RIVERTRENDS DATA UPLOAD

MAKE AN ACCOUNT

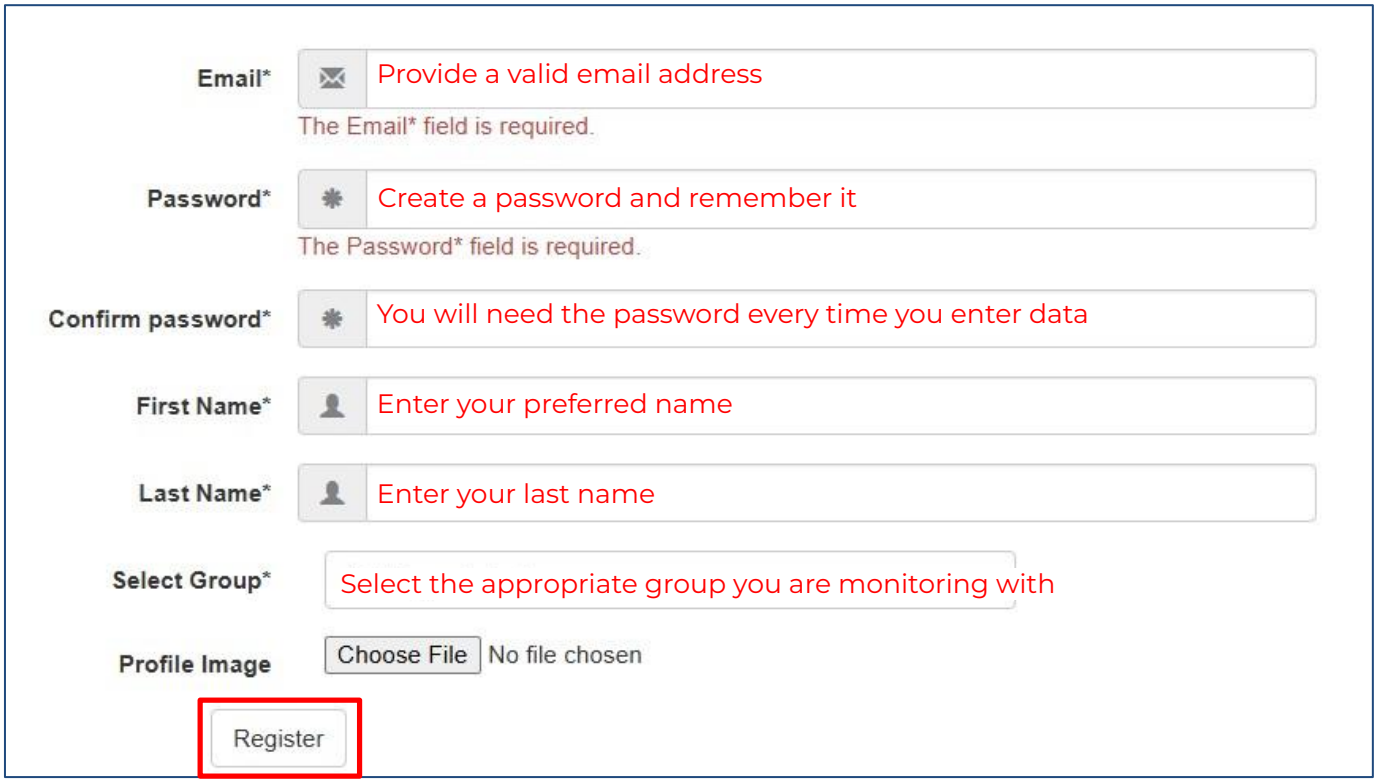
Before you can upload your data, you must register with an account on the CMC Data Explorer.

1. Visit the data explorer link and select **Manage Data** on the top of the page.

cmc.vims.edu

2. Select **Register** at the top right corner of the page.

3. Fill out the entire registration form with the following highlighted information.



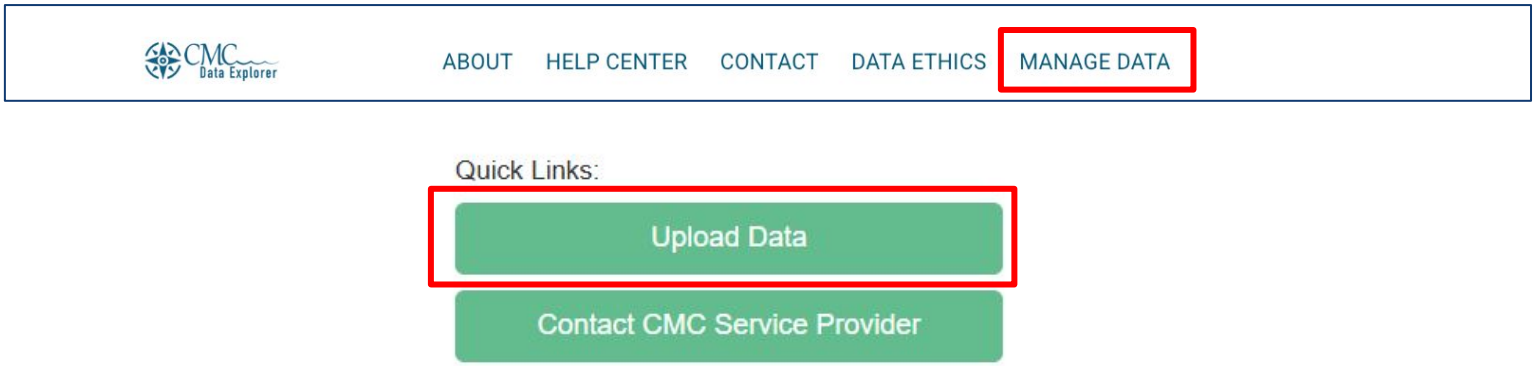
**Select Group*: select the group you are associated with. If you do not see your group listed, please select "Alliance for the Chesapeake Bay"

4. Click **Register** when completed, then go to your email and **click the link to confirm your email address**. An Alliance staff member will confirm your registration within 24 hours. You will then be able to login to upload data.

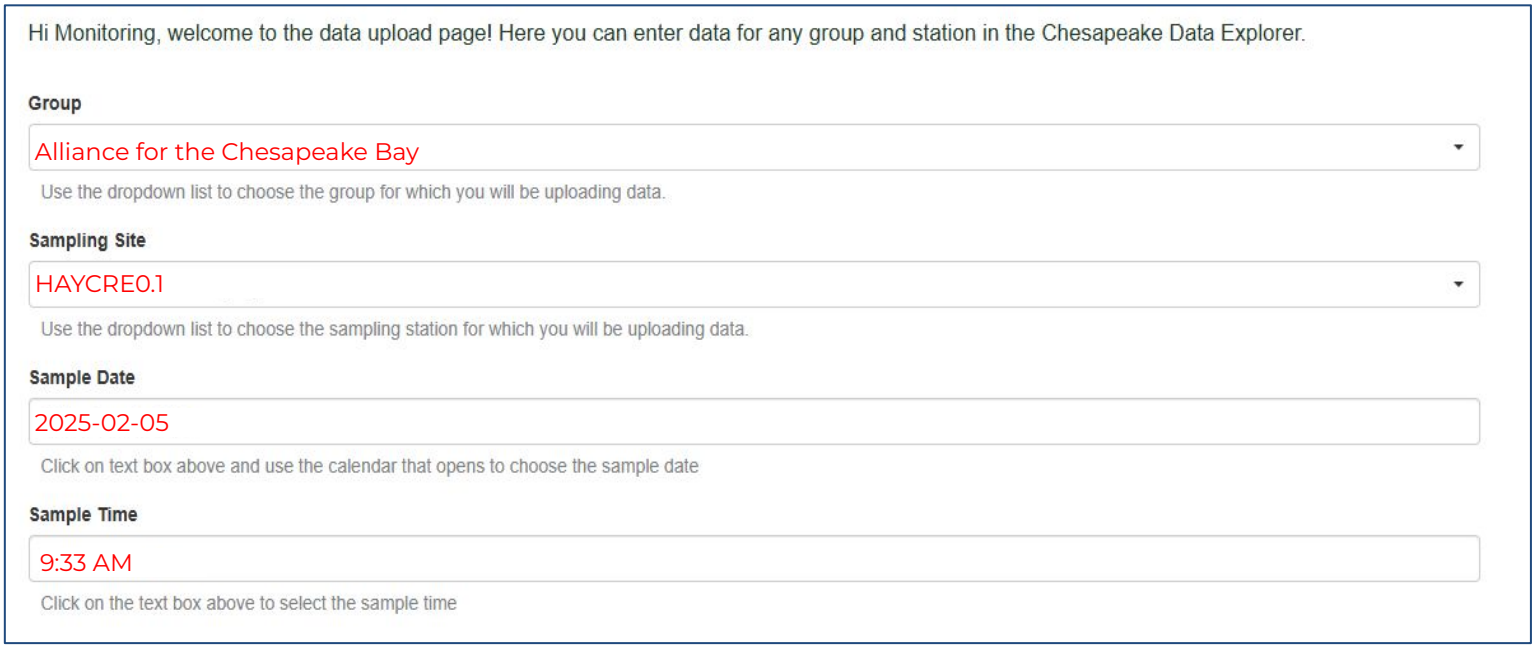
ENTERING DATA: GENERAL INFO

To upload data, first log in to your account on the CMC Data Explorer. Select **Manage Data** from the top menu, then select the **Upload Data** quick link.

cmc.vims.edu



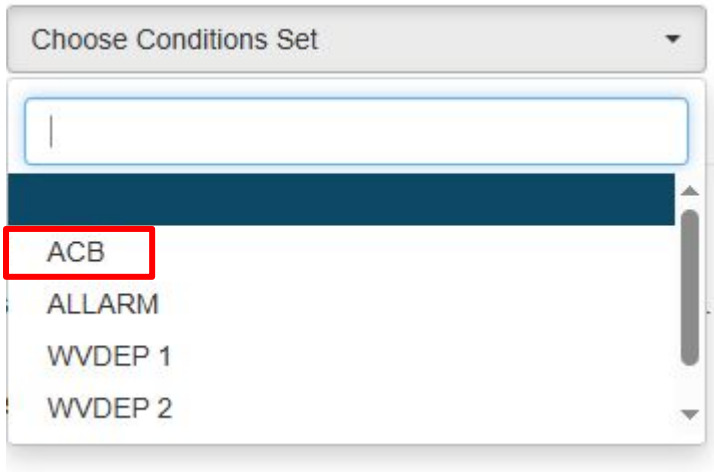
Fill out the top section of the data upload form with the information corresponding to your datasheet.



- **Group:** This will be selected for you based on the group you choose at registration.
- **Sampling Site:** Select your sampling site from the drop down list provided. If you do not see your station, contact the RiverTrends Coordinator.
    - Use caution as some sampling sites may have similar names. Double check you have selected the appropriate site
- **Sample Date:** Enter your sampling date from your datasheet (mm/dd/yyyy).
- **Sample Time:** Enter your sampling time from your datasheet (HH:MM AM/PM)

ENTERING DATA: CONDITIONS DURING SAMPING

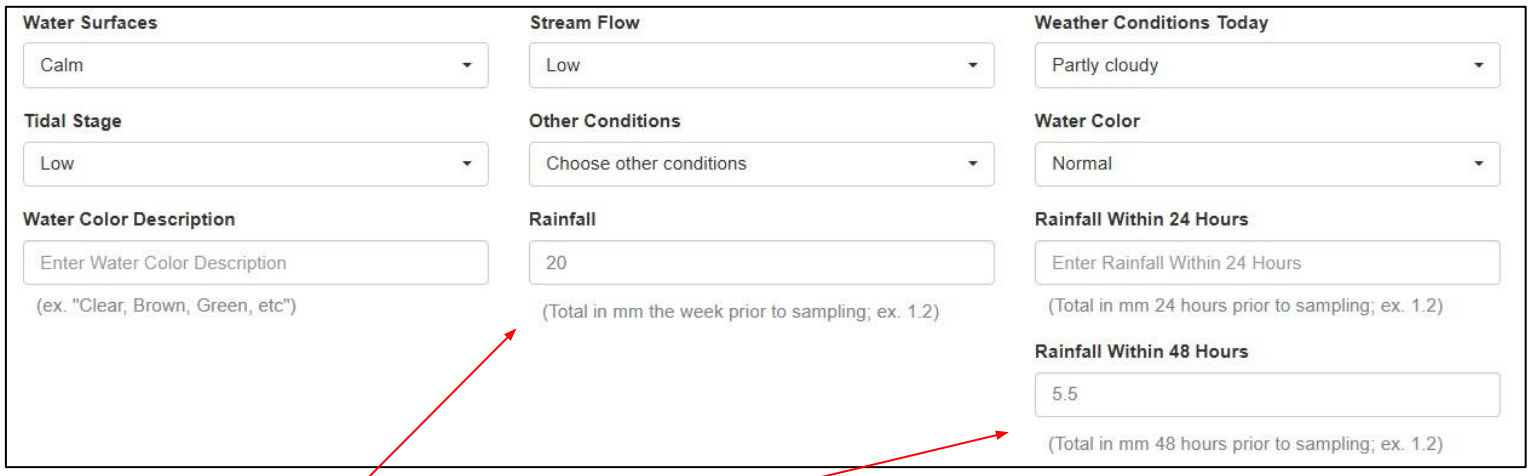
From the “Choose Conditions Set” drop down box, **select ACB.**



Fill out the conditions during sampling that correspond to your datasheet by using the dropdown menus or text boxes. Leave any unused fields blank.

RiverTrends monitors should have complete observational data for:

- water surface, stream flow rate, weather conditions today, water color, tidal stage (if applicable), other conditions (if applicable). The drop down menus correspond to observational data section on the back of your datasheet.



Rainfall Data:

To source your rainfall data, please visit the RiverTrends Resource Page and utilize Wunderground or your local rainfall station to collect accurate rainfall data.

- **Rainfall:** type in the weekly accumulation total (mm) before sampling
- **Rainfall Within 48 Hours**: type in the total of rainfall (mm) 48 hours before sampling

ENTERING DATA: CALIBRATIONS

This section records the calibration/standardization procedures that correspond to the front of the RiverTrends datasheet, including pH, dissolved oxygen, and bacteria (if applicable).

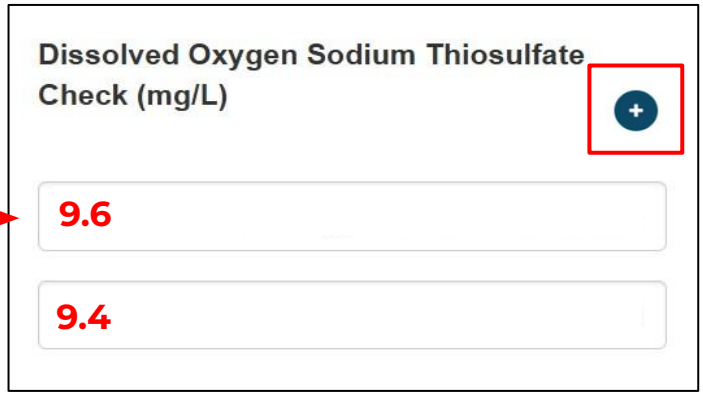
DISSOLVED OXYGEN

Sodium Thiosulfate Check (mg/L): Type in the value of your sodium thiosulfate check. If a second and third check were completed, report the two closest values. Click the blue plus sign to "add a second value" and type in the value for the second sodium thiosulfate check. If your sodium thiosulfate check is not between 9.4 and 10, submit a supply request for new sodium thiosulfate on the RiverTrends Resource Page.

Data Sheet:

Check 1	Check 2	Check 3
9.2 mg/L	9.6 mg/L	9.4 mg/L

Upload:



BACTERIA (R-CARD)

E. coli Bacteria Measurements (R-Card)

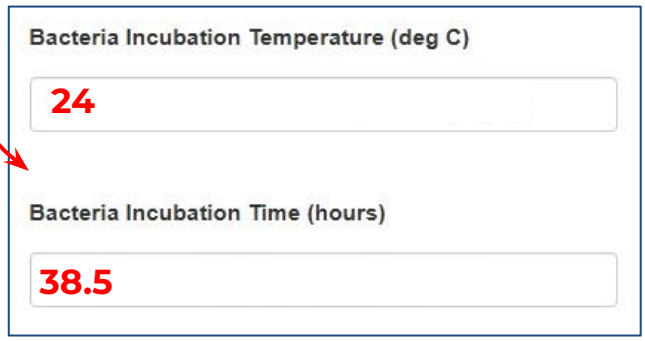
Disregard any pink, red, green-blue, or white colonies. These are not E. coli bacteria. Only count purple and blue-purple colonies.	Incubation Time	Incubation Temperature	Sample water used (1-3mL)	Total colonies counted on plate
	24 hours	38.5 °C	Sample 1: _____mL	_____
			Sample 2: _____mL (only March/October)	_____

To calculate the Total Colonies of E. coli bacteria per 100 ml of water:

1. Divide 100 by the ml of water used. 2. Multiply this quotient by the number of purple colonies counted

Sample 1: ([100 ÷ mL of water used] * colonies counted) = _____CFU/100mL (report this number on back of datasheet)

Sample 2: ([100 ÷ mL of water used] * colonies counted) = _____CFU/100mL (report this number on back of datasheet)



ENTERING DATA: CALIBRATIONS CONT'D

pH

Type in the value of your pH meter quality assurance checks Most monitors complete a 2-point calibration, using pH 7 and pH 4 **or** pH 10. Leave the other one blank. Use the guide below to match up the numbers on your datasheet with the correct sections on the data upload page.

Data Sheet:

pH Meter Quality Assurance Checks					
If your calibration values differ by more than +/- 0.20 from the standard, do not take sample and contact coordinator.	Pre-sample Calibration and Temperature			Post Sample Check and Temperature	
	7.00	7.00	21.2 °C	7.00 7.02	23.0 °C
	4.01	.		4.01 .	
	10.01	10.00		10.01 10.01	

Upload:

pH Calibration Temperature (deg C)

21.2

pH Calibration Value (4) (SU)

Enter pH Calibration Value (4) (SU)

pH Calibration Value (7) (SU)

7.0

pH Calibration Value (10) (SU)

10.0

pH Post-Sample Check (4) (SU)

Enter pH Post-Sample Check (4) (SU)

pH Post-Sample Check (7) (SU)

7.02

pH Post-Sample Check (10) (SU)

10.01

pH Post-Sample Temperature (deg C)

23.0

ENTERING DATA: SURFACE SAMPLES

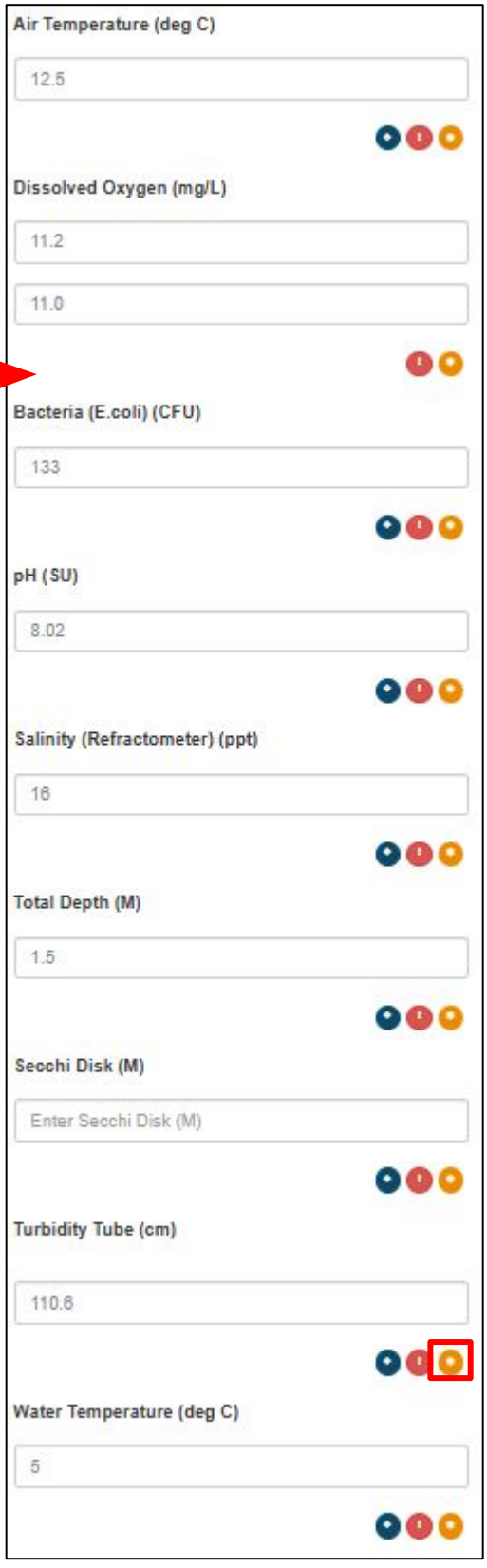
Section 4: Surface Samples

This section records the surface samples that correspond to the back of the RiverTrends datasheet, If you do not have data for a listed parameter, leave the box blank. Do not enter "0" unless that is the actual recorded value.

Data Sheet:

Parameter	Field Readings
Air Temperature (nearest tenth)	12.5 °C
Dissolved Oxygen Note: Tests should be within 0.6 of each other. If not, perform 3rd test and report two closest results.	Test 1: 11.2 mg/L Test 2: 11.0 mg/L
Bacteria	133 CFU/100mL
pH (nearest hundredth)	8.02 SU
Salinity (nearest tenth)	16.0 ppt
Total Depth (nearest tenth of meter)	1.5 m
Water Clarity - Secchi Disk (nearest tenth of meter)	_____ m ☐Check box if value is > than that recorded
Water Clarity - Turbidity Tube (nearest tenth of cm)	110.6 cm ☐Check box if value is > than that recorded
Water Temperature (nearest tenth)	5.0 °C

Upload:



REMINDERS:

- Upload TWO dissolved oxygen samples each month
- Upload TWO samples for each parameter in March and October when you collect field replicates
- Use QUALIFIER CODES when the reading is greater than your equipment is able to record See pg. 7 for more information on how to use qualifier codes.

Click Save at the bottom of the page after entering your data.

REPLICATES AND QUALIFIER CODES

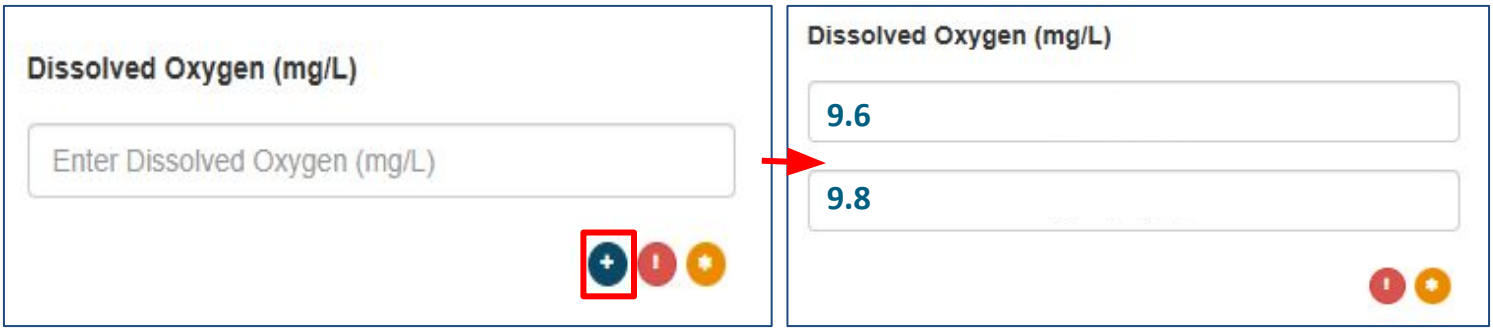
REPLICATE SAMPLES

RiverTrends monitors collect two dissolved oxygen samples each month, indicated by Test 1 and Test 2 on the field data sheet. Additionally, replicate samples of all parameters are collected in March and October. When this happens, both samples need to be uploaded to the Data Explorer by using the blue plus sign symbol to open a second value box.

Data Sheet:

Dissolved Oxygen Note: Tests should be within 0.6 of each other. If not, perform 3rd test and report two closest results.	Test 1: 9.6 mg/L
	Test 2: 9.8 mg/L

Upload:



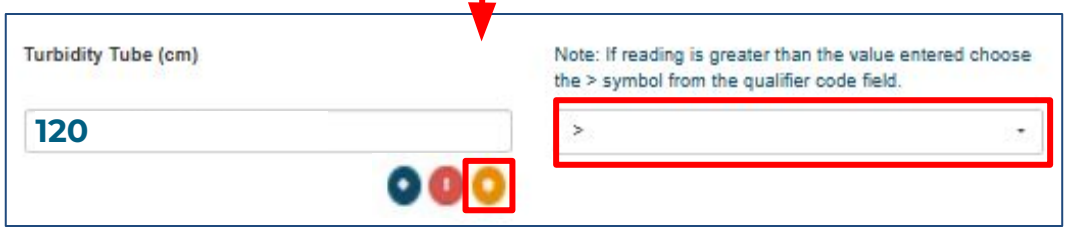
QUALIFIER CODES

For secchi disk or turbidity tube measurements, you may have a reading that is greater than the value able to be recorded by your equipment. If this happens, click the orange circle and select the ">" symbol from the drop down menu.

Data Sheet:

Water Clarity - Secchi Disk (nearest tenth of meter)	____.____ m	☐Check box if value is > than that recorded
Water Clarity - Turbidity Tube (nearest tenth of cm)	120.0 cm	☐Check box if value is > than that recorded

Upload:



PROBLEM CODES

Occasionally you may notice that your data is not meeting quality assurance standards. When this happens, a problem code needs to be associated with the datapoint. RiverTrends volunteers may add the problem codes A, B , V or C themselves, or the RiverTrends coordinator will add it on the back end when reviewing data.

Code	Name	When should I use this?
A	Calibration or Standardizatio n failed	Do not take your field reading if calibration or standardization fails. If you proceed with a field reading, the data will be flagged with this code. **Dissolved Oxygen:** Sodium thiosulfate check failed, reported lower than 9.4 **pH:** calibration failed (7, 4, or 10 more than 0.20 from standard value)
B	Post-sample check failed	**pH:** post-sample checks failed (7, 4, or 10 more than 0.20 from standard value)
C	Field replicate out of range	For use by RiverTrends Coordinator **only**
V	Other Field QA/QC issue	**pH:** calibration not performed or failed **DO:** Sodium thiosulfate check not performed, failed or are more than 0.4 mg/L apart **Bacteria:** incubation time greater than 24 hours, temperature incorrect outside of 38-40*C range
X	No routine sample taken - see comments	If you are unable to record a routine measurement, use X. This **must** be accompanied by an explanation in the comments section.

PROBLEM CODE USE SCENARIO

The pH meter post-sample checks were outside of the acceptable range for buffer 10, reading 9.78. This data must now have a problem code associated with it. Find the field reading of the pH value for this sampling event, select the red circle to open the problem code dropdown menu, then select the appropriate code. For this scenario, select problem code B to indicate that the post sample check failed.