

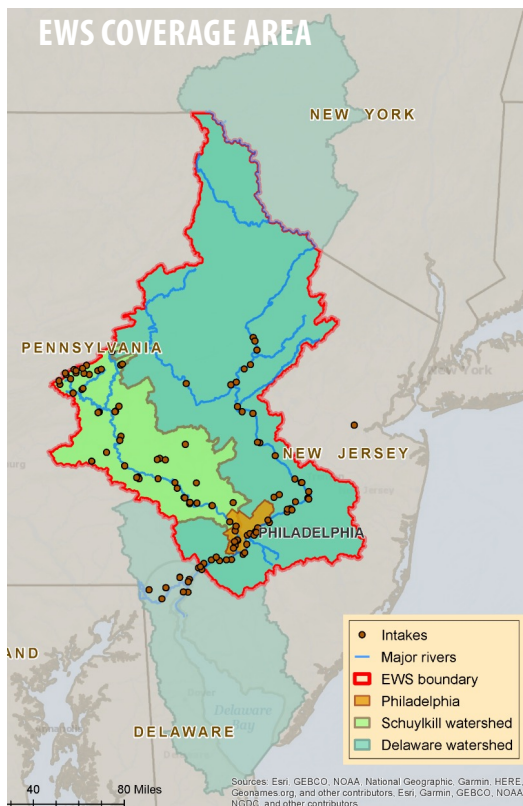
Delaware Valley Early Warning System

A WATER QUALITY REPORTING SYSTEM FOR THE DELAWARE VALLEY REGION

The Delaware Valley Early Warning System (EWS) provides alerts to water systems about discharges into rivers and streams, or changes in surface source water quality and flow, in the Schuylkill and lower Delaware River watersheds. EWS especially focuses on those discharges that might affect drinking water quality. EWS is a password protected website, but is also an email notification system, telephone hotline, and telephone notification system.



EWS provides rapid communication of surface water pollution events or surface water quality changes. An event report on the web site or via telephone triggers email notifications to the entire user base (and supplemental telephone notifications for high-risk events) in a matter of minutes. Notifications through the EWS provide critical information to water system operators which may need to make changes to treatment processes, or close intakes, in response to a surface water contamination event.



EWS KEY FEATURES

- ▶ A website and telephone system to track and map pollution discharge event information, notify participating water systems, and display the data via a mobile device-friendly website
- ▶ A fully automated email and telephone notification system (that does not require staffing) to trigger notifications to all downstream users of reported water quality events
- ▶ Predictive spill modeling that can estimate downstream arrival times of pollution discharges at water system intakes using real time water data and tidal conditions
- ▶ Fully functional on desktop and mobile devices

EWS KEY FUNCTIONS

- ▶ Report events that threaten water quality and share critical information about those events with other water system operators
- ▶ Send and receive real-time notifications for reported water quality events
- ▶ Review the details of reported events, including the event's location, spill path, and risk level, a description of the event, the status of the event report
- ▶ Use data models and interactive maps that visualize the spill path of events and predict water intakes that will potentially be affected by an event
- ▶ View locations and information for water quality stations and water intakes in the EWS coverage area

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Users report events that have the potential to contaminate surface water supplies within the EWS coverage area.

Examples:

- ▶ *Spills (fuel and chemical)*
- ▶ *Transportation Accidents*
- ▶ *Sewage Treatment Plant Upsets*
- ▶ *Illegal Dumping of Waste*
- ▶ *Major Fires*



Water quality events of concern to EWS members include accidental and illicit discharges, and natural changes in water quality that can significantly affect drinking water sources. Such events include truck and vehicle accidents on roadways that drain to nearby streams and rivers, railway accidents, on-water accidents (involving boats and tankers), spills on properties near waterways, runoff from fires/firefighting, wastewater system discharges, sewer overflows, releases of impounded sediments and failures of waste product basins.

EWS relies on a partnership of 450 registered members from 55 organizations dedicated to protecting water quality. EWS was initially developed in 2005 in response to federal Homeland Security, USEPA, and PADEP goals and funding for emergency preparedness and reducing security risk.



Diesel Spill - 2019. 3,000 gallons Delaware River (Philadelphia, PA)