DATA MANAGER GUIDE

WATER REPORTER

A product of

The COMMONS

WATER REPORTER

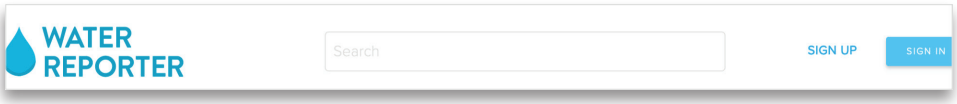
DATA MANAGER GUIDE CONTENTS

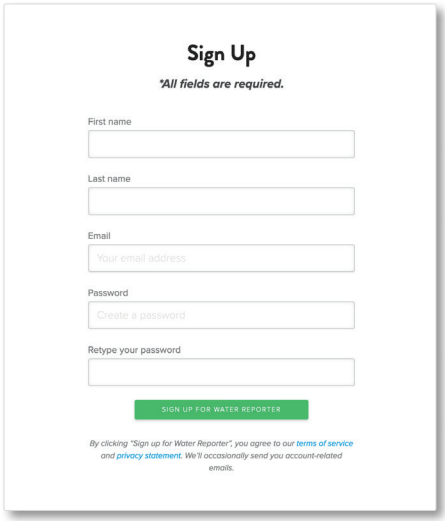
ACCOUNT SETUP

Water Reporter supports three types of account users: Basic users, Group Owners, and contributors. All users start by creating a basic user account.

Step 1: Create your Account

Navigate to www.waterreporter.org. Click the “sign up” button in the upper right hand corner.





Create your account

Complete the sign up page to register your email address. You will continue to use your email address to log-in to Water Reporter in the future.

When you click “Sign up for Water Reporter” the system will create your account. Expect to receive a welcome email in your inbox.

Navigate your Dashboard

Edit Profile
Use the Edit Profile button below your name to add more personal detail to your account.

Your Personal Information.
Your Name. We recommend that you use your real name. Do not use your organization’s name here as it creates confusion when you create a group with the same name.

Your Position. What is your position at your organization? This will be public if you choose to include it.

Your Organization. Name your organizaiton. This is a text field and will not impact the group that you form in the next step.

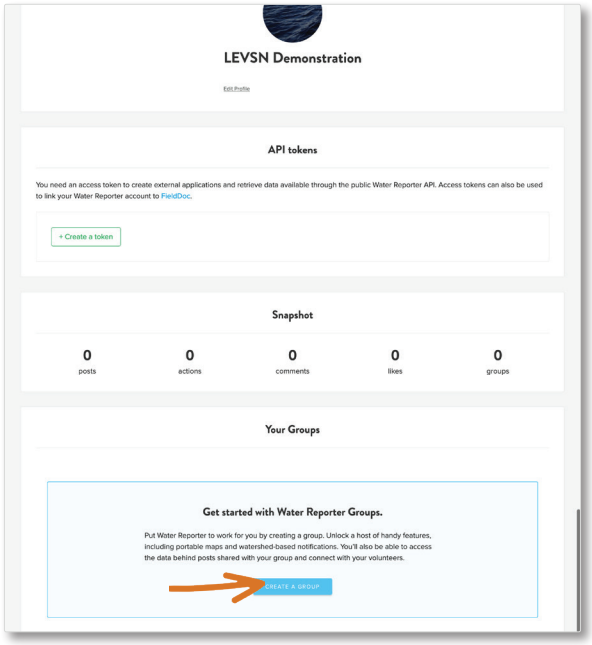
Memberships. This will populate as you create or “follow” new groups.

Profile Picture. Please upload a profile photo, it helps personalize your account.

Contact Information. This is publicly shared and optional.
Bio. This is publicly shared and optional, but helps personalize your account.

Step 2: Create a Group

Create your own Group in Water Reporter. This is where you will build a data source of your monitoring stations and manage any data collectors who share data to you via Water Reporter.



Create a Group

From your Account Dashboard, click the button to “Create a Group”.

New Organization

Please fill out all fields with your organization’s profile information.

Name. This is the name that will appear on your dashboard.

Keywords. Keywords can help people find your group. .

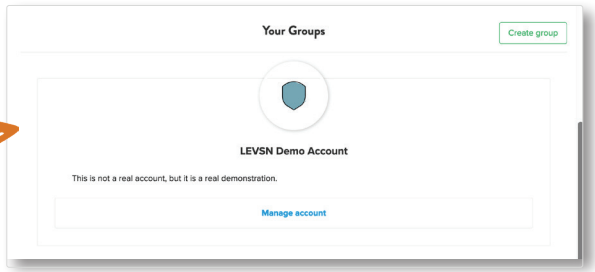
Description. This public facing space is available for all users to see. You can use the space to describe your organization or describe any calls-to-action that you have to your Water Reporter users.

Logo. Your logo will be displayed throughout the user experience. Square logos are best. To really make your logo stand out, upload a 256 x 256 logo on a white background.

Contact Information. These items will be visible on the group’s Water Reporter page.

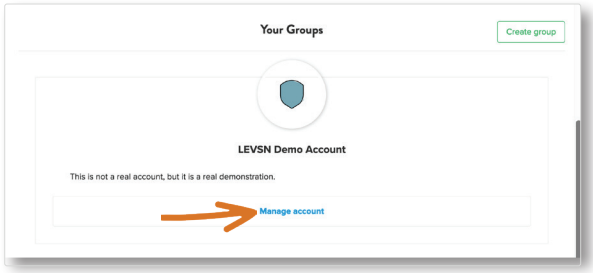
Click Save.

THIS IS THE GROUP ACCESS POINT



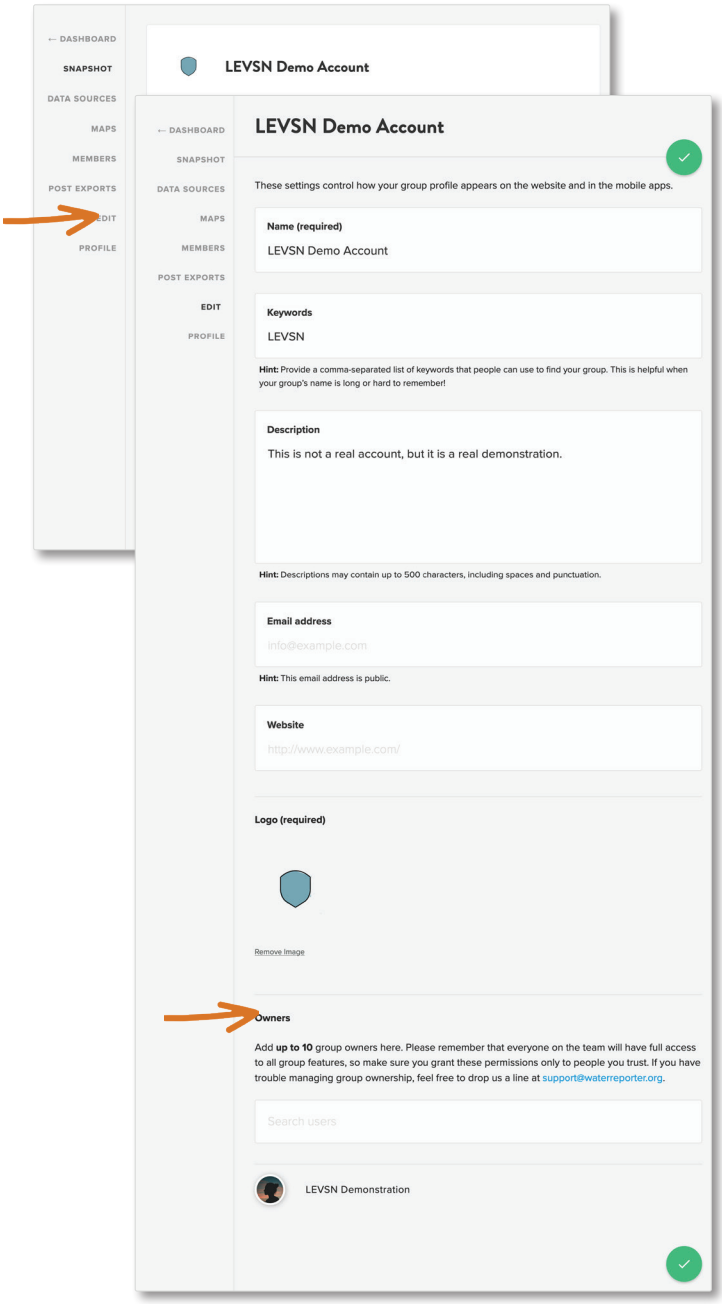
Step 3. Add Owners

If you have co-managers, you can add them to your Group through the group edit page. All co-managers must create a Basic Water Reporter account before they can be added to your group.



Enter your account

From your Account Dashboard, click the button to “Manage Account”



Select Edit

Navigate to your Edit Page. From this settings page your can change Group profile settings and add up to 10 group owners. Group owners have full access to the account, such as editing data sources, building maps, and importing/exporting data.

Owners. Owners must be searched for by typing in a name or email address.

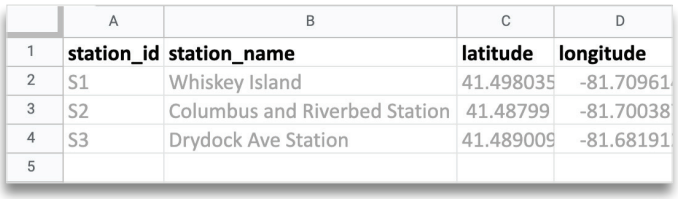
Click the check mark to save your work.

DATA SOURCE SET UP

To create your data source you will need to pull together some required data components that will form the data source. Once you have the structure framed you can add in historical data, collect data, enter thresholds and parameters, and build maps.

Step 1: Preparing your data for Water Reporter

Water Reporter simplifies data management, but you need get your data in order first. To get started, gather all of the defining fields of your monitoring program. This section shows you the required information necessary to have on hand to create a data source.

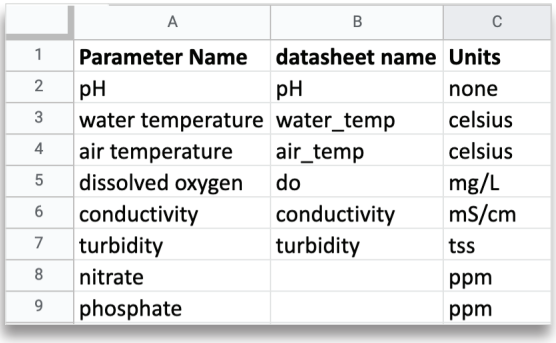


	A	B	C	D
1	station_id	station_name	latitude	longitude
2	S1	Whiskey Island	41.498035	-81.70961
3	S2	Columbus and Riverbed Station	41.48799	-81.70038
4	S3	Drydock Ave Station	41.489009	-81.68191
5				

Stations

Continuous monitoring occurs at fixed stations, or the places where you monitor. Build a .csv file with the following fields. Make sure to have your column headers match these fields directly for a successful upload.

This link downloads a suggested spreadsheet from which you can build your station list. *Tip: Check your downloads folder for the file.*

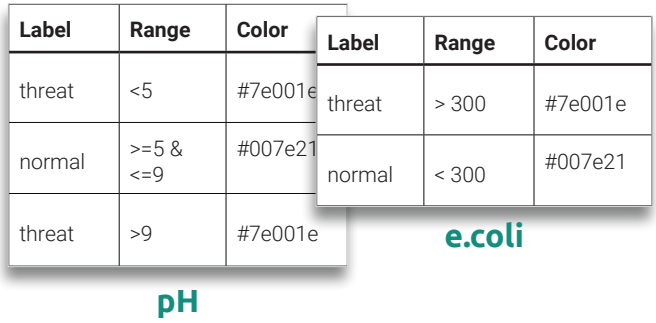


	A	B	C
1	Parameter Name	datasheet name	Units
2	pH	pH	none
3	water temperature	water_temp	celsius
4	air temperature	air_temp	celsius
5	dissolved oxygen	do	mg/L
6	conductivity	conductivity	mS/cm
7	turbidity	turbidity	tss
8	nitrate		ppm
9	phosphate		ppm

Parameters

Parameters are the quantitative components for which you monitor, the data collected via your sample. These fields can have thresholds and indicators associated with them, which gives owners a great advantage at sharing the meaning of data with general audiences. For non-quantitative parameters users can either assign a value to each label (if you want the data to appear on a trend map) or you can solely collect the information through the data form. If this all sounds premature, that's OK! Right now you just want to make a list of the parameters that you want to include in your data source that you also want to appear on a trend map.

Follow this link for an example spreadsheet to organize your parameter information. NOTE: Your list should match the parameters chosen by the LEVSN program.



Label	Range	Color
threat	<5	#7e001e
normal	>=5 & <=9	#007e21
threat	>9	#7e001e

pH

Label	Range	Color
threat	> 300	#7e001e
normal	< 300	#007e21

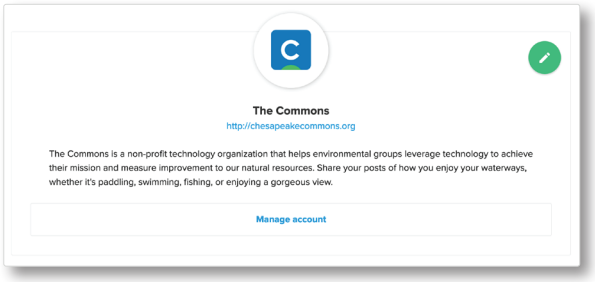
e.coli

Ranges

Each parameter can have thresholds assigned to the score and an indicator tied to the threshold. While you will have to manually enter this information, you can prepare your information before you start building the data source.

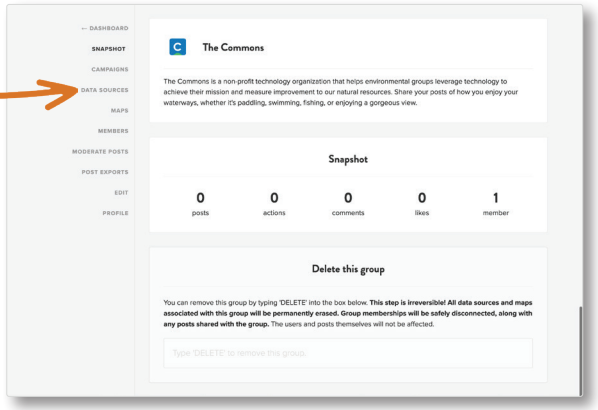
Step 2: Create the Data Source

Once you know what you want to include in your data model, it's time to build the source so that it can accept and manage your data. This section walks you step by step through setting up your data source. Pay attention to the details and the order of operations.



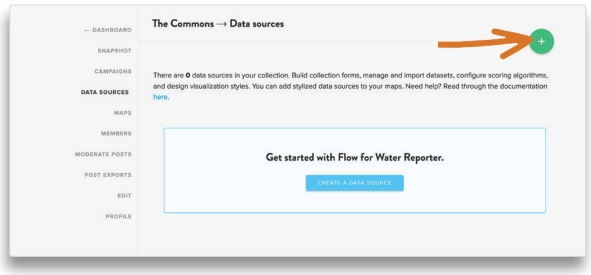
Open your Account

Only Account Owners can set up data sources. Let's navigate to your data source page so that you can get started. **Click on Manage Account** to enter your organization's management dashboard.



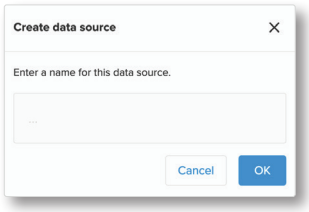
Account Snapshot

From the Snapshot summary you can navigate to all of your subscription features. To create a new data source you will **click on the Data Sources** tab.



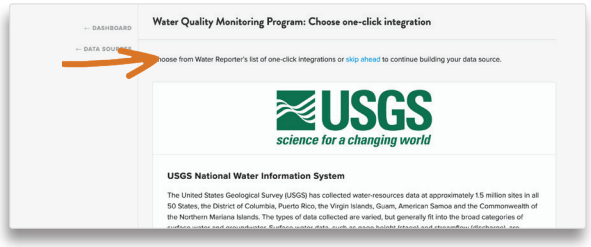
Create a Data Source

On the Data Source Landing Page you can access all of your data sources. To create a new data source, **click either the plus sign or "create a data source" button**.



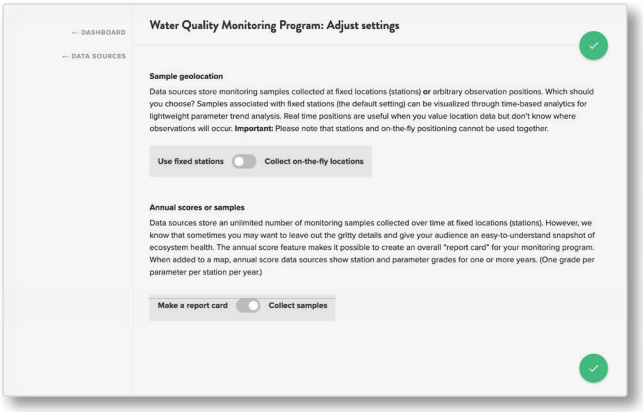
Name your data source

Ideally, your data source name should match the name of your monitoring program. Otherwise, choose an name that is specific and easy to reference by all subscription owners.



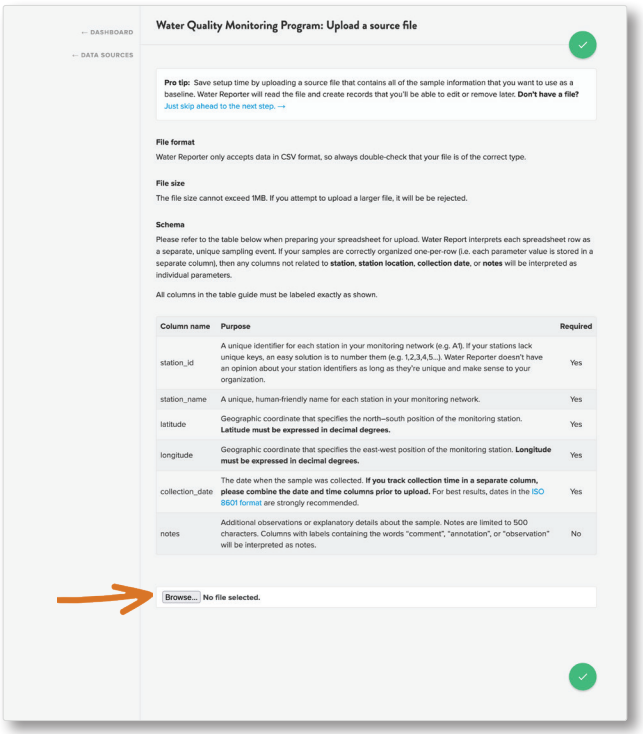
Click: Skip Ahead

For the purposes of this training, click skip ahead to continue to set up your water quality monitoring data source.



Adjust Settings

You do not need to adjust any settings because you are creating a data source with fixed stations that collects samples. **Click the Check button to contine.**



Optional: Upload a Source File

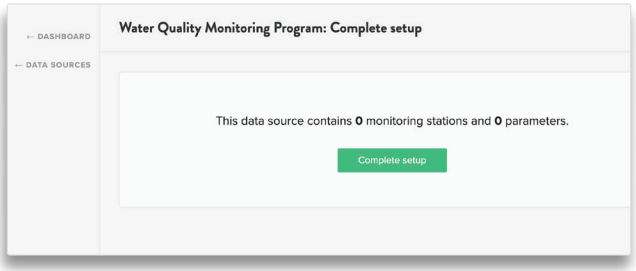
If you want to combine the steps of adding your locations and parameters, and you have historical data ready to go, you can upload that data right now.

To take advantage of this step you need to structure your data in a very specific way with column headers matching those required by Water Reporter. The data itself needs to be 'clean' too with no loose text floating in any of the cells.

Use this template to create your upload.

Browse to find and upload your template. Click the green check mark. The system will take a few minutes to read your file, create your stations and parameters, and enter in each of your samples' readings.

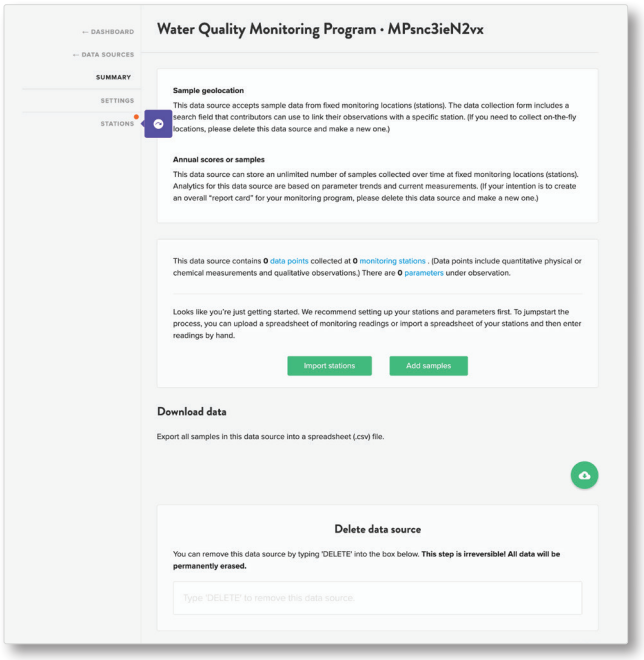
If you want to be certain that everything uploads correctly, we recommend that you **skip ahead to the next step by clicking the blue instructions.**



Complete Setup

Even though you haven't entered any data yet, you must **click complete setup.**

Step 3: Add stations

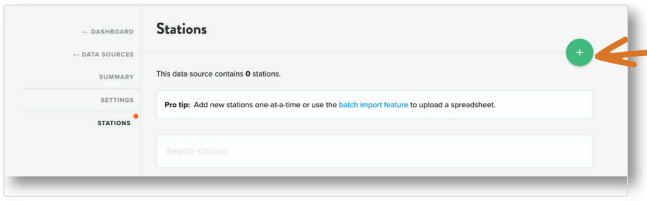


Add Stations

First step in your data source set up must be to set up your stations list. You can add/delete/edit your stations at any time.

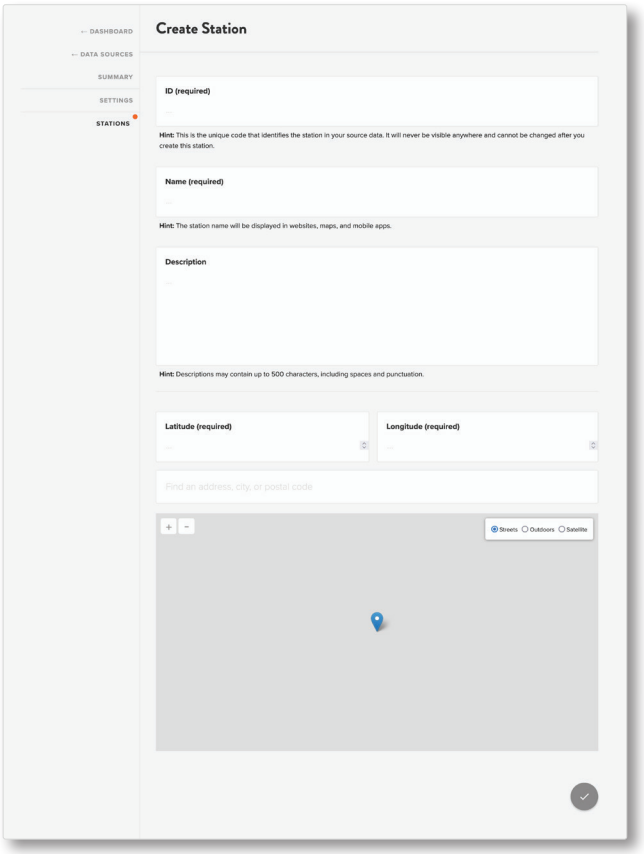
Option 1: Add Stations Manually
If you want to add your stations manually, click on the stations tab on the left hand panel.

Option 2: Batch Upload
To upload all stations at once click on import stations and use this template that you used during the data source preparation period.



Option 1: Add Stations Manually

Click the plus button to add a new station manually.



Enter in the fields and click the green check mark to create the station.

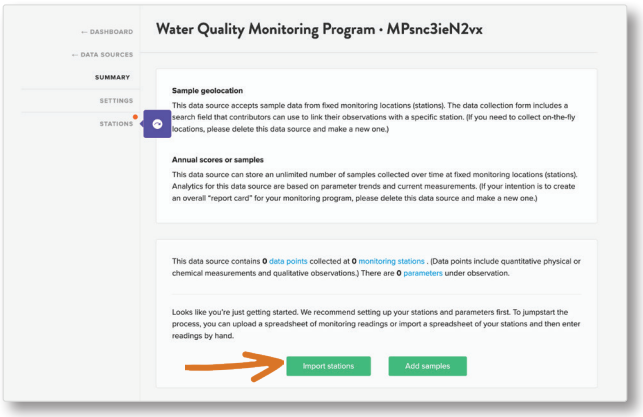
ID. This is a unique code that identifies the station in your data source. It will never be visible anywhere and cannot be changed after you create this station.

Name. This station name will be visible on station cards and in forms. The name can be edited after you create the station.

Description. Descriptions are helpful for providing additional details in regards to the monitoring station.

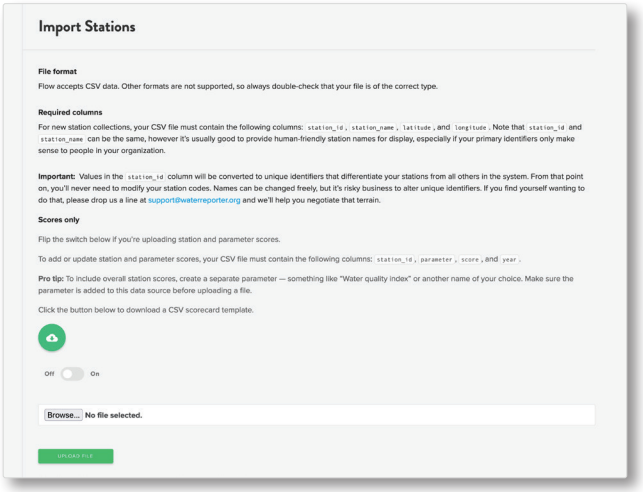
Latitude. Provide in decimal degrees.

Longitude. Provide in decimal degrees.



Option 2: Import batch stations

Click the Import Stations button.



Create a .csv file with the following columns and input your station information.

station_id this will be the station's unique identifier and cannot be changed once created

station_name provide a reader friendly name for your station

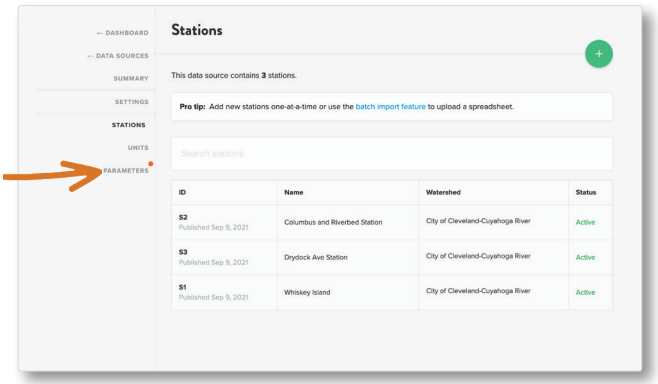
latitude enter coordinates in decimal degrees

longitude enter coordinates in decimal degrees

When you have completed the file, **click browse to find the file**.

Click th **Upload File Button** to upload the file.

Note: The file that you upload to set up your stations should only have the station information and no data or parameters.

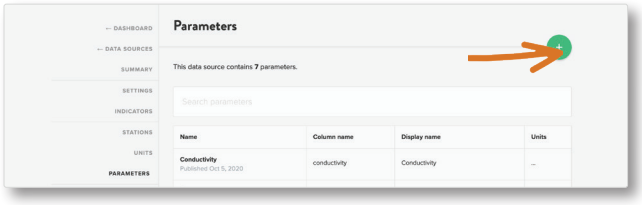


You can review all of your stations on the stations tab. You can edit, delete, and add additional stations at any time.

Clicking on a station will open up a new page where you can manage details about your station.

Next step in setting up your data source is to **click on the Parameters tab**.

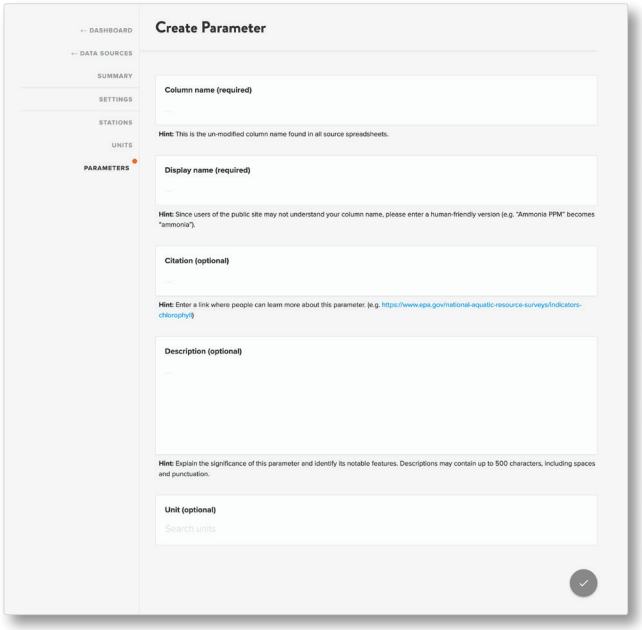
Step 4: Adding Parameters



Add Parameters

Add parameters one at a time from the Parameter list summary page. Click the green + button to add each parameter.

NOTE: All parameters will be added to the digital data collection form.



Create Parameter

Enter in the information for each of the fields.

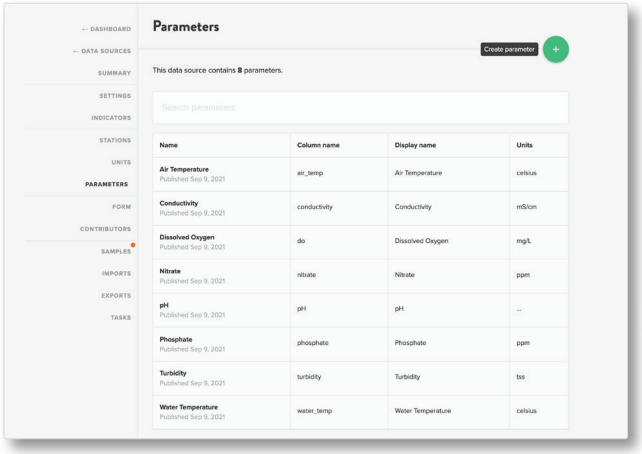
Column name (required). This field will become the header in your custom import template.

Display name (required). How the parameter will display on digital data collection forms and station cards.

Citation. Optional, but can be included in the station card to share deeper information with the audience.

Description. The description gives you a chance to explain why your program collects this information. What valuable insight does this parameter give into water quality health?

Unit. Units will appear on station cards and helps with data validity. Include a unit if one is tied to the parameter. Some parameters, such as pH are unitless.

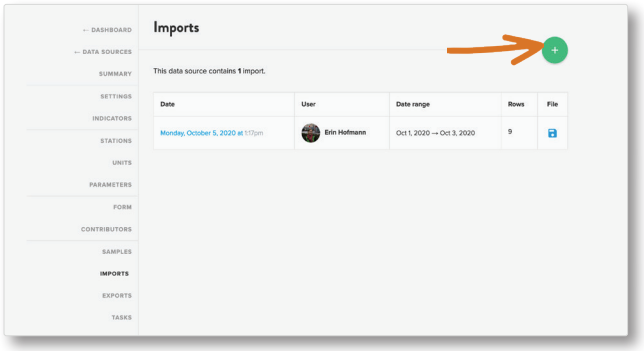


Repeat

Keep creating new parameters until all have been added into the system. The system will add all parameters to your master list. You can click into each parameter to define ranges and edit information.

Step 5: Importing data

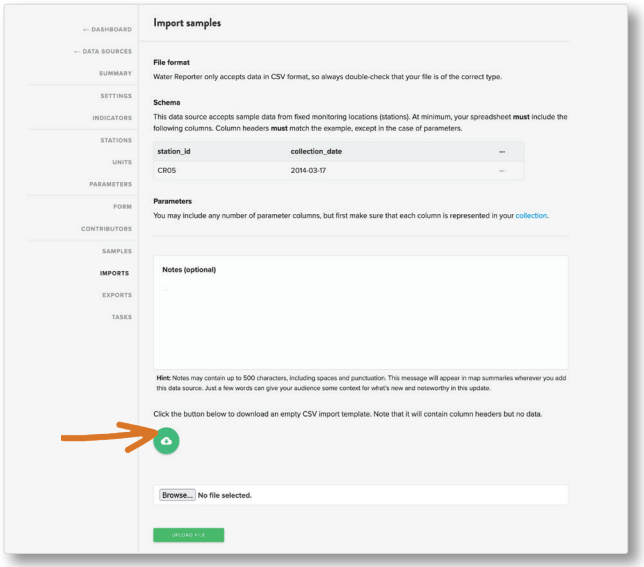
Once you have identified your stations and parameters, you can populate your data source with historical data. The following instructions walk you through how to generate a template, enter your data, and then upload that information.



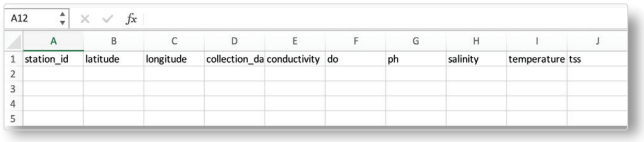
Download custom template

It's time to import your data. First, download the template that the system created with all of your parameters.

Click the plus button to create a new import.



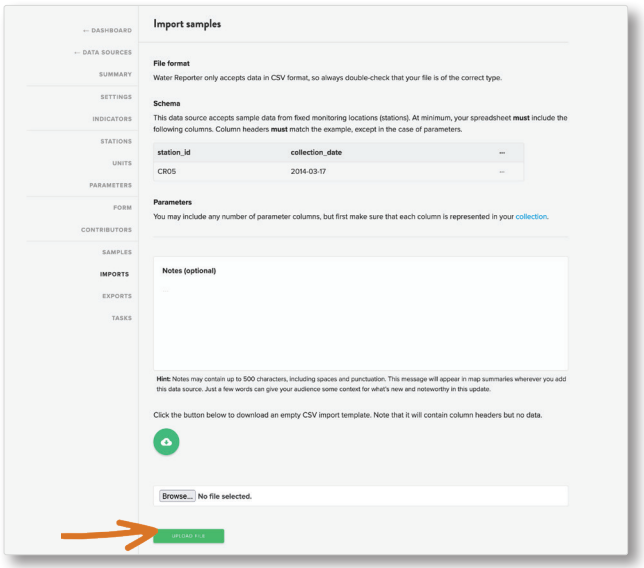
Click the download button to access your import template. These columns match the columns you created from your parameter list.



Enter your data into the template. Each sample should take up a row.

TIPS for data preparation:
You MUST include the station_id and collection_date.

- A "0" will be read as a 0 not a null cell so if you did not collect data in a sample for a specific parameter then leave the cell blank.
- Empty cells will be skipped
- Do not enter any text into the parameter columns.



Once you have populated your .csv template, upload the file into Water Reporter.

MANAGE YOUR DATA

Once you have created a data source, use Water Reporter to store new samples, analyze results, and push data to end users through various mechanisms. This section walks you through the various features of the Data Manager

Data Manager Feature Overview

Before diving into details within specific features, let's walk through the various features that help your Data Manager run smoothly. The following list identifies the activities achievable within each tab in a data source.

Settings Your data source settings let you manage the title and description. If you choose to create Maps or share your data source with contributors to collect data, the title will provide an important reference point.

Stations Stations are a key component of the data model for data association. This association allows for the trend analysis and station card features to function properly. Beyond the station list, data owners can change settings, add images, 'hibernate' inactive stations, and create station-specific parameter thresholds and indicators that override the source-wide specified ranges.

Parameters A numerical or other measurable factor. Chemical, physical, and biological properties should be stored here. Examples of frequently sampled or monitored parameters for water quality include temperature, dissolved oxygen, pH, conductivity, nitratates, phosphates, and turbidity. Owners may wish to include atypical parameters in the list in order to display results on the embeddable maps. Details on how to achieve this outcome are detailed in the parameters training section.

Form Forms exist to facilitate direction submissions of data from contributors and collect information beyond the list of parameters. Owners can choose from a list of field types to create a digital data collection form that owners and contributors can access from both mobile and web applications.

Contributors Data source owners can open access to basic Water Reporter users to a data source's form. These individuals receive permission to access the form, enter readings, and submit samples for verification and insertion into the data source's database of readings.

Samples All readings imported or submitted and verified to this data source appears on the samples page. Owners can filter, edit, delete, and create new samples using the Form from this page.

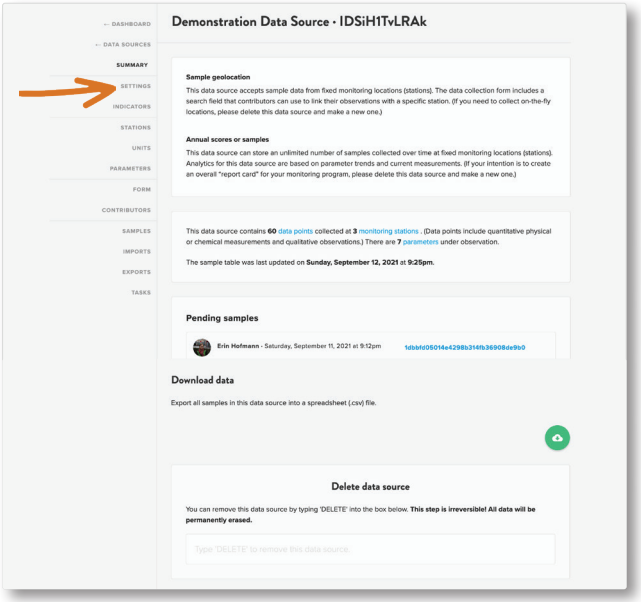
Import Data source owners can download a template and upload batch sample data. A list of all past uploads and the files remains accessible from this page.

Exports Owners can pull all data from the system into a .csv file.

Tasks To help manage QA/QC and transparency, Data Manager upholds best data management practices to track completed activity within the data source. The system documents major tasks on this page. This is an automated section, data owners cannot make any changes to the tasks list.

SUMMARY PAGE

When entering into your data source you will arrive on the summary page. From here you can review high level details, verify samples, download data, delete the data source, and navigate to other features you want to use.



Data Source Dashboard

On your summary page you can review a snapshot of the information stored in this data source. Use the hyperlinks to jump to key features: data points (aka samples), monitoring stations, or parameters.

Verify Samples

From the summary page data owners can review pending samples, make edits, and verify or delete the samples. Deleted samples are fully removed from the data source. Verified samples are added to the samples and will appear in all maps or analysis stemming from this data source.

Download Data

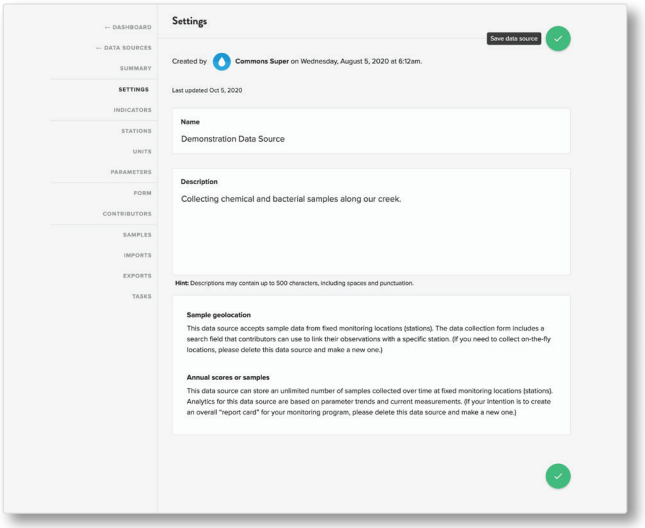
Tap the download button to ask the system to export a .csv file of all verified data in your datasource. Navigate to the “exports” tab to retrieve the file.

Delete the Data Source

At any time you can delete a data source. You cannot reverse this action and all data within the deleted data source will be lost.

SETTINGS

Edit and update your summary information on the settings page.



Data Source Details

Your data source's name will appear in multiple places including:

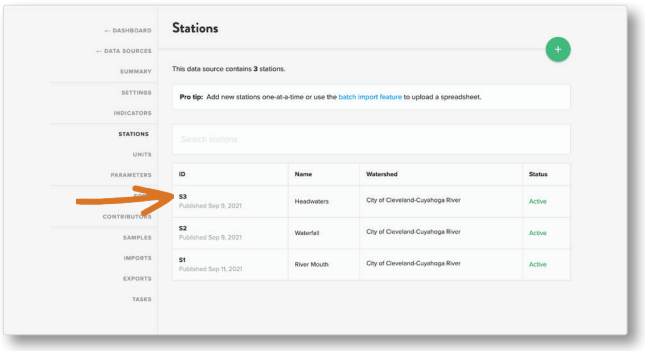
- the data entry page for all contributors,
- in your list of data sources,
- in your maps for available data sources to select, and
- on your map as a layer audiences can turn on and off.

Suffice it to say, choose your name carefully. But feel free to change it at any time. The updates will automatically happen everywhere of relevance.

The description will help all data source owners recall what information is housed within this data source. We recommend being thorough in your description.

STATIONS

As a data source owner, you will most likely visit the Stations dashboard periodically. From this page you can edit, update, and expand information for each station. Some of the information here will display directly on any Maps that host this data source.



Station Dashboard Summary

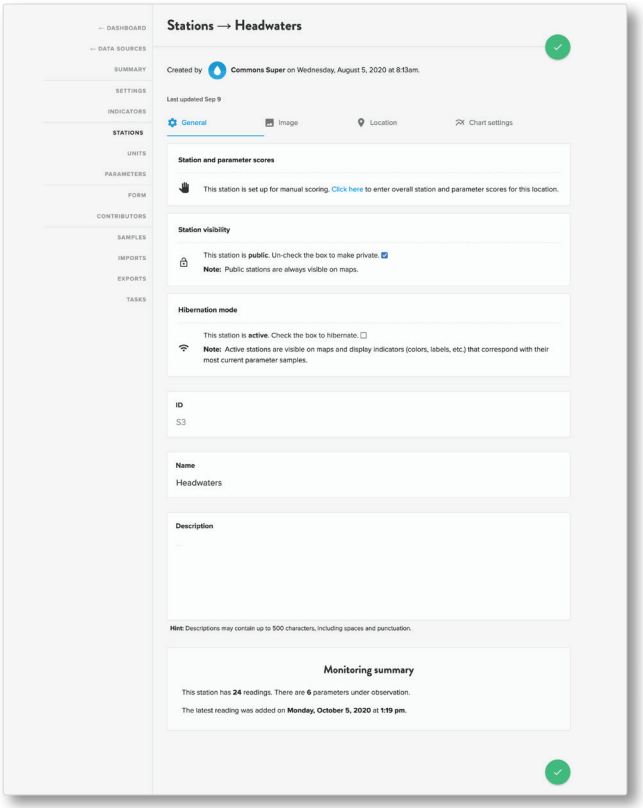
Your station list reflects all stations added to this data source, regardless of hibernation/archived status. From the summary page you can add more stations using the plus button or enter into each of the stations to add more specific information.

For the purposes of training a data owner, we will enter into a station to explore all of the options to add and edit information.

Click on a station to get started.

Station Overview Page

Each station has four tabs with associated fields. Data owners can make edits to any of these fields or delete the station. For the purposes of this training, let's walk through each of the fields and what you can do with it.



General

Station and parameter scores. Only click on this link if you are using this data source to display annual scores. Not sure? If you are uploading data throughout a monitoring season or a monitoring season's worth of data, then you do not want to use this feature.

Station visibility. If you uncheck visibility this station will not appear on any maps that you create.

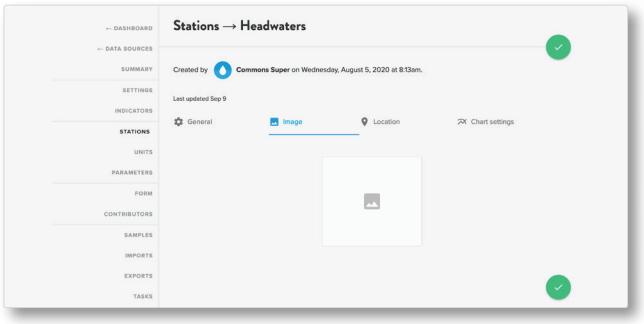
Hibernation mode. If you check hibernation then the station will appear on maps that you create but will not show any indicator and threshold information on the station point. This indicates that you used to monitor here but no one is currently collecting data. It helps audiences understand that data is not up to date.

ID. This field was determined when you set up the station. You cannot edit this field. You will always include this field when importing a data file.

Name. This field will appear in maps and in forms. The name can change without losing data but it will always be associated with the same ID.

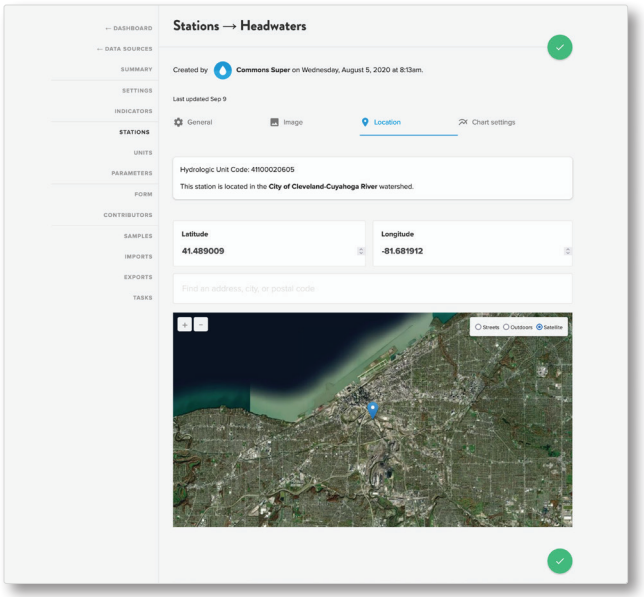
Description. Feel free to add details here about the location, what is monitored, or who is doing the monitoring.

Monitoring Summary. The system pulls these statistics from the samples and parameters pages and displays them here for quick owner reference.



Image

Owners can select a single image for each station. This image will appear as the banner on a station card of this data source in configured Maps.



Location

The location page has a lot of great information. For example, if you are unsure of your watershed, you can grab the hydrologic unit code, as established by the National Hydrologica Database, on the location page.

You can also change the location of your station without compromising your existing data.

To change the coordinates, do one or more of the following:

- Enter coordinates manually
- Move the location icon on the map or
- Type in an address to change the coordinates.

NOTE: If you are moving a station's coordinates significantly and monitoring data already exists at the current location, you may want to consider hibernating a station and starting a new location in order to -preserve baseline data integrity.

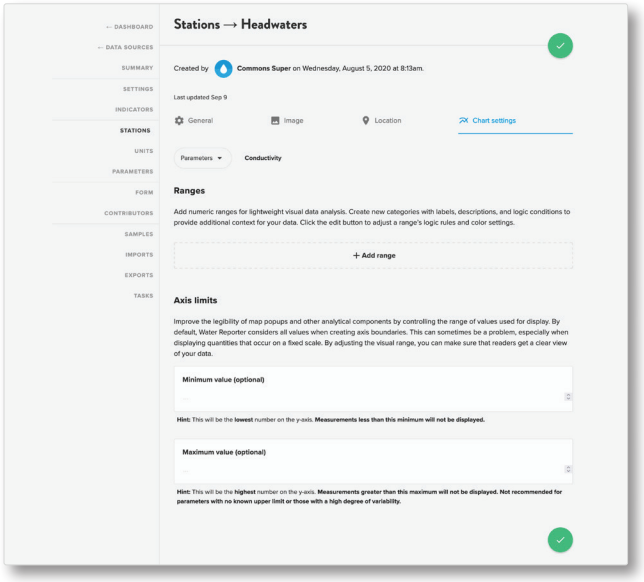


Chart Settings

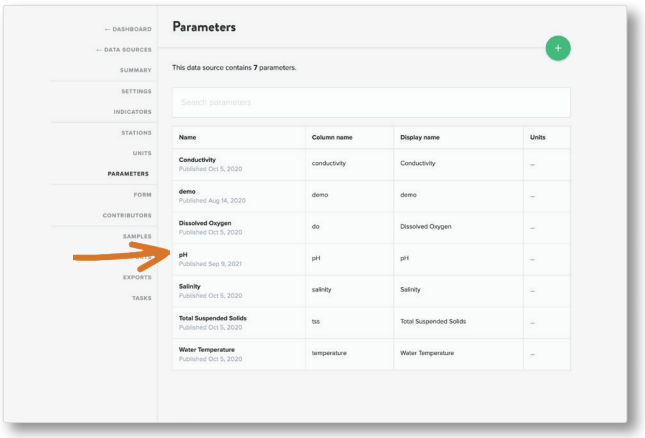
As a default, owners determine chart settings within the Parameters tab; however, in some instances monitoring stations have different thresholds and indicators. This may happen, for example, for a program that monitors in both tidal and non-tidal waters. **Use Location Chart Settings only if the ranges for one or more parameter are different than those that you establish within the parameter page**.

The process for establishing the ranges and axis limits follows the exact same flow as it does for the parameters. In an effort to save space, refer to the parameters section of this guide for instructions on how to set your ranges.

NOTE: *IF* you are using station chart settings, remember to select the parameter before beginning to customize the ranges and indicators.

PARAMETERS

Your parameters page hosts a lot of foundational information for your data source. Not only does the page define what information you will collect and store but it also is where you delineate thresholds and indicators that appear on Maps.



Parameter Dashboard Summary

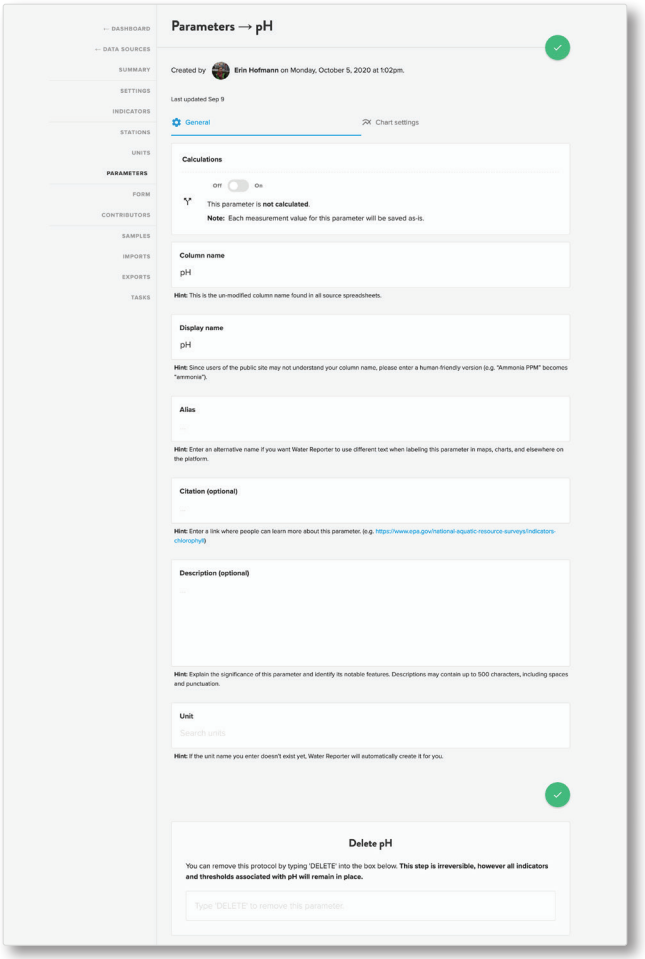
Your parameter list reflects all of the parameters added to this data source. From the summary page you can add more parameters using the plus button or enter into each of the parameters to add more specific information.

Let's enter into a parameter to explore all of the options to add and edit information.

Click on an existing parameter to get started.

Parameter Overview Page

Each parameter has two tabs with many fields. Data owners can make edits to any of these fields or delete the parameter. Let's walk through each of the fields and what you can do with it.



General

Calculations. SKIP.

Column name. This is the un-modified column name found in all source spreadsheets. If you are uploading data, the file must have headers that match the information in the column name exactly to import correclty.

Display name. Write a name that general users will understand. The display name appears on forms and maps.

Alias. If you want Water Reporter to use different text when labeling Maps components, enter that information here. This may be the case if you are collecting E Coli (Display name = E Coli) to indicate if it's safe to swim (Alias = Swimming Conditions).

Citation. Enter a link where people can learn more about this parameter. This is a great educational field to help layer the information in a stacking manner in order to help share data with stakeholders of varying degrees of familiarity with water quality terms and monitoring strategies.

Description. Provide text that details the significance of this parameter. Descriptions will be accessible via Maps and station cards.

Unit. If your parameter has a unit, include it here. The unit will appear on station cards and maps.

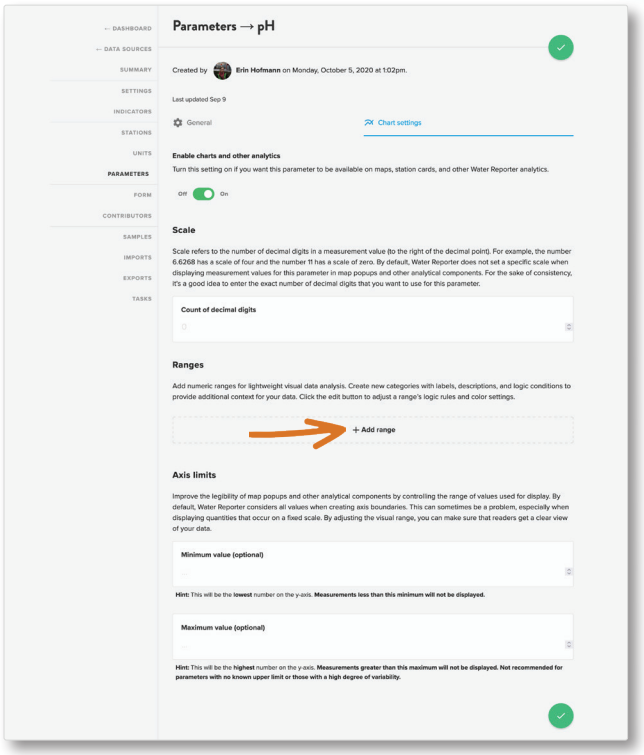


Chart Settings

Each parameter has its own chart settings. Configure this feature if you have thresholds and indicators on hand for your parameter.

Thresholds, aka Ranges, and indicators, aka Labels, will have color and labeling analysis applied to the station and parameter on maps and station cards.

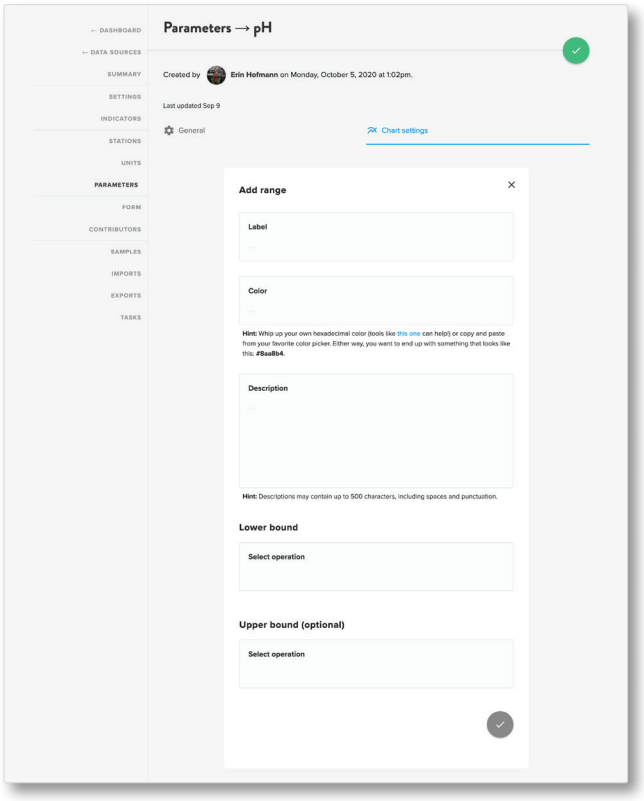
It's OK if you do not have this information. The maps and analytics will display a default color that you determine when configuring your map.

Enable charts and other analtics. Turn this "on" if you want to have ranges. If you enter in your ranges and want to retain the details but do not want to put the information on maps, turn this setting to "off".

Scale. Scale refers to the number of decimal digits in a measurement. By default, Water Reporter does not set a scale. Only use this if you want to enter an exact number of decimal digits in maps and other analytical components.

Ranges. You will need to add all ranges in a separate page. We will dive into this process in the next step.

Axis Limits. By default, Water Reporter considers all values when creating axis boundaries that appear in Maps and additional analytics. This can be a problem when you are displaying quantities that occur on a fixed scale. You can adjust the axis to help readers get a clear view of your data. Each paramater can have different axis limits because they appear on separate charts.



ADD RANGES

You can configure a set of ranges for each parameter. Owners will repeat the process for each paramater that has threshold information to share.

Label. This label is what will appear on maps and analytics when a data point for this parameter falls within the specified range.

Color. Water Reporter uses hexadecimal color codes. You can find your preferred color using a tool. Enter in the code. This color will appear when a data point falls within the specified range.

Description. Provides a useful internal notes section to help transfer and retain knowledge about this range to other data source owners.

Lower Bound & Upper Bound. These bounds set the range for your parameter's range. You will set multiple ranges within each parameter to capture all of the possible data inputs. On the next page we will show some example bounds.

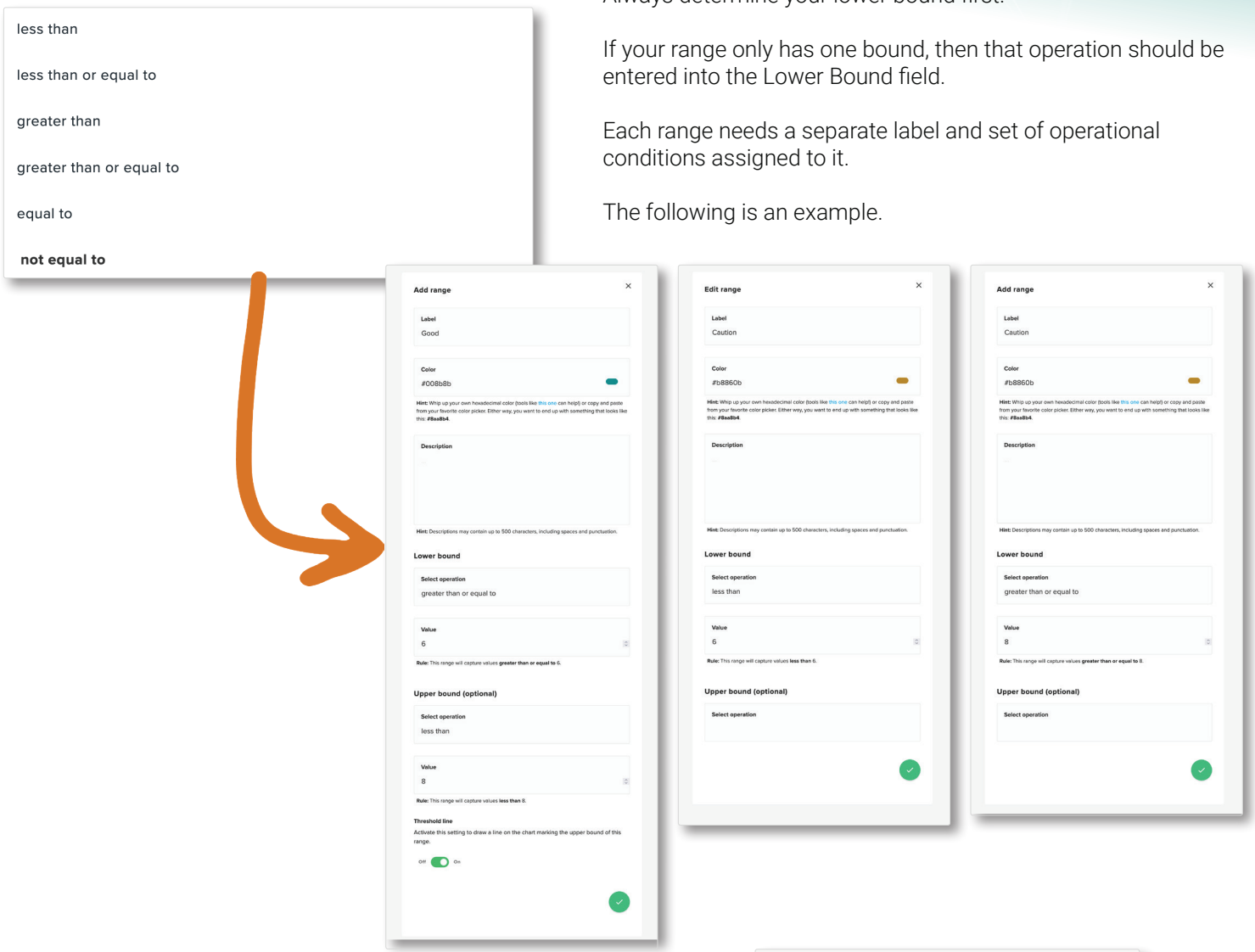
LOWER AND UPPER BOUND OPERATIONS

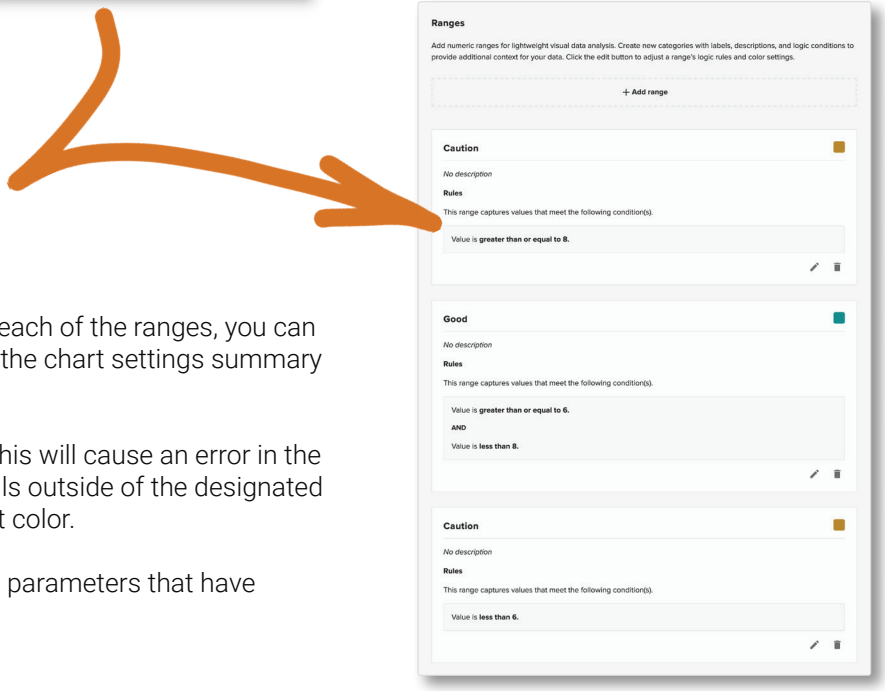
Always determine your lower bound first.

If your range only has one bound, then that operation should be entered into the Lower Bound field.

Each range needs a separate label and set of operational conditions assigned to it.

The following is an example.





CREATING THE RANGES

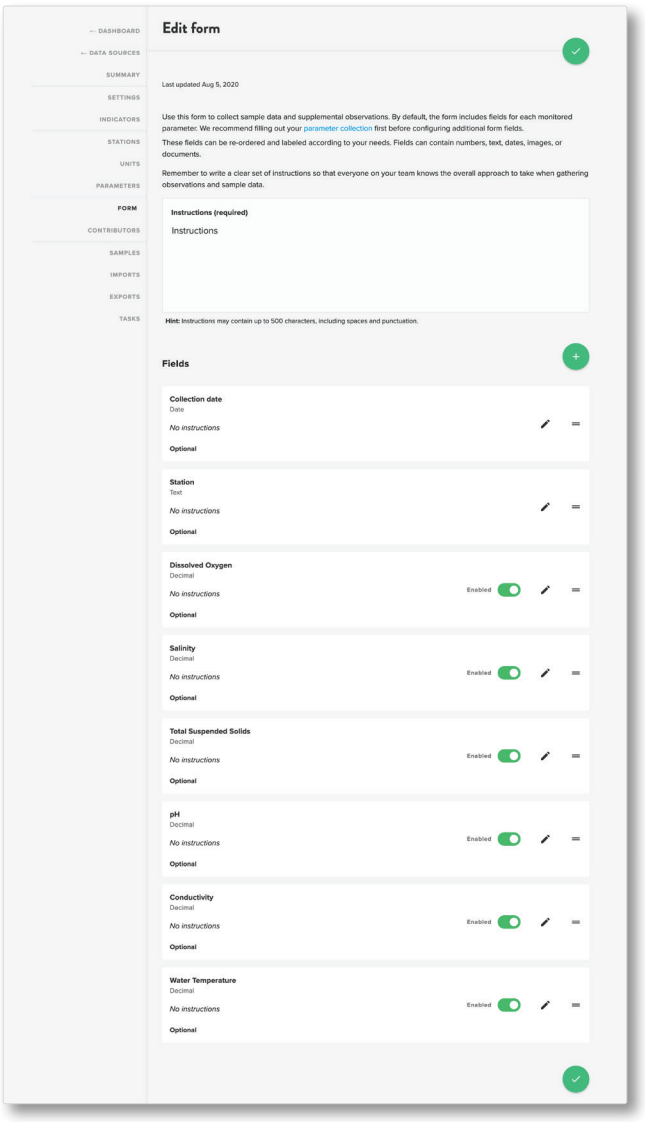
As you define all of the fields within each of the ranges, you can review the high level information on the chart settings summary page.

Make sure that no ranges overlap. This will cause an error in the system. If by chance a data point falls outside of the designated ranges it will display the map default color.

REPEAT: Perform this action with all parameters that have indicators.

FORM

The Form combines the parameter fields with system-generated and owner-added fields to produce data collection forms digitally. Forms are intended to be shared with volunteers that you want to contribute sample readings digitally. Forms are accessible via both the mobile and web application. Each data source has one form.



Edit Form

Upon arrival on the form page you will see that your form already contains fields.

If you return to your main profile dashboard page or your mobile application you will notice that you can access the form to enter data already.

All this is to say, your form has been building itself quietly while you created your data source.

NOTE: To save changes, click the check mark. Do this often as the system does not automatically save changes for you as you make edits and updates.

Let's go through each of the actions that you can take to manage your form. From the Form Page you can:

ADD OVERVIEW INSTRUCTIONS

Each form has an overview instruction field. Fill this out at the top of the edit form page. Click save after edits are complete.

RE-ORDER FIELDS

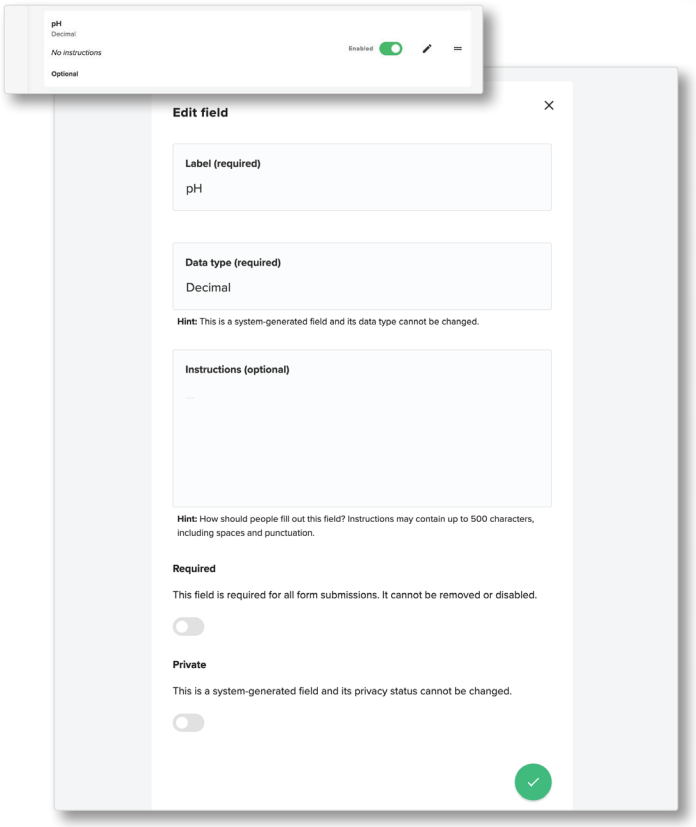
Click the **=** icon and drag the field to re-position it within the form. Click save after each move so that the fields stay in their new spot.

CHANGE VISIBILITY STATUS

Toggle off the slide icon to change visibility from "enabled" to "disabled". This toggle appears for parameter fields only, meaning that you can have parameters that form contributors do not see.

ADD AND EDIT FIELDS

Click the edit pencil icon to add and edit fields. Move on the the next page for a thorough description of your options.



Edit Form Field

Click on a field's edit pencil to enter into the edit options.

Label. You can re-name any form field. If you are re-naming a parameter, however, note that the parameter will not automatically update. We recommend that you keep the label the same as the parameter to avoid data management confusion in the future.

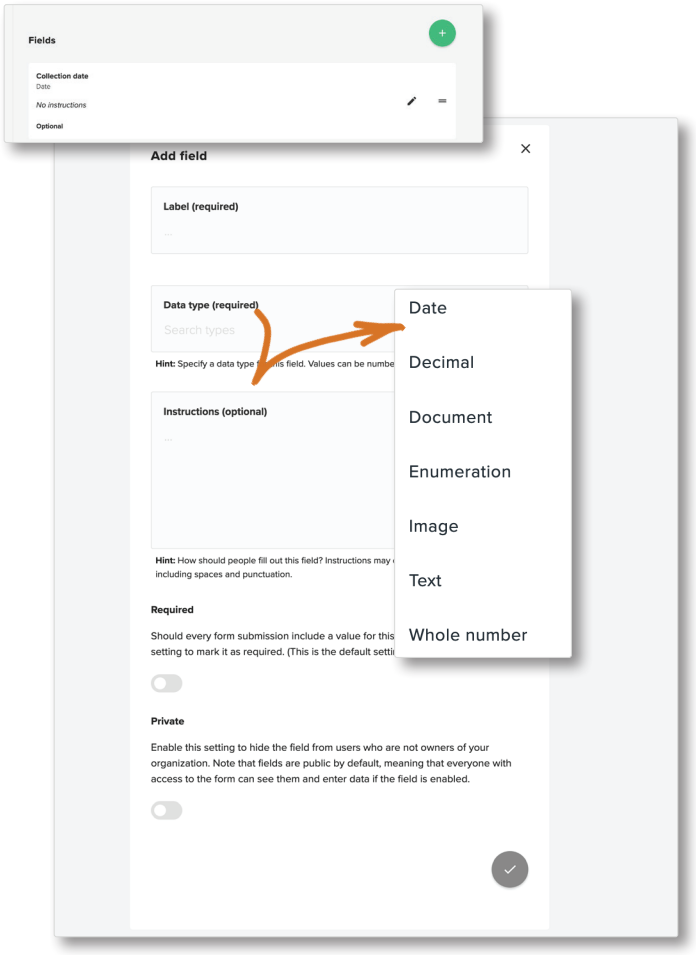
Data Type. For parameterfields, you cannot change the data type. For all other fields, you can choose the data type.

Instructions. For owners who what to share instructions on how to perform the sampling or how to enter the data point, enter that information here. The instructions will appear within the form.

Required. By default all fields are optional except the station and date. DO NOT MAKE A FIELD BOTH REQUIRED AND PRIVATE.

Private. This setting is helpful if the data owner wants to add a notes section that only they can see.

Click save to confirm edits as you make them.



Add New Form Field

Click on the Plus Circle button to add a new field. New fields will not appear in the parameters list and cannot be displayed on maps or analyzed. If you want the information to appear on the map it must be added as a parameter.

Label. This is your field name.
Data Type. Select from the available options. Water Reporter supports most field types other than check boxes.

Instructions. For owners who want to share instructions on how to perform the sampling or how to enter the data point, enter that information here. The instructions will appear within the form.

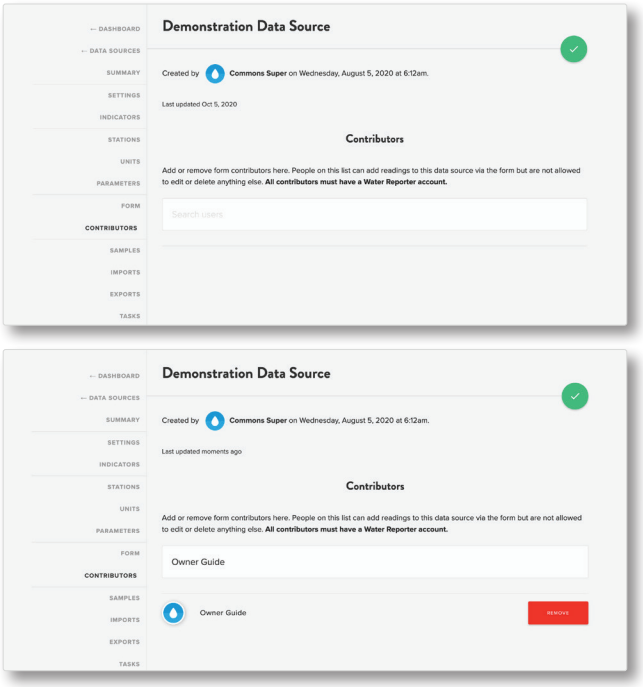
Required. By default all fields are optional except the station and date. DO NOT MAKE A FIELD REQUIRED AND PRIVATE.

Private. This setting is helpful if the data owner wants to add a notes section that only they can see.

Click save to confirm any edits.

CONTRIBUTORS

Water Reporter provides varying levels of access, or permissions, to the data source for different users. Contributors are added at the data source level and the only function that they can perform is adding data. All contributor level data is conditional and stored outside of the official data source until an owner verifies it.



Add Contributors

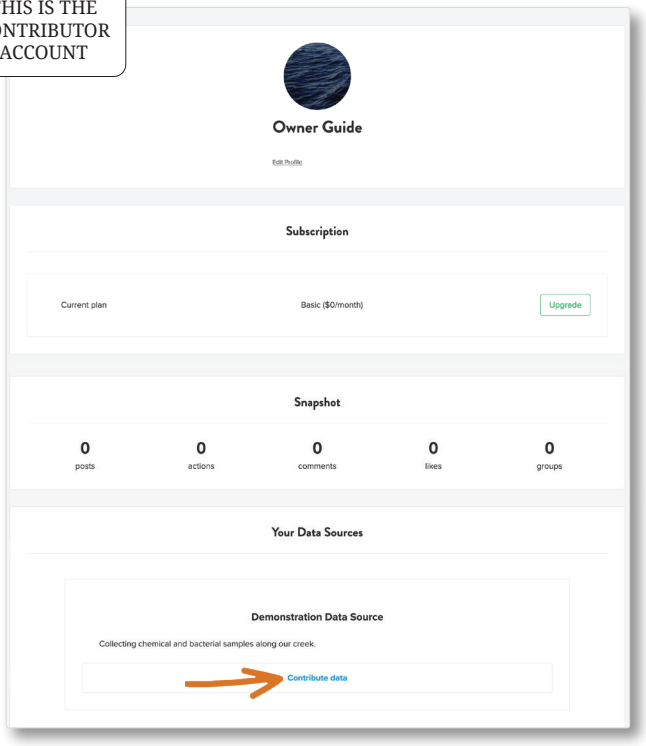
A Contributor must first create a basic user account in Water Reporter.

A Data Owner can search through users by their name or their email address and then add anyone in the system as a contributor to the data source.

Owners can add as many Contributors as they choose and remove contributors as well.

Once a contributor has been added, click the green check mark to save the update.

THIS IS THE CONTRIBUTOR ACCOUNT



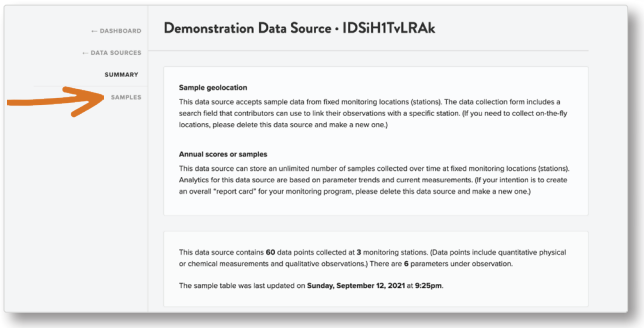
How Contributors Add Samples

After being added to a data source, a contributor can access the form to add a sample two ways: via web and via mobile. These instructions are intended to help a Data Owner explain to a Contributor how to use the system.

Web Data Entry

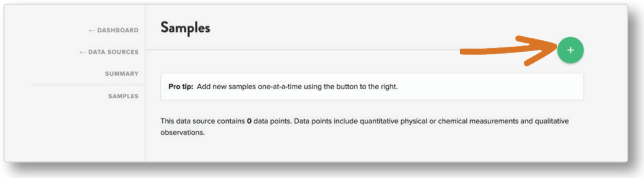
User signs into their account.

Scroll down to the data source. Click on the Contribute Data button.

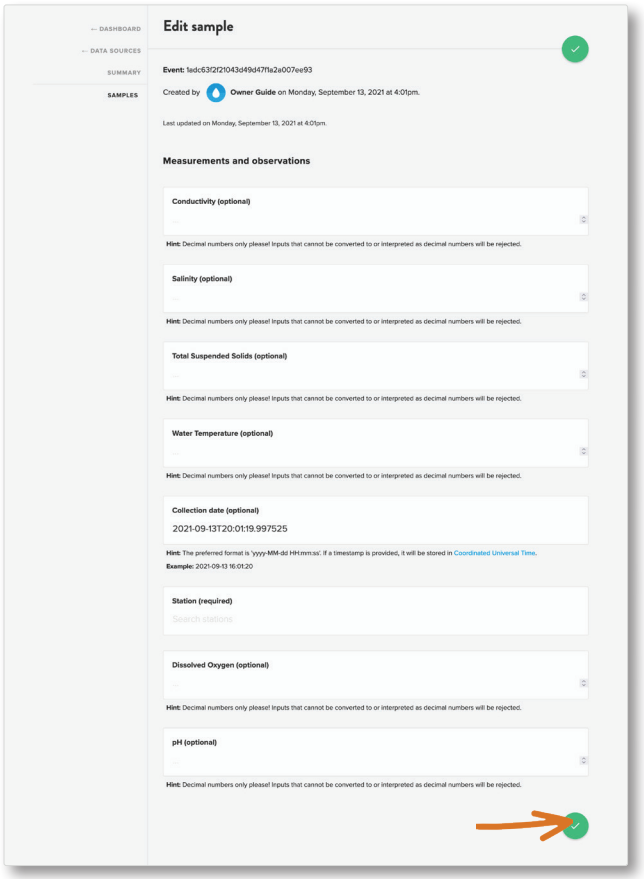


Once in the "Contribute Data" area, the contributor will land on the sample summary page. There is nothing for them to do here.

Click on the Samples Tab.

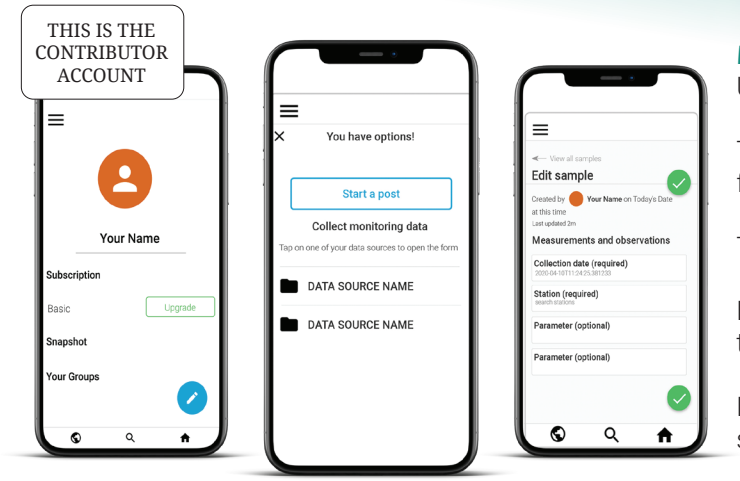


Click the green plus button to add a new sample.



Enter in all of the data points for each of the fields. Click the check mark to save the sample.

That's it! The contributor has completed the task to collect and share their sample. Now, a data owner must review and verify the data in order to enter it into the data source.



Mobile data entry

User signs into their account.

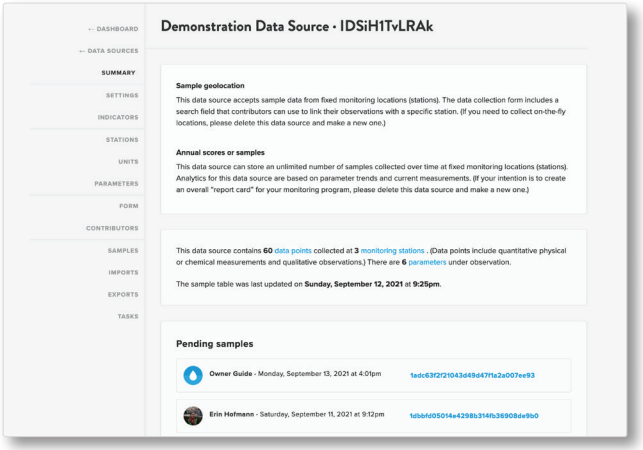
Tap the blue digital pen icon to access your digital data collection forms.

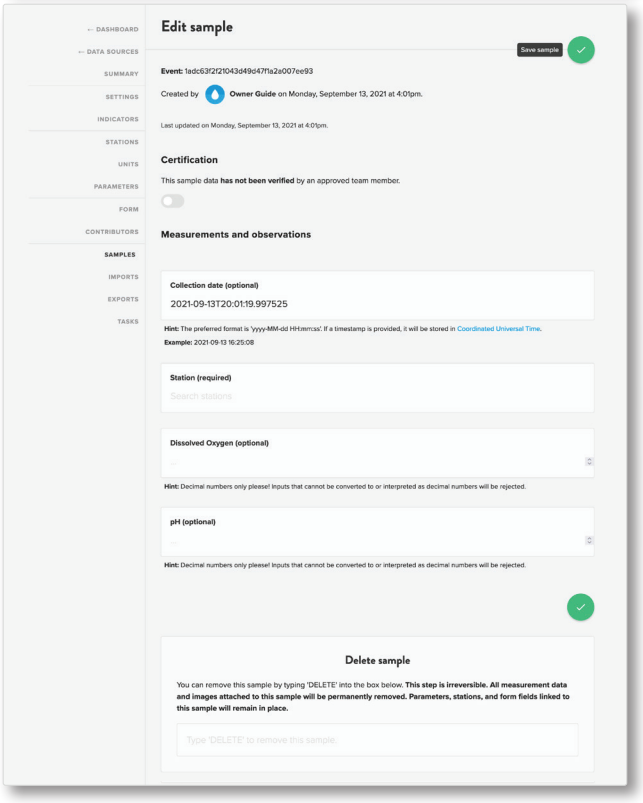
Tap on the data source that you want to add your sample to.

Enter your data into each field. Tap the green check mark to save the sample.

NOTE: The contributor will need wifi or cell service in order to submit the form.

That's it! The contributor has completed the task to collect and share their sample. Now, a data owner must review and verify the data in order to enter it into the data source.





Verifying pending samples

Owners will find all pending samples waiting for them on a data source's summary page.

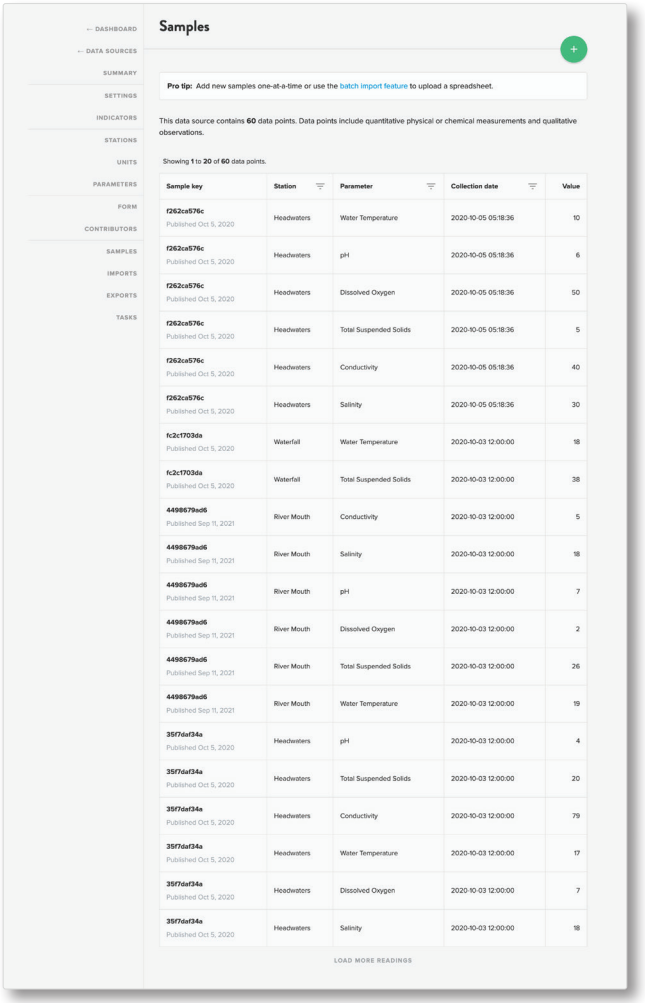
Click the unique data string for a sample to enter into the sample.

Review and edit the sample however you would like.

Delete or verify the sample. Verified samples are added to the data source.

SAMPLES

The Samples page lists all readings and data points. It is searchable and filterable. Some data owners choose to review data or make individual edits on this page. Owners can also add new individual samples via the collection form from this page.



Samples list

On this page, owners can review invidual data points. The system does not perform any analysis on the data you see here.

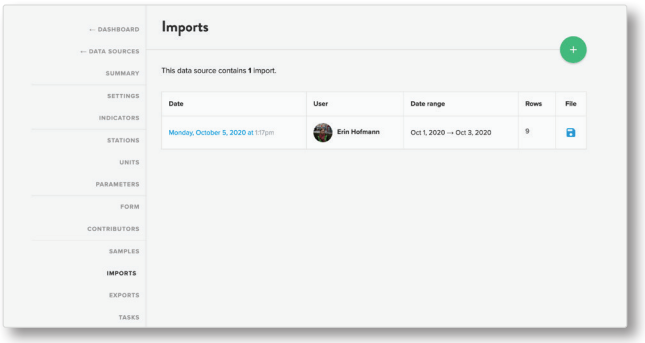
You will notice that multiple readings will have the same sample key, this refers to the form submitted or the row in the template imported. In other words, all data collected in one sample has the same sample key. This is helpful if you need to find and edit a single reading.

Click on a sample key to enter into that sample. You will see all entries collected within one sample. Once in the sample you can review, edit, delete, or unverify all of the information.

Click on the green + button to add a single sample manually.

IMPORTS

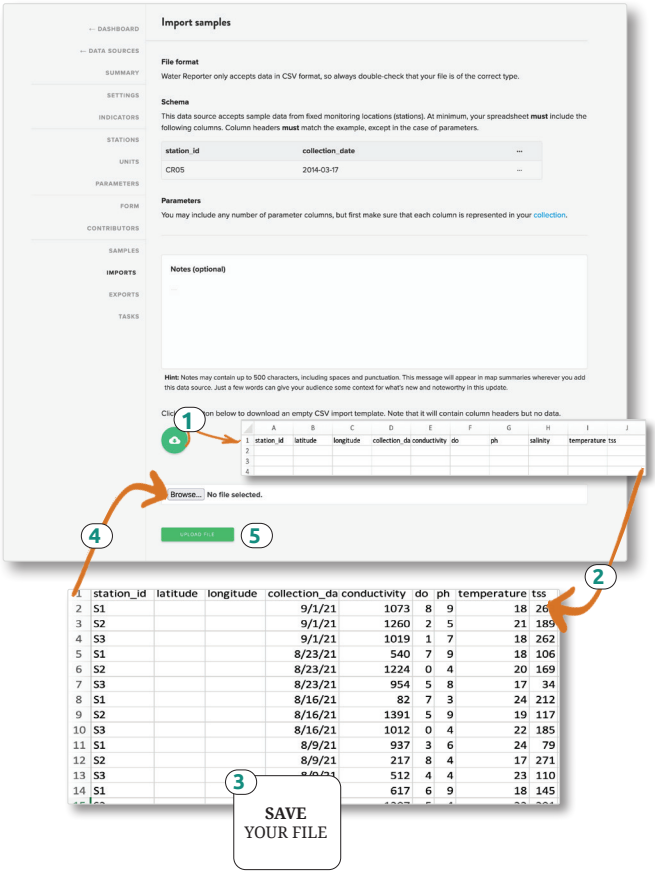
Add batches of data to Water Reporter. Use your custom template to structure your data to be read by Water Reporter.



Import summary page

Owners can review all former imports (and re-access the data via the floppy disc icon) on the summary page.

To **add a new import**, click the green plus button.



Import new data

1. If you need a fresh copy of your import template, use the cloud download button to grab the .csv file. The file will have exact column names that match those that you defined in your parameters field.
2. Enter each sample has its own row - add one collection date and station ID and then all of the readings collected through that sampling activity.
3. After you have populated your template, make sure that you save it as a .csv file.
4. Browse your system to find your saved .csv file.
5. Upload your .csv file into your data source via the “Upload File” Button.

An “Analyzing Data” icon will appear after you click “upload”. The system is confirming that your data is machine readable and adding it to the data source.

If successful, the system will land you on the Samples page to review the data. Any maps or analytics you have tied to this data source will update automatically.

NOTE: The system make take awhile to upload, depending on the size of the file. Any changes to Maps will also take at least 15 minutes to publish.

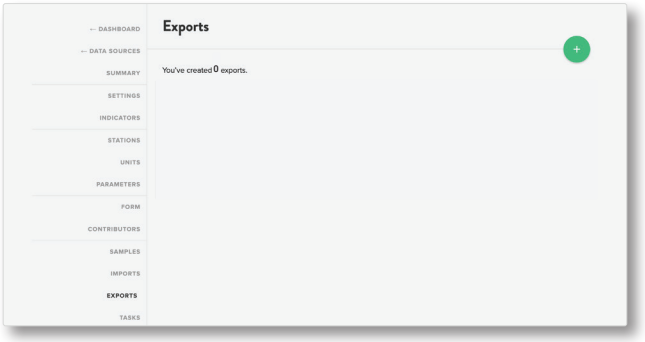
Troubleshooting data imports

If you receive an error message for your import, double check the following before trying again:

- Have you entered the station_ids correctly?
- Do all column headers match the system?
- Are there non-numerical characters in any of the cells? This could include TEXT and special characters - remove those.

EXPORTS

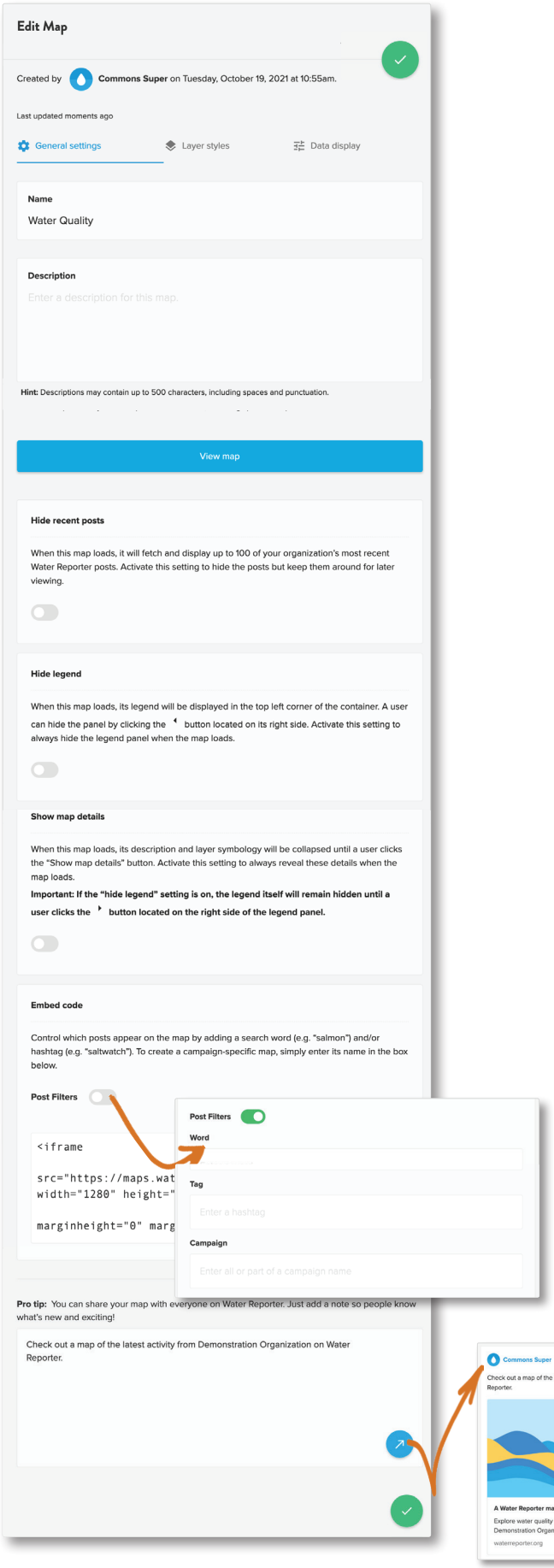
Water Reporter is optimized for data sharing. Any data you store in Water Reporter can easily be exported in a machine readable format for easy share-ability with data aggregators, data consumers or to use in analytics programs.



Export Summary Page

Click the plus button to generate a new export. The system exports all data into a .csv file. There are not filters that you can apply before exporting the data.

All exports will appear for download on the export summary page once the export has been generated.



General

Your general settings control the overall components of your map display. You will provide details for individual data source display on the following pages. If you do nothing, your map will display default settings.

Name. Appears on Map Legend as Title.

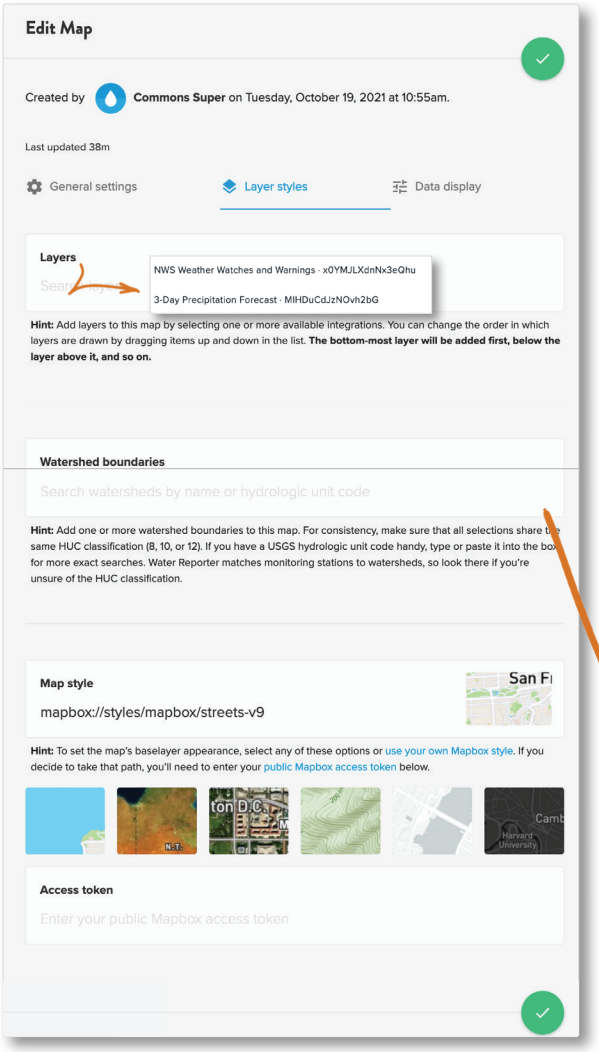
Description. Use this space to provide details on what will appear on your map and how to read it.

Hide recent posts. Toggle on if you do not have or do not want observational posts to appear upon map load.

Hide Legend. Toggle on if you want the map to load without displaying the legend. Note that the legend, when displayed, covers about 1/3 of the visible map.

Show map details. Map details provide further refinement of the map.

Embed code. If you have observational posts appearing on your map, you can add filters to control which posts appear. For example, you can only display photos with the hashtag #LEVSN. The embed code will change if you add filters.



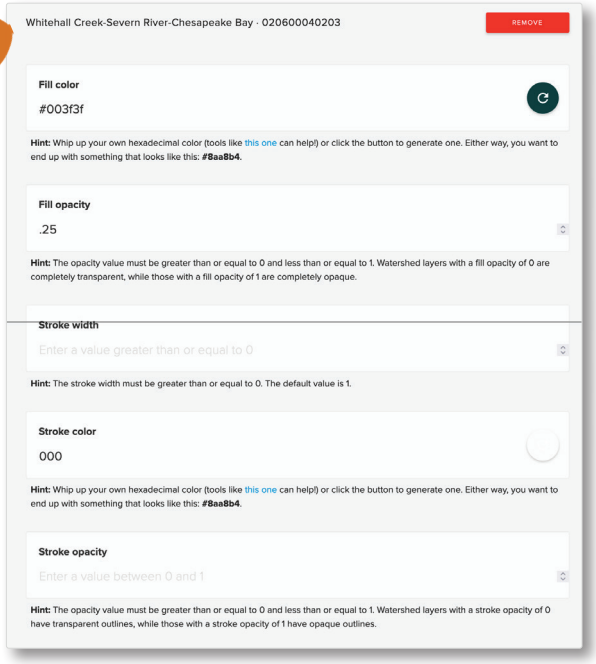
Layer styles

Layers. You have the option to add National Weather Service and/or 3-Day Precitipation Forecast, if desired. You can also leave this field blank.

Watershed boundaries. Type in the watershed name or code. If you don't know it, you can grab if from your stations list in Data Sources or from an observational post. When you type in your waterhed, additional fields appear to help customize how your watershed(s) appear on the map visualization. Continue below for additional fields.

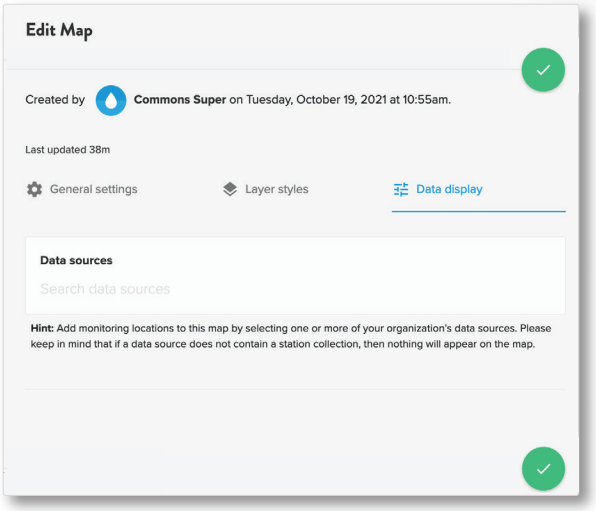
Map Style. Water Reporter uses MapBox baselayers and offers six base options for your Maps.

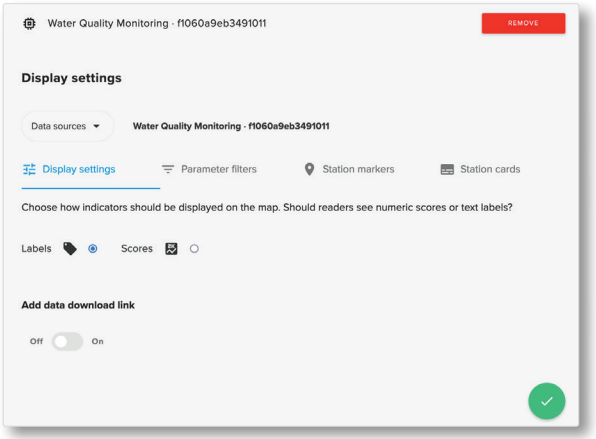
Access token. This field exists for users who have created additional static layers in MapBox that they want to add to their Water Reporter map.



After you have designed your base layers and additional layers, click the check mark to save your Map's characteristics.

This is your map prior to adding data sources - the maps shows your base information.





Data display

Now you are going to add data source(s) to your map and stylize information specific to the data source information.

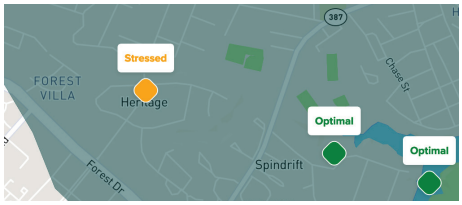
Data Sources. Start typing in the name of your data source and then select that data source. You can add multiple data sources from within your account to a single map. You will need to go through the following set up steps for each data source.

NOTE: The options will differentiate if you select a continuous monitoring data source or an on-the-fly data source. You cannot add customization to observational data types.

Data settings

Now you are going to add data source(s) to your map and stylize information specific to the data source information.

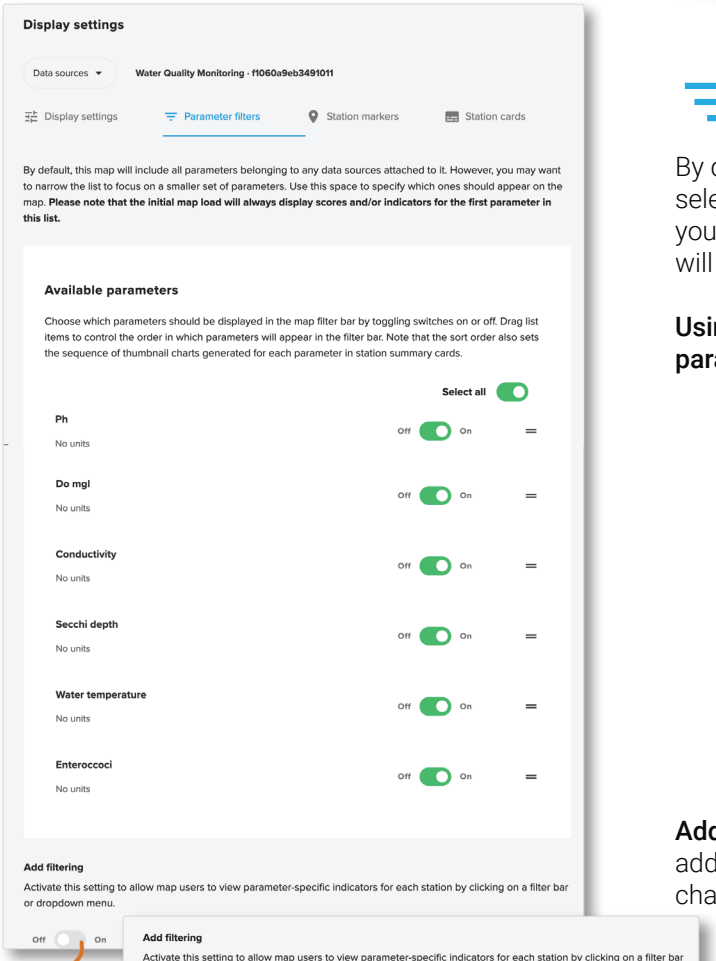
Labels. If you select labels then the label tied to a parameter (set up in chart ranges). For parameters with no labels or thresholds designated, no label will appear on the map.

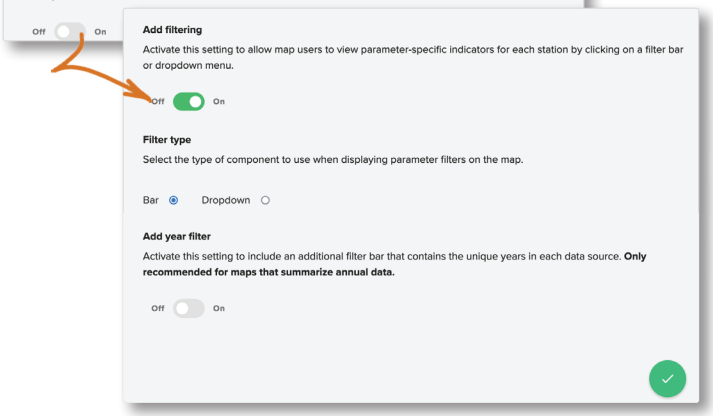


Scores. Alternatively, select the Scores option if you are showcasing Annual Scores.

Click the check mark to save your work and then click the Parameter Filters Tab.

CREATE YOUR MAP



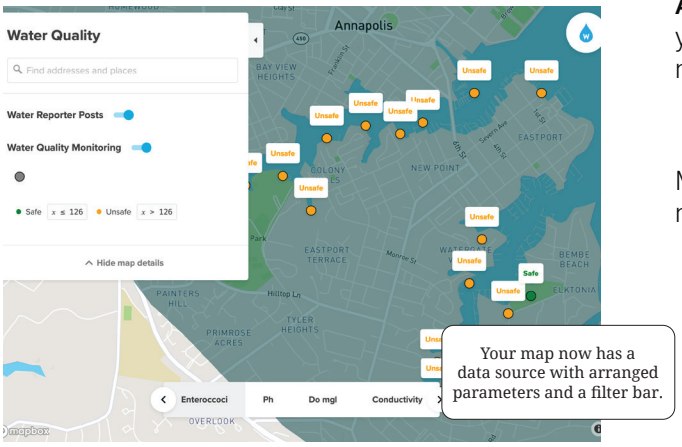


Parameter filters

By default, the map will display all parameters included in the selected data source. If you want to limit the information shared, you can toggle off parameters. The toggled off parameter data will not be visible on the map.

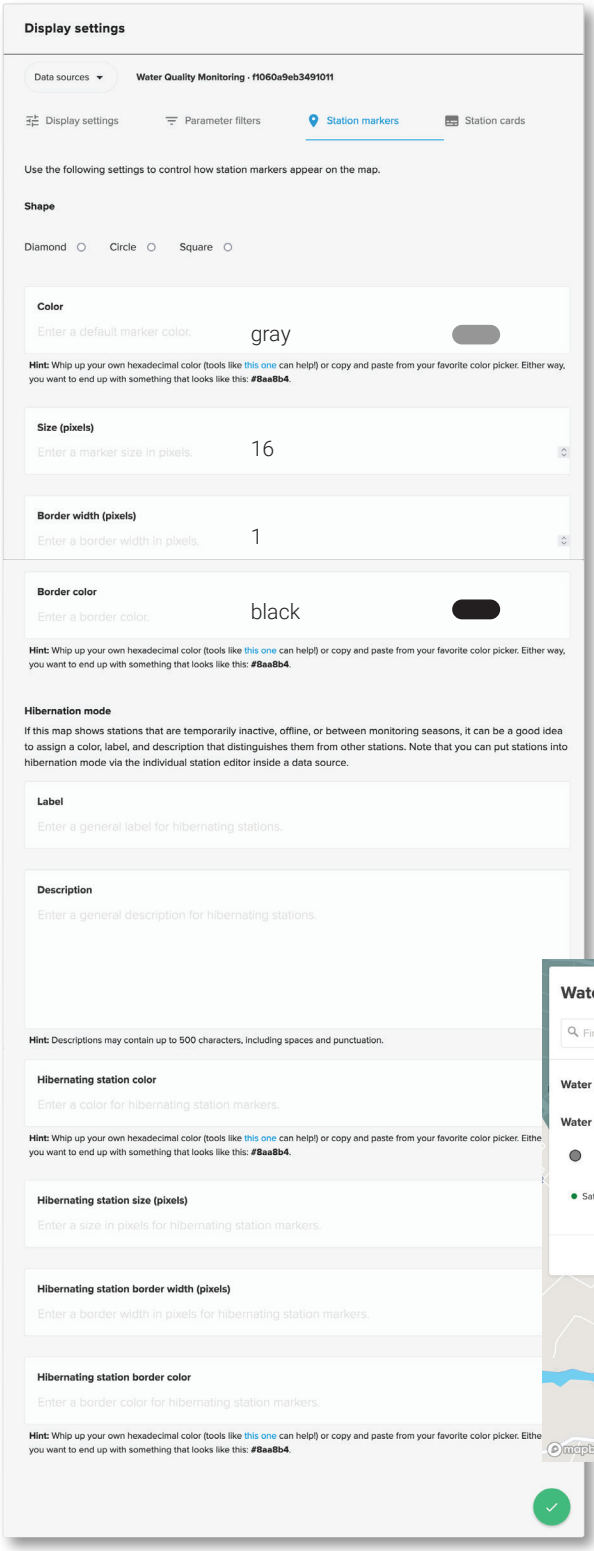
Using the = icon you can also rearrange the order of the parameters.

Add filtering. We recommend turning on filtering. This feature adds more options for a user to navigate through parameters to change the information that appears on the map.



Add year filter. Only add a year filter to summarize annual data, if you toggle this on for your continuous monitoring data the map may not move between parameter displays correctly.

Make sure to click the check mark to save your work before moving on to the next tab.



Station markers

Shape. Select the shape of the points on the map. If you have multiple data sources in your map you should differentiate the various shapes, sizes, and colors. Default is diamond.

Color. This is the station data source default color. The color will appear whenever a threshold range color does not exist.

Water Reporter uses hexadecimal colors. You can use a tool like this one to discover and enter your favorite color.

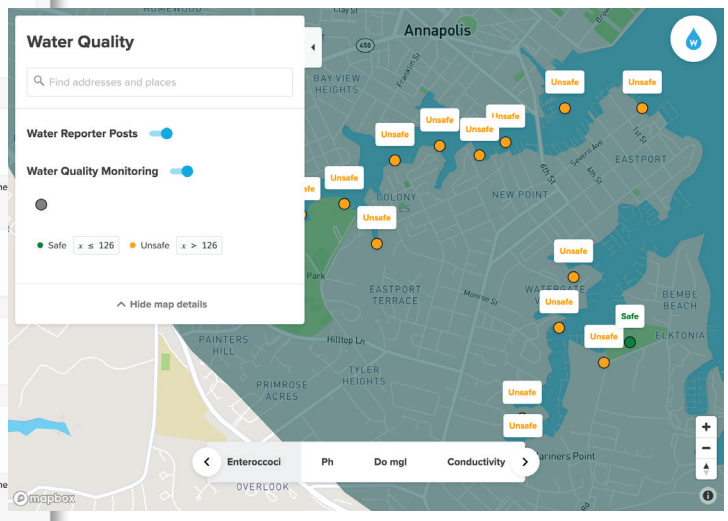
Size. Size will stay consistent across all stations in the data source. A size between 12 - 18 typically looks good on a map.

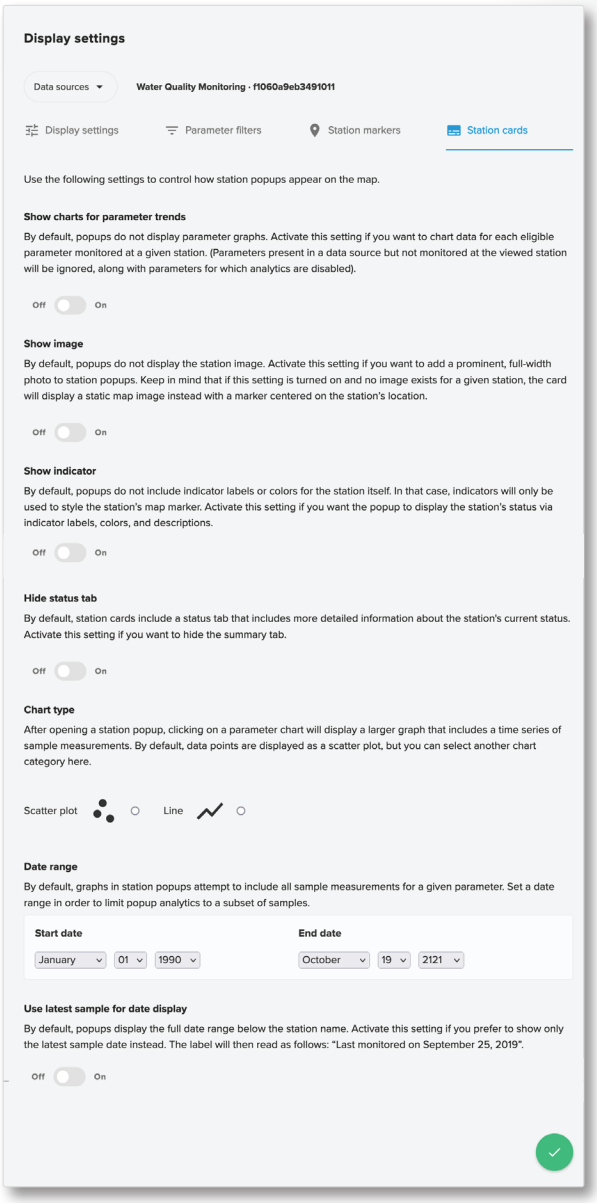
Border Width. Do you want your station points to have a border?

Border Color. Select a color for the station shape border.

HIBERNATION MODE
You can put stations in Hibernation Mode on the **Station page** within the Data Source.

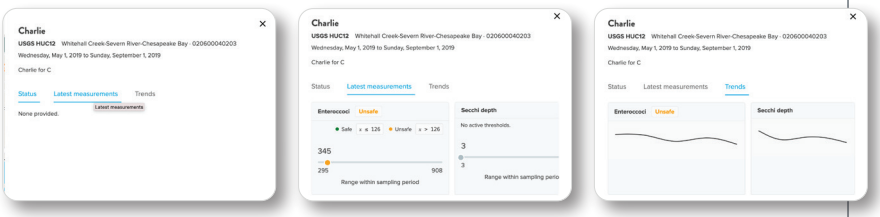
The fields populate similar to the general station marker set up.





Station cards

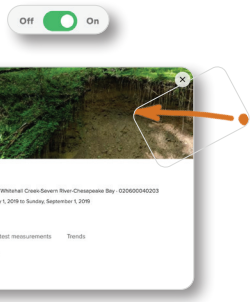
Station cards appear when a user click on a station point. Before changing any settings, this is what appears when you click on a map's station card.



The following images show what changes you can make on the user interace station card by changing a setting on Station Cards.

Note that updates may take a few minutes to appear on your map.

Show Image



Show indicator

Hide status tab

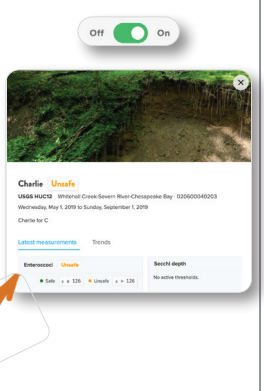
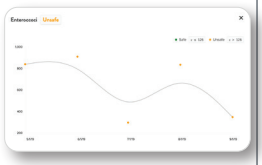


Chart Type.

Scatter Plot

Line; Smoothing off

Line; Smoothing on



Use latest sample for date display.