

Water Works: Conservation D



Track down surveys are intensive stream walks designed to identify existing and potential impairment sources. Last year, the District covered nearly seven miles of stream, locating and documenting the conditions of 68 stormwater outfalls, 29 stream crossings, five debris dumps and five areas of extreme erosion. The District is completing study reports that include abbreviated EPA 9-element watershed-based plans, with recommendations for tackling the worst pollution sources. Addressing these problems will help reduce bacteria, sediment and other NPS pollutants, and "liberate" streams from the Impaired Waters List.

Finding a Market for Cleaner Water

An emerging mechanism to address natural resource concerns within a watershed is Water Quality Trading. Water Quality Trading is a voluntary exchange of pollution reduction credits to improve an impaired stream or a stream seeking to maintain water quality. Under a water quality credit system, landowners generate credits by implementing best management practices (BMPs) to reduce nonpoint source pollution into impaired streams. Regulated point source entities needing to reduce pollution levels for such pollutants as phosphorus, nitrogen or sediment can purchase the credits generated by the landowner as an alternative to costly facility upgrades.

Since March 2006, the Darke and Miami Soil and Water Conservation Districts (SWCDs) in Ohio have worked with local partners and landowners to implement a water quality trading system in the Stillwater Watershed. These districts help landowners implement BMPs such as converting row crops to alfalfa or pasture seedings, livestock waste management and waterway restoration to reduce nutrients in the watershed. Participating landowners can then become eligible to trade credits with local regulated entities such as wastewater

treatment facilities. Trading presents a new source of funding for agriculture producers and opportunities for conservation districts to participate in the trading mechanism. More information on water quality trading can be found on the Environmental Protection Agency's website at <http://www.epa.gov/owow/watershed/trading.htm> or the Stillwater Watershed website at <http://www.stillwatershed.org/>.

District Participation Needed in Clean Watershed Needs Survey

Every four years, the U.S. Environmental Protection Agency conducts a survey to determine what resources are needed by local and state governments in order to implement the Clean Water Act. The Clean Watershed Needs Survey collects data on stormwater management, wastewater collection and treatment, nonpoint source pollution control projects, combined sewer overflows control facilities and small community needs. Information is collected on both existing projects and estimated financial and technical needs for future projects. The results are then presented in a report to Congress and help determine funding levels.

The 2008 survey is underway. Conservation districts are especially encouraged to participate due to their unique work with a variety of water issues. Each state has a different time frame and process for submitting data. To get involved, contact your state coordinator at <http://nww.epa.gov/cwns/wherelive.htm>.

Thanks to the many folks who contributed to this feature story, including Greg McGlinch (Ohio), Crista Carrell (Georgia), Debbie Hughes (New Mexico), Judith Ortego (New Mexico), Jane Brawerman (Connecticut), Joey Breaux (Louisiana) and Carolyn Kelly (Washington).

Nearly 3,000 conservation districts across the nation address natural resource concerns on all landscapes. One of districts' greatest commonalities is their locally led process. They work with landowners and communities to identify local resource issues and develop solutions, often through multi-level partnerships.

Throughout the country, water quality and quantity issues rank highly in the locally led process. Land can be farmed or forested, developed or developing, inland or coastal. It can get too much water or too little, or both at different times. No mat-

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Track Down Surveys Chart Course to Cleaner River

The Connecticut River Coastal Conservation District has been engaged in conservation efforts throughout the Mattabeset River Watershed for over 16 years. The Mattabeset River is a major tributary of the Connecticut River. Its watershed, which includes parts of ten municipalities and encompasses 69.9 square miles, suffers from water quality problems related to development, urban runoff and limited riparian buffers. The river and many of its tributaries are on Connecticut's Impaired Waters List for contact recreation and aquatic and wildlife habitat impairments.

Current District efforts focus on on-the-ground restoration. Recognizing that a piecemeal approach would not result in measurable water quality improvements, the District began working at a smaller scale, conducting "track down surveys" of tributary streams to locate sources of impairments and develop small watershed restoration plans.



Image courtesy of EPA

Partnership Restores Native Riparian Habitat

The threat of invasive species of plants impacts virtually all landscapes in the U.S. Invasive species not only threaten native flora, they can also impact riparian areas, affecting water quantity and quality.

The salt cedar in New Mexico is a classic example. Introduced in the early 1900s to stabilize streambanks, the species consumes large amounts of groundwater supplies and exudes salt from its leaves. Removal and restoration consists of several methods, including mechanical removal and mulching of salt cedars, aerial spraying and a cut/stump method in which the trees are cut and stumps painted with herbicide paint to prevent growth. Native species are then planted to return the riparian area to a natural state.

The Restore New Mexico Partnership, in which the New Mexico Association of Conservation Districts (NMACD) and the Carlsbad Soil and Water Conservation District participate, is working to remove salt cedar. The partnership includes organizations at the federal, state, tribal and local levels, and leverages funding and agreements to address restoration. To date, over 500,000 acres have been restored, including 18,000 acres along the Pecos River and its tributaries.

The Restore New Mexico Partnership recently received a Collaborative Conservation Award from the U.S. Department of Interior, partly for the work on salt cedar removal and restoration efforts. More information on this effort can be found on the NMACD website at <http://nm.nacdnet.org>.



Districts Tackling Water Issues

Where or when, people recognize the need to protect water as a critical resource. Conservation districts have been and continue protecting the country's water quality and quantity. They work with landowners and land users, giving them needed technical and financial assistance to establish conservation practices. They employ a wide array of strategies, fitting the solution to the problem. They work with a broad base of partners, from local watershed groups to state water quality and conservation agencies and federal entities such as the U.S. Environmental Protection Agency, the USDA

Natural Resource Conservation Service and Forest Service, and others in the Departments of Interior and Commerce.

Below are just a few examples of districts' outstanding activities on water-related issues. Even more outstanding is the fact that most are conducted in every one of the nation's conservation districts!

NACD is eager to hear about water-related projects and initiatives your district is involved with. Please send your success stories to Jeremy-Peters@nacdnet.org.

Planning for Water Extremes

The threat of drought is constant regardless of geographic location. Areas such as the arid western states are more accustomed to issues of water quantity than other areas like the South, which recently experienced extreme drought. To better plan for water usage, Georgia has developed a comprehensive water management plan to coordinate future water management.

The Comprehensive Statewide Water Management Planning Act, signed by Governor Sonny Perdue in 2004,

set in motion the creation of The Water Council. For more than three years, the Council facilitated public hearings and collected information to develop the plan, considering the needs of agriculture, industry, private citizens and natural systems. Conservation district supervisors regularly participated, and the final plan was recently approved by the State Legislature and Governor Perdue.

The plan will use three concepts to guide the management of Georgia's water resources: water resource assessments, regional forecasts of water supply and assimilative capacity demands and regional water development and conservation plans. Water planning regions will be aligned with surface and groundwater resource boundaries. Regional water development and conservation plans will be developed and implemented by appointed boards. Conservation district supervisors are currently submitting nominations for the water planning councils to ensure the voice of conservation is heard throughout the state. More information on the plan is available on the Council website at <http://www.georgiawatercouncil.org/>.



Photo courtesy of Barry E. Gillis.

Partnership Reduces Sediment in Forest Streams

Since 2001, the Skagit Conservation District in northwest Washington has partnered with Mount Baker-Snoqualmie National Forest (USFS) on implementation projects to

benefit water quality and fish habitat on tributaries of the Skagit River and their flood plains. These projects reduce the risk of road failure and resultant sediment production that occurs from water collection and concentration, fish passage blockages, and the resulting negative effects on water quality and fish habitat.

Threatened species like Chinook salmon and Dolly Varden (bull trout) utilize this area, as well as coho, chum, and pink salmon and resident populations of cutthroat and rainbow trout.

The projects consist of culvert replacement and/or removal and replacement with rocked rolling dips, ditching and fill stabilization. Some roads are placed into "storage" utilizing culvert removal, fill stabilization and installation of rock lined water bars practices.

The Skagit CD has sponsored six projects to date, receiving \$1,798,000 in Washington State Salmon Recovery Funding Board grant funds. The USFS has contributed \$475,915 in grant match. Besides the tremendous environmental benefits received, these projects have put millions of dollars of contracted work out to local timber communities.



Coastal Restoration through Re-vegetation

In the 20th century, Louisiana lost an estimated 1,900 square miles of coastal wetlands. The loss continues at a rate of 25-30 square miles per year. This loss includes critical wetland values, such as water quality protection and improvement, flood control and storm surge buffering, habitats for threatened species, commercial and recreational opportunities.

Louisiana's conservation districts are partnering with state and federal partners to address this issue. Eleven districts, the state Departments of Agriculture and Forestry and Natural Resources, and NRCS came together in 1990 to further early efforts of "restoration through re-vegetation." As a result, a Partnership Vegetative Planting Program helped establish 35 linear miles of restorative coastal plantings each year, using locally adapted plant species.

The districts help landowners identify and solicit project proposals, while the state and federal agencies provide technical support and oversight. Districts and the program manager cooperate with the landowner on implementation. As most of these projects are implemented on private land, one of the greatest advantages has been the opportunity to work directly with coastal wetland landowners who wouldn't be able to participate in other large-scale public-land projects. Transferring restoration techniques through local districts to the individuals has given many landowners the resources necessary to continue these efforts on their own.

