

MT VWWM 2011

Montana Volunteer Water Monitoring Project

Montana Volunteer Monitoring Database

Created in Partnership Among

*Environmental Protection Agency
Montana Department of Environmental Quality
Montana Department of Natural Resources and Conservation
Montana Water Center
Montana State University Water Quality Extension and
Montana Watercourse*

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Getting Started

Access the “Montana Volunteer Water Monitoring Database”

- Google “Montana Volunteer Water Monitoring Database,” OR
- Type “<http://mtwatercourse.org/vwm/>” into your browser, OR
- Go to “mtwatercourse.org” choose the “water monitoring tab” click “here” next to the interactive water monitoring database

Create a New Monitoring Project OR Join an existing monitoring project

- On the left-hand side of the page, click on “click here” next to “want to join?”

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Montana Volunteer Water Monitoring Project

HELP LIBRARY HOME

SEARCH BROWSE SUBMIT



Welcome to the new Montana Volunteer Monitoring Project!

The Montana Volunteer Water Monitoring Project employs a non-advocacy approach in teaching water quality and water monitoring procedures, focusing on providing citizens with tools and training so that they may make informed decisions regarding local water quality issues.

The information gathered by participants is for educational purposes and to increase awareness and enhance stewardship of Montana’s water resources. Additionally, it is a starting point for individuals to gather baseline information about their streams and rivers. Participants have the option of sending their data via the Internet to this site. The information contained in this database is public information and available to anyone. If your information does not meet the level of rigor required in either its collection or recording, please refrain from entering it into this database.

Members

You are not logged in.
Already a member? [Login here.](#)
Want to join? [Click here.](#)

Find Data

Select a station on the map to find data collected. Select BROWSE or SEARCH for more options.

- [BROWSE](#)
- [SEARCH](#)

Submit Data

Registered members may submit monitoring data. Choose the basic or advanced submission path to submit your data. Which path should you follow? [Find out here.](#)

- [Basic](#)
- [Advanced](#)

Library

The library options will be coming soon.



Map Satellite Hybrid

Imagery ©2011 TerraMetrics, Map data ©2011 Europa Technologies, Google, Terms of Use

[Refresh this map if any new stations you've recently added are not showing.](#)

Create a new monitoring project

Registration
You are not logged in.
Already a member? [Login here.](#)
Want to join? [Click here.](#)

Thank you for your interest in the Montana Volunteer Water Monitoring Project!
If you'd like to become a member and submit your water quality data you have two options.

1. Join an existing monitoring project.
Here's a list of monitoring projects currently in our system. If you'd like more information about collecting monitoring data for any of these projects please **SELECT** a project. You'll want to contact the project administrator for specifics about that project.

- **Liza** [[SELECT](#)]
- **Test Project** [[SELECT](#)]
- **Greater Gallatin Watershed Council** [[SELECT](#)]
- **Careless Creek** [[SELECT](#)]
- **Shields Volunteer Monitoring** [[SELECT](#)]
- **Test Project Two** [[SELECT](#)]
- **Elk Creek SVEC** [[SELECT](#)]
- **Glacier Creek Water Quality Monitoring** [[SELECT](#)]
- **Swan River Water Quality Monitoring** [[SELECT](#)]
- **Watershed Education Network** [[SELECT](#)]
- **Upper Gallatin Watershed** [[SELECT](#)]

2. Create a new monitoring project.
If you'd like to set up a new project, please contact the VWM project administrator.
[Email Admin](#)

If you're already a member, [login here.](#)

© 2010 Montana Watercourse | Updated: June 7, 2010 | © 2010 Montana Water Center
Email | Admin

- At the bottom of the page, click on “email admin.”
- Your email should open a blank email to “nehasil@montana.edu” If not, send an email to “nehasil@montana.edu.”
- In the subject line write “MTVWM access,” and include your name and contact information in the body of the email.
- You should receive a return email within 3-5 business days with your username and password. Follow the directions in the email to create your new monitoring project.

Join an existing monitoring project

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Montana Volunteer Water Monitoring Project

HELP LIBRARY HOME
SEARCH BROWSE SUBMIT

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- [Libra](#) [SELECT]
- [Test Project](#) [SELECT]
- [Greater Gallatin Watershed Council](#) [SELECT]
- [Careless Creek](#) [SELECT]
- [Shields Volunteer Monitoring](#) [SELECT]
- [Test Project Two](#) [SELECT]
- [Elk Creek SVEC](#) [SELECT]
- [Glacier Creek Water Quality Monitoring](#) [SELECT]
- [Swan River Water Quality Monitoring](#) [SELECT]
- [Watershed Education Network](#) [SELECT]
- [Upper Gallatin Watershed](#) [SELECT]

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[Email Admin](#)

If you're already a member, [login here.](#)

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Email | Admin

- Click on “select” next to the project you would like to join.

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SEARCH BROWSE SUBMIT

Registration
You are not logged in.
Already a member? [Login here.](#)
Want to join? [Click here.](#)

Project Details
Here is a summary of this project. If you are interested in participating in this project, or would just like more information, please contact the project administrator listed below.

Project ID:	ELKCRMG
Project Name:	Elk Creek SVEC
Start Date:	10.06/2003
Duration:	Continuing
Purpose/Mission:	
Project Admin:	Debra Earl (debearl) debra.earl@montana.edu

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Email | Admin

- Click on the email address of the project administrator
- Your email should open a blank email to the project administrator.
- In the subject line write “MTVWM access,” and include your name and contact information in the body of the email.
- You should receive a return email within 3-5 business days with access information. Follow the directions in the email to access your site.

Entering Data

Basic Data Entry

- This database works best with a **Firefox** browser

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Members
You are not logged in.
Already a member? [Login here.](#)
Want to join? [Click here.](#)

Find Data
Select a station on the map to find data collected. Select BROWSE or SEARCH for more options.

- BROWSE
- SEARCH

Submit Data
Registered members may submit monitoring data. Choose the basic or advanced submission path to submit your data. Which path should you follow? [Find out here.](#)

- Basic
- Advanced

Library
The library options will be coming soon.

Map Satellite Hybrid

Refresh this map if any new stations you've recently added are not showing.

- Under “Submit Data” Click “Basic”

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Montana Volunteer Water Monitoring Project

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SEARCH BROWSE SUBMIT

Member Login
You are not logged in.
Already a member? [Login here.](#)
Want to join? [Click here.](#)

You are now logged out.

Username:

Password:

Keep me logged in on this computer

Forgot your password? [CLICK HERE!](#) | Want to be a member? [CLICK HERE!](#)

- Log in by entering Username: [provided by admin] Password: [provided by admin] and click the “login” box

Submit Data

You are logged in as **Mussel_WC**.
[Mussel_WC's Profile](#) | [Logout](#)

For information about training opportunities contact the Montana Watercourse.

Email: mwatercourse@montana.edu
 Phone: (406) 994-6671

[Training Opportunities \[1.2 mb PDF\]](#)

Any registered member can submit monitoring data to the VWM database. Read the instructions below to determine which type of data you have and which path you should take.

BASIC DATA

Choose the "Basic Data" path if you have gone through a [Level I](#) or [Level II](#) training from Montana Watercourse or no training. Data collection sheets are provided in the Montana Watercourse VWM Guidebook. You will manually enter your data using web-based forms.

How do I submit my BASIC data? Follow these [4 STEPS!](#)

ADVANCED DATA

Choose the "Advance Data" path if you have gone through a [Level III](#) training to become a Certified Volunteer Monitor or are otherwise proficient in collecting water quality samples. Advanced data is submitted using excel spreadsheets. You will upload these spreadsheets directly to the database.

How do I submit my ADVANCED data? Follow these [4 STEPS!](#)

- Click "BASIC DATA" to begin entering data

SUBMIT DATA

BASIC

You are logged in as **Mussel_WC**.
[Mussel_WC's Profile](#) | [Logout](#)

Data Collection Forms

Project Data
[Blank Form \[80 kb PDF\]](#)
[Sample Form](#)

Station Data
[Blank Form \[138 kb PDF\]](#)
[Sample Form](#)

Water Quality Data
[Blank Form \[88 kb PDF\]](#)
[Sample Form](#)

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1 Step 1 is complete and you are a member!

Get ready to enter your basic data by following [steps 2 and 3](#).

2 Step 2: Choose or create a project

Begin by choosing or creating a project. Browse the list under the Choose Project box below to see if your project is already in the database. If your project is not in the database you will first need to create a new project. Email the [project administrator](#) to create a new project. Be prepared to provide all of the information on your [Project Information Sheet \(Appendix H\)](#).

Note: You may not see a particular project listed because you do not have permission to submit data for it. If that is the case, please email the [project administrator](#) and ask to be added to the project.

Choose Project

MWC-Sal

[VIEW more info about each project.](#)

3 Step 3: Choose or create a station

Next choose or create a station. Browse the list in the Choose Station box below to see if your station is already in the database. If your station is not in the database you will first need to create a new station by submitting the station data you collected on your [Site Information & Summary Data Sheet \(Appendix K\)](#).

Choose Station

BWBSGRBUCK

[VIEW more info about each station.](#)

Create New Station

[CLICK HERE](#)
to set-up your new station.

4 Step 4: Submit Monitoring Data

Click the submit button below to begin entering the data you collected on your [Site Water Quality Data Sheet \(Appendix K\)](#).

- Step 2: Choose your project from the drop down box
- Step 3: Choose your station from the drop down box OR choose "CLICK HERE" to create a new station
- Step 4: Click the "submit" key

Submit Data

BASIC

You are logged in as **Mussel_WC**.
[Mussel_WC's Profile](#) | [Logout](#)

Current Data

ProjectID: MWC-Sal
StationID: Test Site

Data Collection Forms

Project Data

[Blank Form](#) [80 kb PDF]
[Sample Form](#)

Station Data

[Blank Form](#) [138 kb PDF]
[Sample Form](#)

Water Quality Data

[Blank Form](#) [88 kb PDF]
[Sample Form](#)

Now you have to enter the date and time for the data you collected. There is a unique date and and time for each row of data on the [collection form](#).

Date:	<input type="text" value="4/11/2011"/>	<input type="button" value="..."/>
Time:	<input type="text" value="13:00"/>	<input type="button" value="..."/>
Time Zone:	MDT ▾	
Comments:	<input type="text" value="test site"/>	

- Enter the “Date” M/DD/YYYY,
- Enter the “Time” (in military time) the sample was taken
- Enter the “Time Zone” **MDT** = Winter months (daylight savings)
MST= Summer months (standard time)
- Enter any “Comments” about the sample
- Click “Submit”

Submit Data
 BASIC
 You are logged in as **asigler**.
[asigler's Profile](#) | [Logout](#) | [Admin](#)

Current Data
ProjectID: TEST01
StationID: Test Site
Date: 4/11/2011
Time: 13:00 MDT
Comments:
 test site for instructions

Data Collection Forms
Project Data
[Blank Form](#) [80 kb PDF]
[Sample Form](#)
Station Data
[Blank Form](#) [138 kb PDF]
[Sample Form](#)
Water Quality Data
[Blank Form](#) [88 kb PDF]
[Sample Form](#)

Enter data values as they are recorded on your Data Collection form. Look at this sample [Field Results Data](#) sheet for more details.
 If you have data to submit for parameters that are not listed on this page click the "Submit Additional Data" button.

SUBMIT ADDITIONAL DATA

Click for a definition and typical values for this parameter.
 Click for units conversion info.
 Click for a definition and description of this sampling method.

PARAMETER	VALUE	METHOD
Air Temp (deg C)	<input type="text"/>	UNKNOWN
Water Temp (deg C)	<input type="text"/>	UNKNOWN
Specific Cond (µS/cm)	1200	PROBE
pH (none)	<input type="text"/>	UNKNOWN
Alkalinity (mg/L)	<input type="text"/>	UNKNOWN
Dissolved Oxygen Concentration (mg/L)	<input type="text"/>	UNKNOWN
Dissolved Oxygen Saturation (%)	<input type="text"/>	UNKNOWN
Turbidity (NTU)	<input type="text"/>	UNKNOWN
Nitrate (mg/L)	<input type="text"/>	UNKNOWN
Phosphate (mg/L)	<input type="text"/>	UNKNOWN
Flow (cfs)	<input type="text"/>	UNKNOWN

Submit

- Enter the “VALUE” and “METHOD for each “PARAMETER.”
- For example, for “specific cond (uS/cm): Enter the specific conductivity (EC value from your datasheet). In the “Method” drop down box, choose “PROBE.”
 ** Remember to convert mS/cm to µS/cm by multiplying the mS/cm value by 1000 **
- Click “Submit”

The data was edited/deleted successfully!
 Click EDIT or DELETE to change or delete more data.
 To submit more data for **TEST01** at **Test Site** on **4/11/2011 at 13:00**, [click here](#).
 To submit data for a different project, station, date, or time, [click here](#).

Date/Time	Parameter	Result Value	Result Units	Method	
4/11/2011 1:00:00 PM MDT	Specific conductance	1200	µS/cm	PROBE	EDIT DELETE

- Your data has been submitted successfully! Take a moment to review the entry and make sure it is correct. At this page you can “Edit” your entry if you made a mistake or “Delete” the entry if you need to start over.
- To enter data from a different day or for a different site, click “click here.” This will bring you back to the “submit data” process on page 6 of this document.

Create a New Station

SUBMIT DATA

BASIC

You are logged in as **Mussel_WC**.
[Mussel_WC's Profile](#) | [Logout](#)

Data Collection Forms

Project Data
[Blank Form](#) [89 kb PDF]
[Sample Form](#)

Station Data
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[Sample Form](#)

Water Quality Data
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Choose Project

MWC-Sal ▾

[VIEW more info about each project.](#)

3 Step 3: Choose or create a station

Next choose or create a station. Browse the list in the Choose Station box below to see if your station is already in the database. If your station is not in the database you will first need to create a new station by submitting the station data you collected on your [Site Information & Summary Data Sheet \(Appendix K\)](#).

Choose Station

BWBSGRBUCK ▾

[VIEW more info about each station.](#)

Create New Station

CLICK HERE
to set-up your new station.

4 Step 4: Submit Monitoring Data

Click the submit button below to begin entering the data you collected on your [Site Water Quality Data Sheet \(Appendix K\)](#).

- Step 3: choose “CLICK HERE” to create a new station
- Follow the step-by-step instructions to create a new station

Viewing Data

MTVWM2011
Montana Volunteer Water Monitoring Project

HELP LIBRARY HOME

SEARCH **BROWSE** SUBMIT

Welcome to the new Montana Volunteer Monitoring Project!

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- [SEARCH](#)

Submit Data
Registered members may submit monitoring data. Choose the basic or advanced submission path to submit your data. Which path should you follow? [Find out here.](#)

- [Basic](#)
- [Advanced](#)

Library
The library options will be coming soon.

Map Satellite Hybrid

Refresh this map if any new stations you've recently added are not showing.

- On the homepage, click “Browse” in the upper right hand corner

Browse Data
Stuff about browsing data here -- and exporting Excel files.

Here are links to all of the raw data in the database. I'll put export links on all of them in a little while.

Browse Data

[Projects](#)
Description of what a project is goes here.

[Stations](#)
Description of what a station is goes here.

[Field Results](#)
Description of what field results are goes here.

[Lab Results](#)
Description of what lab results are goes here.

[Habitat Data](#)
Description of what habitat data is goes here.

- You can browse by Project Name, Station, or Field Results
- For Example: Search by “Station.” This will bring up a list of every station in the database. They are listed in alphabetical order. Choose the desired site.

Here's a list of all stations in the database.

Records 1 to 10 of 55

Station ID	Station Name	Description	Lat/Long	HUC Code
BWBSGRBUCK	Gallatin near Buck Ridge access rd	Near Buck Creek Ridge Service rd.	45.21293 /-111.24732	10020008
BWBSGRDN	Gallatin north of Lone Peak Trail Rd.	Gallatin just north of stop light at Big Sky Spur Rd	45.2665 /-111.25211	10020008
BWBSGRDN2	Gallatin north of Big Sky south of Jack Smith Bridge	Down fishing access "road"	45.27797 /-111.22908	10020008
BWBSGRDUD	Dudley Creek confluence with Gallatin	West side of Highway 191 near trailhead	45.2724 /-111.24189	10010001
BWBSGRELK	South Fork of the West Fork of the Gallatin	West of West Fork Bridge on north side of road	45.2667 /-111.28019	10020008
BWBSGRLMR	North Fork of the West Fork of the Gallatin	At bridge at entrance of Lone Mountain Ranch	45.26906 /-111.32055	10020008

- This page displays the site information, an aerial image, and all of the data points that have been entered. You can view the data in the table provided or you can graph the data.

Station Information

Something about graphing here and the choices.

[List Stations](#)

[Back to Map](#)

Test Site

Test Site

River/Stream
NA
016 |NAD83
NA
NA
This site is for testing data entry
Latitude:48.99565
Longitude:-109.61691

Here is all of the data collected for this station.

Graph Data

One parameter
Bar | Line

Two parameters
Bar | Line

Two stations
Bar | Line

Project ID	Start Date	Characteristic	Result Value	Units
TEST01	1/1/2010	Dissolved oxygen saturation (%)	100	%
TEST01	1/1/2010	Dissolved oxygen concentration (mg/L)	14	mg/L
TEST01	9/23/2010	Dissolved oxygen saturation (%)	100	%
TEST01	9/23/2010	Dissolved oxygen concentration (mg/L)	10	mg/L
TEST01	9/23/2010	pH	7	ft
TEST01	9/23/2010	Temperature, water	20	deg C
TEST01	9/23/2010	Temperature, air	20	deg C
TEST01	4/3/2011	Specific conductance	1000	µS/cm
TEST01	4/4/2011	Specific conductance	2000	µS/cm
TEST01	4/5/2011	Specific conductance	2005	µS/cm
TEST01	4/11/2011	Specific conductance	1200	µS/cm

Graphing Options



- For Example: To graph the data choose “Bar” under “One parameter.”
- You can choose data to compare one site on different days (one parameter or two parameters), or two sites on the same day (two stations)

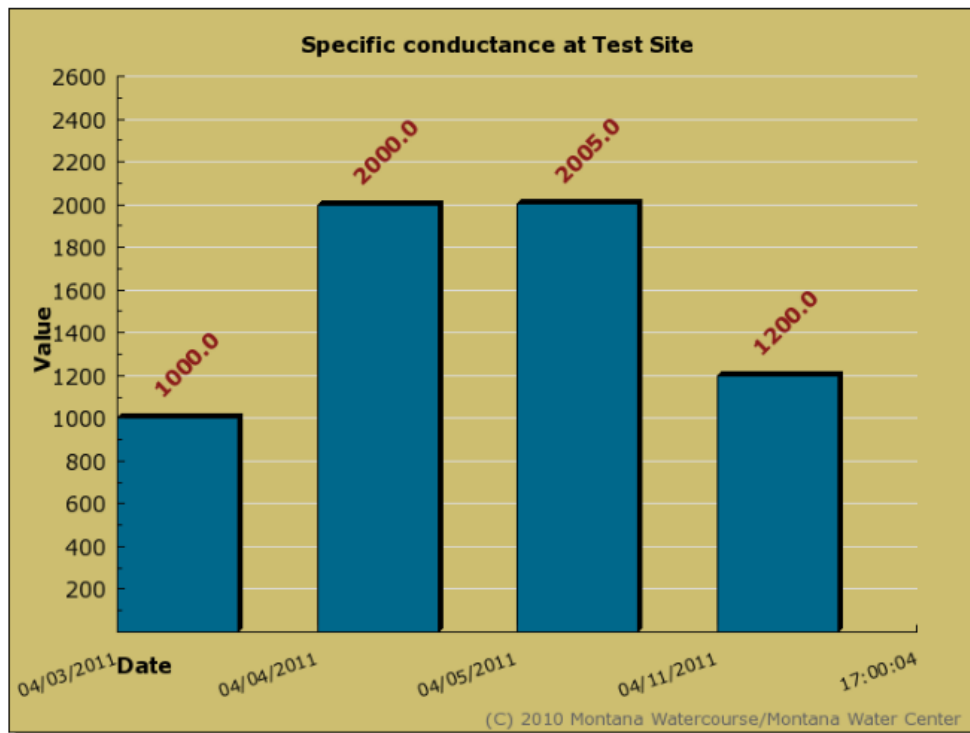
Graph Data
Something about graphing here and the choices.

Choose a parameter and select a start and end date to graph the resulting data for the station, Test Site.

Station ID:	Test Site
Start Date:	2010-03-01
End Date:	2011-04-12
Parameter:	Specific conductance

Submit

- Enter the date range you are interested in and choose a parameter



- This will display your data in a graph (bar graph shown here)