

# Getting Started on the Exchange Network: Adding Business Value for Water Programs Watersheds, Oceans, and Wetlands

The Exchange Network enables environmental and public health agencies to capitalize on standardized technology and extensive partnership opportunities to exchange water-related data with national, state, tribal and other partners. This guide provides information on how the Exchange Network can add value for water programs. It will help you understand how the Exchange Network can improve decision-making through more efficient access to more data and can reduce business costs. It also explains how to become a partner on the network. The guide is specifically tailored for watershed, ocean, and wetland programs. An electronic version of this guide, with hyperlinks, is available at [www.exchangenetwork.net](http://www.exchangenetwork.net).

## HOW DO I GET STARTED?

### 1. Understand How the Exchange Network May Be Used to Add Business Value for Water Programs

The Exchange Network provides states, tribes, and others with technologies, tools, services, and partners to:

- Submit water data to EPA and access it more efficiently,
- Exchange water data with other states, tribes, and environmental stakeholders,
- Improve water data analysis, and
- Improve internal water data business processes.

Exchange Network partners have found that the Exchange Network has helped them save money, make better decisions through more efficient access to more data sources, provide more and better quality data to the public, and enjoy other benefits described in more detail below.

#### ***Submit Water Quality Data to EPA More Efficiently***

Many Exchange Network partners monitor surface water quality and report their regulatory data to EPA. The Exchange Network provides the means for submitting this data directly to the EPA through the Water Quality Exchange (WQX). Partners also report beach closure information to EPA over the Beach

Notification Exchange. Submitting through the Exchange Network can **save time and money**, foster **better environmental decision-making**, and may create other **data sharing opportunities**. Partners sending data through WQX have reported several benefits, including:

- Streamlined business processes that reduce the expense and time spent reporting to EPA;
- Lower barriers to entry that enable new partners to submit previously unavailable data, providing more data from more monitoring stations to all partners;

#### **What the Wisconsin Department of Natural Resources Is Saying about the Exchange Network**

"WQX has transformed the way we interact with, share and use monitoring data. Today, the time we spend improving or verifying monitoring data is considered 'investing in the resource' rather than 'meeting reporting requirements'. We manage data based on what we need from the data... Because of the perceived higher value of 'data management' today, we've moved past historical barriers which once blocked us from investing time and resources into this task. The result is that our monitoring data - stations, results, quality assurance elements - are steadily improving."  
- Lisa Helmuth, Wisconsin DNR

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- Faster access for water quality managers to timely and comprehensive data from all reporting partners, including federal agencies, states, tribes, universities, and watershed stewards, over the Internet and, in the future, over the Exchange Network;
- Improved data quality through data standards, automated error checking, and reduced manual data entry; and
- Easier access to WQX data for incorporation into analytical tools and services.

### **Exchange Water Quality Data With Other States, Tribes, and Stakeholders**

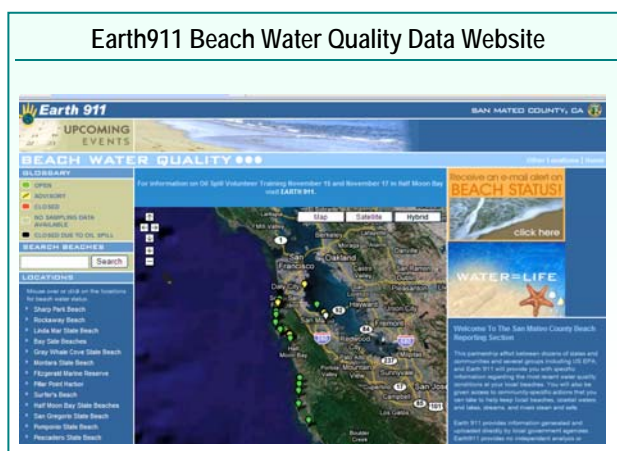
The Exchange Network allows partners convenient access to data collected by neighboring states and tribes, and has enhanced information access for other stakeholders. Several states, collaborating with Earth911, use the Beach Notification Exchange to provide beach advisory information automatically to the public on the Earth911 web site.

Other partners leverage the Exchange Network to **address regional and watershed-specific water quality management issues**. The Chesapeake Bay Nonpoint Source-Best Management Practices Exchange in development will allow the Chesapeake Bay Program Office and state environmental and health agencies to **share and model bay information** from multiple sources and locations more efficiently. The Pacific Northwest Water Quality Exchange (PNWWQX) has already demonstrated many benefits for partners, including:

- Allowing agencies to analyze data on a watershed basis by overcoming jurisdictional boundaries between federal agencies, neighboring states, tribes, and nongovernmental organizations;
- Feeding data to an online interactive map to easily search and access real-time water quality monitoring and sampling data from many partners;
- Saving time and money by re-using tools and other resources developed by network partners;
- Improving the timeliness of data by transmitting it in minutes rather than weeks or months; and
- Encouraging new partners to share data that historically was unavailable to state agencies.

### **Support More Powerful Water Quality Analyses**

Several Exchange Network partners are developing tools and services to **support more sophisticated analyses of water quality data** shared over the Network.



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- EPA is developing data publishing services that will allow partners to incorporate water quality data into their own customized applications to support data analysis, decision making, and communication with the public.
- Kentucky is working with EPA, USGS, and other public partners on a Watershed Modeling Information Portal (KWMIP). This one-stop resource allows Kentucky watershed managers to search and access modeling tools and related datasets geographically and across partner agencies, using Exchange Network infrastructure to aggregate data from the disparate sources.

### Chesapeake Bay NPS-BMP Exchange

The EPA Chesapeake Bay Program Office (CBPO), Pennsylvania, Maryland, and Virginia, have developed an exchange to improve access to information about best management practices (BMPs) affecting the Chesapeake Bay ecosystem. Partners now share nonpoint source BMP data that can be used more easily by modeling tools at CPBO to predict pollutant impacts on watershed water quality. In addition to providing analysts with insight about the effectiveness of land management practices, this information will also be publicly available on a website. Prior methods for exchanging this data among Chesapeake Bay partners were slow, costly, and labor intensive; the Exchange Network has improved data accuracy, harmonized partner information, reduced costs by eliminating manual data processing, and streamlined access to critical water management information for decision-makers and stakeholders. Further information is available at [www.chesapeakebay.net](http://www.chesapeakebay.net).

### ***Improve Internal Water Quality Data Business Processes***

The Exchange Network can also **support your internal business needs**. The California Department of Environmental Projection is developing a system for sharing watershed data among state environmental programs, water quality control boards, and other partners in the California Environmental Data Exchange System (CEDES). When complete, Exchange Network technologies will be used to increase the availability of environmental data about the San Francisco Bay-Delta region, improving watershed analysis and reporting by publishing combinable datasets from a variety of sources.

## **2. Determine How the Exchange Network Can Benefit Your Water Program**

The following questions will help you determine where the Exchange Network can add value to your water program. We recommend that program managers talk through these questions with front line staff and information technology managers and staff in their agencies.

- Do you require or submit data for water regulatory programs?
- Do you manage watersheds and other water resources that cross state boundaries?
- What additional water data do you want or need from surrounding states or tribes to support water management decisions and/or programs in your agency?
- What new datasets would you like to integrate with your water data?
- Where do you see opportunities to move water data electronically and reduce typing or data entry?
- Where do you enter the same water data multiple times?

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### 3. Get Started on the Exchange Network

With **minimal effort**, you can get up and running on the Exchange Network. If you are not yet a participant in the Exchange Network, please refer to the *Join the Network* and *Apply for a Network Grant* Getting Started Guides that will help you understand what it takes to become a partner and some of the resources available. These and other Getting Started Guides are available at <http://www.exchangenetwork.net/guides/index.htm>.

If you are already a partner on the Exchange Network and would like to join an existing water exchange, such as WQX or PNWWQX, please see the *Join an Existing Data Exchange* Getting Started Guide. You can also visit the water exchanges pages on the Exchange Network website (<http://www.exchangenetwork.net/exchanges/water/index.htm>).

If you would like to create new water-related exchange, please consult the *Build a New Data Exchange* Getting Started Guide.

## WHO CAN I TALK TO?

The following people may be contacted to learn more about the data exchanges and other resources in this guide or to help you determine how the Exchange Network can support your agency's water program.

#### Mitch West

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#### Kristen Gunthardt, WQX

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#### Curtis Cude, PNWWQX

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#### Exchange Network/CDX Help Desk

For contact information and the services it provides, see the Exchange Network website (<http://www.exchangenetwork.net/contacts/helpdesk.htm>).

#### Other States, Tribes, and Territories

Look at the **progress pages** (<http://www.exchangenetwork.net/progress/index.htm>) on the Exchange Network website. Click on the map/links for contacts and information.