

New York

Departments of Environmental Conservation and Health Share Data on Groundwater and Hazards

EXCHANGE NETWORK SUCCESS STORY

Environmental Information



SUMMARY

Need

- Ability to get information on water quality and potential threats to it

Solution

- Multiple flows of data on water quality and hazards
- Bi-directional flows that allows partners to refine data for use by others
- A new schema based on customer needs

Benefits

- Faster, more timely, and more efficient data exchange
- Higher quality and more accurate data
- Geographic integration and display of data

Need for the Exchange Network

New York's Department of Environmental Conservation (DEC) and Department of Health (DOH) are both responsible for the environmental health of New York citizens from their drinking water.

However, DEC and DOH maintain data on different aspects of drinking water quality and potential hazards. They each see only partial views of the same picture.

- DOH, which manages the state drinking water program, has extensive data on drinking water quality and public water systems.
- DEC, which manages programs on groundwater and brownfields, maintains data on regulated facilities, remediation sites, and

spills.

Each Department would benefit from having access to the other's data. For example:

- DEC needs DOH data to do its water quality planning and assessment.
- DOH needs DEC data on spills to fulfill its obligation to report spills to the Centers for Disease Control.

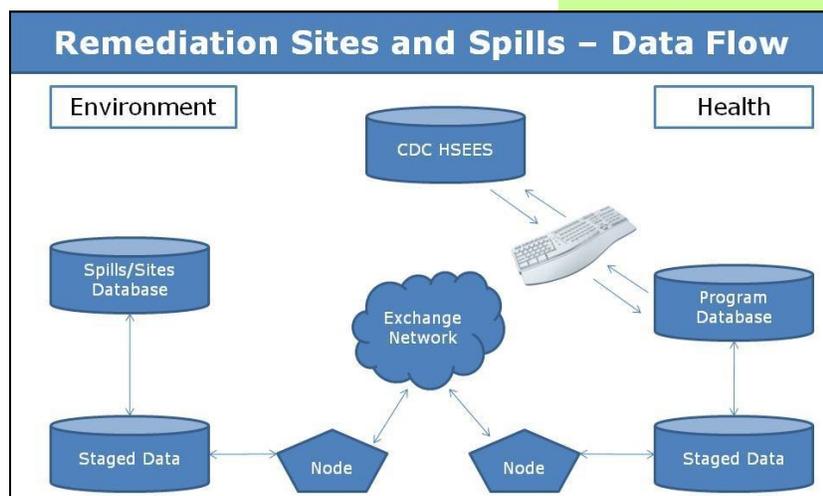
However, DEC and DOH had no formal data sharing agreement. Access was limited, technology was outdated, and data use was not coordinated. When data was shared, it was a labor-intensive manual process.

The Exchange Network Solution

New York DEC and DOH decided to use the Exchange Network to develop the New York Groundwater Data Exchange. This exchange allows them to better protect groundwater resources and respond to contamination.

Both departments have Node 2.0-compliant nodes that they use to communicate with each other and with other Exchange Network partners.

Through regular exchanges on a daily to quarterly basis, DOH now provides its information on water quality and geospatial data on water sources while DEC provides its information on regulated facilities, hazardous materials spills, and remediation sites.



Two-way flows allow Departments to refine data for each other

Not only does the New York Groundwater Data Exchange allow one Department to share data with the other, the bi-directional flows they established now allow one partner to obtain data and then refine it for the other.

For example, DEC flows data on hazardous materials spills to DOH in nearly real time (DOH typically needs the data within 48 hours of a spill). DOH is then able to improve the data by refining the spill location, providing information about spilled materials and providing health assessment information. This information is then available to DEC. The spill information is also made available to others by publishing it on the DEC node.

The Benefits

DEC and DOH report that the Exchange Network has allowed them to increase the speed, timeliness, and efficiency of their data exchanges as well as the quality and accuracy of the data exchanged.

The Exchange Network has also allowed them to do geographic integration and display of their data. For example, DEC and DOH have transferred geospatial water supply delivery area information using Geography Markup Language (GML) from ArcInfo to an enterprise geospatial database.

In the future, DEC and DOH anticipate having direct exchanges of data with the Center for Disease Control's (CDC) Hazardous Substances Emergency Events Surveillance system. CDC maintains this system to collect and analyze information about hazardous spills.

Developing schema with data "customers" : What do you need? How do you want it delivered?

DEC and DOH began the schema development process by involving their data customers in the flow design.

These customers were asked "what data do you need?" And, "how do you want it delivered?"

Finding that existing schemas (such as EDWR and SDWIS) were not adequate for their purposes, DEC and DOH developed their own schema using many of the shared schema components provided by the Exchange Network. DEC was also able to reuse its existing Facility Registry System (FRS) flow.

LEARN MORE

To learn more about New York Departments of Environmental Conservation and Health Share Data on Groundwater and Hazards using the Exchange Network, please contact:

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