

<b>DWMAPS GIS LAYERS and DATA SOURCES</b>		
<b>Layer/Data Description</b>	<b>Source of Information</b>	<b>Link to Additional Information</b>
<b>Basemaps</b>		
Basemaps	ESRI	
<b>Potential Sources of Contamination: Permitted to Discharge</b>		
NPDES Facilities (from the 'upstream' tool) Refuse Facilities	Refuse Systems - SIC 4953. Establishments primarily engaged in the collection and disposal of refuse. EPA's Facility Registry Service (FRS) pulls from the National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS). DWMAPS pulls the data quarterly.	<a href="https://www.osha.gov/pls/imis/sic_manual.display?id=955&amp;tab=description">https://www.osha.gov/pls/imis/sic_manual.display?id=955&amp;tab=description</a>
NPDES Facilities (from the 'upstream' tool) Sewerage Facilities	Sewerage Systems - SIC 4952. Establishments primarily engaged in the collection and disposal of wastes conducted through a sewer system. EPA's Facility Registry Service (FRS) pulls from the National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS). DWMAPS pulls the data quarterly.	<a href="https://www.osha.gov/pls/imis/sic_manual.display?id=954&amp;tab=description">https://www.osha.gov/pls/imis/sic_manual.display?id=954&amp;tab=description</a>
NPDES Facilities (from the 'upstream' tool) Other Facilities	Other Facilities - All other NPDES Facilities. EPA's Facility Registry Service (FRS) pulls from the National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS). DWMAPS pulls the data quarterly.	
<b>Potential Sources of Contamination: Other Point Sources</b>		
CERCLA Sites	EPA's Facility Registry Service (FRS) pulls from the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). CERCLIS is EPA's inventory of abandoned, inactive, or uncontrolled hazardous waste sites regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). It records information about all aspects of hazardous waste sites from initial discovery to listing on the National Priorities List (NPL). DWMAPS pulls FRS data quarterly.	<a href="http://www2.epa.gov/enviro/frs-data-sources">http://www2.epa.gov/enviro/frs-data-sources</a>
RCRA Facilities	EPA's Facility Registry Service (FRS) pulls from the Resource Conservation and Recovery Act Information (RCRAInfo) database. RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report. DWMAPS pulls FRS data quarterly.	<a href="http://www2.epa.gov/enviro/frs-data-sources">http://www2.epa.gov/enviro/frs-data-sources</a>
TRI Facilities	EPA's Facility Registry Service (FRS) pulls from TRIS. TRIS is a publicly available EPA database reported annually by certain covered industry groups, as well as federal facilities. It contains information about more than 650 toxic chemicals that are being used, manufactured, treated, transported, or released into the environment, and includes information about waste management and pollution prevention activities. DWMAPS pulls FRS data quarterly.	<a href="http://www2.epa.gov/enviro/frs-data-sources">http://www2.epa.gov/enviro/frs-data-sources</a>
TSCA Facilities	EPA's Facility Registry Service (FRS) pulls from the Toxic Substances Control Act (TSCA) database. The database that supports the Toxic Substances Control Act (TSCA) of 1976, which provides EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon and lead-based paint. DWMAPS pulls FRS data quarterly.	<a href="http://www2.epa.gov/enviro/frs-data-sources">http://www2.epa.gov/enviro/frs-data-sources</a>
<b>Potential Sources of Contamination: Non-point Sources</b>		

Nitrogen	County Commercial Fertilizer Use Estimates (Nitrogen), 2006. From USGS Water Resources NSDI Node. "County-Level Estimates of Nitrogen and Phosphorus from Commercial Fertilizer for the Conterminous United States, 1987-2006."	<a href="#">Nitrogen and Phosphorus Pollution Data Access Tool</a>
Pesticides	County Pesticide Use Estimates (Atrazine), 2007. From USGS Water Resources NSDI Node. "Annual county atrazine use estimates for agriculture, 1992-2007."	<a href="#">Metadata HTML format</a>
Phosphorus	County Commercial Fertilizer Use Estimates (Phosphorus), 2006. From USGS Water Resources NSDI Node. "County-Level Estimates of Nitrogen and Phosphorus from Commercial Fertilizer for the Conterminous United States, 1987-2006."	<a href="#">Nitrogen and Phosphorus Pollution Data Access Tool</a>
<b>Hydrography and Watersheds</b>		
Catchments	NHDPlus_NP21/Catchments_NP21_Simplified (MapServer). This map service contains simplified catchments from the EPA Office of Water NHDPlus v2.1 data set.	<a href="#">Link to Map Service</a>
Flood, 100 year	FEMA National Flood Hazard Layer (NFHL). The NFHL data are from FEMA's Flood Insurance Rate Map (FIRM) databases. New data are added continually. DWMAPS pulls the data quarterly.	<a href="https://hazards.fema.gov/femaportal/wps/portal/NFHLWMS">https://hazards.fema.gov/femaportal/wps/portal/NFHLWMS</a>
Flood, 500 year	FEMA National Flood Hazard Layer (NFHL). The NFHL data are from FEMA's Flood Insurance Rate Map (FIRM) databases. New data are added continually. DWMAPS pulls the data quarterly.	<a href="https://hazards.fema.gov/femaportal/wps/portal/NFHLWMS">https://hazards.fema.gov/femaportal/wps/portal/NFHLWMS</a>
Impaired Waters	Office of Water (OW): 303(d) Listed Impaired Waters NHDPlus Indexed Dataset with Program Attributes. Under Section 303(d) of the CWA, states, territories, and authorized tribes (referred to here as states) are required to develop lists of impaired waters. These are waters that are too polluted or otherwise degraded to meet the state water quality standards. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop TMDLs for these waters. Note: the CWA Section 303(d) list of impaired waters does not contain impaired waters with an established TMDL, impaired waters for which other pollution control mechanisms are in place and expected to attain water quality standards, or waters impaired as a result of pollution. DWMAPS pulls the data quarterly.	<a href="http://water.epa.gov/scitech/datait/tools/waters/data/downloads.cfm">http://water.epa.gov/scitech/datait/tools/waters/data/downloads.cfm</a>
Total Maximum Daily Loads (TMDL)	EPA Office of Water (OW): Impaired Waters with TMDLs NHDPlus Indexed Dataset with Program Attributes. The Total Maximum Daily Load (TMDL) Tracking System contains information on waters that are Not Supporting their designated uses. These waters are listed by the state as impaired under Section 303(d) of the Clean Water Act. The status of TMDLs are also tracked. TMDLs are pollution control measures that reduce the discharge of pollutants into impaired waters. A TMDL or Total Maximum Daily Load is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. What is a total maximum daily load (TMDL)? Water quality standards are set by States, Territories, and Tribes. They identify the uses for each waterbody, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the waterbody can be used for the purposes the state has designated. The calculation must also account for seasonal variation in water quality. The Clean Water Act, section 303, establishes the water quality standards and TMDL programs. DWMAPS pulls the data quarterly.	<a href="http://water.epa.gov/scitech/datait/tools/waters/data/downloads.cfm">http://water.epa.gov/scitech/datait/tools/waters/data/downloads.cfm</a>

Assessed Waters	<p><i>EPA Office of Water (OW): 305(b) Waters As Assessed NHDPlus Indexed Dataset with Program Attributes.</i> The 305(b) program system provide assessed water data and assessed water features for river segments, lakes, and estuaries designated under Section 305(b) of the Clean Water Act. 305(b) waterbodies are coded onto NHDPlus v2.1 features creating area, point and linear events representing assessed and non-assessed waters. In addition to NHDPlus reach indexed data there may also be custom events (point, line, or area) that are not associated with NHDPlus and are in an EPA standard format that is compatible with EPA's Reach Address Database. These custom events are used to represent locations of 305(b) waterbodies that are not represented well in NHDPlus. DWMAPS pulls the data quarterly.</p> <p>Note: Geospatial data in some states may appear to show a greater number of 'impaired' waters (from the 'impaired' waters layer) than 'assessed' waters. In these cases the states likely provided 'impaired' waters data from a more recent cycle than the 'assessed' waters data. As 'assessed' data from more recent reporting cycles become available, additional assessed water bodies will be available for use in DWMAPS.</p>	<a href="http://water.epa.gov/scitech/dataitools/waters/data/downloads.cfm">http://water.epa.gov/scitech/dataitools/waters/data/downloads.cfm</a>
NPDES Facilities (from the layers menu)	<p>Discharge Monitoring Report (DMR) data from the Discharge Monitoring Report (DMR) Pollutant Loading Tool. Data is pulled from EPA's ICIS-NPDES. For "major" facilities, EPA expects authorized states to enter compliance and enforcement information into the national databases for at least 95% of their permitted facilities. For "non-major" (or "minor") facilities, EPA does not require authorized states to enter compliance and enforcement information into ICIS-NPDES; however, many authorized states are providing the information voluntarily. DWMAPS pulls this data quarterly.</p>	<a href="http://cfpub.epa.gov/dmr/faq.cfm">http://cfpub.epa.gov/dmr/faq.cfm</a>
National Hydrography Dataset (NHD)	<p>NHDPlus_NP21/NHDSnapshot_NP21 (MapServer). This map service contains GIS data from the EPA Office of Water NHDPlus v2.1 data set.</p>	<a href="#">Link to Map Service</a>
HUC12 Density - GW and HUC12 Density - SW	<p>These tables were created to relate Public Water System (PWS) source facilities to Watershed Boundary Dataset subwatershed polygons (HUC12s), and provide counts of surface and ground water facilities by state and HUC12. It is important to note that each PWS may comprise of multiple facilities that fall within different HUC12s, and therefore a PWS may not be related to a single HUC12, only a PWS's source facilities may be related to a single HUC12.</p>	
<b>Grants</b>		
Grants	<p>The CWA Section 319 Grants Reporting and Tracking System (GRTS) 2015.</p>	<a href="http://ofmpub.epa.gov/apex/grts/faq?p=GRTS:199">http://ofmpub.epa.gov/apex/grts/faq?p=GRTS:199</a>
Collaboratives	<p>Source Water Collaborative. 2015.</p>	
<b>Geology and Landuse</b>		
Arsenic	<p>Ryker, S.J., 2001, Mapping arsenic in groundwater--A real need, but a hard problem: Geotimes Newsmagazine of the Earth Sciences, v. 46, no. 11, p. 34-36.</p>	<a href="http://water.usgs.gov/GIS/metadata/a/usgswrd/XML/arsenic_map.xml">http://water.usgs.gov/GIS/metadata/a/usgswrd/XML/arsenic_map.xml</a>
Karst	<p><i>USA Karst.</i> ArcGIS Online. USGS Source: USGS Source: U.S. Geological Survey Open-File Report 2004-1352. Original Data Description from USGS: These data are digital facsimiles of the original 1984 Engineering Aspects of Karst map by Davies and others. This data set was converted from a printed map to a digital GIS coverage to provide users with a citable national scale karst data set to use for graphic and demonstration purposes until new, improved data are developed.</p> <p>The karst polygons of the original map were scanned from the stable base negatives of the original, vectorized, edited and then attributed with unit descriptions. All of these processes potentially introduce small errors and distortions to the geography. The original map was produced at a scale of 1:7,500,000; this coverage is not as accurate, and should be used for broad-scale purposes only. It is not intended for any site-specific studies.</p>	
Land Use	<p>USGS National Land Cover Database (NLCD) 2011</p>	<a href="#">Link to Map Service</a>
<b>Pipelines</b>		

Crude Oil	<i>Major crude oil pipelines in the United States.</i> Created by EIA using publicly available data. Data period as of Nov. 2014. Layer includes interstate trunk lines and selected intrastate lines but excludes gathering lines. Based on publicly available data from a variety of sources with varying scales and levels of accuracy. This layer is not visible if zoomed in beyond 1:1,000,000 scale.	<a href="http://www.eia.gov/maps/layer_in fo-m.cfm">http://www.eia.gov/maps/layer_in fo-m.cfm</a>
Hydrocarbon Gas Liquids	<i>Major HGL pipelines in the United States.</i> Created by EIA using publicly available data. Data period of Nov. 2014. Layer includes interstate trunk lines and selected intrastate lines. Based on publicly available data from a variety of sources with varying scales and levels of accuracy. This layer is not visible if zoomed in beyond 1:1,000,000 scale.	<a href="http://www.eia.gov/maps/layer_in fo-m.cfm">http://www.eia.gov/maps/layer_in fo-m.cfm</a>
Natural Gas	<i>Natural gas interstate and intrastate pipelines in the United States.</i> Collected by EIA from FERC and other external sources. Data period as of Jan. 2012. Based on a variety of sources with varying scales and levels of accuracy and therefore accuracy is directly affected. This layer is not visible if zoomed in beyond 1:1,000,000 scale.	<a href="http://www.eia.gov/maps/layer_in fo-m.cfm">http://www.eia.gov/maps/layer_in fo-m.cfm</a>
Petroleum Product	<i>Major petroleum product pipelines in the United States.</i> Created by EIA using publicly available data. Data period as of Nov. 2014. Layer includes interstate trunk lines and selected intrastate lines. Based on publicly available data from a variety of sources with varying scales and levels of accuracy. This layer is not visible if zoomed in beyond 1:1,000,000 scale.	<a href="http://www.eia.gov/maps/layer_in fo-m.cfm">http://www.eia.gov/maps/layer_in fo-m.cfm</a>
<b>Transportation</b>		
Railroads	<i>USDOT FRA National Rail Network.</i> This map layer, utilizing data from the Federal Railroad Administration (FRA), displays the U.S. National Rail Network. Users can view the national freight and passenger rail systems. The freight network shows all privately owned freight rail lines labeled by the primary owner. The passenger network shows only municipal and Amtrak rail lines and is symbolized by the following passenger types:  Commuter (C) Amtrak (A) Amtrak & Commuter (AC) Amtrak & Tourist (AT)  The data was downloaded from the National Transportation Atlas Database (NTAD) 2013 and is maintained by the U.S. Department of Transportation (USDOT).	<a href="http://www.arcgis.com/home/item.html?id=56f5c1bba4914292b0aab74132148b3c#!">http://www.arcgis.com/home/item.html?id=56f5c1bba4914292b0aab74132148b3c#!</a>
Roads, Hazardous Material Routes	<i>Hazardous Material Routes.</i> (MapServer). US Department of Transportation. This dataset contains state-assigned hazardous material routes developed using data from the 2012 National Transportation Atlas Database (NTAD).	<a href="http://maps1.arcgisonline.com/ArcGIS/rest/services/FMCSA_Hazardous_Material_Routes/MapServer">http://maps1.arcgisonline.com/ArcGIS/rest/services/FMCSA_Hazardous_Material_Routes/MapServer</a>
<b>Potential Sources of Contamination: Point Sources</b>		
CSO Outfalls, 2004	CSO Outfalls NHD Location. USEPA Office of Water. August, 2004. Data provided include CSO Outfall locations that were georeferenced (reach indexed) to the National Hydrography Dataset (NHD). The CSO location information was part of the support materials for a special CSO Report to Congress (U.S. EPA 2004. Report to Congress: Impacts and Control of CSOs and SSOs United States. EPA 833-R-04-001. August, 2004. Office of Water. Washington, DC.	