

Data Management

Data Management

Manage a wide variety of water quality data, including monitoring locations, projects, activities, and results. Supports all data covered by WQX Version 2, including field samples, lab data, biological monitoring, and metrics / indices.

Intelligent Data Import

No need to setup import templates! Just copy and paste your data from Excel, Open Waters recognizes the data based on column headers and then validates the data against EPA validation requirements. Supports both traditional and "cross-tab" import formats.

Data can be imported, or manually edited as shown here

Ease of Use

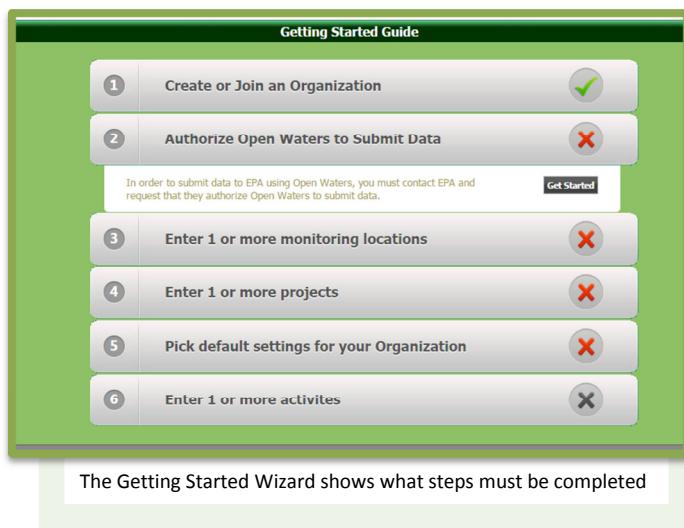
A major focus for Open Waters is to make data management and WQX Submission as easy as possible.

Getting Started Wizard

When you first create an Open Waters account, the application provides a wizard that guides you step-by-step through the process of getting started, including setting up the proper WQX submission permissions, and letting you know which data must be added, and in what order.

Retrieve All of Your Existing WQX Data

Have you previously used different software to submit data to WQX? Open Waters provides a one-click data import, allowing you to pull in all of your previous WQX data into Open Waters. This can help save a lot of time when getting started.



The Getting Started Wizard shows what steps must be completed

WQX Submission

Automated Bi-directional Synchronization with EPA

Submitting data to EPA has never been easier. All you need to do is edit (or import) your data and it is automatically synchronized with EPA's WQX system in real time. You control which data goes to EPA and which stays local to your system. Any data that fails to go to EPA is flagged for immediate editing. Let Open Waters handle the WQX submission burden, so you can focus on managing and analyzing your data.

Reference data is also pulled from EPA to help ensure that your data meets EPA data quality standards.

CONFIRM SAMPLE DATA TO IMPORT										
Note: You must click the "Import Selected Rows" button to complete the import process.										
Automatically submit imported data to EPA/WQX										
Import Selected Rows										
			Site Name	Sample Date	Location ID	Parameter	Unit	Value	Notes	
<input checked="" type="checkbox"/>	P	106-2013	LR01_20151111_110000	Feld	Water	11/11/2015	11/11/2015	COT	salinization	
<input checked="" type="checkbox"/>	P	106-2013	LR01_20151111_110000	Feld	Water	11/11/2015	11/11/2015	COT	Dissolved oxygen (DO) 0	
<input checked="" type="checkbox"/>	P	106-2013	LR01_20151111_110000	Feld	Water	11/11/2015	11/11/2015	COT	Specific conductance	
<input checked="" type="checkbox"/>	P	106-2013	LR01_20151111_110000	Feld	Water	11/11/2015	11/11/2015	COT	Turbidity	
<input checked="" type="checkbox"/>	P	106-2013	LR01_20151111_110000	Mg/hrs	Water	11/09/2010	11/09/2010	COT	Temperature, meter	
<input checked="" type="checkbox"/>	P	106-2013	LR02_20151111_110000	Mg/hrs	Water	11/09/2010	11/09/2010	COT	conductance	
<input checked="" type="checkbox"/>	P	106-2013	LR02_20151111_110000	Mg/hrs	Water	11/09/2010	11/09/2010	COT	pH	
<input checked="" type="checkbox"/>	P	106-2013	LR02_20151111_110000	Feld	Water	11/11/2015	11/11/2015	COT	Dissolved oxygen saturation	
<input checked="" type="checkbox"/>	P	106-2013	LR02_20151111_110000	Mg/hrs	Water	11/11/2015	11/11/2015	COT	oxygen (DO) 0	
<input checked="" type="checkbox"/>	P	106-2013	LR02_20151111_110000	Mg/hrs	Water	11/09/2010	11/09/2010	COT	Not Detected	
<input checked="" type="checkbox"/>	P	106-2013	LR02_20151111_110000	Feld	Water	11/11/2015	11/11/2015	COT	conductance	
<input checked="" type="checkbox"/>	P	106-2013	LR02_20151111_110000	Mg/hrs	Water	11/11/2015	11/11/2015	COT	Turbidity	
<input checked="" type="checkbox"/>	F	Monitoring Location not found...Monitoring Location ID does not exist. Import Monitor first.	106-2013	LR0X_20151111_110000	Feld	Water	11/11/2015	11/11/2015	COT	Temperature, meter
<input checked="" type="checkbox"/>	F	Monitoring Location not found...Monitoring Location ID does not exist. Import Monitor first.	106-2013	LR0X_20151111_110000	Feld	Water	11/11/2015	11/11/2015	COT	pH
<input checked="" type="checkbox"/>	F	Monitoring Location not found...Monitoring Location ID does not exist. Import Monitor first.	106-2013	LR0X_20151111_110000	Mg/hrs	Water	11/09/2010	11/09/2010	COT	Dissolved oxygen saturation
<input checked="" type="checkbox"/>	F	Monitoring Location not found...Monitoring Location ID does not exist. Import Monitor first.	106-2013	LR0X_20151111_110000	Mg/hrs	Water	11/09/2010	11/09/2010	COT	Dissolved oxygen (DO) 0
<input checked="" type="checkbox"/>	F	Monitoring Location not found...Monitoring Location ID does not exist. Import Monitor first.	106-2013	LR0X_20151111_110000	Feld	Water	11/11/2015	11/11/2015	COT	conductance
<input checked="" type="checkbox"/>	F	Monitoring Location not found...Monitoring Location ID does not exist. Import Monitor first.	106-2013	LR0X_20151111_110000	Mg/hrs	Water	11/11/2015	11/11/2015	COT	Turbidity
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When importing data, Open Waters flags records that would fail WOX submission.

Data Analysis

Mapping:

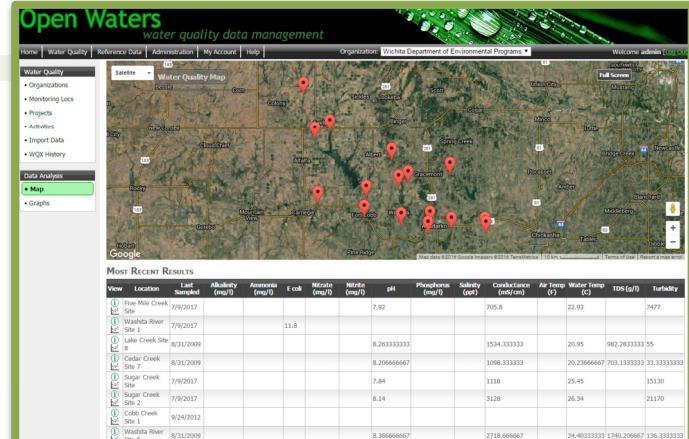
After your data has been imported, view your monitoring locations geospatially. Drill-down to view the sampling data collected at each site. A public map is also available that can be integrated with your agency's website to share data with your constituents.

Charting:

Generate time series charts with the built-in charting engine.

Data Export:

Export your data to Excel for additional analysis



Private and public maps available to visualize your data

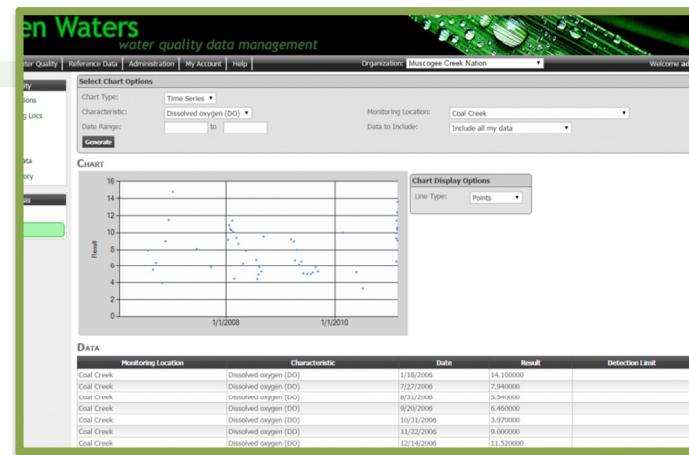
Security

Application Security

Application security ensures that only the users you authorize can access your data. You can define different levels of data access and submission rights.

Multi-Tenant Model

If you download and install your own copy of Open Waters, you have the option of housing data for multiple Organizations. Each Organization has access to its own data and manages its own security and submissions.



Generate time series charts for additional data analysis

Ready to get started? Several free implementation options available

Free Cloud Hosting

- www.open-waters.com
- Cloud-based solution
- **FREE** for any organization that submits 100 or fewer samples per year
- Monthly hosting fee for larger organizations

Free Hosting for Oklahoma tribes

- Muscogee Creek Nation offers free hosting to OK tribes as part of an Oklahoma Tribal Consortium
- Oklahoma Tribes are encouraged to contact Frank Harjo for more info at fharjo@mcn-nsn.gov

Free Download

- Download and install Open Waters on your own web server
- Requires a web server running IIS and a Microsoft SQL Server database

Free Source Code

- Technically savvy? Grab the Open Waters source code and customize your own unique solution
- Open Waters is completely open source with no proprietary 3rd party dependencies

Need more? Software customization is also available to suit your agency's needs