

Water Quality Data Exchange (WQDE) System Frequently Asked Questions



Overview Questions

1. What is the Water Quality Data Exchange System?

The New Jersey Water Quality Data Exchange System (WQDE) is the New Jersey Department of Environmental Protection's (NJDEP's) comprehensive information technology (IT) solution designed to receive, integrate, and disseminate ambient water quality data for New Jersey generated from multiple sources. This system will make it easier for NJDEP, the U.S. Environmental Protection Agency (USEPA), and regional and local water monitoring entities to submit and access New Jersey water quality monitoring data over the Internet. In addition to new data that is entered into WQDE, this system will also provide access to New Jersey water quality data stored in the USEPA's STORET Data Warehouse and the USGS' National Water Information System (NWIS). WQDE will be relied on heavily for the development of New Jersey's Integrated Water Quality Monitoring and Assessment Report (Integrated Report) and Section 303(d) List of Water Quality Limited Waters. The WQDE system complements NJDEP's Volunteer Monitoring (VM) Data System, which was designed as a repository for volunteer-collected water resource data. Further integration of the two water data exchange systems is planned for the future.

2. What type of information will be available in WQDE?

Eventually, all ambient water quality monitoring data generated by the NJDEP will be entered into WQDE, along with water quality monitoring data generated by our monitoring partners. This includes ambient chemical, sediment, biological (taxa counts and tissue analysis), continuous (data logger/data sonde) monitoring data, as well as a small amount of wastewater effluent data related to ambient water monitoring studies. In addition to new data, WQDE will also provide access to historical water quality data for New Jersey stored in both the USEPA and USGS data systems, which has been available electronically since the 1970's. (This historical data will continue to be available to users as more recent data is entered into the WQDE system.)

The WQDE system will also contain an "Ambient Water Quality Monitoring Inventory" of additional sources of data that are not in WQDE because they are contained in other existing data systems, such as USEPA's STORET Data Warehouse and USGS' NWIS. All these sources will be accessible using an enhanced version of the Exchange Network Browser and via NJDEP's Data Miner and NJGeoWeb or via the contact information provided in the Inventory.

3. Who are the anticipated users of this system?

NJDEP's ambient water quality data systems are available for anyone to use for data submission as well as data review and retrieval. These systems can handle field observations/measurements and monitoring results from chemical, biological (taxa counts), and habitat assessments. Data

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from both the WQDE system and Tier C and D data from the Volunteer Monitoring (VM) System are sent to USEPA's STORET Data Warehouse and made available to the public.

WQDE is intended to serve as the primary data repository for NJDEP ambient water quality monitoring programs and external monitoring partners (including Integrated Report data solicitation respondents), New Jersey Water Monitoring Council member organizations, NJDEP TMDL study contractors, NJPDES permittees conducting ambient water quality monitoring studies, NJDEP 319(h) grantees, NJDEP Office of Science water research contractors, and NJDEP County Environmental Health Act grantees conducting ambient water quality monitoring.

WQDE will serve as the primary source of “readily available data” used by the Department to assess water quality and develop the Integrated Report and the 303(d) List. The Department considers “readily available data” to be data that meets all applicable data requirements, is available to the public, is submitted electronically in the proper format, and is collected under a Department- or USEPA-approved Quality Assurance Project Plan. This includes Department-generated data as well as data submitted by other entities. Other entities submitting water quality data include the federal government (USGS and USEPA), county agencies (e.g., health departments), regional entities (Delaware River Basin Commission, Interstate Environmental Commission, NJ Meadowlands Commission), water and wastewater utilities, watershed organizations (watershed associations, watershed management groups, and volunteer monitoring organizations), NJPDES permittees, and entities conducting short term water quality studies for TMDLs, 319 grant projects, etc. Types of data sought by the Department for the Integrated Report/303(d) List include water chemistry, benthic macroinvertebrate assessments, and continuous recordings of dissolved oxygen, temperature, and/or pH.

4. How was development of the WQDE system funded?

Funding for development of this data system came from a USEPA National Environmental Information Exchange Network Grant.

5. What part of the WQDE system is currently available for use?

The data entry, data reporting and internet mapping portions of the system are currently available for use. The data entry portion will accept project descriptions with Quality Assurance Project Plan attachments, monitoring locations with attached photos, and results for physical/chemical, biological, habitat and fish tissue data from rivers, lakes, streams, ocean, and coastal waters.

6. Can data from waters outside of New Jersey be entered into the WQDE database?

Yes. Many of the data elements for projects and monitoring locations include reference values for locations outside New Jersey (e.g., NY, PA, DE counties, Geographic Regions for the NY/NJ Harbor are River Basins for areas outside NJ). The reference values for these and other data elements can be modified upon request to include values for items from outside New Jersey. Contact Paul Morton (paul.morton@dep.state.nj.us or 609-984-5495) for additional information.

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7. Can historical data be submitted?

Yes. The NJDEP encourages the submission of all water quality data available to generate a robust database of water quality information. However, for water quality assessment and generation of the Section 303(d) List of Water Quality Limited Waters, the NJDEP can only use data collected under a NJDEP or USEPA-approved QAPP.

8. Is technical support available for entering my data into the WQDE system?

Yes. If assistance is still needed after a thorough review of the online guide, fact sheet, and FAQs, data submitters may contact Paul Morton (Paul.Morton@dep.state.nj.us) or other Department staff identified below:

Type of Assistance/ Support	Contact Person	Email address	Telephone number	NJDEP Program
WQDE Technical Assistance	Paul Morton	Paul.Morton@dep.state.nj.us	609-984-5495	Water Monitoring & Standards (WM&S)
VM (Volunteer Monitoring)	Danielle Donkersloot	Danielle.Donkersloot@dep.state.nj.us	609-633-9241	WM&S/ Bureau of Water Quality Standards and Assessment (BWQSA)
NJ Water Monitoring Council	Alena Baldwin-Brown	Alena.Baldwin-Brown@dep.state.nj.us	609-292-1623	WM&S
Integrated Report/303(d) List	Kevin Berry	Kevin.Berry@dep.state.nj.us	609-633-7017	BWQSA
TMDL studies	Trish Ingelido	Patricia.Ingelido@dep.state.nj.us	609-984-9423	WM&S/Bureau of Environmental Analysis and Restoration (BEAR)
NJPDES-related studies	Jason Lonardo	Jason.Lonardo@dep.state.nj.us	609-292-4860	Division of Water Quality, Bureau of Surface Water Permitting
Fish Tissue	Terri Tucker	Terri.Tucker@dep.state.nj.us	609-633-3856	Office of Science

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WQDE in Relation to Other Systems

9. What is the difference between E2, WQDE, and COMPASS?

“E2” is the product name for NJDEP’s Electronic Environmental (E2) Reporting System for data. WQDE is one of the modules on E2 and is designed to receive ambient water quality data. COMPASS is the name of the database that stores all the data once it has been reviewed and approved by an Organization Administrator.

10. What is the difference between WQDE and the Volunteer Monitoring modules of E2?

Both modules reside within the E2 framework, use similar data standards, and rely on the COMPASS database for data storage. In the future, there will be a convergence of the two systems.

The volunteer monitoring (VM) module is designed to meet the specific data needs of New Jersey’s volunteer monitoring community. It relies on Web forms and data formats that are a consolidation of the forms and practices employed by the volunteer monitoring community. Its emphasis is on ease of use and small batches of information while supplying the information necessary for NJDEP use of the data.

The WQDE module is designed for internal use by NJDEP staff as well as its contractors, grantees, and those responding to the data solicitation. WQDE has a more robust set of data elements designed to provide a more detailed accounting of the environmental monitoring process. It is designed for the batch loading of hundreds of monitoring locations and thousands of data results at a time.

11. I am already using the Volunteer Monitoring (VM) data management system. Do I need to switch over to the WQDE system?

No. We encourage you to continue using the VM data system. Our goal is to further integrate these systems as one seamless application in the future.

12. How is WQDE different from USEPA’s STORET Data Warehouse, the Water Quality Exchange (WQX) and the Legacy Data Center?

The STORET Data Warehouse is USEPA's repository for water quality monitoring data collected by water resource management groups across the country. These organizations, including states, tribes, watershed groups, other federal agencies, volunteer groups and universities, submit data to the STORET Warehouse in order to make their data publically accessible. Data in the STORET Warehouse are of documented quality, meaning that a certain level of metadata, including where, how, why, when and what was monitored, must be included with all data submissions. Each sampling result in the STORET Warehouse is accompanied by

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information on where the sample was taken (latitude, longitude and a site identification), when the sample was gathered, the medium sampled (e.g., water, sediment, fish tissue), information on sampling, analytical methods used, and the name of the organization that sponsored the monitoring.

Groups submit data to the STORET Data Warehouse through a framework called the Water Quality Exchange, or WQX. WQX is not a distributed database that people use, but rather a standard way of submitting data to the STORET Data Warehouse, using the National Environmental Information Exchange Network (NEIEN). WQX defines a standard set of data elements that must be captured in a data submission file in order for the data to come into the STORET Data Warehouse. It also uses a standard set of internet protocols that define how the data submission is made to USEPA.

The [LDC \(Legacy Data Center\)](#) contains historical water quality data dating back to the early part of the 20th century and collected up to the end of 1998. Data is no longer being placed in the Legacy Data Center, but the public can still access data from it, either from flat files, or query tools.

The WQDE system is based on the WQX data standard. However, we have enhanced the standard to require additional information regarding monitoring projects (spatial, temporal, and parametric information). This enables users with their own robust data systems (such as USGS) to “register” their projects in a searchable inventory of monitoring projects without having to translate and reenter their monitoring results.

13. What is the difference between NJDEP’s WQDE and USEPA’s WQX Web for data entry?

WQX Web is a Web-based application designed to assist smaller organizations with submitting data via WQX to the STORET Data Warehouse. WQX Web also interacts with the Central Data Exchange (CDX), which is the USEPA's portal through which all environmental data is expected to flow.

WQDE has many of the same features and functions as WQX Web, with some significant enhancements. First, WQDE provides Web-based forms for users to enter Organization, Project and Monitoring Location information. Second, WQDE has roles that restrict a user’s ability to see and/or edit data only for a specific project within an Organization, which is useful for organizations administering grants (e.g., 319(h) grants) or contracts (TMDL monitoring studies, fish tissue analysis), for various projects, to external organizations. Third, WQDE has more extensive data validation routines (checking values against historical data for NJ waters and sediment to identify questionable data and checking to make sure the correct units are supplied for a particular Characteristic). Fourth, WQDE provides for users to enter data with formats that are closer to what is being currently supplied to NJDEP. Finally, WQDE preserves all data submitted to WQDE and track all changes to that data (audit trails) for eDiscovery.

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14. Should data be submitted to both USEPA’s STORET Data Warehouse and NJDEP’s WQDE systems?

No. Data from WQDE will be sent to USEPA’s STORET Data Warehouse. Users querying both sources could wind up double counting results and biasing their interpretations.

Users can use the Inventory portion of WQDE to register their projects. We will not send this project level information to USEPA if the Inventory entry includes that the data is available from the STORET Data Warehouse

Getting Started: Accessing WQDE

15. How do I get access to the WQDE system?

To access the WQDE system, you first need to obtain a “My New Jersey” account. Go to NJDEP Online (www.njdeponline.com) and follow the instructions to register for an account.

16. Who/what is an “Organization Administrator”?

The “Organization Administrator” is the person designated by a monitoring entity to be responsible for validating all data submitted to WQDE by that entity and deciding how that data is to be accessed and retrieved from the system.

17. Will I be able to edit the information that I entered into the database when I registered my organization/project?

Yes. Users authorized as “Data Reporter” will be able to edit project information. Users authorized as Bureau/Organization Administrator will be able to edit information for the entire Organization.

Creating and Editing Data Projects in the WQDE Database

18. Should a different project be created in the database for every Quality Assurance Project Plan (QAPP) modification?

Yes. A new project should be created for major changes to monitoring projects, including changes in monitoring locations, sampling frequency, sampling procedures, analytes and measurements, and analytical methods.

19. Do I have to attach a QAPP that has been approved by NJDEP, USEPA, or USGS to my Project?

Yes, the QAPP contains valuable information that is used by NJDEP and other staff to help understand and appropriately use your data. A QAPP must be approved by USEPA, USGS, or

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NJDEP before monitoring begins to meet NJDEP Integrated Report/303(d) List data requirements.

20. Can I attach results and graphs to my Project?

Yes, and we encourage you do this. Files can be attached to your projects either through the Project Web form or as part of a project data submission. Please note that all project files must be compressed in an archive format (.zip) when using the batch submission process and must have a separate file that defines the project identifier, the name of the attachment file, and the file extension(pdf, jpg, etc.).

21. Is there a file size limitation for attachments?

Yes, files in the Adobe PDF format are limited to 58 Mb, and other formats are limited to approximately 4.8 Mb. We encourage you to make your attachments as small as possible to reduce the wait when uploading and downloading information, and to accommodate USEPA's 80 Mb limit for file attachments. For larger quality assurance program plans (QAPPs) with lots of attached graphics, we recommend that you submit them as grayscale color depth and a 300 dpi resolution.

22. Can I delete projects from WQDE?

Yes, WQDE allows projects to be deleted but requires that results be deleted first to prevent accidental deletion of all the project data.

23. What are "Geographic Regions"?

The drop-down menu for "Geographic Regions" (under "Geographic Information") includes large areas identified by federal agencies (e.g., National Estuary Program areas), state agencies (e.g., the Highlands), and areas of general interest (e.g., Coastal). The selected region should represent the geographic region within which the monitoring locations for the project were located.

24. What are "River Basins"?

The drop-down menu for "River Basins" (under "Geographic Information") includes the 20 NJDEP Watershed Management Areas as well as additional bay and estuarine areas. The selected "River Basin" should represent the drainage area within which the monitoring locations for the project were located.

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Creating Configurations and Batch Loading Files

25. What are Configurations?

Configurations are a set of instructions that you provide to WQDE on how to process the data you intend to supply. It includes which piece of information is in a column, the format of the data (e.g.: date format), and information about any data you want the system to automatically generate.

26. Should I put my column headings in the Replacement Value column?

No. The “Replacement Value” column is used to fill in values missing from your file. For example, if you use the datum field for coordinates but you do not always know what the value is, you can enter “Unknown” in the “Replacement Value” field and WQDE will put the value in for you when it encounters a missing value in your file, rather than you manually entering “Unknown” for each black line in your data file. If you enter your column headings in the “Replacement Value” column, WQDE will attempt to enter your column headings for the missing value, which will result in an error.

27. Are there any special rules for using the “Auto generate” feature in “Configurations”?

“Auto Generate” is a useful feature that lets you specify a value one time in a configuration without having to include it in the data file that you submit to WQDE. “Auto Generate” fields must be the first fields in the configuration. The trick for moving all the “Auto Generate” fields to the top is to change all their sequence numbers to “0” and then click the “Sort Sequence” button. All the rows then move to the top.

28. What are “Mapping Translations” and how do they work?

“Mapping Translations” are used with fields that are limited to specific values. They permit you to identify your codes and translate or map them to WQDE codes. This can be done prior to submitting a file in the configuration. WQDE also has a feature that allows you to keep a list of values that do not match its codes and gives you the option to map your values to WQDE codes as part of validating the file. WQDE lists only the first 100 unmatched values (for time/performance reasons), so you may have to submit your file multiple times until you match all the values. You are also given the option to save these mappings and they will be applied the next time you use the import configuration.

29. Can I modify an existing configuration?

Yes, open your configuration, change the name of the configuration to something new, and click the “Save As” button. You can then add and delete columns, change the order of columns, and

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add or change default values and formats. When you are finished, click “Save” and there will be a new configuration with your new column order. Your original configuration will also be saved.

30. Can someone else in my organization change my configuration?

No, only you can edit your configuration.

31. Can I copy someone else’s configuration

Yes, as long as you are associated with their “Organization” in WQDE, you can open their configuration, give it a new name, and then click the “Save As” button. After the screen refreshes, you will see that your name now appears in the owner box.

32. Is there an example spreadsheet that can be used for batch loading projects, monitoring locations, and results?

Yes, NJDEP has created a sample spreadsheet that includes the mandatory data elements and reference values for those data elements that are limited to reference values. It can be downloaded at: www.state.nj.us/dep/wms/wqde.html.

Reference Data

33. Where can I find the “Reference Data” for WQDE?

All the rules for WQDE are defined in the WQDE Data Dictionary. Most of the permitted values are also listed in the “Reference Data” line under the WQX group in E2. Some fields in WQDE are limited to specific values (or domain lists). Some fields in WQDE are mandatory, some are optional, and some are mandatory under certain conditions. A handy trick when working on “Configurations” is to right click on the link, and select the “Open in New Tab” menu item. You will now have a tab with the “Configuration” and a tab with the “Reference Values”. You can copy and paste from the “Reference Table” to your configuration

34. How do I search the Reference data?

If you click on a column heading, it will sort the rows by that column in ascending order. Click that column again and it will sort the rows in descending order.

35. Is there a “wild card” for searching Characteristics?

Yes, the “wild card” character is the percent symbol (%). If you enter %osph% into the search box, and click the “Go” button, the list will be filtered down to just Phosphorus and Orthophosphate.

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36. Where is pH in the Characteristic reference table?

It is at the bottom. The list sort order is numbers uppercase (A-Z), then lowercase (a-z). Please note that the units for pH are “None”

37. What happens if I don't see a “Characteristic” in the Reference list

Please contact us (see contact information in the answer to Question #8). “Characteristic” names are obtained from the USEPA Substance Registry System (SRS). If the name exists in the SRS, we want to use the SRS name for WQDE. If the name of a “Characteristic” does not exist in the SRS, we can add it to WQDE and ask USEPA to add it to the SRS.

Submitting Data to the Database**38. What is a “submission”?**

“Submission” is the term for a file that is submitted to the WQDE system on a specific date and time using a particular configuration file. The WQDE system assigns a sequential number to each submission called a “Submission ID”. This “Submission ID” is very important for tracking the progress of your files and helps us in troubleshooting any problems with the system.

39. WQDE requires one “Characteristic” per line for input files. My data is organized with Characteristics in columns. Is there a Configuration that handles Characteristics in columns?

Yes, but only for data logger files. There is a free “Add-In” on the Web for Microsoft Access called “Untools”, which lets you transpose/unpivot your table into a format that is more compatible with WQDE. Other types of files must be reformatted manually to be consistent with the WQDE data format.

40. Is there a limit to how many rows/lines can be in a batch file loaded with a configuration?

The practical limit appears to be 5,000 rows for results but a file this large will take a long time to process and be validated. We recommend that multiple data files be created with no more than 2,500 rows each for a more acceptable submission response time.

41. My submission has a status of VALID. Now what?

Your submission is ready to be sent to the COMPASS database. To do this, your Organization Administrator needs to click on the cell to the far left of your submission, select “Accept” from the drop down menu, and then click the “Update Accept/Reject” button.

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Deleting Data from the Database

42. What if I find something wrong with my data after it's been submitted to WQDE? Will I be able to delete the data in WQDE?

Yes, if you have the role of “Data Reporter”, you can delete your submission up until it is approved by your “Organization Administrator”. Once it is approved, only your “Organization Administrator” can delete your data.

43. How do I delete monitoring locations and results?

Under “View Submissions”, click on the “Delete” icon in the row that has your submission. The system will confirm that you want to delete the submission. The monitoring locations or results will be deleted from the WQDE and COMPASS tables, but the record of your submission and your raw data file will remain in the system.

Note: There are no “cascading deletes” with WQDE; you will not be able to delete the monitoring location if there are results associated with that location. You will get an error message that you must first delete the results before you can delete the monitoring location. You must first find the submission with the results, delete it, and then you can delete the monitoring location.

If your original submission contained results for other monitoring locations, you can open the file, delete the rows for the deleted monitoring location, save the file, and then do a new submission to WQDE.

44. Is it necessary to delete my old data before I put in new data?

Yes, you must delete your old submission with the “old” data before you submit your file with the new data.

Activities and Results

45. What is the best way to organize my data?

Some groups submit all of the data for all dates and all monitoring locations. Others submit one file per monitoring location for all dates, and still others submit one file per “Characteristic”. We prefer that you submit smaller files more frequently than larger files that approach the limits of the system. It also makes your data timelier and more relevant if you submit it monthly or quarterly rather than annually or biannually.

46. What is the “Activity Identifier”?

The “Activity Identifier” is a code for grouping all the activity-level information. This includes:

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- ActivityTypeCode
- ActivityMediaName
- ActivityStartDate/ActivityStartTime & ActivityEndDate/ActivityEndTime
- Depth Information
- Sample Collection Method Information
- Sample Preparation Information
- Metrics

If any of the above items are different, then a new “Activity Identifier” is required. If you choose to include optional activity level information, then the combination of all the activity fields must be unique.

47. Can I reuse Activity Identifiers if they already exist within WQDE?

No. Once an “Activity Identifier” is in WQDE you cannot re-use it. If you need to enter partial results for a sample, then we recommend you either use distinct but related codes for the “ActivityIdentifier” (123a, 123b) or you delete your initial, partial activities and results and submit a new file with all the results.

48. What information do I have to report about my sample collection methods and equipment?

You need to provide an identifier or code for the analytical method (SampleCollectionMethodIdentifier), the source for the analytical method code (SampleCollectionMethodIdentifierContext), and the name of the sample collection method (SampleCollectionMethodName). You must also select from the list of pre-defined values for the sample collection equipment (SampleCollectionEquipmentName).

49. Is sample collection information required for “Field Measurements” or “Observation”?

No, it is only required when the “Activity Type” you supply in your input file includes the word “Sample”. You may include sample collection and equipment information for field measurements and observations, but be sure your Activity Identifiers are unique.

50. What is a “Characteristic”?

“Characteristic” is the term for something observed or measured in the environment. It has sometimes been called a parameter, an analyte, a substance, or a constituent.

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51. Have the Characteristic Names changed between what we used for STORET and what is required for WQDE?

Yes, USEPA has standardized names for “Characteristics” on its Substance Registry System and NJDEP has adopted this standard for WQE. Please use the new names when submitting data to WQDE. The changes are as follows:

Old STORET/WQX Name	New WQDE Characteristic Name	Method Speciation
Acidity as CaCO ₃	Acidity, hydrogen ion (H ⁺)	as CaCO ₃
Alkalinity, bicarbonate as CaCO ₃	Bicarbonate	as CaCO ₃
Alkalinity, carbonate as CaCO ₃	Calcium carbonate	as CaCO ₃
Alkalinity, hydroxide as CaCO ₃	Calcium hydroxide	as CaCO ₃
Calcium as CaCO ₃	Calcium	as CaCO ₃
Nitrogen, ammonia (NH ₃) as NH ₃	Ammonia	as NH ₃
Nitrogen, ammonia (NH ₃) as NH ₄	Ammonia	as NH ₄
Nitrogen, ammonia as N	Ammonia-nitrogen	as N
Nitrogen, Ammonium (NH ₄) as N	Ammonium	as N
Nitrogen, ammonium (NH ₄) as NH ₄	Ammonium	as NH ₄
Nitrogen, Nitrate (NO ₃) as N	Nitrate	as N
Nitrogen, Nitrite (NO ₂) + Nitrate (NO ₃) as N	Inorganic nitrogen (nitrate and nitrite)	as N
Nitrogen, Nitrite (NO ₂) as N	Nitrite	as N
Phosphorus as P	Phosphate-phosphorus	as P
Phosphorus as PO ₄	Phosphate-phosphorus	as PO ₄
Phosphorus, hydrolyzable as P	Polyphosphate	as P
Phosphorus, hydrolyzable as PO ₄	Polyphosphate	as PO ₄
Phosphorus, hydrolyzable plus orthophosphate	Polyphosphate	as P
Phosphorus, organic as P	Organic phosphorus	as P
Phosphorus, orthophosphate as P	Orthophosphate	as P
Phosphorus, orthophosphate as PO ₄	Orthophosphate	as PO ₄
Phosphorus, phosphate (PO ₄) as P	Phosphate-phosphorus	as P
Phosphorus, phosphate (PO ₄) as PO ₄	Phosphate-phosphorus	as PO ₄
Phosphorus, polyphosphate as PO ₄	Polyphosphate	as PO ₄
Silicon as Si	Silicon	as Si
Silicon as SiO ₂	Silicon	as SiO ₂
Sulfite (SO ₃) as S	Sulfite	as S
Sulfite (SO ₃) as SO ₃	Sulfite	as SO ₃
Sulfur, sulfate (SO ₄) as S	Sulfate	as S
Sulfur, sulfate (SO ₄) as SO ₄	Sulfate	as SO ₄

52. Does “Sample Fraction” need to be reported when the “Activity Type” is “Field Msr/Obs”?

No. The “Characteristics” that are used for “Field Measurements” do not require sample fraction.

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53. What is the “Result Value Type”?

“Result Value Type” is the field used to indicate how the result was derived. The values entered in this field must be either: “Actual”, “Calculated”, or “Estimated”.

“Estimated” is used when there is some quality control (QC) concern about the data, such as the sample was held beyond its holding time before it was analyzed, or the analyst noted matrix interference, or the Characteristic was also detected in the blank; or if the result is less than the reporting limit.

“Calculated” is used when the result is not from a direct measurement, such as when you calculate un-ionized ammonia from the measurement of ammonia, temperature, and pH and use a spreadsheet or look-up table to determine the corresponding value.

54. What are Result Measure Qualifiers and how do they differ from Laboratory Comment Codes?

“ResultMeasureQualifiers” are codes that explain why a result may require a closer look. It’s the place where you can provide a code to indicate why a result is an estimate, and indicate that a result is a “Non-detect” or a “greater than” value.

55. Can the “Result Measure Qualifier” column be left blank?

Yes, except when reporting results that are qualified or commented such as a “non-detect”, “less than” or “greater than” value. In those cases, use the appropriate qualifier code from the reference table.

56. How do I report values that are below the reporting level or detection limit?

Report the value of the “MDL” or “RL” in the “ResultMeasureValue” field. If it is a “non-detect”, enter a “K” in the “ResultMeasureQualifier” field. If it is below the reporting level, enter a “JR” in the “ResultMeasureQualifier” field. Do not enter “ND” in the “ResultMeasureValueField”.

57. How do I report values that are “Too Numerous to Count” (TNTC) and above the upper quantitation limit?

Put the upper limit in the “Result Measure Value” column and the qualifier “L” (Larger than) in the “Measure Qualifier” field.

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58. Can I report a less than (“<”) or greater than (“>”) symbol along with a value in the “Result Measure Value” field?

No. The system cannot handle these symbols at this time, although we are exploring future refinements with our contractors.

59. Can I report the result, the “Method Detection Limit” (MDL), and the “Reporting Limit” (RL)?

No. Currently you can only report the result and the “MDL”, or the result and the “RL”. You do this by reporting the result in the “ResultMeasureValue” field. Then, if you want to report the MDL, you enter the MDL value in the “DetectionQuantitationLimitMeasure” field, the units for the MDL in the “DetectionQuantitationLimitMeasureUnits” field and “Method Detection Limit” in the “DetectionQuantitationLimitType” field. If you want to report the RL, you enter the RL value in the “DetectionQuantitationLimitMeasure” field, the units for the “RL” in the “DetectionQuantitationLimitMeasureUnits” field and “Reporting Limit” in the “DetectionQuantitationLimitType” field.

60. What information do I need to report about my analytical methods?

You need to supply the method number (“AnalyticalMethodIdentifier”), and the source for the method number (“AnalyticalMethodIdentifierContext”). If you report values from the reference table for the above two items, that’s all you need to supply. If you do not have methods that match the reference table, then you will need to supply the name of the “AnalyticalMethodName” and a source for the method other than the values provided in the reference table.

61. What if my analytical method involves a modification of the published method?

You may add a column to your configuration (“AnalyticalMethodQualifier”) and describe the modification in this column.

Portable Data Logger**62. What is a Portable Data Logger?**

A Portable Data Logger (PDL) is a device that is set out in the environment for a period of time and which makes and records measurements of the environment at regular intervals. It is sometimes called a data sonde, a recording meter, a continuous measurement device, etc. A portable data logger is also a device that is used to make multiple measurements at a single location at various depths (in the ocean, in an estuary, or in a lake or reservoir).

Water Quality Data Exchange (WQDE) System Frequently Asked Questions

63. What is a different about the data format for Portable Data Logger?

Many PDLs have an output format that puts characteristics in columns instead of the row format that WQDE expects. When you set up your import configuration, you will select “ResultMeasureValue” as one of the columns, then scroll over to the right and select the “Characteristic” and the “Units” for that characteristic. You will then repeat the selection of “ResultMeasure”, “Value”, “Characteristic”, and “Units” for each column in your output file.

64. How do I report depth with PDL results?

If the probe of the data logger has a sensor that measures depth, then use the “Depth, data logger” characteristic. If you positioned the sensor by using a tag line or other depth measuring device, then just use the Depth characteristics. If you positioned the sensor so it floats on the surface or lays on the bottom, then use the Relative Depth item in the configuration drop down.

Troubleshooting

65. What does it mean when I get an email that includes the text “XML validation error”?



Error messages occur when the user supplies information that does not match the rules for the WQDE system. They can also occur when there are communication issues between the different parts of the WQDE system. You can go back to the “View Submissions” part of E2 and click on the “Error” message icon to view what has caused the error.

66. What does it mean when I get an email citing an Oracle Error?

It means there was a problem adding your results to the database. Please contact the appropriate contact person for assistance in resolving these errors (see contact information in the answer to Question #8).

67. My submission has a status of INVALID. How do I fix this?

Click on the “View Submissions” link and click on the “Error” icon. A window should pop up listing the errors in your file. Please note that the line numbers do not correspond to the line numbers of your input file. The system only logs the first 100 errors.

Once you correct your errors, it is not necessary to delete your original submission. Since the submission was invalid, it never got into the system. The submission record under “View Submissions” is just to prove you made the attempt and to provide a place to see what errors caused the problem.

Water Quality Data Exchange (WQDE) System Frequently Asked Questions

68. My submission has a status of COMPASS_FAILED. What does that mean?

Something went wrong in transferring the data from the WQDE system to COMPASS. Please contact us for assistance in fixing this issue (see contact information in the answer to Question #8).

69. The system won't let me delete my monitoring locations. It says there is data associated with the monitoring location. How do I delete the monitoring location?

The WQDE system provides a safeguard to prevent the accidental deletion of all data associated with a given monitoring location. You must first locate the data submission(s) with the activities and results for that monitoring location and delete those submissions; then you will be able to delete the monitoring locations.

Data Reports and Retrieval**70. Where are the data reports located – in NJGeoWeb and Data Miner?**

Water quality data submitted to WQDE can be viewed on-screen via NJDEP Data Miner at: http://datamine2.state.nj.us/DEP_OPRA/OpraMain/categories?category=Ambient+Water+Quality. Monitoring locations can be viewed via NJEP's Web based mapping solution NJGeoWeb at: <http://www.nj.gov/dep/gis/geoweb splash.htm>. Data from WQDE is sent to USEPA's STORET Data Warehouse (<http://www.epa.gov/storet>) which can be used to download data in a text based file format.