State Source Water Protection Program Coordination with NRCS

Background

ASDWA has been working with our members to support and promote state source water protection (SWP) program planning and implementation for many years. Our efforts began with the development of the state source water assessments per the 1996 Amendments to the Safe Drinking Water Act and continued over the past 20 plus years in coordination with multiple partners. This included establishing the National Source Water Collaborative (SWC) in 2006 with 13 (that has now grown to 29) different member agencies associations, and organizations for which ASDWA and the Ground Water Protection Council (GWPC) are Co-Chairs, and working with the Natural Resources Conservation Service (NRCS), EPA, state Clean Water Act programs, and other partners. The NRCS State Conservationist's office and local conservation districts are key partners for state SWP programs that can provide technical assistance and funding for private landowners to implement conservation and practices that benefit and protect sources of drinking water from nutrient pollution and other potential threats, such as wildfire.

2018 Agriculture Improvement Act (aka Farm Bill) Conservation Title

Section 2503 of the 2018 Farm Bill, for the first time, added source water protection as one of the explicit goals when targeting conservation practices, and recognizes the role of water utilities in identifying priority areas. This includes:

- Identifying priority areas for drinking water protection in each state with NRCS State Technical Committees (STCs). These can address water quality, quantity, surface, and groundwater.
- Directing at least 10% of total funds available for conservation programs (except for CRP) toward source water protection, an estimated $4 billion over 10 years.
- Additional incentives (up to 90% reimbursement) for private agriculture and forest landowners who employ practices that benefit source waters.

Identifying NRCS Priority SWP Areas and Practices

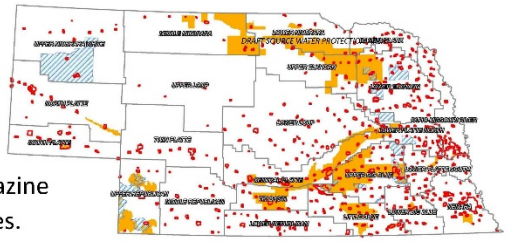
The state SWP programs have the best knowledge about the SWP areas that would benefit most from implementing conservation and practices for SWP. Working with NRCS on selecting priority SWP areas and determining best practices to address drinking water concerns requires close coordination that includes sharing GIS map layers, source water assessments and SWP protection plans (where available). In the absence of state specific maps, NRCS can use EPA's Drinking Water Mapping Application to Protect Source Waters (DWMAPS) tool to help target priority SWP areas across the nation.

The current NRCS Bulletin has a due date of September 30, 2020, though this will be an ongoing effort. NRCS will work with state SWP programs to identify high priority SWP areas that are being refined from last year's local priorities to create some national consistency using HUC-12 watersheds and groundwater protection areas representing no more than 20% of the total land area of the state. State SWP program efforts to help NRCS develop these priority areas to date include:

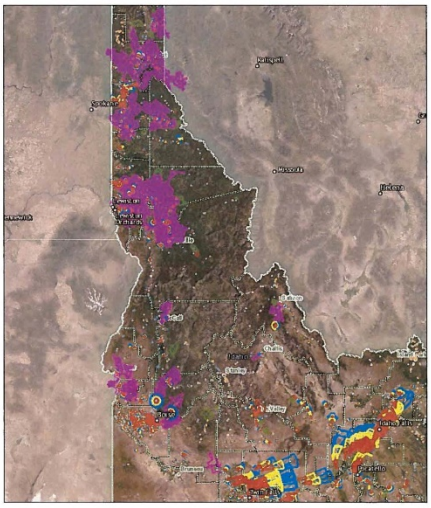
- Some state SWP programs have worked with NRCS for years (e.g., DE, IA, ME, NE, NH, OH, OR)
- Some states have started new SWP workgroups under the NRCS STCs to coordinate SWP efforts (e.g., CO, ID, IA, NE, WI, Pacific Islands)
- Some state SWP programs shared presentations at STC meetings (e.g., KY, ME, MA, MN, NH, VA)
- Almost every state has now shared their GIS maps of wellhead and surface water protection areas with NRCS since the June 2019 NRCS bulletin was published last year.
- There are just a few state SWP programs that are working very closely with NRCS to select priority SWP areas and NRCS practices for landowner implementation based on site specific SWP concerns (e.g., CT, ID, NE, OR, VT). See examples from Nebraska, Idaho, and Vermont (on next page).

Nebraska NRCS Priority SWP Areas for Ground Water and Surface Water

- Nutrient management – for application
- Cover crops
- Irrigation water management
- Conversion of flood irrigation
- Water well decommissioning
- Changes to crop rotation
- Integrated Pest Management – for atrazine
- Conversion of cropland to grass or trees.
- CRP – convert cropland in wellhead areas
- Wetland Restoration



Idaho DEQ Source Water Assessment and Protection



Idaho NRCS SWP Priority Ground Water and Surface Water Areas and Practices

309-Agrichemical Handling Facility	393-Filter Strip	638-Water and Sediment Control Basin
327-Conservation Cover	449-Irrigation Water Management	650-Windbreak/Shelterbelt Renovation
328-Conservation Crop Rotation	521A-Pond Sealing or Lining, Flexible Membrane	656-Constructed Wetland
329-Residue Management, No Till	528-Prescribed Grazing	657-Wetland Restoration
340-Cover Crop	580-Streambank and Shoreline Protection	658-Wetland Creation
350-Sediment Basin	590-Nutrient Management	659-Wetland Enhancement
351-Well Decommissioning	595-Pest Management	660-Tree/Shrub Pruning
380-Windbreak/Shelterbelt Establishment	601-Vegetative Barrier	
390-Riparian Herbaceous Cover	612-Tree/Shrub Establishment	
391-Riparian Forest Buffer	635-Vegetated Treatment Area	

Vermont NRCS Priority SWP HUC-12 Sub-watershed Map and Practices

1. Groundwater Testing (code 355)
2. Well Decommissioning (code 351)
3. Integrated Pest Management (code 595)
4. Nutrient Management (code 590)
5. Filter Strips (code 393)
6. Riparian Forest Buffer (code 391)
7. Field Borders (code 386)
8. Cover Crops (code 340)
9. Heavy Use Area Protection (code 561)
10. Conservation Crop Rotation (code 328)
11. Agrichemical Handling Facility (code 309)

NRCS Programs for Source Water Protection

The HUC-12 high priority SWP areas can also overlap with NRCS program project areas. NRCS program projects that implement agriculture and forestry practices are primarily funded through the NRCS Environmental Quality Incentives Program (EQIP) for NWQI watersheds and other types of projects. NRCS will allow increased payments to landowners to implement practices in the priority SWP areas described previously to address drinking water impacts (per the Farm Bill provisions). It is important to emphasize that NRCS funding goes directly to landowners. The current NRCS program opportunities for state SWP program coordination include the NWQI, RCPP, CIG, and Easements (described below).

- *National Water Quality Initiative (NWQI):* The NWQI is a great opportunity for state SWP programs to help NRCS select NWQI watersheds that are drinking water sources. This year's NWQI requires NRCS to, at a minimum, select three impaired watersheds (on EPA's 303(d) list) in each state (that can also be drinking water sources). States can select additional source watersheds that focus on either surface water or groundwater and can get NRCS planning assistance if they are not ready for the implementation phase. Spirit Lake in Iowa is a good example of a watershed that went directly into the implementation phase for FY '19 funding.
    - View examples from Oregon and Connecticut that share information on addressing resource concerns and using GIS map layers (that is similar to the process for selecting high priority SWP areas) to select NWQI watersheds in these states (on next page).
    - *The current NWQI bulletin due date is July 3, 2020.*

- *Regional Conservation Partnership Program (RCPP):* The RCPP provides $300 million annually for projects that leverage funding and in-kind contributions from multiple project partners. Some of these projects include state source water protection programs, water utilities, and a variety of other partners. There are two funding pools for RCPP projects – one for Critical Conservation Areas (CCAs) and one for State/Multistate areas. These projects are intended to address one or more natural resource concerns and partners must evaluate the project's impact and results.
    - View the Milford Lake, Kansas RCPP project goals and partners example (on next page).
    - *The current RCPP Announcement for Alternative Funding Arrangements that will award up to 15 AFA grant-like projects was due on May 17, 2020.*

- *Conservation Innovation Grants (CIG):* This national competitive grant program supports development, testing and research for innovative projects to address conservation challenges with new tools and technologies, practices, systems and approaches on private lands. These projects can focus on drinking water, water reuse, water quality, air quality, energy, and wildlife habitat. State NRCS offices are also able to fund and hold their own CIG competitions.
    - *The current National CIG Announcement project proposal due date was June 29, 2020.*

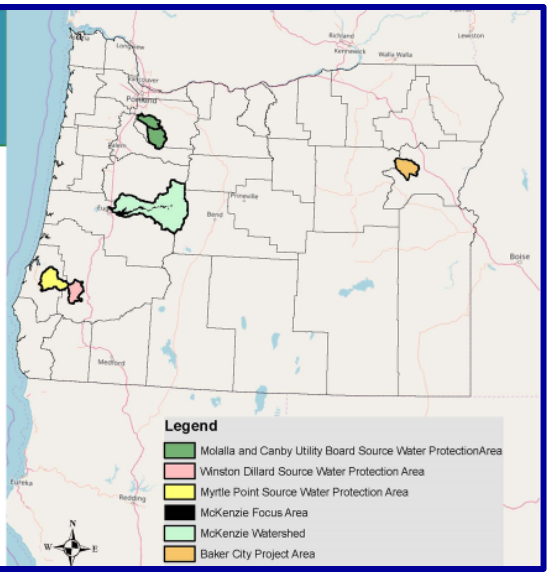
- *Easement Programs:* NRCS easement programs offer technical and financial assistance to landowners who want to maintain or enhance their land in a way beneficial to agriculture and/or the environment, including drinking water sources.
    - The Agricultural Conservation Easement Program (ACEP) helps to conserve agricultural lands and wetlands and their related benefits.
    - The Healthy Forests Reserve Program helps landowners restore, enhance and protect forestland resources on private lands and their related benefits.

For more information and assistance:

- Continue working with your NRCS State Conservationists Office, attend the State Technical Committee meetings, and participate in state and local workgroups.
- Find the list of state SWP coordinators at www.asdwa.org/sourcewatercontacts.
- Check out the Source Water Collaborative Toolkit that provides simple steps for working with state SWP programs and NRCS State Conservationists and Conservation Districts.

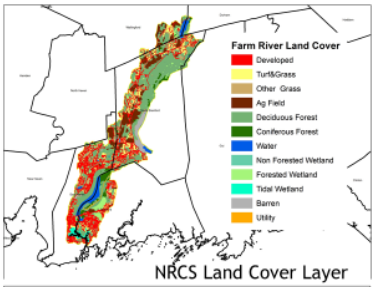
Oregon NWQI SWP
5 Pilots - $492,420

- **Project Partner Goals:**
  - Detailed watershed assessment
  - Outreach strategy to address site specific agricultural & forestry impacts to source water quality
- **Project Area Concerns:**
  - Nutrients, sediment, pathogens, pesticides
  - Harmful Algal Blooms (HABs)
  - Wildfire risk
  - Salmon, fish habitat
  - Environmental Justice issues

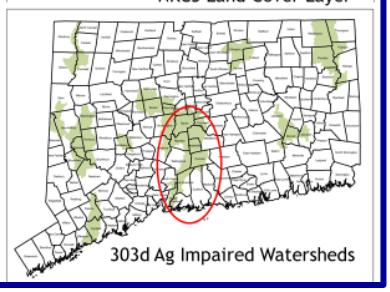


Connecticut - Farm River NWQI SWP Pilot Criteria

- Data Layers used to Analyze Source Water Protection Opportunities
  - NRCS Land Cover Layer
  - 303d Ag Impaired Watersheds
  - Source Water Protection Areas
  - Conservation planning data (NRCS)
  - Financial assistance data (NRCS)
- Additional factors
  - Willing participation by producers
  - Number of ag operations



NRCS Land Cover Layer


303d Ag Impaired Watersheds

Kansas RCPP - Milford Lake

- Project Value: $2.8 million
- NRCS Investment: $1.4 million
- **28 Partners**
  - **Lead Partner: Kansas Water Office**
  - **Multiple State Agencies**
  - **Riley County Conservation District**
  - **Five Water Utilities:** Kansas River Water Assurance District No. 1
- **Challenges:** HABS that impact public water supplies, wildlife, water-based recreation.
- **Solutions:** Implementation of conservation practices to reduce nutrients entering Milford Lake.

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