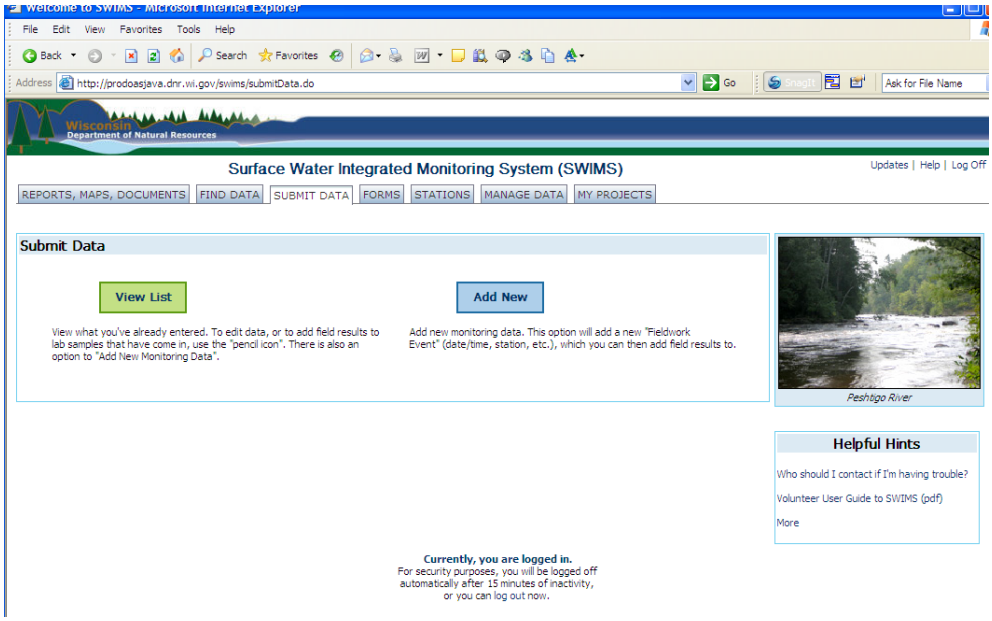
Step 3: Review Fieldwork Data

Review and verify that the data transferred from the worktables is now linked to the correct station. You can also review the lab slip information and results on this screen.



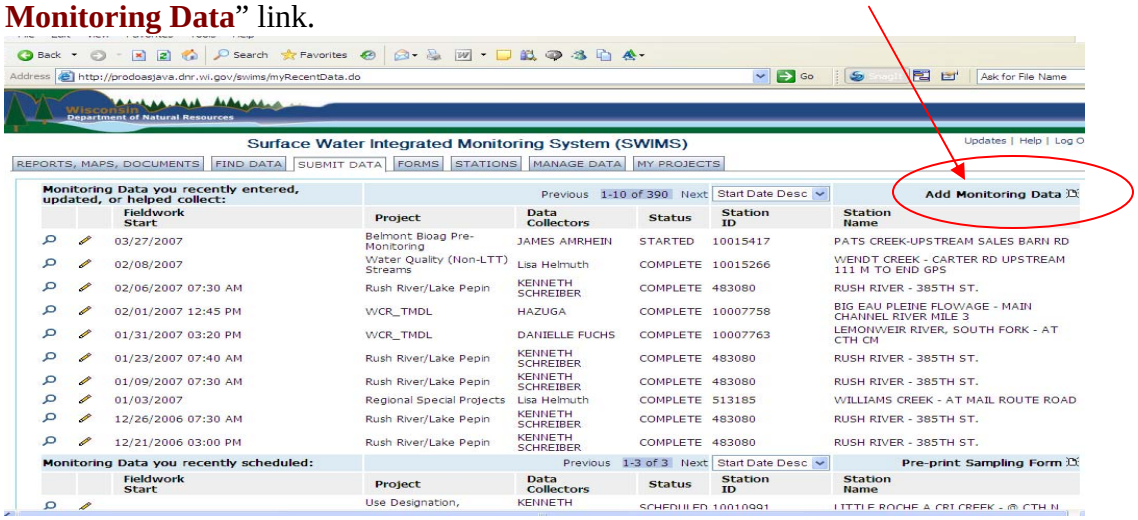
Enter Data Using Forms

You can use the "**SUBMIT DATA**" tab to enter data from field work notes and data collected in field work events that will not be analyzed at the State Lab of Hygiene. Click on the "**SUBMIT DATA**" tab and select the "**View List**" button to add data to recent data or "**Add New**" button to add new fieldwork event data.

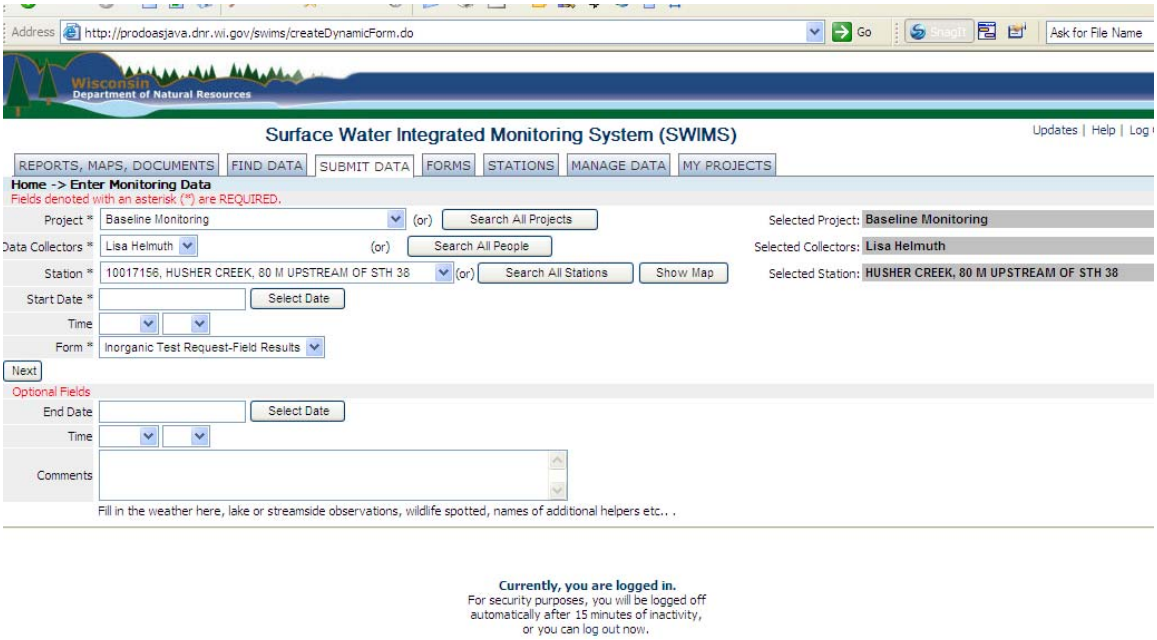


o View List of Field Work Events to Add Data

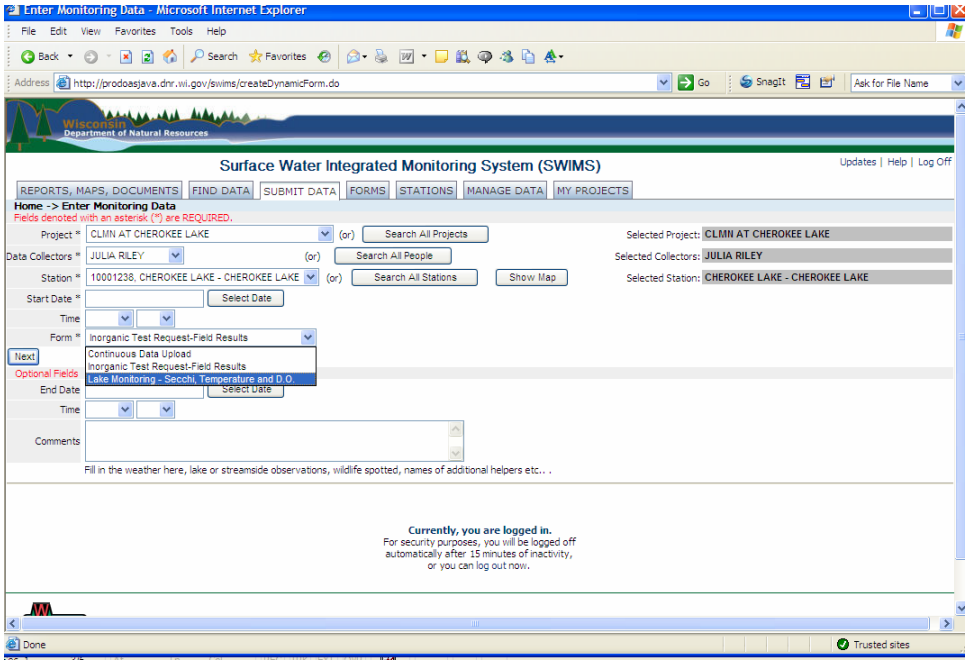
Step 1: Find the Fieldwork Event that you would like to add data to. If you don't see a fieldwork to add to and need to create a new fieldwork, click on "**Add Monitoring Data**" link.



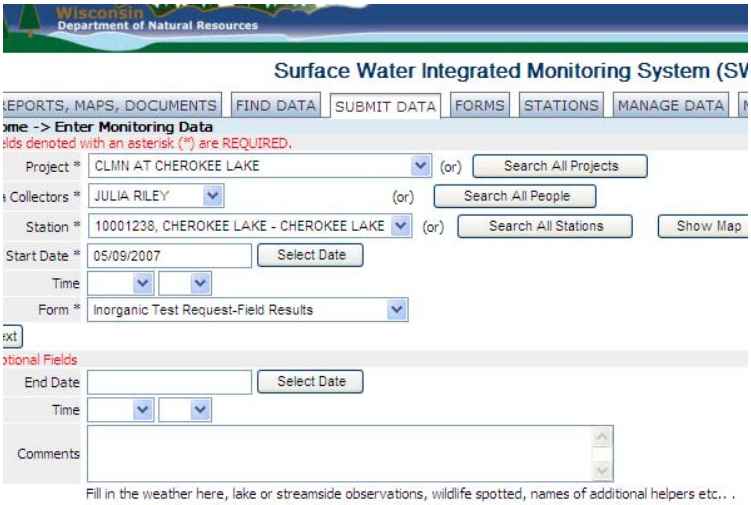
Step 2: Click on the "**pencil**" icon to edit the fieldwork event i.e., add data to the event using the data entry wizard/forms.…



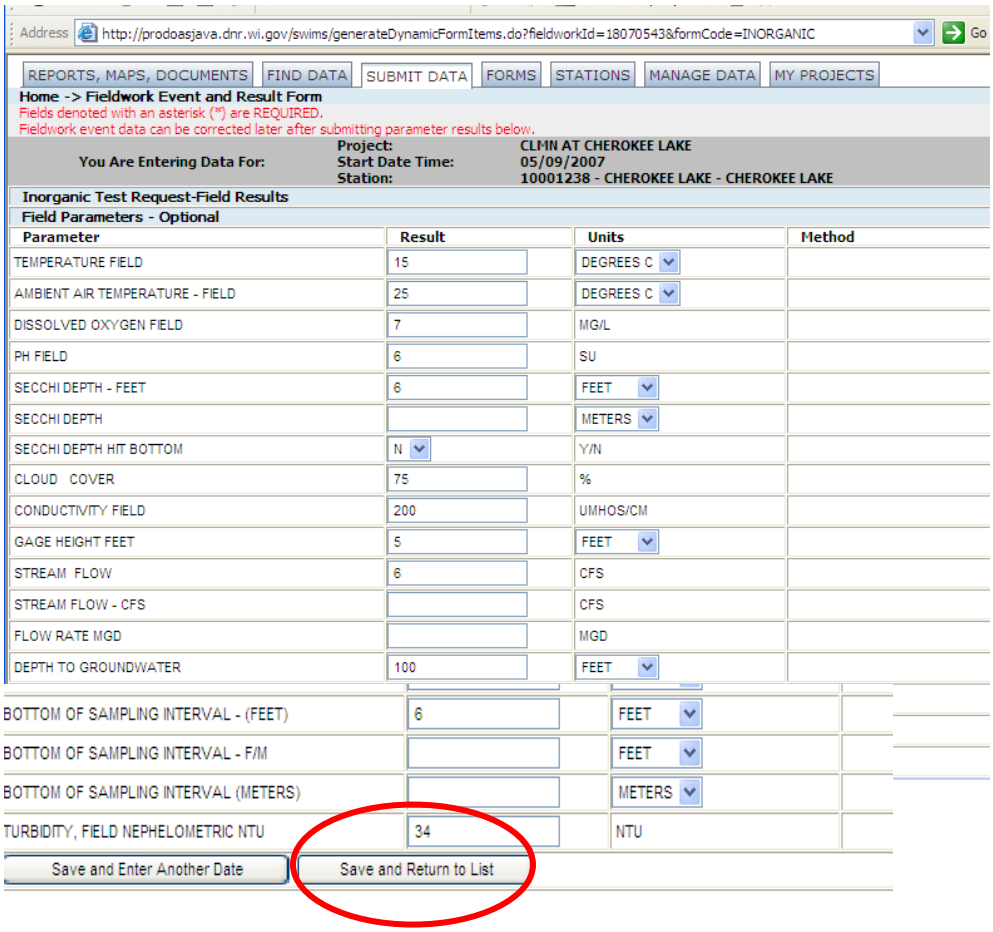
Step 3: Select the form you will need to use for entering your data from the "**Form***" drop-down arrow list.



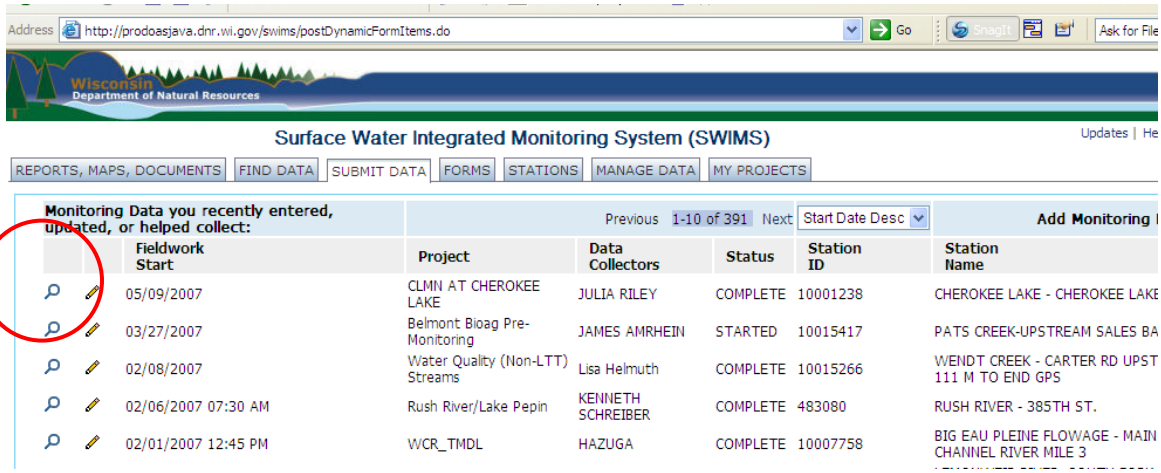
Step 4: Fill in the information in the "**Enter Monitoring Data**" screen.



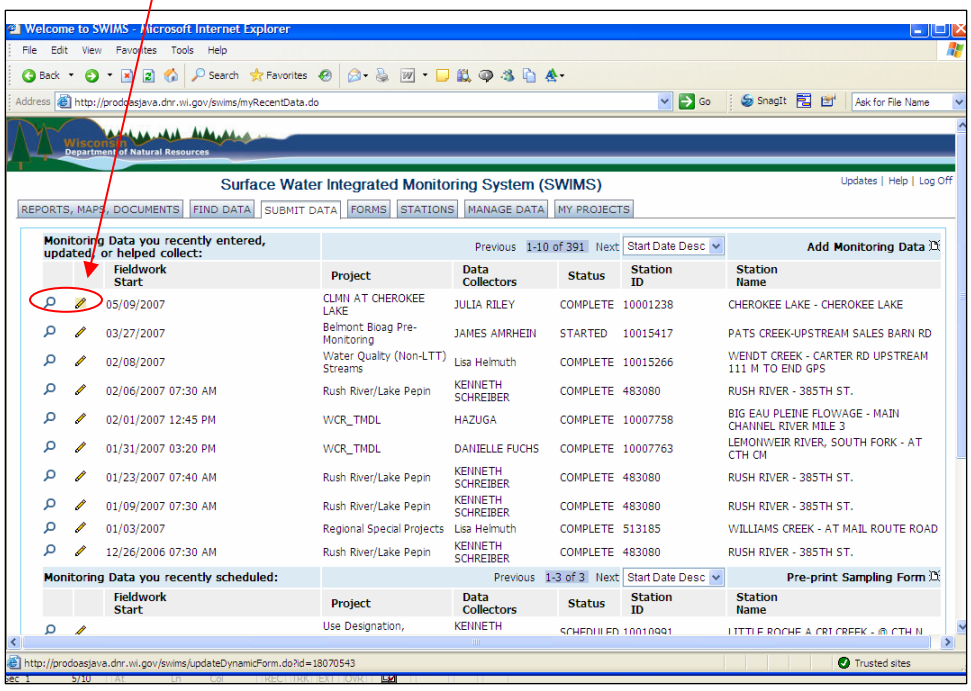
Step 5: Selecting the Inorganic Test Request – Field Results form will bring you to this screen. Enter the result information you wish to add to the field-work event and click on the "**Save and Return to List**" button.



Step 6: When you finish entering data, you will be brought back to this screen. To view your fieldwork event with your new data, click on the "**magnifying glass**" icon.

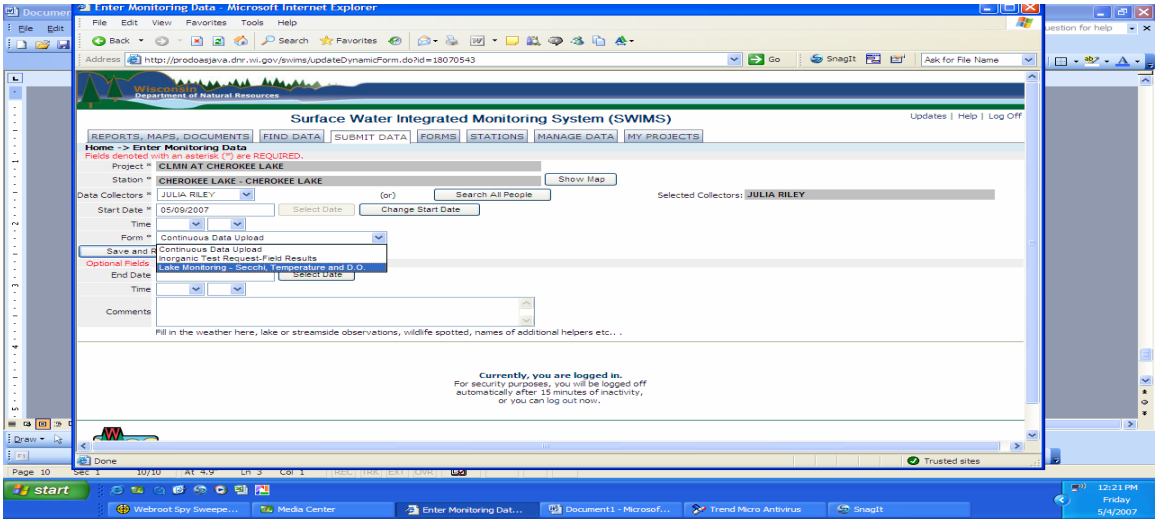


Step 7: Once you have uploaded your data, you can select an additional form to add more information to your fieldwork event. Click on the "**pencil**" icon to return you to the "**Enter Monitoring Data**" screen again to select the next form.

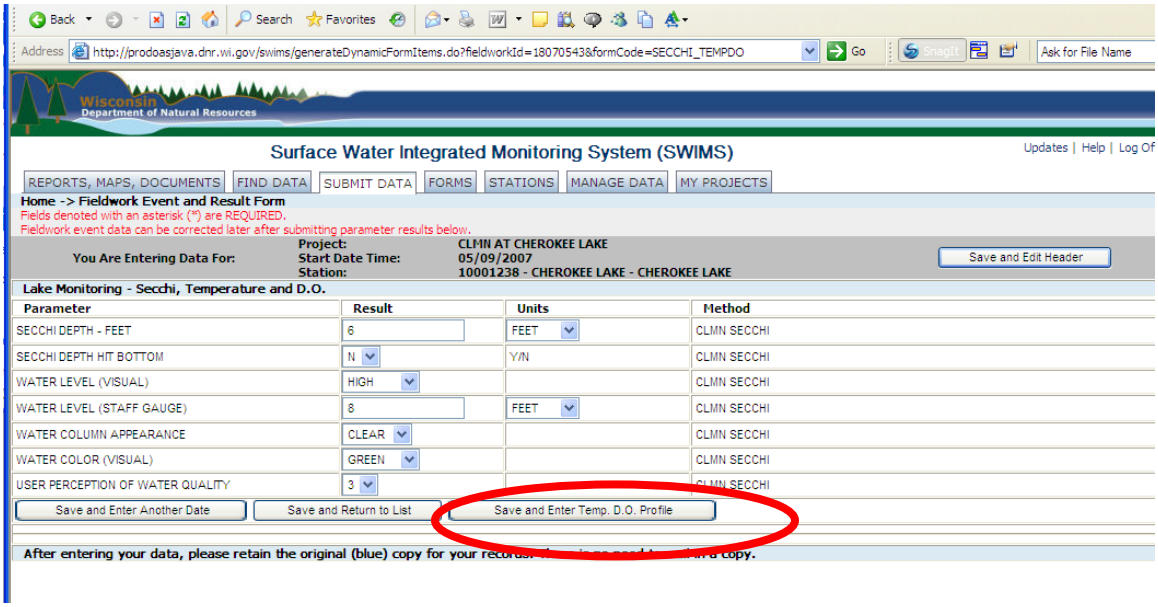


o The Secchi, Temperature, and DO form:

Step 1: Select the "**Monitoring Secchi, Temperature, and DO**" form from the drop-down arrow list in the "**Enter Monitoring Data**" screen:

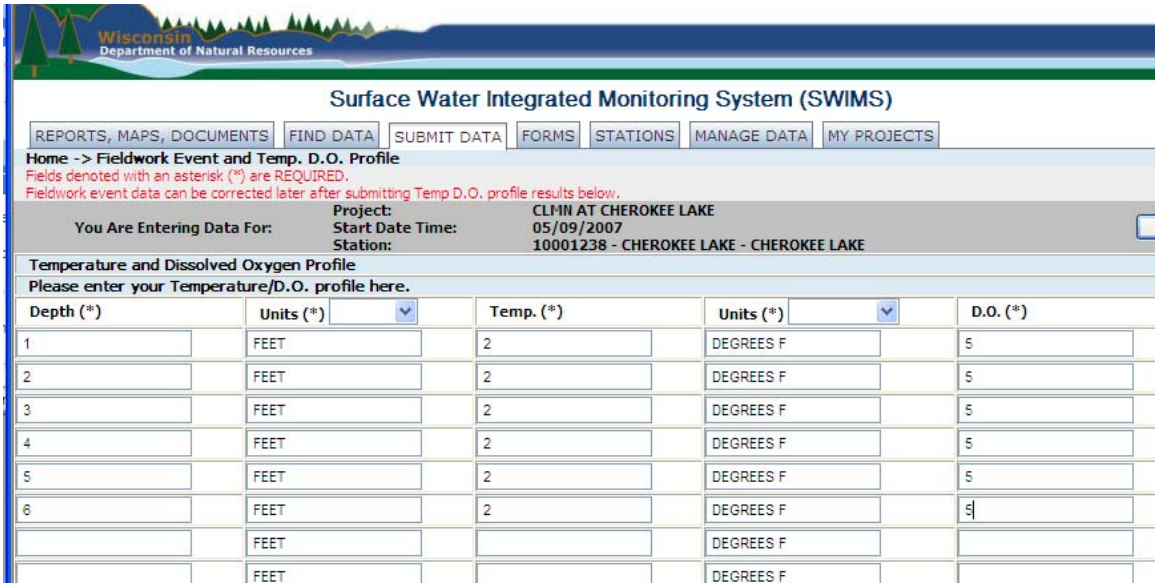


Step 2: The next screen is the "**Fieldwork Event and Result Form**" screen for the initial data entry screen of secchi depth. Add your result data and then click on the "**Save and Enter Temp. DO. Profile**" button. If you want to change information about the date and time of the fieldwork or add comments you can click on the "**Save and Edit Header**" button to take you back to the "**Enter Monitoring Data**" screen.

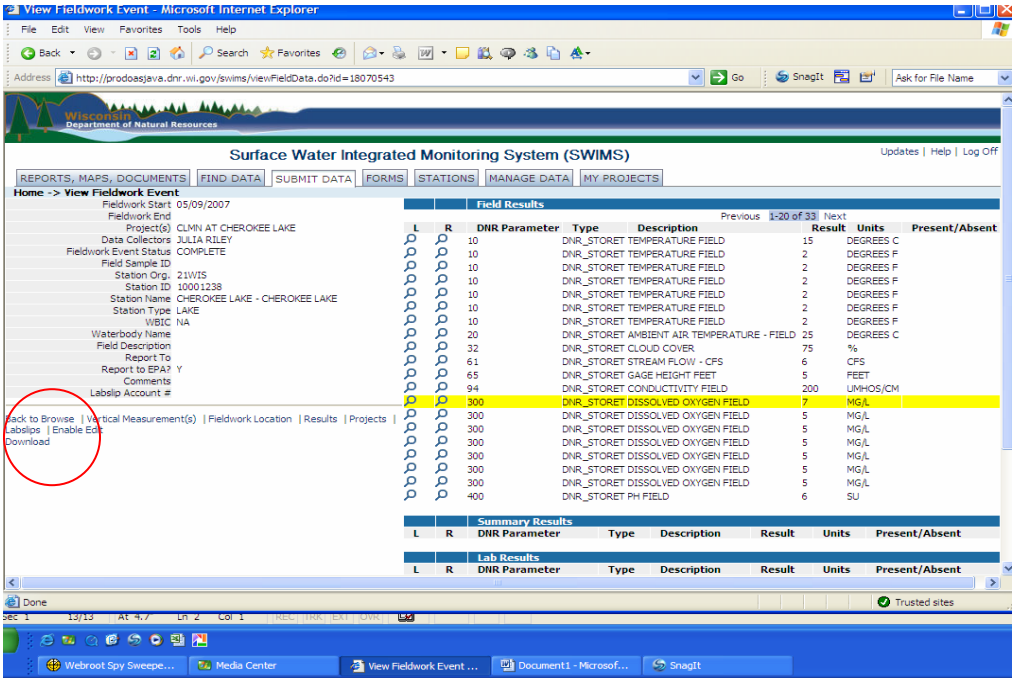


[Note the "Save and Enter Temp. D.O. Profile" button]

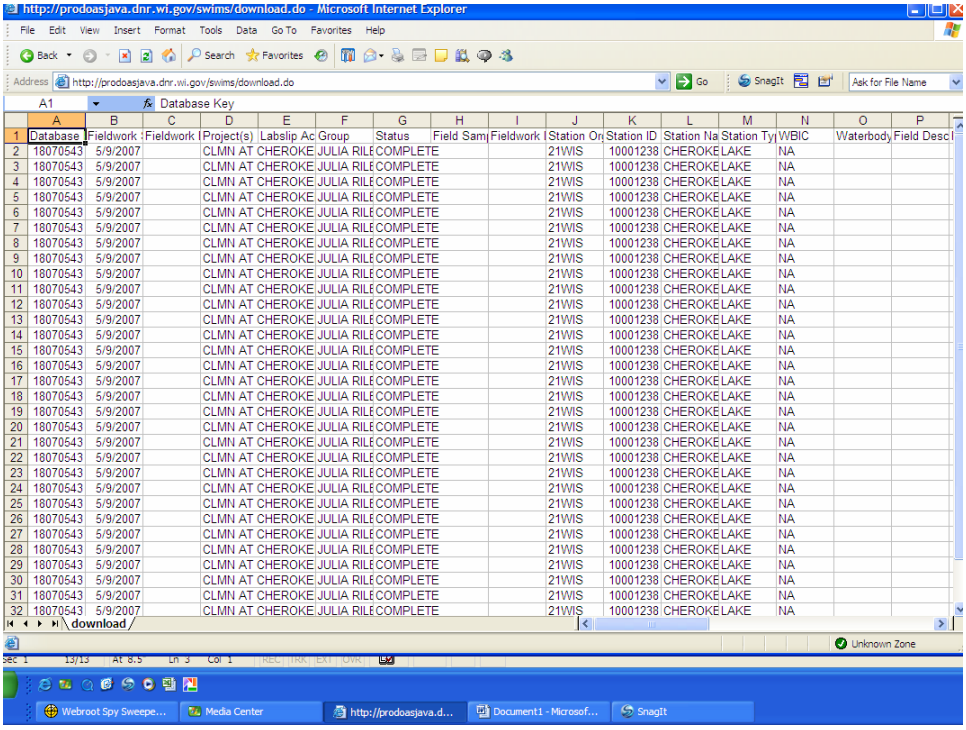
Step 3: Enter the temperature and D.O. profile data in the "**Fieldwork Event and Temp. D.O. Profile**" screen.



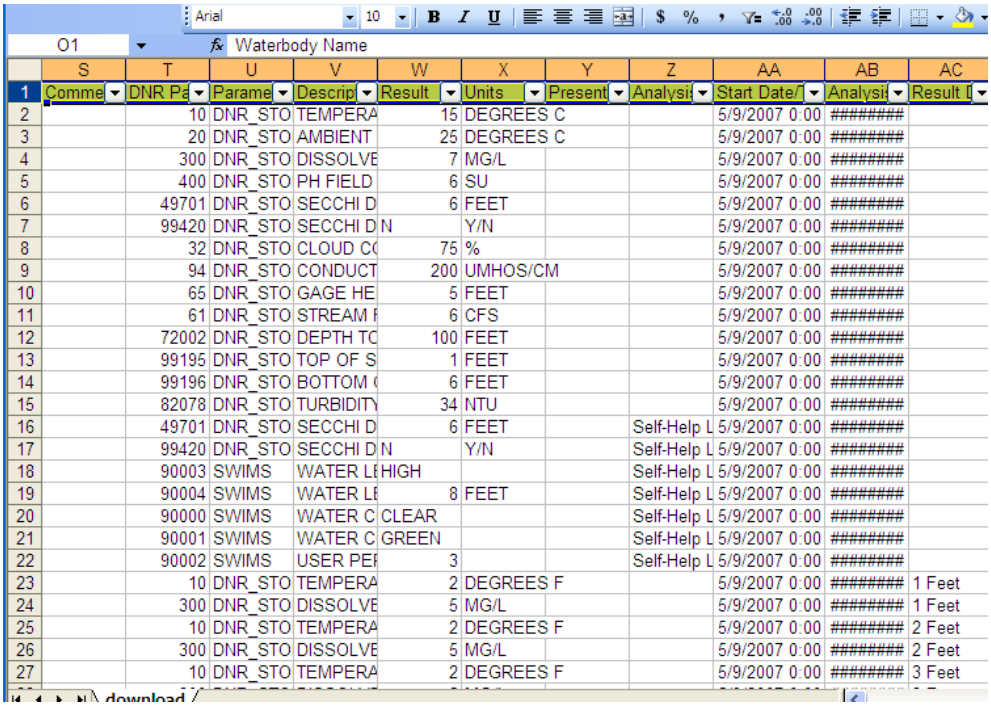
Step 4: When you have completed entering your data, you can navigate through the "**magnifying glass**" icon to see your data in the standard fieldwork event format. To download information, click on the "**Download**" link at the bottom of the left-hand side of the "**View Fieldwork Event**" screen.



Step 5: The downloaded data will go into an excel spreadsheet.



Here is an example of the data with an autofilter on:



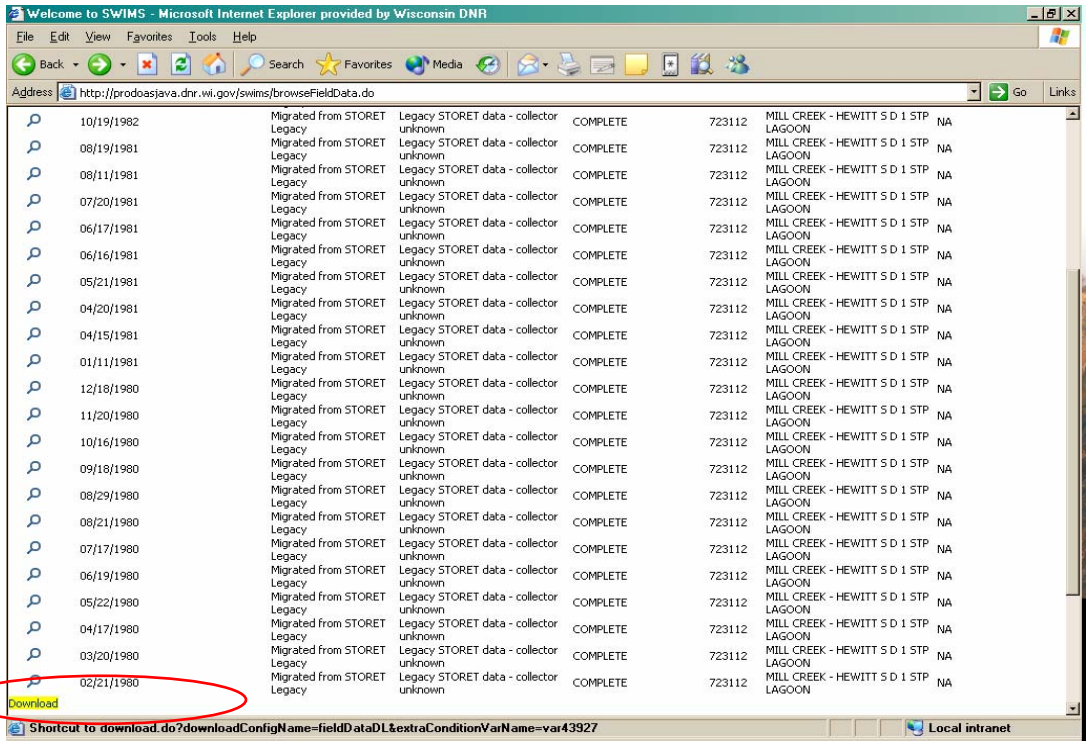
Download Data

Follow these steps to create excel spreadsheets of data results.

Step 1: Find Your Fieldwork Events
Click on the "**FIND DATA**" tab. Then click on the "**Monitoring Station (Fieldwork Events)**" link. Search by the field(s) most useful to you (using "**Advanced Search**" if necessary) to get the results you're looking for. Once you're on the "**Fieldwork Event**" screen, scroll down (if necessary) to the bottom of the screen and click on the "**Download**" link in the lower left-hand corner. *NOTE: You can also download data from the "**STATIONS**" tab by navigating to the "**View Monitoring Stations**" screen. The screen looks different, but the process is the same.*

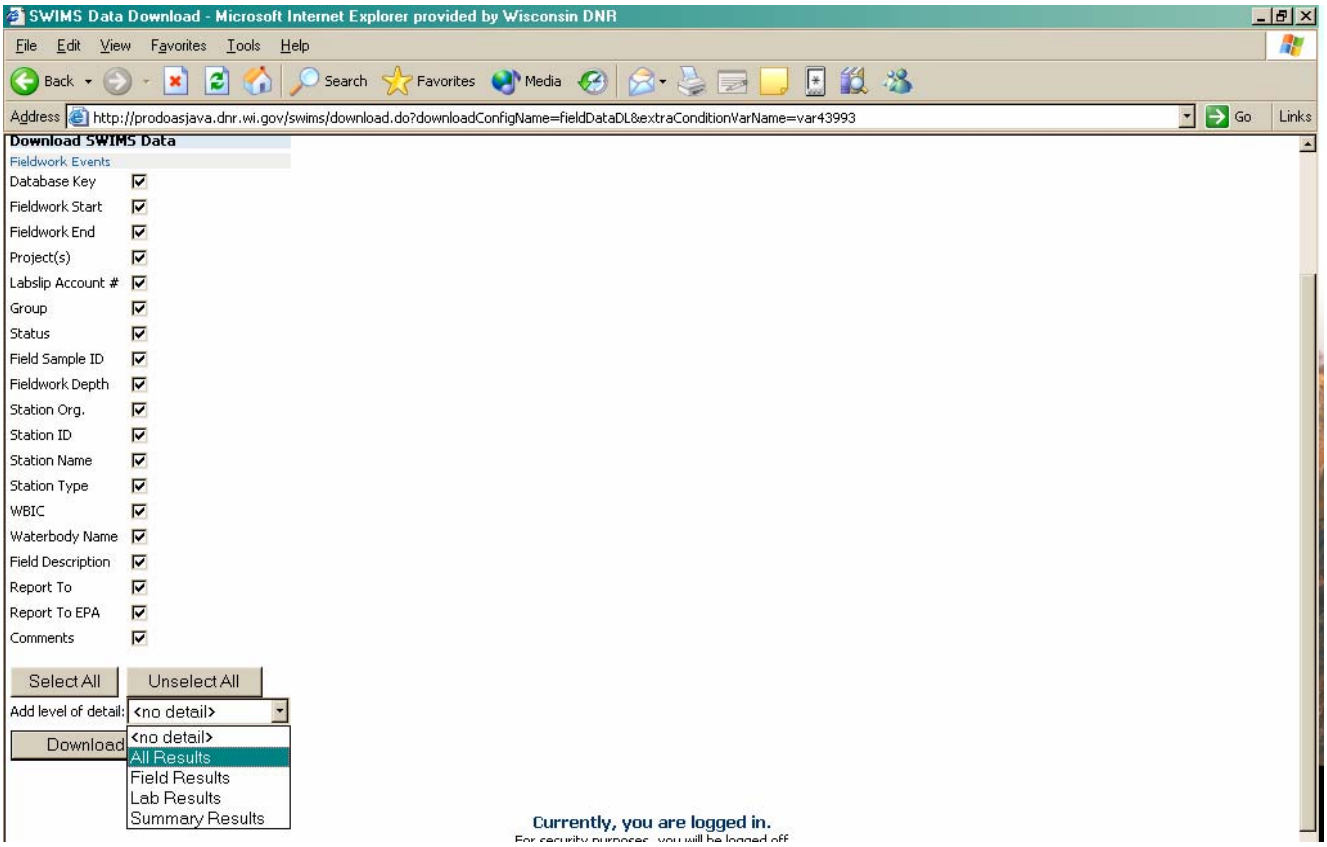
A NOTE OF CAUTION: The SWIMS data system has its limits! If you attempt to download more than 20,000 records (results) at once, you will get an error message.

List of Fieldwork Events To Be Downloaded



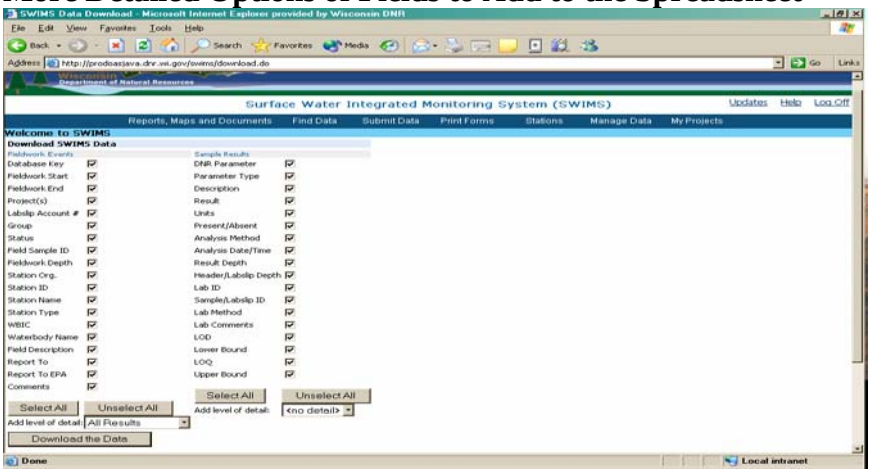
Step 2: Choose the fields you want to appear on the spreadsheet by checking the boxes. Click on the "**Select All**" button to check all boxes. Choose the level of detail you'd like to see from the "**Add Level of Detail**" dropdown list.

Options of Fields to Add to the Spreadsheet



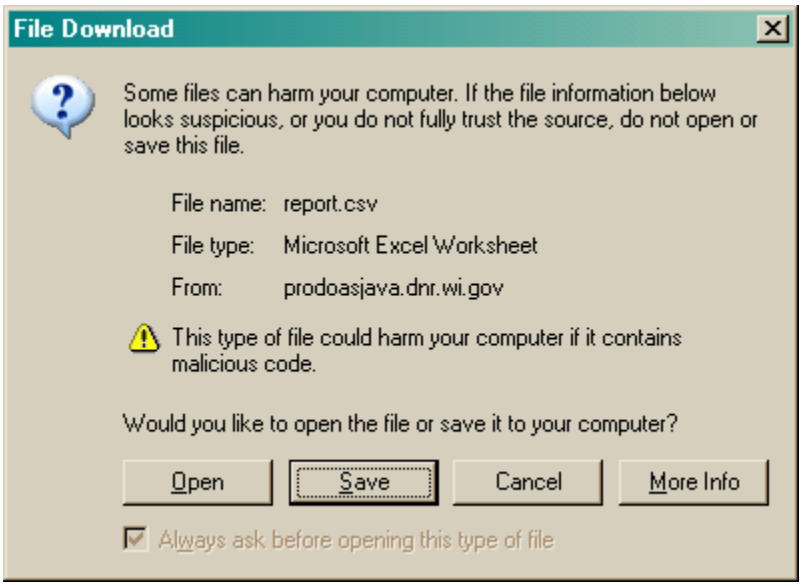
Step 3: Choose additional fields of detail (parameters, results, units, etc.) that you want to appear on the spreadsheet by checking the boxes in the second column that appears. (Again, click the "**Select All**" button to check all boxes.) When you're done with checking the options you want, click on the "**Download the Data**" button.

More Detailed Options of Fields to Add to the Spreadsheet



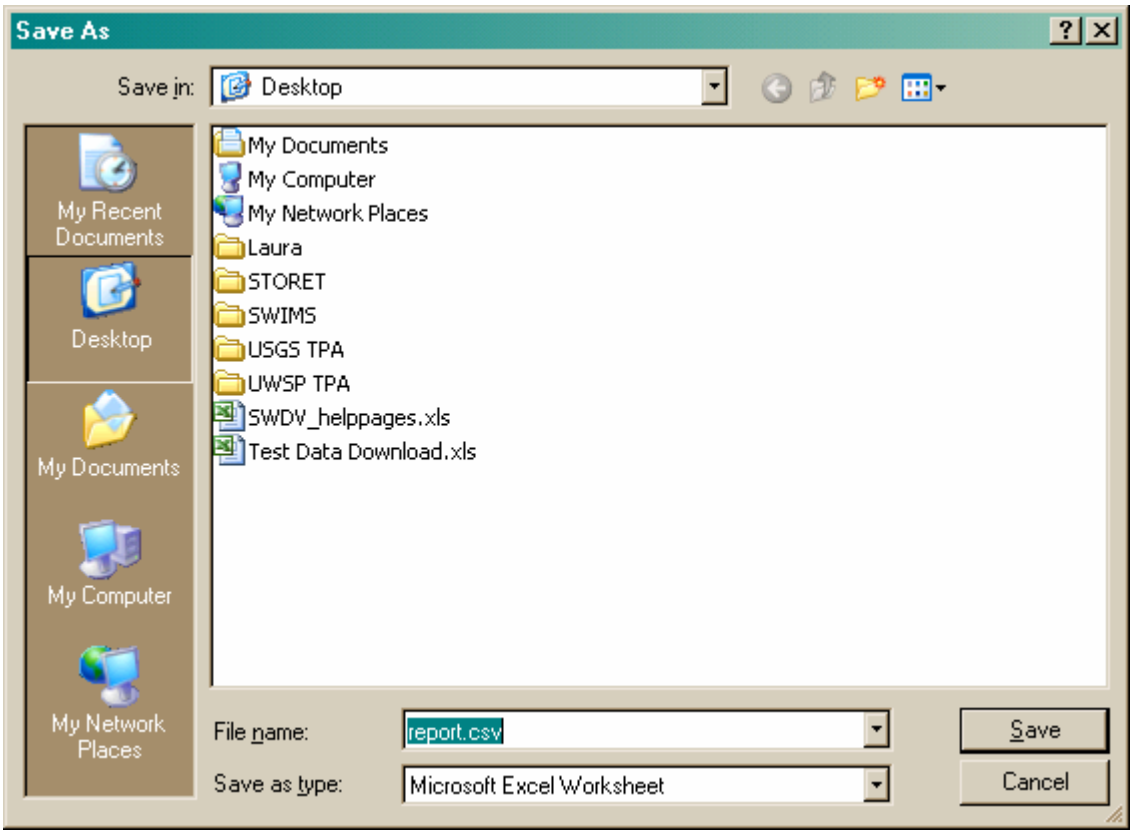
Step 4: The "**File Download**" box will appear. Click on the "**Save**" button to save the file to your computer.

File Download Box



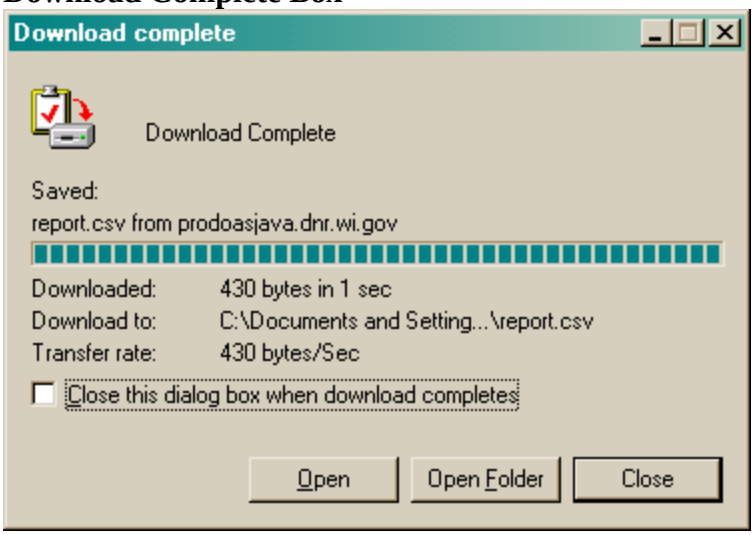
Step 5: Save the file as a Microsoft Excel Worksheet under "**Save as type**".

Save Box



Step 6: A "**Download Complete**" box will run. When the download is complete, click on the "**Open**" button to open the file.

Download Complete Box



Step 7: The data will appear in an Excel spreadsheet. You can now arrange it in a format of your choosing, analyze the data, and send it out for data viewing by others.

SWIMS Data Downloaded into Excel Spreadsheet

Microsoft Excel - report.csv

File Edit View Insert Format Tools Data Window Help

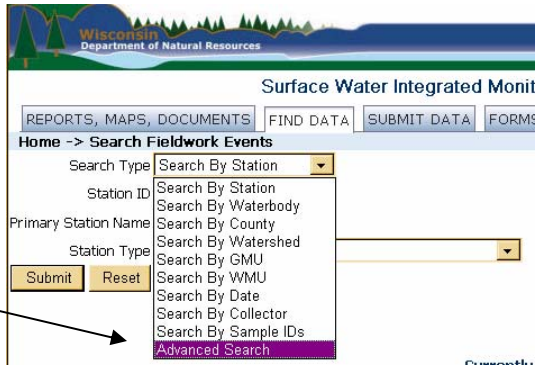
	S	T	U	V	W	X	Y	Z	AA
1	Comments	DNR Parameter	Parameter Type	Description	Result	Units	Present/Absent	Analysis Method	Analysis Date/
2		32210	DNR_STORET	CHLOROPHYLL A UNCORRECTED	*<1	UG/L			10/02/2001
3		80082	DNR_STORET	BOD 5 DAY CARB	<2.0	MG/L			08/15/2001
4		136	DNR_STORET	TEMPERATURE AT LAB	ICED	C			08/15/2001
5		940	DNR_STORET	CHLORIDE	441	MG/L			08/30/2001
6		665	DNR_STORET	PHOSPHORUS TOTAL	3.58	MG/L			09/07/2001
7		671	DNR_STORET	PHOSPHATE ORTHO DISS	*3.54	MG/L			08/15/2001
8		608	DNR_STORET	NITROGEN NH3-N DISS	0.055	MG/L			08/23/2001
9		615	DNR_STORET	NITROGEN NO2-N TOTAL	0.008	MG/L			08/15/2001
10		625	DNR_STORET	NITROGEN KJELDAHL TOTAL	*0.66	MG/L			09/19/2001
11		631	DNR_STORET	NITROGEN NO3+NO2 DISS (AS N)	18.8	MG/L			08/23/2001
12		530	DNR_STORET	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	ND	MG/L			08/20/2001
13		535	DNR_STORET	RESIDUE VOL NFLT	ND	MG/L			08/20/2001
14									

Find Data: Advanced Searches

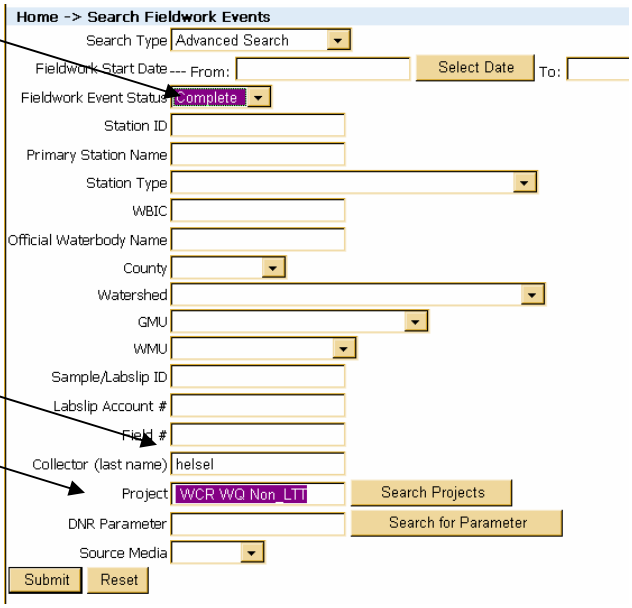
o Search by Multiple Variables

Here are some tips to remember when searching for fieldwork. In the "**FIND DATA**" tab, click on "**Monitoring Data (Fieldwork Events)**" link.

In order to make your search as specific as possible, you can search by a variety of fields at the same time. To maximize your search options, click on the drop-down arrow in the "**Search Type**" field, and choose "**Advanced Search**" from the drop-down list.



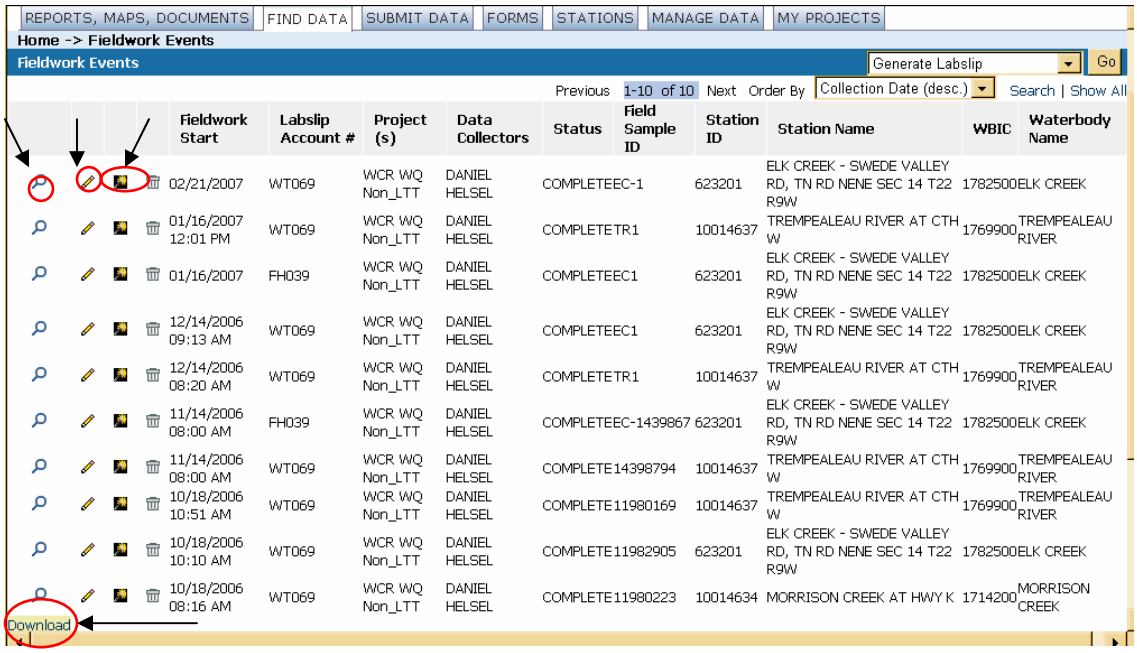
Try searching for fieldwork (or lab slips) using the "**Fieldwork Event Status**" (e.g., **Scheduled, Complete, Started**), "**Collector (last name)**," and "**Project**" fields. Click on "**Submit.**"



*A NOTE OF CAUTION: Be careful when searching for generated lab slips (Scheduled). Often, there may not be a start date on the lab slip, so using the "**Fieldwork Start Date**" field for these searches may not return all the results you want.*

The previous search resulted in a listing of 10 completed fieldwork events/samples collected by Dan Helsel for the WCR_WQ_Non_LTT project.

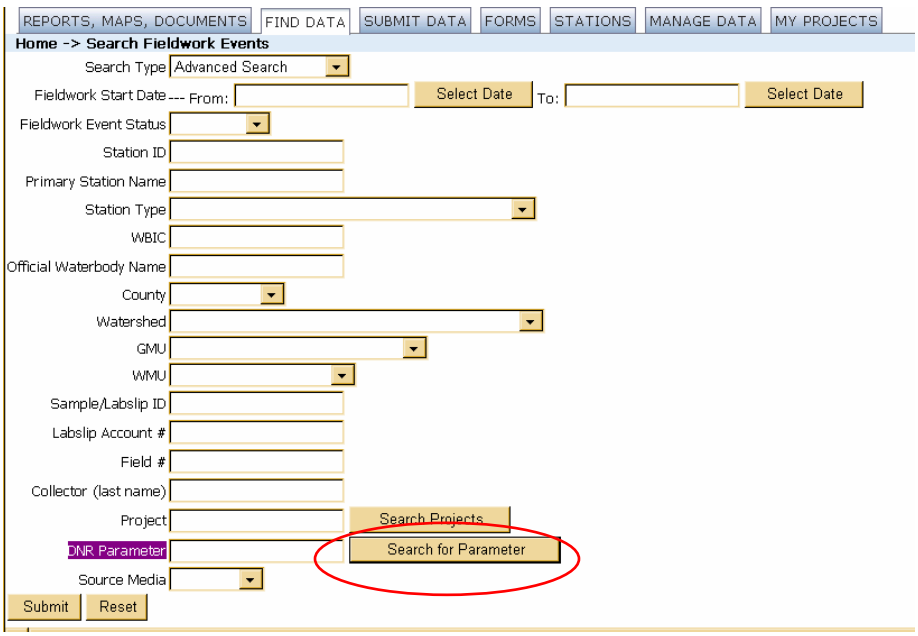
From here, you can go into the individual records to view or edit the sample results, add information to the existing fieldwork events, or download (all) the data from the fieldwork events listed.



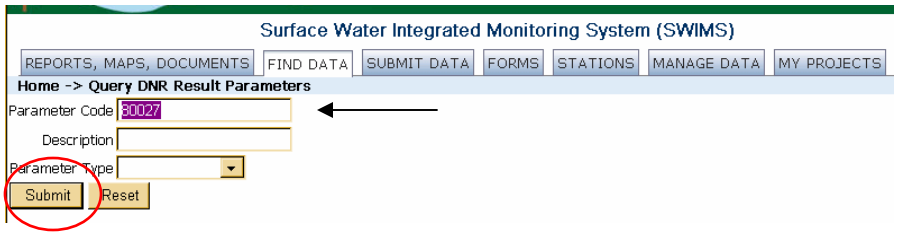
Fieldwork Start	Labslip Account #	Project (s)	Data Collectors	Status	Field Sample ID	Station ID	Station Name	WBIC	Waterbody Name
02/21/2007	WT069	WCR WQ Non_LTT	DANIEL HELSEL	COMPLETEEC-1		623201	ELK CREEK - SWEDE VALLEY RD, TN RD NENE SEC 14 T22 R9W	1782500	ELK CREEK
01/16/2007 12:01 PM	WT069	WCR WQ Non_LTT	DANIEL HELSEL	COMPLETETR1		10014637	TREMPEALEAU RIVER AT CTH W	1769900	TREMPEALEAU RIVER
01/16/2007	FH039	WCR WQ Non_LTT	DANIEL HELSEL	COMPLETEEC1		623201	ELK CREEK - SWEDE VALLEY RD, TN RD NENE SEC 14 T22 R9W	1782500	ELK CREEK
12/14/2006 09:13 AM	WT069	WCR WQ Non_LTT	DANIEL HELSEL	COMPLETEEC1		623201	ELK CREEK - SWEDE VALLEY RD, TN RD NENE SEC 14 T22 R9W	1782500	ELK CREEK
12/14/2006 08:20 AM	WT069	WCR WQ Non_LTT	DANIEL HELSEL	COMPLETETR1		10014637	TREMPEALEAU RIVER AT CTH W	1769900	TREMPEALEAU RIVER
11/14/2006 08:00 AM	FH039	WCR WQ Non_LTT	DANIEL HELSEL	COMPLETEEC-1439867		623201	ELK CREEK - SWEDE VALLEY RD, TN RD NENE SEC 14 T22 R9W	1782500	ELK CREEK
11/14/2006 08:00 AM	WT069	WCR WQ Non_LTT	DANIEL HELSEL	COMPLETE14398794		10014637	TREMPEALEAU RIVER AT CTH W	1769900	TREMPEALEAU RIVER
10/18/2006 10:51 AM	WT069	WCR WQ Non_LTT	DANIEL HELSEL	COMPLETE11980169		10014637	TREMPEALEAU RIVER AT CTH W	1769900	TREMPEALEAU RIVER
10/18/2006 10:10 AM	WT069	WCR WQ Non_LTT	DANIEL HELSEL	COMPLETE11982905		623201	ELK CREEK - SWEDE VALLEY RD, TN RD NENE SEC 14 T22 R9W	1782500	ELK CREEK
10/18/2006 08:16 AM	WT069	WCR WQ Non_LTT	DANIEL HELSEL	COMPLETE11980223		10014634	MORRISON CREEK AT HWY K	1714200	MORRISON CREEK

o Search by Parameter

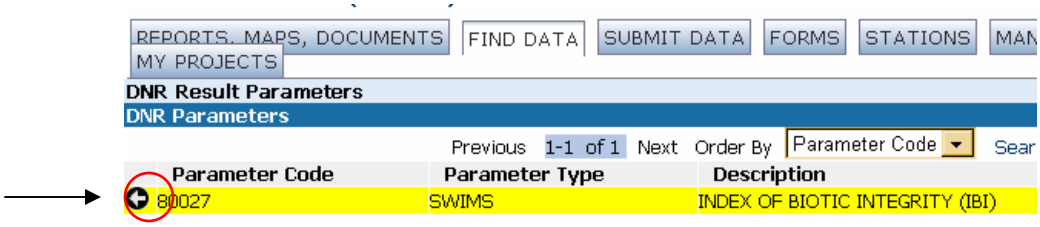
You can search for fieldwork by specific parameters. In the "**DNR Parameter**" field on the "**Advanced Search Fieldwork Events**" screen, click on the "**Search for Parameter**" button.



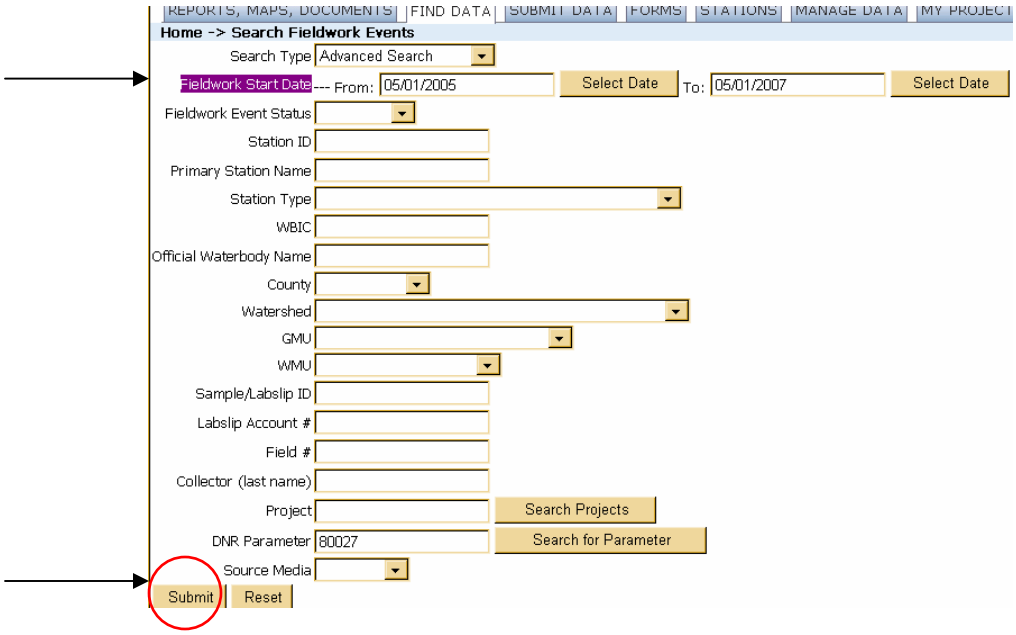
If you know the specific parameter code you're searching for, enter it in the "**Parameter Code**" field. (For macroinvertebrate data searches, 80027 is for IBI, and 80028 is for HBI. If you're looking for other macroinvertebrate metric parameters, search by "8002%" or "8003%".) Click on the "**Submit**" button.



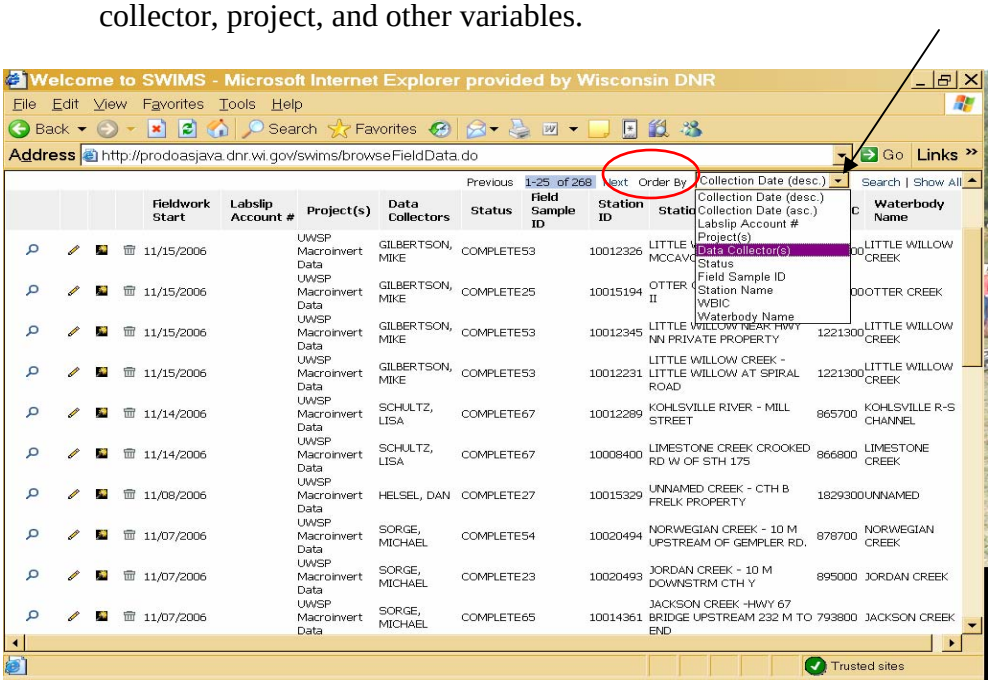
When you have found the parameter, select it by clicking on the black "**back arrow**" icon.



Add other search variables, such as the "**Fieldwork Start Date**" range. (Remember, trying to download over 20,000 records at once will crash the system! Keep your search reasonable.)

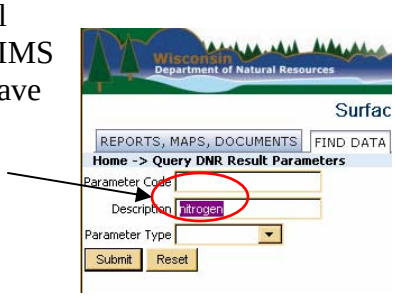


The above search resulted in a listing of 268 sample results collected between 5/01/2005 and 5/1/2007 for the parameter code 80027 (IBI). You can arrange the "**Order By**" box so that you can view the data in order of collection date, collector, project, and other variables.

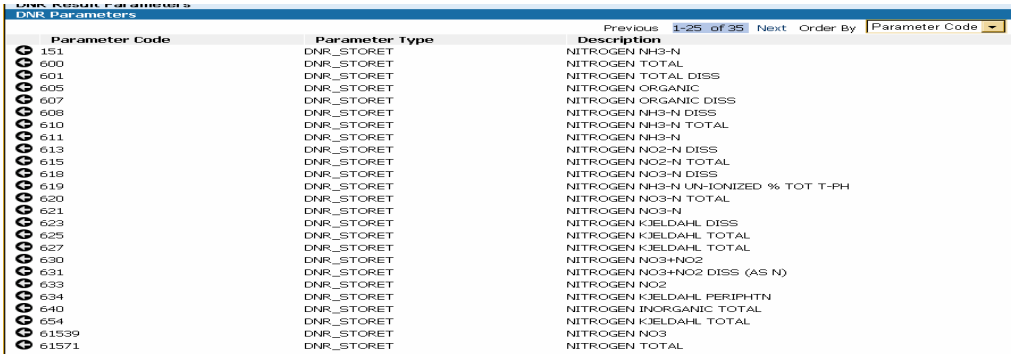


Fieldwork Start	Labslip Account #	Project(s)	Data Collectors	Status	Field Sample ID	Station ID	Station	Waterbody Name
11/15/2006		UWSP Macroinvert Data	GILBERTSON, MIKE	COMPLETE53		10012326	LITTLE WILLOW MCCAVC	LITTLE WILLOW CREEK
11/15/2006		UWSP Macroinvert Data	GILBERTSON, MIKE	COMPLETE25		10015194	OTTER II	OTTER CREEK
11/15/2006		UWSP Macroinvert Data	GILBERTSON, MIKE	COMPLETE53		10012345	LITTLE WILLOW NEAR HWY NN PRIVATE PROPERTY	1221300 LITTLE WILLOW CREEK
11/15/2006		UWSP Macroinvert Data	GILBERTSON, MIKE	COMPLETE53		10012231	LITTLE WILLOW CREEK - LITTLE WILLOW AT SPIRAL ROAD	1221300 LITTLE WILLOW CREEK
11/14/2006		UWSP Macroinvert Data	SCHULTZ, LISA	COMPLETE67		10012289	KOHLSVILLE RIVER - MILL STREET	865700 KOHLSVILLE R-S CHANNEL
11/14/2006		UWSP Macroinvert Data	SCHULTZ, LISA	COMPLETE67		10008400	LIMESTONE CREEK CROOKED RD W OF STH 175	866800 LIMESTONE CREEK
11/08/2006		UWSP Macroinvert Data	HELSEL, DAN	COMPLETE27		10015329	UNNAMED CREEK - CTH B FRELK PROPERTY	1829300 UNNAMED
11/07/2006		UWSP Macroinvert Data	SORGE, MICHAEL	COMPLETE54		10020494	NORWEGIAN CREEK - 10 M UPSTREAM OF GEMPLER RD.	878700 NORWEGIAN CREEK
11/07/2006		UWSP Macroinvert Data	SORGE, MICHAEL	COMPLETE23		10020493	JORDAN CREEK - 10 M DOWNSTRM CTH Y	895000 JORDAN CREEK
11/07/2006		UWSP Macroinvert Data	SORGE, MICHAEL	COMPLETE65		10014361	JACKSON CREEK -HWY 67 BRIDGE UPSTREAM 232 M TO END	793800 JACKSON CREEK

Another way to search by parameter is to search by parameter name. There may be several parameters listed with similar names. To make sure you get the results you're looking for, search by a partial parameter "**Description**" (e.g., "nitrogen"). SWIMS will retrieve a complete list of parameters that have "nitrogen" listed in their titles.



The above search resulted in a listing of 35 parameters with the word "nitrogen" in their description.



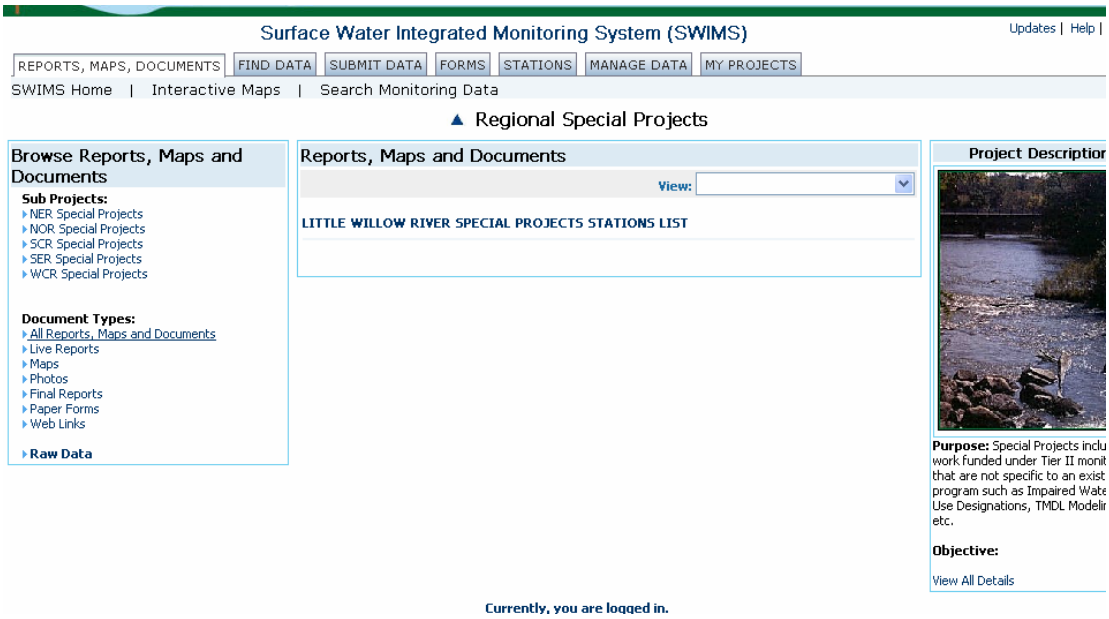
Parameter Code	Parameter Type	Description
151	DNR_STORET	NITROGEN NH3-N
600	DNR_STORET	NITROGEN TOTAL
601	DNR_STORET	NITROGEN TOTAL DISS
605	DNR_STORET	NITROGEN ORGANIC
607	DNR_STORET	NITROGEN ORGANIC DISS
608	DNR_STORET	NITROGEN NH3-N DISS
610	DNR_STORET	NITROGEN NH3-N TOTAL
611	DNR_STORET	NITROGEN NH3-N
613	DNR_STORET	NITROGEN NO2-N DISS
615	DNR_STORET	NITROGEN NO2-N TOTAL
618	DNR_STORET	NITROGEN NO3-N DISS
619	DNR_STORET	NITROGEN NH3-N UN-IONIZED % TOT T-PH
620	DNR_STORET	NITROGEN NO3-N TOTAL
621	DNR_STORET	NITROGEN NO3-N
623	DNR_STORET	NITROGEN KJELDAHL DISS
625	DNR_STORET	NITROGEN KJELDAHL TOTAL
627	DNR_STORET	NITROGEN KJELDAHL TOTAL
630	DNR_STORET	NITROGEN NO3+NO2
631	DNR_STORET	NITROGEN NO3+NO2 DISS (AS N)
633	DNR_STORET	NITROGEN NO2
634	DNR_STORET	NITROGEN KJELDAHL PERIPHTN
640	DNR_STORET	NITROGEN INORGANIC TOTAL
654	DNR_STORET	NITROGEN KJELDAHL TOTAL
61539	DNR_STORET	NITROGEN NO3
61571	DNR_STORET	NITROGEN TOTAL

Now you can choose which parameter you want to search. Click on the black "**back arrow**" icon, and then follow the rest of the procedure for searching by parameter.

Manage Data

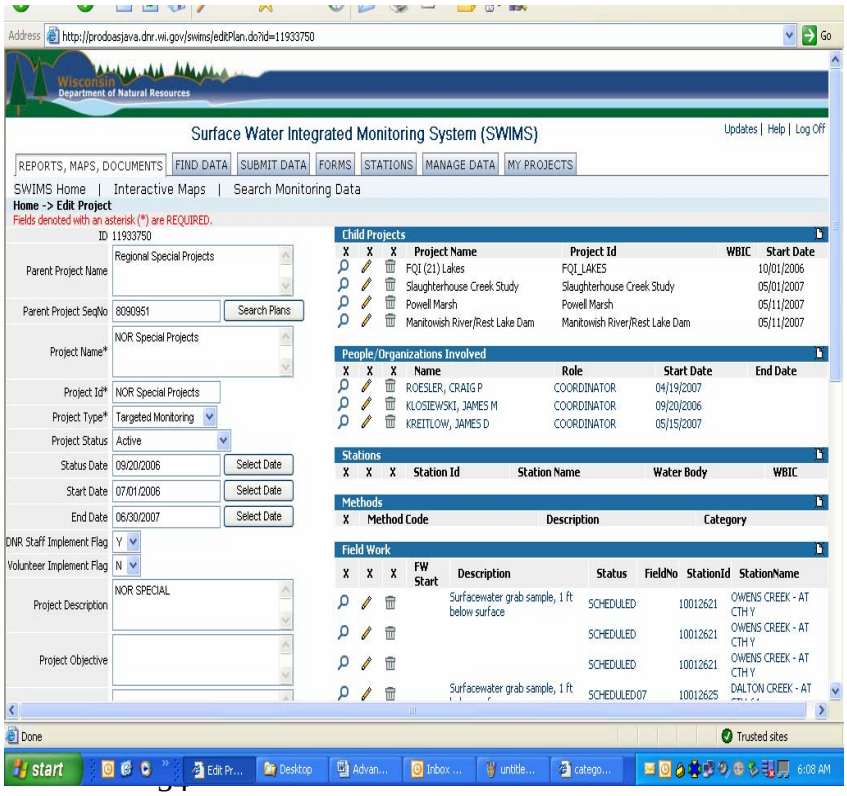
Because SWIMS is designed around the concept of a project, to make specific stations or people show up in your "wizard" for submitting data or generating lab slips, you need to cross reference that information to the project.

The picture below shows what a "project" looks like from the reports and maps area. By clicking on the regional special projects of your choice, you can drill down to the detailed information for that area. Or, click on the "**View All Details**" link at the bottom right to view and edit the cross referenced information for the project, such as stations, people, etc.



For projects internal to the WDNR, the highest priorities for editing or managing data at the project level include:

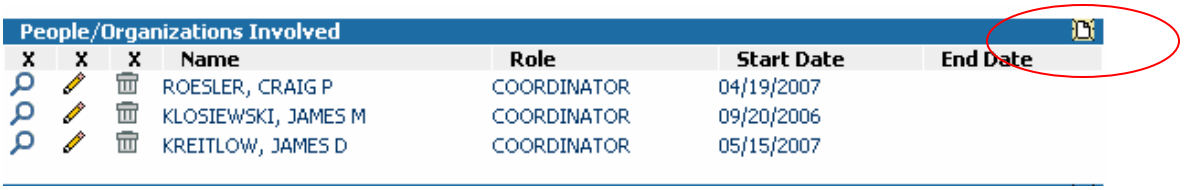
- People/organizations
- Stations
- Methods
- Documents
- Lab Account Codes
- Forms



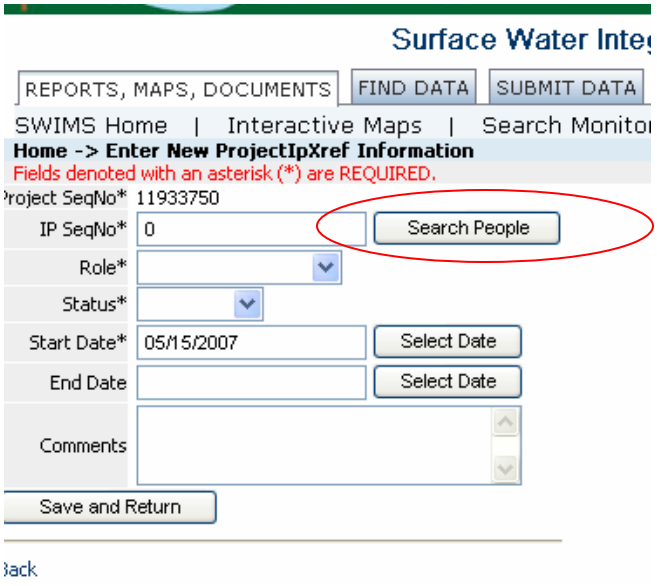
o People or Organizations

Adding people or organizations to the project enables those individuals to use the lab slip generator or submit data form and have their name show up in relation to the project. Follow these steps to add a person's name.

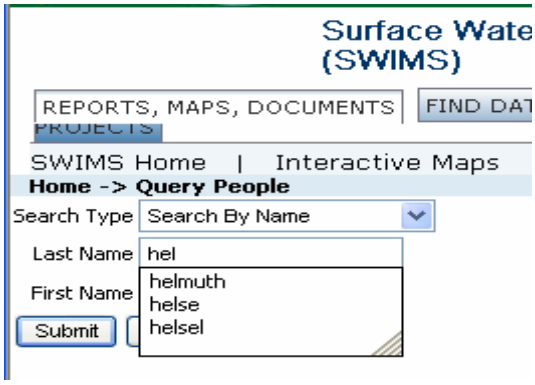
Step 1: Click on the "**add new**" icon:



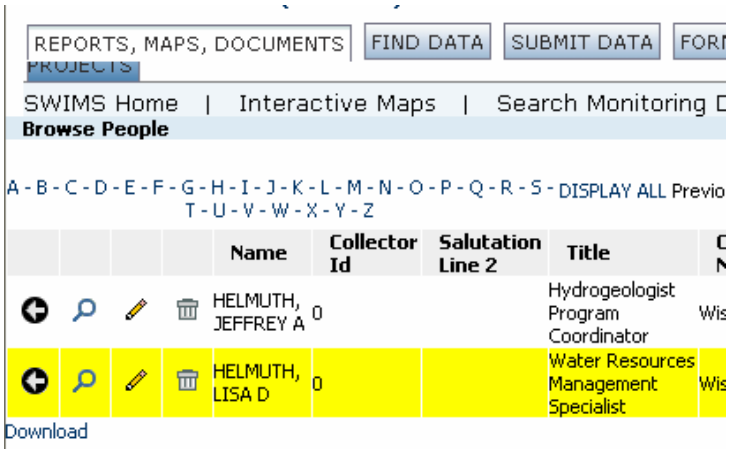
Step 2: Search for the person using the "**Search People**" button.



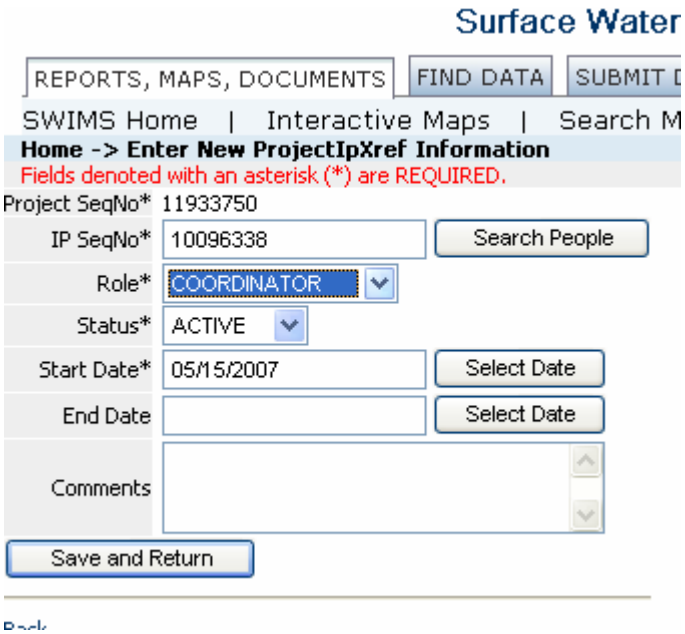
Step 3: Type in the last name and click on return to search for the person:



Step 4: Find and select the name, and backfill into the project by clicking on the black "**back arrow**" icon:



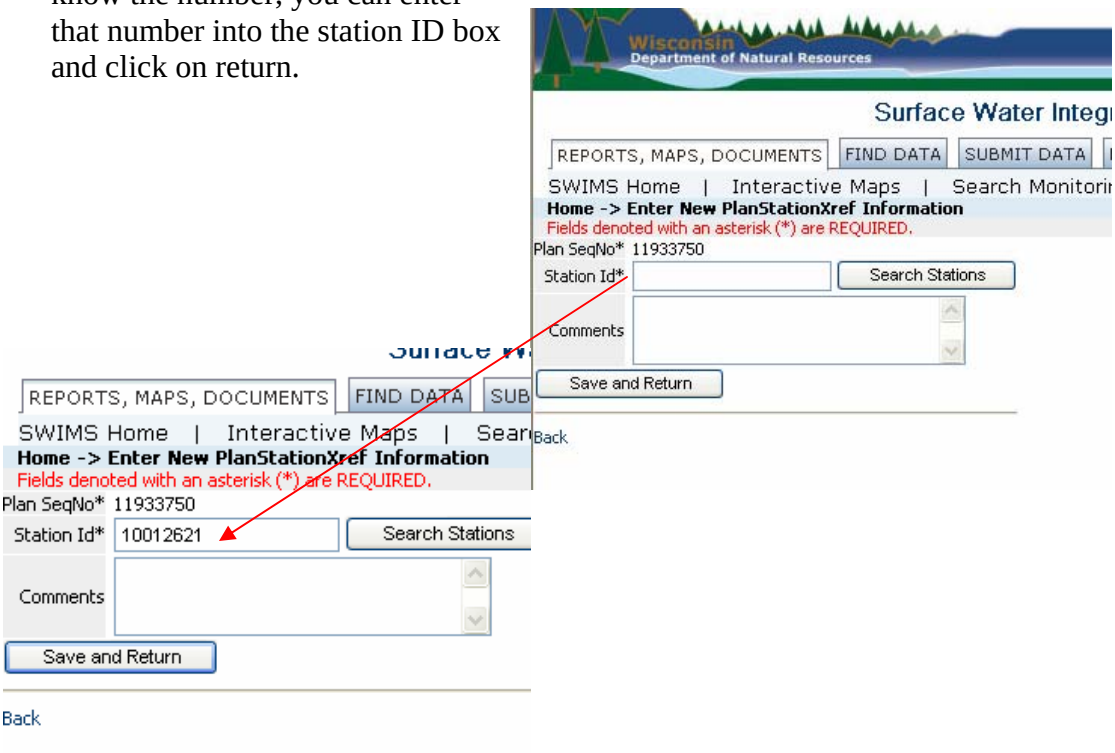
Step 5: Assign Role, Status and Date:



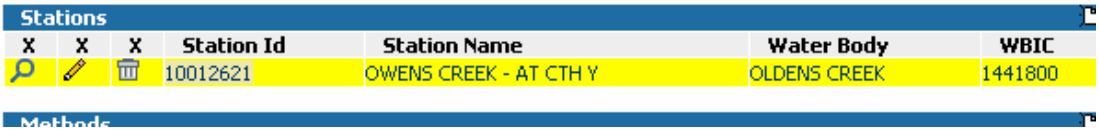
o Stations

Step 1: Click on the "**add new**" icon and search for stations:

Step 2: Use the "**Search Stations**" button to find the station you need, or if you know the number, you can enter that number into the station ID box and click on return.

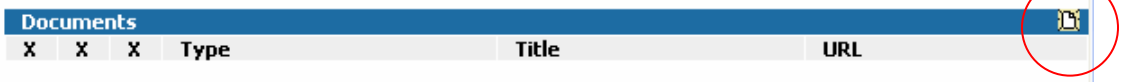


The station is now cross referenced and will show up in the labslip generator or submit data wizard if used.

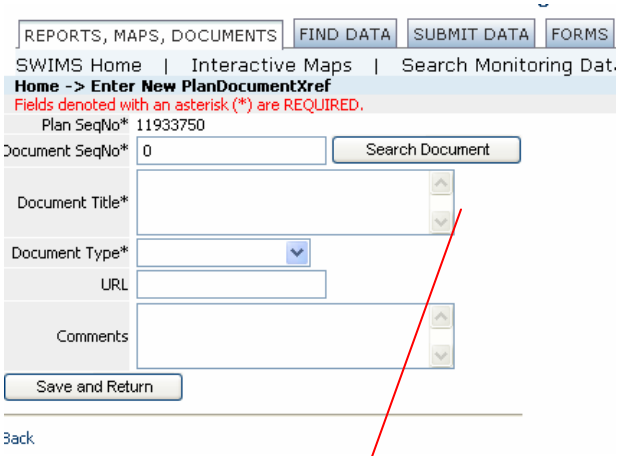


o Adding Documents

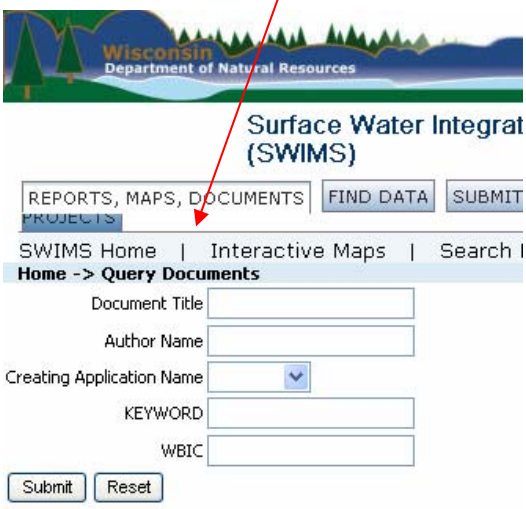
You can add the special project monitoring request or other detailed description, like the final report, etc. for a project through the “documents” area.



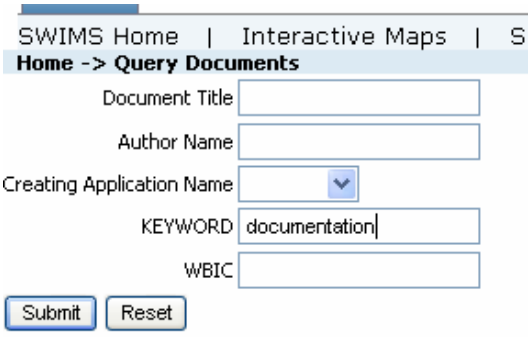
Search for documents by clicking on the “**add new**” icon:



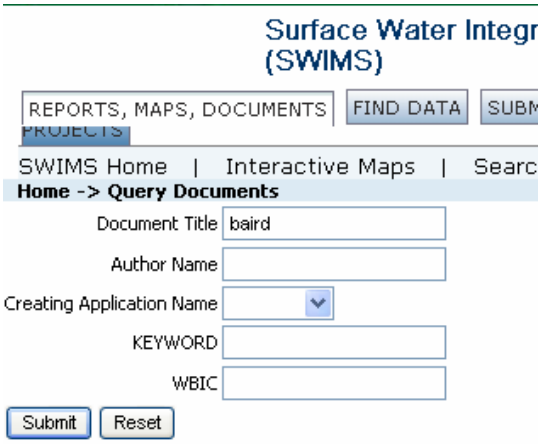
To search and select a document, you’ll need to search by Keywords, WBIC, Title or Author.



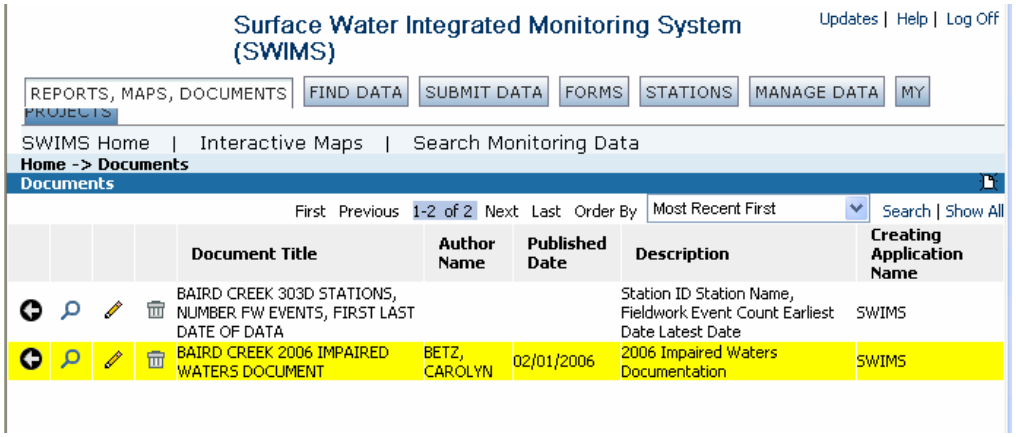
You can search by Keyword:



Or by title (hint try waterbody name):

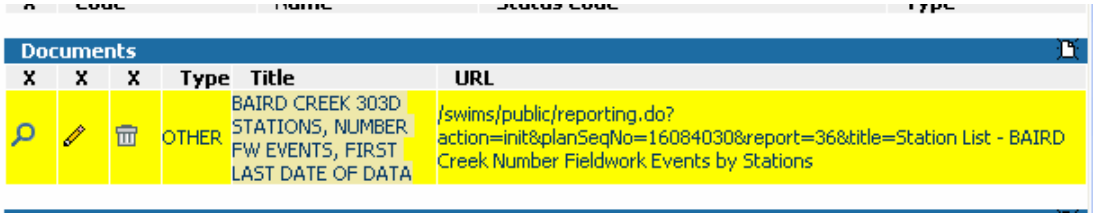


The result for “baird” in the title includes:



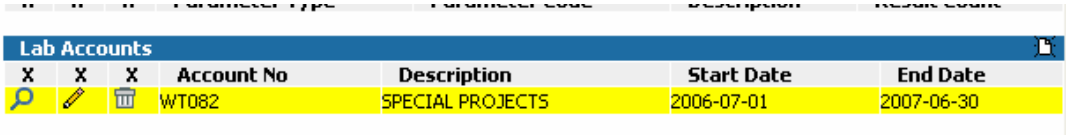
This is how the report shows up on the project:

o

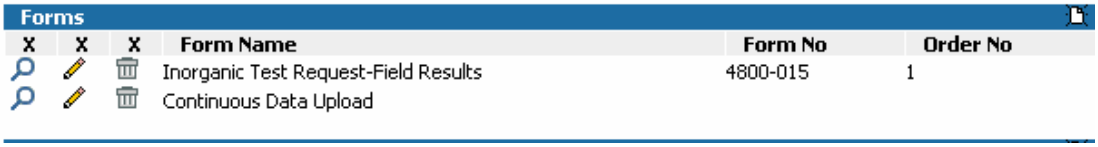


o Lab Accounts, Forms

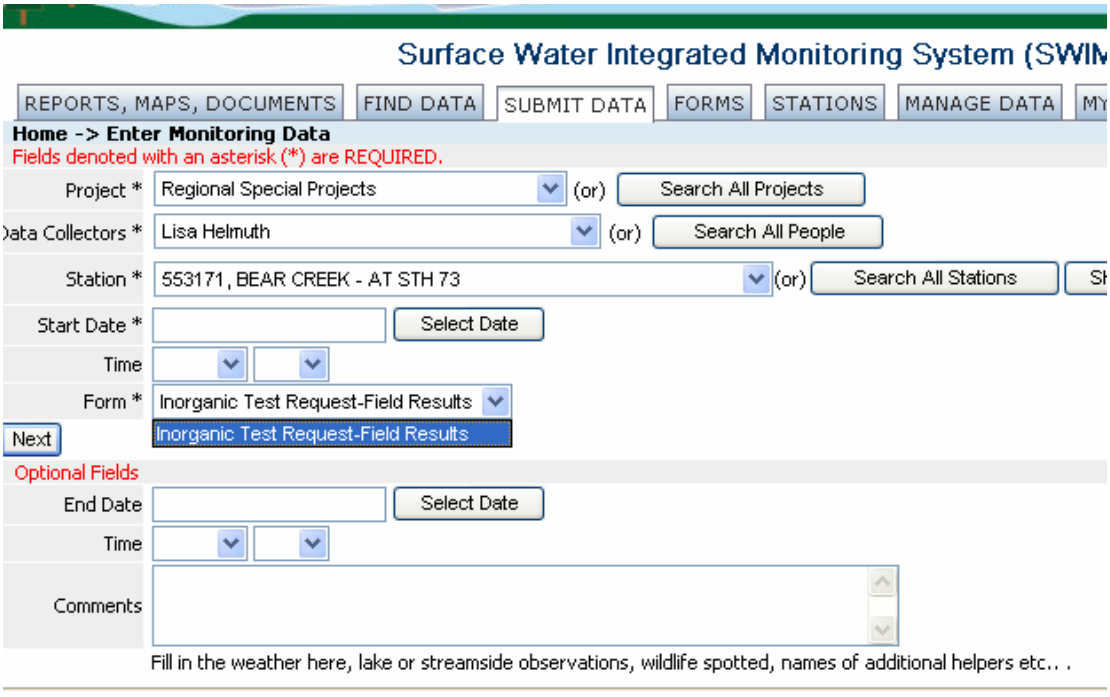
The same cross referencing process should be done for "**Lab Account Codes**":



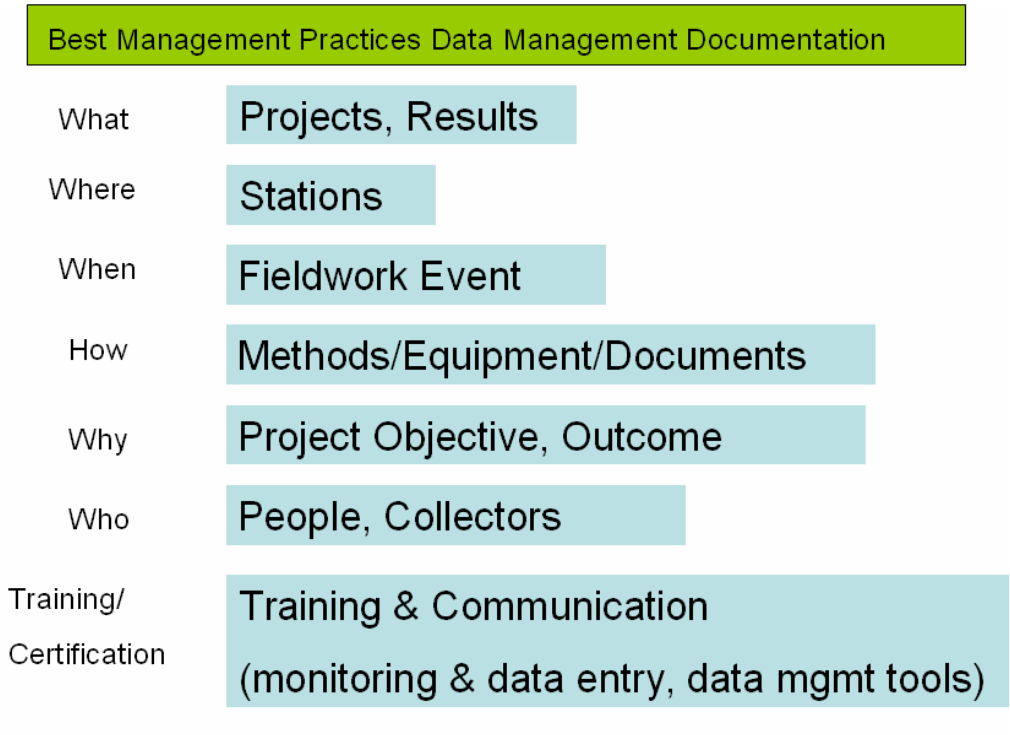
And forms:

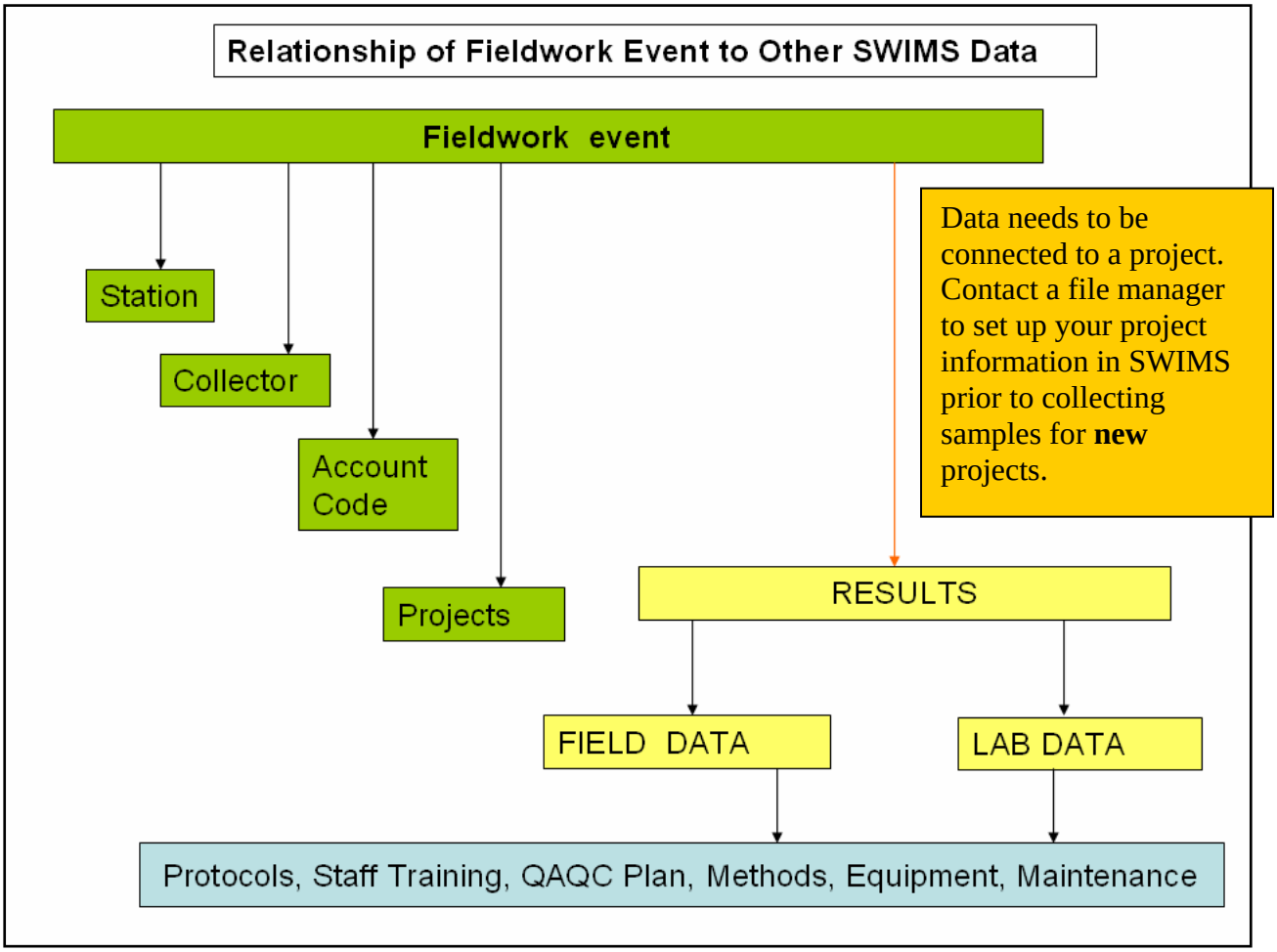


Cross referencing these two forms will make them show up in the "**Submit Data**" wizard – "**Enter Monitoring Data**" screens - associated with the specific project.



Appendix A: SWIMS Database Relationships





Appendix B: Embedded Locator Tool (eLT) Troubleshooting Tips

Map Server is Down

If you click "show map" and **a box shows appears up with toolbars**, **but with an error message inside the box**, the map server may be down. Try again later

eLT Isn't Installed on Your Computer

If you click "show map" and **just a tiny box shows up without toolbars,** you may need to have the current version of the eLT installed on your computer.

- Check to see that the ELT.ocx file was loaded to your c:\DNRAPPS\eLT directory (c:\DNRAPPS\eLT\ELT.ocx).
- Check the version of the file by right clicking on the ELT.ocx file, select Properties, then select the Version tab. The ELT.ocx version should be 1.20.0.0.

If you don't find the ELT.ocx file on your computer, contact your ITC or someone with Administrator privileges to install the latest version. You can find the list of RIMS and ITCs on the following web page http://intranet.dnr.state.wi.us/itworks/itcrims/ (see IT Staff Lists on the left side)

Here are the directions to install eLT (Data Administrators Only)

- Go to the following directory

  \\central\swis\elt\eLT_Install\InstallShield\latest_version\Disk1\Prod
- Run the **NRSetup.bat** file in this directory by double clicking it. An automated install program will run through the installation.

Reset Active X Controls and Privacy Settings

If you click "show map" and **a box shows up with the toolbars, but no map and no error message inside**, **with a message "active x control blocked . . ." at the top of your browser,** you may need to reset your Security, Active X Controls, and/or Privacy Settings. Follow these steps:

- Start Internet Explorer
- In the **Tools** menu, select **Internet Options**
- Select the **Security** tab
- Click on **Trusted Sites** as the web content zone
- Click "**Sites**"
- Paste the name of the URL (i.e. prodoasjava.dnr.wi.gov) in the box.
- Uncheck "require server verification…" and click on **OK**. Once you've added the URL, Re-check the "require server verification…" checkbox.
- Now try the map again (try clicking on the refresh button)

If it still doesn't work, adjust the ActiveX and Privacy Settings:
Click on the **Custom Level** button

- For all settings dealing with the **ActiveX controls** and **plugins**, change the settings to **Enabled**
- Click **OK**
- Click on the **Privacy** tab
- Move the bar to **Low**
- Click **OK** and **OK** to exit the settings dialogs

Request Help

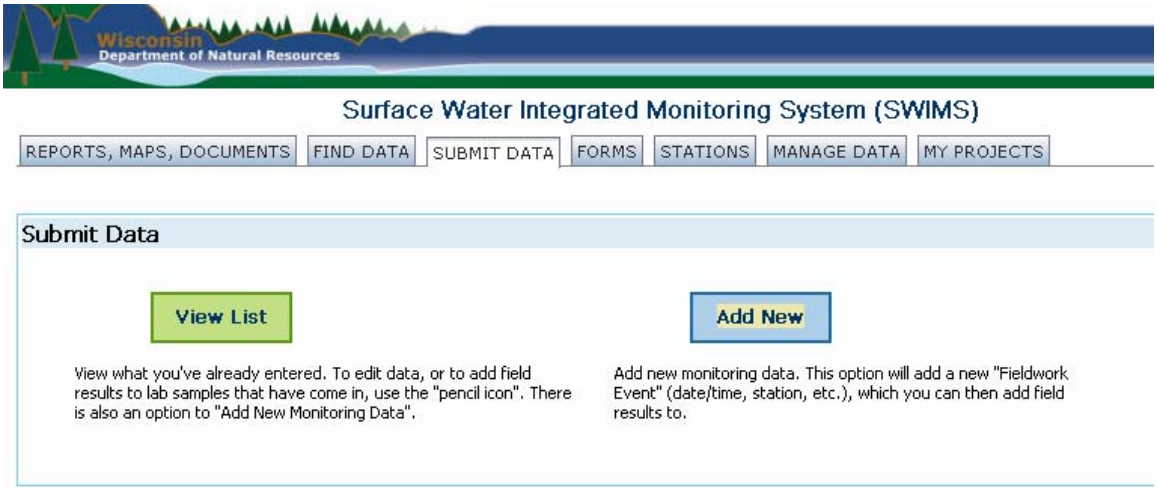
If you still get error messages or can't get maps to appear, send us the screenprint (hold the **Ctrl** button down and press the **Print Screen Button**, then paste this into your e-mail message) of the problem or error message.

Appendix C: Continuous Meter Data Upload

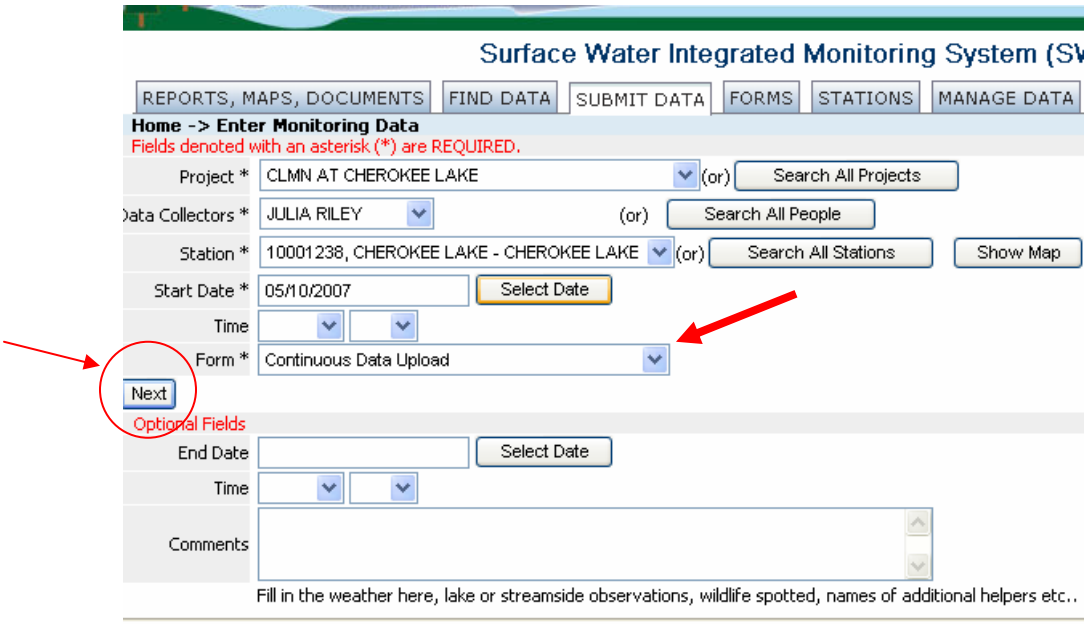
Upload the Data

Uploading continuous meter data is possible through using the SWIMS forms area located in the "**SUBMIT DATA**" tab screens. The system is customized to allow you to use the specific format in which your data is configured when it is downloaded form the unit. In some cases you will have to use the boxcar pro or similar software to export the data in text delimited or comma separated value (CSV) format.

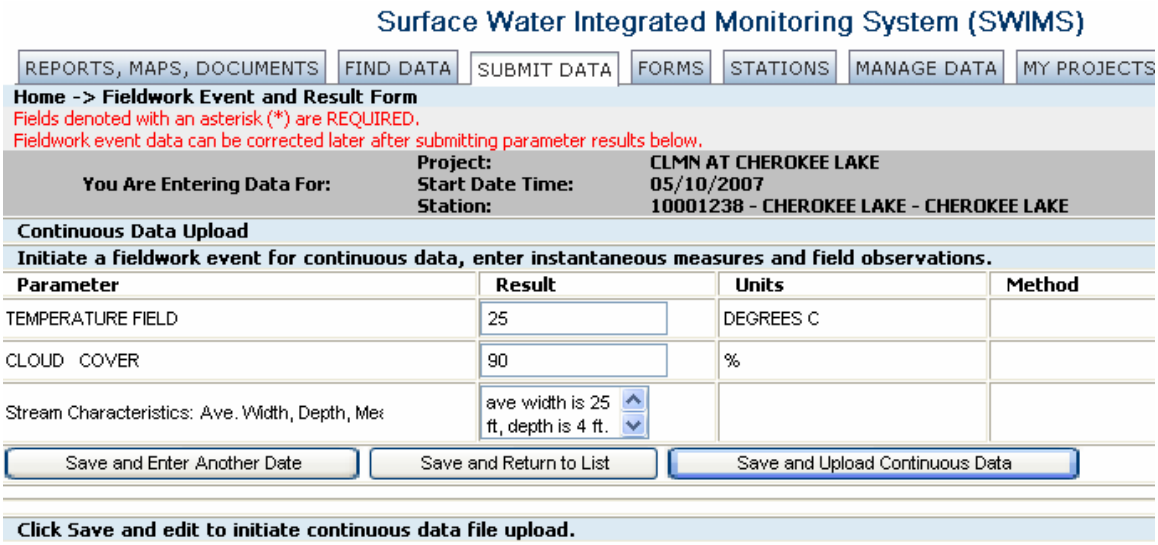
Step 1: Click on the "Add New" button.



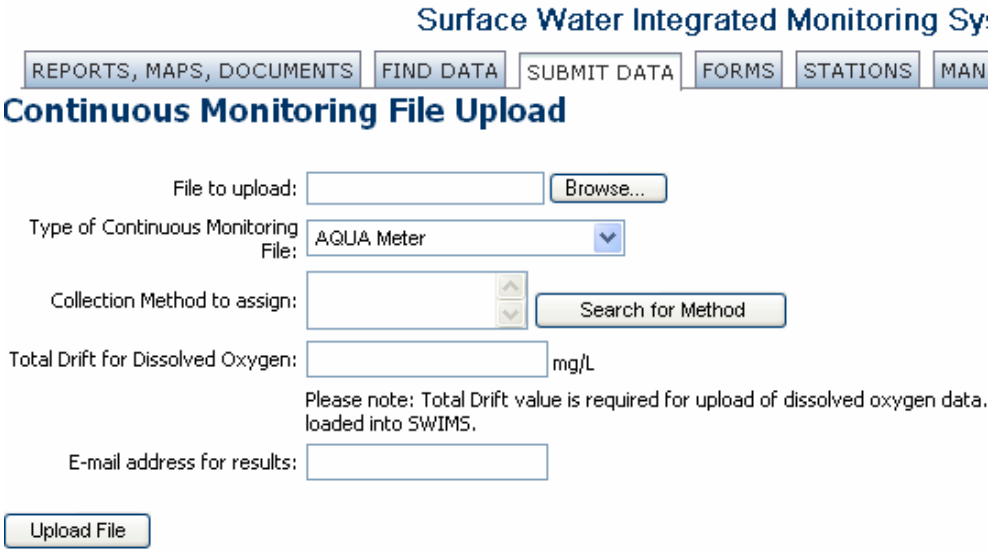
Step 2: Use the data entry wizard just like you would for the lab slip area, identifying the project, collectors, station, and date of fieldwork. Select the "**Continuous Data Upload**" form from the "**Form***" drop-down list:



Step 3: Enter any instantaneous data collected during unit deployment. New parameters will be added to this area to accommodate a wider range of instantaneous measures. These values are not required to upload your data.

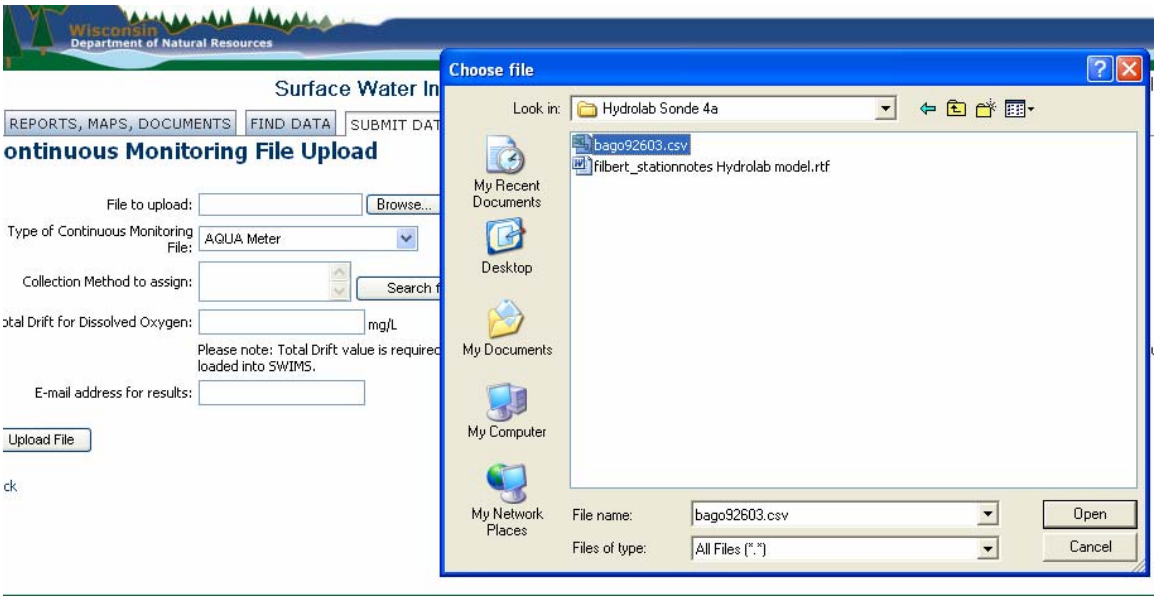


Step 4: Upload the file, document method and other information. The data must be formatted correctly for a successful upload to SWIMS. The following pages show the correct format for your data.

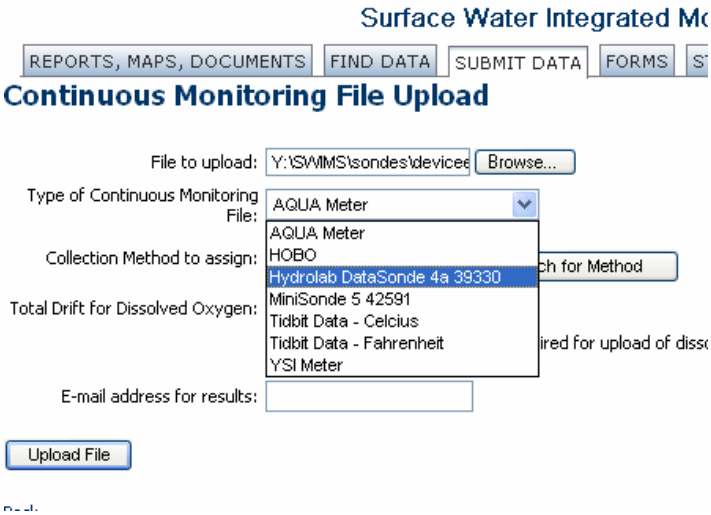


A note on drift: Total Drift value is required for upload of dissolved oxygen data. Value may be positive or negative. The 2006-07 Guidance on Sondes Data Collection indicates that datasets with Total drift values > 1 mg/L or < -1 mg/L should not be loaded into SWIMS. However, the system will allow you to enter the total drift value of zero for situations where you have not collected total drift.

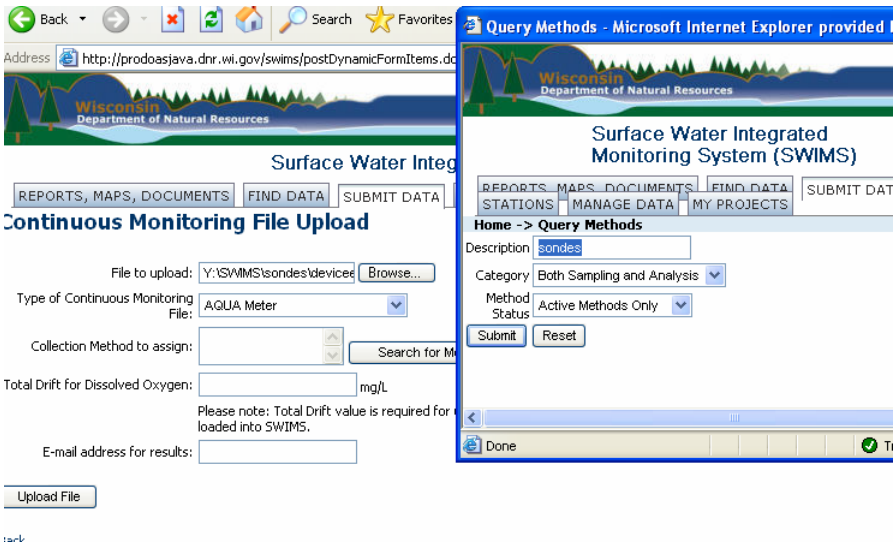
Step 5a: Navigate to file (needs to be in correct format)

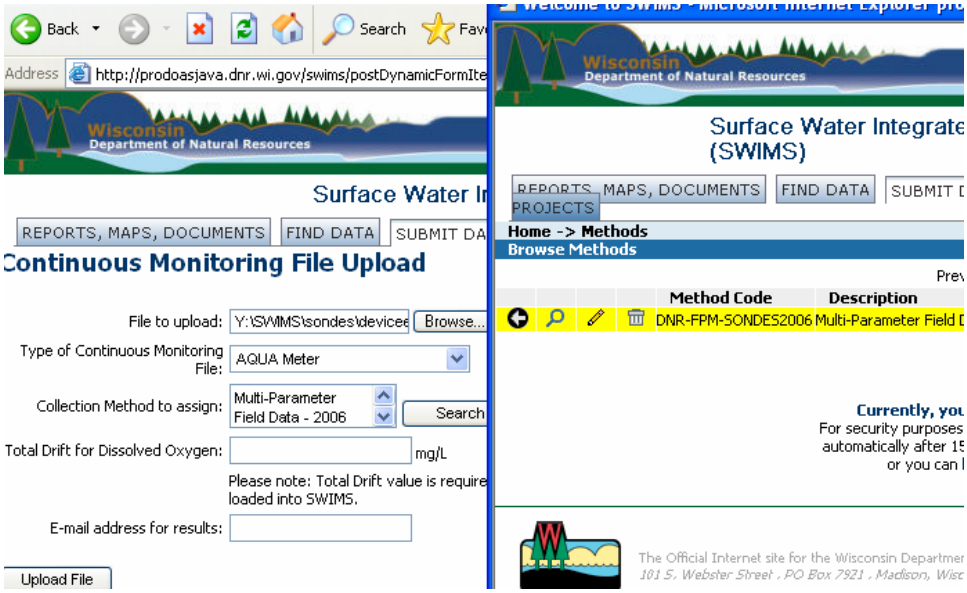


Step 5b: Select the meter name for the unit you've used – *this will tell the system which format to expect.*

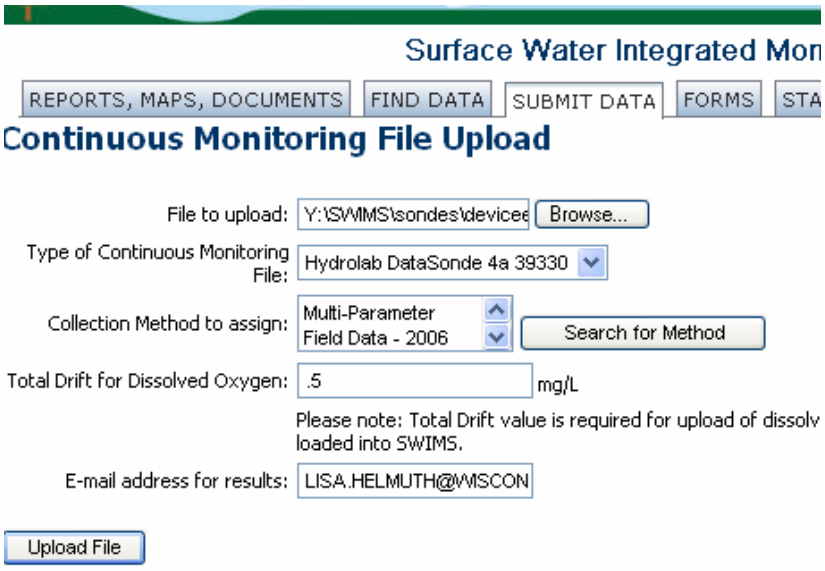


Step 5c: Select the method used- "Sondes" Guidance should be selected.

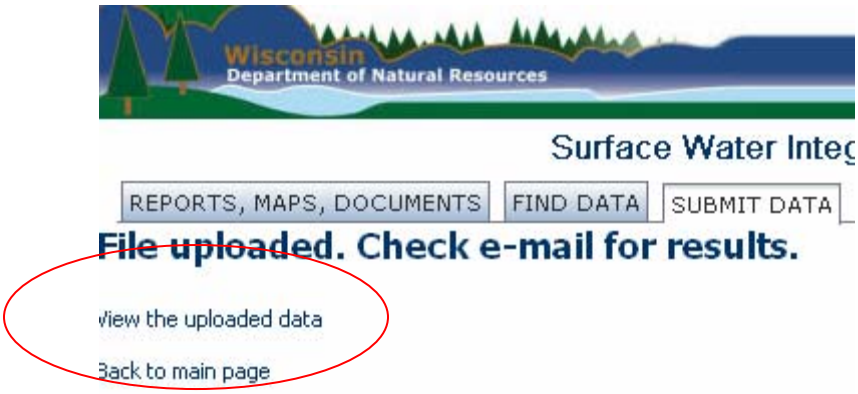




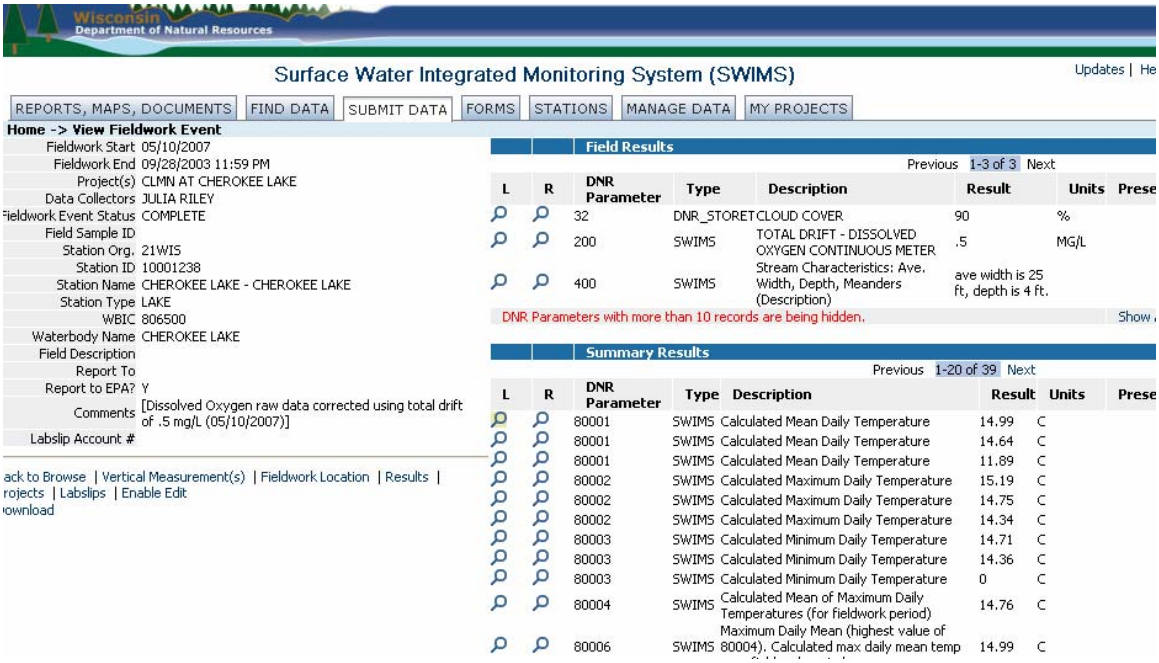
Your completed page should look something like this:



Step 6: Once you upload your data, the page will ask you to view the uploaded data:

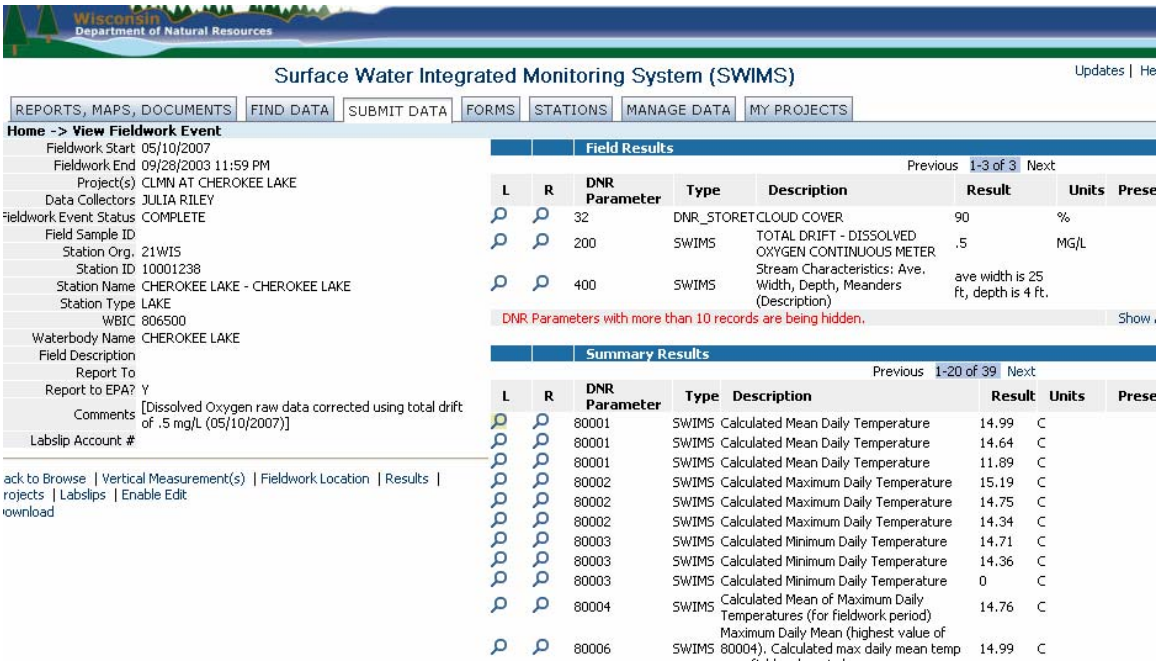


Step 7: View your data to validate the results – make sure the tool worked correctly for your dataset by checking for minimums, maximums, and 'does this make sense?'.

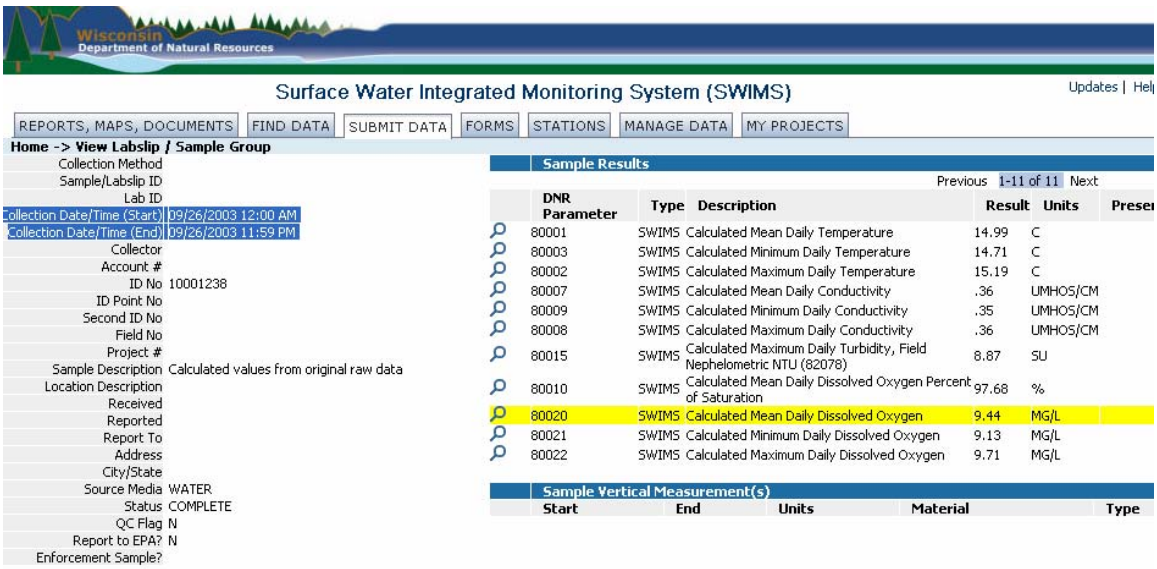


Reviewing Continuous Data in SWIMS

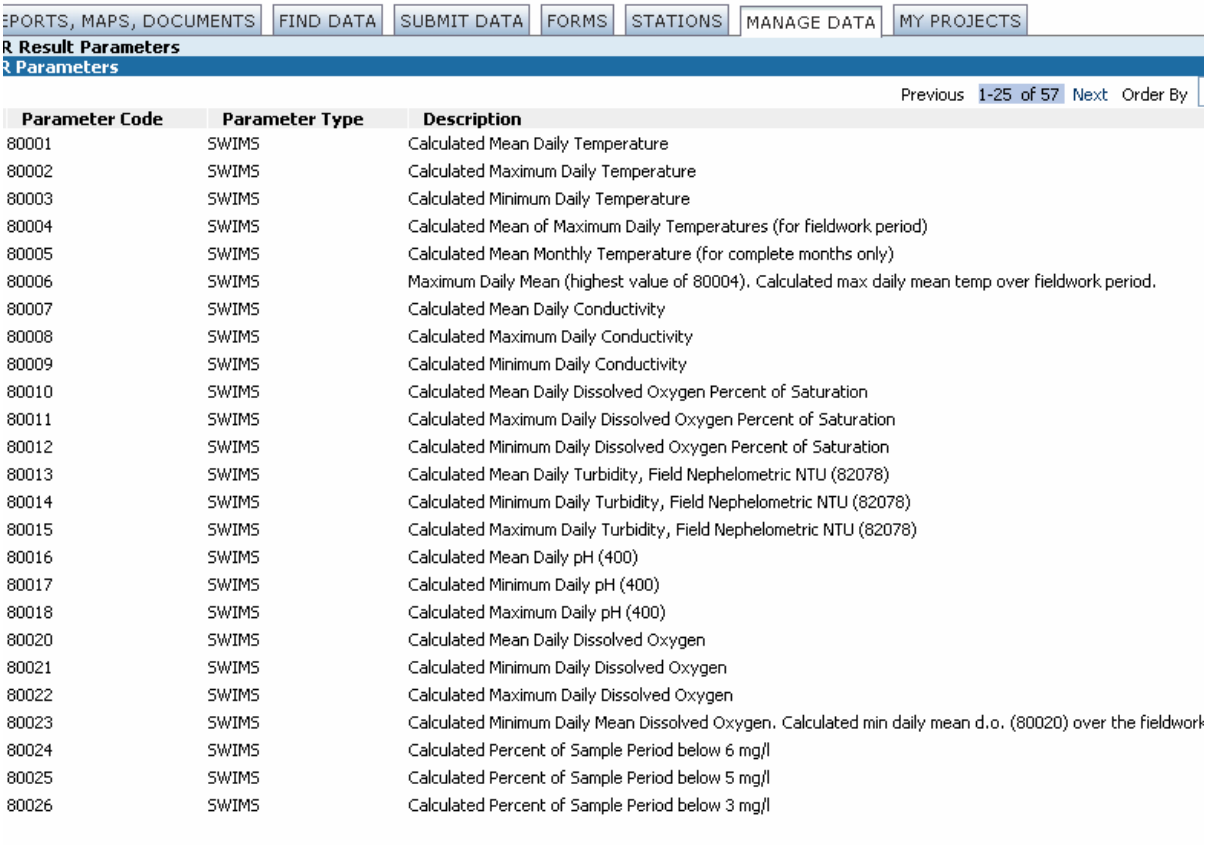
Continuous data in swims looks like other fieldwork except that the detailed raw data that was uploaded is “hidden” upon opening the fieldwork event. These data are available for viewing or downloading.



Reviewing Summary or Computed Values:



The SWIMS continuous upload tool computes the following summary values if the data is included in the upload:



EPORTS, MAPS, DOCUMENTS | FIND DATA | SUBMIT DATA | FORMS | STATIONS | MANAGE DATA | MY PROJECTS

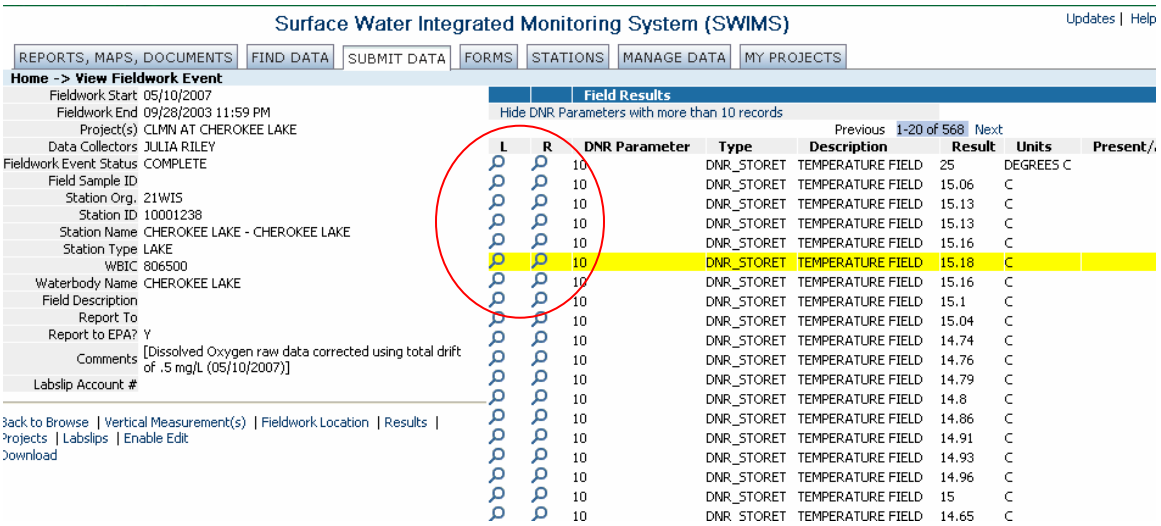
R Result Parameters

R Parameters

Previous 1-25 of 57 Next Order By

Parameter Code	Parameter Type	Description
80001	SWIMS	Calculated Mean Daily Temperature
80002	SWIMS	Calculated Maximum Daily Temperature
80003	SWIMS	Calculated Minimum Daily Temperature
80004	SWIMS	Calculated Mean of Maximum Daily Temperatures (for fieldwork period)
80005	SWIMS	Calculated Mean Monthly Temperature (for complete months only)
80006	SWIMS	Maximum Daily Mean (highest value of 80004). Calculated max daily mean temp over fieldwork period.
80007	SWIMS	Calculated Mean Daily Conductivity
80008	SWIMS	Calculated Maximum Daily Conductivity
80009	SWIMS	Calculated Minimum Daily Conductivity
80010	SWIMS	Calculated Mean Daily Dissolved Oxygen Percent of Saturation
80011	SWIMS	Calculated Maximum Daily Dissolved Oxygen Percent of Saturation
80012	SWIMS	Calculated Minimum Daily Dissolved Oxygen Percent of Saturation
80013	SWIMS	Calculated Mean Daily Turbidity, Field Nephelometric NTU (82078)
80014	SWIMS	Calculated Minimum Daily Turbidity, Field Nephelometric NTU (82078)
80015	SWIMS	Calculated Maximum Daily Turbidity, Field Nephelometric NTU (82078)
80016	SWIMS	Calculated Mean Daily pH (400)
80017	SWIMS	Calculated Minimum Daily pH (400)
80018	SWIMS	Calculated Maximum Daily pH (400)
80020	SWIMS	Calculated Mean Daily Dissolved Oxygen
80021	SWIMS	Calculated Minimum Daily Dissolved Oxygen
80022	SWIMS	Calculated Maximum Daily Dissolved Oxygen
80023	SWIMS	Calculated Minimum Daily Mean Dissolved Oxygen. Calculated min daily mean d.o. (80020) over the fieldwork
80024	SWIMS	Calculated Percent of Sample Period below 6 mg/l
80025	SWIMS	Calculated Percent of Sample Period below 5 mg/l
80026	SWIMS	Calculated Percent of Sample Period below 3 mg/l

Each Fieldwork Event will display all parameter values for raw data under the "L" Lab slip or Sample Group magnifying glass:



Surface Water Integrated Monitoring System (SWIMS)

Updates | Help

REPORTS, MAPS, DOCUMENTS | FIND DATA | SUBMIT DATA | FORMS | STATIONS | MANAGE DATA | MY PROJECTS

Home -> View Fieldwork Event

Fieldwork Start 05/10/2007
Fieldwork End 09/28/2003 11:59 PM
Project(s) CLMN AT CHEROKEE LAKE
Data Collectors JULIA RILEY
Fieldwork Event Status COMPLETE
Field Sample ID
Station Org. 21WIS
Station ID 10001238
Station Name CHEROKEE LAKE - CHEROKEE LAKE
Station Type LAKE
WBIC 806500
Waterbody Name CHEROKEE LAKE
Field Description
Report To
Report to EPA? Y
Comments [Dissolved Oxygen raw data corrected using total drift of .5 mg/L (05/10/2007)]
Labslip Account #

Back to Browse | Vertical Measurement(s) | Fieldwork Location | Results | Projects | Labslips | Enable Edit Download

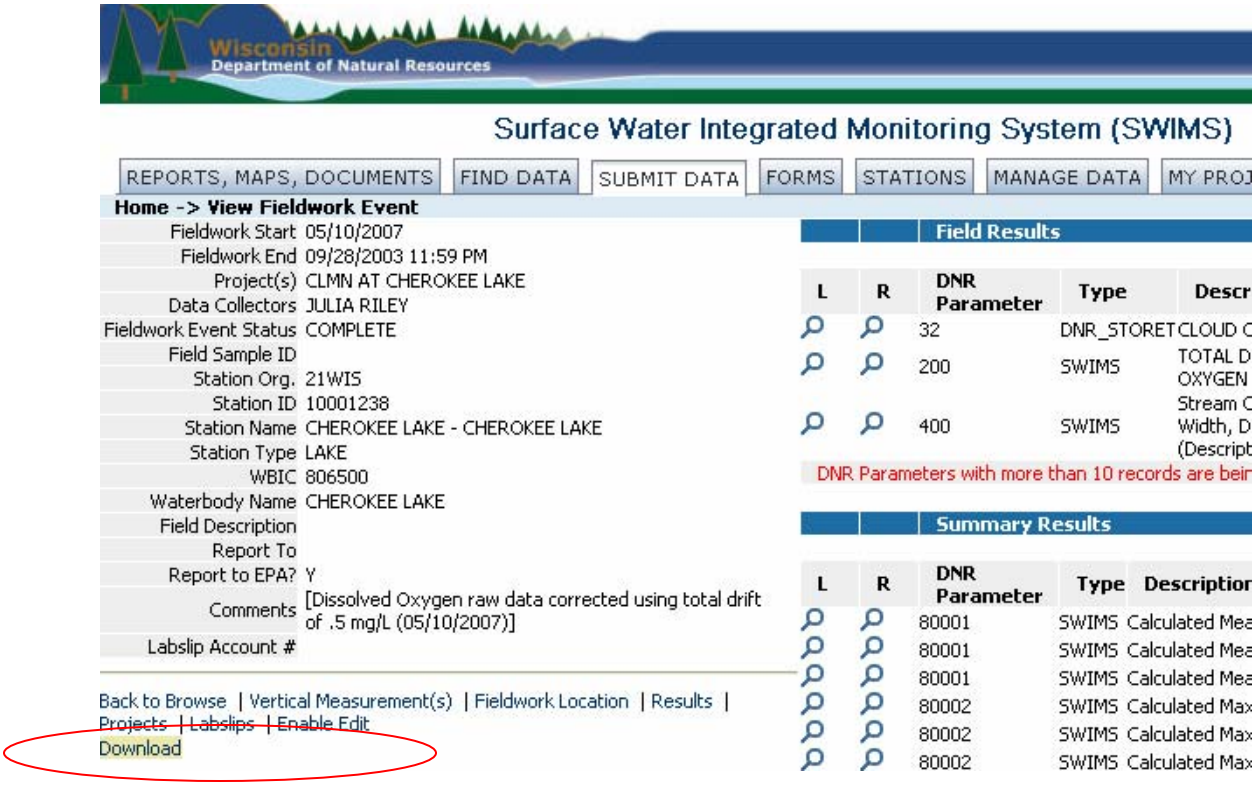
Field Results

Hide DNR Parameters with more than 10 records

Previous 1-20 of 568 Next

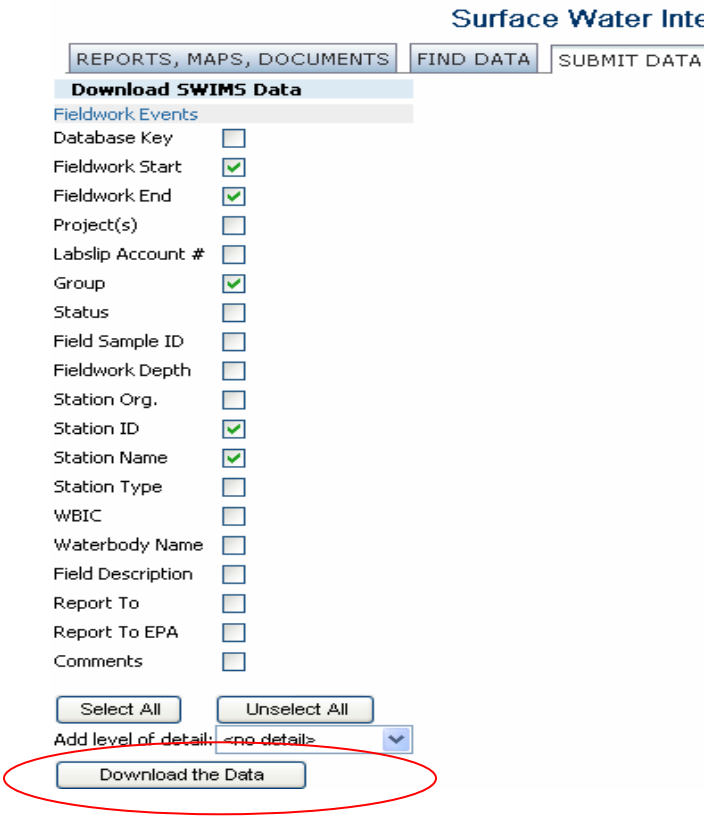
L	R	DNR Parameter	Type	Description	Result	Units	Present/
		10	DNR_STORET	TEMPERATURE FIELD	25	DEGREES C	
		10	DNR_STORET	TEMPERATURE FIELD	15.06	C	
		10	DNR_STORET	TEMPERATURE FIELD	15.13	C	
		10	DNR_STORET	TEMPERATURE FIELD	15.13	C	
		10	DNR_STORET	TEMPERATURE FIELD	15.16	C	
		10	DNR_STORET	TEMPERATURE FIELD	15.18	C	
		10	DNR_STORET	TEMPERATURE FIELD	15.16	C	
		10	DNR_STORET	TEMPERATURE FIELD	15.1	C	
		10	DNR_STORET	TEMPERATURE FIELD	15.04	C	
		10	DNR_STORET	TEMPERATURE FIELD	14.74	C	
		10	DNR_STORET	TEMPERATURE FIELD	14.76	C	
		10	DNR_STORET	TEMPERATURE FIELD	14.79	C	
		10	DNR_STORET	TEMPERATURE FIELD	14.8	C	
		10	DNR_STORET	TEMPERATURE FIELD	14.86	C	
		10	DNR_STORET	TEMPERATURE FIELD	14.91	C	
		10	DNR_STORET	TEMPERATURE FIELD	14.93	C	
		10	DNR_STORET	TEMPERATURE FIELD	14.96	C	
		10	DNR_STORET	TEMPERATURE FIELD	15	C	
		10	DNR_STORET	TEMPERATURE FIELD	14.65	C	

To download the Data, "disable edit" and the "Download" link will show:

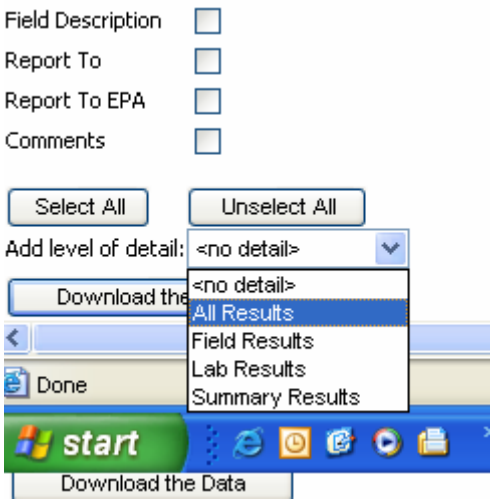


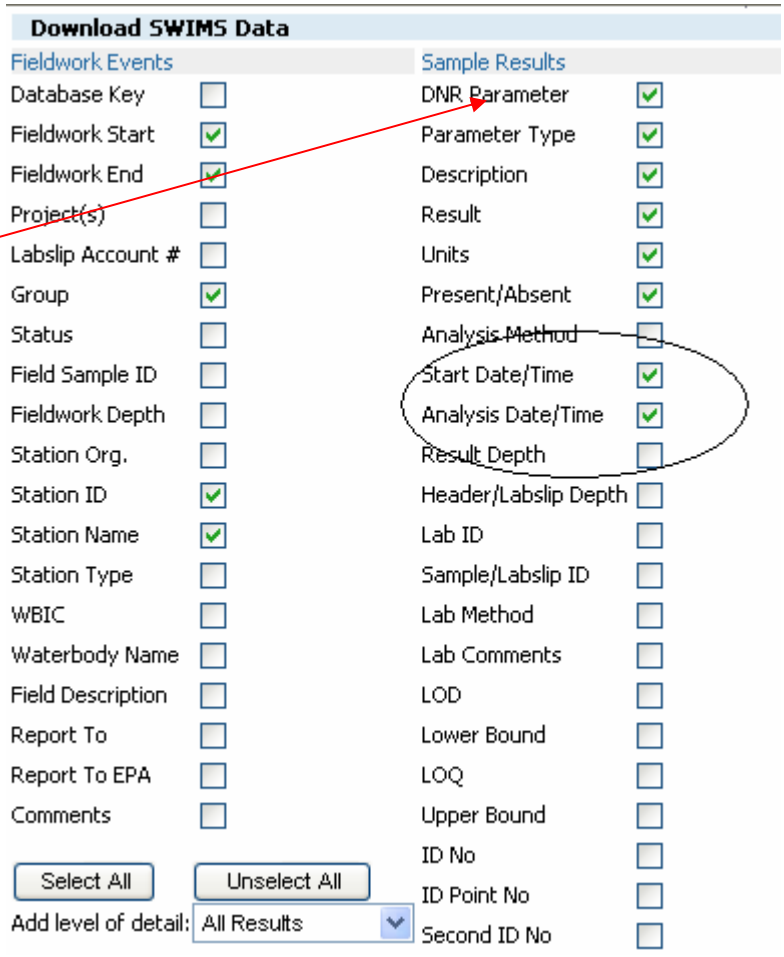
Download the Data

Select the fieldwork event information you wish to download.

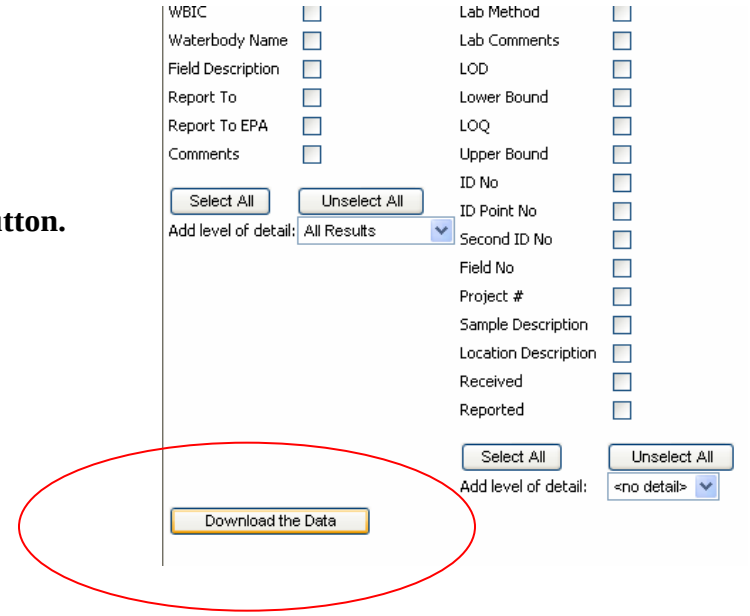


Use the "Add level of detail" drop-down arrow list to select the type of results and details you want to download.

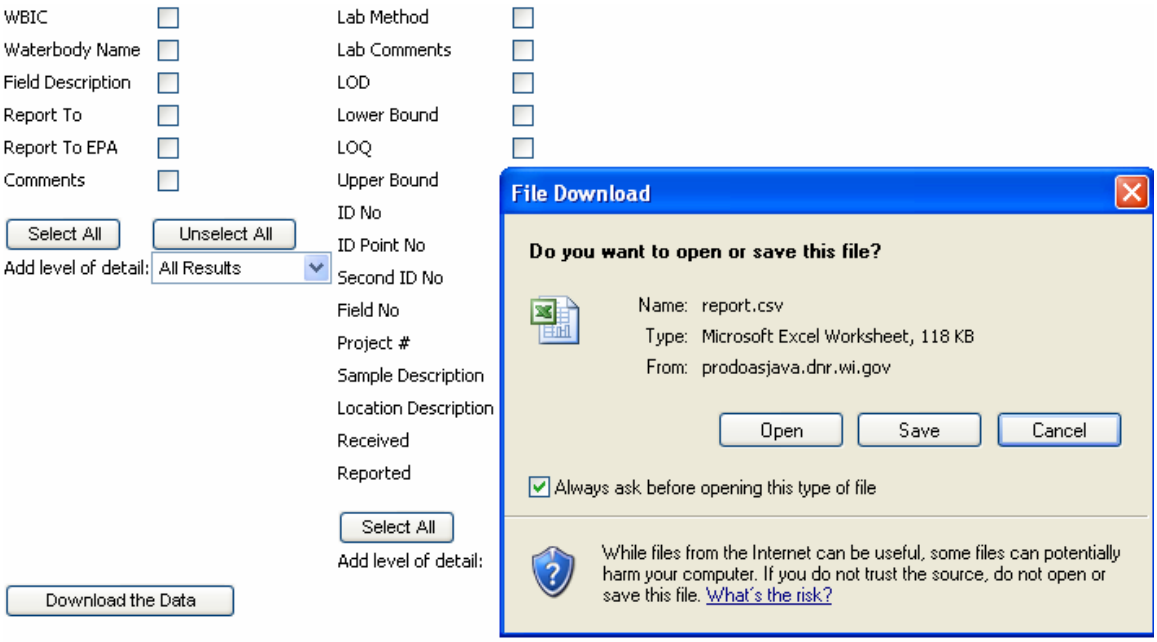




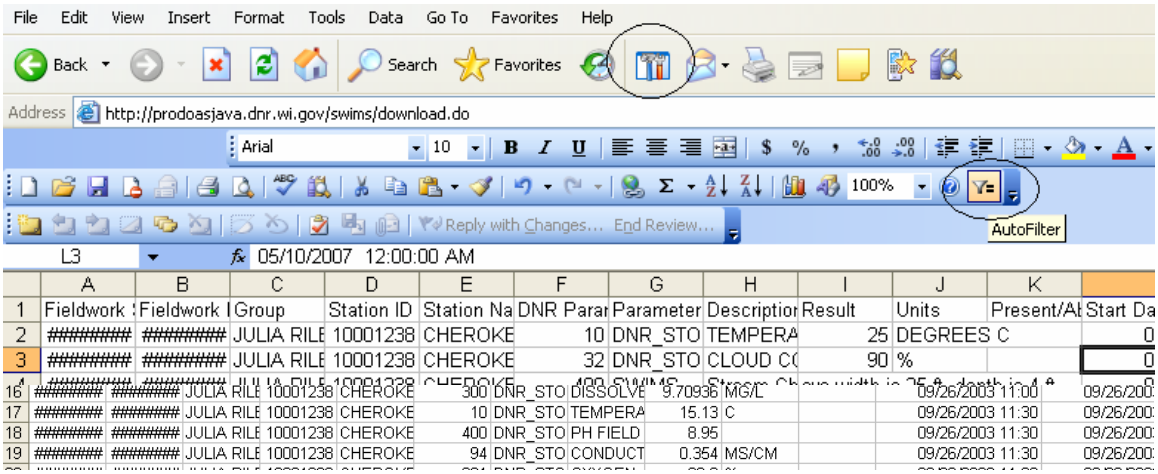
Click on the "Download the Data" button.

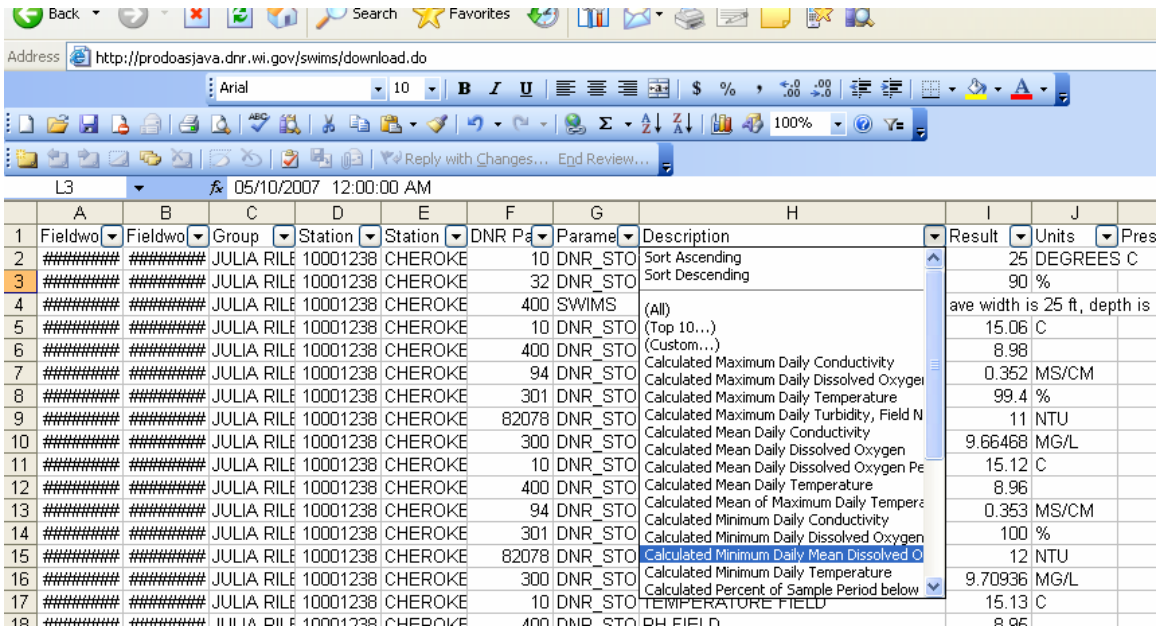


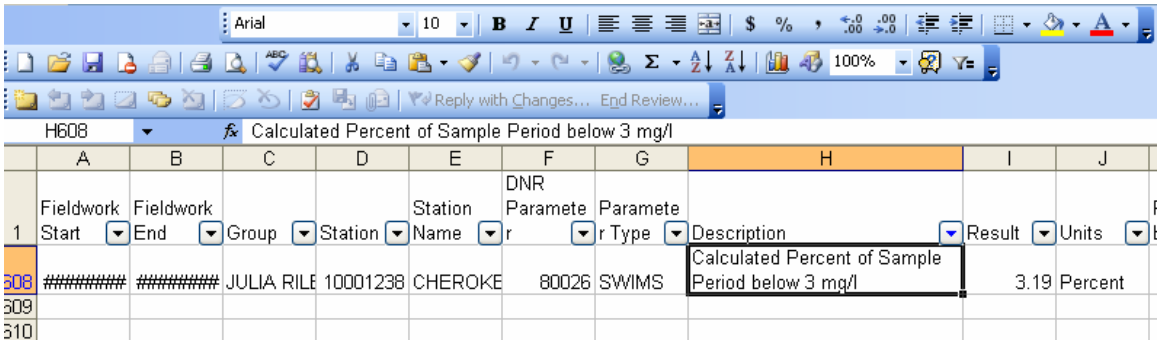
Click on the "Open" button to access the excel worksheet with the selected downloaded information:



You can use Excel "TOOLs" to enable "autofilter" for further sorting of data/information.




Back
Search
Favorites
Address
http://prodoasjava.dnr.wi.gov/swims/download.do
Arial
10
100%
Reply with Changes...
End Review...
L3
05/10/2007 12:00:00 AM
Sort Ascending
Sort Descending
(All)
(Top 10...)
(Custom...)
Calculated Maximum Daily Conductivity
Calculated Maximum Daily Dissolved Oxyge
Calculated Maximum Daily Temperature
Calculated Maximum Daily Turbidity, Field N
Calculated Mean Daily Conductivity
Calculated Mean Daily Dissolved Oxygen
Calculated Mean Daily Dissolved Oxygen Pe
Calculated Mean Daily Temperature
Calculated Mean of Maximum Daily Tempera
Calculated Minimum Daily Conductivity
Calculated Minimum Daily Dissolved Oxygen
Calculated Minimum Daily Mean Dissolved O
Calculated Minimum Daily Temperature
Calculated Percent of Sample Period below
TEMPERATURE FIELD
PH FIELD


Arial
10
100%
Reply with Changes...
End Review...
H608
Calculated Percent of Sample Period below 3 mg/l
Fieldwork Start
Fieldwork End
Group
Station
Station Name
DNR Parameter
Parameter Type
Description
Result
Units
608
JULIA RILE
10001238
CHEROKE
80026
SWIMS
Calculated Percent of Sample Period below 3 mg/l
3.19
Percent
609
610

Formats for Data Upload

Use this chart to find the correct format and columns and column order for uploading your data			
	Device Name	**Format**	**Notes**
Temp Only			
	Onset Thermister	TXT comma delimited	The txt file is the exported Excel text version of the dtf file using the ONSET export application.
	Tidbit - C	TXT tab delimited Celsius	
	Tidbit - F	TXT tab delimited Fahrenheit	
Multi-Parameter			
	Aqua	txt tab delimited	
	HydroSonde A	csv file (comma delimited)	
	MiniHydro Sonde	Txt tab delimited	
	YSI	text comma delimited file	

Onset Thermister:

ONSET_THERMISTER_309311.txt - Notepad

File Edit Format View Help

```
Serial Number:     309311     --     Series: Temperature   (*C)

Date,Time,Temperature   (*C)
05/22/06,00:00:00.0,15.86
05/22/06,01:00:00.0,15.69
05/22/06,02:00:00.0,15.54
05/22/06,03:00:00.0,15.38
05/22/06,04:00:00.0,15.22
05/22/06,05:00:00.0,14.91
05/22/06,06:00:00.0,14.59
05/22/06,07:00:00.0,14.43
05/22/06,08:00:00.0,14.28
05/22/06,09:00:00.0,14.43
05/22/06,10:00:00.0,14.59
05/22/06,11:00:00.0,14.91
05/22/06,12:00:00.0,15.54
05/22/06,13:00:00.0,15.86
05/22/06,14:00:00.0,16.33
05/22/06,15:00:00.0,16.65
05/22/06,16:00:00.0,16.81
05/22/06,17:00:00.0,16.81
05/22/06,18:00:00.0,16.81
05/22/06,19:00:00.0,16.65
05/22/06,20:00:00.0,16.49
05/22/06,21:00:00.0,16.33
05/22/06,22:00:00.0,16.01
05/22/06,23:00:00.0,15.86
05/23/06,00:00:00.0,15.86
05/23/06,01:00:00.0,15.69
05/23/06,02:00:00.0,15.69
```

Tidbit Celcius:

Deer Cr. @STH92 2nd xing Dwnstrm Mt. Hor.txt - Notepad

File Edit Format View Help

```
Date/Time       Temperature   (*C)      Temperature   (*F)
10/06/2005 11:00:00     11.04   51.89   Serial Number:     848174       Series: Temperature   (*C)
Station_ID = 10012173
10/06/2005 12:00:00     11.35   52.44   Serial Number:     848174       Series: Temperature   (*F)
Monit_Station_Seq_No = 104302
10/06/2005 13:00:00     11.51   52.72
10/06/2005 14:00:00     11.66   53      Series  Temperature   (*C)
10/06/2005 15:00:00     11.82   53.28   Logger Info     Information specific to the logger
10/06/2005 16:00:00     11.66   53      Model   Optic StowAway-TEMP(C)ONSET -4C TO 38C
10/06/2005 17:00:00     11.51   52.72   Serial Number   848174
10/06/2005 18:00:00     11.19   52.16   Memory Size (Bytes)     32768
10/06/2005 19:00:00     10.89   51.61   Extra Info      Information used by tech support
10/06/2005 20:00:00     10.42   50.77   Model Number    5
10/06/2005 21:00:00     10.27   50.49   Version Number  3
10/06/2005 22:00:00     10.11   50.21   Series Info     Information about the data in the series
10/06/2005 23:00:00     9.8     49.65   Points Used     6701
10/07/2005 00:00:00     9.64    49.37   First Point     10/06/05 11:00:00.0
10/07/2005 01:00:00     9.49    49.09   Last Point      07/12/06 15:00:00.0
10/07/2005 02:00:00     9.49    49.09   Duration        279 Days 04:00:00.0
10/07/2005 03:00:00     9.33    48.81   Stats   Calculated from the series
10/07/2005 04:00:00     9.18    48.53   Wrap Count      0
10/07/2005 05:00:00     9.02    48.25   Max Value       31.32
10/07/2005 06:00:00     9.02    48.25   Min Value       -0.08
10/07/2005 07:00:00     8.87    47.97   Avg Value       7.68
10/07/2005 08:00:00     8.87    47.97   Launch Parameters       Mirrors the launch dialog settings
10/07/2005 09:00:00     8.87    47.97   Description     Deer Cr. @STH92 2nd xing Dwnstrm Mt. Hor
10/07/2005 10:00:00     9.02    48.25   Wrap    On
10/07/2005 11:00:00     9.18    48.53   Interval        01:00:00.0
10/07/2005 12:00:00     9.8     49.65   Measurement Unit        Temperature  (*C)
10/07/2005 13:00:00     10.27   50.49   Triggered Start Off
```

Tidbit Farenheit:

Deer Cr.@STH 92 Thompson Farm.txt - Notepad

File Edit Format View Help

```
Date/Time       Temperature   (*C)      Temperature   (*F)
10/06/2005 11:00:00     10.31   50.56   Serial Number:     848180       Series: Temperature   (*C)
Station_ID = 10010799
10/06/2005 12:00:00     10.62   51.12   Serial Number:     848180       Series: Temperature   (*F)
Monit_Station_Seq_No = 102928
10/06/2005 13:00:00     10.77   51.4
10/06/2005 14:00:00     10.93   51.68   Series  Temperature   (*C)
10/06/2005 15:00:00     11.08   51.96   Logger Info     Information specific to the logger
10/06/2005 16:00:00     10.93   51.68   Model   Optic StowAway-TEMP(C)ONSET -4C TO 38C
10/06/2005 17:00:00     10.77   51.4    Serial Number   848180
10/06/2005 18:00:00     10.46   50.84   Memory Size (Bytes)     32768
10/06/2005 19:00:00     10.31   50.56   Extra Info      Information used by tech support
10/06/2005 20:00:00     9.99    50      Model Number    5
10/06/2005 21:00:00     9.84    49.72   Version Number  3
10/06/2005 22:00:00     9.68    49.44   Series Info     Information about the data in the series
10/06/2005 23:00:00     9.53    49.16   Points Used     6701
10/07/2005 00:00:00     9.37    48.88   First Point     10/06/05 11:00:00.0
10/07/2005 01:00:00     9.37    48.88   Last Point      07/12/06 15:00:00.0
10/07/2005 02:00:00     9.22    48.6    Duration        279 Days 04:00:00.0
10/07/2005 03:00:00     9.22    48.6    Stats   Calculated from the series
10/07/2005 04:00:00     9.22    48.6    Wrap Count      0
10/07/2005 05:00:00     9.06    48.32   Max Value       29.61
10/07/2005 06:00:00     9.06    48.32   Min Value       1.41
10/07/2005 07:00:00     9.06    48.32   Avg Value       8.21
10/07/2005 08:00:00     9.06    48.32   Launch Parameters       Mirrors the launch dialog settings
10/07/2005 09:00:00     9.22    48.6    Description     Deer Cr.@STH 92 Thompson Farm
10/07/2005 10:00:00     9.37    48.88   Wrap    On
10/07/2005 11:00:00     9.68    49.44   Interval        01:00:00.0
10/07/2005 12:00:00     10.31   50.56   Measurement Unit        Temperature   (*C)
10/07/2005 13:00:00     10.46   50.84   Triggered Start Off
```

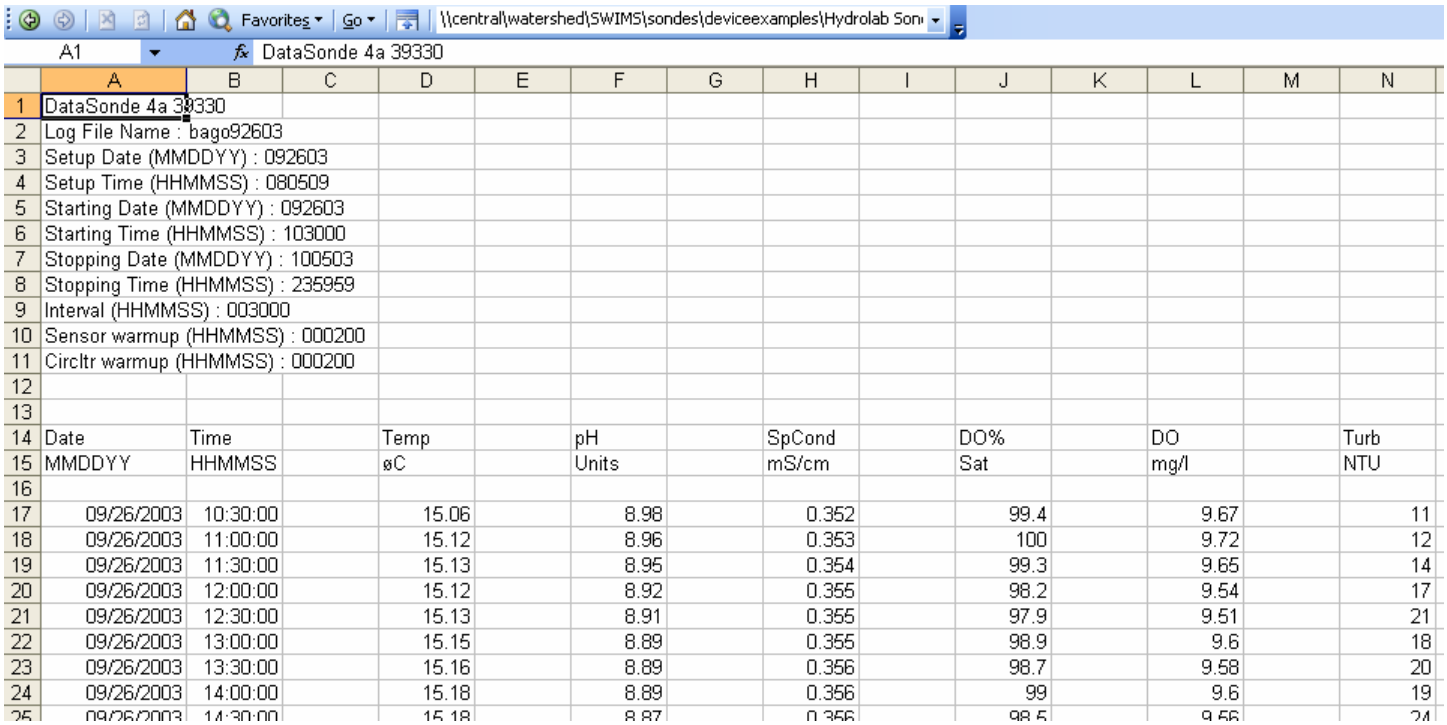
Aqua Unit (Temp, DO)

AQUA_prn8-21.txt - Notepad

File Edit Format View Help

```
Popple  River   at      CTH     N
"8/17 - 8/21,2006"

AQUA    2002    Data    Report
************************************************
Start   time    [Day]   :       08/17/2006      13:00   -229.5416667
Down    load    time    [Day]   :       08/21/2006      12:15   -233.5109259
Sample  interval        [Minute(s)]     :       0:30
Battery status  at      down    load    :       OK
Samples collected       :       191
************************************************

Notes:
************************************************
Ken     Schreiber
WCR     EAU     CLAIRE
Unit    #5
************************************************

        Time    DOY     Temp    DO

08/17/2006      13:00   229.5416667     21.39   6.09
08/17/2006      13:30   229.5625        21.45   6.36
08/17/2006      14:00   229.5833333     21.5    6.62
08/17/2006      14:30   229.6041667     21.54   6.85
08/17/2006      15:00   229.625 21.55   7.1
08/17/2006      15:30   229.6458333     21.58   7.32
08/17/2006      16:00   229.6666667     21.59   7.51
08/17/2006      16:30   229.6875        21.61   7.68
08/17/2006      17:00   229.7083333     21.6    7.75
```

Hydrosonde (CSV):

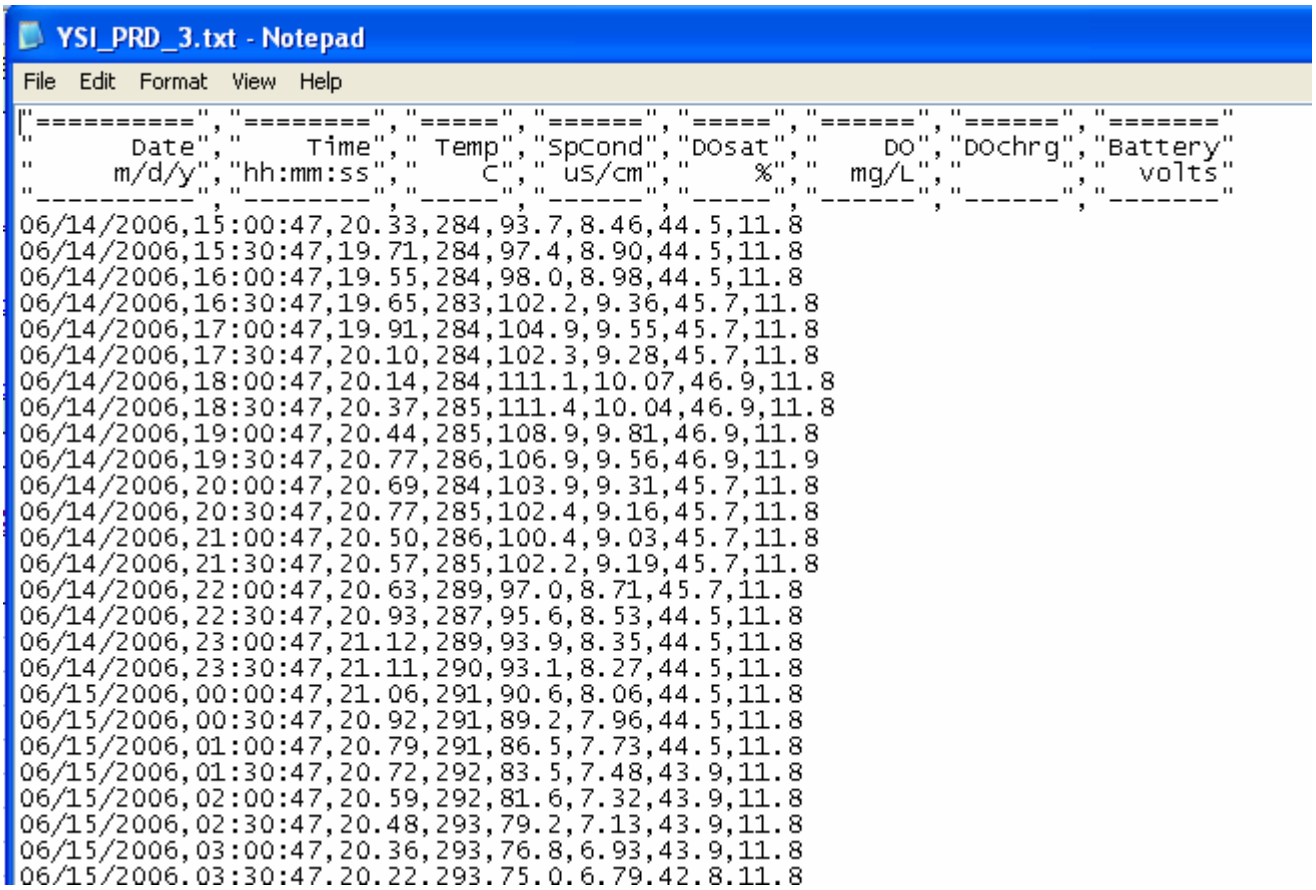


	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	DataSonde 4a 39330													
2	Log File Name : bago92603													
3	Setup Date (MMDDYY) : 092603													
4	Setup Time (HHMMSS) : 080509													
5	Starting Date (MMDDYY) : 092603													
6	Starting Time (HHMMSS) : 103000													
7	Stopping Date (MMDDYY) : 100503													
8	Stopping Time (HHMMSS) : 235959													
9	Interval (HHMMSS) : 003000													
10	Sensor warmup (HHMMSS) : 000200													
11	Circltr warmup (HHMMSS) : 000200													
12														
13														
14	Date	Time		Temp		pH		SpCond		DO%		DO		Turb
15	MMDDYY	HHMMSS		øC		Units		mS/cm		Sat		mg/l		NTU
16														
17	09/26/2003	10:30:00		15.06		8.98		0.352		99.4		9.67		11
18	09/26/2003	11:00:00		15.12		8.96		0.353		100		9.72		12
19	09/26/2003	11:30:00		15.13		8.95		0.354		99.3		9.65		14
20	09/26/2003	12:00:00		15.12		8.92		0.355		98.2		9.54		17
21	09/26/2003	12:30:00		15.13		8.91		0.355		97.9		9.51		21
22	09/26/2003	13:00:00		15.15		8.89		0.355		98.9		9.6		18
23	09/26/2003	13:30:00		15.16		8.89		0.356		98.7		9.58		20
24	09/26/2003	14:00:00		15.18		8.89		0.356		99		9.6		19
25	09/26/2003	14:30:00		15.18		8.87		0.356		98.5		9.56		24

MiniSonde (HydroSonde)

	A	B	C	D	E	F	G	H	I
1	MiniSonde 5 42591								
2	Log File Name : Little Willow @ Spiral Rd Fall '06								
3	Setup Date (MM/DD/YYYY) : 09/29/2006								
4	Setup Time (HH:MM:SS) : 11:31:11								
5	Starting Date (MM/DD/YYYY) : 09/29/2006								
6	Starting Time (HH:MM:SS) : 12:00:00								
7	Stopping Date (MM/DD/YYYY) : 10/06/2006								
8	Stopping Time (HH:MM:SS) : 12:00:00								
9	Interval (HH:MM:SS) : 01:00:00								
10	Sensor warmup (HH:MM:SS) : 00:00:30								
11	Circltr warmup (HH:MM:SS) : 00:00:30								
12									
13	Date	Time	Temp	pH	SpCond	NH4Tot	LDO%	LDO	IBatt
14	MM/DD/YYYY	HH:MM:SS	□C	Units	□S/cm	mg/l-N	Sat	mg/l	%Left
15									
16	09/29/2006	12:00:00	9.41	8.25	529	0.05	105.6	11.71	57
17	09/29/2006	13:00:00	9.54	8.34	527	0.05	108.1	11.95	58
18	09/29/2006	14:00:00	10.37	8.39	526	0.05	112.6	12.2	58
19	09/29/2006	15:00:00	11.27	8.41	526	0.06	114.3	12.13	58
20	09/29/2006	16:00:00	11.46	8.42	526	0.07	111.3	11.76	60
21	09/29/2006	17:00:00	11.22	8.4	526	0.06	104.9	11.15	58
22	09/29/2006	18:00:00	11.09	8.39	526	0.06	99.6	10.61	60
23	09/29/2006	19:00:00	10.88	8.36	526	0.06	94.3	10.1	60

YSI Unit:


YSI_PRD_3.txt - Notepad

File Edit Format View Help

"==========","========","=====","======","=====","======","======","======="
"   Date","   Time"," Temp","SpCond","DOsat","   DO","DOchrg","Battery"
"   m/d/y","hh:mm:ss","   C"," uS/cm","   %"," mg/L","   "," volts"
"----------","--------","-----","------","-----","------","------","-------"
06/14/2006,15:00:47,20.33,284,93.7,8.46,44.5,11.8
06/14/2006,15:30:47,19.71,284,97.4,8.90,44.5,11.8
06/14/2006,16:00:47,19.55,284,98.0,8.98,44.5,11.8
06/14/2006,16:30:47,19.65,283,102.2,9.36,45.7,11.8
06/14/2006,17:00:47,19.91,284,104.9,9.55,45.7,11.8
06/14/2006,17:30:47,20.10,284,102.3,9.28,45.7,11.8
06/14/2006,18:00:47,20.14,284,111.1,10.07,46.9,11.8
06/14/2006,18:30:47,20.37,285,111.4,10.04,46.9,11.8
06/14/2006,19:00:47,20.44,285,108.9,9.81,46.9,11.8
06/14/2006,19:30:47,20.77,286,106.9,9.56,46.9,11.9
06/14/2006,20:00:47,20.69,284,103.9,9.31,45.7,11.8
06/14/2006,20:30:47,20.77,285,102.4,9.16,45.7,11.8
06/14/2006,21:00:47,20.50,286,100.4,9.03,45.7,11.8
06/14/2006,21:30:47,20.57,285,102.2,9.19,45.7,11.8
06/14/2006,22:00:47,20.63,289,97.0,8.71,45.7,11.8
06/14/2006,22:30:47,20.93,287,95.6,8.53,44.5,11.8
06/14/2006,23:00:47,21.12,289,93.9,8.35,44.5,11.8
06/14/2006,23:30:47,21.11,290,93.1,8.27,44.5,11.8
06/15/2006,00:00:47,21.06,291,90.6,8.06,44.5,11.8
06/15/2006,00:30:47,20.92,291,89.2,7.96,44.5,11.8
06/15/2006,01:00:47,20.79,291,86.5,7.73,44.5,11.8
06/15/2006,01:30:47,20.72,292,83.5,7.48,43.9,11.8
06/15/2006,02:00:47,20.59,292,81.6,7.32,43.9,11.8
06/15/2006,02:30:47,20.48,293,79.2,7.13,43.9,11.8
06/15/2006,03:00:47,20.36,293,76.8,6.93,43.9,11.8
06/15/2006,03:30:47,20.22,293,75.0,6.79,42.8,11.8