



# ANNUAL REPORT

ODNR Division of Soil and Water Conservation



# Soil and Water Conservation and YOU

Proud to be working together for Ohio's economy, environment, and recreational opportunities.



On behalf of Ohio's 88 soil and water conservation districts and the ODNR Division of Soil and Water Conservation, we extend our sincere thanks to every citizen and landowner who works with us in so many different ways to keep Ohio's economy strong, to protect our environment, and to provide a high quality of life that includes recreational opportunities.

Whether your motivation is safely using our natural resources for your livelihood, promoting a safe and healthy environment, or managing our lands and waters for outdoor recreation and wildlife, or for all three reasons, we applaud you, and thank you for being our partner.

Our work together can touch every acre of land, every body of water, and every urban, suburban, and rural community. We help bring rural and agricultural people together with urban dwellers to work to protect our watersheds and drinking water, to promote economic development while minimizing impacts on streams and wildlife habitat, and to protect and restore the resources upon which a thriving economy and outdoor recreation depend.

Our work together grows more critical every day. There is growing pressure on our agricultural lands to meet an ever-broader range of society's needs, including renewable fuels such as ethanol and materials for thousands of products previously made from oil, while still satisfying a growing need for food and fiber. A growing population and expanding development adds significant pressure on land and water resources.

Despite these pressures, we are confident that our past positive, cooperative, "can-do" spirit will allow our local-state-federal, rural and urban, public-private conservation partnerships to successfully meet these natural resource-based challenges so critical to Ohio's future. We hope we can count on your support and involvement.



David Hanselmann  
Chief, ODNR Division of  
Soil and Water Conservation



Clark Sheets  
President, Ohio Federation of Soil  
and Water Conservation Districts

# Proud to be Working Together for Ohio's Economy and Jobs



## Modern, easily accessible soils information, critical for every economic sector, now available

What if you had a piece of land – 100-acres, say – and were planning to invest in planting soybeans or trees? Or in building your dream house? How about an office complex? Would it matter if the soils were clayey? Sandy? Would you bother to seek out soils maps and information before making your investment?

What if the information was easy to use? And FREE?

*“I know Ohio’s farmers can be even more productive and successful by using this new source of soils information.”*

*Jack Fisher, Executive Vice President, Ohio Farm Bureau Federation*

Division of Soil and Water Conservation soil scientists think that most Ohio citizens considering such an investment would want to know where those highly contrasting soils are on their property. Such information has been available to the public in soil survey books for most of the state for decades, but relatively few landowners

have taken advantage of it. To make the information more accessible and easier to apply to business decisions involving large and small tracts of land, the division initiated the Statewide Digital Soils Information (SDSI) Project in 2000.

USDA’s Natural Resources Conservation Service and SWCDs are our primary partner in achieving online availability of soils information and to making available inexpensive compact discs (CDs) with user-friendly geographic information system software.

With increased accessibility to soils information collected since the early 1900s, businesses and industries in the state can easily make smarter decisions about investments involving real estate. These decisions can increase business profits and decrease the public’s costs for maintaining healthy soils and clean water. Check it out at [www.ohiodnr.com/soilandwater/](http://www.ohiodnr.com/soilandwater/)

## New tools help woodland owners and loggers productively use 8 million acre resource

Ohio’s forest products industry contributes \$15.1 billion annually to Ohio’s economy. The state has approximately 8.1 million acres under forest cover, of which some 397,000 families own about 6.2 million acres. Ohio forests grow one billion board feet of timber each year, and 300-400 million board feet of wood are harvested.

Timber is a valuable economic resource – and a renewable one – which, when well managed, helps protect soil, improve water quality, house wildlife and provide opportunities for recreation.

### **New Tool #1** *Timber Harvest Plan*

Commonly called a THP, this is a written record that details when, where, and how best management practices will be used to prevent soil erosion and siltation during a timber harvest. The THP is developed and/or approved by the county SWCD board of supervisors. By requesting an approved, filed plan, the owner or operator of a timber harvest benefits from an affirmative defense in the event of a civil nuisance suit involving erosion and/or siltation.

### **New Tool #2** *Call Before You Cut*

Consulting a professional forester before a cut, and using a master logger if choosing to harvest trees, helps Ohio woodland owners protect both their woods and their financial interests. A toll-free number (877-424-8288) with a live operator on duty weekdays provides quick answers to questions about how to find an accredited forester to help with management options and in sustaining long-term woodlot health. Additional information is available on the “Call Before You Cut” Web site at [call4ucut.com](http://call4ucut.com).



## At \$8 billion, livestock and poultry play an important economic role

Livestock and poultry production contribute more than \$8 billion to Ohio's economy and provide for more than 47,000 jobs on the farm or in processing.

Livestock and poultry farms generate more than \$229 million in tax revenue each year.

Livestock and poultry production account for more than one-third of Ohio's farm production and for one-sixth of the state's farm income.

In other words, livestock agriculture is important business here. Yet most livestock and poultry production still takes place on more than 38,000 small and medium size family owned farms.



### **Comprehensive Nutrient Management Plans**

Plans were written for 260 mostly small- and medium-size livestock producers.

### **Grazing Lands**

Conservation measures were applied on more than 42,518 acres.

### **Nutrient Management**

Management measures were applied on 287,685 acres.

*"Members of the Ohio Livestock Coalition support the rights of livestock and poultry producers to conduct business wherever they may choose as long as they meet all rules and regulations governing their livestock and poultry production enterprises. Livestock and poultry farms should be managed in a manner where everything economically feasible to protect the environment and precious natural resources is undertaken. We continue to support economically sound programs that protect and improve the environment and conserve precious natural resources, and look to the conservation partnership of ODNR-DSWC, local SWCDs and USDA-NRCS to help livestock and poultry farmers achieve these objectives by providing valuable assistance in developing and implementing technically sound conservation plans that are an important part of producers' business plans."*

*Tim Demland, President  
Ohio Livestock Coalition (OLC)*

## SWCDs and DSWC – Building a cooperative relationship with developers

Construction is a multi-billion dollar industry in Ohio and indirectly supports a significant number of other related business sectors. But as growth continues, so does concern for the health of streams and other water resources. Problems plaguing urban waterways include increased runoff, greater variety and volume of pollution in runoff, loss of habitat, and other forms of degradation that have typified streams in developing areas.

The ODNR Division of Soil and Water Conservation and their partners are actively assisting the development sector in meeting environmental needs while pursuing economic growth. Developers,

consultants, and local government have had to adjust to increased regulation of erosion and sediment, evolving storm water control methods, and stream and wetland mitigation. This is where the division and county-based soil and water conservation districts (SWCDs) are helping to save money – for developers, consumers, and local governments – and streamline processes.

More than 30 of the state's 88 SWCDs provide review of development plans for pollution prevention both during and after construction. In many cases, they serve multiple municipalities and the county by providing a consistent review of development plans for practices required by local ordinances and resolutions and by the Ohio Environmental Protection Agency.

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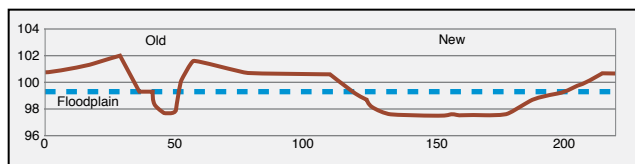




# Helping Urbanizing Communities

New techniques for construction of drainageways provide for water resource protection while still conveying runoff waters.

Far from ideal was one way to describe the old Clover Groff Ditch in NW Franklin County. Originally an intermittent headwater wetland stream, it had been modified decades ago to dry the land out enough to raise crops.



But the ditch and its extensive 100-year floodplain posed problems for a new crop: homes. Improving the drainage further could have easily made the site more developable but not without sacrificing a number of building lots. Development provided a one-time window of opportunity for creating something better.

The ditch had become deeper and in its channelized condition offered poor habitat and provided limited ecological function. Division of Soil and Water Conservation staff offered a win-win suggestion: lower

a portion of the original floodplain creating a low, wet width that would reduce the overall floodplain while offering “services” such as sediment trapping and greater ecological benefits. *See diagram.*

An approach called “over-wide channel design” – essentially a wide, flat, bare-bottom trapezoid – was ideal for this site. Earthmoving equipment only initiates construction – self-forming

processes finish the job, which progresses through a predictable sequence of vegetative succession and

sediment dynamics. The result is a stream tailor-made to fit the specific conditions because it’s formed by those conditions – the site’s slope, flow rate, and sediment regime.

Designing and constructing entire “streams” is a costly proposition, some approaches averaging \$200-\$600/linear foot. For low gradient headwater streams like Clover Groff Ditch, over-wide channel design is a nice alternative, costing about \$43/linear foot. The builder will use excess soil from the over-wide channel to increase his “buildable” acreage. The new arrangement

meets requirements for open space, and the lots around the “new” wetland stream are expected to sell for \$15,000 to \$20,000 more than other lots in the development.

The ecological services provided by self-forming wetland streams are being demonstrated and studied principally in the most intensively drained areas of the country – the Great Lakes states, the Mississippi delta, and coastal plains of the east coast. The DSWC is currently helping track and monitor 18 such sites. Further information is available on the division’s Web site <http://www.dnr.state.oh.us/soilandwater/>.

*“Through a partnership with the developer and DSWC, we were able to acquire a conservation easement on this site which establishes permanent protection on the land while also implementing a new stream restoration approach. This new approach may further improve water quality and save the developer land, money and time in the long term. The conservation easement allows us the ability to monitor and analyze the benefits of this stream restoration. We are very excited about this partnership opportunity!”*

*Emily Dick, Assistant Director  
Franklin Soil and Water Conservation District*

February 2006



November 2006



Clover-Groff ditch was reconstructed using an “over-wide” ditch design (left); less than one year later it already offers ecological benefits.

# Proud to be Working Together for Ohio's Recreational Opportunities



## Ohio Clean Marinas

No matter how you look at it, Lake Erie is one of Ohio's greatest resources, accounting for an estimated \$8.7 billion in tourism revenue annually. Boating, fishing, swimming, water-skiing – all rely on a clean lake. And for about 2.4 million people who get their drinking water from the lake, clean water is essential.

That's why the Division of Soil and Water Conservation developed the Ohio Clean Marinas Program in partnership



with the Ohio Sea Grant College Program and a host of federal and state agencies, local health departments, fire marshals, and marina and yacht club owners.

Funded by a grant from the National Oceanic and Atmospheric Administration (NOAA) through ODNR's Office of Coastal Management, Clean Marinas encourages marinas and boaters to use simple, innovative solutions to improve Ohio's coastal and inland water resources.

Currently 21 marinas are "Certified Ohio Clean Marinas," and 41 have pledged to meet certification standards within the year. Already, an Ohio Clean Marinas Program-initiated shrink-wrap recycling effort has prevented 150,000 pounds of recyclable material from entering landfills in its first year.

*"Under the umbrella of the Lake Erie nonpoint source pollution control program, "Clean Marinas" is a win-win for marina owners and the thousands of boaters who recreate on Lake Erie every year."*

*Mike Quinn, Acting Chief,  
ODNR Division of Watercraft*

By promoting awareness of environmental laws, rules, and jurisdictions, the Ohio Clean Marinas Program is helping to keep Lake Erie a great place to recreate.





## CREP Benefits Roll In 8,000 miles of watercourses protected

Ohio's three Conservation Reserve Enhancement Programs (CREPs) are racking up some impressive numbers...but numbers aren't really the story here. Together, the Lake Erie, Big Walnut, and Scioto River Watershed CREPs are changing the very landscape and producing a bumper crop of environmental benefits.

Consider: Nearly 23,000 acres of warm season grasses have been planted or planned for floodplains and highly erodible lands within the Scioto River watershed. More than 2,300 acres of 30-year wetlands and 2,045 acres (210 miles) of wind-breaks have been established in the Lake Erie CREP project area. And collectively, 32,550 acres (2,808 miles) of grass filter strips have been installed or contracted.

But we said that numbers aren't the real story. The REAL story is that all of these measures (and more than a dozen more) provide a multitude of ecosystem

benefits for everyone in the watershed - and beyond. All of these conservation practices help reduce erosion and sedimentation to Ohio waterways. Many provide wildlife habitat and wildlife travel lanes. Most improve in-stream habitat for fish and other aquatic life. And most help improve the quality of water to downstream consumers, including a number of community water systems.

*"As an avid outdoorsman and hunter and being in the field with my sons and bird dog, I see first hand the greatly improved wildlife habitat in the CREP areas. I know Ohio's thousands of hunters and fishermen appreciate farmers enrolling parts of their farms to protect waterways and wetlands, and at the same time maintaining a strong and productive farm, thus leaving a legacy for future generations."*

*Terry Cosby, State Conservationist  
USDA Natural Resources  
Conservation Service*

## Riding Tall in the Saddle Equine program assists horse and stable owners

Horseback riding is a popular pastime throughout Ohio...in fact, Ohio's equine population is the seventh largest in the country. At about 160,000 head, it equals the population of Dayton, and surpasses that of Findlay, Newark, Warren, and East Cleveland combined.

And there's just no getting around it; horses poop. Lots.

Building on the foundations that NE Ohio SWCDs had already established, in 2005 the Division of Soil and Water Conservation began working with the Ohio Livestock Coalition, Livestock Environmental Assurance Program, and Ohio Farm Bureau Federation to craft a program to help horse farm owners, operators, and managers economically address the environmental challenges facing their operations.

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## SWCDs and DSWC – Building a Cooperative Relationship with Developers

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For its part, the division has revised Ohio's Rainwater and Land Development manual to ensure that designers have the best standards to apply to new development sites. The latest edition - released in late 2006 - contains new designs that incorporate stream protection in a practical and reasonable way. The division provides training to engineers, landscape architects and other land development consultants to familiarize them on how to apply new technologies in the most cost effective manner.

### ...From watershed to watershed

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- Completion of 6,050 linear feet of streambank stabilization in one watershed
- Stabilization of 625 linear feet of streambank in another watershed
- Creation of seven wetlands for sediment trapping and/or septic filtering
- Installation of fencing to exclude livestock from streams.
  - > 24,433 linear feet completed and 11,343 in progress in White Oak Creek (Brown County),
  - > 12,500 linear feet in East Fork Little Miami (Clermont County)
  - > 12,000 linear feet in Duck Creek (Washington County)

Watershed groups in urban and developing areas are using riparian and wetland acquisition and easements to protect water quality and habitat. Eight coordinators and their partners have been instrumental in acquiring approximately 1,050 acres of riparian corridor and nearly 1,000 acres of wetlands.



### Equine program assists horse and stable owners

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A curriculum was developed, and a pilot program was held July 2005 in cooperation with Geauga SWCD to evaluate the training program and recommend changes - which included a name change - to the "Equine Environmental and Liability Awareness" program.

Train the trainer sessions were held in September and October 2005 to train program partners - OSU extension, SWCDs, USDA-NRCS, OFBF and other professionals - to help them better promote, host, organize, coordinate and conduct local training sessions. A total of 162 professionals participated in the five train the trainer sessions.

To date, 13 local training sessions have been held by program partners with 323 participants attending. The program's curriculum includes key topics dealing with economic and environmentally sound manure management, pasture management, facility design and management, conservation measures, neighbor relations, regulatory compliance and equine liability law.

Conservation partners are also working together to provide cost-share funding to reduce sedimentation and nutrient runoff from equine operations in northeast Ohio. The Special EQIP (Environmental Quality Incentives Program) for Equine Operations - a program of the USDA Natural Resources Conservation Service - resulted in the following in 2006:

- 19 contracts submitted
- 11 contracts approved
- \$82,364 total funds approved

The majority of the funds were used for construction of special pads for equine loafing, travel ways, exercising, or temporary confinement.

The combined efforts of federal, state, and local government, agricultural organizations, and private individuals is creating a program that's better for stable owners and operators, horses, the environment, and an important Ohio recreational industry.