



Accessing Sonde Data Online:

1. Access the project website at www.uwgb.edu/watershed.
2. Click on 'Monitoring Data' – 'UW-Milwaukee Biological and Continuous Monitoring Data' – 'Uncalibrated Daily Sonde Data'. This list of files is updated daily via modem to show the stream data through the past 24-hour period. The data is not post-calibrated, but this preliminary data will give students the opportunity to view the data in "real time".
3. Find the correct stream file. A new file is generated for each month of the year. The file naming code is as follows:
 - The first 3 digits in the file name represent the stream. The stream codes for the Fox River Program are:
 - 851 Ashwaubenon
 - 852 Apple
 - 853 Baird
 - 857 Duck
 - The fourth digit in the name represents the year. For example, '4' is 2004.
 - The fifth space in the name represents the month, where the numbers '1' to '9' are January to September, 'A' is October, 'B' is November, and 'C' is December.
 - The sixth space in the name represents the type of data file. An 'S' in this space stands for sonde, an 'M' stands for meteorological data, and an 'I' stands for internal equipment conditions. Students will be most interested in the 'S' files.
 - The seventh and eighth spaces stand for the file number created that month. These are normally '00', but may be '01' or '02' if the equipment had to create an additional file.
 - So, an example file named **85748S00.dat** would be sonde data for Duck Creek in August 2004.
4. Double-click on a file name to open it in EcoWatch. (Note: **Do not** have EcoWatch open when you double-click on the file name or nothing will happen. For some reason, double-clicking only works to open the file if the program isn't running.)

Using EcoWatch to View Sonde Data:

1. To add or remove parameters from the screen, on the menu bar select 'Setup' – 'Parameters' – 'Add/Remove'. Highlight parameters in the left column that you want taken off the graph and hit the remove button. You can also change the order that the parameters are displayed in by clicking the Up-Down buttons on the left side of the dialogue box. The graph will automatically refresh itself when you hit OK.
2. The depth graph defaults to display with no flow at the top of the graph and the greatest depth at the bottom, which is opposite that of the USGS hydrographs. To change this so that the graph goes up as the depth increases, on the menu bar select 'Graph' – 'Manual

Scale'. Select the depth parameter in the box at the left, turn off the check in the box labeled "Autoscale", and adjust the low limit to 0 and the high limit to the number that was previously displayed in the low limit box. Click OK and the depth graph will reverse to look like a standard hydrograph.

3. Data can either be displayed in graph or table format. To switch formats, select either the 'Graph' or 'Table' option in the 'View' menu. There are also two buttons that accomplish the same task on the toolbar at the top of the screen.
4. To quickly view the values for all parameters at a particular time, hold down the right mouse button and move the cursor to the point on the graph you are interested in. Values for each of the parameters are displayed at the left side of the screen. Simply release the button when you want to exit the command.
5. To zoom in on a particular time period on the graph, you can either select 'Graph' – 'Limit Data Set' or hit the button on the toolbar that has two vertical lines on it. After selecting this option, click on the beginning and end of the time period that you wish to isolate on the graph. To zoom back out, select 'Graph' – 'Cancel Limits'.
6. EcoWatch generates summary statistics for the data set by selecting 'File' – 'Report'. In the dialogue box, set the type of report as 'Statistic' and select the time period you want EcoWatch to calculate the statistics over. EcoWatch calculates minimum, maximum, mean, and standard deviation statistics on a daily, weekly, monthly, or cumulative (which it calls "all") basis.
7. To export graphs from EcoWatch as picture files, click the data export button (red arrow next to the save button). Set the export format at the bottom left as "Windows Meta File" (WMF). Choose where you want the file to be saved, give it a descriptive name (i.e. July04Summary), and click Export. This file can now be opened in any image editing software, or inserted as a picture into Microsoft Word or Powerpoint.
8. Data can also be exported from EcoWatch into Microsoft Excel in tabular format. Click the data export button (red arrow next to the save button). Set the export format at the bottom left as "Comma Delimited" (CDF). Choose where you want the file to be saved, give it a descriptive name (i.e. July04Summary), and click Export. Start Excel and select 'File' – 'Open'. Change the file type that Excel is looking for to 'All Files' at the bottom of the dialogue box. Select the .CDF file that you created with EcoWatch. Excel will automatically recognize that you are trying to import data, and open the "Text Import Wizard". In the first window, make sure that the "Original Data Type" is set at "Delimited" and click the "Next" button. In the second window, turn on the checkmark box next to "Comma" under "Delimiters" and click the "Next" button. The final window does not require any changes, so click the "Finish" button. The Wizard will close and the data from EcoWatch is now ready for editing in Excel. Make sure to perform a 'File' – 'Save As' and change the type of file to an Excel Workbook file to save it in Excel format.