**Table 1.** Sources and type of data provided by the U.S. Geological Survey to the U.S. Environmental Protection Agency for *EPA's 2007 Report on the Environment: Science Report* [USEPA, U.S. Environmental Protection Agency; mg/L, milligrams per liter; ROE, Report on the Environment; WY, water year (the 12-month period between October 1 and September 30); NA, not applicable; LOADEST, load estimation software; NAWQA, National Water-Quality Assessment Program

| ROE Indicator Name | ROE Figure Caption | Media | Ecosystem | Type of data provided (units) | Class type | Class bins | Discussion location in this report | Data location in this report | Extent of data | Original data source (reference[1]) | Period of record | Number of sites | 2007 aggregation method | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen and Phosphorus in Streams in Agricultural Watersheds | Nitogen in streams in agricultural watersheds of the contiguous U.S., 1992-2001. | Streams | Agricultural | Number of sites within each class bin of nitrate[2] or total nitrogen[3] concentration in stream-water samples (percent) | Concentration | Less than 1 mg/L, 1 to less than 2 mg/L, 2 to less than 6 mg/L, 6 to 10 mg/L, 10 mg/L or more | ROE Indicators for Fresh Surface Waters; Nitrogen and Phosphorus in Streams in Agricultural Watersheds | Appendix 2 | Contiguous U.S. | Nutrients (13) | WY 1992-2001 | 130 for nitrate*, 133 for total nitrogen | Flow-weighted mean annual concentration | |
| Nitrogen and Phosphorus in Streams in Agricultural Watersheds | Phosphorus in streams in agricultural watersheds of the contiguous U.S., 1992-2001. | Streams | Agricultural | Number of sites within each class bin of orthophosphate or total phosphorus[4] concentration in stream-water samples (percent) | Concentration | Less than 0.1 mg/L, 0.1 to less than 0.3 mg/L, 0.3 to less than 0.5 mg/L, 0.5 mg/L or more | ROE Indicators for Fresh Surface Waters; Nitrogen and Phosphorus in Streams in Agricultural Watersheds | Appendix 2 | Contiguous U.S. | Nutrients (13) | WY 1992-2001 | 132 for orthophosphate, 129 for total phosphorus | Flow-weighted mean annual concentration | |
| Nitrogen and Phosphorus Discharge from Large Rivers | Nitrate discharge from four major U.S. rivers, 1955-2004. | Streams | National | Estimated nitrate[2] load for 4 major U.S. rivers (thousand long tons of nitrate per year) | NA | NA | ROE Indicators for Fresh Surface Waters; Discharge from Large Rivers | Appendixes 3 and 4 | Mississippi R., St. Lawrence R., Susquehanna R., and Columbia R. watersheds | Mississippi R. 1955-1967, (7); Mississippi R. 1968-2004, Brent A. Aulenbach (U.S. Geological Survey, written commun., 2007); St. Lawrence R., Susquehanna R., and Columbia R., (1) | Mississippi R., 1955-2004; St. Lawrence R., 1976-2004; Susquehanna R., 1974-2004; Columbia R. 1974-2004 | 4 | Mississippi R. calculated using 2 methods (see comments), Other Rivers calculated using LOADEST software. | Mississippi R. loads were based on composite samples for 1955-1967, and load estimates using LOADEST code for 1968-2004. The other 3 river loads were estimated using LOADEST code fo the entire period of record for both the 2002 and 2007 analyses. |
| Nitrogen and Phosphorus Discharge from Large Rivers | Total phosphorus discharge from four major U.S. rivers, 1971-2004. | Streams | National | Estimated total phosphorus[4] load for 4 major U.S. rivers (thousand long tons of total phosphorus per year) | NA | NA | ROE Indicators for Fresh Surface Waters; Discharge from Large Rivers | Appendixes 3 and 4 | Mississippi R., St. Lawrence R., Susquehanna R., and Columbia R. watersheds | Mississippi R. 1971-2004, Brent A. Aulenbach (U.S. Geological Survey, written commun., 2007); St. Lawrence R., Susquehanna R., and Columbia R., (1) | Mississippi R., 1955-2004; St. Lawrence R., 1976-2004; Susquehanna R., 1974-2004; Columbia R., 1974-2004 | 4 | Mississippi R. calculated using 2 methods (see comments), Other Rivers calculated using LOADEST software. | All river loads were estimated using LOADEST code for the entire period of record. |
| Pesticides in Streams in Agricultural Watersheds | No figure for pesticide occurrence; data provided to USEPA for ROE. | Streams | Agricultural | Number of sites within each class bin of pesticide detections in stream-water samples (percent) | Number of detections | 0, 1 or 2, 3 or 4, 5 or more | ROE Indicators for Fresh Surface Waters; Pesticides in Streams in Agricultural Watersheds | Appendix 5 | Contiguous U.S. | Pesticides (5) and (Jeffrey D. Martin, U.S. Geological Survey, written commun., 2006) | WY 1992-2001 | 83 | Used data from the 12-month period at each site with the most samples collected and the most pesticides (Gilliom and others, 2006). | |
| Pesticides in Streams in Agricultural Watersheds | Pesticides in streams in agricultural watersheds of the contiguous U.S., 1992-2001. | Streams | Agricultural | Number of sites within each class bin exceeding human-health and aquatic-life benchmarks[5] for pesticides in stream-water samples (percent) | Number of exceedances | 0, 1, 2 or 3, 4 or more and 0, 1 or 2, 3 or 4, 5 or more | ROE Indicators for Fresh Surface Waters; Pesticides in Streams in Agricultural Watersheds | Appendixes 6, 7, and 8 | Contiguous U.S. | Pesticides (5) and (Jeffrey D. Martin, U.S. Geological Survey, Indianapolis, Ind., written commun., 2006) | WY 1992-2001 | 83 | Exceedances based on human-health benchmarks for 73 of the 83 pesticide compounds and aquatic-life benchmarks for 62 pesticide compounds analyzed. | Time-weighted mean concentration of pesticides compared to human-health benchmarks. Aquatic-life benchmarks for pesticides compared to time-weighted mean, moving-day average, or individual sample concentrations depending on the benchmark. |
| Nitrate and Pesticides in Shallow Ground Water in Agricultural Waterhseds | Nitrate in shallow ground water in agricultural watersheds of the contiguous U.S., 1992-2003. | Ground Water | Agricultural | Number of sites within each class bin of nitrate[2] concentration in ground-water samples (percent) | Concentration | Less than 2 mg/L, 2 to less than 6 mg/L, 6 to less than 10 mg/L, 10 mg/L or more | ROE Indicators for Ground Waters; Nitrate and Pesticides in Shallow Ground Water in Agricultural Watersheds | Appendix 9 | Contiguous U.S. | Nutrients (Bernard T. Nolan, U.S. Geological Survey, written commun., 2006) | WY 1992-2003 | 1,423 | Single sample per site | Data from NAWQA Cycle I Agricultural Land-use Studies |
| Nitrate and Pesticides in Shallow Ground Water in Agricultural Waterhseds | Pesticides in shallow ground water in agricultural watersheds of the contiguous U.S., 1993-2003 | Ground Water | Agricultural | Number of sites within each class bin of pesticide detections in ground-water samples (percent) | Number of detections | 0, 1 or 2, 3 or 4, 5 or more | ROE Indicators for Ground Waters; Nitrate and Pesticides in Shallow Ground Water in Agricultural Watersheds | Appendix 10 | Contiguous U.S. | Pesticides (5) | WY 1993-2003 | 1,412 | Single sample per site | Data from NAWQA Cycle I Agricultural Land-use Studies |
| Nitrate and Pesticides in Shallow Ground Water in Agricultural Waterhseds | No figure for pesticide exceedence of human-health benchmarks; data provided to USEPA for ROE. | Ground Water | Agricultural | Number of sites within each class bin exceeding human-health benchmarks[5] for pesticides in ground-water samples (percent) | Number of exceedances | 0, 1, 2 or 3, 4 or more | ROE Indicators for Ground Waters; Nitrate and Pesticides in Shallow Ground Water in Agricultural Watersheds | Appendixes 10, 11, and 12 | Contiguous U.S. | Pesticides (5) | WY 1993-2003 | 1,412 | Exceedances based on human-health benchmarks for 73 of the 83 pesticide compounds analyzed. | Data from NAWQA Cycle I Agricultural Land-use Studies |

[1] Number in parenthesis indicates the citation reference number in the Reference section of this report.
[2] nitrate plus nitrite
[3] nitrate, organic nitrogen, nitrite, and ammonia compounds
[4] orthophosphate, organic phosphorus, and mineral phosphorus compounds
[5] A complete description of how benchmarks were determined for the pesticide data used for the indicators described in this report is provided in Wilson and others (2008) (21).