National Water Quality Initiative 2023 Progress Report

Farmers, ranchers, and forest landowners recognize water as our Nation's most precious resource. Every day, new producers are stepping up to work hand-in-hand with the Natural Resources Conservation Service (NRCS) to plan and apply practices that improve water quality and strengthen agricultural operations.

The National Water Quality Initiative (NWQI), now in its tenth year, is a partnership among NRCS, state water quality agencies and the U.S. Environmental Protection Agency to improve and protect water quality through voluntary conservation. NRCS provides targeted funding for financial and technical assistance in small watersheds most in need and where farmers can use conservation practices to make a difference.

Conservation systems include practices that promote soil health, reduce erosion and lessen nutrient runoff, such as filter strips, cover crops, reduced tillage and manure management. These practices not only benefit natural resources but enhance agricultural productivity and profitability by improving soil health and optimizing the use of agricultural inputs.

State water quality agencies and other partners contribute additional resources for watershed planning, implementation and outreach. They also provide resources for monitoring efforts that help track water quality improvements over time.

Based on the success of the FY 2017 pilot project, NRCS now has a "planning" phase to assist states with watershed-level assessment, on-farm planning, and outreach prior to receiving financial assistance for implementation.

Technical assistance dollars can be used to support producer workshops, analyze water quality data, conduct GIS analyses, perform stream surveys, aid local coordinators and expand one-on-one planning and outreach with landowners.

In FY 2019, NRCS expanded NWQI to include source water protection as a purpose for the initiative. NWQI priority areas for source water protection may include surface and groundwater sources of drinking water. These efforts are designed to identify and address potential threats to clean drinking water from agricultural activities.



Outcomes and Impacts

As USDA's premiere water quality initiative, NWQI provides a way to accelerate voluntary, on-farm conservation investments and focused water quality monitoring and assessment resources where they can deliver the greatest benefits for clean water.

NWQI has led to a four-fold increase in the acres treated with water quality practices in targeted watersheds.

Average annual funding for conservation and the number of producers assisted in these watersheds has roughly doubled.

Since 2012, NRCS has worked with more than 6,000 producers to adopt conservation practices on more than 1.37 Million acres in priority watersheds through NWQI.

As of FY 2023, at least 19 impaired water bodies have been improved and subsequently scheduled for de-listing or otherwise removed from NWQI due to successful water quality improvements.



Fiscal Year 2023 National Water Quality Initiative NRCS Financial Assistance (EQIP FA) for Active and Completed Contracts

| Region | Acres | NRCS Investments | Contracts |
|-----------|---------|------------------|-----------|
| Central | 79,179 | \$10,333,429 | 205 |
| Northeast | 5,933 | \$5,976,687 | 63 |
| Southeast | 17,980 | \$11,541,699 | 168 |
| West | 19,521 | \$5,993,306 | 50 |
| Total | 122,613 | \$33,845,121 | 486 |

Data source: FPAC Economics and Policy Analysis Division, January 2024

Focus on Critical Source Areas

Through watershed assessment, critical areas for treatment are identified using a variety of tools and approaches, and practice implementation within critical areas is being tracked at the project level. One tool that can help identify critical source areas is the CEAP Soil Vulnerability Index (SVI). It identifies soils most vulnerable to runoff loss of sediment and nutrients on cropland. Tracking conservation implementation on these vulnerable acres is one way to estimate progress towards meeting water quality objectives nationally. The NRCS Resource Inventory and Assessment Division provides annual reports on treatment on SVI acres for all NWQI watersheds (HUC12).

High SVI Acres Treated......46%

NRCS Goals

NRCS developed edge-of-field pollutant reduction goals for NWQI to show progress in achieving water quality improvements in these small watersheds. Original goals were based on reductions achieved through FY 2018, and were met or exceeded in FY 2018. In FY 2019, those milestones were expanded to include expected reductions by FY 2023. NWQI aims to reduce sediment loss from cropland by 1.3 million tons, phosphorous loss by 3.3 million pounds and nitrogen loss by 16.8 million pounds. NWQI exceeded the milestone for phosphorous loss by FY 2022, and was close to meeting the milestones sediment and nitrogen in FY 2023. These reductions will help to address water quality impairments or concerns identified in each watershed and contribute towards restoring their beneficial use and ecological function. In FY 2020, NWQI exceeded the milestone for contributing to the de-listing of up to 15 stream segments from the U.S. Environmental Protection Agency list of impaired streams by 2023.

Overall Summary FY 2012–23

| Total NRCS Investment | . \$333,080,448 |
|------------------------|-----------------|
| Number of Contracts | . 6,587 |
| Total Acres Contracted | . 1,372,711 |

| 2023 Milestones | | | | |
|--|---------------------|--------------------------------|--|--|
| Reduce Sediment Loss (tons) | | | | |
| Milestone | Achieved | Percentage Toward Milestone | | |
| 1,385,600 | 1,365,243 | 99% | | |
| *1,222,788 tons r | educed in FY 2012-2 | 2022; 142,455 tons in FY 2023 | | |
| Reduce Phosphorus Loss (lbs) | | | | |
| Milestone | Achieved | Percentage Toward Milestone | | |
| 3,335,750 | 3,643,619 | 109% | | |
| *3,479,659 lbs red | duced in FY 2012-20 | 022; 163,960 lbs in FY 2023 | | |
| Reduce Nitrogen Loss (lbs) | | | | |
| Milestone | Achieved | Percentage Toward Milestone | | |
| 16,828,200 | 17,000,838 | 101% | | |
| *15,294,083 lbs re | educed in FY 2012-2 | 2022; 1,706,755 lbs in FY 2023 | | |
| Stream Segment/Lake Recommended Delistings | | | | |
| Milestone | Achieved | Percentage Toward Milestone | | |
| | | | | |

Data source: FPAC Economics and Policy Analysis Division, January 2024

*19 delistings in FY 2012-2022; 0 in FY 2023

