

Nitrogen and Phosphorus Pollution Data Access Tool (NPDAT)

epa.gov/nutrientpollution/npdat



Introduction to NPDAT

Over the last 50 years, the amount of nitrogen and phosphorus pollution entering our nation's waters has escalated dramatically. For example, 30 percent of U.S. streams have high levels of nitrogen (N) and phosphorus (P) pollution. Reported drinking water violations for nitrates have doubled in the last eight years. N and P pollution threatens human health, aquatic ecosystems, and economic prosperity. The U.S. Environmental Protection Agency's new tool, NPDAT, is designed to help states develop effective state N/P reduction strategies to combat this serious and growing environmental problem.

What is the Nitrogen and Phosphorus Pollution Data Access Tool?

EPA's new "Nitrogen and Phosphorus Pollution Data Access Tool" (NPDAT) helps states, other partners, and stakeholders to:

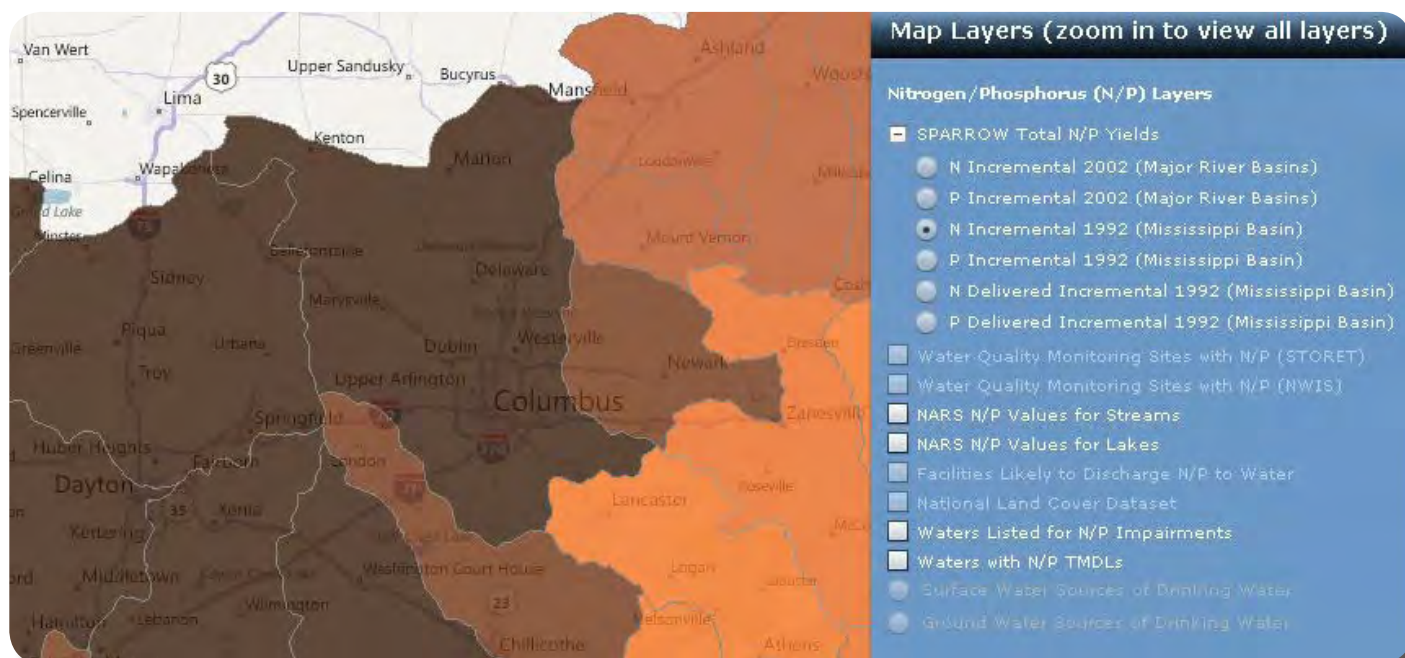
- (1) Prioritize watersheds on a statewide basis for nitrogen and phosphorus loading reductions, and
- (2) Set watershed load reduction goals based upon best available information.

The NPDAT consists of an introductory Website, geospatial viewer, data downloads, and datasets available publicly elsewhere. The Data Access Tool aggregates data at a single location. With these data "pre-assembled," states and others can readily use this data, gather additional, less-accessible data and develop effective nitrogen and phosphorus source reduction strategies. The NPDAT leverages the common code base used by the EPA's Recovery Mapper, MyWATERS Mapper, and Beaches Mapper Web mapping applications. In doing so, it supports the basic tenets of the EPA Geo-Spatial Platform initiative.

How can states and others use the Data Access Tool?

The NPDAT can help support states in analyzing nitrogen and phosphorus pollution by providing key data in a readily-accessible and easy-to-use format on:

- 1) The extent and magnitude of nitrogen and phosphorus pollution,
- 2) Water quality problems related to this pollution, and
- 3) Potential pollution sources.



Screenshot of the Data Access Tool which shows that the Total Nitrogen yield varies among 818 watersheds in the Mississippi River Basin (U.S. Geological Survey SPARROW model).

What type of information is available through the Tool?

Data available on the NPDAT include:

- **Nitrogen and Phosphorus Loading information** from U.S. Geological Survey SPARROW model (SPAtially Referenced Regressions On Watershed attributes)
- **Water Quality Data and Information** (e.g., Water quality monitoring sites with nitrogen and phosphorus data and National Aquatic Resource Surveys (NARS) Phosphorus/ Nitrogen Values data layers)
- **Setting Watershed Load Reduction Goals / Source Control Priorities** (e.g., Facilities that are likely to discharge nitrogen and phosphorus to water, waters with N/P TMDLs [Total Maximum Daily Loads], and drinking water sources.)

The NPDAT includes the best information currently available in EPA and related federal databases. While making these data layers viewable and downloadable through NPDAT, EPA does not draw conclusions or make any recommendations or determinations as to sources of nitrogen or phosphorus in individual states.

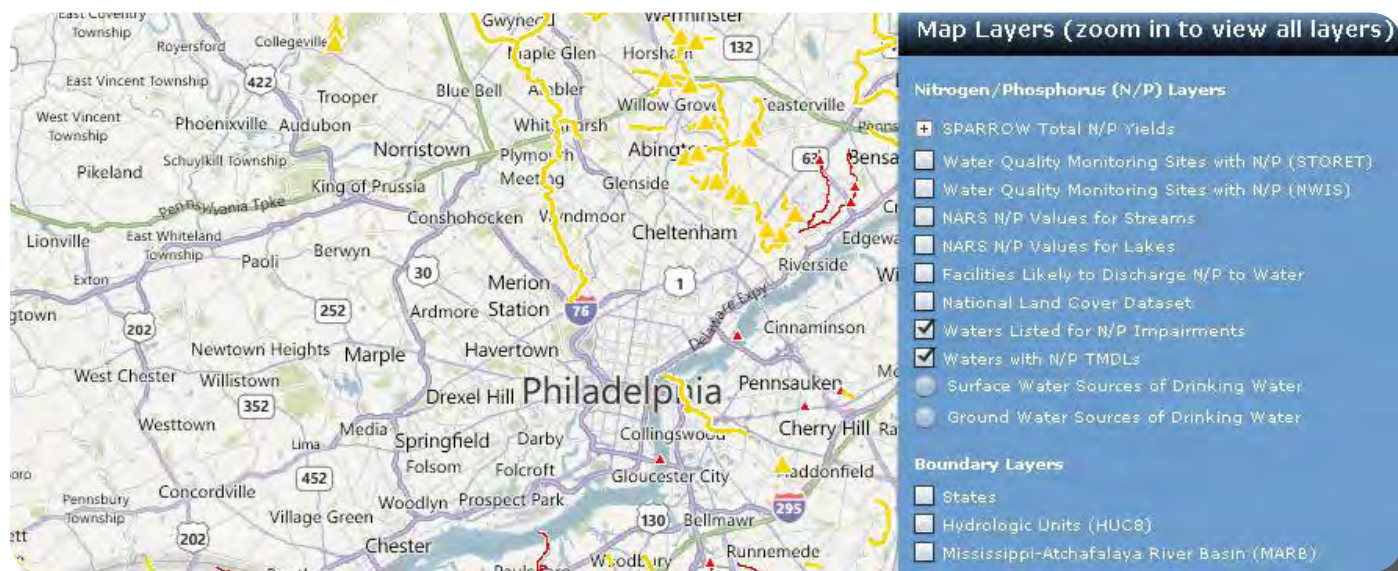
How can states and others obtain data through the Tool?

Users can obtain data through the NPDAT's geospatial viewer and data downloads at the website at: www.epa.gov/nutrientpollution/npdatt.

The NPDAT Tutorial, available on the website, follows the recommended elements of EPA's March 16, 2011 memorandum "Working Effectively in Partnership with States to Address Phosphorus and Nitrogen Pollution Through Use of a Framework for States Nutrient Reductions" and includes narrative text and screenshots.

How can you get help or provide feedback?

Users may also submit questions and comments to EPA via NPDAT "Contact Us" links or by email at: npdatt-hq@epa.gov. EPA will consider user feedback and may provide updated data in the future.



Waters that are listed as impaired by nitrogen and/ or phosphorus under the Clean Water Act Section 303(d) list, as well as TMDLs for nitrogen and/ or phosphorus, can be viewed and downloaded to help prioritize watersheds.



Information and resources on nitrogen and phosphorus pollution can be found at <http://epa.gov/nutrientpollution>

Additional information on nitrogen and phosphorus pollution in the Mississippi River Basin can be found at <http://epa.gov/msbasin>

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