



Missouri Stream Team Application User Manual

Get Started with the New Stream Team App!

Existing Stream Team Users



Create User Account



Create a new user account in the new application.

1



Connect Accounts



Enter your ID number to connect your existing data to the new account.



New Stream Team Users



Create User Account



Create a new user account in the new application.

2



Create Stream Team



Whether you're a team of 1 or 100, create a Stream Team.



You're set up and ready to go!

You can now manage your team, request supplies, and submit data.

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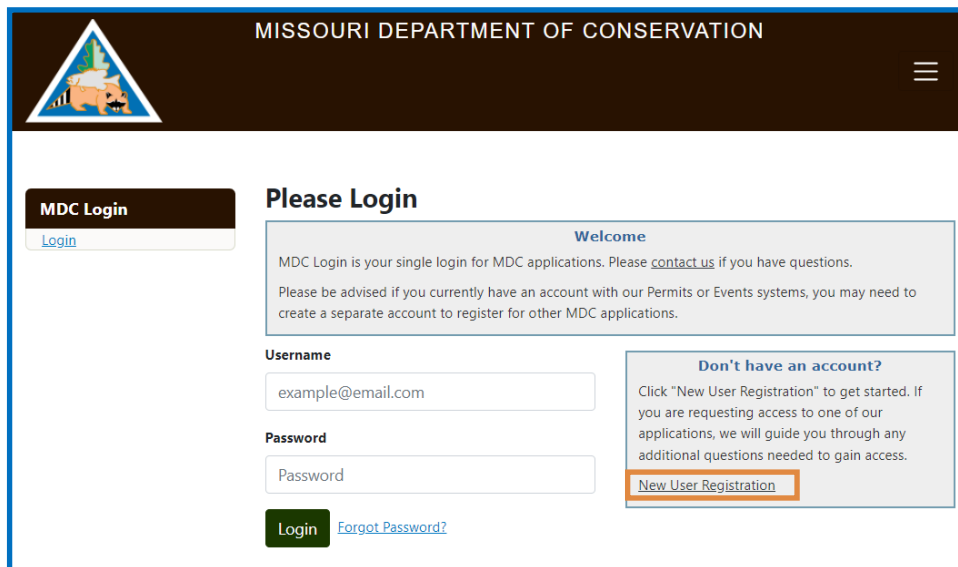
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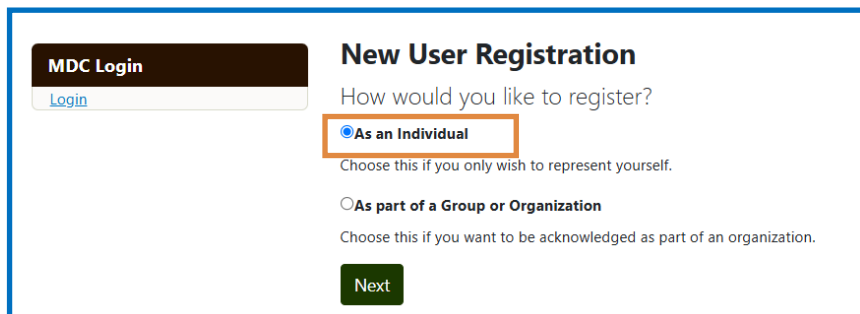
Create a User Account

1. Go to the Stream Team web application. **We advise volunteers to access the database using the Edge browser if possible:**
<https://mdc12.mdc.mo.gov/applications/Streamteam>
2. Click **Login**.
3. If you already have an MDC Armor account, you do NOT have to create a new account with the following steps and can skip to linking your old account (page 5). See below for a list of common public applications that already require an account:
 - Ginseng Root Dealer/Sales Management
 - MDC Confined Wildlife Information System
 - Missouri Wildfire Reporting
 - TeleCheck
 - Landowner Community Assistance Program
 - Managed Hunts
 - MDC Magazine Subscriptions (MOMAG)
 - Special Use Permit
4. Click **New User Registration**.



The screenshot shows the Missouri Department of Conservation login page. At the top is the department's logo and name. Below the logo is a dark box with 'MDC Login' and a 'Login' link. The main heading is 'Please Login'. Below this is a 'Welcome' message and a paragraph explaining that MDC Login is a single login for MDC applications. There are input fields for 'Username' (with the example 'example@email.com') and 'Password'. Below these is a 'Login' button and a 'Forgot Password?' link. To the right of the password field is a box titled 'Don't have an account?' with instructions to click 'New User Registration' to get started. The 'New User Registration' link is highlighted with an orange box.

5. Leave selection on **As an Individual**.
6. Click **Next**.
7. Complete all fields on the form.
ConservationID is optional.
8. Click **Submit**.

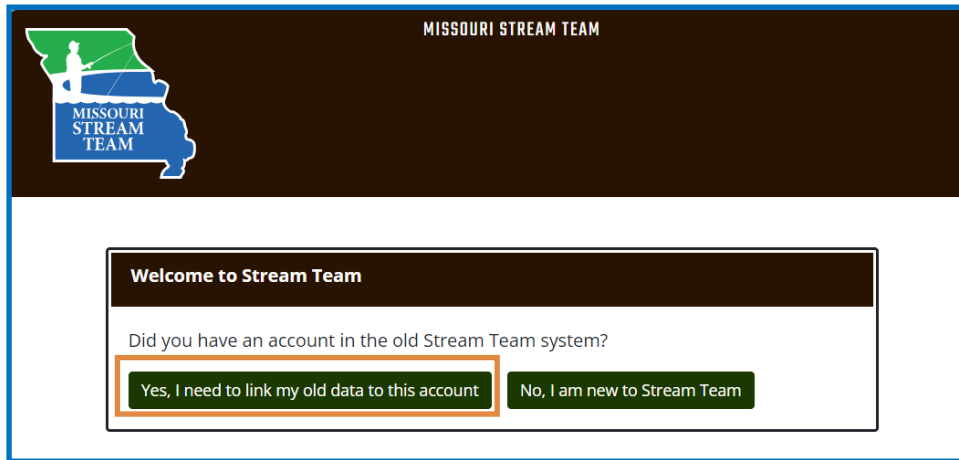


The screenshot shows the 'New User Registration' page. It has a dark box with 'MDC Login' and a 'Login' link. The heading is 'New User Registration'. Below this is the question 'How would you like to register?'. There are two radio button options: 'As an Individual' (which is selected and highlighted with an orange box) and 'As part of a Group or Organization'. Below each option is a brief description. At the bottom is a 'Next' button.

Link to an Account in the Old Application

If you had an account in the old Stream Team application, you will need to link the data using your volunteer number.

1. Click **Yes, I need to link my old data to this account.**



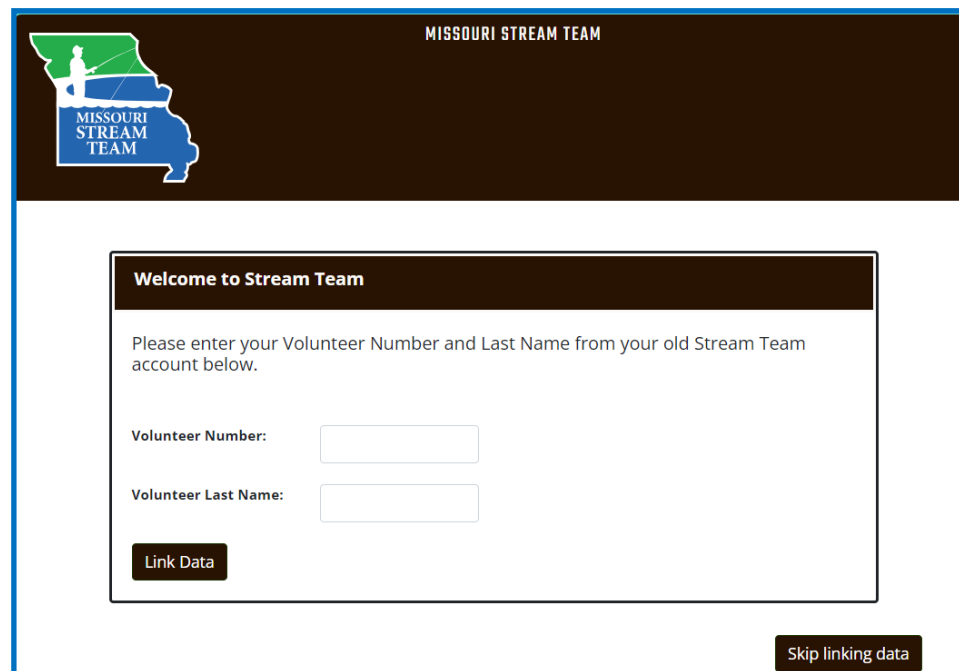
MISSOURI STREAM TEAM

MISSOURI STREAM TEAM

Welcome to Stream Team

Did you have an account in the old Stream Team system?

Yes, I need to link my old data to this account **No, I am new to Stream Team**



MISSOURI STREAM TEAM

MISSOURI STREAM TEAM

Welcome to Stream Team

Please enter your Volunteer Number and Last Name from your old Stream Team account below.

Volunteer Number:

Volunteer Last Name:

Link Data

Skip linking data

2. Enter **Volunteer Number** from the email from Missouri Stream Team and the **Volunteer Last Name** as it appeared in the old application.
3. Click Link Data.

Create a Stream Team

1. Log in to the Stream Team application. **We advise volunteers to access the database using the Edge browser if possible:**
<https://mdc12.mdc.mo.gov/applications/Streamteam>
2. Click **New Stream Team Registration** under **Stream Team Activities**.

The screenshot shows the 'STREAM TEAM REGISTRATION' form. On the left, a sidebar contains three sections: 'Stream Team Activities' (with 'New Stream Team Registration' highlighted), 'Stream Team VWQM' (with links like 'Site Creation/Adoption', 'Visual Survey', etc.), and 'Volunteer Functions' (with links like 'Pending Invitations', 'Stream Team Management', etc.). The main form area is titled 'STREAM TEAM REGISTRATION' and contains a section titled 'Team and Contact Information'. This section includes the following fields: 'Stream Team Name:*' (text input), 'Contact Person Name:' (text input), 'Address:' (text input), 'Zip Code:' (text input), 'City:' (text input), 'State:' (dropdown menu), 'County:*' (text input), 'Phone:*' (text input), 'Email:' (text input), 'Group Type:*' (dropdown menu), 'Other Group Type:' (text input), 'Age Group:' (text input), and 'Contact Preference:*' (text input).

3. Enter a Stream Team name of your choice — a unique name is suggested.
4. The contact person information is auto populated on the page load.
5. Complete the remaining fields for **Team and Contact Information**.
6. Continue to the next section to add members to your Stream Team.

Add Additional Team Members

This can be family members and/or members you want to invite to be part of your team.

Add Family Members

This uses your email address for the family member. This option is best for youth and family that will not be creating a user account.

- 1. Click **Add Team Members**.
- 2. Check **Household Member** checkbox. By clicking the checkbox, Member Email field auto populates the email.
- 3. Enter first and last name for the team member.
- 4. To add additional family members click Add New button and repeat the steps above.

Invite Team Members

This invites a member who will use their own email to create a user account.

- 1. Click **Add Team Members**.
- 2. Enter the first and last name, plus the email address of the member you want to invite. An invitation to join the team will be emailed when you click **Submit**.
- 3. To add additional members to your team, click the Add New button and repeat the steps above.

Additional Team Members

Remove "Add Team Members" section

Household Member
(Using same email address)

☐

First Name

Last Name

Member Email

Add New

Delete

Submit

Cancel

Manage a Stream Team

The team lead can change the Stream Team's name, invite new members, inactivate team members, and assign another member as a team lead. Individual users will update their personal information by logging into their accounts.

1. Log in to the Stream Team application. **We advise volunteers to access the database using the Edge browser if possible:**
<https://mdc12.mdc.mo.gov/applications/Streamteam>

2. Click **Stream Team Management** under **Volunteer Functions**.
3. Select the Stream Team you want to manage from the **Stream Team Selection** drop down.
4. Select if you would like to **Invite a Team Member** or **Update Team Name**.
5. Make updates as needed.

Accepting an Invitation to a Stream Team

When a user is invited to a team, they will need to accept the invitation to officially join the team. Invited team members will receive an email notification when they have been invited to a stream team. If you need to accept an invitation, follow the steps below.

1. Log in to the Stream Team application. **We advise volunteers to access the database using the Edge browser if possible:**
<https://mdc12.mdc.mo.gov/applications/Streamteam>
2. You may immediately see a pop-up message asking you to join a stream team that you were recently invited to. You may select "Join" or click the "x" button in the top right corner of the pop-up message and proceed to the next step.

- Under the **Volunteer Functions** menu section, select **Pending Invitations**. Then you may select **Accept** or **Reject** to any of your invites.

NEW STREAM TEAM MEMBERS

Invited Team Members

Congratulations! You have been invited to join a Stream Team.
Please accept or reject the invite(s) below.

Team Number - Name	
36564 - Dream Stream Team	<input type="button" value="Accept"/> <input type="button" value="Reject"/>

Update a Team Name

- Select **Stream Team Management** from the **Volunteer Functions** heading.
- Under “Select an Option” pick **Update Team Name**, and the two fields will appear. One with the current team’s name and a second open field. The open field may be used for a correction or renaming the team.

To confirm, simply click **Update**.

STREAM TEAM MANAGEMENT

Stream Team Selection: Team 35521 - Missouri Stream Conservationists

Manage Your Team

Select an Option:

Update Team Name

Update Team Name:

Current:	New:	
Missouri Stream Conservationists	Missouri Stream Team Conservationists	<input type="button" value="Update"/>

Invite a Team Member

1. Select **Stream Team Management** from the **Volunteer Functions** heading.
2. Under “Select an Option” pick **Invite a Team Member**, and you will need to enter the first and last name, plus the E-mail of the prospected team member.
3. As soon as the “send” is clicked, their name and information should appear in the Pending Invitations. They will receive correspondence for an invitation when you **Submit** and if they **accept**, they will appear in the Stream Team’s **Team Members** section.

STREAM TEAM MANAGEMENT

Stream Team Selection: Team 35521 - Missouri Stream Conservationists

Manage Your Team

Select an Option:

Invite a Team Member

Invite a Team Member:

First Name: Last Name: Email:

User Information

Select a User:

Select One

Team Members

Name	Email	Is Active	Team Lead
Jeff Cantrell	coyoteteacher2@gmail.com	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Pending Invitations

Name	Email
------	-------

Activating Members and Assigning the New Team Lead

1. Select **Stream Team Management** from the **Volunteer Functions** heading.
2. Select your Team
3. Under “**Team Members**” , the current Team Lead will be listed at the top and a list of members below. There is a field for the member’s name, their contact email, and a box to be checked for the status of being Active. The box may be checked if they are current; and if they are inactive (whether a retired member or just taking a break) uncheck the box. However, they can be reactivated easily by rechecking the box.
4. The current Team Lead will have the **Is Active** and the **Team Lead** checked. They are able to assign the Team Lead to a different member by selecting the **Team Lead** checkbox by any other individuals name.

Team Members			
Name	Email	Is Active	Team Lead
Suzy Gump	suzy.gump@gm	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bubba Gump	bubba.gump@gm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Bubba Gump jr.	bubba.gump@gm	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Report an Activity

1. Log in to the Stream Team application. **We advise volunteers to access the database using the Edge browser if possible:**
<https://mdc12.mdc.mo.gov/applications/Streamteam>
2. Go to **Activity Report** under **Stream Team Activities**.

Stream Team Activities

- New Stream Team Registration
- Activity Report**
- Ordering Activity Supplies

Stream Team VWQM

- Site Creation/Adoption
- Visual Survey
- Stream Discharge
- Macroinvertebrate
- Water Chemistry
- Equipment Reorder

Volunteer Functions

- Pending Invitations
- Stream Team Management
- Calendar Event Submission Form
- Report an Environmental Emergency
- Interactive Map

ACTIVITY REPORT SUBMISSIONS

Add new Activity Report

Show 10 entries Search:

Activity ID	Stream Name	Activity Reporting Date	Submission Date	Activity Type	Number of Participants	Team Number	Action
No data available in table							

Showing 0 to 0 of 0 entries Previous Next

3. Click **Add new Activity Report**.
4. Select the **Team Number** and **Activity Reporter Name** from the drop down menus.
5. Fill out all the required information in the **Stream Team Activity** section. Data fields are based on the **Activity Type**. You will see field labels change as you select different activity types.
6. If select activities occur on a stream, you can drop a pin on a map. To do this, zoom in on the site until the pin icon shows. Select the pin icon. Then, click on the map at the most downstream point of the activity.

Activity Location Reset Help

Search Location

Stream Team Activities

- Stream Team VWQM
- Active
- Inactive

1 inch = 752 feet

Stream Name of where activity took place:

Location County:

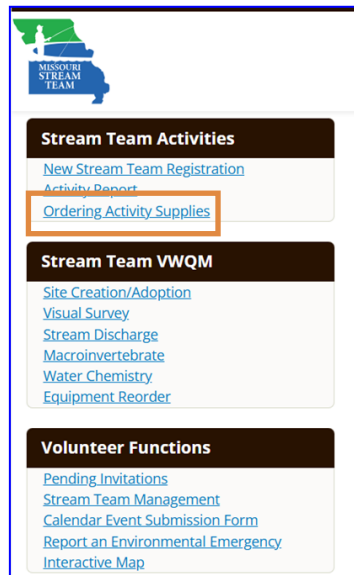
7. If you would like to be included in the quarterly **Activity Prize Drawing**, select “YES” and enter **Name** and **Phone**.
8. **Activity Photos** related to the stream team activity can be uploaded by volunteers (Note: only file type JPEG, JPG, PNG are allowed).
9. Select **Yes** if users want to add **Service Volunteers** for this activity, fill out all the required fields and click Add.

Service Volunteers are volunteers that are not registered with Missouri Stream Team. Example: a teacher and school children who are helping with your event.

10. Click **Submit** once after all the required fields are complete.

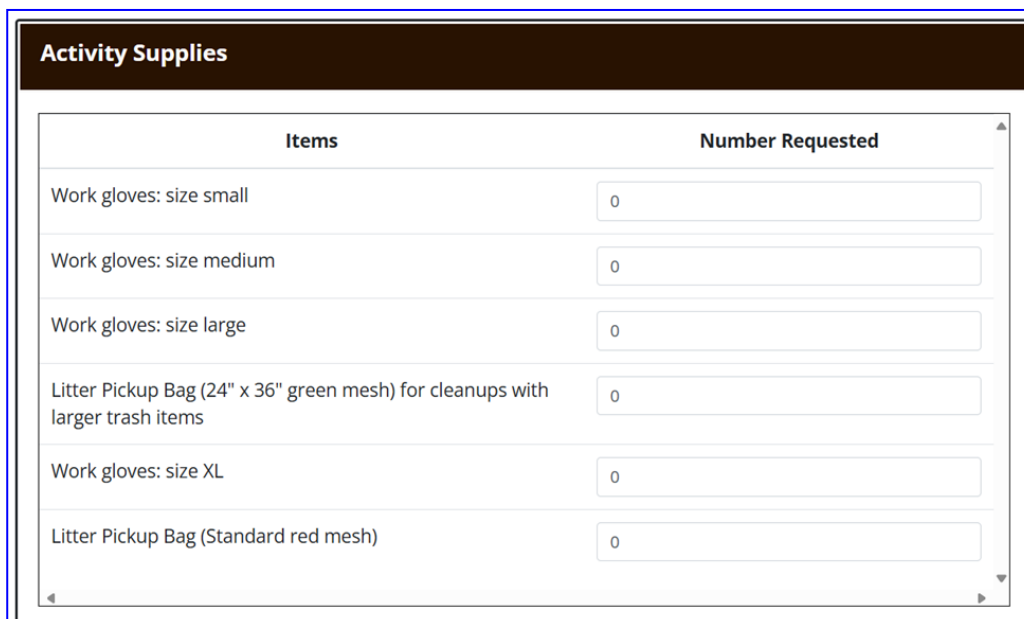
Order Activity Supplies

1. Log in to the Stream Team application. **We advise volunteers to access the database using the Edge browser if possible:**
<https://mdc12.mdc.mo.gov/applications/Streamteam>
2. Go to **Ordering Activity Supplies** under **Stream Team Activities**.



The screenshot shows the Missouri Stream Team application interface. At the top is the Missouri Stream Team logo. Below it are three main sections: 'Stream Team Activities', 'Stream Team VWQM', and 'Volunteer Functions'. The 'Stream Team Activities' section contains links for 'New Stream Team Registration', 'Activity Report', and 'Ordering Activity Supplies'. The 'Ordering Activity Supplies' link is highlighted with an orange box. The 'Stream Team VWQM' section contains links for 'Site Creation/Adoption', 'Visual Survey', 'Stream Discharge', 'Macroinvertebrate', 'Water Chemistry', and 'Equipment Reorder'. The 'Volunteer Functions' section contains links for 'Pending Invitations', 'Stream Team Management', 'Calendar Event Submission Form', 'Report an Environmental Emergency', and 'Interactive Map'.

3. Select **Team Name / Number and Activity Reporter Name** from the dropdown menus.
4. Select the **Activity Date** for the activity the supplies will be used for.
5. Enter quantities of items requested. (Note: quantities may be adjusted based on inventory and total items requested)



The screenshot shows the 'Activity Supplies' form. It has a title bar 'Activity Supplies' and a table with two columns: 'Items' and 'Number Requested'. The table contains six rows of items, each with a corresponding input field for the number requested, all set to 0.

Items	Number Requested
Work gloves: size small	0
Work gloves: size medium	0
Work gloves: size large	0
Litter Pickup Bag (24" x 36" green mesh) for cleanups with larger trash items	0
Work gloves: size XL	0
Litter Pickup Bag (Standard red mesh)	0

6. Click **Submit** to place an order.

Suggesting an Event for the Stream Team Calendar

1. Go to the Stream Team website. We advise volunteers to access the website using the Edge browser if possible: <https://www.mostreamteam.org/>
 2. Hover over **Events and Activities**, click **Calendar of Events**.
 3. Click **Suggest Event**, found in the top left corner of the calendar.
- That should take you to this screen:

Suggest an Event

Use this form to suggest an event to be placed on our calendar. The calendar administrator will be notified of your suggestion and review your submission for approval. Please include accurate contact information so we may contact you if there are questions.

Your Contact Information * required
This will not appear in calendar event

Full Name *

Email Address *

Phone Number

Organization

Note to Calendar Administrator

Event Information * required
This will appear in calendar event

Event Title *

Category

Start Date *

☐ All day event ☐ No end time

Start Time *

End Time *

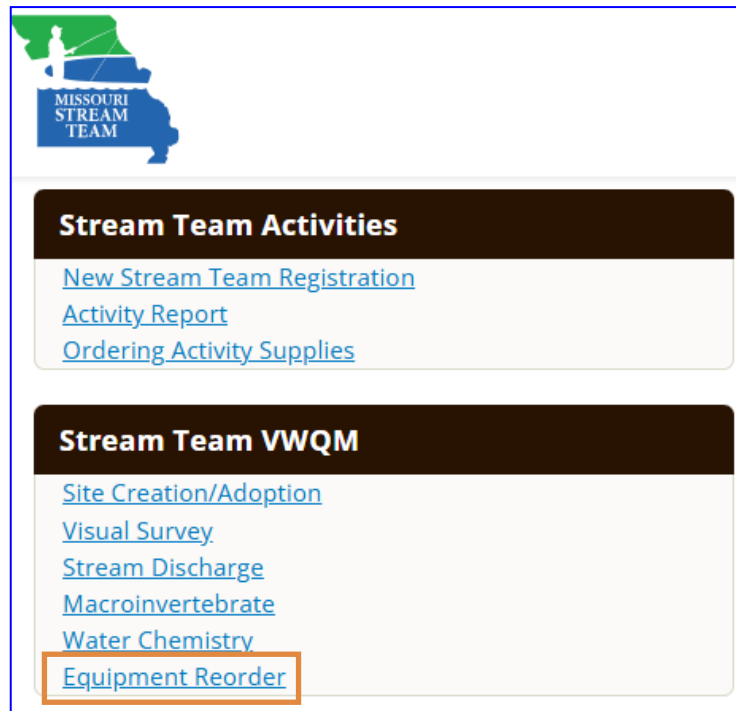
Repeat Type

Fill in all required information in the Suggest an Event pop-up. Make sure to scroll to the bottom and click **Suggest Event**, in order to submit your suggestion.

All suggested events should be approved within 3 business days. Please contact streamteam@mdc.mo.gov if you have submitted an event and do not see it reflected on the calendar.

Order VWQM Equipment as a New Monitor

1. Log in to the Stream Team application. **We advise volunteers to access the database using the Edge browser if possible:**
<https://mdc12.mdc.mo.gov/applications/Streamteam>
2. Click **Equipment Reorder** under **Stream Team VWQM**.



3. Enter your information.
4. Select **Yes** for **Are you a new volunteer ordering VWQM equipment?**.
5. Select the **kit types** for the type of data you plan to collect.
6. Click **submit**.

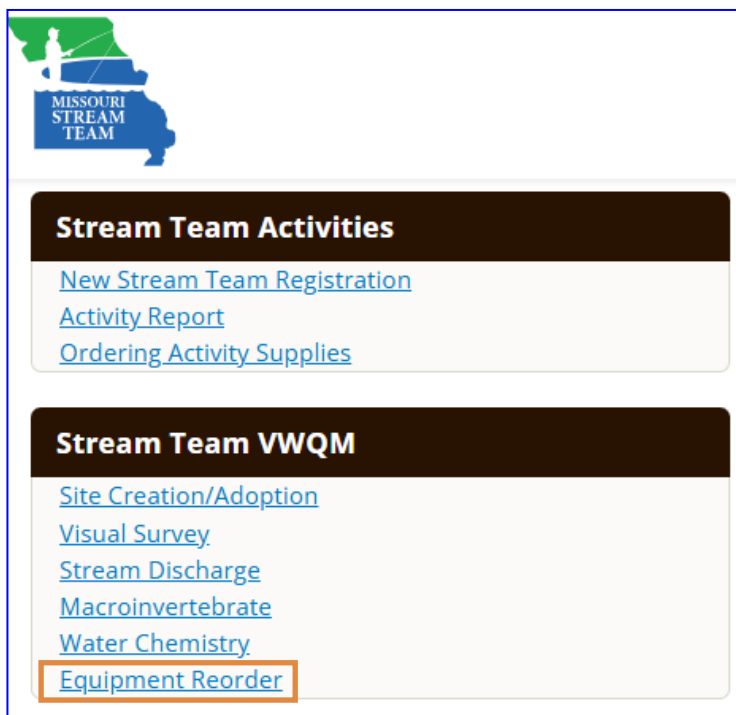
New Volunteer Equipment

Are you a new volunteer ordering VWQM equipment? ☒ Yes ☐ No

Please select all the Kit Types you would like to order: ☒ Biological ☐ Chemistry ☒ Stream Discharge

Order VWQM Replacement Reagents and Equipment

1. Log in to the Stream Team application. **We advise volunteers to access the database using the Edge browser if possible:**
<https://mdc12.mdc.mo.gov/applications/Streamteam>
2. Click **Equipment Reorder** under Stream Team VWQM.

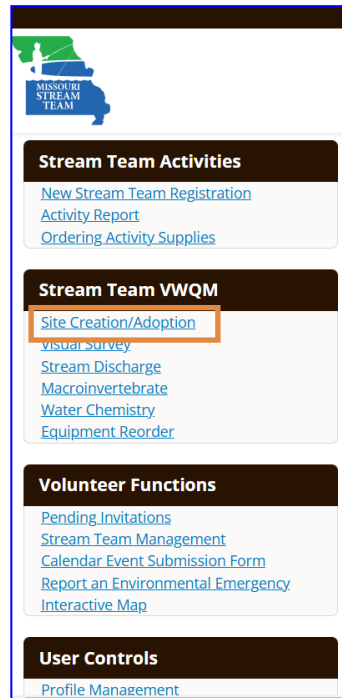


3. Enter your information.
4. Enter the quantity for the items needed.
5. Click **submit**.

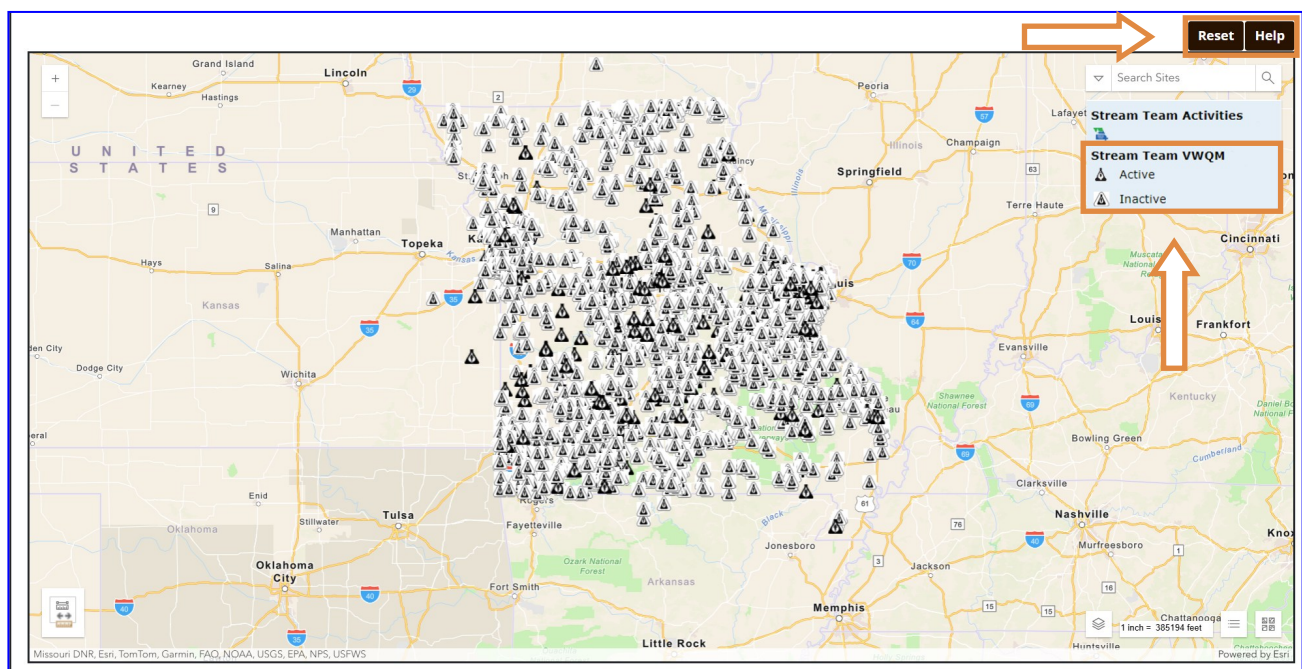
Create or Adopt a VWQM Site

1. Log in to the Stream Team application. **We advise volunteers to access the database using the Edge browser if possible:**

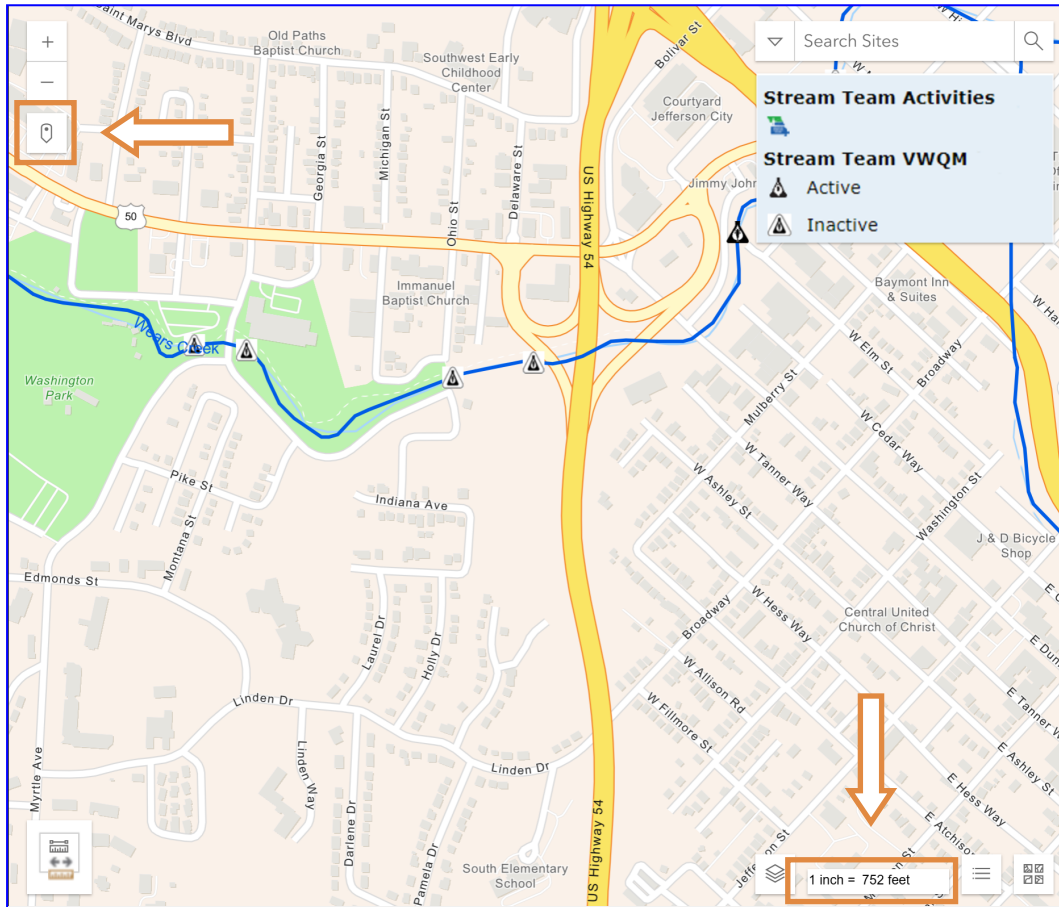
<https://mdc12.mdc.mo.gov/applications/Streamteam>



2. Click **Site Creation / Adoption** under **Stream Team VWQM**.
3. You will see **instructions** on how to create or adopt a VWQM Site, as well as a map where you can see all existing VWQM sites. Notice that you can **Reset** the map at anytime, or use the **Help** button for further instructions. There is also a legend that shows what **Active** and **Inactive** sites look like on the map.



- To create or adopt a 300ft-site, **zoom** until you see the **Draw Point** tool appear below the zoom buttons in the top left corner of the map. You must be zoomed in *at least* to the scale of **1 inch = 752 feet** (see scale at the bottom right of the map).
- Once the **Draw Point** tool is visible, you can now either select a site to adopt, OR select the Draw Point tool and place a **NEW** site on the map.



Selecting a site to adopt

Active Sites are sites that have been created within three (3) years, and/or have had data submitted to them within three years.

Inactive sites are sites that are older than three years and have not received data within three years.

Volunteers can adopt both active and inactive sites— although **we encourage folks to adopt inactive sites** unless they are coordinating sampling events with other volunteers.

- Once you are **zoomed in**, **select a site on the map**. A **pop-up window will appear** on the map above the site location, and all the information about that site will populate in the **fields below the map**. In this example below, a site on Wears Creek in Jefferson City was selected.

Stream Team VWQM

SiteID	36304
DateLastMonitored	2009-10-24 11:16
StreamName	Wears Creek
LocationDescription	Wears Creek near Duensing Field at Washington Park
County	Cole
State	MO

***State:** Missouri

***County:** Cole

Stream Name: Wears Creek

Is a tributary?: ☐

Site Description: Wears Creek near Duensing Field at Washington Park

Please double check the existing site description for this site. If changes are needed please contact staff.

***UTM E:** 570982

***UTM N:** 4270069

Longitude: -92.185

Latitude: 38.576

***Watershed HUC 8:** 10300102 - Lower Missouri-Moreau

***Watershed HUC 12:** 103001021304 - Wears Creek-Missouri River

Comments:

2. Double check that all the information about your site looks correct. If you see issues with any of the fields associated with a site you want to adopt, please contact staff at Streamteam@dnr.mo.gov.

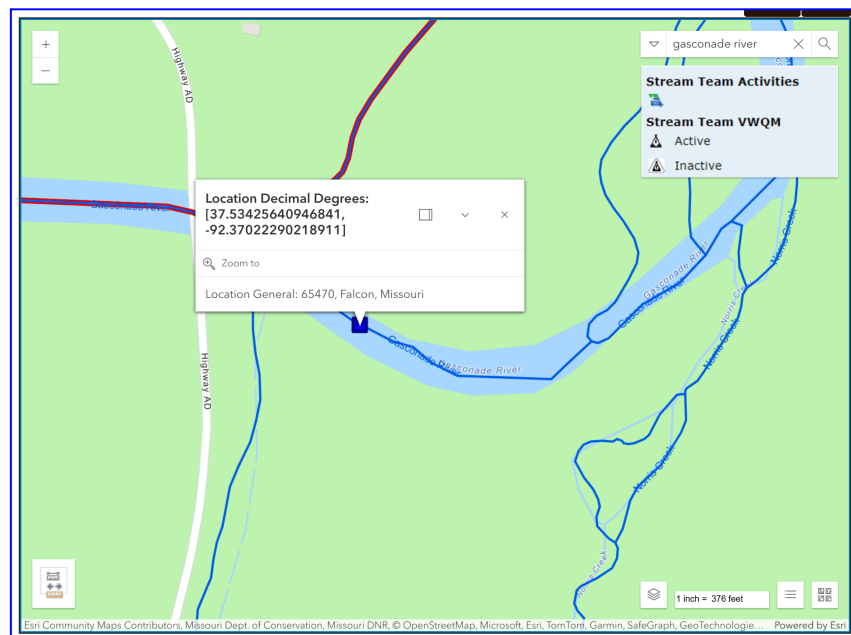
- Note: If you change your mind and you do not want to adopt this site and you would rather adopt a different site, or create a new site, please select the **Reset** button first at the top right corner of the map.

3. Now hit the **Submit** button to adopt this site. You will now be able to submit data on the site that you've adopted.

Creating a new site

1. Once you are zoomed in to an area that you want to create a site such that the **Draw Point** tool has appeared. Select the Draw Point tool and place it over a stream line segment in the **center** of the 300-foot stretch of steam that you're going to monitor. It may be beneficial to zoom in further on the map to better see your location.

Be sure to place the monitoring point as close to the dark-blue line segment as possible— even if the stream width shown on the map is much wider than the dark blue line. *If you place your monitoring point more than 100ft away from the dark blue line, it will not populate the necessary information for you to submit this site and you will have to place the point again.*

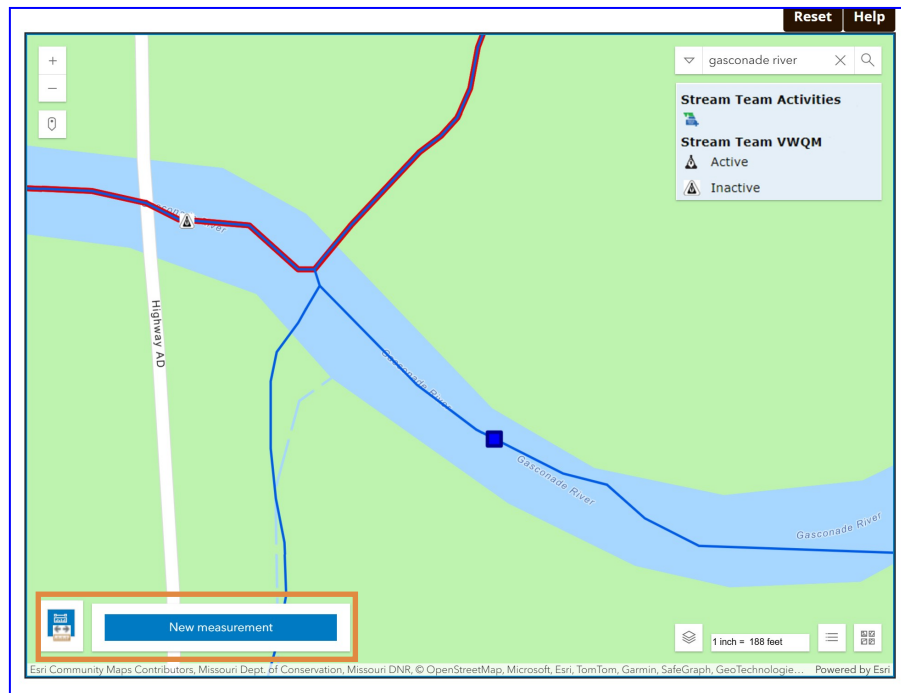


2. Once your point is placed, scroll down to see the information that has populated below the map.
3. You will need to fill out the **Site Description** field before submitting a new site. *Remember to use permanent landmarks when creating a site description.*
4. If your new site is within 150ft of an existing *inactive* site, please adopt that site.
You can use the **Measuring Tool** to help you.

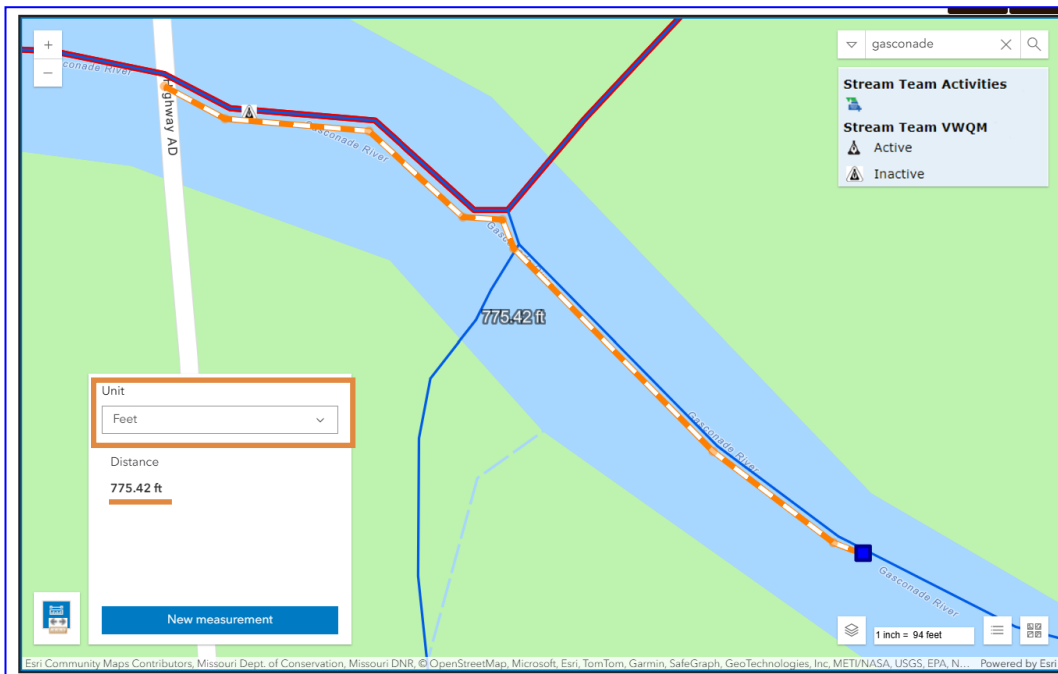
*State:	*County:
Missouri	Laclede
Stream Name: ?	Is a tributary?: <input type="checkbox"/>
Gasconade River	
*Site Description: ?	
*UTM E:	*UTM N:
555640	4154328
Longitude:	Latitude:
-92.37022290218911	37.53425640946841
*Watershed HUC 8: ?	*Watershed HUC 12: ?
10290201-Upper Gasconade	102902010406-Norris Creek-Gasconade River
Comments:	

Using the Measuring Tool

1. The **Measuring tool** is located on the bottom left corner of the map. Select the icon and hit **New measurement**.



- Click on the map to start measuring.
- Each time you click on the map the measuring line will anchor in that spot so you can continue to drag the measuring line in the direction you want to go.
- When you are done, double click the map to stop measuring. The measurement is displayed in the measuring window.
- You can change the units of the measurement by selecting from the drop down in the measurement window.
- In this example, my new site would be: 775 ft DS (Downstream) from the Hwy AD bridge crossing on the Gasconade River.

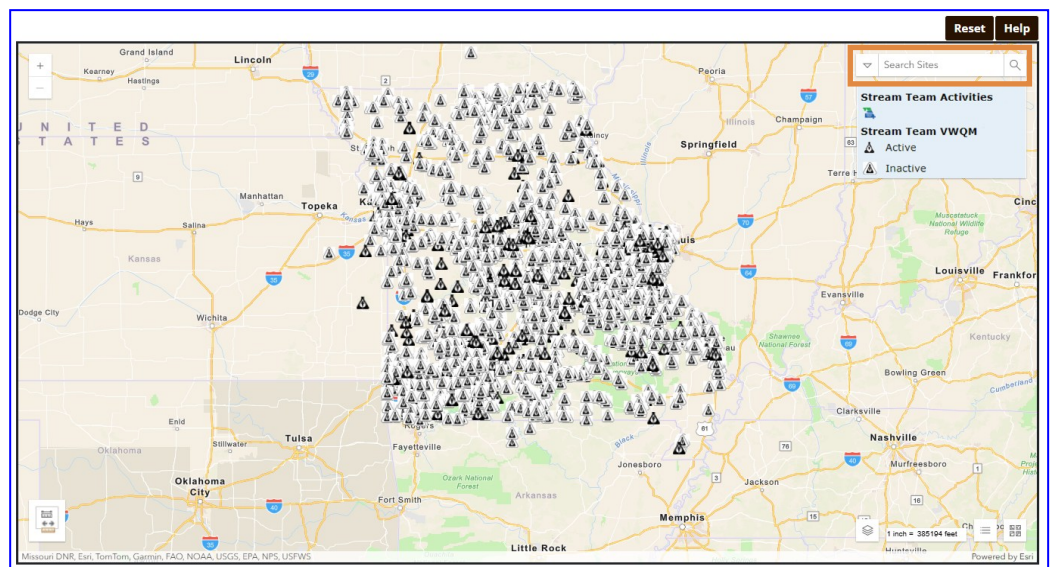


- Note: It is OK to round your measurements to the nearest 5 feet / meters.

Using the Search Function

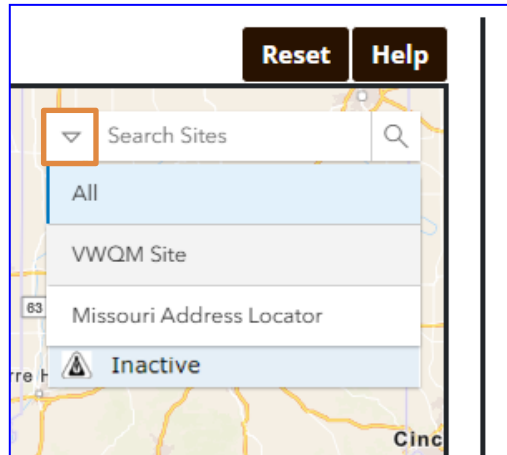
The map has a search function located at the top right-hand corner that you can use to search different locations:

- Addresses / Cities
- Stream names
- Specific VWQM Sites—using site descriptions and/or Site ID

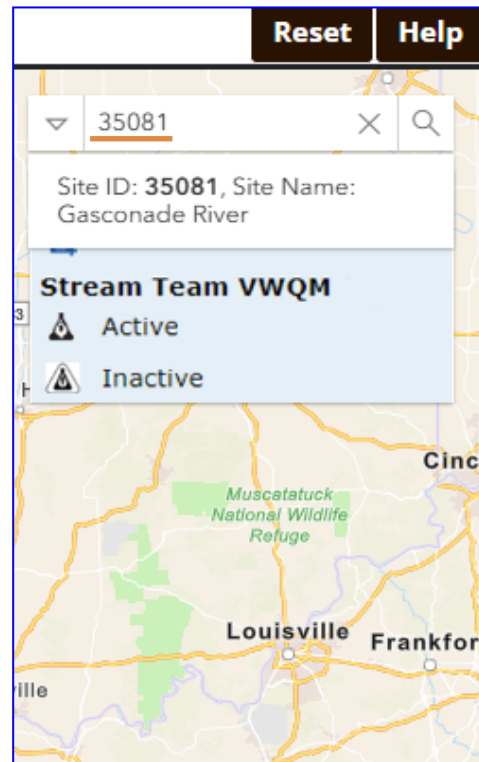
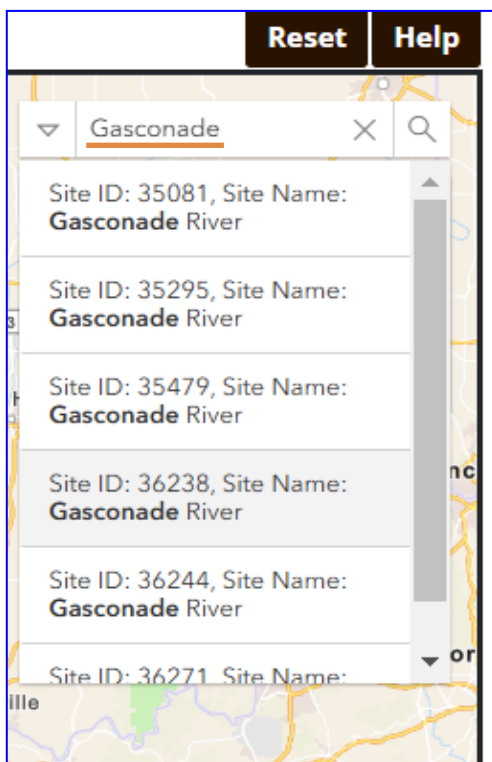


If you know the **VWQM Site ID** of a site you would like to adopt (VWQM Site ID's can be found on our [Interactive Map](#)), you can search a specific site and the map will zoom in to the site you've searched.

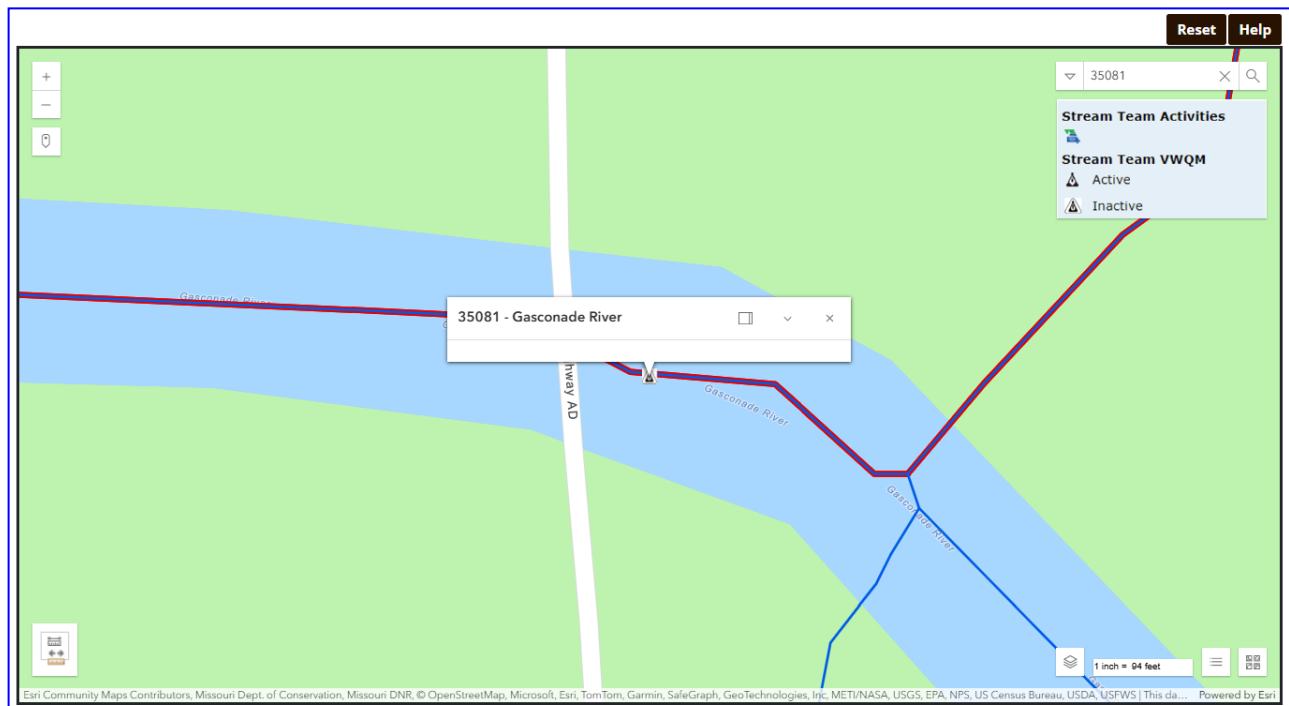
1. The map search is defaulted to search *both* VWQM Site ID's and Missouri addresses. You can select the drop down on the left-hand side of the search bar to search *only* VWQM Sites or *only* Missouri Addresses, or you can leave it defaulted where it is.



2. If you want to search for a specific site you can start to enter in the **stream name** that the site is on and the search drop down list will populate sites on that stream. Or, you can search the specific **VWQM Site ID**.



3. Select the site that you wish to view and the map will zoom in to this site.
4. You can now select this site and it will populate the fields below the map before you submit.



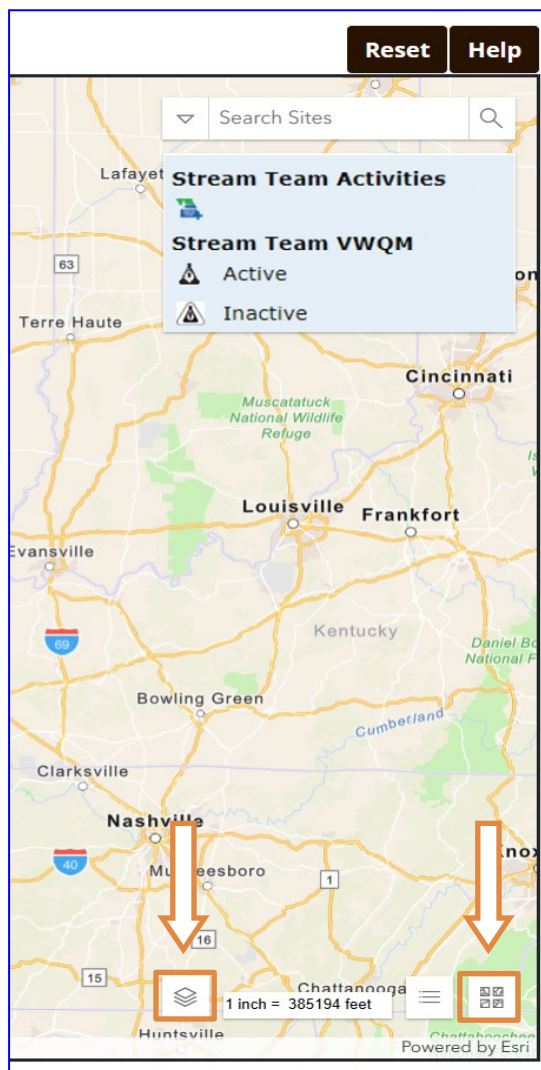
Site Creation / Adoption User Considerations

- VWQM sites are attached to **specific individuals**. Multiple people can adopt and submit data on the same site. We encourage folks to adopt Inactive sites or create new sites unless they are coordinating monitoring events with other volunteers on the same site. If you are creating or adopting a site that is a part of a **VWQM project**, please reach out to staff.
- Data that is submitted by individuals can be associated with a specific stream team (See tutorial on VWQM Data Submission).
- **Please do not create a site on a lake or pond.** It is preferred that volunteers submit data from *perennial streams* (streams that have flowing water the majority of the year).
- Volunteer Users cannot create sites on streams that are further away than the dark blue stream line on the map. Sites needing to be created in areas like these (for example, Forest Park in St. Louis, MO) will need to be created by program Staff. Please reach out to Streamteam@dnr.mo.gov for sites like these.

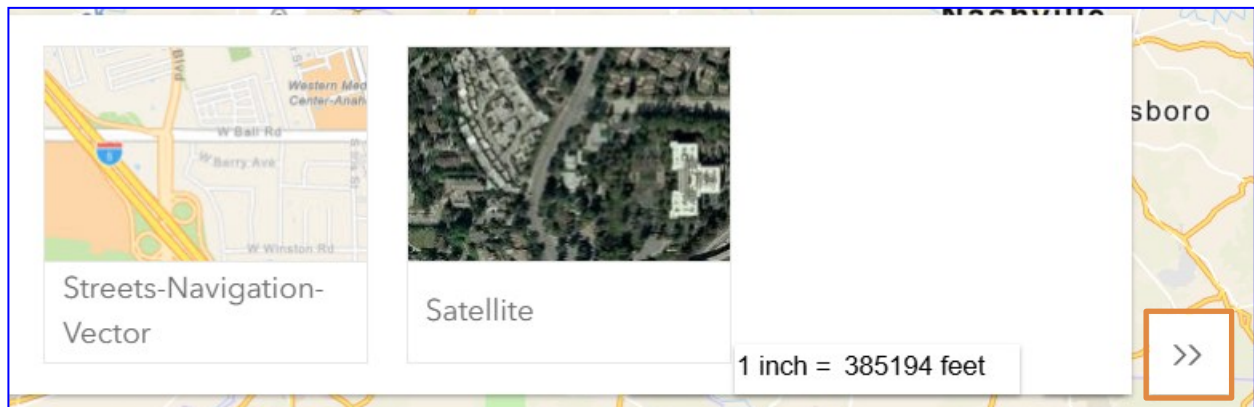
Using the Map Layers

The Site Creation/Adoption Map has different basemap and layer options that can help you when selecting a monitoring site.

1. The **Basemap** layer options are located at the bottom right-hand corner of the map. The other **layer list** options are located just to the left of the scale bar.
2. Selecting the **Basemap** layer options will allow you to choose between a **Satellite** imagery background or a **Street/ navigation** background.

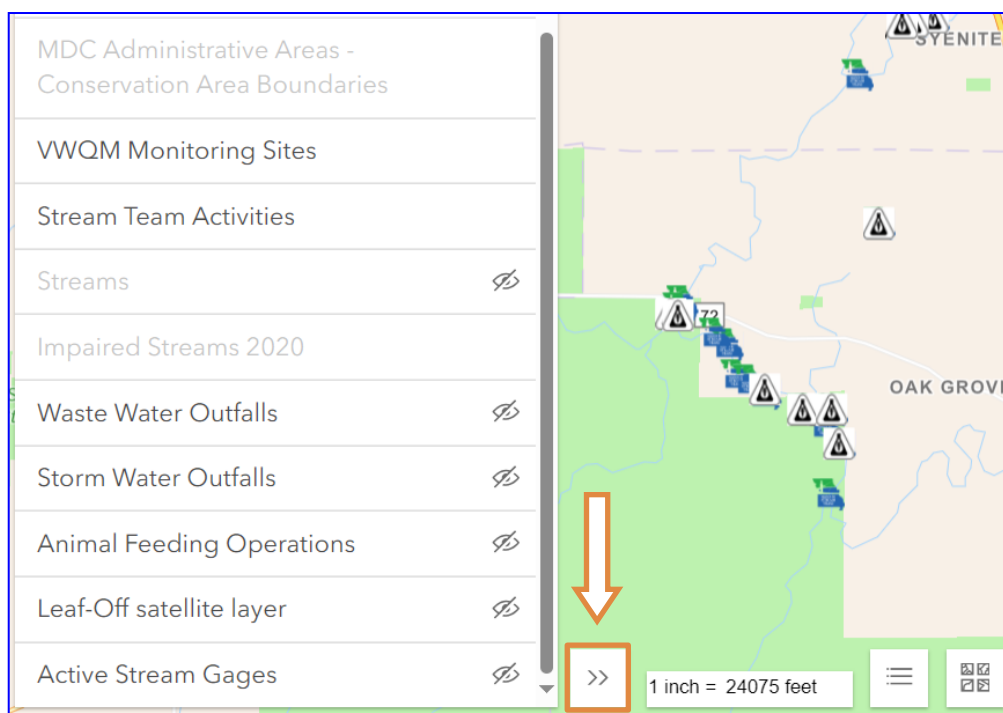




- To hide the basemap layer list, select the arrow just to the right of the layer choices.
- Select the **Layer List** to the left of the scale bar to see the list of possible layers you can view.



To hide the **Layer List**, select the arrows at the bottom right of the layer choices.

- Layer names that are grey-ed out are not viewable until the map is zoomed in further. The layer text will turn black/bold once the map is zoomed in far enough.



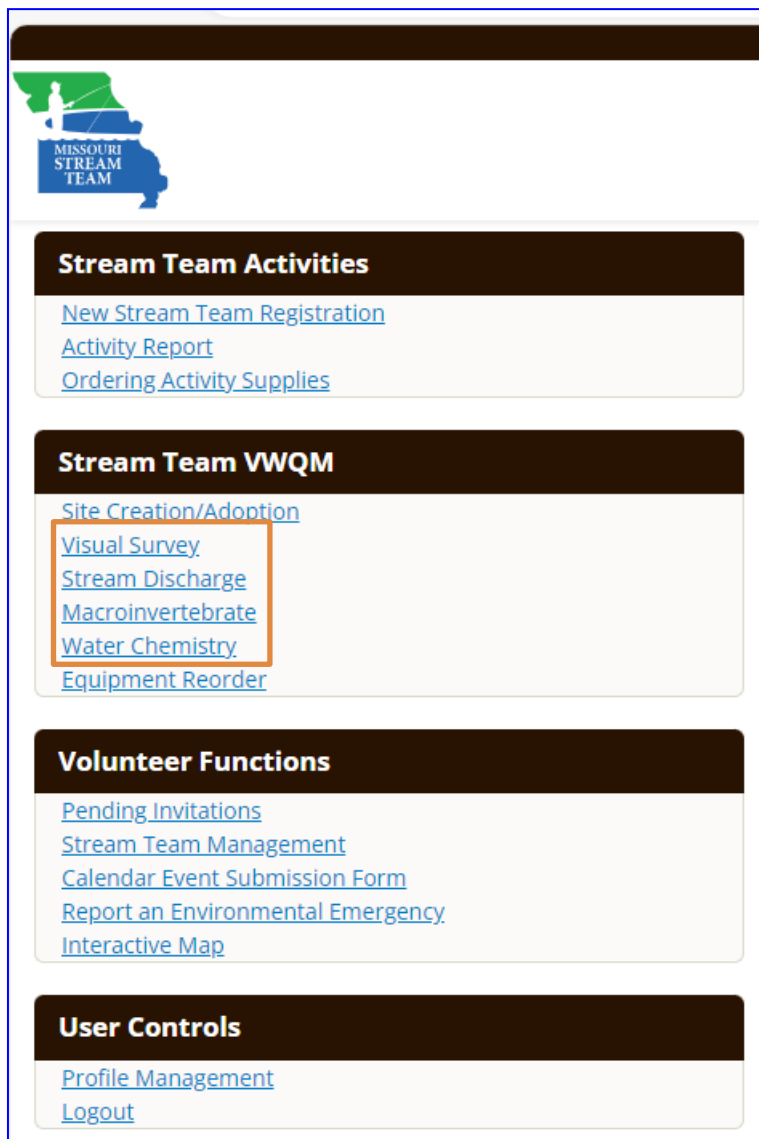
- Layers that are hidden from view are indicated by  the icon. Layers that are viewable are indicated by  the icon.

5. The legend will display the symbology of each layer that is made viewable. To hide the legend, select the arrow to the bottom right of the legend list.



Submit VWQM Data

1. After logging in to the Stream Team Database, select a data sheet from the left side-bar. Options will include; Visual Survey, Stream Discharge, Macroinvertebrate, and Water Chemistry. This example will go through the Stream Discharge data sheet.



- Note: If you do not have any sites associated with your account yet, you will not be able to enter any data into the database. Likewise, if you are not trained in our Volunteer Water Quality Monitoring protocols, you will not have access to these links. If you have recently completed our VWQM Level 1 Certification and do not have access to creating a VWQM site or submitting data, please reach out to program staff at stream.team@mdc.mo.gov.

2. Once you select a link for a particular data sheet, you will be able to **add an additional data sheet or review past** data that’s been submitted.

STREAM DISCHARGE DATA SHEET SUBMISSIONS

Stream Discharge Data Sheet Submissions

Add new Stream Discharge Data Sheet

Show 10 entries

Search:

Stream Discharge ID	Data Submitter	Stream Discharge Date	Action
22756		02/02/2024	Review
22752		02/01/2024	Review
22753		02/01/2024	Review
22754		01/31/2024	Review
3012		04/03/2023	Review
3013		04/03/2023	Review
3014		04/03/2023	Review
3002		03/31/2023	Review
3003		03/31/2023	Review
3004	Tahika Gatto	03/31/2023	

3. Select **Add new Stream Discharge Data sheet** or whichever datasheet you are going to submit.
- At the top of each datasheet page there are instructions and reminders in red text about that particular datasheet.
4. Next, select a **VWQM site** that you want to enter data on.

Sampling Event Information

Select VWQM Site

Site #:

0

State:

MO

County:

Tributary of:

Stream Name:

Site Description:

Data Submitter (Responsible Volunteer): *

Submitter ID:

0

Sampling Date: *

Time (Military Time): *

Stream Team: *

Select One

Number of Participants:

Rainfall (inches in the last 7 days):

Water Temp. in shade (°C):

5. Select the site that you would like to submit data on from the list. If you have many sites, you can also use the search function to search a key word or phrase that describes your site, like the volunteer (your) site number, site description, stream name, or county.

Site Information

Search:

Marion

Submitter ID	Submitter Name	Site ID	Volunteer Site Number	Is Tributary	Stream Name	State	County	Site Description	
8112	Tabitha Gatts	36100	21	False	Bear Creek	MO	Marion	Bear Creek 40 feet US Highway 79 just E of intersection with Warren Barrett Drive	Select

6. Once the site is selected, the rest of the required **Sampling Event Information** will need to be filled out. This will include the **Sampling Date, Time, and Stream Team**.
- Some folks are affiliated with more than one Stream Team. If you only have one Stream Team this field will auto-fill with your Stream Team. Otherwise, if there is a particular Stream Team that you would like this data to be affiliated with, select it from the drop down.

Sampling Event Information

Select VWQM Site

Site #:

State:

County:

Tributary of:

Stream Name:

36100

MO

Marion

Bear Creek

Site Description:

Bear Creek 40 feet US Highway 79 just E of intersection with Warren Barrett Drive

Data Submitter (Responsible Volunteer): *

Submitter ID:

8112

Sampling Date:*

Time (Military Time):*

Stream Team:*

Select One

Number of Participants:

Rainfall (inches in the last 7 days):

Water Temp. in shade (°C):

7. It is optional to fill out the **Number of Participants, Rainfall, and Water Temperature**.
- The Number of Participants represents the number of *additional* people helping to monitor regardless of if they are trained or not.
7. All the necessary information pertaining to each datasheet must be filled out prior to submission.

Entering Visual Survey Data

1. Follow steps 1—8 from pages 27—29 to select the site that you wish to submit data on and fill out the header information.
2. Fill out the **floodplain** land use section.
 - All land use percentages must total to 100%.
3. Fill out the **riparian cover** land use section.
 - All land use percentages must total to 100%.
4. Fill out the **stream bank conditions** section.
 - All land use percentages must total to 100%.
5. Fill out the **bed composition of riffle** section.
 - All land use percentages must total to 100%.
 - If your stream site does not contain a riffle, check the “Riffle habitat NOT available” box.
6. **The additional stream conditions are optional to enter for the submission of this datasheet:**
 - Fill out the **percent embeddedness of cobble substrate** by entering each cobble percentage in the appropriate cells. If there are no cobbles present at your site, check the box for “Cobble substrate NOT present”.
 - Enter in any **signs of human use** that you see at your site.
 - Enter in the **percentage of algae** that you see covering the stream bed of your 300-foot site.
 - Of the algae observed, enter the percentage that is close-growing or filamentous. The other percentage will automatically calculate.
 - Select the **water color** that best describes what you see at your site.
 - Select the **water odor** that best describes what you see at your site.
 - Select the **Weather Condition** that best describes what you see at your site based on the amount of cloud cover.
 - Fill out any other **comments** about your site that you would like us to know.
 - Select if you saw any **fish present** while monitoring at your site.
7. Select **submit** if you are finished entering in your data. You may also select **cancel** to go back to the previous page *without* saving any information that you may have entered.

Entering Stream Discharge Data

- Follow steps 1—8 from pages 27—29 to select the site that you wish to submit data on and fill out the header information.
- Select the **collection type** that matches the way that you gathered discharge at your site:
 - If you select **gathered**, go to step 3.
 - If you select **flow too low to measure**, or **flow to high to measure**, go to step 9.
 - If you select **USGS gaging station**, go to step 12.
 - If you select **flow meter**, go to step 16.
- Enter in the **stream width of flowing water**:
 - The corresponding number of depth measurements that are required based on the width of your stream will automatically calculate. In the example below, if the stream width is 25 feet wide, a minimum of 12 depth measurements are needed in order for the data to be submitted as Quality Assured. If 1 less depth measurement than

Stream width of flowing water (tenths of a foot)		<input type="text" value="25"/>	
Minimum Number of Intervals Needed			
Stream Width	Depth Increment	Stream Width / Depth Increment	Interval Number Needed
≤ 20	Depth every 1 Foot	width / 1 =	#
> 20 ≤ 60	Depth every 2 Feet	25 / 2 =	12
> 60 ≤ 90	Depth every 3 Feet	width / 3 =	#
> 90 ≤ 100	Depth every 4 Foot	width / 4 =	#

what is needed is entered, the data sheet will still submit, but will be made Educational. If more than 1 depth measurement is not entered than what is needed, the data sheet will not be allowed to submit.

- Enter in the correct **number of depth intervals** needed. You may need to use the scroll bar to the right of the depth chart in order to enter in all your depths. The cells that are outlined in green are the required number of cells to enter, however you have more depth measurements than what are required, you can enter in up to 30.

Record depths at appropriate intervals:	
Depths Entered: 13 / 12	
6	<input type="text" value="1.50"/>
7	<input type="text" value="1.20"/>
8	<input type="text" value="1.60"/>
9	<input type="text" value="1.20"/>
10	<input type="text" value="1.10"/>
11	<input type="text" value="0.80"/>
12	<input type="text" value="0.90"/>
13	<input type="text" value="0.10"/>
14	<input type="text"/>
15	<input type="text"/>

if
to

5. Enter in how many feet you floated your whiffle balls in the **distance floated** cell.
6. Enter in **at least 4 float trial times** in seconds. You can enter up to 10 float trail times if desired. You may need to use the scroll bar to the right to see all the float trial times.

Determine the Average Velocity for the Stream

Velocity Float Trials:

Float Trails Entered: 4 / 4

Trial Number	Time (Seconds)
1	25
2	30
3	18
4	10

Distance Floated (Feet):

Velocity Float Trials:

The next step in calculating the sum of float times is to calculate the average float time. Average float time is equal to the sum of float times divided by the number of float trials.

Sum of Float Times (Seconds)

83

Number of Velocity Trials

4

7. Next, reference the stream bottom type that you have and select the **correction value for your stream bottom type**.

Stream Bottom Type:

Rough, loose rocks or coarse gravel: correction value = 0.8

Smooth, mud, sand, or bedrock: correction value = 0.9

Correction Value For Stream Bottom Type

0.8 - Rough
▼

8. The stream discharge will automatically calculate at the end of the datasheet. You can check this number to see if it makes sense and aligns with your own calculations.
9. Add any **comments** that are pertinent to your data collection.
10. Denote if you saw any **fish present** at your site during data your collection.
11. **Submit** your data sheet.

Stream Discharge (Feet)³ per Second or Cubic Feet per Second

7.6

12. If you are submitting discharge using a **USGS gaging station**, you will need to verify that your site is within 0.5 miles of the gaging station and that there are no inputs or outputs between your site and the gaging station. Please select “yes” or “no” to the verification before entering your discharge value.
13. **Select the correct gaging station** that corresponds to the one that is near your site. *If you do not see the gaging station in this list, please reach out to program staff at Streamteam@dnr.mo.gov.*
14. **Enter the discharge value** from the gaging station. Note: some gaging stations show both the *gage height* and the discharge, please make sure that you enter the discharge value and **not** the gage height.

Collection Type

Select: ☐ Gathered ☐ Flow too low to measure ☐ Flow too high to measure ☒ **USGS Gaging Station** ☐ Flow Meter

Please verify if your site is located within 0.5 miles of the USGS gaging station and that there are no tributaries, losing segments, or point source discharges between your site and the gaging station. ☒ Yes ☐ No

USGS Gage (Site Number - Station Name)

Stream Discharge (Feet)³ per Second or Cubic Feet per Second

15. Follow steps 9—11 to submit your data.
16. If you are submitting discharge using a **flow meter**, select the flow meter option from the collection type.
17. Enter the **discharge** that was calculated using the flow meter.
18. Enter the flow meter type that you used in the **comments** section in addition to any other comments that you have.
19. Follow steps 10—11 to submit your data.

Collection Type

Select: ☐ Gathered ☐ Flow too low to measure ☐ Flow too high to measure ☐ USGS Gaging Station ☒ **Flow Meter**

Stream Discharge (Feet)³ per Second or Cubic Feet per Second

Entering Macroinvertebrate Data

In order to submit this data sheet, you must collect 3 net-sets and record the habitat type, net type, and time spent picking through each net.

- Follow steps 1—8 from pages 27—29 to select the site that you wish to submit data on and fill out the header information.
- Record your macroinvertebrate collection methods:
 - Habitat type** will be defaulted to Riffle. Please select the habitat type that best describes where you collected macroinvertebrates.
 - Net type** will be defaulted to kick net. If you did not use a kick net, please select the D-net option.
 - Time spent picking:** please record the time that you and anyone with you spent picking through the net in minutes (2 min to 60 min). Please spend *at least 5 minutes* picking through each net if possible. Do not estimate how many macroinvertebrates you found.

Collection Methods			
Sampling Information	Net Set #1	Net Set #2	Net Set #3
Habitat Type*	Riffle	Riffle	Riffle
Net Type*	Kick Net	Kick Net	Kick Net
Time Spent Picking (Minutes Picking x Number of People)*	Minutes Picking 10 x Number of People 3 = Total Minutes 30	Minutes Picking 9 x Number of People 3 = Total Minutes 27	Minutes Picking 15 x Number of People 3 = Total Minutes 45

- Enter the number of each macroinvertebrate you found in the **sensitive**, **somewhat tolerant**, and **tolerant** organism categories. If you found more than 200 of any organism, please record that number in the comments.
- The **water quality rating** will automatically calculate based on the diversity of macroinvertebrates you found.

Water Quality Rating			
Water Quality Rating:			
25			
Less than 12 = Poor	12 - 17 = Fair	18 - 23 = Good	Greater than 23 = Excellent

- Provide any **comments** that you wish to include with this data sheet.
- Denote if you saw fish present at your site during your monitoring trip.

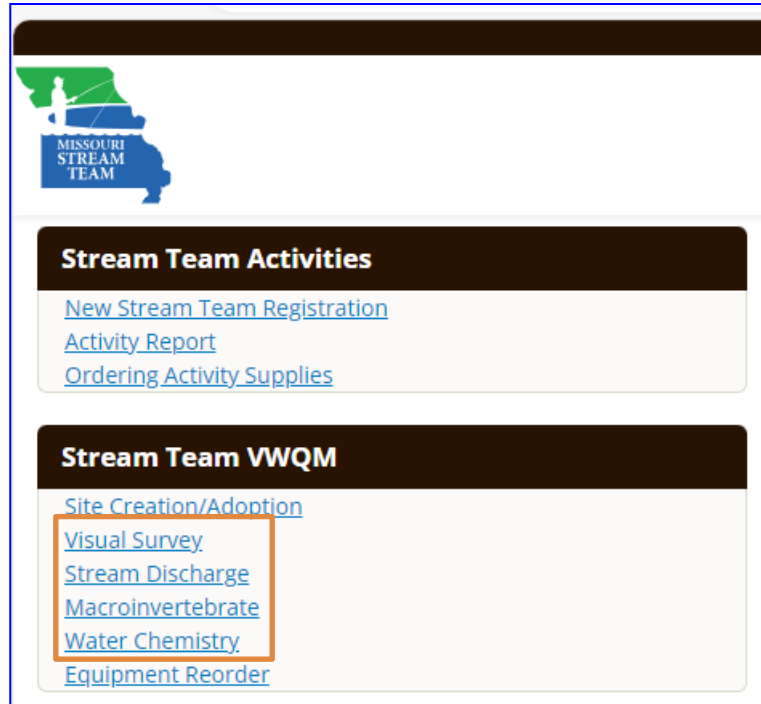
Entering Water Chemistry Data

All the parameters under the water chemistry data section of this data sheet are **optional**. However, you must at least fill out 1 parameter in order to submit the data sheet.

1. Follow steps 1—8 from pages 27—29 to select the site that you wish to submit data on and fill out the header information.
2. **Calibration or expiration dates** must be filled out prior to submission for parameters that require them.
3. **Weather Conditions:** select your cloud cover from the drop down list
4. **NO₃-N Nitrate:** select your value from the drop down list.
5. **Air Temperature:** record your air temperature value (–20 °C to 55 °C).
6. **Water Temperature:** record your water temperature value (–2 °C to 40 °C).
7. **O₂ Dissolved Oxygen:** enter the 4 expiration dates from each reagent, then record your dissolved oxygen value (1mg/L to 20mg/L).
8. **O₂ Dissolved Oxygen Saturation:** this value will be auto-calculated based on the dissolved oxygen and water temperature values.
9. **pH:** when using pH strips, enter the date of your sampling day for the calibration date and the date that your strips expire in the two reagent expiration date fields, then enter your pH value (1 to 14).
10. **Conductivity:** enter the date you calibrated your conductivity meter (within 12 hours of sampling), and then enter your conductivity value (low range meter: 20 µS/cm to 1,990 µS/cm, high range meter: 1,000 µS/cm to 19,990 µS/cm). If you're using a low range meter that displays “- - -” on the screen, select the over range option on the datasheet.
11. **Transparency:** enter your transparency value (0 cm to 60 cm).
12. **Cl⁻ Chloride:** enter the chloride strip expiration date, convert your chloride value from Quantab units to mg/L using the numbers on your chloride strip bottle, then record your chloride value on the online data sheet (20 mg/L to 8000 mg/L).
13. **PO₄ Phosphate:** enter the phosphate reagent expiration date, then enter your phosphate value (0.02 mg/L to 3.00 mg/L).
14. **NH₃-N Ammonia:** enter both reagent expiration dates, then add your ammonia value (0.01 mg/L to 0.80 mg/L). If your value was diluted, be sure to check the dilution check box to record a value greater than 0.80.
15. **Other Parameter:** if you have recorded an additional parameter, you can enter the name, units, calibration and expiration dates, and value of the parameter in this field. Any additional notes about this parameter can be noted in the comments.
16. **Comments:** include any comments from your sampling even there.
17. **Fish Present:** denote if you saw fish present at your site during your monitoring trip.

Review VWQM Data

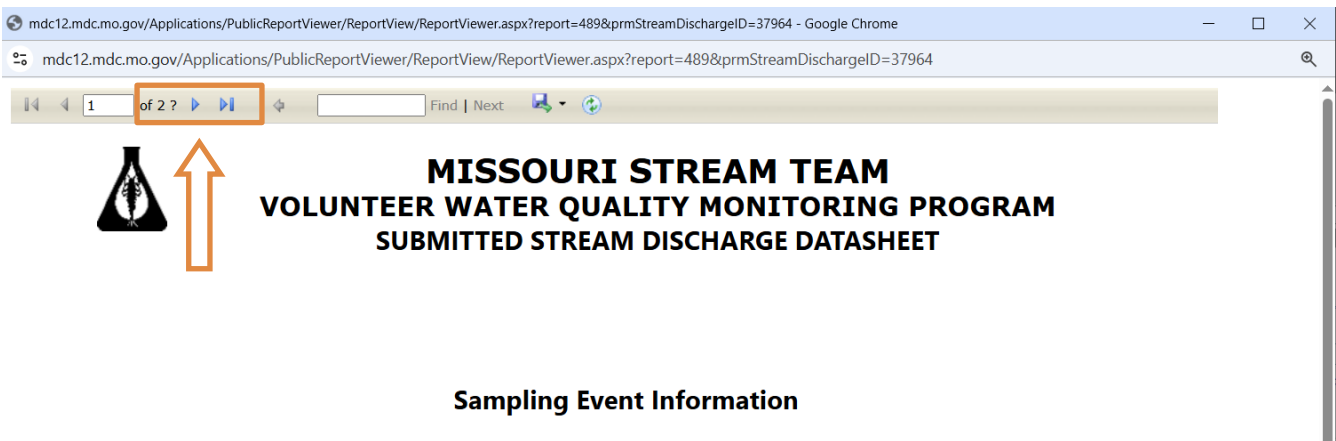
1. Select a **datasheet type** from the main menu options.



2. You will see a list of datasheets that have previously been submitted. Click the **Review** button under the Action column to review a datasheet. **Note:** this is a “pop-up” window that may need to be un-blocked by some browsers.

STREAM DISCHARGE DATA SHEET SUBMISSIONS			
Stream Discharge Data Sheet Submissions			
Add new Stream Discharge Data Sheet			
Show 10 entries		Search: <input type="text"/>	
Stream Discharge ID	Data Submitter	Stream Discharge Date	Action
22756		02/02/2024	Review
22752		02/01/2024	Review
22753		02/01/2024	Review
22754		01/31/2024	Review
3012		04/03/2023	Review
3013		04/03/2023	Review
3014		04/03/2023	Review
3002		03/31/2023	Review
3003		03/31/2023	Review

- Some datasheets are too large to fit on one page, so you may need to select the arrow at the top left-corner of the review page to see more of your data.



Submit Stream Team Project Data

Many Stream Team volunteers are apart of a Stream Team Project that collects and submits VWQM data. When a volunteer is apart of a Stream Team Project, they will have the ability to submit data on each site associated with the Project.

If you are a Project lead, or on the same team as a project, it may be helpful for you to understand how to submit data for your project, and what other volunteers in your project see when they submit sites.

1. **Select a datasheet type** from the main menu options.
2. Once you select a link for a particular data sheet, select **Add new _____ Data Sheet**, based on the data sheet type that you selected.
3. Select **Add new Stream Discharge Data sheet** or whichever datasheet you are going to submit.
4. Next, select a **VWQM site** that you want to enter data on.
5. **Select the site** that you would like to submit data on from the list.
 - The site should be a site that is associated with the Stream Team Project
 - *NOTE: The Volunteer Site Number of a specific site may be different for each volunteer on the Project. This is because each volunteer may have additional sites that they monitor outside of the Project that they're a part of. When communicating with your Team about what sites are being monitored for a specific Project, try to use the unique Site ID or the Site Description (see highlighted columns below) to describe a given location as these will not change for different Projects.*

Site Information									
Search:									
Submitter ID	Submitter Name	Site ID	Volunteer Site Number	Is Tributary	Stream Name	State	County	Site Description	
18368		2922	1	False	Maries River	MO	Osage	Maries River 150 yards US confluence with Osage River	Select
18368		2922	2	False	Maries River	MO	Osage	Maries River 150 yards US confluence with Osage River	Select
18368		1965	3	False	Grand Glaize Creek	MO	St Louis	Grand Glaize Creek 100 yards DS Simpson Park Lake dam and 400 yards US Meramec River	Select

6. Enter the header information as you normally would for that datasheet.
7. Make sure to **select the Stream Team** that is associated with the Project that you're entering data for.

Select VWQM Site

Site #:^{*}

State:

County:

Tributary of:

Stream Name:

1965

MO

St Louis

Grand Glaize Creek

Site Description:

Grand Glaize Creek 100 yards DS Simpson Park Lake dam and 400 yards US Meramec River

Data Submitter (Responsible Volunteer):^{*}

Submitter ID:

Sampling Date:^{*}

Time (Military Time):^{*}

Stream Team:^{*}

Select One ▾

Number of Participants:

Rainfall (Inches in the Last 7 Days):

Water Temp. in Shade (°C):



