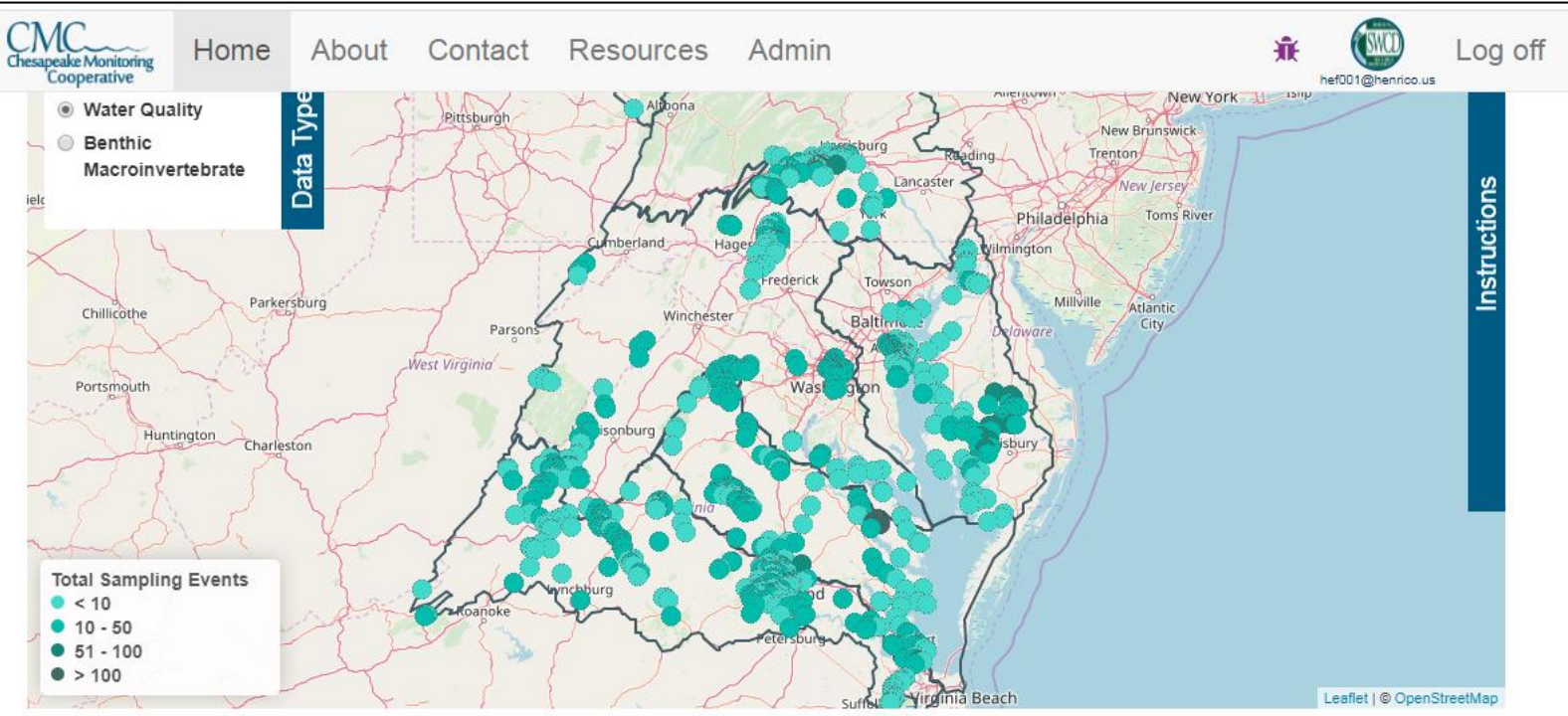










# Registering for HAWQS Team database in the Chesapeake Monitoring Cooperative (CMC)



**Database Statistics**

The summary statistics below provide an overview of the current scope of the Data Explorer.

 <b>186552</b> WATER QUALITY RECORDS	 <b>2395</b> BENTHIC MACROINVERTEBRATE RECORDS	 <b>436</b> RIVERS/STREAMS	 <b>1311</b> STATIONS
 <b>166</b> BENTHIC STATIONS	 <b>479</b> MONITORS	 <b>17941</b> MONITORING HOURS	 <b>97</b> ORGANIZATIONS

Go to: <https://cmc.vims.edu/#/home>

- **Use Chrome**



Google Chrome

# Register at Top Right Corner

**CMC**  
Chesapeake Monitoring  
Cooperative

Home About Contact Resources Register Log in

## Welcome to the Chesapeake Data Explorer!

The Chesapeake Data Explorer is a tool for storing and sharing data collected by a network of water quality and benthic macroinvertebrate monitors working with the Chesapeake Monitoring Cooperative. These data are publicly accessible and are shared directly with the Chesapeake Bay Program and other data users.



Data are identified by method and quality assurance level using the [CMC tiered framework](#) and are owned by the data provider(s) and not the Chesapeake Monitoring Cooperative. Data users are:

- Responsible for [properly citing](#) the original data provider. Contact information for data providers can be found [HERE](#).
- Responsible for using provided data in a manner consistent to the quality assurance of the provided data.

Use the **Map tab** to view Water Quality or Benthic Macroinvertebrate data throughout the watershed. Use the **Query tab** to download data and metadata files.

Map Query

# Fill in Personal Information: Write your email and password down

 [Home](#) [About](#) [Contact](#) [Resources](#)  [Register](#) [Log in](#)

Email\*

Password\*

Confirm password\*

First Name\*

Last Name\*

Cell Phone

Home Phone

Emergency Phone

Address First

Address Second

City

State

Zip

Select Group\*

Profile Image  No file chosen

Email: \_\_\_\_\_  
password: \_\_\_\_\_

# Fill in Personal Information

CMC  
Chesapeake Monitoring  
Cooperative

Home About Contact Resources

Register Log in

Email\*

Password\*

Confirm password\*

First Name\*

Last Name\*

Cell Phone

Home Phone

Emergency Phone

Address First

Address Second

City

State

Zip

Select Group\*

Profile Image  No file chosen

Under Group:  
Select  
“Henrico Area  
Water Quality  
Samplers”

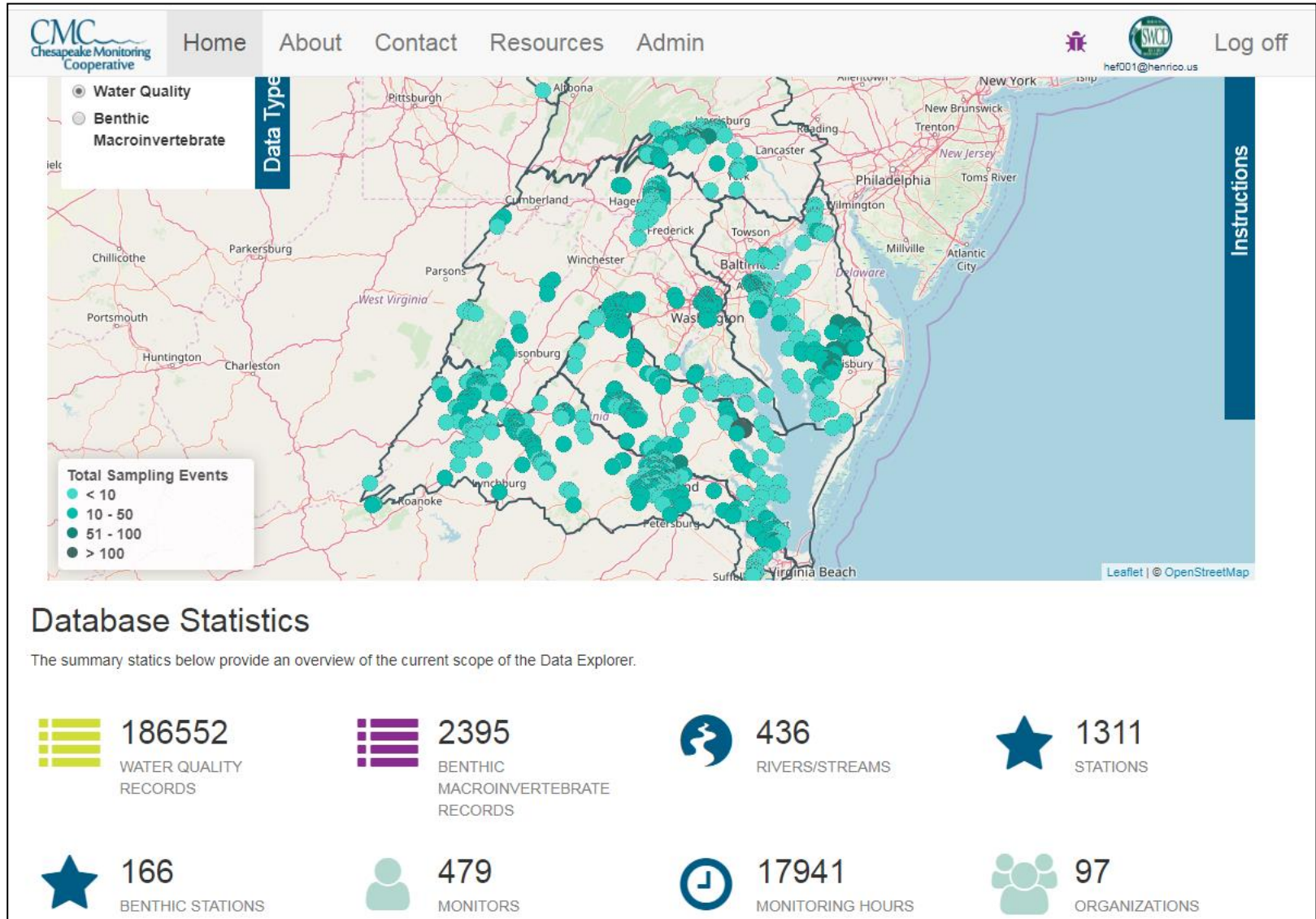
# Click Register and wait for Coordinator to Activate you

Select Group\*

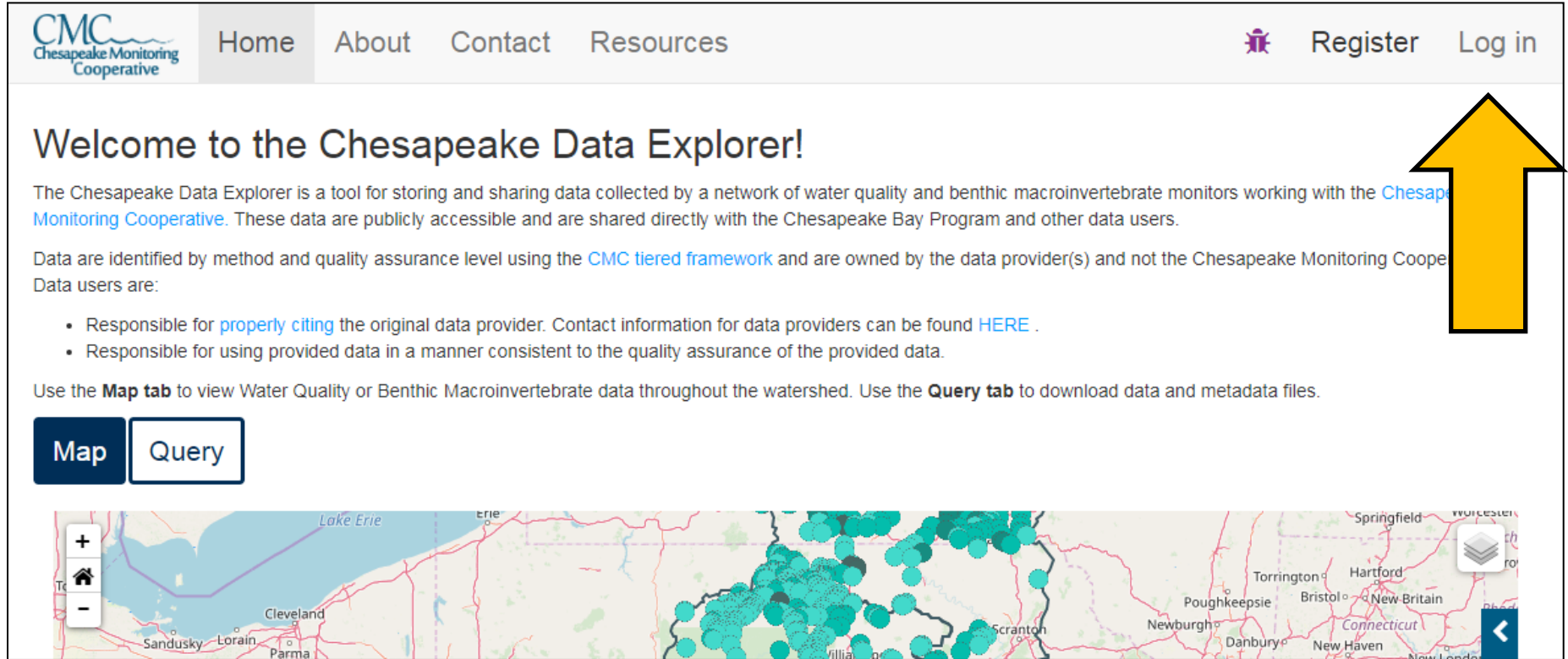
Profile Image  No file chosen



# Using Chesapeake Monitoring Cooperative (CMC) Database for Data Entry



# Login at Top Right Corner



The screenshot shows the top navigation bar of the Chesapeake Monitoring Cooperative website. The logo is on the left, followed by links for Home, About, Contact, and Resources. On the right side of the navigation bar, there are icons for a user profile, 'Register', and 'Log in'. A large yellow arrow points to the 'Log in' link. Below the navigation bar, the main heading reads 'Welcome to the Chesapeake Data Explorer!'. The introductory text explains that the tool is for storing and sharing water quality and benthic macroinvertebrate data. It mentions that data are publicly accessible and shared with the Chesapeake Bay Program. A list of responsibilities for data users is provided, including properly citing the original data provider and using data consistently with the quality assurance level. At the bottom of the page, there are two buttons: 'Map' and 'Query'. Below these buttons is a map showing the Chesapeake Bay watershed area with numerous teal-colored data points plotted. The map includes a zoom control on the left and a layer control on the right.

CMC  
Chesapeake Monitoring  
Cooperative

Home About Contact Resources

Register Log in

## Welcome to the Chesapeake Data Explorer!

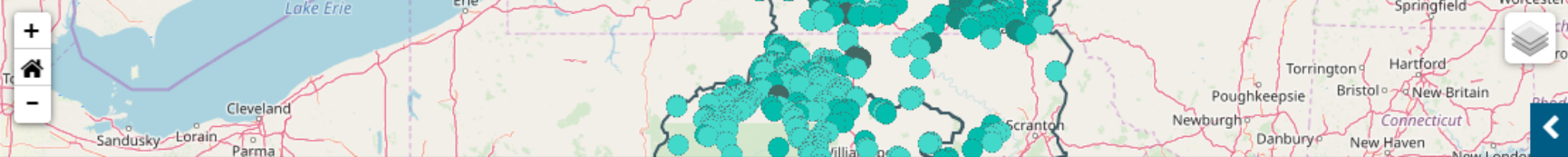
The Chesapeake Data Explorer is a tool for storing and sharing data collected by a network of water quality and benthic macroinvertebrate monitors working with the [Chesapeake Monitoring Cooperative](#). These data are publicly accessible and are shared directly with the Chesapeake Bay Program and other data users.

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- Responsible for using provided data in a manner consistent to the quality assurance of the provided data.

Use the **Map tab** to view Water Quality or Benthic Macroinvertebrate data throughout the watershed. Use the **Query tab** to download data and metadata files.

Map Query





# Uploading Data:

Once logged in, click on **Admin** at Top of page



Home

About

Contact

Resources

Admin



hef001@henrico.us

Log off

## Welcome to the Chesapeake Data Explorer

The Chesapeake Data Explorer is a tool for storing and sharing data collected by a network of water quality and benthic macroinvertebrate monitors working with the [Chesapeake Monitoring Cooperative](#). These data are publicly accessible and are shared directly with the [Chesapeake Bay Program](#) and other data users.

Data are identified by method and quality assurance level using the [CMC tiered framework](#) owned by the data provider(s) and not the Chesapeake Monitoring Cooperative. Data users are:

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Use the **Map tab** to view Water Quality or Benthic Macroinvertebrate data throughout the watershed. Use the **Query tab** to download data and metadata files.

Map

Query

⌄ Map Data Loading...

# Uploading Data:

Click “Upload Data” after clicking on Admin

Chesapeake Monitoring Cooperative

Admin Data Profile Manage Resources

Log off

## Chesapeake Data Explorer

Good Evening, Stacey

Quick Links:

- Upload Data
- Submit Station
- Contact Customer Service Provider

Henrico Area Water Quality Samplers's Activity this month

- 2 NEW USERS
- 80 NEW SAMPLES

Or, click on “Upload Water Quality” under Data Tab and click on  Form button

Chesapeake Monitoring Cooperative

Admin Data Profile Manage Resources

Log off

There are two different methods for uploading data: single sample event data uploads through a data entry form OR multiple sample event uploads by uploading a spreadsheet file. The file for latter method is in the Data Explorer User's Manual.

Choose the type of upload you would like to use:

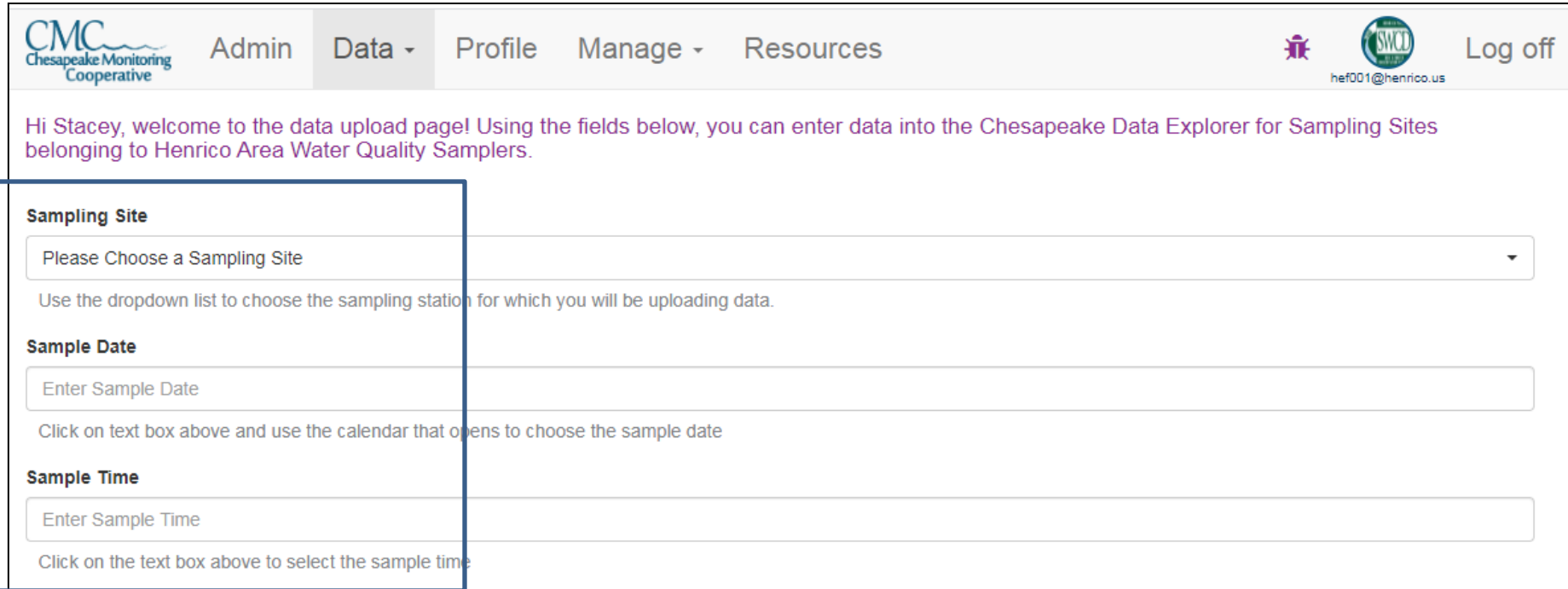
- Form
- Bulk File

Upload Water Quality

- Edit & Review Water Quality
- Upload Macroinvertebrates
- Edit & Review Macroinvertebrates
- Submit Station

# Uploading Data:

## Select your sample site, date and time from your data sheet



The screenshot shows the user interface for uploading data. At the top, there is a navigation bar with the CMC logo (Chesapeake Monitoring Cooperative) on the left and 'Admin', 'Data', 'Profile', 'Manage', and 'Resources' in the center. On the right, there are icons for a user and the Henrico Area Water Quality Samplers (SWCD) logo, along with the text 'Log off' and the email 'hef001@henrico.us'. Below the navigation bar, a purple message reads: 'Hi Stacey, welcome to the data upload page! Using the fields below, you can enter data into the Chesapeake Data Explorer for Sampling Sites belonging to Henrico Area Water Quality Samplers.' The main content area contains three input fields, each with a title and a description: 1. 'Sampling Site' with a dropdown menu and the text 'Please Choose a Sampling Site' and 'Use the dropdown list to choose the sampling station for which you will be uploading data.' 2. 'Sample Date' with a text box and the text 'Enter Sample Date' and 'Click on text box above and use the calendar that opens to choose the sample date'. 3. 'Sample Time' with a text box and the text 'Enter Sample Time' and 'Click on the text box above to select the sample time'. A blue rectangular box highlights the 'Sampling Site', 'Sample Date', and 'Sample Time' sections.

Please Contact the Project Coordinator if you do not know your Site Name

# Uploading Data:

Select **ALL** under Choose Conditions Set tab

Conditions During Sampling

First choose the set of conditions that you would like to include on the form. Next, use the added fields to describe conditions at the sampling location at the time sampling occurred.

Choose Conditions Set

Ca

Us

Ba

ACB

ALLARM

ALL

Bacteria Incubation Time (hours)

Enter Bacteria Incubation Time (hours)

Please fill out the fields shown below with the corresponding data from your datasheet unless otherwise noted to take additional observations. **Leave any unused fields blank.**

# Conditions During Sampling

## Conditions During Sampling

First choose the set of conditions that you would like to include on the form. Next, use the added fields to describe conditions at the sampling location at the time sampling occurred.

ALL

### Water Surfaces

Choose a water surface condition

### Stream Flow

Choose stream flow condition

### Weather Conditions Today

Choose weather conditions Today

### Weather Conditions Yesterday

Choose weather condition Yesterday

### Weather Conditions Day Before Yesterday

Choose weather conditions the day before yesterd

### Tidal Stage

Choose a tidal stage

### Sea State

Choose a sea state

### Wind Direction

Choose a wind direction

### Wind Speed

Choose a wind speed

### Cloud Cover

Choose cloud cover conditions

### Other Conditions

Choose other conditions

### Water Color

Choose a water color

### Water Color Description

Enter Water Color Description

(ex. "Clear, Brown, Green, etc")

### Rainfall

Enter Rainfall

(Total in mm the week prior to sampling; ex. 2.3)

### Rainfall Within 24 Hours

Enter Rainfall Within 24 Hours

(Total in mm 24 hours prior to sampling; ex. 1.2)

### Rainfall Within 48 Hours

Enter Rainfall Within 48 Hours

(Total in mm 48 hours prior to sampling; ex. 1.2)

### Water Odor

Choose Water Odor

### Water Odor Description

Enter Water Odor Description

### Other Comments

Enter Other Comments

Use the drop down menu to match the conditions from the data sheet

# Collect Rainfall Data from Wunderground:

<https://www.wunderground.com/>

## Conditions During Sampling

First choose the set of conditions that you would like to include on the form. Next, use the added fields to describe conditions at the sampling location at the time sampling occurred.

ALL

### Water Surfaces

Choose a water surface condition

### Stream Flow

Choose stream flow condition

### Weather Conditions Today

Choose weather conditions Today

### Weather Conditions Yesterday

Choose weather condition Yesterday

### Weather Conditions Day Before Yesterday

Choose weather conditions the day before yesterd

### Tidal Stage

Choose a tidal stage

### Sea State

Choose a sea state

### Wind Direction

Choose a wind direction

### Wind Speed

Choose a wind speed

### Cloud Cover

Choose cloud cover conditions

### Other Conditions

Choose other conditions

### Water Color

Choose a water color

### Water Color Description

Enter Water Color Description

(ex. "Clear, Brown, Green, etc")

### Rainfall

Enter Rainfall

(Total in mm the week prior to sampling; ex. 2.3)

### Rainfall Within 24 Hours

Enter Rainfall Within 24 Hours

(Total in mm 24 hours prior to sampling; ex. 1.2)

### Rainfall Within 48 Hours

Enter Rainfall Within 48 Hours

(Total in mm 48 hours prior to sampling; ex. 1.2)

### Water Odor

Choose Water Odor

### Water Odor Description

Enter Water Odor Description

### Other Comments

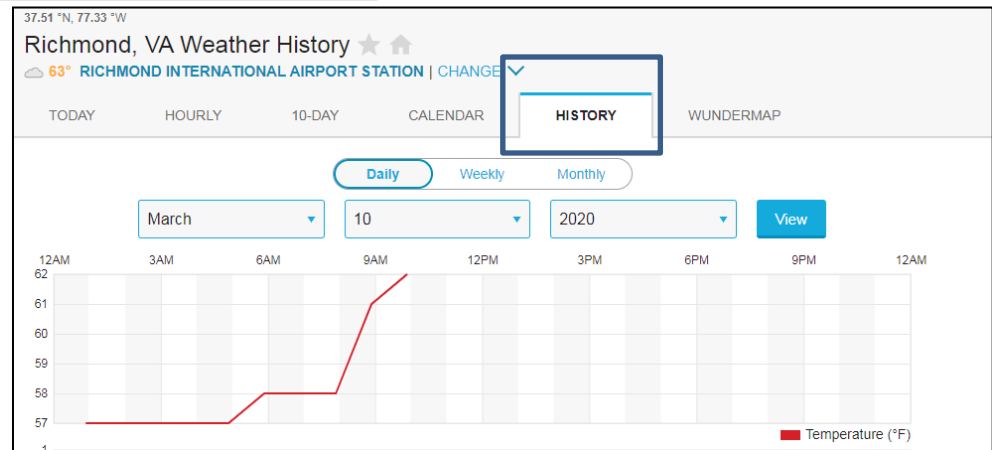
Enter Other Comments

# Rainfall Data from Wunderground



1. Search site zip code

2. Click on history tab
3. Select past weekly and daily events



4. Scroll down to Summary and Precipitation Actual
5. Record Weekly, rainfall within 24 and 48 hours

Make sure to convert from in. to mm. by multiplying numbers by 25.4 before entering in CMC

Summary			
Temperature (° F)	Actual	Historic Avg.	Record
High Temp	52	64	82
Low Temp	30	42	20
Day Average Temp	40.84	53	-
<b>Precipitation (Inches)</b>	<b>Actual</b>	Historic Avg.	Record
Precipitation (past 24 hours from 11:54:00)	0.04	0.11	-
Dew Point (° F)	Actual	Historic Avg.	Record

# Make sure to record Calibration of Incubator and Total Incubation Time

**Calibration**

Use the fields in this section to input calibration information.

**Bacteria Incubation Temperature (deg C)**

**Bacteria Incubation Time (hours)**




• Bacteria Incubation Temperature (deg C): enter your Coliscan incubation temperature in degrees C to the nearest half of a degree. **\*\*Incubator is in degrees Fahrenheit so please convert to Celsius\*\***

• Bacteria Incubation Time (hours): enter your coliscan incubation time in hours to the nearest hour.



# Data Entry

Enter data for your field data collected during that sampling event. Leave fields blank if data was not collected due to instrument failure or poor sampling conditions. You also may not be entering data for each field shown on the database, leave any parameters that you don't sample blank.

- If extra sample was taken or a bacteria split sample was recorded, use the  sign to add in the result
- If a problem occurred, click the  sign and indicate the issue
- If the result is higher or less than the reading, click the  sign and add the Qualifier

## Air Temperature (deg C)



- Air Temperature (deg C): enter the Air Temperature data to the nearest half of a degree

## Bacteria (E.coli) (CFU)



- Bacteria Sample (CFU/100ml): Add Results from your data sheet
- Round up to nearest number (Ex: instead of reporting 33.33, report as 34)
- If 0 E. coli are reported, report data as <34. If more than 2419 CFU is present, report as >2419

## Nitrite (ppb)



- Nitrite and Orthophosphate: add your results generated from the Hanna Checkers.

## Orthophosphate (ppm)



## Turbidity Tube (cm)



Note: If reading is greater than the value entered choose the > symbol from the qualifier code field.

Turbidity Tube (cm): enter the value to the nearest tenth of a cm. \*\*if the value is greater than recorded on your datasheet, click the box that says "if needed, select a qualified code" and select the > symbol on the database.\*\*

## Water temperature (deg C)



- Water Temperature (deg C): Enter Water Temperature data to the nearest half of a degree

# Volunteer Hours

**Volunteer Hours**

Choose Monitor ▼	Enter Monitoring Hours for selected User
Choose Monitor ▼	Enter Monitoring Hours for selected User
Choose Monitor ▼	Enter Monitoring Hours for selected User

- Volunteer Hours: select your name from the drop down list of monitors and record the hours spent monitoring. If you have additional monitors on your team, select their names and record the hours spent monitoring. **You will only be able to select monitors that have an account with the system and are associated with your group.**

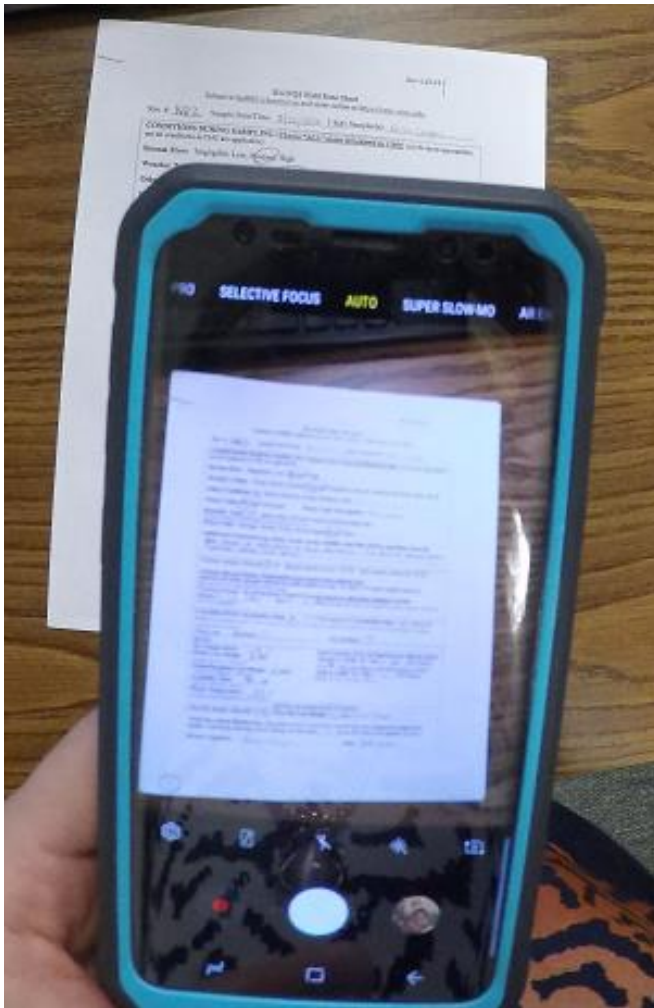
# Volunteer Hours

## Tasks that go towards volunteer hours:

- Monitoring procedures at home
- Driving to and from site
- Reporting Data on CMC
- Monitoring tests at site
- Cleaning up after incubation
- Meeting for equipment resupply and training/certification

# Remember to Email Data Sheet

- Scan or take a picture of data sheet and email to Coordinator within a week of monitoring
- Email data sheet with Date & Site Name
- Example: 3.14.20 JB1
- Send Coliscan plate for colony identification verification
- Send any other relevant photos of site or pictures of yourself monitoring to post on social media page



**Data must be submitted and uploaded, otherwise, it won't be reported**

