

USGS National Water Quality Assessment (NAWQA) Program

Fiscal Year (FY) 2014 Proposed Reductions

FY 2012 Enacted Budget:	\$61.6 million
FY 2013 Appropriation	\$61.6 million
FY 2013 Appropriation minus Sequestration	\$58.8 million
FY 2014 Proposed Budget including Redirection	\$57.1 million¹

Twenty-one years ago, Congress established the National Water-Quality Assessment (NAWQA) program of the U.S. Geological Survey (USGS) to answer a fundamental question:

What is the status of the Nation's water quality, and is it getting better or worse?

Since then, NAWQA has been a primary source of long-term, nationally consistent data and information on the quality of the Nation's streams and groundwater. NAWQA data and models provide answers to where, when, and why the Nation's water quality is degraded and what can be done to improve and protect it for human and ecosystem needs.

During its first decade (1991–2001), NAWQA established a nationally consistent water-quality dataset for a wide array of physical, chemical, and biological measures that serves as a baseline for determining trends, building models, and assessing the quality of the Nation's streams and aquifers. During its second decade (2001–2012), the NAWQA program built upon the baseline investigations by reporting on how water-quality conditions changed over time, by developing regional-scale water-quality models to extrapolate findings to unsampled areas, and by developing model-based tools that resource managers can use to evaluate the likely consequences of different management practices or policies.

During the next decade (2013–2023), NAWQA will build upon the core long-term water-quality and ecological monitoring to evaluate and forecast how changing land-use conditions and climate variability may affect water quality and ecosystem health across the Nation (see [USGS Fact Sheet 2013-3008](#)).

NAWQA stakeholders and the National Research Council (2012) reviewed the plans for the next decade and stressed the importance of restoring and enhancing the national water-quality monitoring networks for streams and groundwater, which have gradually eroded over the last 15 years as inflation steadily reduced the monitoring sites that could be supported with flat appropriation levels. These monitoring networks provide the only nationally consistent and long-term water-quality monitoring of its kind. Data from these monitoring networks are essential to track changes in nutrients, pesticides, sediment, and other contaminants, and for developing model-based decision-support tools that allow managers to evaluate how conditions may change in response to different scenarios of population growth, climate change, or land-use management.

NAWQA's plan for monitoring over the next decade includes monitoring at 313 surface water-quality sites throughout the year, every year. Stakeholders and the National Research Council endorse this type of intensive monitoring because year-to-year tracking of stream quality is critical to assess short-term changes as well as long-term trends. These data are also essential to assess the sources and delivery of nutrients and sediment not only to local streams and rivers but also to more distant receiving waters, such as in the Great Lakes, Gulf of Mexico, Chesapeake Bay, Puget Sound, and San Francisco Bay.

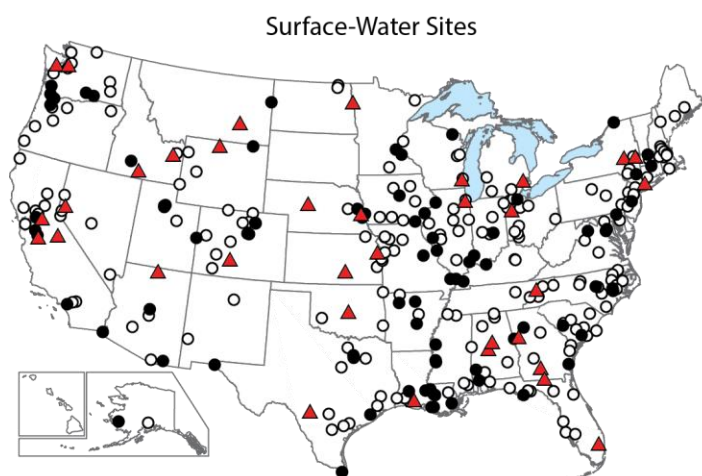
NAWQA's plan also calls for sampling 6,500 wells over 10 years in aquifers that supply more than 90 percent of the groundwater used for domestic and public drinking-water supply.

¹ After \$5 million redirect to WaterSMART and Priority Ecosystems Programs.

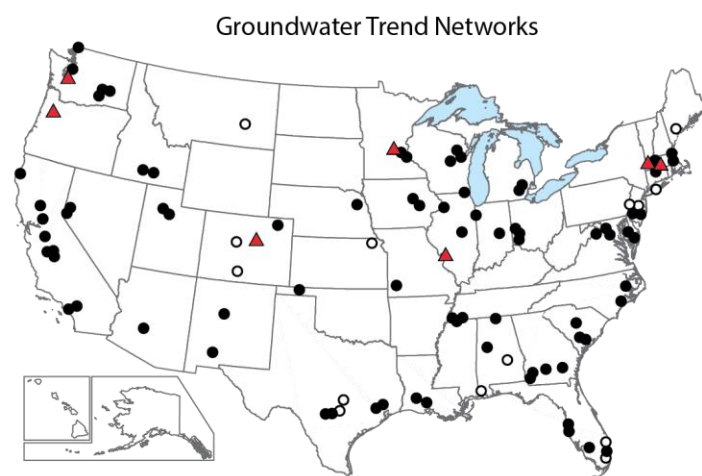
Budget levels at the beginning of FY2013 were sufficient to support annual sampling at 117 long term surface water-quality sites and 750 wells, or about one quarter of the planned surface-water monitoring and less than one-half of the planned groundwater monitoring. Additional budget reductions due to sequestration resulted in the need to reduce annual sampling efforts to only 100 surface-water sites and about 660 wells per year. The budget proposed for FY2014 reflects an increase of \$473 thousand over the FY 2012 appropriation and redirection of \$5 million to other Administration priorities; an overall decrease of about 7% from FY2012 levels. The net effect of the proposed changes would be additional decreases to water-quality monitoring and modeling activities endorsed by stakeholders and the National Research Council ([2012](#)). Specific impacts of the proposed FY2014 reduction and redirection would include:

- A net loss of about 30 percent of the national network of long-term quality monitoring sites for streams and rivers since 2012. (see map).
- Stop development of one of four regional nutrient SPARROW models and decision support tools, such as those currently being used to guide conservation investments to high priority areas in the Mississippi River Basin and Chesapeake Bay watersheds.
- Eliminate monitoring of water-quality trends at an additional 210 wells in CT, CO, IL, MN, OR, and WA in three large aquifer systems that supply drinking water to more than 42 million residents (see map).
- Stop development of one of four groundwater-quality models used by water-supply managers to assess the amount and quality of drinking water that is available and to forecast changes in water quality resulting from alternative management actions. The four aquifer systems to be modeled are: California Central Valley, glacial aquifer in the northern United States, Mississippi Embayment, and the North Atlantic Coastal Plain, including the area around the Chesapeake Bay.
- Reduce planned and ongoing collaborative efforts with numerous local, state, and Federal partners to better understand the effects of management practices on the movement of nutrients, sediment, and other contaminants and their effects on stream ecosystems in watersheds such as the Potomac, Yazoo, Iowa, and Yakima River basins.

Budgets Impacts on Planned Water-Quality Monitoring for 2013-2022



- 83 sites monitored under the proposed FY 2014 budget
- ▲ 34 sites discontinued to meet FY 2013 and 2014 budget reductions
- 196 planned sites for which resources are unavailable



- 79 trend networks (2,370 wells) monitored under the proposed FY 2014 budget
- ▲ 7 trend networks (210 wells) discontinued to meet FY 2013 and 2014 budget reductions
- 14 planned trend networks (420 wells) for which resources are unavailable