

Ohio EPA Division of Surface Water

Credible Data Online Application User's Guide – September 2016

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Revision History

History	Effective Date
<p>Ohio EPA Credible Data Online Application User’s Guide, version 2.0</p> <p>Table of Contents: Updated to Include Revision History</p> <p>Internet Explorer: Removed information about obsolete versions</p> <p>The QHEI sections was revised to emphasize that a pdf of site maps should be submitted with each score.</p> <p>Removed HHEI discussion from manual due to lack of data received and current lack of rules and regulatory structure to support it.</p> <p>Quality Control Samples: Update of Field QC sample assessment and paired parameter assessment techniques. This approach is more in line with the current DSW approach.</p> <p>Changed footer format to fit current DSW formatting standard??</p> <p>Other miscellaneous typographical changes and clarifications</p>	<p>September 26, 2016</p>
<p>Previous Version</p>	<p>April 4, 2011</p>

Introduction

The Credible Data Law (enacted 2003) required Ohio EPA to “establish and maintain a computerized database,” “make the data available to other agencies and all interested persons...,” and store the data “in such as manner that they are easily retrieved and available for sharing with other agencies and all other interested persons.” The resulting system was designed to accept (and make available to anyone interested) water quality

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data collected by Credible Data Qualified Data Collectors (QDCs) and state agencies that are subject to the Credible Data rules.

The Credible Data Online Application (CDOA) is now accessible online through Ohio EPA's eBusiness gateway (<https://ebiz.epa.ohio.gov/loginAction.li>). Data must be submitted via this system to be officially accepted as credible data, with the exception of Level 3 biological data. All Level 3 fish and macroinvertebrate data must be submitted using paper data sheets in accordance with the data reporting requirements, including certification statements, in the Credible Data rules (OAC 3745-4-04 through -06). Anyone can access the online data in this system simply by obtaining a User ID and an account from the eBusiness gateway.

The only data that QDCs can enter into the system is data from approved Project Study Plans (PSPs). Before you can enter data into the CDOA, you must have had project rights delegated to you (see the section below on “Delegating Project and Data Entry Rights”).

Internet Explorer – Versions and Settings

If you do not have Internet Explorer, it is available as a free download. Our contractor built the database with the I.E. browser in mind, so it is not likely to work with other browsers.

Creating User Accounts

Each user will have a unique User ID and password. This includes [lead QDCs](#) and others that will assist them with their data entry. Those submitting Level 2 or Level 3 data to the system (e.g., lead QDCs) will also have to get a [Personal Identification Number](#) (PIN) prior to data submittal, which will allow data submittal under an electronic signature - but a PIN is not needed until all of the data for that project is entered.

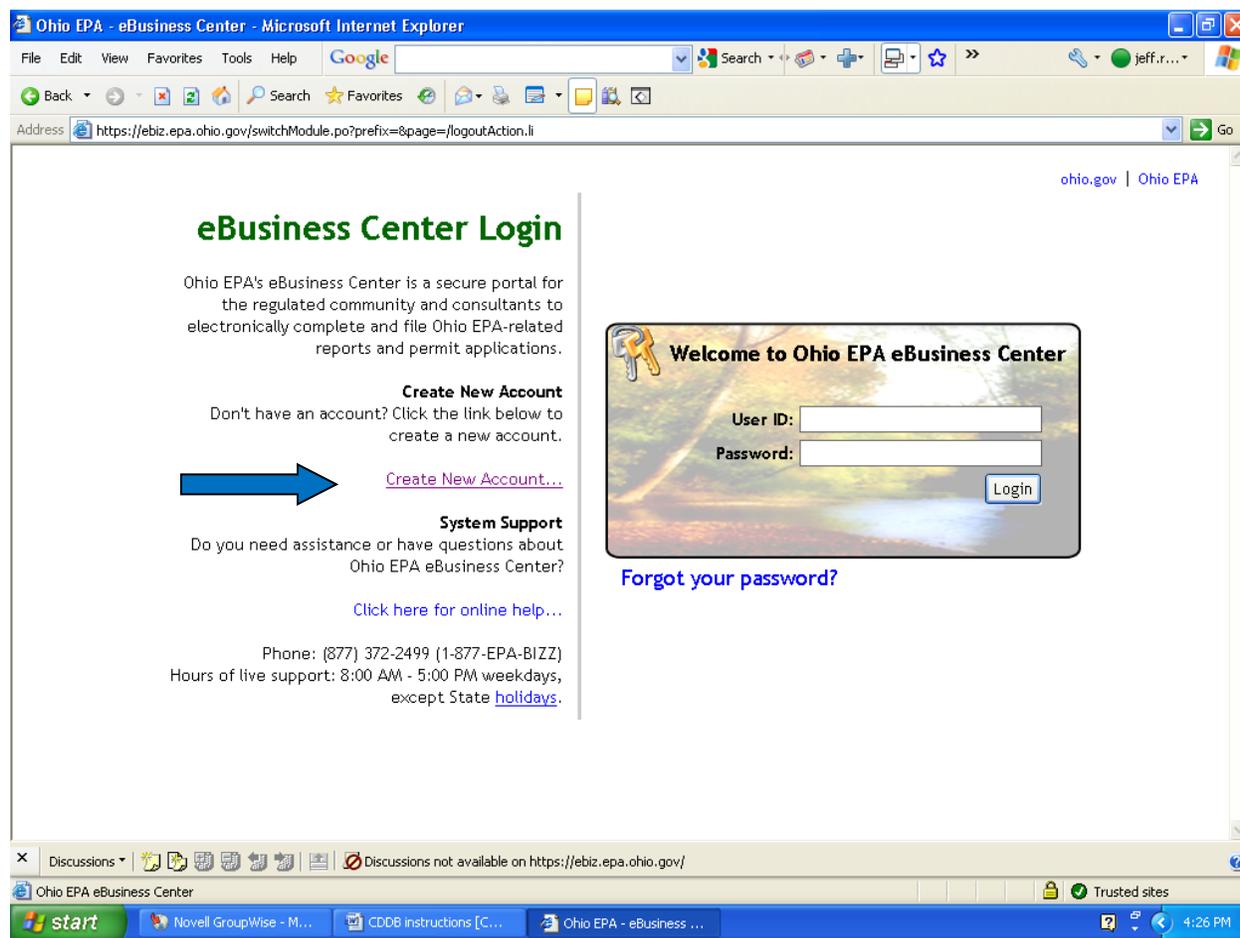
In order to obtain a PIN, you must make an official request to Ohio EPA. Please follow the required steps listed in the following link:

http://www.epa.ohio.gov/Portals/28/documents/opcert/RequestPIN_eBiz.pdf

You will need to use Internet Explorer and should set your browser to “always allow pop-ups for this site.” The preferred choice is to make this setting prior to starting but if you forget, then when you try to locate a site on the map, the map will try to “pop-up”. At this point you typically will get a yellow bar across the top of your screen that says something about pop-ups. If you right click on that bar, you can allow pop-ups using that feature. However, you may have to re-enter a bit of site information if you do it this way.

Note: terms in [green](#) are defined at the end of this User's Guide.

Click on "Create New Account" at the eBusiness gateway (<https://ebiz.epa.ohio.gov/loginAction.li>) to begin the process.



Delegating Project and Data Entry Rights

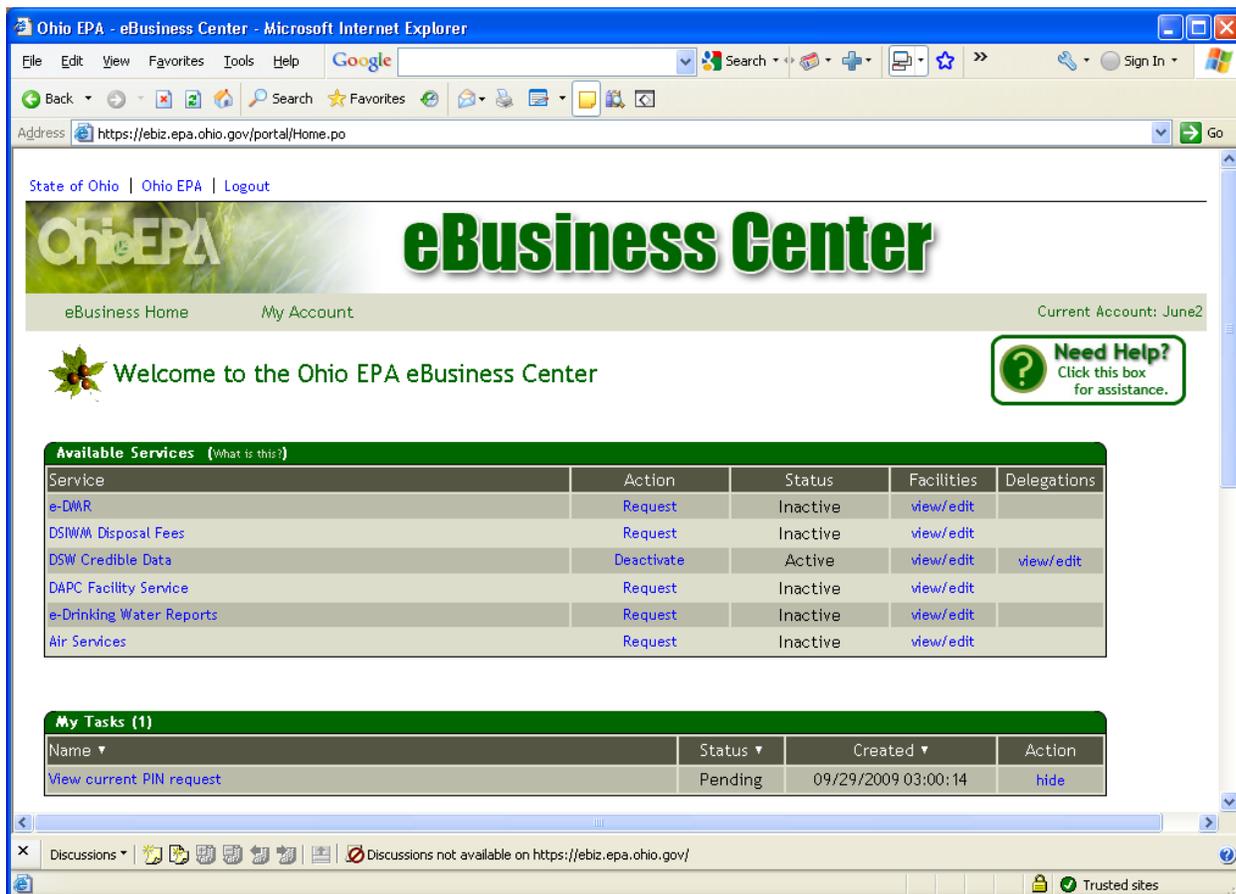
Once you have an account, the [lead QDC](#) should email us their unique UserID so we can find them in the CDOA and delegate the project to them as the lead QDC. Due to search limitations on our end, we had to impose a project naming format. Also, the project name field will only accept 50 characters. The end result is that your delegated electronic project name may not be exactly what you originally called it. However, the project description field should include your complete original project name. After your project is delegated to you, you should receive an automated email confirming this delegation.

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Note: Some users have had this notification email get screened by their spam filter. You can check to see if you have a project using the steps described below.

You must have projects delegated to you before you can enter any data into the CDOA. After receiving this delegation email, you can login at the eBusiness gateway with your User ID and password and this should take you to the “[eBusiness Home](#)” page:



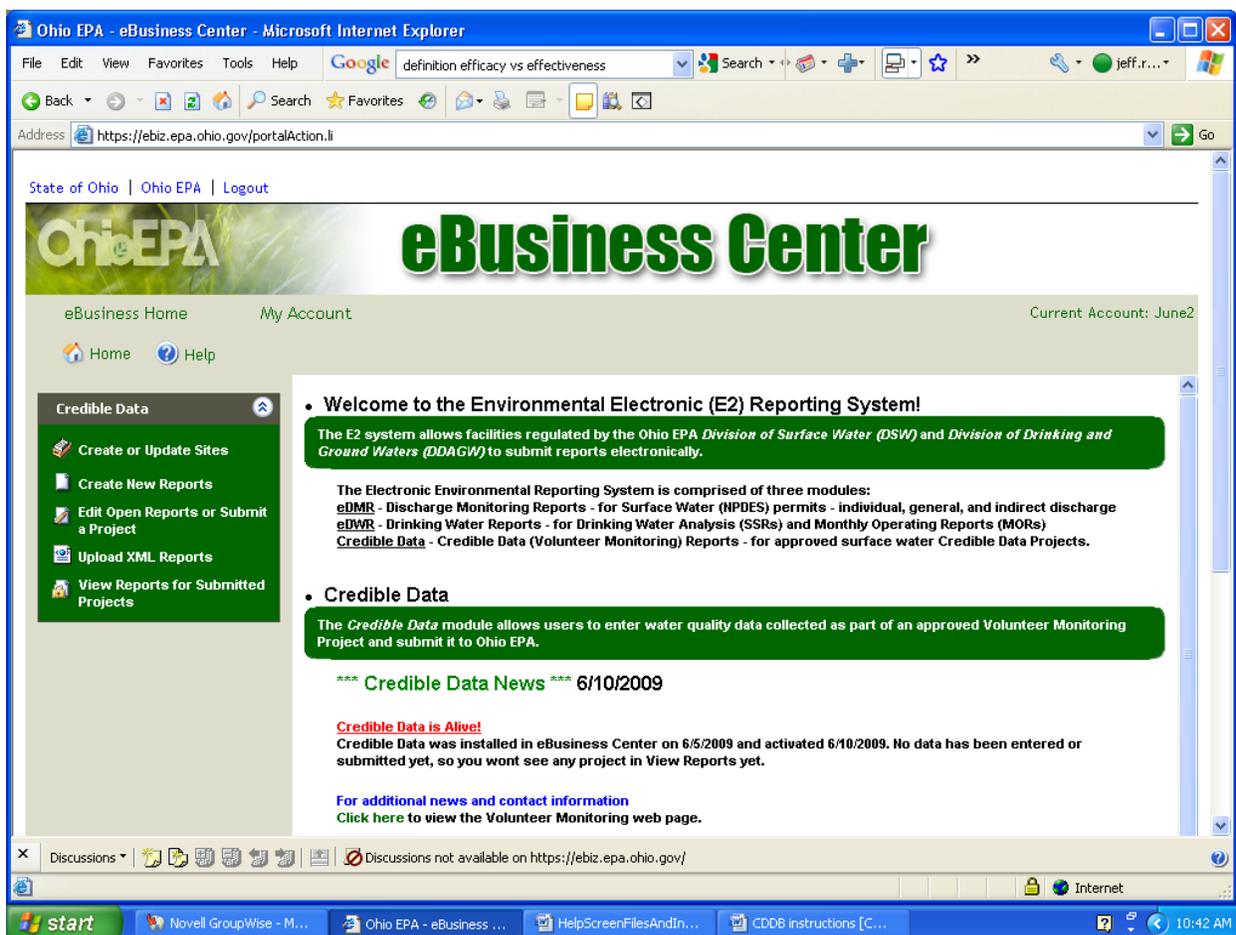
In the far right column it should say “view/edit” under Delegations (in the row that starts with “DSW Credible Data”) and that's where you click to search for User IDs and delegate rights to others to enter data on your project. The preferred choice may be to search using their unique User ID. If you need to Delegate other eBusiness users to help you enter your data, you will click on this. If not, you won't need to use this Delegations feature. Before you delegate anyone, make sure the project name and other information is correct.

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Once a project has been delegated to a [lead QDC](#), the basic user steps are to create [sites](#), create [reports](#) (specific date/time sampling information) under those sites, and to enter data on [forms](#) (e.g., chemical results, QHEI, or Level 1/Level 2 macroinvertebrates) under the reports. Only once all results for a project study plan have been entered should the data be submitted. This is very important, since we don't want anyone to have to enter anything twice and because the credible data rules require "all or nothing" data submittal. Data submittal requirements reduce the flexibility of the system, so you must make sure it's all there before you hit the "Submit" button. The Credible Data law requires that all data collected must be submitted. Conversely, only samples and methods in the approved PSP should be entered and submitted. Any samples that are not collected due to equipment failure, weather, etc. should be explained in a Data Verification letter submitted after the data has been submitted. Contact the Credible Data Program for more information and examples of this letter.

After you have made your Delegations (which you can also assign or edit later) or if you don't need to make any delegations, you can select "DSW Credible Data" from the left side of the eBusiness homepage (see screen shot above). You should then see the screen shown below:

Note: terms in [green](#) are defined at the end of this User's Guide.



From this screen, your main options are the choices in the green box at the left. You also can select “eBusiness Home” if you need to return to [delegations](#) or to use another eBusiness service.

Note: An eBusiness user that has not been delegated any projects will only see the “View Reports for Submitted Projects” option in the green field on the left of the screen.

[Data submittal](#) for a study plan needs to happen at the same time for all data under that project study plan (this is required by the Credible Data rules) and can be done only by the [lead QDC](#). The lead QDC should **make certain that all data** for that project is **entered correctly prior to submittal**. This will save you from having to re-submit any data.

Creating Sites

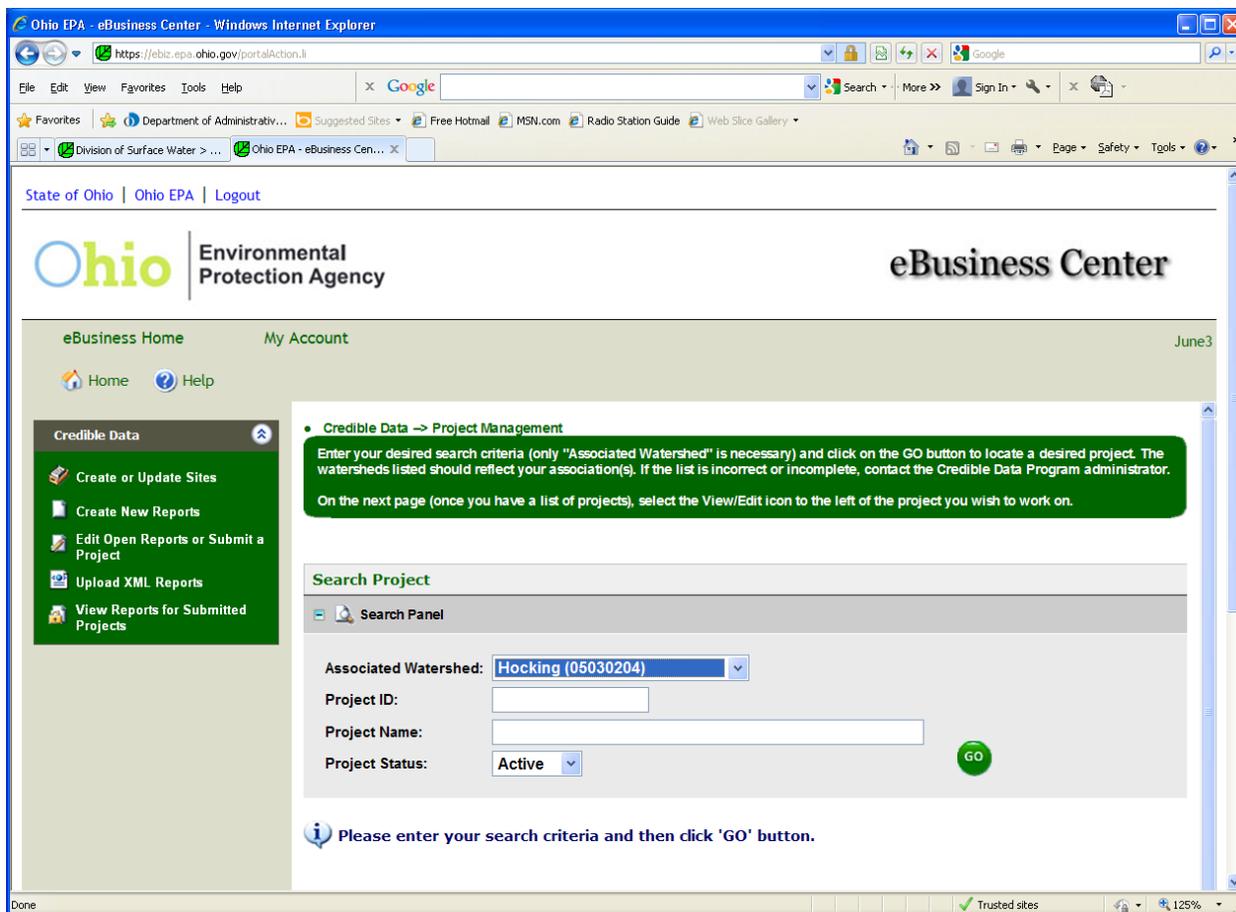
Before you create any sites, make sure the project name, description, *etc.* is correct. If we need to make a change, now is the time to do it.

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Note: The Project Name online may be slightly different than how it was submitted. This field only allows 50 characters and we had to impose a naming format to simplify finding projects. Projects will start with the name of an organization or a QDC, followed by the sampling year, followed by as much of the original project name as will fit in that field. Complete project names will be included in the Project Description field which allows entry of more characters.

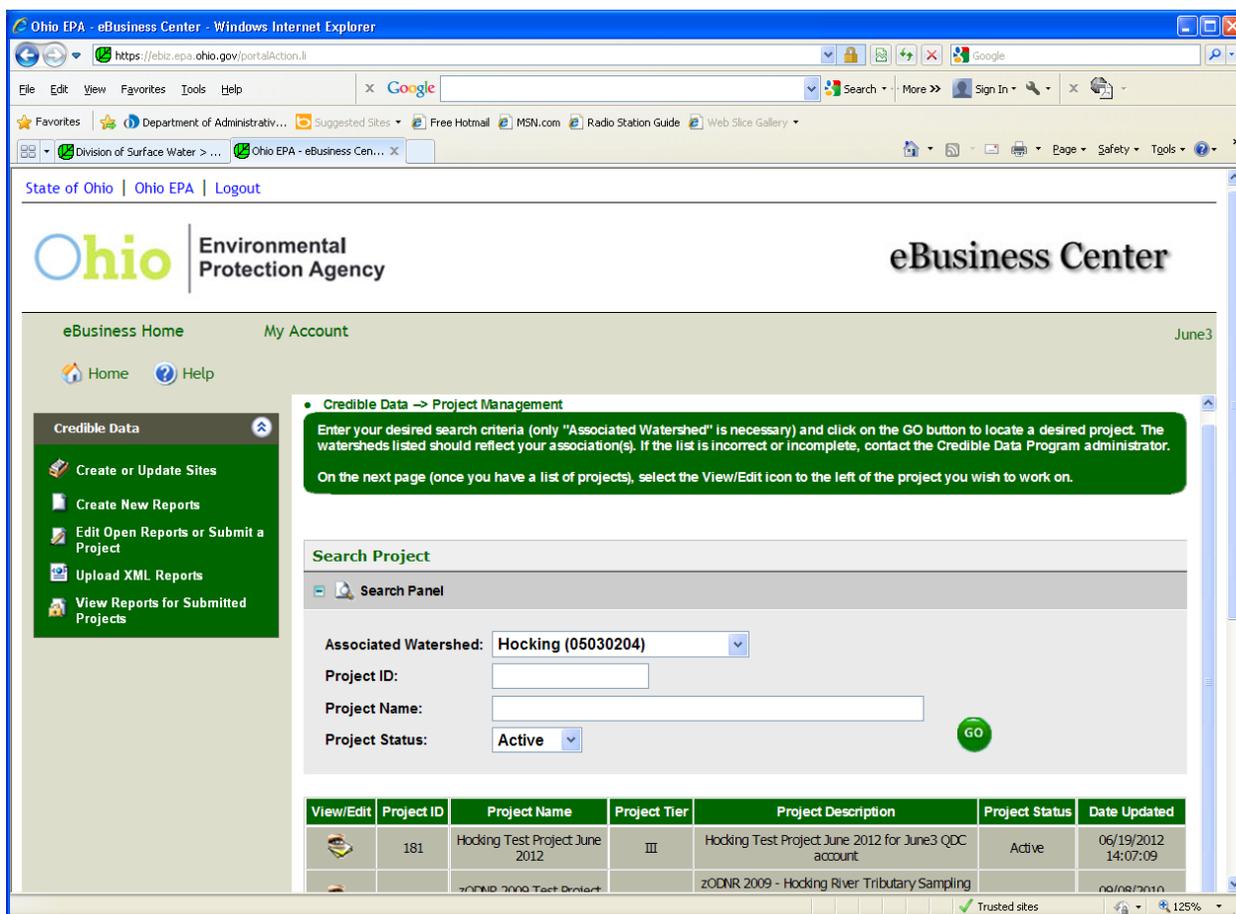
Click on “Create or Update Sites” in the column at the left, then select the appropriate watershed for your project from the dropdown box and click on the round “GO” button.



If you have multiple projects in that watershed, they will all come up at one time after you click on “GO.” Click on “View/Edit” to the left of the project you’d like to select.

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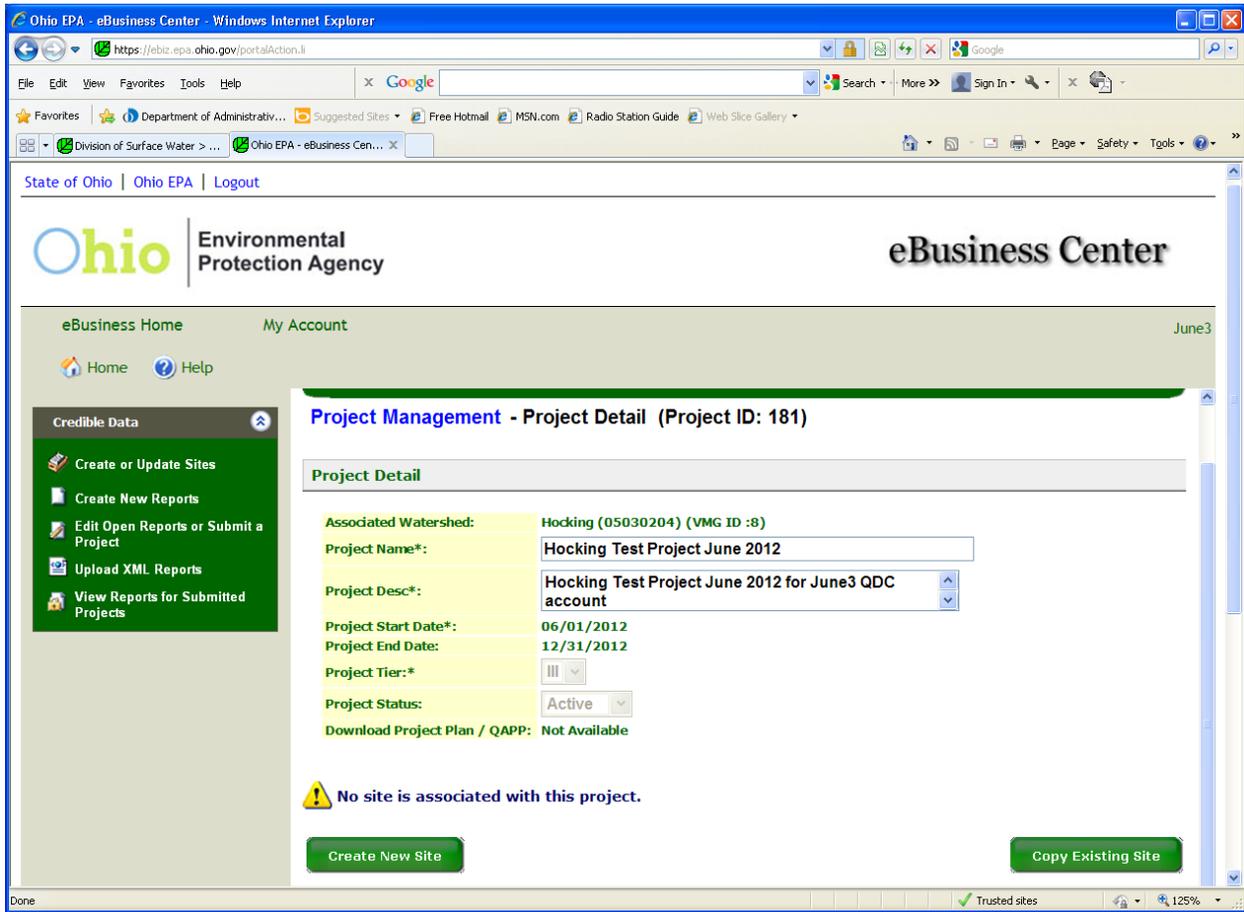
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This should cause any sites that you've already entered to be displayed. If you'd like to enter an additional site, click on the "Create New Site" button at the lower left. If you'd like to edit an existing site, click in the "View/Edit" column to the left of that site.

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After selecting “Create New Site,” you should see the screen below:

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Ohio EPA - eBusiness Center - Windows Internet Explorer

https://ebiz.epa.ohio.gov/portalAction.js

Division of Surface Water > Ohio EPA - eBusiness Cen... X

eBUSINESS Home My Account June 3

Home Help

Credible Data

- Create or Update Sites
- Create New Reports
- Edit Open Reports or Submit a Project
- Upload XML Reports
- View Reports for Submitted Projects

Site Details

Please update the site detail information below. Use the online map to locate your site or enter latitude/longitude (zoom in close first). You can also enter the online map afterwards to confirm the accuracy of the sample location.

Site Detail (Site ID: <<New>>)

Project:	Hocking Test Project June 2012 (Project ID: 181)
Site Name*: (include water body)	<input type="text"/>
Site Number*: (user assigned)	<input type="text"/>
Site Description*: (include location)	<input type="text"/>
County*:	<input type="text"/>
Hydrological Code(8)*:	<input type="text"/>
Hydrological Code(10):	<input type="text"/>
Hydrological Code(12):	<input type="text"/>
River Code:	<input type="text"/>
River Mile:	<input type="text"/>
Station Role:	<input type="radio"/> Reference <input type="radio"/> Other <input type="radio"/> Trend Assessment <input type="radio"/> Restoration <input type="radio"/> Study Design
Point Location Lat/Long*: (decimal degrees)	Latitude <input type="text"/> Longitude <input type="text"/>

Select Online Map Method Interpolation-Map

Fill out as much information as you have here. Some items must be completed before saving the site is possible (*i.e.*, Site Name, Site Description, County, and HUC 8 – HUC8s are available at this site: <http://gis4.oit.ohio.gov/ERINWatershed/>). Entering the county first will populate the HUC8 box with any watersheds that are in that county. Once you choose a HUC8 in CDOA, the HUC10 box will populate with the HUC10s that are in that HUC8 and so on.

You can either enter the latitude and longitude in decimal degrees (*e.g.*, if you used a GPS unit to obtain the coordinates – you should use at least 4 decimal digits, preferably 5) in CDOA or you can use the “Select Online Map” feature (which is also a good way to

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confirm you have correctly transcribed the coordinates you typed in).

The screenshot shows a web browser window displaying the Ohio EPA eBusiness Center. The page title is 'Ohio EPA - eBusiness Center - Windows Internet Explorer'. The address bar shows the URL 'https://ebiz.epa.ohio.gov/portalAction.js'. The browser's address bar and search bar are visible. The page content includes a navigation menu on the left with options like 'Create or Update Sites', 'Create New Reports', 'Edit Open Reports or Submit a Project', 'Upload XML Reports', and 'View Reports for Submitted Projects'. The main content area is titled 'Site Detail (Site ID: <<New>>)' and contains a form with the following fields:

- Project:** Hocking Test Project June 2012 (Project ID: 181)
- Site Name*:** (include water body) Test Site One
- Site Number*:** (user assigned) Site One - JR1
- Site Description*:** (include location) Jackie's Run - upstream
- County*:** Athens
- Hydrological Code(8)*:** Hocking (05030204)
- Hydrological Code(10):**
- Hydrological Code(12):**
- River Code:**
- River Mile:**
- Station Role:** Reference Other Trend Assessment Restoration Study Design
- Point Location Lat/Long*:** (decimal degrees) Latitude: 39.327592, Longitude: -82.102332

There are buttons for 'Save and Exit' and 'Back'. A 'Select Online Map' button is also present, with a 'Method' dropdown set to 'Interpolation-Map'. A green message box at the top of the form area reads: 'Please update the site detail information below. Use the online map to locate your site or enter latitude/longitude (zoom in close first). You can also enter the online map afterwards to confirm the accuracy of the sample location.'

You should have already set your browser to “always allow pop-ups for this site.” The preferred choice is to make this setting prior to starting - but if you forget, then when you try to locate a site on the map, the map will try to “pop-up”. At this point you may get a yellow bar across the top of your screen that says something about allowing pop-ups. If you right click on that bar, you can allow pop-ups using that feature. However, you might have to re-enter a bit of site information if you do it this way.

When you click on “Select Online Map,” you get a map of Ohio in a new window which will look like the pop-up screen below:

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http://wwwapp.epa.ohio.gov/?LatCOORD=&LongCOORD=&PAGENAME=siteDetail&BUTTONNAME=ptButton - Cred ...

Find latitude & longitude

Use the buttons in the top-left corner of the map to [pan and zoom](#) to your area of interest. When you have located your site on the map, click on it to draw a marker. Next, click on the marker to display a confirmation message, and to submit the location of your site. The bottom search form can be used to locate an address or street intersection near your site.

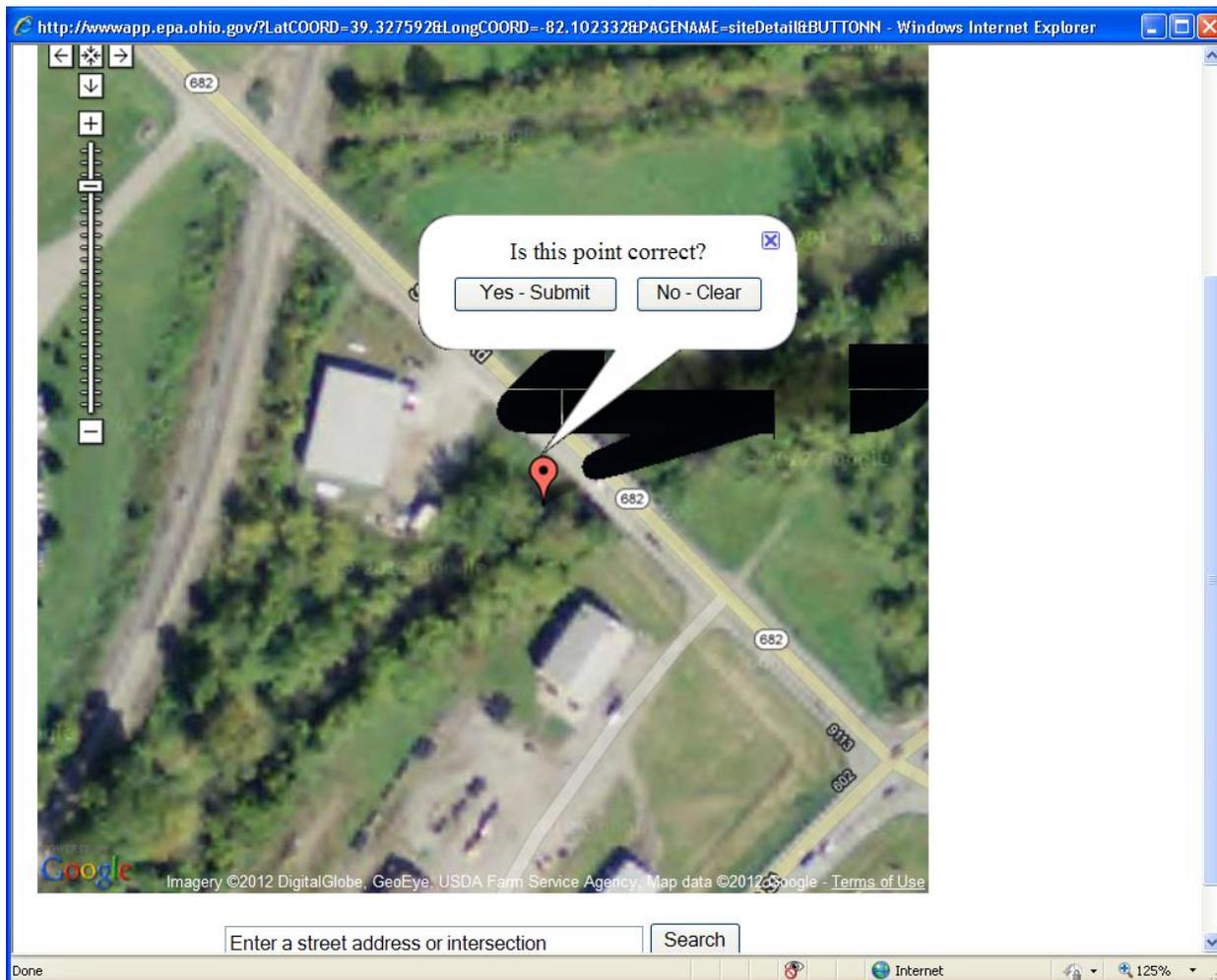
Done Internet 100%

Drag the map to center your sample location and select “+” to get close to your desired location (zooming in as much as possible, step-by-step, is recommended to get the most accurate location possible), then click on the location (e.g., on the upstream side of a bridge) to denote your sampling point. A marker will appear and you can then either move the marker slightly to where you want it, or just click on it and select “Yes – Submit” or “No – Clear.” Choosing “Yes – Submit” will enter the latitude and longitude in the site form for you (and the map will disappear).

If you click on “Satellite,” you will get an aerial photo of the area. This will generally allow you to further magnify the map and to more accurately locate your site, as shown below (see additional room to slide bar toward “+”). After you’ve entered the location and site information, click on “Save and Exit.”

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Note: If you choose to manually type in your latitude/longitude, we recommend you click “Select Online Map” anyway to visually confirm your sample location on the map.

Multiple Sites

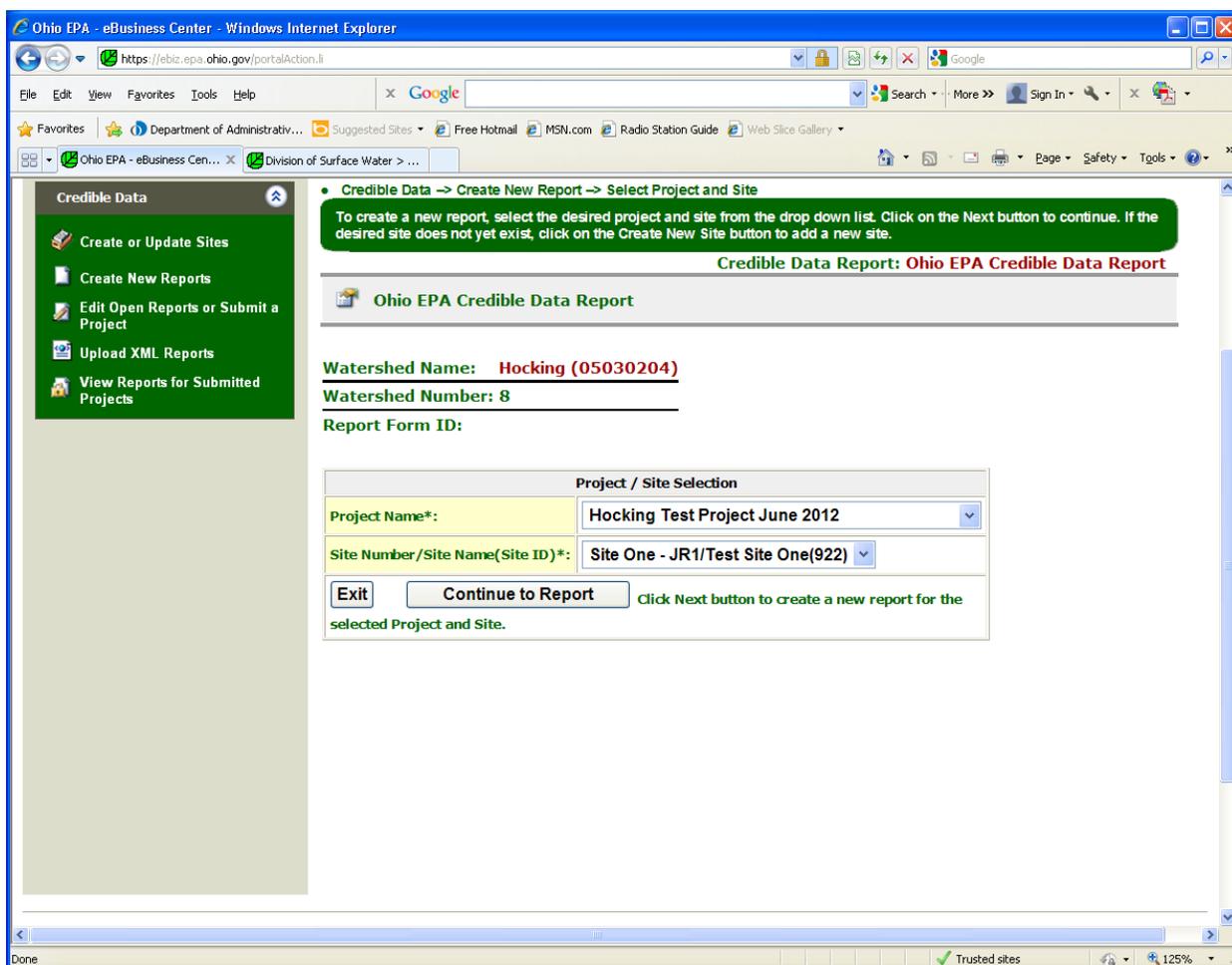
Most projects will have multiple sampling sites. As you create more sites, your list of sites should grow (this will confirm that you are doing it correctly). Once you create a site and save it, the CDOA places you right back to a page where you can immediately create another site (click on “Create New Site”). Alternately, you can click on “Create or Update Sites” selection to create another site at a later time. You may use one site multiple times within a project (e.g., for a duplicate sample or for different sampling dates). Only Report IDs must be unique.

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Creating Reports

Once your sites have been created, you need to create [reports](#) (to enter information associated with sampling for a particular date at that location). Select "Create New Reports" in the column of green choices at the left. Then select the appropriate watershed from the drop down box of choices and select "Online entry" on the right side. After that you can select the appropriate Watershed (if necessary) and click on "Entry" in the far right column. Then select your Project Name from the drop down box (for many of you there will only be one or two choices here) and the site that the report should be associated with from the second drop down. Then click on "Continue to Report." (Your Site Number/Site Name box will be empty still at this point).

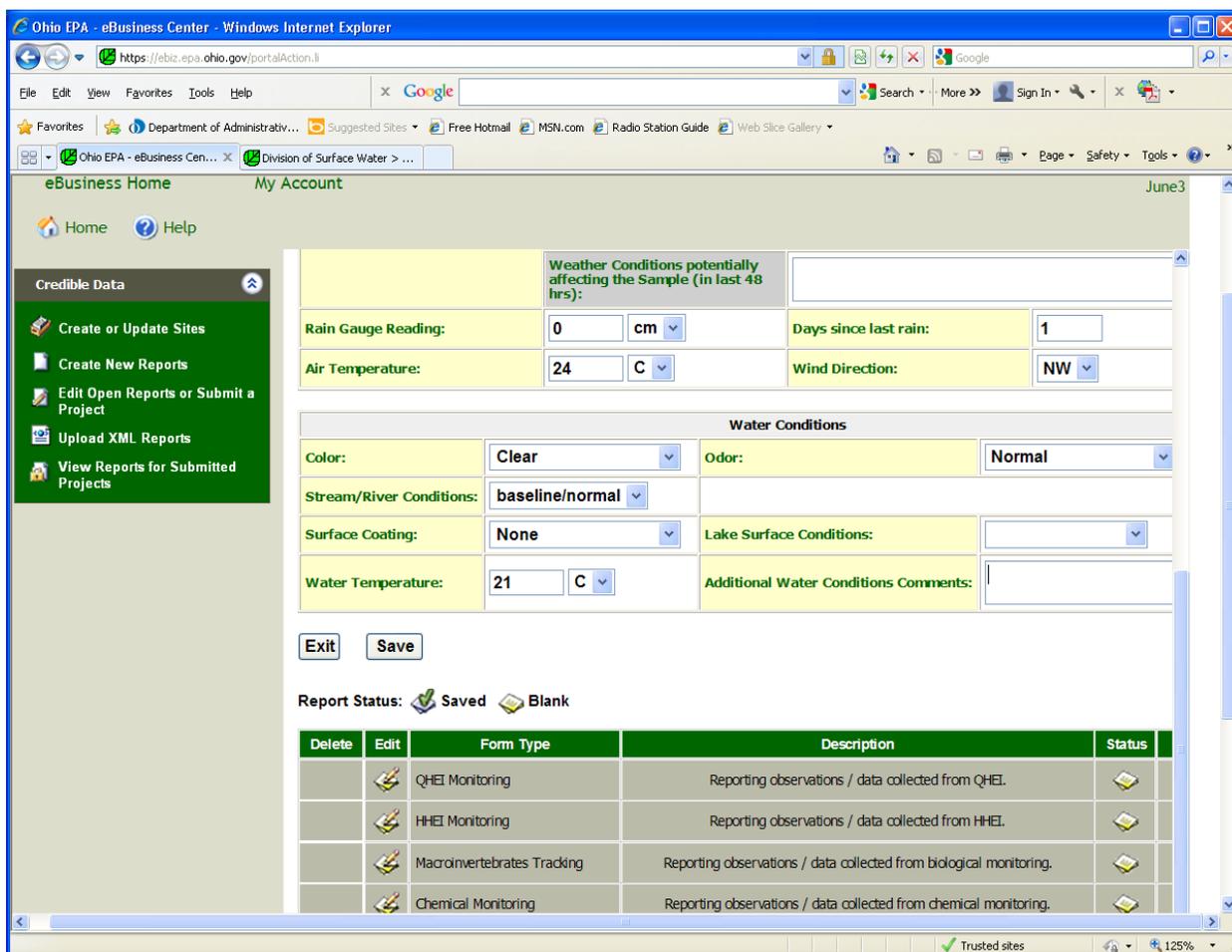


When you are creating a site, a report, or entering data on a form there is information that must be entered before the system will let you proceed to the next screen. This mandatory information is generally denoted by an asterisk (*). For reports, this

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mandatory information includes “Activity Date” and “Survey Team” (please use complete names, not initials). Entering other information, such as “Sample time” and “Days since last rain,” is recommended since it can be very helpful later with data interpretation, etc.



Once you have entered the information, click on “Save” before creating **forms** associated with the **report**. You should see “the report has been saved successfully” message near the top of the page. At the bottom of the page is a table that lists four “**Form Types**.” These options are “QHEI Monitoring,” “Macroinvertebrates Tracking,” and “Chemical Monitoring.” This table is depicted above.

Once you have created one report, you may choose to move on to data entry using forms (see section below) or you may wish to enter additional reports. To start a new report (to represent the same site at a different day/time or to represent a different site at a different time), you can again click on “Create New Reports” in the green column at the left. Then make sure that the correct watershed is displayed in the dropdown box
Note: terms in green are defined at the end of this User's Guide.

and click on “Entry” on the right side. Make sure the correct project name is displayed in the top dropdown and select the site that you would like to associate the new report with.

As you create additional reports, you should be able to select “Edit Open Reports or Submit a Project” in the green column on the left and see all of the reports you have entered. We have had users enter new reports over top of old reports, so it is important to confirm that your report list reflects what you think you have entered. **DO NOT SUBMIT** reports as you complete them. All reports should be submitted at one time, after the [lead QDC](#) has determined that all sample information is correct.

Create Forms – Excel/XML

If you do not wish to create reports online and would rather use the Excel to XML feature, you still begin with “Create Reports.” Select “Create Reports” in the column of green choices on the left. Then select the appropriate watershed from the drop down box of choices and select “Excel” at the right side

When you are going to create data with the Excel file (converted to XML), make sure that you keep copies of your submittal(s). The Excel file will not validate contents like the online version will, this validation will occur at the time of submittal. If errors are found, you will want to be able to revise and re-submit your data instead of starting over from scratch. Keeping copies of submitted Excel/XML files is highly recommended. There may be submittal validation problems that will require you to re-submit.

Data Entry/Forms

After you have entered your Report information, you can click on one of the “Edit” buttons at the left of the “Form Type” table to create a form to enter your data (e.g., a chemical [form](#) to enter chemical data, a macroinvertebrate [form](#) to enter that data, etc.). Any data types collected on the same date, at the same time, and location can/should

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To Combine Reports or Not To Combine Reports?

In general, combining data collected at the same location on the same day in one report will help save you time. However, there are times when you do not want to put data on the same report.

QC samples for chemistry data should be on their own separate reports. Each report should include only one value for each parameter.

Data that you know is different levels of credible data should be submitted on separate reports (e.g., your study plan was approved for level 2 QHEI and level 3 chemistry). One report cannot be approved with multiple levels.

But if, for example, you are submitting level 2 QHEI and level 2 macroinvertebrate and/ or chemistry data, those can and should be on the same report.

generally (see the "To Combine Reports...?" box above for more explanation) be entered under the same report.

QHEI Habitat

The [QHEI form](#) was designed to look similar to the paper version. The electronic version includes some checks that require all information that affects scoring to be entered before you can move on the next section. You must have all scoring information available to save a QHEI form (you can't enter part of the mandatory information and come back to finish it later, but you can change this information or add optional information later before submittal), so make sure this is all available before you start. You should submit a pdf of your hand drawn map of the site with each QHEI score.

The screenshot shows a web browser window with the URL <https://ebiz.epa.ohio.gov/portalAction.js>. The page title is "Qualitative Habitat Evaluation Index and Use Assessment Field Sheet". The form includes a sidebar with navigation options like "Credible Data" and "Admin Tools". The main content area contains a table for substrate assessment with columns for "BEST TYPES", "OTHER TYPES", "ORIGIN", and "QUALITY". Each type has checkboxes for "Pool" and "Riffle" and a count in brackets. Below the table are radio buttons for "NUMBER OF BEST TYPES" (4 or more [2] or 3 or less [0]) and an "Embeddedness" section with checkboxes for "EXTENSIVE[-2]", "MODERATE[-1]", "NORMAL[0]", and "NONE[1]". A "Comments:" field contains the text "QHEI Scorer = Ed Rankin".

For guidance on QHEI scoring, see "Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI), June 2006" at: <http://www.epa.ohio.gov/portals/35/documents/QHEIManualJune2006.pdf>

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HHEI Habitat

This section was deleted from this manual because we currently lack water quality standard to support the primary headwater habitat methods (and no HHEI data has been previously submitted to the CDOA).

Macroinvertebrate Assessment

Unlike the habitat assessment techniques above, a specific macroinvertebrate sampling technique is not dictated by Ohio EPA and different sampling methods may be used (e.g., MAIS, U.S.EPA's RBP, etc.). Therefore, the Credible Data Online Application requires just taxa and abundance information. Other mandatory information includes the "Sampling Equipment" and the "Macroinvertebrate Data Entry Method" (follows from macroinvertebrate data level). Other known information should also be entered to increase the future utility of the data, track changes in stream conditions, etc.

The screenshot shows the Ohio EPA eBusiness Center web application. The browser address bar displays <https://ebiz.epa.ohio.gov/portalAction.li>. The application interface includes a sidebar with navigation options like "Create or Update Sites" and "View Reports for Submitted Projects". The main content area contains the following sections:

- Habitat Types Present:** Includes checkboxes for Fine Woody Debris, Submerged Logs, Leaf Pads, Cobble, Boulders, Coarse Gravel, Vegetated Bank Margins, and Other.
- River Bottom Composition:** Input fields for % Silt (15), % Sand (30), % Gravel (30), % Cobble (10), and % Boulder (5).
- Fish Population:** A dropdown menu set to "Present".
- Habitat Description Comments:** A text input field.
- Sampling Information:**
 - Sampling Equipment:*** A dropdown menu set to "Kick Net".
 - MacroInvertebrate Data Entry Method:*** A dropdown menu set to "Common names (Level 1)".
- Macroinvertebrate Datasheet:** A table for recording macroinvertebrate counts.

Intolerant / Sensitive	Count	Somewhat Tolerant	Count	Tolerant	Count
Mayfly Nymphs		Scuds		Aquatic Worms	
Stonefly Nymphs		Sow Bugs		Leeches	
Dobsonfly Larvae		Crayfish		Black Fly Larvae	
Caddisfly Larvae		Damselfly Nymphs		Midge Larvae	
Water Penny Larvae		Dragonfly Nymphs		Pouch Snails	

Note: terms in green are defined at the end of this User's Guide.

The macroinvertebrate form changes to reflect the data level you select (which should match your Project Study Plan). The form will reflect either Level 1 (order level taxonomy) or Level 2 (family level taxonomy) data entry options. The list of Level 1 taxa was taken from the Ohio Department of Natural Resources Ohio Stream Quality Monitoring Project (<http://www.dnr.state.oh.us/tabid/980/Default.aspx> <http://watercraft.ohiodnr.gov/sqm>).

Level 2 macroinvertebrate data primarily uses family level taxonomy and so there are many more taxa choices. You must select the taxa that reflect your data and add them to the form. You may check multiple taxa at one time (or you may add extra ones later, if you missed any), using the procedure described below. You can generate a Favorites List to reflect the taxa you normally find or start anew each time using the “Search and Add” feature.

The screenshot shows the Ohio EPA eBusiness Center interface in Microsoft Internet Explorer. The address bar shows <https://ebiz.epa.ohio.gov/portalAction.li>. The main content area is titled "Credible Data" and contains several sections:

- River Bottom Composition:** Input fields for % Silt (15), % Sand (30), % Gravel (30), % Cobble (10), and % Boulder (5).
- Fish Population:** A dropdown menu set to "Present".
- Habitat Description Comments:** A text area for notes.
- Sampling Information:**
 - Sampling Equipment: Kick Net
 - MacroInvertebrate Data Entry Method: Scientific names (Level 2)
- Macroinvertebrate Datasheet:**
 - Buttons: Insert Favorites, Edit Favorites
 - Warning: **Macroinvertebrate without count will be removed when saving.
 - Table with columns: Phylum/Class/Order, Family, HFBI Value, Count
 - Button: Search and Add
 - Field: Additional Comments
 - Buttons: Exit, Save

Note: terms in [green](#) are defined at the end of this User's Guide.

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Once you click on “Search and Add,” you will get the screen below and can either type in a specific taxa name, or more likely, just click on “Go” and get a list of taxa to choose from.

The screenshot shows a web browser window titled "Ohio EPA - eBusiness Center - Microsoft Internet Explorer". The address bar shows "https://ebiz.epa.ohio.gov/portalAction.li". The page content includes a navigation menu on the left with options like "Create or Update Sites", "Create New Reports", "Edit Open Reports or Submit a Project", "Upload XML Reports", and "View Reports for Submitted Projects". The main content area is titled "Macrolnvertebrate Form --> Family/Genus/Species List". A green banner contains instructions: "To locate a desired Genus/Species, please enter the Family and/or Genus/Species Name and click on the GO button. From the search result list, place a check box on the desired record and click on the Continue Button." Below this, a "Watershed Report: Ohio EPA Credible Data Report" is displayed with the following details:

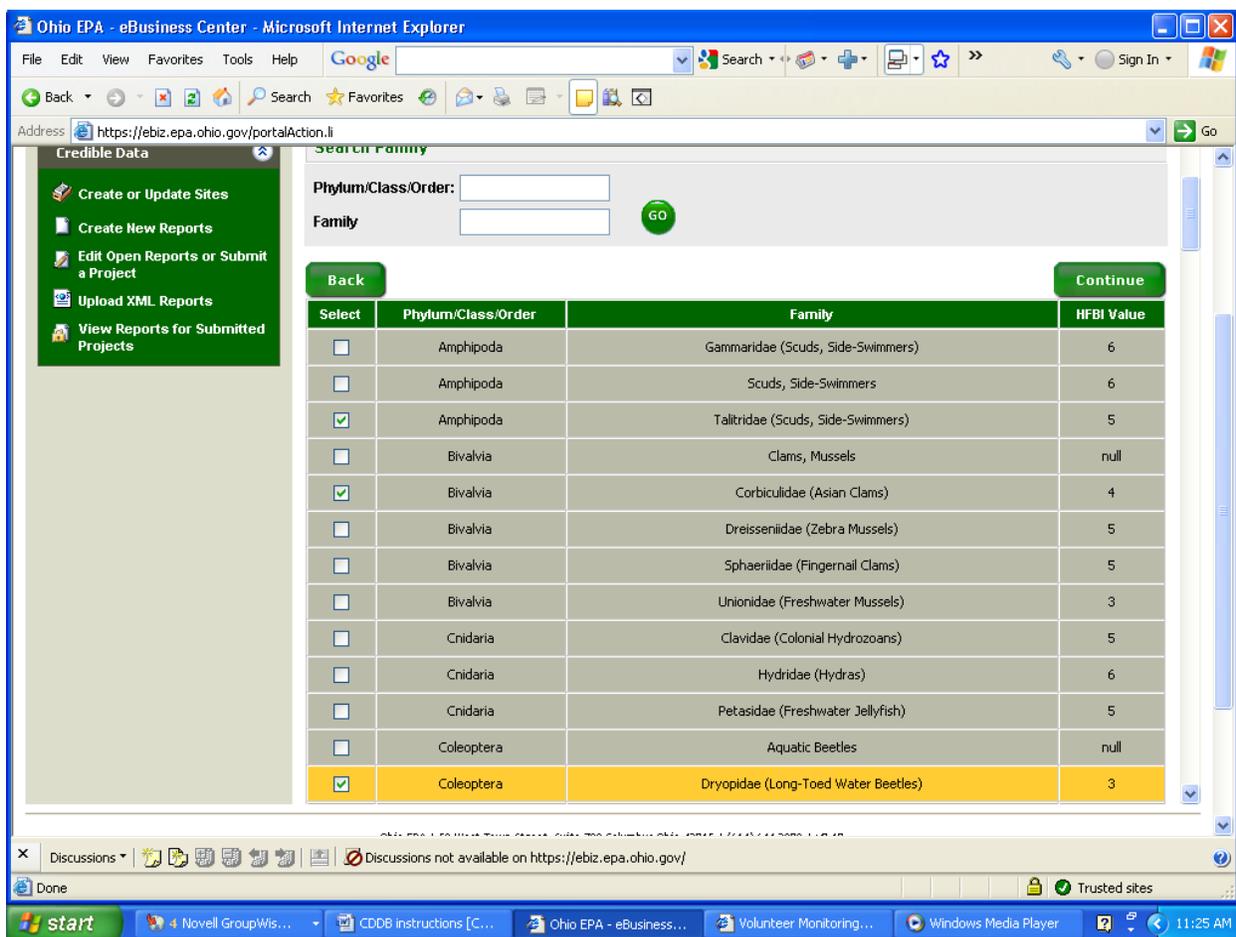
Watershed Name:	Hocking (05030204)
VM Group ID:	8
Project Name:	ODNR 2009 Test Project Hocking River Tribs.
Site Name:	4 Fake Reference Stream
Waterbody:	null
Report Form ID:	1818

Below the report is a "Search Family" section with two input fields: "Phylum/Class/Order:" and "Family". A green "GO" button is positioned to the right of the "Family" field. At the bottom of the search section are "Back" and "Continue" buttons. A yellow warning icon and the text "No records found!" are displayed below the search area.

After you click on “Go,” you get a long list of possible taxa. You can hold down the Control key and select multiple taxa to add to the form as a group (by clicking on “Continue”). Or you can select one name and then click on “Continue” to add them one at a time. For some groups (e.g., Turbellaria or Oligochaeta) identification is not usually done to the family level, so class names are used. Also, other order level taxa names are listed here too but are generally just used when a specimen is too small, young, or damaged to identify it to family level.

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Once you enter the number of organisms per taxa, make sure to click on “Save” before you “Exit.” Any taxa without an abundance entered under the “Count” column will be removed from the list upon saving.

Note: The column marked HFBI Value is a general tolerance estimate for each taxa on the list. It is adapted from Hilsenhoff (1988, see references). Higher values indicate higher tolerance of poor water quality.

Note: terms in green are defined at the end of this User's Guide.

Ohio EPA - eBusiness Center - Microsoft Internet Explorer

Address: https://ebiz.epa.ohio.gov/portalAction.li

Home Help

Insert Favorites Edit Favorites

****Macroinvertebrate without count will be removed when saving.****

Phylum/Class/Order	Family	HFBI Value	Count
Amphipoda	Talitridae (Souds, Side-Swimmers)	5	<input type="text" value="23"/>
Bivalvia	Corbiculidae (Asian Clams)	4	<input type="text" value="33"/>
Coleoptera	Dryopidae (Long-Toed Water Beetles)	3	<input type="text" value="45"/>
Trichoptera	Hydroptilidae (Micro Caddisflies)	4	<input type="text" value="4"/>
Trichoptera	Leptoeridae (Long-Horned Case-Maker Caddisflies)	4	<input type="text" value="2"/>
Coleoptera	Psephenidae (Water Pennies)	3	<input type="text" value="29"/>
Decapoda	Cambaridae (Crayfishes)	5	<input type="text" value="7"/>
Diptera	Dixidae (Dixid Midges, Meniscus Midges)	4	<input type="text" value="143"/>
Diptera	Simuliidae (Black Flies)	6	<input type="text" value="9"/>
Ephemeroptera	Isonychiidae (Brush-Legged Mayflies)	2	<input type="text" value="15"/>

Search and Add

Additional Comments:

Exit Save

Discussions not available on https://ebiz.epa.ohio.gov/

Done Trusted sites

Chemical Monitoring

Each chemical [form](#) typically represents a sample jar (and the preservative for that jar). On this form, you must enter “Sample ID” (a unique identifier for that specific project) and “Activity Type.” You should also enter any other information available – since items like “Preservation” and “Sample Depth” may aid in data interpretation later and also confirm that the sample was collected and preserved correctly. You must add analytical parameters (or “Analytes”) to this form individually or in a group, through the use of a parameter template.

If you wish to revise a previously entered [report](#), select the report's Sample ID from the dropdown box at the top of the page. You should segregate your parameters onto different forms by sample preservative type. This allows us, when reviewing your data, to confirm that it was properly field preserved.

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To add an individual analyte, select it from the dropdown “Analyte” list and click on “Insert Analyte.” Using the Control key, multiple analytes may be selected and entered at one time. Note that each parameter includes the reporting units, if your lab reports in different units, you may need to convert.

Note: Multiple chemical forms can/should be entered under that same report if multiple sample jars were filled at one time at one site. However, QC samples for chemistry data should be on their own separate reports (not just on separate forms). Each report should include only one value for each parameter.

The screenshot shows the Ohio EPA eBusiness Center interface. The main content area displays the 'Sample Information' form. The form includes the following fields and values:

- Watershed Name: **Hocking (05030204)**
- Project Name: **Hocking Test Project June 2012**
- Watershed Number: **8**
- Site Name: **Test Site One(922)**
- Report Form ID: **44788**
- Report Form Detail ID: **<<New>>**
- Select Sample ID: **New (enter ID below)**
- Sample ID*: **Test1 - Field params**
- Activity Type*: **Field Measurements/Observations**
- Matrix/Media: **Water**
- Preservation: **[Dropdown]**
- Sample Depth: **10**
- Sample Depth Unit: **cm**
- Activity Comments: **YSI 655 meter**

Buttons visible include 'Exit', 'Save', 'Insert Template', 'Insert Analyte', and 'Delete Parameters'.

Entering Chemistry Data:

For each parameter/result entered, the required information is denoted by an asterisk in the column header (*i.e.*, Results, Analysis Data, Detection Level Measure, Analysis Method). An optional column provides space for any data qualifiers. Data qualifiers may be imposed by the laboratory (due to QA/QC problems during analysis) and/or by the

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QDC reviewing the data. It's very important that you include data qualifiers in your submittal (to avoid having to submit again or to avoid bad quality data being included in the CDOA).

Qualifying Chemistry Data

Data qualifiers available in CDOA are the ones most often used by labs but "Other" is also an option. Use of "Other" should be further explained in the "Result Comment" box when used. If you have a lab result that has been rejected (denoted by "R" in the "Data Qualifier" column), you should still submit this analytical result to CDOA, marked with the "R" data qualifier. This will ensure that you have submitted all data from your project as required by the Credible Data law. That result will be labeled "Rejected" but will be maintained in the CDOA. **Explain the reason for any data qualification in the comments box.**

Data that has been qualified as estimated (denoted by "J" in the "Data Qualifier" column), by the lab or by the QDC as part of the data assessment process, can still be submitted at the original target data level. This data may still be usable for its original intended purpose. Again, this data may be "J" qualified by the lab or by you, the lead QDC (e.g., as a result of low level blank contamination, inadequate duplicate sample agreement, etc.). Different labs and data review entities may use different standards for when to consider data estimated. With blank contamination for example, a sample concentration may have to be 5X or 10X the level of analyte in a blank to be counted as a useable (but qualified with a "J") result. Also, some qualifiers used are more specific, such as "J+" and "J-". This offers additional information about the data being biased high or low (based on high or low spike recoveries, etc.).

An additional data qualifier, "[Trend](#)", has been added to the options in the dropdown menu. This is to be used when data assessment has resulted in a decision to consider a data point a lower level (e.g., reduced from level 3 to level 2, or from Level 2 to Level 1) but there is still reason to believe the reported concentration can be considered generally quantitative.

When you add a qualifier to a sample result, please explain the reason for the qualification in the comments column. Examples below:

J – qualified due to duplicate disagreement

Trend – qualified due to blank contamination

R – rejected due to paired parameter disagreement

Various U.S. EPA guidances discuss data qualifiers and their use (e.g., see table 8 in Guidance on Environmental Data Verification and Data Validation, 2002, EPA QA/G-8

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at: <https://www.epa.gov/quality/guidance-environmental-data-verification-and-data-validation>). Data assessment is discussed further in the "QC Data Assessment" section below.

Other Chemistry Information

The Analysis Method (e.g., EPA 365.3 or SM 4500-P) should be a method listed in your approved [Project Study Plan](#). Notice of any method change should have been provided to the Credible Data Program prior to the change (for confirmation of equivalency).

The CDOA still requests Detection Level (or limit) but we are planning to change this to Reporting Limit, which is more useful for our data review, and we'd prefer that you enter Reporting Limit (RL) instead of DL. Also, when your lab reports trailing zeroes on a result, please enter those digits in the CDOA (e.g., if the lab result is 2.00 mg/L, then enter 2.00 instead of just 2). These extra digits imply greater accuracy and should be reflected in the data and it will fit in better with the rest of your results.

The screenshot shows a web browser window displaying the Ohio EPA eBusiness Center. The main form is titled "Test1 - Field params" and includes the following fields:

- Sample ID*: Test1 - Field params
- Activity Type*: Field Measurements/Observations
- Matrix/Media: Water
- Preservation: (empty)
- Sample Depth: 10
- Sample Depth Unit: cm
- Activity Comments: YSI 655 meter

Below the form, there is a "Template:" dropdown set to "Field Parameters" and an "Insert Template" button. An "Analyte:" dropdown is also present with an "Insert Analyte" button. A "Delete Parameters" button is located above a table of analytes.

Delete	Analyte Name	Result*	Qualifier	Analysis Date*	Detection Level Measure*
<input type="checkbox"/>	Conductivity (Umho/Cm)	262		6/1/2012	10
<input type="checkbox"/>	Dissolved Oxygen (mg/l)	6.8		6/1/2012	1.0
<input type="checkbox"/>	pH (S.U.)	7.12		6/1/2012	0.5
<input type="checkbox"/>	Water Temperature (C)	24		6/1/2012	0.0

A number of [chemical templates](#) have been created for both common combinations of parameters (e.g. the "Field parameter" template includes pH, water temperature,

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conductivity, and dissolved oxygen) and for big projects with many samples collected for the same analyte list. If you don't need every analyte on a template, or need to add a couple extra, inserting a template may still be worth your while. It's easy to add an extra analyte to a list started with a template. Also you can leave blank one (or more) template analytes that you don't need and the empty lines will disappear when the data is submitted.

If your samples were diluted at the lab before analysis, you should include this information in the comments box (helps explain increased detection levels for a particular sample).

Once you have saved this form with your parameters, boxes will appear on the left. You can use these boxes to delete any unwanted parameters. Just check the box on any line you would like to delete and then click on "Delete Parameters."

*Note: **Bacteria** sampling results should be recorded on a chemical monitoring form. The "chemical" parameter list includes fecal coliform and E. coli*

When entering chemical water quality data, several additional columns (e.g., Analysis Date, Detection Level, and Analytical Method) must be populated with information prior to saving the data. This is required so that the level of your data can be verified. Once data is submitted it can't be modified, so the system is designed to make you enter this auxiliary information at the beginning (we don't want you to have to re-do it). Chemistry forms are segregated by each preservative type. So results that stem from meter measurements will be on a separate [form](#) versus results which are from samples that are iced (or nitric preserved, or sulfuric preserved, etc.) and taken back to the lab for analysis.

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Analyte Name	Result*	Qualifier	Analysis Date*	Detection Level Measure*	Analy Meth
Chemical Oxygen Demand (Low Level) (mg/l)	<input type="text" value="3.5"/>	<input type="text"/>	<input type="text" value="10/13/2009"/>	<input type="text" value="0.1"/>	SM5220
Nitrogen, Ammonia (NH3) (mg/l)	<input type="text" value="0.056"/>	<input type="text"/>	<input type="text" value="10/13/2009"/>	<input type="text" value="0.004"/>	SM4500
Nitrogen, Nitrate (NO3) (mg/l)	<input type="text" value="3.98"/>	<input type="text" value="J"/>	<input type="text" value="10/13/2009"/>	<input type="text" value="0.004"/>	SM4500
Nitrogen, Nitrite (NO2) (mg/l)	<input type="text" value="0.11"/>	<input type="text"/>	<input type="text" value="10/13/2009"/>	<input type="text" value="0.002"/>	SM4500
Phosphorus, Total (P) (mg/l)	<input type="text" value="0.27"/>	<input type="text"/>	<input type="text" value="10/13/2009"/>	<input type="text" value="0.01"/>	SM4500

Note: We recommend you put the sample's Reporting Limit in the Detection Limit column since we plan to change the column header soon to say Reporting Limit (which has more utility for data evaluation). Please note what you did in the comments section. Thanks!

Since analytical results may come back from a lab at different times (e.g. metals may take a long time), the chemical [form](#) allows you to fill out results for some of the parameters and then come back to the others later (unlike the macroinvertebrate [form](#), which requires that you enter data for each line all at one time and unused lines are deleted).

The "Comments" column should be used to explain any qualified sample results, any sample dilutions (these may affect the reporting limit etc.), and any other abnormalities pertaining to that sample result.

Note: Comments explaining qualified data and diluted data are mandatory for level 3.

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Quality Control Samples

Quality Control (QC) samples (e.g., duplicates, blanks, etc.) should be entered separately from the original sample. Only one result for a particular parameter should be on each report. The Sample form includes the following options:

- Field Measurements/ Observations
- Field Replicate Measurements/Obligations
- Sample
- Sample, Quality Control Duplicate
- Sample, Quality Control Blank
- Sample, Quality Control Other

So, if you collect a duplicate sample, you should enter the results for all its parameters (segregated on separate forms by sample containers/preservative types) for the original sample on one report and enter the results for all of the duplicate analyses on a different report (also segregated on separate forms by sample containers/preservative types).

QC Data Assessment

Your lab may attach data qualifiers to your sample results but that does not mean they have assessed your field QC sample results (blank sample results, duplicate results, etc.) – that qualification is generally left to the sampler/QDC. The Credible Data Program has developed guidelines for assessing blank contamination and duplicate sample agreement as well as sample holding times and “paired parameters” (data assessments not specific to QC samples). These are also assessments we can make based on the information we receive when QDCs input data to the CDOA. The blank contamination assessment is based on US EPA recommendations. The other assessments are recommendations based on the Division of Surface Water's guidance (Surface Water Field [Sampling Manual](http://www.epa.state.oh.us/Portals/35/documents/SW%20Sampling%20Manual%202015%20Update%20Final%20Main.pdf), <http://www.epa.state.oh.us/Portals/35/documents/SW%20Sampling%20Manual%202015%20Update%20Final%20Main.pdf>).

Evaluation Guidelines for QC Sample Results

For most CDP chemical water quality data, data qualification is generally confined to evaluation of Blank results, Duplicate results, sample holding times, and paired parameter results (defined below). Standards for evaluation of analytical results of those QC sample types are described below. Data can be qualified using the standard qualifiers such as “J” for an estimated concentration or “R” for rejected result. Data

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qualification may also result in a result being determined to be too uncertain for some data uses but potentially useful for more general data trend applications.

Blanks – Blank contamination can result in qualification of other results that were in the same field batch as that blank. In some cases, these other results may still be useable and other times the sample results should not be considered valid, largely depending on the concentration in the sample vs. the concentration in the blank.

Sample Result

Interpretation

Sample \leq 3x Blank

Reject sample results in this range as insufficiently different from blank results

3x Blank < Sample \leq 5x Blank

Likely indication that the analyte is there but poor confidence in numerical result, limit data use to data "Level 2" applications/"trend" assessments

< 5x Blank < Sample \leq 10x Blank

Consider sample result to be an estimated concentration (qualified "J") but still suitable for most data uses

< 10x Blank

Do not qualify data (blank contamination does not significantly change result/within uncertainty of the value reported)

Field Duplicates – Laboratories analyze and evaluate duplicates for their own internal procedures but you should also be collecting field duplicates to evaluate variability in regard to sampling precision. The duplicate sample results are compared using a statistic called Relative Percent Difference (RPD). In the equation below one sample result/ concentration is substituted in for x_1 and the other for x_2 (it doesn't matter which is which).

RPD - Relative Percent Difference

$$\% \text{ Diff} = \left| \frac{x_1 - x_2}{(x_1 + x_2)/2} \right| \times 100$$

Example RPD calculation:

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$$\frac{|(6 - 10)|}{|((6 + 10)/2)|} \times 100 = \frac{|-4|}{|8|} = 0.5 \times 100, \text{ (positive since it's an absolute value)}$$

Some entities use a 40% RPD standard and state that: "For duplicate samples with RPD ≤ 40%, no qualification is necessary." You may use this approach if you wish.

DSW has modified our approach in consultation with our laboratory. We allow a higher %RPD at lower concentrations, since there is a greater percent uncertainty closer to the detection level (and often times these detections are below levels of concern), and allow a lower %RPD at higher concentrations, since analytical results should be more consistent at higher concentrations. To account for this varying acceptable %RPD, we assess our duplicate samples using a curved line.

By starting with three points based on the ratio of the sample concentration to the detection limit and the %RPD we are willing to accept, we used Excel to generate the equation of a line. The three points used were:

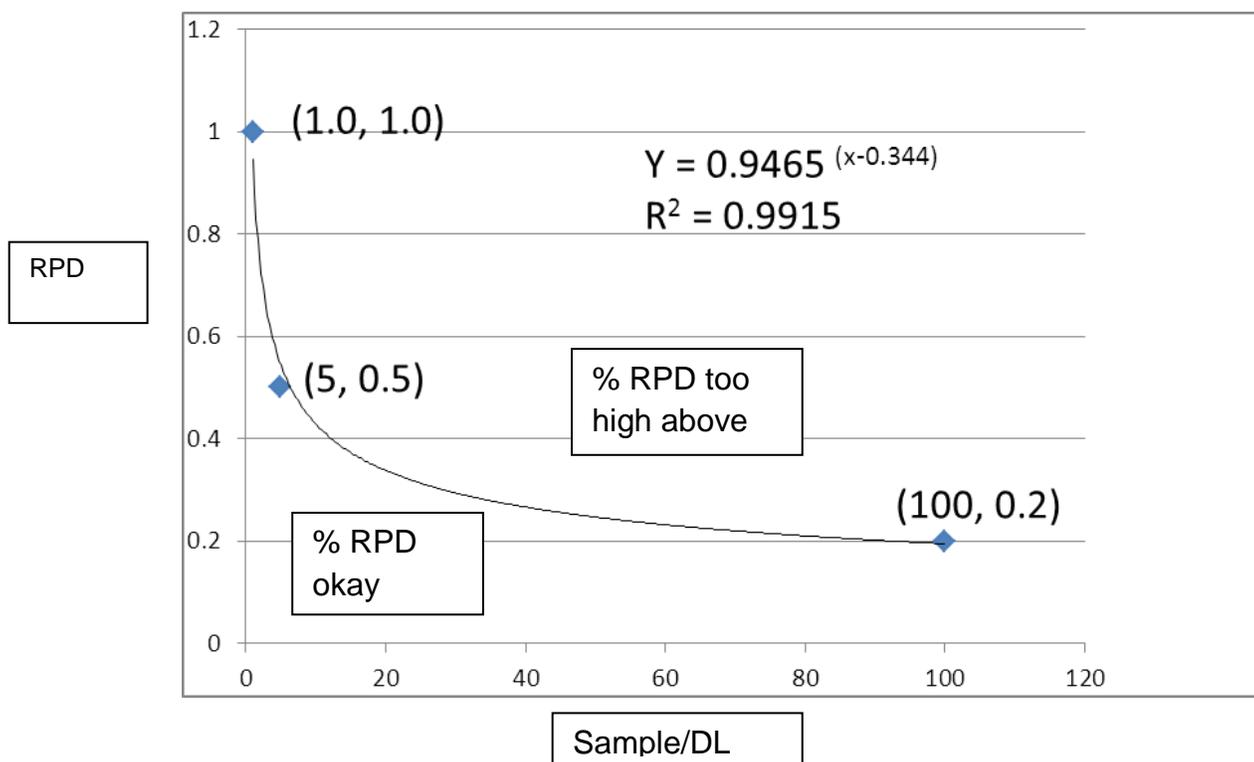
- (1, 1.0) – At the detection limit, we are willing to accept approximately 100% RPD
- (5, 0.5) – at 5x the detection limit (often near the RL), we are willing to accept approximately 50% RPD
- (100, 0.2) – at 100x the detection limit, we are willing to accept approximately 20% RPD

The graph (taken from Excel, using the "Power" option from the "Trend line" function) shown below illustrates the curve of best fit for these three points. The resulting R² value confirms a good fit of our line to our points.

Duplicate Maximum Acceptable %RPD Using Sample Concentration/ DL Ratio

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Using “Trend line” in Excel we are able to generate an equation with a very good fit to these three points. With additional tweaking of the equation (adding 5% to each result,) we get a result that gives us almost exactly 100% RPD when the sample concentration equals the detection limit and puts us back up above 10% RPD for high concentration samples (see the table below).

The resulting final equation is $Y = [(0.9465x^{-0.344}) * 100] + 5$

where x = Sample/DL ratio and y = acceptable %RPD

At first take, this approach might seem somewhat arbitrary, but we have to remember that all approaches have some arbitrary component and what we need is to be consistent and to define an approach that we are comfortable with. Using the above equation, we get acceptable %RPDs at the following levels:

Determine Maximum Acceptable %RPD (based on sample concentration to DL ratio)

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Sample* Conc./DL (x)	"Trendline" equation from Excel $Y = (0.9465x^{-0.344})$ *100	$y' = [(0.9465x^{-0.344}) * 100] + 5$ (add 5% to baseline eqn.)
1	94.65	99.65
2	74.57	79.57
5	54.41	59.41
10	42.87	47.87
50	24.64	29.64
100	20.41	24.41
200	15.30	20.30
1000	8.79	13.79

*Not the duplicate sample concentration. For sample results below the detection limit (and the duplicate is above the detection limit), use the detection limit in the Duplicate Maximum %RPD calculations (otherwise there is insufficient latitude for variability at low concentrations).

This leaves us with a two-tiered system for duplicates. If our %RPD is below the values from our equation (*i.e.*, below the curve), we accept both data points as valid. If the %RPD exceeds the %RPD from the equation, we don't know which value to believe is correct, the sample or the duplicate value, so we must reject ("R" qualify) both data points. At that point, particularly if multiple duplicate pairs have been rejected, the sampler(s) should look into possible causes for the disagreement and work to minimize those causes for future sampling. One helpful tool for properly mixing/splitting duplicate samples is the churn splitter.

Paired Parameters – There are some parameter pairings that can be evaluated in tandem (using %RPD), since they are related. Some parameters are fractions or subsets of others, such as nitrate being part of nitrate/nitrite, so that the one parameter should, in theory, never have a higher concentration than the other parameter. Examples of paired parameters are below:

Total P ≥ orthophosphate (or dissolved reactive phosphorus)

TKN ≥ Ammonia

Nitrate/Nitrite ≥ Nitrate

TOC ≥ DOC

Total Cr ≥ Hexavalent Cr

BOD ≥ Dissolved BOD (or other dissolved parameter pairings)

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It's theoretically possible that the subset analyte could be 100% of the total (or larger) analyte, but any result where that compound exceeds the total (or larger compound) should be considered an estimated concentration (qualified with a "J"). Results that are quite close may be essentially the same number and valid for most data uses. Similar to how we evaluated duplicate samples above, we use the same equation to determine the acceptable %RPD for "Paired Parameters" analytical results within the same sample.

For "Paired Parameters" with a %RPD less than the equation amount (using an average Detection Limit this time, since they may be different), we will simply acknowledge the difference with a "J" qualifier, leaving both data points as useable for most applications. However, when the %RPD exceeds the allowed amount from the equation, we will generally not use the two data points and reject (qualify with an "R") the results. In this situation we don't know which result to believe and they are too different for us to be comfortable with the variability present. This all applies only when the subset parameter has a higher concentration than the expected larger/parent parameter. If the subset parameter has a lower concentration, then no evaluation/qualifiers are needed.

Example data for "Paired Parameters" assessed using the maximum %RPD equation: $Y = [(0.9465x^{-0.344}) * 100] + 5$ (where x is the "parent" sample concentration/DL and Y is the max. %RPD).

Note: we can email you a copy of our Excel file that we use to evaluate blanks, duplicates, and "paired parameters."

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Subset parameter – example concentration	Parent (larger) parameter – example concentrations	Subset DL (DES webpage*)	Parent DL (DES webpage*)	Average DL	%RPD (Parent and Subset)	Max. Allowed %RPD (from the eqn.)	Data Qualifier
Cr ⁺⁶ – 3.6	Tot. Cr – 3.5	3.4 ug/L	0.28 ug/L	1.8 ug/L	2.82	75.87	“J”
Cr ⁺⁶ – 7.5	Tot. Cr – 3.5	3.4 ug/L	0.28 ug/L	1.8 ug/L	72.73	75.87	“J”
Cr ⁺⁶ – 7.8	Tot. Cr – 3.5	3.4 ug/L	0.28 ug/L	1.8 ug/L	76.11	75.87	“R”
Cr ⁺⁶ – 24	Tot. Cr – 16	3.4 ug/L	0.28 ug/L	1.8 ug/L	40.0	44.98	“J”
Cr ⁺⁶ – 26	Tot. Cr – 16	3.4 ug/L	0.28 ug/L	1.8 ug/L	47.62	44.98	“R”
Cr ⁺⁶ – 16	Tot. Cr - 26	3.4 ug/L	0.28 ug/L	1.8 ug/L	47.62	38.06	None (par>sub)

* Detections limits may change over time – be sure you are using current values associated with your data. For results below the detection limit, use ½ the detection limit in the Paired Parameter Maximum %RPD calculations.

Sample Holding Time – This is an important QC item that is easily checked on any data set. With some parameters, like a total result for a metal, slightly exceeding the holding time may make little or no difference (and would likely result in only a “J” qualifier being added to the result) in the reported concentration but for other parameters like a bacteria sample, missing the holding time would generally lead to complete rejection of that data. The amount of the holding time exceedance can also be evaluated relative to the total holding time; shorter times lead to lower tolerance of exceedances (as a result of less stable analytes).

Data Submittal

To submit data to the Credible Data system, **all data described in the [project study plan must be submitted at one time](#)**. The Credible Data rules require an “all or nothing” data submittal. Please double-check the accuracy and completeness of all data prior to submitting (to prevent data being down-graded to a different level or having to re-submit part of the data).

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Data submittal must be done by the project's [lead QDC](#) using an electronic signature (requires a signed and notarized form to obtain the [Personal Identification Number](#) (PIN) required for data submittal). Check the box to agree with the certification statement, enter your PIN, and answer the security question (see screen shot depicted below). Then you can "Submit" the complete data for the project.

After the data has been electronically submitted, you should submit a **Data Verification Letter** to confirm that all data that was collected was submitted and to explain the reasons that samples in the approved PSP were not submitted (e.g., due to problems with sample collection, analysis, weather, etc.). Contact the Credible Data Program for a template/example to use for this letter.

Credible Data

- Create or Update Sites
- Create New Reports
- Edit Open Reports or Submit a Project
- Upload XML Reports
- View Reports for Submitted Projects

Credible Data -> Retrieve/Submit Saved Reports

To edit existing reports, select a Watershed and then a Project Name from the drop down choices. To submit reports, make sure that ALL REPORTS for this project ARE PRESENT AND COMPLETE BEFORE SUBMITTING. Then for level 2 or level 3, certify the statement (by checking the box), enter your PIN, answer the security question, and click on the Submit All Reports button.

Associated Watershed:

Project Name:

Delete	Edit	Last Updated Date	Last Updated By	Report Type	Report Form ID	Prev Sub ID	Project Name	Site Name	Trip Date
<input type="checkbox"/>		10/23/2009 09:09:55	Jeff Reynolds	WQM	1502		ODNR 2009 Test Project Hocking River Tribs.	South Goal	2009-10-07
<input type="checkbox"/>		10/23/2009 09:08:39	Jeff Reynolds	WQM	1501		ODNR 2009 Test Project Hocking River Tribs.	North Goal	2009-10-01

I certify under the penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information to be accurate and complete. Law

I have read and agree with the above statement

Enter PIN:

Security Question: what animal is this?

To get a PIN, go to the eBusiness home page and click on "Request new PIN" in the lower left corner. Complete the information requested. The link will then change to "View PIN Request." If you follow that link it will allow you to print a form that is to be

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completed by you in the presence of a notary public. The completed notarized form can then be mailed to Ohio EPA (address on the form) and then your PIN will be mailed . Once you have received your PIN, you will need to activate the PIN (using a link at the bottom of the eBusiness homepage).

State of Ohio | Ohio EPA | Logout

Ohio EPA eBusiness Center

eBusiness Home My Account Current Account: JuneQDC1

Welcome to the Ohio EPA eBusiness Center

Need Help? Click this box for assistance.

Available Services (What is this?)				
Service	Action	Status	Facilities	Delegations
e-DMR	Request	Inactive	view/edit	
DSIWM Disposal Fees	Request	Inactive	view/edit	
DSW Credible Data	Deactivate	Active	view/edit	view/edit
DAPC Facility Service	Request	Inactive	view/edit	
e-Drinking Water Reports	Request	Inactive	view/edit	
Air Services	Request	Inactive	view/edit	

My Tasks (1)			
Name	Status	Created	Action
Request New PIN	New	05/21/2009 11:22:47	hide

For the latest Ohio EPA news check out our [home page](#).

Rejected Reports and Approved Data at Lowered Levels

At times it is necessary for Ohio EPA to reject reports, instead of approving them. This may be due to a QA/QC problem (blank contamination, duplicate agreement, laboratory difficulties, etc.), incorrect entry, etc. Other times, QA/QC problems may make it necessary to approve a report at a lower level than the rest of the data. If you are aware of conditions that may make this lower level a possibility, talk to us before you enter problem data.

Note: terms in [green](#) are defined at the end of this User's Guide.

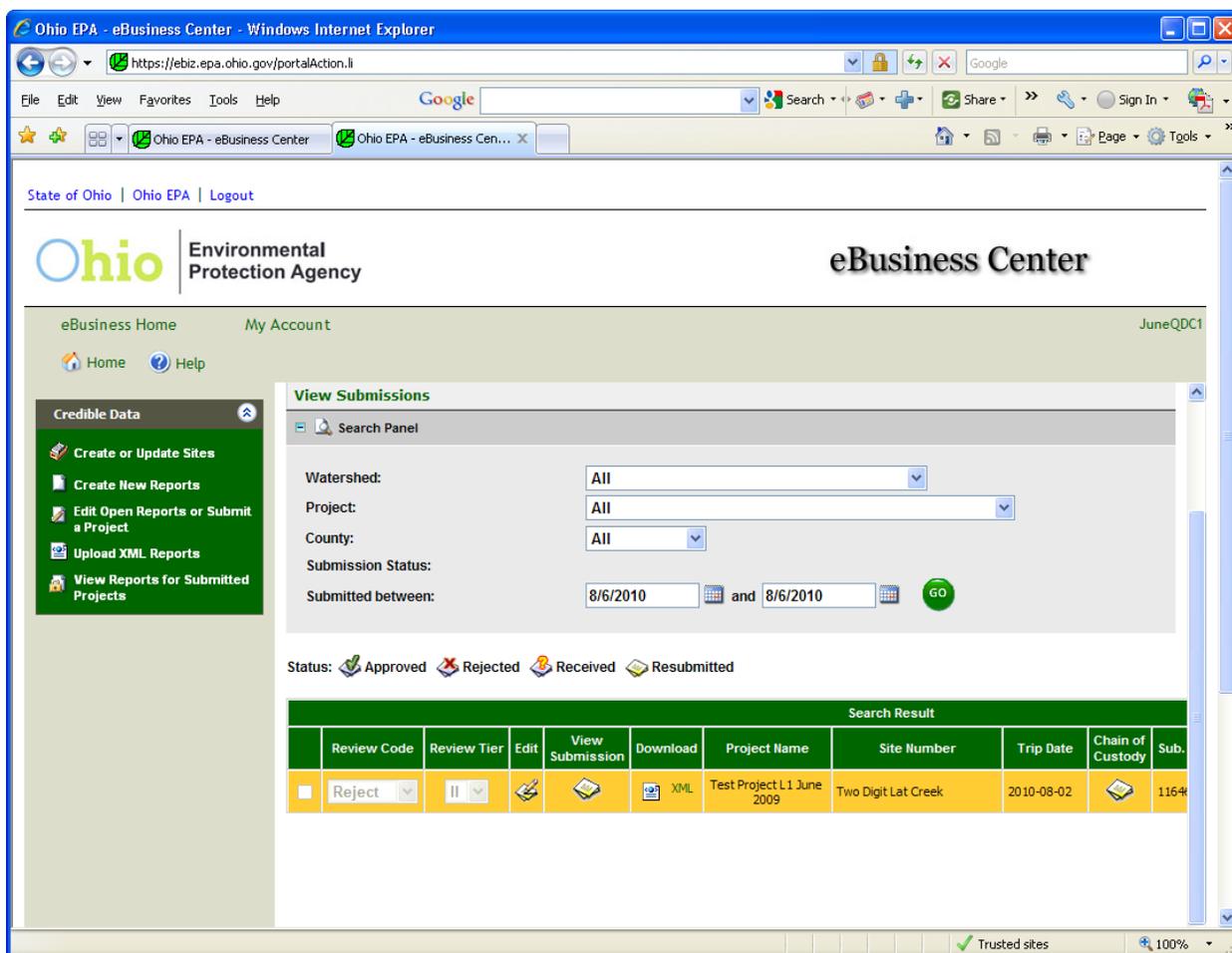
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Entry of data as multiple reports can be avoided by properly qualifying the data yourself. If you are aware of lab problems or QC problems, you can qualify the data as "R" for rejected or "trend" for a lower level as part of the same report as other data that does not need qualified. These qualifiers will stay with those results in the final database, so others will know of the limitations of the data.

Once a report is rejected, you will be able to correct and re-submit it. It is important to be as careful as possible with data entry to avoid the need to resubmit reports, which makes extra work for you and us. If a report was rejected because part of the data needs to be considered a lower level, you may need to segregate data into separate reports. This is because a report can only be approved at one level and data will not be approved at level higher than it merits.

After one of your reports is rejected, you will see that report in the "View Reports for Submitted Projects." An example is shown below.

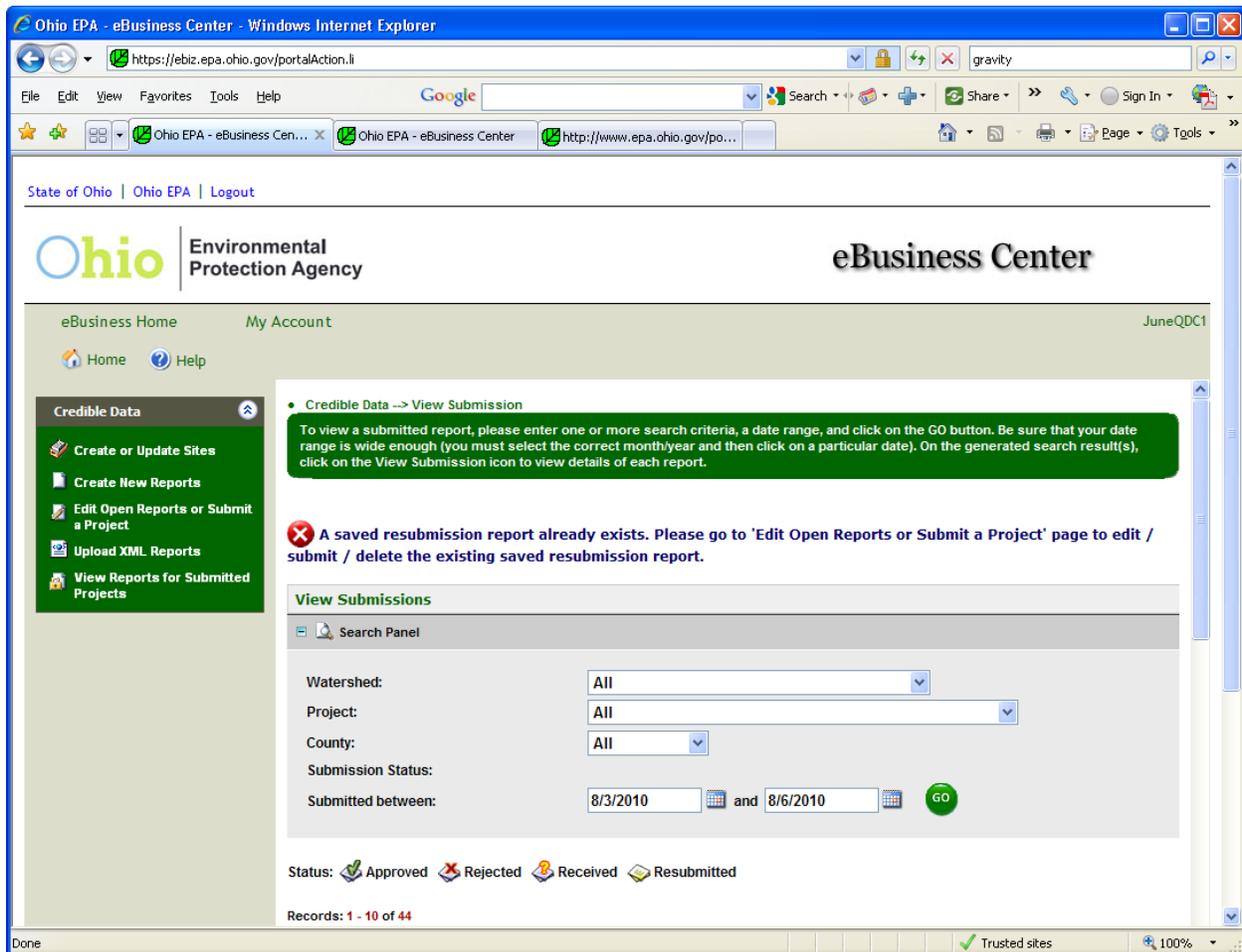
Note: terms in [green](#) are defined at the end of this User's Guide.



From here you should click on the icon under the “Edit” column. This will take you back to the report and allow you to make changes and save the revised report. Once it has been saved from here, it will again be visible under, “Edit Open Reports or Submit a Project.” Once you have completed revisions of all rejected reports (and any others you may have previously forgotten to enter), you can submit the remaining data reports.

After you click “Edit” to revise a report, use the “Edit Open Reports...” window to further modify it. Do not go back to “View Reports...” to try to access. You will get the message below and risk loss of data that you entered.

Note: terms in green are defined at the end of this User's Guide.

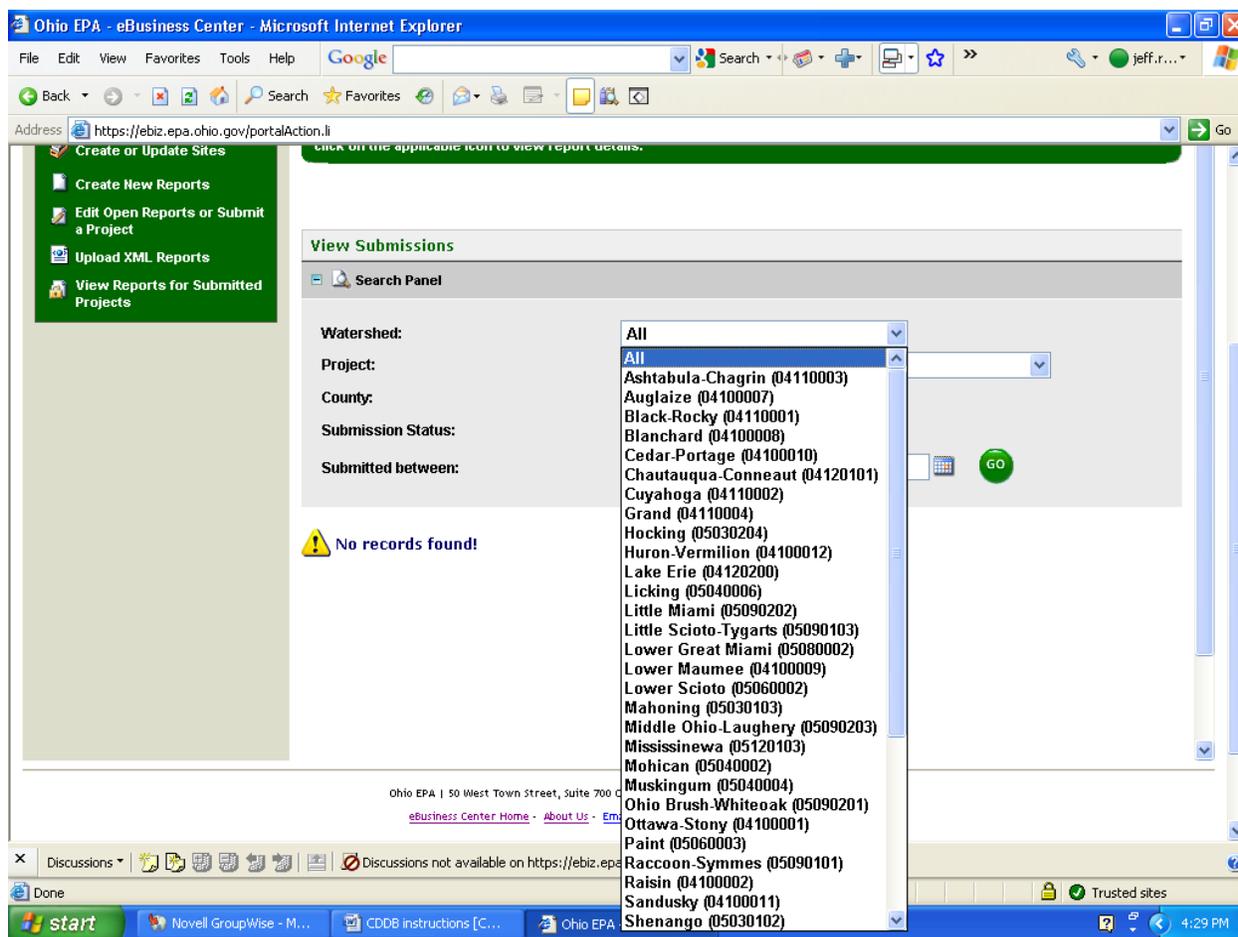


Data Viewing

This is an option available to anyone with an **eBusiness** account (not just **QDCs**). The easiest way to view data is to select the watershed that you're interested in and then set a date range for projects (the default range may be too narrow to find the project(s)/data you want) and then hit the "Go" button. This will display project names for any data collected in the timeframe designated. The screen shot below shows part of the drop down menu of watershed names.

*Note: terms in **green** are defined at the end of this User's Guide.*

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If you are unsure what watershed (HUC 8 name/number) you are sampling in, you can use the site below:

<http://gis.epa.ohio.gov/map.php>

Note: The data you view comes up in a limited format. If you need data that you entered (or someone else entered) into CDOA in an Excel format, contact us and we can retrieve it using Excel and provide it to you.

State Agency Data

In addition to storing data from QDCs, the CDOA is meant to accept and store data from other State of Ohio agencies that have performed water quality sampling. The Credible Data Law (ORC 6111.54) requires that, “Each state agency in possession of surface water quality data shall submit the data to the environmental protection agency in a format designated by the director of environmental protection.” The Credible Data Rules *Note: terms in green are defined at the end of this User's Guide.*

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(OAC 3745-4, effective March 2006) specify that data from a particular year should be submitted by April 1st of the following year.

While the concept of Qualified Data Collectors is not applicable to State of Ohio agency staff, since their data is considered "credible" by rule, the level of the state agency water quality data must be determined by review of Ohio EPA staff. Any level 3 data submitted by another state agency is considered equivalent to data collected by Ohio EPA and will be used for the same types of decisions, classifications, etc. Other data will be considered level 2 or level 1 based on the methods used and the qualifications of the data collector.

Regardless of the eventual data entry option used, everyone has to start with project naming and creation and creation of sampling sites (with associated information). Since the search capacities, on our end, for finding projects are limited we are using a naming format that will start with the year of data collection, followed by the agency initials, followed by an actual project name in the remaining characters of the 50-character field. The adjoining project description field will be used for a more complete description of the project (and may indicate data types to be collected).

Credible Data Terms

Chemical Template – A set of pre-determined chemical parameters that may be entered in the chemistry form as a group. Usually, these are parameters commonly sampled together and they always must be parameters that share the same sampling preservative. Several chemical templates are available for your use.

CDOA – Credible Data Online Application. An on-line system designed for submitting surface water data to the Ohio EPA's Credible Data Program.

Data Submittal - Data submittal may only be performed by the project's [lead QDC](#) and should only be done once all project data has been entered and double-checked. The Credible Data Law requires that any data submittal must include all data from a PSP. Submitting data for a Level 2 or Level 3 project requires a PIN.

Delegations – Delegations are granted privileges that allow the delegated person to input data on a Credible Data project. The CD administrator delegates initial privileges/rights to the [lead QDC](#) for a project and then the lead QDC may choose to delegate data entry rights to others that may assist with data entry for that project.

Note: terms in [green](#) are defined at the end of this User's Guide.

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eBusiness homepage – This is the webpage (<https://ebiz.epa.ohio.gov/login.jsp>) where you can access various Ohio EPA web-based data services. Here you can enter the “DSW Credible Data” service to enter data or delegate project rights to others assisting you with data entry. Other eBusiness services (associated with other divisions and functions of Ohio EPA) are also accessible from this home page.

Form – A form is the place where you can actually enter data and is found under the **Report** (which is associated with a **Site**).

Form Type – There are four form types available: “QHEI Monitoring,” “HHEI Monitoring,” “Macroinvertebrates Tracking,” and “Chemical Monitoring” and they are accessed from the bottom of the **Report** page. Forms reflect actual sampling results.

HHEI - Headwater Habitat Evaluation Index. A stream habitat assessment technique developed as part of the primary headwater habitat program. This is typically used to assess locations draining less than 1.0 square mile.

HUC – Hydrologic Unit Code. This term was originated by USGS and reflects a system of watershed division and designation. Larger numbers (e.g., HUC12) reflect smaller more specific watershed areas than smaller numbers (e.g., HUC8) which are for larger watershed areas. There are approximately 45 HUC8s within the state of Ohio.

Lead QDC – The Qualified Data Collector delegated/authorized to submit project data to the CDOA.

PIN - Personal Identification Number. A PIN is the electronic equivalent of a signature and may be obtained using a form from the **eBusiness homepage**.

PSP - Project Study Plan – A specific plan that describes sampling locations, frequencies, and data types to be collected by Qualified Data Collectors. PSP elements are described in the Credible Data rules and vary by level, with level 3 requirements being the most demanding.

QDC – Qualified Data Collector – A data collector status conferred upon a qualified individual by the Credible Data Program in one of three different levels, with level 3 being the highest, or several different specialties.

QHEI - Qualitative Habitat Evaluation Index. A stream habitat assessment technique developed by Ohio EPA to predict the diversity of the fish population. This is typically used to assess locations draining more than 1.0 square mile.

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Reports – These reflect information associated with sampling at a particular date and time at a specific site. Report information includes data about the weather, the condition of the surface water body that day, and who was there to do the sampling.

Sites – Unique locations where data was collected. They are identified by latitude/longitude, county, HUC, etc. and may be used for data collection for multiple dates, times, and data types.

Trend – A data qualifier used to suggest that the quantitation of the chemical analyte is more approximate and so the data should be considered a lower level (and not suitable for some data applications), such as level 2 instead of level 3.

User ID – Anyone getting an eBusiness account must designate a unique UserID. This separates them from all other eBusiness users.

References

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http://www.epa.ohio.gov/portals/35/wqs/headwaters/PHWHManual_2012.pdf

Ohio EPA, 2006. "Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI), June 2006" at:
<http://www.epa.ohio.gov/portals/35/documents/QHEIManualJune2006.pdf>

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