

Overview of the Nonpoint Source Program

ASDWA Webinar

Using Clean Water Act Funding For Source Water Protection

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What is Nonpoint Source (NPS) Pollution?

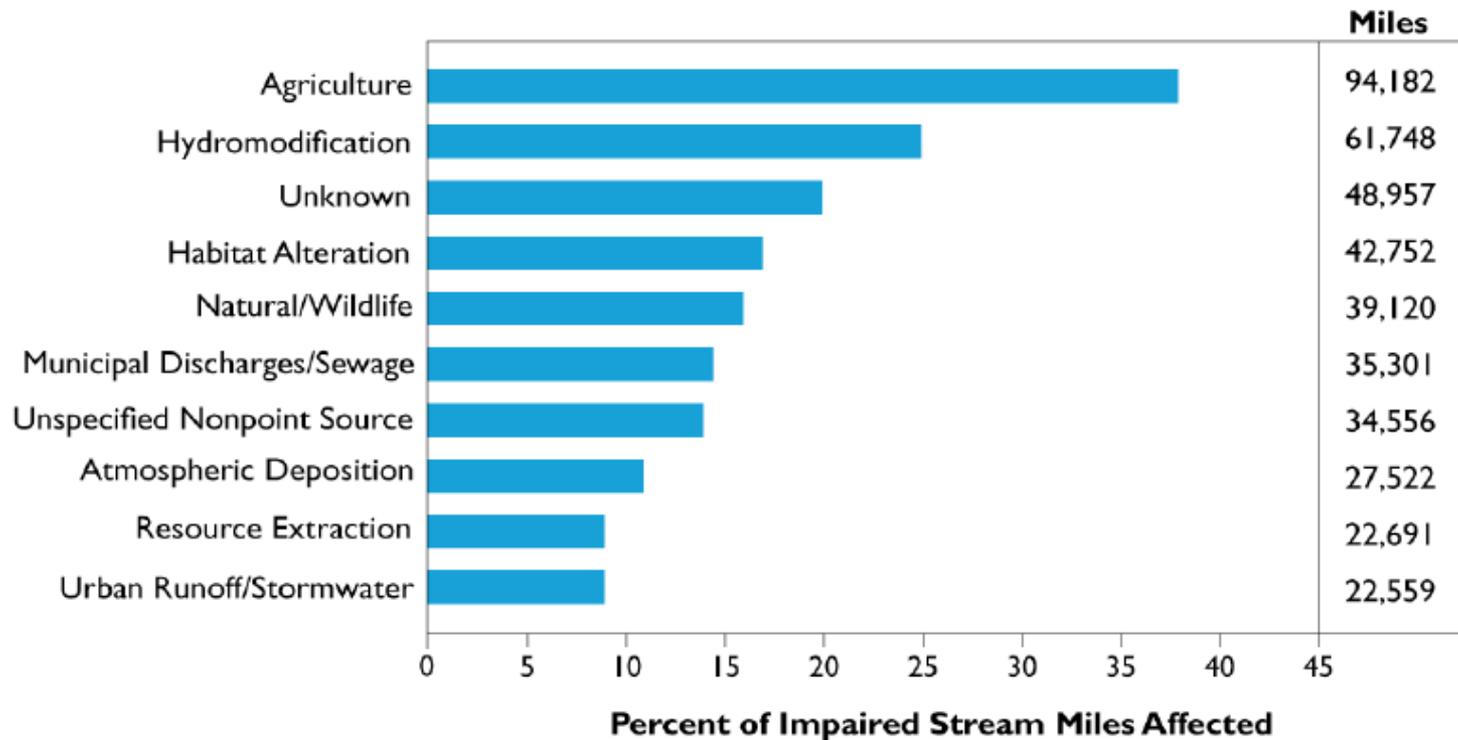
- Anything that isn't "point source" pollution. ("Point source" is defined. **NPS** is not.)
- Some source categories could potentially be regulated as a point source in the future, but are currently managed in the NPS program, such as:
 - Smaller animal feeding operations
 - Smaller stormwater systems
 - Abandoned mines (acid mine drainage)

Sources of NPS pollution include:

- Excess fertilizers, herbicides and insecticides from agricultural lands and residential areas
- Oil, grease and toxic chemicals from urban runoff and energy production
- Sediment from improperly managed construction sites, crop and forest lands, and eroding streambanks
- Salt from irrigation practices and acid drainage from abandoned mines
- Bacteria and nutrients from livestock, pet wastes and faulty septic systems
- Atmospheric deposition and hydromodification

Nonpoint Sources Dominate State Lists of Impaired Waters

National Water Quality Inventory: 2004 Report to Congress



Note: Percents do not add up to 100% because more than one source may impair a waterbody.

Figure 3. Top 10 sources of impairment in assessed rivers and streams.

Short History of Section 319

- While point sources were regulated under the 1972 CWA, the NPS program was established in 1987.
 - Unlike the point source program and all other major environmental media programs, Section 319 neither authorized Federal regulation nor required State regulation.
 - States were required to conduct **NPS assessments** and invited to develop **NPS management programs**, “including, as **appropriate, nonregulatory or regulatory programs** for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects.”
 - States with approved NPS assessments and management programs became eligible for **319 funding**. All were approved by 1990.

Section 319 Funding

Years

Annual Appropriation

- 1990-1994: \$40, 51, 50, 52, 80M
- Mid/late '90's \$100M
- 2001-04: \$237 – 238M
- 2005-10: \$199-207M
- 2011-12: \$175M -\$165M (proposed)

- Since 2002 funds have been divided into 'base' and 'incremental' halves.
- Base funds support state and local staff, education, outreach, technical assistance, etc.
- 'Incremental' funds support development and implementation of NPS TMDLs or watershed based plans.

Typical Uses of 319 Funds

- Development of watershed-based plans to restore impaired waters
- Implementation of the plans through on-the-ground projects that address nonpoint source impairments in watersheds
- Demonstrate the effectiveness of innovative practices (e.g., innovative agricultural practices, low impact development, stream restoration)
- Promote good practices on a state-wide basis (e.g., nutrient management, soil conservation practices, installation of buffers)
- Project planning and coordination with other Federal/state/local agencies
- Leverage others state funds and USDA/other Federal funds
- Monitoring and reporting
- Staff and program administration

Watershed-Based Plans – a cornerstone of 319

- Before a state implements a 319-funded restoration project, it must develop a watershed-based plan.
- Our Section 319 Program and Grants Guidelines identify 9 Components that **must** be included in each “Watershed-Based Plan” to restore impaired waters.
- These include identification of causes and sources of impairment, load reduction estimates, and others.

Urban Runoff/Stormwater

- MAJOR PARADIGM SHIFT: **Low Impact Development** (“LID”) needs to be implemented virtually everywhere.
- Pollutant runoff from homes and streets (e.g., nutrients, heat) matters, but hydrology is the overwhelming driver and source of WQ problems in developing and developed areas
- LID has many benefits in addition to water quality improvements, including augmenting water supply through aquifer and lake recharge, urban energy savings, and community health.

10% up to 20% Imperviousness

10% of the drainage area is impervious here.



Low Impact Development

Systems and practices that use or mimic natural processes to:

- Infiltrate
- Evapo-transpirate, or
- Use

stormwater or runoff where it is generated.



Healthy Watersheds

- Adding emphasis on preserving good quality waters and the landscapes that support them.
 - Recognizes the benefits of preserving natural ecosystems.
- Experience has shown it is expensive and technologically complex to restore compromised source water/groundwater and/or healthy watersheds to their former condition.
- Our goal is to support states in their efforts to assess where their HW's are and develop/implement plans to protect them.

319 and source water protection

- **Mills River, NC – source water for 50,000 threatened by ag runoff**
 - Conservations easements, riparian buffers, logging road stabilization restored the waterway
- **Charleston Side Channel Reservoir, IL – excess sediment, phosphorus, manganese**
 - Shoreline stabilization, grassed waterways, on-farm conservation practices reduced Mn levels, algal blooms and odor.
- **Lake Icaria, IA**
 - Excess siltation addressed by conservation practices, prescribed grazing, manure management.

Recap

- CWA Section 319 program essential for addressing NPS pollution, albeit one with a huge set of water quality problems and declining budget
- Common between 319 and source water/groundwater protection efforts: program goals, pollution sources and control practices, reliance on engaged local stakeholders and voluntary actions.
- Clear opportunity for collaboration and synergy.
- State NPS Coordinators a good place to start
 - www.epa.gov/owow_keep/nps/contacts.html