

Ohio Lake Erie Buffer Initiative

FINAL REPORT



March 2004

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Ohio Lake Erie Buffer Initiative Team

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Note: Over the course of the project numerous staff members rotated in and out of the buffer team as agency assignments changed. We have tried here to list all of the original team members and also any newcomers or replacement representatives.

Lake Erie Buffer Initiative – Project Summary

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Buffers.... A Tool To Help Keep Our Lake Clean!

INTRODUCTION

PROBLEM IDENTIFICATION

Lake Erie and its ecosystem is adversely affected by high sediment loading, loss of wetlands, loss of riparian habitat, and nutrient and pesticide runoff.

The 1998 State of the Lake Report (Ohio Lake Erie Commission, 1998) identified sediment as “the primary impediment to improving water quality in the Lake Erie Watershed.” The report contains a goal of reducing long term suspended sediment loads entering the lake by 67%, with the objective of “returning Lake Erie’s river mouths to a healthy and productive condition.” Without this drastic reduction in sediment loading, the larger objective of restoring healthy plant and animal communities to Lake Erie and its watershed will not be met.

Ohio has lost 84% of its wetlands since the original settlement of the state. It has been estimated that there were originally 300,000 acres of wetlands within the Lake Erie marsh area. By 1987 this figure was reduced to 22,793 acres (Ohio Lake Erie Commission, 1998). The North American Waterfowl Management Plan identifies the Lake Erie watershed as a critical waterfowl habitat.

The Lake Erie Watershed is highly agricultural with 72% of the land in active cultivation. Extensive clearing, drainage, and stream modification has significantly reduced the level of riparian corridors and wildlife habitat. As a result, the agricultural watersheds in the western portion of the watershed also have low levels of plant diversity. In the Ninth Biennial Report, the International Joint Commission recommended that governments increase buffer strip mileage in the Great Lakes Basin by 30% by the year 2002 (Kirchner, 1999).



Sediment transported to Lake Erie Via Toussaint River

The 1998 Lake Erie Quality Index rated the Watershed Sources Metric as “poor”. In addition to sediment, other non-point pollutants include nutrients such as phosphorous and nitrates, and pesticide runoff. The Lakewide Area Management Plan (LaMP) Beneficial Use Subcommittee draft report concluded that the near shore tributaries, coastal wetlands, and first habitat, are impaired lake wide due to eutrophication (LaMP, draft summary, 1998). Nitrate alerts are a regular spring occurrence in communities that draw drinking water from the Lake Erie tributaries. Sampling of the tributaries by the Heidelberg College Water Quality Laboratory reveals spring spikes in herbicide concentrations that can exceed drinking water standards.

The high sediment loads require frequent dredging of shipping channels to maintain access to Lake Erie ports. Dredging of Toledo Harbor represents the most severe dredging problems on the Great Lakes and costs more than \$2,200,000 annually (Toledo Harbor



Sediment Entering Lake Erie from Maumee River

Project Final Report, NRCS, 1998.) Disposal of the dredged material from Toledo Harbor creates significant environmental concerns.

The Lake Erie Buffer Team began as a grass roots effort. As a result of above problems, in 1998 NRCS representatives from Northwest Ohio sat down with the Ohio Lake Erie Office to discuss the recently conceived National Conservation Buffer Initiative and the goal of possibility initiating a parallel effort within the Maumee Watershed.

The initial idea was to develop a project for the Maumee Watershed. During the course of these discussions it became clear that the need for conservation buffers was watershed wide and it was decided to expand the idea to include the entire Ohio Lake Erie Watershed, and to invite others to participate in the effort.

BUFFER TEAM ORGANIZATION

The first buffer team organizational meeting was held in the winter of 1999. A small group met, brainstormed ideas, and developed a list of other potential partners and participating agencies. Field level representatives from these other agencies were then invited to subsequent meetings. Enthusiasm developed and ideas were generated and refined in these initial meetings. The team and effort gradually grew in size and scope, functioning mainly as a self-directed work team. Members decided to develop a mission statement, goals, and strategic plan. Once these were developed the obvious step was to look for funding sources to implement the plan. The dreams of team members were realized when in January of 2000 the team successfully applied for and was awarded a Lake Erie Protection Fund Implementation grant.

Over the course of the project, team members held meetings at least quarterly and often times more frequently. Meetings were rotated throughout various locations in the Lake Erie Basin. The meetings were chaired by Steve Davis, buffer coordinator for Ohio NRCS, and the discussion focused on accomplishments since the last meeting and future activities. Minutes were taken and decisions were achieved thru consensus. Actions and major expenditures were decided and recorded via use of motions, seconds and voice votes. Duties and action items were delegated to team members based on their areas of expertise and availability. Sub-committees were often organized to tackle specific issues and projects in detail and these committees brought recommendations back to the team for decisions and/or actions. The teamwork that developed is reflected in the accomplishments of the group over the years.



**Original Buffer Team Members with Governor Taft
At Buffer Program Kick-off held in Seneca County - summer 1999**

MISSION STATEMENT AND GOALS

The Ohio Lake Erie Buffer Initiative developed the following mission statement and goals as one of its first tasks.

MISSION STATEMENT:

The Ohio Lake Erie Buffer Team is a diverse group of public and private agricultural and natural resource organizations educating and encouraging farm operators and landowners to implement conservation buffer technologies that protect Ohio's soil and water resources.

OHIO LAKE ERIE BUFFER TEAM GOAL:

The goal of the Ohio Lake Erie Buffer Team is to enroll 50,000 acres of new conservation buffers into available conservation reserve programs by the end of 2005.

It is often asked how the goal was established. In these early days this was a new practice, there was no track record on its acceptability, and no enhanced financial incentives for landowners to implement. Thus the goal was established not from a highly scientific exercise and need determination, but rather a figure was selected that was high enough to cause the team to stretch, but low enough that it was thought attainable with existing efforts. In retrospect, knowing the kinds of financial incentives that developed, it is now apparent that this goal should be substantially higher over time and over the entire watershed.

LOGO DEVELOPMENT

After a mission statement and goals were developed it was determined that the effort needed a logo to give it identity. The team brainstormed ideas for a logo and a graphic artist with the ODNR Division of Wildlife translated the teams many ideas into a clear concise symbol which depicted green vegetation where the land meet the water and the lake. The logo became the symbol to identify the group, its efforts, its goals and its marketing products.



LAKE ERIE BUFFERS

STRATEGIC PLAN OVERVIEW

STRATEGIC PLAN DEVELOPMENT

The Ohio Lake Erie Buffer Team Initiative's first major action was to develop a Strategic Plan. This plan would map out the team's objectives. The team members developed a list of objectives that needed to be completed through the Ohio Lake Erie Buffer Program. Action items were developed for each objective and responsibilities were assigned to team members to provide leadership to achieve these actions. Many, if not all of the actions, were completed successfully within each objective.

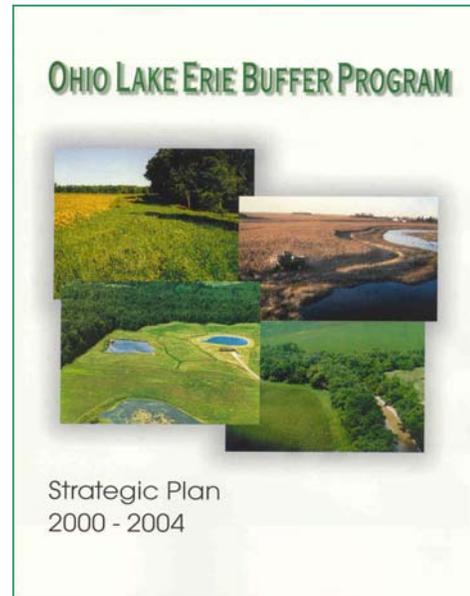
The plan provided resources to control non-point pollutants at their source. Many of the pollutants entering the lake originate as rainfall runoff from both farm fields and urban land. Even though most farmers do a good job of controlling runoff, the high concentration of agricultural land in the watershed means the cumulative effect of just a small amount of soil erosion.

In addition to providing pollution control benefits, the buffer practices will benefit individual farmers by making it easier and more efficient to farm many fields, and reduce the costs of maintaining drainage channels. The plan recognized that not all non-point pollution originates from agricultural land, and contained provisions for an urban buffer component to address non-point pollution from urban and suburban sources.

The plan focused on resources toward a common goal of maximizing the acres of conservation buffers that are installed and create milestones to measure success. A key component of the plan was to help provide marketing resources that county and area natural resource professionals can use to educate landowners and the public on the proper installation and benefits of buffers.

The complete Strategic Plan is found online at the Buffer Program Website:

www.oh.nrcs.usda.gov/programs/Lake_Erie_Buffer



STRATEGIC OBJECTIVES:

The objectives of Ohio's Lake Erie Buffer Team's Strategic Plan include the following 10 strategic elements:

1. Market the agricultural, environmental and financial benefits of installing filter strips, forest buffers, windbreaks and wetland restorations on Ohio farms.
2. Develop long-term strategies to increase the potential of Ohio's conservation buffers to be profitable and self-sustaining practices.
3. Obtain additional field level technical assistance to increase services available to help landowners install conservation buffer practices in the Lake Erie watershed.
4. Launch a recognition program promoting awareness of conservation buffer accomplishments within the Lake Erie watershed and honoring individuals and organizations contributing to the Ohio Lake Erie Buffer Program's success.
5. Encourage city, county and regional groups to implement buffer projects in their respective jurisdictions, providing the buffer team's resources to support their efforts.
6. Seek out members of the agri-business community to promote the benefits on conservation buffer systems to their respective customers.
7. Develop effective strategies to initiate the widespread use of urban conservation buffer practices throughout the Lake Erie basin.
8. Provide administration, coordination and assistance in order to ensure the Ohio Lake Erie Buffer Program monies are utilized in the most fiscally responsible and beneficial way.
9. Demonstrate innovative conservation buffer practices available to Ohio farms and create partnerships between public and private organizations to help apply these practices throughout the Lake Erie watershed.
10. Monitor Ohio's Lake Erie conservation buffer progress and assess the benefits of widespread buffer installation throughout the Lake Erie watershed.

STRATEGIC PLAN ACCOMPLISHMENTS

STRATEGIC OBJECTIVE #1:

Market the agricultural, environmental and financial benefits of installing filter strips, forest buffers, windbreaks and wetland restorations on Ohio farms.

1.1 Reprint the Ohio Lake Erie Buffer Program brochure to reach farmers, private firms and citizens.

RESULT: This document was created and designed before the team was established. Due to the demand, the supply had been exhausted. The brochure was reprinted to restock Ohio Soil and Water Conservation Districts. They are still being used as an educational tool to explain to landowners the benefits of conservation buffers.

1.2 Implement a watershed buffer signage program.

RESULT: Signs were created to demonstrate to the traveling public what conservation buffers are and to denote landowners who are good conservation stewards. Signs were designed to denote (1) Filter Strips, (2) Riparian Forests, (3) Windbreaks, and (4) Wetlands. Each sign came complete with posts and hardware and are made of heavy gauge coated aluminum. Over 1300 signs were ordered. The signs were available to the SWCD offices in the watershed in early October 2000 for installation on sites of good-looking, high quality practices where they will get some visibility and provide positive advertising. Soil and Water Conservation District Staff donated time to deliver and install the signs.



1.3 Develop a slide library of buffer images for use by team members.

RESULT: Team members and various organizations created a slide library of buffer images for use. The slides showed examples of conservation buffers from various locations in Ohio as well as artwork explaining the practices and the benefits. The slide collection was put on a CD as digital images and was distributed to conservation field offices, extension agents and news media. This CD was a valuable tool in promoting the installation of buffers in the watershed.

1.4 Design a poster to represent Ohio Lake Erie buffers.

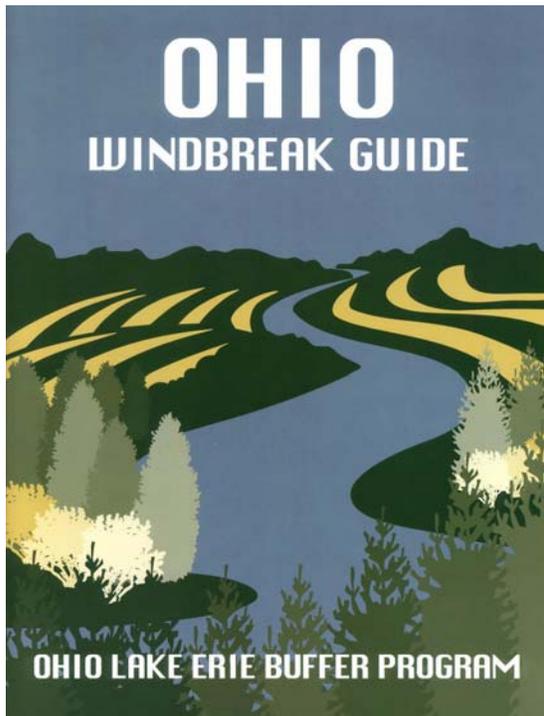
RESULT: The buffer team spent a considerable amount of time researching this issue. It finally was determined that there were other better and more economical products that could be produced by the team to promote buffers. Thus, the team decided not to follow through with this action item.

1.5 Develop a series of fact sheets, handouts and brochures to support, promote and explain the Conservation Reserve Enhancement Program.

RESULT: A series of fact sheets, handouts and brochures to support, promote and explain the CREP were designed by NRCS and printed by the Ohio Department of Natural Resources Division of Soil and Water Conservation. Members of the team designed and published a windbreak brochure that was widely distributed throughout the watershed to support the CREP field windbreak program

1.6 Produce and publish a windbreak guidebook.

RESULT: At the June 18, 2003 Lake Erie commission Meeting, John Dorka, Chief of Ohio DNR's Division of Forestry introduced Ohio's Windbreak Guide. This comprehensive 46-page publication includes information on the benefits of windbreaks, windbreak design, and maintenance and species selection. The Guide contains graphs and charts that provide the



reader with a quick reference to selected species such as trees and shrubs that protect open farmland and structures, and play a conservation role in Ohio agriculture. The Windbreak Guide was distributed statewide through Ohio DNR and also local soil & water conservation district offices. This Guide will help to increase windbreaks in Ohio as well as diversity for songbird species and will continue as a marketing tool for the CREP Program. A committee of Steve Davis, Greg Guess, Greg Maxfield, Don Schmenk and Bob Flickinger designed and published 5,000 copies of the windbreak guidebook. This publication has been distributed to conservation field offices throughout the Lake Erie Basin. In March of 2004 the publication was recognized by the Ohio Chapter of the Soil and Water Conservation Society and awarded the Dan Kush Outstanding Educational Publication award.

1.7 Construct an informational display to showcase Ohio Lake Erie buffers.

RESULT: Two tabletop and one floor mural display were created to showcase how buffers can be utilized. Included with the displays are halogen lighting, table covers and shipping

case with wheels. Each of the displays have two sets of panels, one specifically suited for an urban audience and the other more geared for the agricultural community. These displays have traveled through the watershed and state to county fairs and conservation field days. The displays are currently housed at different locations in the watershed and are actively used. These displays will be used by conservation groups long after the project is completed.

1.8 Produce a video promoting buffer practices and incentives.

RESULT: A video was produced, however it was in a different format than originally planned. A July 2000 broadcast of the Ed Johnson AgriCountry farm show, WRFD Columbus, featured Steve Davis, buffer team leader, and several Ohio farmers who had successfully installed buffers. The show was filmed entirely in the watershed and the farmers discussed the benefits of buffers, why they installed them and why they liked them.



Buffer Ohio award Winner Dwight Wise and the late Ed Johnson discuss the benefits of this buffer strip on the TV show AgriCountry.

The show also featured and highlighted the Ohio CREP program. Approximately 750,000 viewers watched this program. The show was a two part series with the first part airing on the land and the second part filmed on a boat on Lake Erie itself, courtesy of the Lake Erie Charter Boat Association. The theme of the two shows was to connect what happens with the care of the land to the fishery resources of the Lake. This was the first time that the AgriCountry show had ever done a two part series. A tape of this broadcast has been distributed to conservation field offices in the watershed. Because of the fame of the late Ed Johnson, this broadcast and tape have been a great boost to the promotion of buffer strips.

1.9 Obtain additional aerial photos of the variety of buffer practices on Ohio farms.

RESULT: The team members, especially team leader Steve Davis, took numerous slides during their travels in the watershed. Three trips were taken in a plane for aerial photos of completed practices. These were very useful for slide shows. A CD was produced with these buffer images and was distributed to the conservation field offices and other conservation partners. The photos were used in newsletters, news releases, and public presentations. Some photos were requested nationally for use by National Buffer initiative.



This Buffer Team picture, showing a riparian forest buffer, has appeared in numerous publications in Ohio.

1.10 Provide service support to help produce marketing products and provide staff to promote the buffer program in the public sector.

RESULT: A marketing committee was developed and items were purchased and distributed throughout the watershed to give visibility to conservation buffers. Items purchased included, key chains, coolers, yardsticks and insulated can holders. All of these items had the Lake Erie Buffer logo and buffer slogans on them and were distributed at county fairs and SWCD annual meetings.

1.11 Create an Internet website featuring the Ohio Lake Erie Buffer Program on the NRCS server, with NRCS personnel responsible for regularly managing, maintaining and upgrading this site.

RESULT: A volunteer set up a temporary site in early 2000. After gathering additional information a permanent site was completed by a summer buffer intern. This site is housed by NRCS on its server and it can now be found at:

http://www.oh.nrcs.usda.gov/programs/Lake_Erie_Buffer

This web site highlights different conservation buffer practices and explains their purpose and use. The site also lists other conservation programs and identifies the benefits of buffers through testimonials of Ohio farmers and landowners who have installed buffers on their land. The strategic plan, awards program, team members and news releases of the Lake Erie Buffer Team are also highlighted at this site. This web site has attracted interest from other states and even resulted in requests for information from other countries. The team leader has traveled to other states and Canada promoting the Ohio Lake Erie Buffer

Initiative and the accomplishments of Ohio thanks to contacts made as a result of the web site.

1.12 Assist with a conference to promote conservation in the Lake Erie watershed.

RESULT: The Lake Erie Buffer Team assisted USDA-NRCS and Congresswomen Marcy Kaptur in hosting the Great Lakes Symposium in May of 2000 in Toledo.



Individuals interested in conservation in the Great Lakes, attended this meeting from several states and Canada. The Buffer Team organized a tour for one afternoon of the conference which included stops and demonstrations at newly installed buffer strips. The tour and conference were highly successful in making local officials and the general public aware of the work being done in the watershed to improve the water quality of Lake Erie.

STRATEGIC OBJECTIVE #2

Develop long-term strategies to increase the potential of Ohio's conservation buffers to be profitable and self-sustaining practices.

2.1 Explore existing programs to increase timber income from buffers and make the income more stable. Develop program recommendations to utilize timber banking, timber crops or the purchase of timber rights to shorten the time between tree planting and harvest income.

RESULT: A day-long conference was held in which experts from the USDA Forest Service and the private sector were brought in to discuss this issue and the concept of "timber

banking” conservation easements. It was determined by the group that the potential to develop a timber-banking program from the timber in these riparian areas is not feasible *at this time*. The main reason for this belief was the fact that in most cases these areas are long fragmented narrow strips that are isolated from other similar areas. In the future, as more riparian forest areas are restored, this idea may have renewed potential.

2.2 Identify crops that can provide income from conservation buffers and potential markets for crops. Produce a report that summarizes the economics of production and marketing for the most promising alternatives. Also include specific recommendations for additional production and/or market development research needed.

RESULT: This item proved difficult to achieve. Since most landowners are enrolling land into the CRP or CREP program, harvesting of products is prohibited. The committee searched for alternative crops but was not successful in identifying anything other than timber, which takes a long time to market. One positive development is the interest in tree planting on CREP buffers, which is being carried out at twice the project rate of enrollment due to the higher incentives offered for trees. In time these areas can be self-sustaining stand of hardwood products. In some instances use of these areas for hay crops has been successfully promoted. However, the low amount of hay acres in the Maumee and Sandusky watersheds limits the practicality of this approach.

STRATEGIC OBJECTIVE #3

Obtain additional field level technical assistance to increase services available to help landowners install conservation buffer practices in the Lake Erie watershed.

3.1 Summer Interns – Hire summer interns to contact landowners to promote and assist in installation of conservation buffer practices.

RESULT: Buffer interns were hired for the summers of 2000, 2001 and 2002. The first two summers, five interns were hired. Funding was available to hire eight interns for the summer of 2002. These individuals were located in SWCD conservation field offices throughout the watershed. While working closely with field office staffs they performed the following duties:

- Contacted landowners and discussed buffer benefits
- Developed buffer conservation plans with the field offices
- Surveyed and staked our buffer practices
- Prepared promotional and marketing materials such as flyers, brochures and news articles
- Improved the buffer team website

The Buffer Team provided funding for the wages of the interns and NRCS, under an agreement with the Buffer Team, provided space, vehicles, equipment and supervision for the summer interns.

STRATEGIC OBJECTIVE #4

Launch a recognition program promoting awareness of conservation buffer accomplishments within the Lake Erie watershed and honoring individuals and organizations contributing to the Ohio Lake Erie Buffer Program's success.

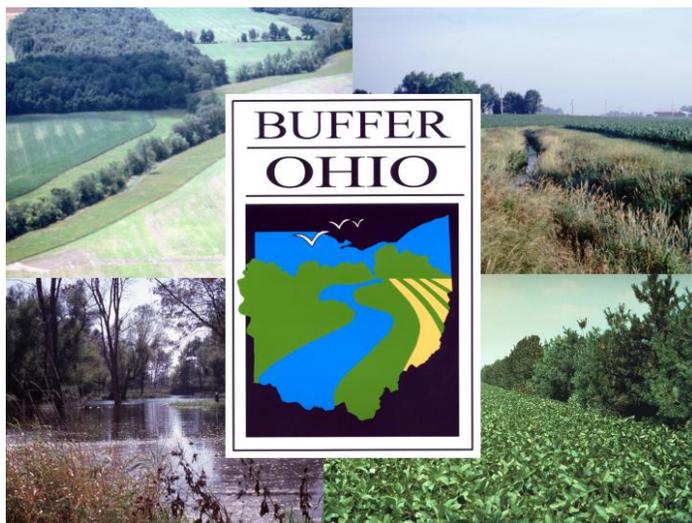
4.1 Identify opportunities for the Lake Erie Buffer Team to recognize buffer accomplishment of individuals, corporations and groups.

RESULT: The Lake Erie Buffer Team provided plaques to soil and water conservation districts in the watershed to be presented at annual meetings to the outstanding individual in each county involved in the buffer programs. Many times team members made the presentations at the annual meetings, which promoted not only the buffer programs but also the Lake Erie Buffer Team. Plaques were provided for a 3 year period at no cost to any SWCD in the watershed which wanted to present the Lake Erie Buffer Award.



The Landols...Award Winners in Huron Co.

Also the Buffer Ohio Program was established. The Buffer Ohio Program is a statewide awards program co-sponsored by 14 different organizations, Lake Erie Buffer Team participated as one of the members, which recognized outstanding examples of promotion



and/or application of conservation buffer practices on the Ohio Landscape. Approximately five to eight awards were presented annually in each of the following categories (1) soil & water conservation district awards (2) individual awards (3) group & organizational awards. These awards were presented at the Annual Meeting of the Federation of Soil and Water Conservation Districts in Columbus each year. Team Leader, Steve Davis, was on hand to make the presentations. The Lake Erie Buffer Team contributed \$1,500 each year to this

very worthwhile program. As a result of the popularity of the Lake Erie buffer programs, *nearly three-fourths of the awards presented* went to landowners located within the Lake Erie Watershed.

4.2 Develop and refine the “Lighthouse farm” concept to create a recognition program honoring model conservation farms within the Lake Erie Basin.

RESULT: The Buffer Ohio Program was developed to recognize outstanding conservation farms in the State of Ohio. As mentioned previously, this award is presented yearly to outstanding conservation farms throughout the state. Many of those receiving the awards are located in the Lake Erie watershed. The Lighthouse Farm concept was never fully developed. What is needed is to find some incentive, beyond just recognition, to cause landowners to want such a designation, in order for a program to achieve widespread acceptance. The Buffer Team was never able to generate a plausible idea as to what that incentive could be. This item, although not achieved, merits further study.

STRATEGIC OBJECTIVE #5

Encourage city, county and regional groups to implement buffer projects in their respective jurisdictions, providing the buffer team’s resources to support their efforts.

5.1 Provide incentives for local watershed or county groups to encourage locally based buffer initiatives.

RESULT: The original plan was to pass seed money for localized initiatives down to local groups from the grant received from the Lake Erie Protection Fund. However, due to constraints on the Lake Erie Commission regarding the use of grant money, the team was notified that this was not possible.

5.2 Secure funds to support matching equipment purchases by local groups for drills to seed buffers with native grasses.

RESULT: ODNR Division of Wildlife, Pheasants Forever and the Wild Turkey Federation provided joint funding to purchase several warm season grass drills for use in the watershed. These drills have been widely used within the counties and have made it much easier for landowners to use native warm season grasses on the conservation buffer areas. This equipment is still in use in the watershed.

STRATEGIC OBJECTIVE #6

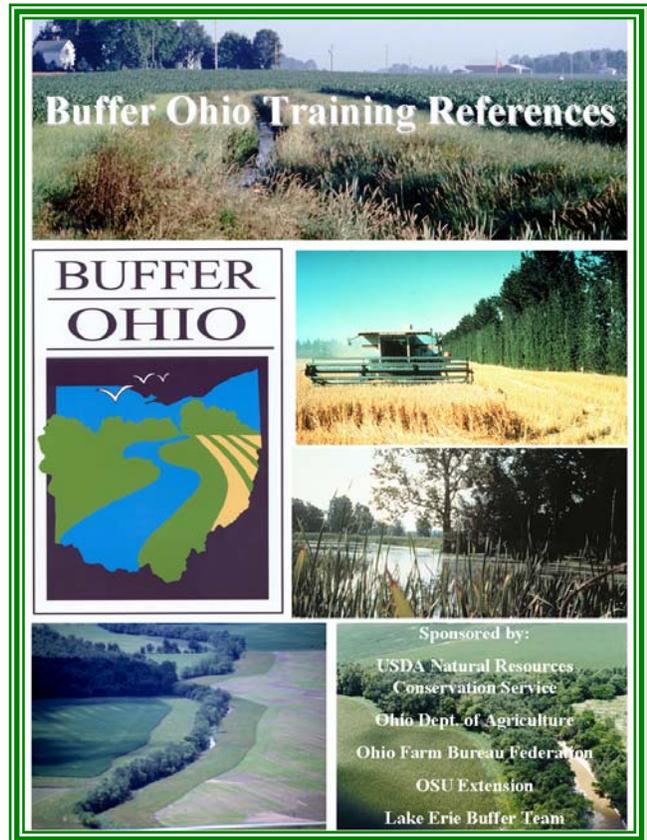
Seek out members of the agri-business community to promote the benefits of conservation buffer systems to their respective customers.

6.1 Identify sources of industry funding to support a Lake Erie Buffer Team awards program.

RESULT: Ohio Wetland Foundation made contributions to conservation groups to restore wetlands. Also, Ohio Corn Growers, Ohio Wetland Foundation, The Nature Conservancy, and Ohio Farm Bureau Federation have all contributed financially to support the Buffer Ohio Awards Program.

6.2 Develop a buffer training program for industry groups and certified crop consultants.

RESULT: Workshops for Certified Crop Advisors were held in February of 2001. Approximately 125 individuals attended the one-day workshops held at four locations throughout the state, two of which were in the Lake Erie Watershed. Meetings were held in the Toledo, Akron, Zanesville and Dayton areas. The title of the program was called, "Conservation Buffers: Understanding the Where, When, Why, What and How." Each attendee received a notebook filled with technical information, marketing materials, and information on the Lake Erie Buffer Program. The agenda included (1) overview of National Buffer Initiative (2) Benefits of Conservation buffers (3) summary of conservation buffer research and (4) understanding and applying conservation buffer practices. Attendees received 5 hours of Continuing Education Credits. It was felt that this activity reached a large number of private agri-business consultants who are an influential voice in agricultural decisions.



Buffer Training Reference Manual for CCA's

6.3 Organize an agri-industry technical advisory group to involve agri-business and industry in buffer team efforts.

RESULT: This group was formed through the creation of the Buffer Ohio Program. Members of the Ohio Corn Grower's and other agri-business groups served on an advisory committee to select the recipients of the awards. This committee will remain intact after the grant is completed.

6.4 Organize a buffer farmer speakers bureau consisting of a list of qualified persons to give presentations to groups and organizations.

RESULT: Buffer team members, working with farmers involved in various buffer programs, spoke at numerous functions such as SWCD annual meetings eliminating the need for a creation of a speakers bureau. Landowners appeared on panel discussions at numerous meetings throughout the state. Landowners, with buffers, were interviewed and quoted in newspapers and on TV. The Lake Erie Buffer Team leader, Steve Davis, made presentations at the International Meeting of the Soil and Water Conservation Society, and the International meeting of the American Society for Agricultural Engineering (ASAE). He also spoke at a major agricultural conference in the Province of Ontario.

The Lake Erie Buffer Team leader also represented Ohio in participating in two national Conservation Buffer Conferences. He attended the First National Conservation Buffer Conference held in San Antonio, Texas and the National Conservation Buffer Workshop in Nebraska City, Nebraska. By participating in these conferences he was able to bring back and share with Ohio the latest information in conservation buffer technology and programs, and also to share with leaders around the country the Ohio Lake Erie Program success story.

STRATEGIC OBJECTIVE #7

Develop effective strategies to initiate the widespread use of urban conservation buffer practices throughout the Lake Erie basin.

7.1 Develop action items to implement an urban conservation buffer program component of the Lake Erie Buffer Team's Strategic Plan.

RESULT: While the agricultural efforts were very successful the urban buffer program accomplishments were less than the team had hoped for. The success of the agriculture buffer program consumed most of the team member's time and there were programs and an extensive infrastructure in place to deliver the agricultural efforts.

However, the agricultural model did not work well for the urban areas. Moreover, since most of the buffer team members were serving as members with a collateral duty in an agricultural based organization, their existing jobs made it difficult to devote much time to new urban initiatives. It is recommended that a separate program be developed for the urban sector of the watershed. It is the feeling of the Lake Erie Buffer Team that the need is there, and it should be addressed in the future through a separate program targeted towards more urban audiences.

STRATEGIC OBJECTIVE #8

Provide administration, coordination and assistance in order to ensure the Ohio Lake Erie Buffer Program monies are utilized in the most fiscally responsible and beneficial way.

8.1 Provide grant administration and fiscal services to the Lake Erie Buffer Team.

RESULT: The Erie Basin Resource Conservation & Development (RC&D) office provided the fiscal services for this grant, paying the bills, maintaining financial records, providing financial reports at team meetings and insuring the money was spent according to the directions of the buffer team and in accordance with the Lake Erie Protection Fund contract.

8.2 Staff a buffer coordinator position to service the buffer team (.25% per year for three years.)

RESULT: Steve Davis, United States Department of Agriculture Natural Resource Conservation Service, was selected by the team to be the team leader. Steve developed the agendas, organized and led the meetings. He also prepared needed reports, publicity materials and kept the team and sub committees moving in the right direction over the last

three plus years. NRCS provided supplies, postage, travel and other support for his work which enabled less of the grant money to be used for overhead and grant administration costs.

8.3 Provide for limited travel, postage and expendable supplies, which cannot be, met out of member agency budgets.

RESULT: A budget of \$6,000 was established, however, very little funding was been utilized for this item. NRCS provided for all of the travel of the team leader and much of the needed postage, copy paper, supplies, etc. Other agencies contributed from their own sources for other team members activities. This budgeted travel money was reallocated to support other project objectives and actions.

8.4 Establish a grants committee to make executive decisions on the buffer team's Lake Erie Protection Fund grant and to seek out and apply for additional funding from other sources.

RESULT: A grants committee was formed with the members being as follows: Steve Davis, Katie McKibben, Robert Flickinger, Diana Holt and Ed McConoughey. This group made executive decisions on items which came up from time to time between team meetings. This group also prepared additional grant applications to seek additional funding for the team, applying for these via the Erie Basin RC&D. The group applied for two USEPA Grants, which were unsuccessful, and also for one grant through The Great Lakes Commission, which was approved. This grant provided \$12,080 in funding for the four GIS summer intern positions which were created in the summer of 2002.

STRATEGIC OBJECTIVE #9

Demonstrate innovative conservation buffer practices available to Ohio farms and create partnerships between public and private organizations to help apply these practices throughout the Lake Erie watershed.

9.1 Demonstrate wetland filtration of surface runoff.

RESULT: The buffer team spent considerable time investigating potential sites for this activity. In the end it was determined that the cost would be substantial for a project with scientifically based monitoring exceeding the amount budgeted in the grant. The idea was originally conceived to promote acceptance by agricultural landowners. However, with the launching of the CREP program landowners actively embraced this idea when given sufficient financial incentives. Thus funding that was designated for this project was transferred by the team into other activities.

9.2 Support Maumee Valley RC&D's Marketing Wetlands for Profits information activities.

RESULT: Team members determined this was being adequately funded via other programs, so the efforts of the team were devoted to other activities.

9.3 Explore streamside riparian mitigation banking partnerships.

RESULT: This was not able to be completed by the buffer team.

9.4 Conduct plant material demonstrations of vegetative retention terraces composed of native warm season grass plantings.

RESULT: Demonstrations of this type are being carried by USDA NRCS in other parts of Ohio. It was felt that the efforts underway there could be easily transposed to the Lake Erie watershed and thus these funds were redirected to other project activities.

9.5 Demonstrate new and innovative equipment, which can be used to install buffer practices and secure some of this equipment for use by SWCD's in the watershed. (New objective added during project.)

RESULT: It was determined that a limiting factor to reforesting some of the riparian areas is the difficulty of timely planting of tree seedlings on wet sites in the spring of the year. In many years these areas are not dry enough to get into until it is too late to plant trees. Recent experiences in other states has shown that direct seeding of seeds and nuts in the fall of the year can produce as good or even better stands than planting seedlings.

A technical workshop was sponsored by the Lake Erie Buffer Team, the ODNR Division of Forestry, the Ohio State University School of

Natural Resources and other partners to demonstrate the direct seeding method of reforestation and the benefit of this versus planting seedlings. The buffer team brought in several experts, including some private forestry consultants, and University Forestry Professors from the Riparian Forest Agro-Ecology Team at Iowa State University. The workshop was held in June of 2003 and attended by over 50 Ohio Resource professionals. At the workshop the participants received both classroom lecture and hands on field demonstrations in the techniques and procedures of successfully utilizing this means of reforestation. An Ohio Direct Seeding handbook was also developed and distributed to the class participants as part of this workshop. The buffer team also amended its work plan to purchase some equipment for reforestation direct seeding, which will remain with the



Iowa Consulting Forester Demonstrates planting

SWCD's and Erie Basin RC&D for use in the watershed. In the fall of 2003, a demonstration planting was made on a farm in Fulton County using this technique.

STRATEGIC OBJECTIVE #10

Monitor Ohio's Lake Erie conservation buffer progress and assess the benefits of widespread buffer installation throughout the Lake Erie watershed.

10.1 Utilize ODNR's Remote Sensing Division to prepare county maps that track buffer needs and buffer progress.

RESULT: County maps were completed and distributed to field offices. These maps proved to be of limited use at the county level, due to the small footprint of a buffer strip on the landscape. At a scale of the entire county the maps showed only a thin line. They were more useful at the township level.

Some work was done by University of Toledo in trying to remote sense existing buffers. At the present time, this technology has difficulty in discerning the thin strips from existing growing crops, especially winter wheat or forages when they are planted adjacent to the buffer area. This area needs considerably more work in the future.

10.2 Prepare an annual summary of buffer installation accomplishments of all programs within the Lake Erie watershed.

RESULT: Each year the annual report contained acres of buffers installed during the past year. The project coordinator tracked installation of buffers via the cost share program. At the present time the limitation of this approach is the lag time between the time a practice is certified by the field office staff and the time that it shows up as a completed contract in the FSA national data base. (See Table 1 for a summary of buffer accomplishments by all programs. See Graph 1 showing progress by years.)

10.3 Publish a Lake Erie Buffer Team annual report that highlights the Lake Erie Buffer Team's accomplishments.

RESULT: An annual report was submitted to the Ohio Lake Erie Office each year outlining the progress made during the past year.

10.4 Prepare Lake Erie Protection Fund grant reports in accordance with the grant-reporting schedule.

RESULT: Grant reports were submitted in a timely manner.

LAKE ERIE CONSERVATION BUFFER ACCOMPLISHMENTS					
Fiscal Year 1997 thru Fiscal Year 2003					
Fiscal Year	Cont. CRP Acres	CREP Acres	319 Program Acres	Wetland Reserve Program Acres	Total Acres
Fy 1997	2450	0	0	1794	4244
Fy 1998	5466	0	180	1890	7536
Fy 1999	1902	0	86	511	2499
Fy 2000	1597	779	0	1330	3706
Fy 2001	2475	7658	567	632	11332
Fy 2002	1782	5287	0	559	7628
Fy 2003	984	2549	0	496	4029
Fy 2003 In process		3727			3727
Totals	16,656	20,001	833	7,212	44701

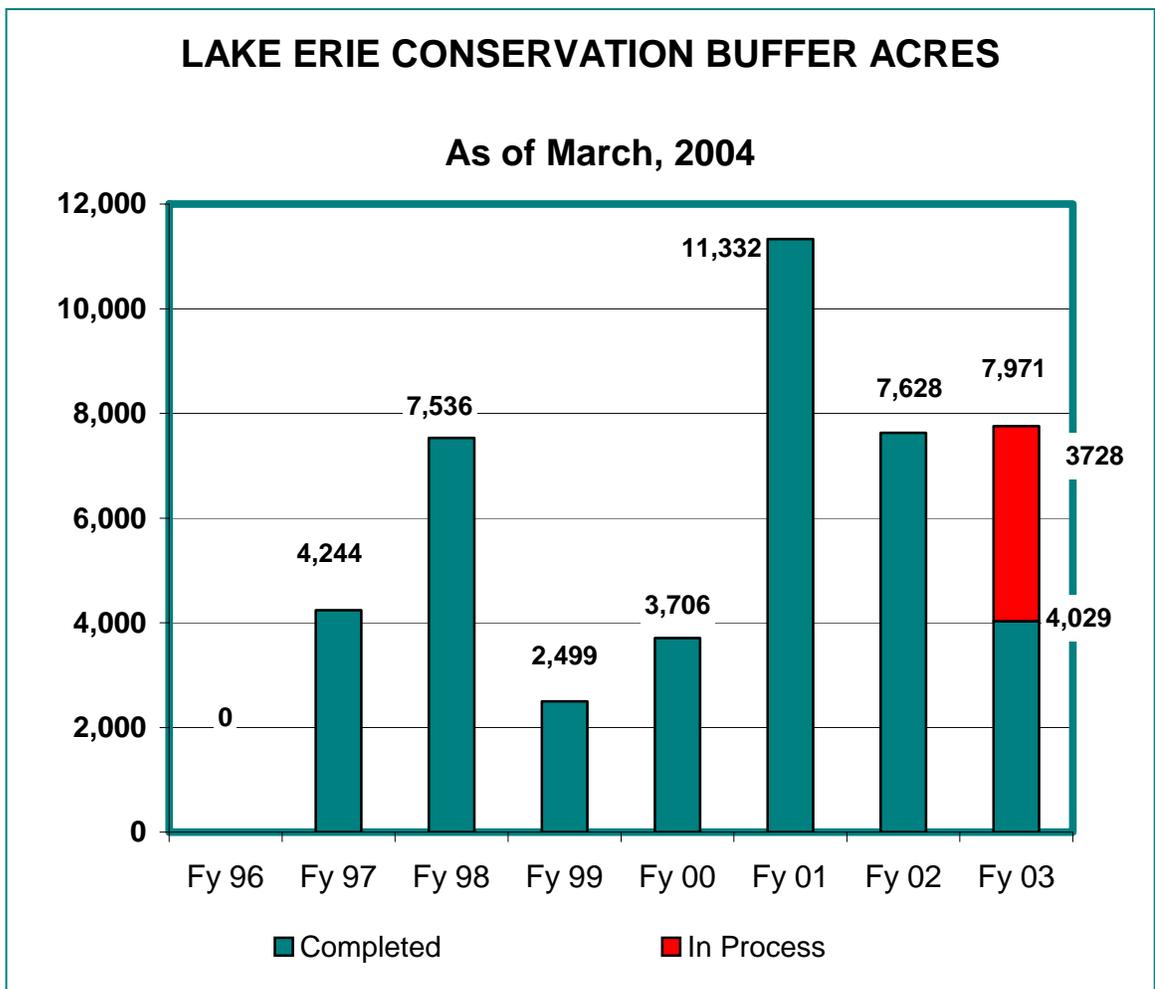
Table 1 – New Buffers Installed In the Lake Erie Watershed by program by Fiscal Year

10.5 Publish the Ohio Lake Erie Buffer Team’s Strategic Plan in a form that communicates the group’s goals and purpose to publish, agency heads and potential supporters.

RESULT: The Ohio Lake Erie Buffer Team’s Strategic Plan was published and served as a guide for the Buffer Team to follow and also as a document to show others what was being done. In addition the strategic plan was put on the Buffer Team web site. As a result of this, the team received requests for copies of the plan from across the U.S. and even from some foreign countries.

10.6 Develop a detailed plan for continued assessment and monitoring of the effects buffers have on water quality and plant and animal communities within the Toussaint watershed or other appropriate watersheds or streams.

RESULT: This was not accomplished through the grant. The team investigated this idea and it was determined that monitoring these effects would be beyond the resources and funding available to the team. Monitoring, which captures only the effects of the buffers, has been proven to be very difficult and expensive. The team leaned heavily on research work that has been done in other places to document the water quality effects of these practices. One area where substantial research and monitoring has been done is the Bear Creek Watershed in Iowa. The Lake Erie Buffer team brought Dr. Richard Schultz, the Bear Creek Lead Researcher and Director of the Iowan State Riparian Forest Agro-ecology Team, to Ohio to share what they have learned.



Graph 1 Trends in Conservation Buffers Installed in Lake Erie Watershed. Dip in 1999 shows year in which cost share incentives were reduced. CREP was launched in 2001. Low number in 2000 reflects landowners waiting for announcement of CREP Program. Peak in 2001 reflects 2 years CREP dollars being available in one calendar year.

SUMMARY OF MAJOR ACCOMPLISHMENTS

The Buffer Team members in a team meeting identified the following as the top 8 most important accomplishments:

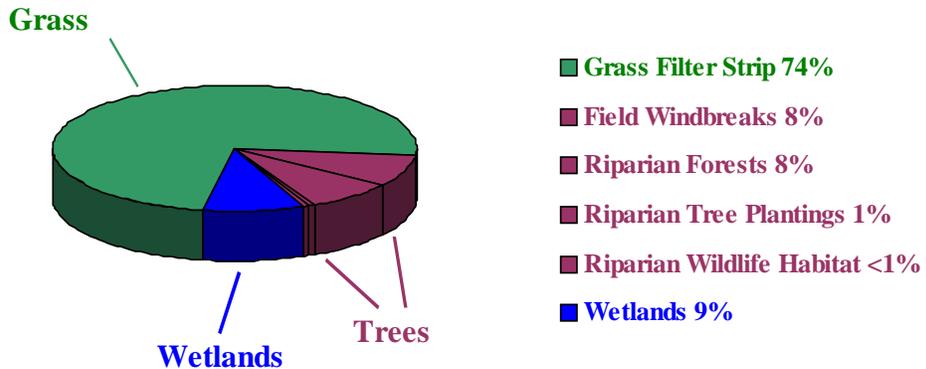
1. Sedimentation was reduced and water quality improved in the watershed as a result of the 44,701 acres of new conservation buffers that have been installed on the land in the watershed to date since 1997.



Filter Strip and Riparian Forest Buffer in Sandusky County

2. The interest in planting riparian forests and restoring wetlands has increased beyond any expectations at the start of the project. These practices are being adopted in the CREP program at twice the rate projected (See graph 2). The team attributes this to the increased financial incentives applied to these programs within the Ohio Lake Erie Conservation Enhancement Program (CREP). The Buffer Team feels that the involvement and support of its members was instrumental in developing a successful Ohio Lake Erie CREP program. Especially important was the work of the non-governmental partners in encouraging legislative support for CREP funding.

CREP Practices By Cover Type
As of March 2004



Graph 2 Tree and permanent wetland practices are being enrolled in CREP program at twice the rate projected at the start of the project.

3. As a result of this project, technical support was increased to the county conservation field offices, and ultimately to the landowners, through the efforts of the summer interns. The program emphasis by the buffer team, the CREP funding, and buffer technical training all converged to elevate the awareness level of this new conservation concept and accelerate the efforts field office staff put forth to promote installation of this practice.
4. Landowner and general public awareness of the needs for and benefit of conservation buffers increased at all levels. Awareness of state legislators increased and correspondingly support for funding increased via the CREP program. In addition, the program efforts resulted in national awareness and admiration for Ohio.
5. Landowners attitudes about buffer practices have changed significantly. As a result of the publicity, education efforts and financial incentives, the attitude of farmers has changed from one of viewing these practices as a cost to viewing them as a benefit.
6. The marketing and support materials developed for field offices.....from publications, to photo CD's to awards to the buffer program signswere invaluable tools. These items not only saved field offices time, but provided a coordinated and consistent message across the basin. They provided tools, which conservation field offices would not have had the time or resources to develop on their own.
7. The Buffer Team approach provided a coordinated effort across counties and across agencies. The Lake Erie Buffer logo and other items developed provided a consistent theme and message, which transected agency and political boundaries.
8. The Buffer Team members developed an enthusiasm for the project and a can do synergism, which resulted in cooperation and coordination amongst agencies. The team approach offered a vehicle to transcend the boundaries and limitations of any one of the agencies by themselves, so that the whole of the effort was much greater than the sum of its parts.



CHALLENGES AND MISSED OPPORTUNITIES

Though the project was highly successful, not everything the buffer team set out to accomplish was achieved within the time frame of the protection fund grant. Some items proved not feasible to do with the buffer teams resources and time available. In some instances the team encountered obstacles or institutional challenges, which required perseverance and creativity for team members to resolve. These items include:

1. A strength of the buffer team was that it began as a ground up initiative by some enthusiastic middle and lower level agency employees. However, as a result it was sometimes more of a priority of this level than it was of upper level leadership. Team members and the team leader served as volunteers or as a collaterally assigned duty, and despite their best intentions, priorities and the workload of their agencies sometimes pulled them in different directions or slowed progress.

Changing agency priorities and continuity of team members affected the team. Part way through the effort some of the initial team members were assigned to different duties by their agencies or moved on and took new positions.

2. There was overall more team and county office involvement by those in the Western part of the watershed than in the Eastern part. To encourage participation, the team held some team meetings in the Eastern end of the watershed. This proved to be inconvenient for the majority of the group as most of the active members were from the Western part of the watershed, and did not materially increase Eastern participation.

The Eastern portion of the watershed is also highly urban and the cost share incentive programs and delivery infrastructure were better developed and heavily targeted to the agricultural regions of the State. Since the Eastern area is more urbanized, and less intensively agricultural, there is a perception among residents, and some agency staff, that buffers are not needed. In addition, the higher land values in the urban areas make voluntary participation in the long-term agricultural contracts via the cost share programs undesirable. Additional work is needed to overcome these obstacles and to develop programs that are more effective in urban regions. Municipal programs, regulations and/or legislative initiatives maybe needed more in this part of the State. More work is needed on a program targeted towards the urban and suburban areas.

3. The team identified one objective of working with golf course owners. Buffers on golf courses would seem to have high potential for success...both in reducing maintenance costs via mowing for course owners, in beautification, and in high potential benefits for water quality since courses often locate adjacent to streams and are users of fertilizers/chemicals.

The team was working with one course to nurture native warm season grasses. The project was well under way to fruition when the course groundskeeper left, and the new management promptly mowed off all the buffers. Challenges identified in talking with golf course people are the understanding of the need, development of the management skill, and overcoming the perception of the public that a good course is

“tidily groomed”...i.e. the players and adjoining landowners don’t like to see things that “look like weeds”. More work is needed in this area.

4. While buffers have been shown to be highly effective single practices when studied as a single site-specific practice in a research situation, measuring and monitoring or quantifying of water quality improvements due to buffers in a landscape has proved to be extremely difficult and expensive. Year to year climate fluctuations, variability of storm events, the scattered nature of landowner installations, influence of other pollutants, all combine to make it difficult to capture solely the buffer effect. If one believes the plot research or the effects monitored in other watersheds such as Bear Creek Iowa, the need to measure this is not so important. Nevertheless, resource managers seem to have an innate need for this data.
5. One means used to track progress was maintaining a summary of enrollment of all types of buffer acres. The team leader attempted to do this annually. Since buffers are installed under a variety of different incentive programs, there is no one central source of data for all accomplishments. To obtain these figures the team leader aggregated several data bases from several different agencies.

In addition the data base for the USDA FSA CRP/CREP program, the main source of buffer incentives funding, often has a lag time as much as a year between the time the buffer is installed and the time the national data base gets updated to reflect that accomplishment. Thus, there is a delay in being able to timely report current year accomplishments.

6. Finally, the last challenged faced is the need for patience. Watersheds are natural systems that evolve over time. Buffers take time to fully mature. Research work done in the Bear Creek Watershed in Iowa shows while buffers immediately start providing benefits, that improvements due to buffer installation sometimes may not be fully realized until as much as 10-15 years after initial establishment.



Buffer System in Iowa State University Bear Creek Watershed Research Project

Yet when algae blooms recently redeveloped in Lake Erie, articles began to appear in the popular press to the affect that “maybe the CREP program isn’t working.” When measuring the success of CREP or the buffer program, it is important to remember that this effort needs to be a long- term project and that the need for full

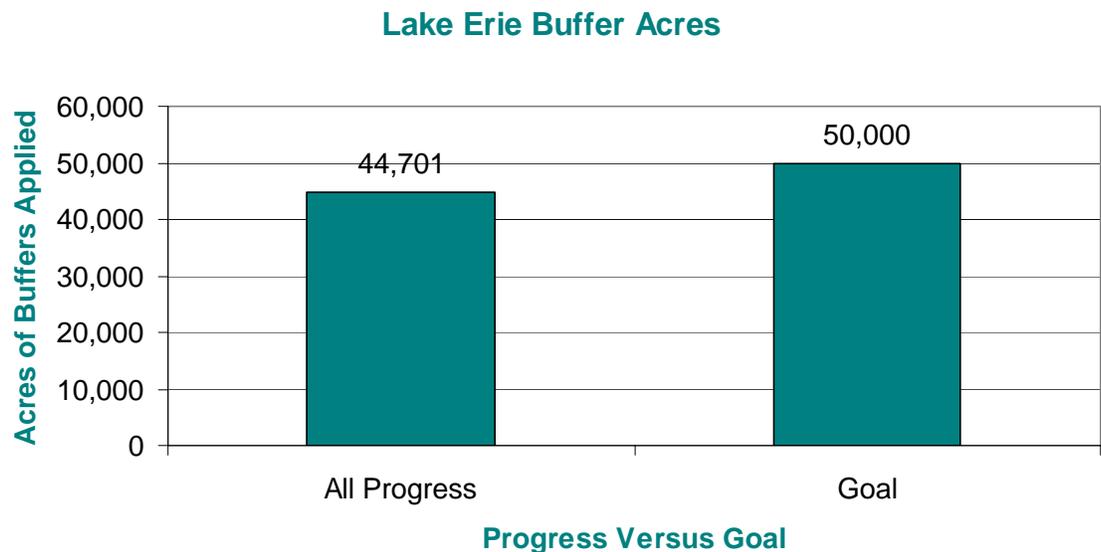
treatment is to eventually treat all the streams and/or drainage courses in the watershed, *Just as the natural buffers were lost, one by one, over time, they will be restored one by one over time.* The improvements will come gradually and accumulate not only as more and more buffers are installed, but also as they develop and mature.

The true measure of success should not be what is in the water today, but are the installation and maintenance trends continuing to point upward, and what is the long-term health of the biological system.

FUTURE RECOMMENDATIONS

The Buffer Team members have identified the following items/issues as important to the future and continued success of the Lake Erie Buffer Program:

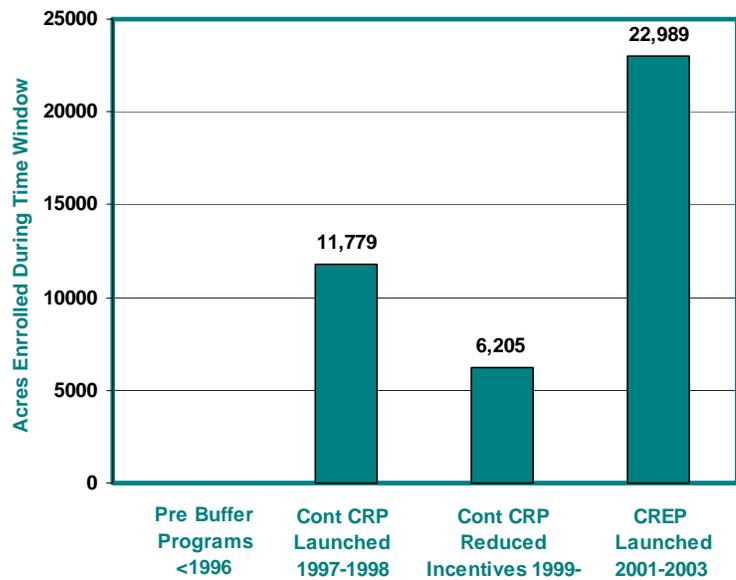
1. The program needs to be kept at the forefront of the agencies priorities, and a way needs to be found to continue in some fashion the buffer team efforts. There is a danger now that the grant is finished, and new priorities or initiatives have arisen, that the buffer team effort will fade into the background. A way needs to be found to keep the group active in some fashion beyond the expiration of the Protection Fund Grant. It is likely the Lake Erie Buffer team goal will be reached as envisioned by 2005, however much more remains to be done and this goal should be viewed as the first step towards establishing all the buffers needed in the basin rather than an end point accomplishment.



Graph 3 Progress towards Lake Erie Goal. New Buffers Installed in Lake Erie Watershed since 1997.

2. Long term maintenance of the CREP/Continuous CRP funding is the single most important factor to continued progress in restoring sufficient conservation buffers to improve water quality in the Lake Erie watershed. Despite all the marketing, publicity and other good things that have been done, ***the single most important factor in changing land-owners attitude to accept buffers, is the offset of lost income when they convert those areas from income producing cropland to conservation buffers.***

BUFFER ENROLLMENT BY EVENT



Graph 4 Influence of CREP on Buffer Enrollment Success!

3. It appears the CREP program will reach the goal for tree plantings and wetland restorations before the goal for grass filter strips is reached. Trees provide permanent benefits. If the tree goal is reached within the CREP program, it should be revisited to shift some of the targeted acres within the program from grass to trees. This may necessitate an additional commitment for the State bonus funds for the tree practices over the amount originally budgeted. In recent fiscal years due to State budget constraints the CREP funding for state bonus payments has been reduced. This has slowed the rate of CREP practice signup and installation. Ways need to be found to either make up for these lost funds at the end of the project, or to extend the project to allow additional time to recoup the lost funds and fully realize the potential of the Lake Erie CREP program.

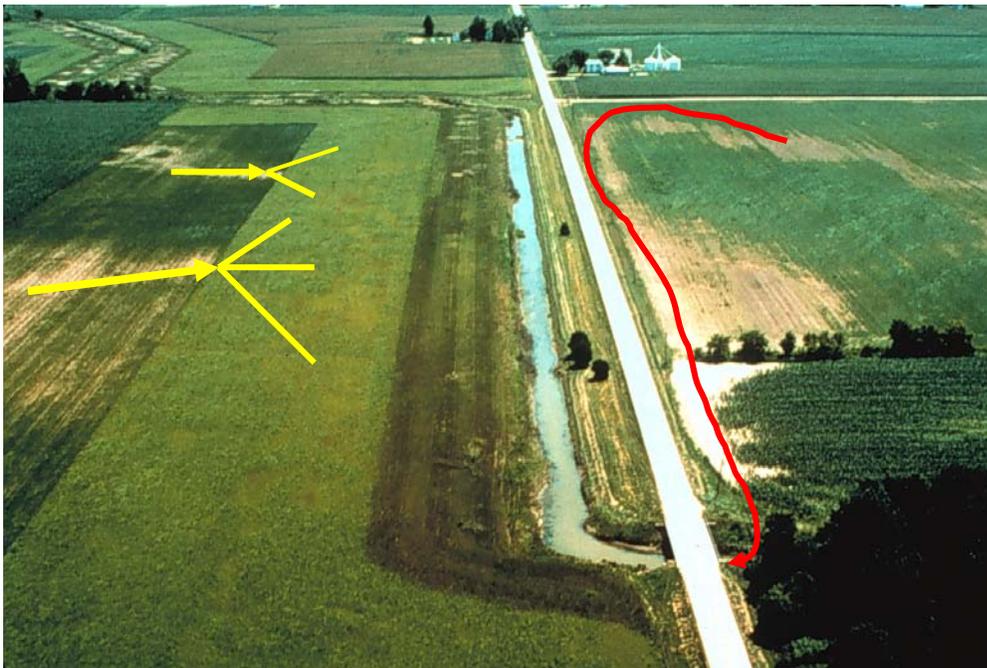


4. There is a need for a maintenance and installation bulletin to fully realize the wildlife potential of the buffers. While some landowners are embracing native grasses and reduced mowing for filter strips, there is still intense pressure in the agricultural community to frequently mow filter strips and to use cool season grasses. In addition, such a bulletin could emphasize the benefits of trees over grass or mixed grass, tree and shrub buffers for songbirds and wildlife.

5. A continued effort should be made to enlist golf courses in the buffer effort. Perhaps

some funding or grants could be offered for demonstration projects, or maybe there is a statewide association of courses or superintendents which could be convinced to become active in the effort.

6. Those counties who at the local level have offered turnkey seeding or tree planting services to landowners have been highly successful. A turnkey service makes it easier for landowners who are often busy when the buffers should be seeded, or lack the necessary equipment needed to make the seedings or plant the trees. Ways should be found to encourage the offering of these services, be it SWCD offices, non-profit groups, or private vendors.
7. Additional means need to be developed to encourage buffer programs in urban areas. Possible ideas would include demonstration projects or grants, model ordinances, public officials training, etc. One thought would be to create an urban buffer team charged with developing an urban program.
8. In as much as buffers benefit society at large, perhaps properly designed and enrolled buffers should be treated as exempt areas or taxed at special tax rates under the Current Agricultural Use Value (CAUV) tax assessment program.
9. Good quality color aerial photos of conservation buffers are a highly effective, visual sales tool for brochures, presentations and displays. Taking of these pictures is beyond the means of most county offices and the current available images can be over used. There will be a need in the near future to update the photo base with fresh images with a new round of high quality photos taken at strategic times from a small airplane or helicopter.



**Buffer Team Aerial Photo Shows Benefits of Auglaize County Grass Filter Strip
Filter strip is on left side versus no filter strip on right side**

CONCLUSION

The Ohio Lake Erie Buffer Program has been successful beyond the vision of the original concept of the project. Since 1997, at least 44,701 acres of new conservation buffers have been established within the Lake Erie Watershed. Trees and wetlands account for 26% percent of the acres installed, which represents twice the projected rate at the start of the project. The rate at which buffers are adopted accelerated during the project and the attitude of landowners within the watershed towards buffers has substantially changed for the better. A majority of the action items in the strategic plan were successfully completed and some new items were added. The Lake Erie CREP project was funded, and combined with the regular continuous CRP program, thus providing a long-term incentive for landowners to continue the adoption of conservation buffers. The Lake Erie Buffer Program provided marketing tools, technical training, and staff personnel to local conservation field offices to accelerate the buffer activities. The program was able to operate with a minimum of administrative overhead so the majority of grant funds went to buffer projects and activities. The program has received national and international attention. Numerous landowners within the Lake Erie watershed have been recognized both at the county level and statewide, for their conservation buffer accomplishments. The 50,000 acres goal established by the team should be realized by fiscal year 2005 as envisioned by the buffer team. This goal should be viewed as a starting point however, and not as a level which represents adequate treatment for the watershed. Much more can and should be done.



Grass Filter Strips, Sod Waterways and Riparian Forest Buffers in Seneca County

ACKNOWLEDGEMENTS

The Ohio Lake Erie Buffer Initiative was made possible by a grant from the Ohio Lake Erie Protection Fund and funds from local governments.

The following are acknowledged for special support or assistance:

Ohio Lake Erie Office for services of Linda Zmudzinski to take minutes at team meetings.

Erie Basin RC&D for providing fiscal services.

OSU Sea Grant for duplicating photo CD's.

OSU Extension for Direct Seeding Training Workshop.

The Late Jim Fofrich Sr. for boat services for filming of Agri Country TV program.

The Late Ed Johnson for lending his enthusiasm and TV show to support the effort.

USDA NRCS for coordinator services and coordinator support and travel.

ODNR Div of Wildlife for helicopter services for aerial photos and for logo design.

ODNR Wildlife and Ohio EPA for storing and distributing buffer signs.

OHIO EPA for fish shocking demonstrations during filming of Agri County TV program.

ODNR Div of Soil & Water Conservation for leadership on Lake Erie CREP Program.

Ohio Department of Agriculture for leadership in the Certified Consultant Training Program.

Ohio Corn Growers, Ohio Farm Bureau Federation, Ohio Wetland Foundation and The Nature Conservancy for financial support for Buffer Ohio Program.

Local Soil and Water Conservation Districts for vigorously promoting the program within their county and presenting Lake Erie Buffer Awards.

Great Lakes Commission for awarding the team the GIS project grant.

Landowners, who embraced this idea and installed new buffers on their land.

The Ohio Lake Erie Buffer Team Members would like to thank the Lake Erie Commission for its funding support. We would also like to thank our agencies, organizations and supervisors for their support in making our time and agency resources available to work on this project. This has been a pioneering effort and truly rewardable work, which will benefit generations of Ohioan's for years to come.

Appendix

CREP Fact Sheet

Conservation Buffer Workshop – Certified Crop Consultants

Sample News Releases – Lake Erie Buffer Team

Sample News Release – Buffer Ohio Awards Program

Agenda for Direct Seeding Workshop

View of Lake Erie Buffer Program Table-Top Display

Lake Erie Buffer Team Web Site

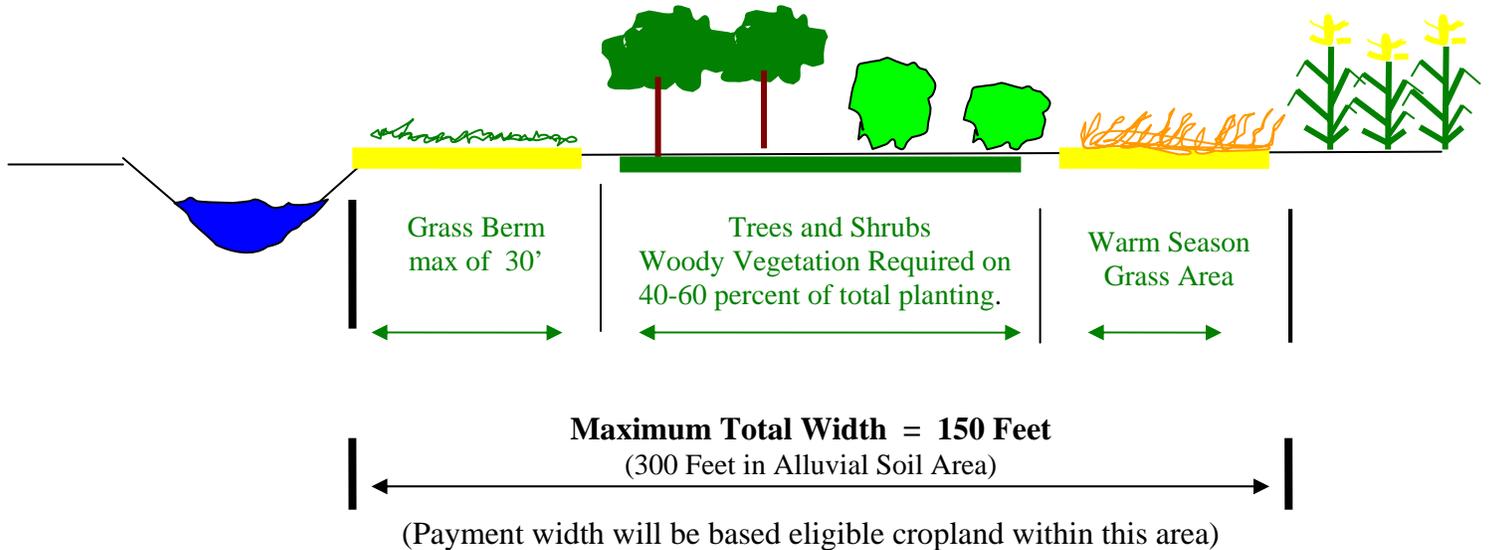
Working Together for Better Farms and Cleaner Waters



Lake Erie Conservation Reserve Enhancement Program

PERMANENT WILDLIFE HABITAT – CP4D

Schematic of Practice Requirements



Practice Requirements

- Location** Enrolled area must be adjacent to a watercourse (blue line or dotted blue line on USGS topo map or field ditch as defined in code 608, FOTG) and to a newly seeded grass berm, existing CRP filter strip, or grass berm actively maintained under maintenance drainage program.
- Width** Total enrolled width shall be a minimum of 35 feet of woody vegetation and warm season grasses (grass ditch berm shall be in addition to this 35'). Maximum width is 150 feet from ditch bank (300 feet in the alluvial soils area.)
- Vegetation** Woody vegetation (native trees, softwoods, shrubs, or conifers) must be planted on 40 – 60% of the width. At least 50% of woody vegetation shall be native hardwoods. A cool season maintenance berm is allowed next to maintained drainage channels. A warm season grass mix shall be used on any grass area outside of maintenance berm. All grass seedings will be a 4 species mixture of grasses, legumes, or forbs best suited to wildlife (per Appendix A, Table 3, FO Technical Guide). Tree and shrub species and spacing shall be according to Table 1, Appendix B, Tree/Shrub Recommendations, NRCS FO Technical Guide.
- Vegetation selection shall be in consultation with Service Forester and Private Lands Biologist. Woody planting may be in center or on edge of buffer strip.
- Practice Spec** Practice and vegetation shall conform to NRCS Technical Guide Specification #645, Wildlife Upland Habitat Management.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audio tape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 325W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call 202-720-5964 (voice or TDD). USDA is an equal opportunity provider and employer

REGISTRATION

- Registration is due by December 29, 2000 and is limited to the first 100 participants to register.

- Registration costs (\$25.00) include morning and afternoon breaks, lunch and workshop materials.

- Participants are responsible for their own lodging if needed.

Name: _____

Address: _____

City _____ State _____ Zip _____

Phone: _____

e-mail: _____

Please register me for:

_____ February 5, 2001 • Englewood, Ohio

_____ February 6, 2001 • Perrysburg, Ohio

_____ February 7, 2001 • Akron, Ohio

_____ February 8, 2001 • Zanesville, Ohio

Make check payable to: Erie Basin RC&D

Mail to:

Ed McConoughey, Coordinator
Erie Basin RC&D
8 Fair Road
Norwalk, Ohio 44857-1923

WORKSHOP LOCATIONS

2001 February 5

Holiday Inn,
Englewood
I-70 at Exit 29
10 Rockridge Road
Englewood, Ohio 45322
Phone: 937-832-1142

February 6

Holiday Inn,
Perrysburg
I-75 & US 20 at Exit 193
10630 Fremont Pike
Perrysburg, Ohio 43551
Phone: 419-874-3111

February 7

Holiday Inn,
Akron/Fairlawn
I-77 & Route 18 at
Exit 137A
4073 Medina Road
Akron, Ohio 44333
Phone: 330-666-4131

February 8

Holiday Inn,
Zanesville
I-70 at Exit 160
4645 East Pike
Zanesville, Ohio 43701
Phone: 740-453-0771

WORKSHOP SPONSORS

*Ohio
AgroBusiness
Association*

*The
Ohio State
University
Extension*

*Natural
Resources
Conservation
Service*

*Ohio
Department
of
Agriculture*

*Ohio
Farm Bureau
Federation*

*Ohio
Lake Erie
Commission*

Conservation Buffers:

Understanding the Where,

When, Why, What and Hows



February 5, 2001
Englewood, Ohio

•
February 6, 2001
Perrysburg, Ohio

•
February 7, 2001
Akron, Ohio

•
February 8, 2001
Zanesville, Ohio

•
9:00 a.m. to 3:00 p.m.

A Workshop for Certified Crop Advisors
(5 CCA Credits)

REGISTRATION DEADLINE: DECEMBER 29, 2000

Conservation Buffers: Understanding the Where, When, Why, What and Hows

AGENDA

- Overview of National Buffer Initiative
- Benefits of Conservation Buffers
- Summary of Conservation Buffer Research
- Understanding and Applying Conservation Buffer Practices

2001 schedule

February 5, 2001
Englewood, Ohio

February 6, 2001
Perrysburg, Ohio

February 7, 2001
Akron, Ohio

February 8, 2001
Zanesville, Ohio

- Incentive Programs
- Panel Discussion
- Group Planning Exercise

WHAT'S IN IT FOR ME?

By attending and participating in this workshop participants will gain a better understanding of the following:

- Benefits of conservation buffers to farm operations, agri-business, the environment and society.
- Current research investigating the environmental and economic benefits of conservation buffers.
- How, what, when and where to design and install conservation buffers.
- Incentive programs that are available to assist landowners to install conservation buffers.
- Panel discussion of the benefits of conservation buffers to my operation.
- EARN 5 CCA CREDITS.

WORKSHOP PRESENTERS

Larry Berger
*Ohio Department
of Agriculture*

Steve Davis
*Natural Resources
Conservation Service*

Larry Antosch
Ohio Farm Bureau Federation

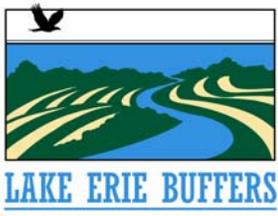
Norm Widman
*Natural Resources
Conservation Service*

Brent Sohngen
*The Ohio State University,
Department of Agricultural,
Environmental and
Development Economics*

Eric Norland
*The Ohio State University,
School of Natural Resources*

Leslie Zucker
*The Ohio State University,
Department of Food,
Agricultural and
Biological Engineering*

.....
Dress is business casual.



Ohio Lake Erie Buffer Team

c/o NRCS
3900 Campus Drive
Lima, Ohio 45804

419-222-0614, ext. 108
steve.davis@oh.usda.gov

Sample News Release

Dec 7, 2001

FOR IMMEDIATE RELEASE

Ohio Lake Erie Buffer Team Successfully Promotes Farm Conservation Efforts

LIMA, OH – Using its motto “*Working Together for Better Farms and Cleaner Waters*” as a guide, the Ohio Lake Erie Buffer Program has successfully promoted the increased use of conservation practices in Ohio since its creation in 1998. Over 20 different Federal, State, local, and private organizations have joined forces to spread the word to farmers and landowners in the Lake Erie watershed about conservation buffer practices that can help improve water quality. In just a few short years this “Buffer Team” has met many of its goals.

In the *1998 State of the Lake Report - Lake Erie Quality Index* released by the Ohio Lake Erie Commission, soil erosion was identified as “...the primary impediment to improving water quality in the Lake Erie watershed.” In one of its many responses to address and rectify this widespread problem, the Commission awarded the Ohio Lake Erie Buffer Program a \$229,635 Lake Erie Protection Fund grant to maximize the installation of conservation buffers throughout the region. The Buffer Team’s primary focus has been to market existing land conservation programs across the Lake Erie watershed. These programs, cooperatively funded by state and federal government agencies, are a partnership of the Ohio Department of Natural Resources (ODNR) - Division of Soil & Water Conservation and the USDA Natural Resources Conservation Service and the Farm Service Agency.

Conservation Buffers are defined as *strips or small areas of land* that are *located in strategic positions in the landscape* and maintained in *permanent vegetation* (grass or trees). The buffer areas generally collect, intercept and filter storm run off before it reaches streams, rivers or lakes. In addition to improving water quality the buffers provide a variety of other benefits, including providing wildlife and songbird habitat and increasing plant and animal diversity. The acres are installed under a long term contract which will provide benefits over a period of 15 to 30 years.

The Buffer Team has achieved the following successes in its mission to promote available programs that reduce sediment loading, minimize nonpoint runoff, and conserve soil and water resources:

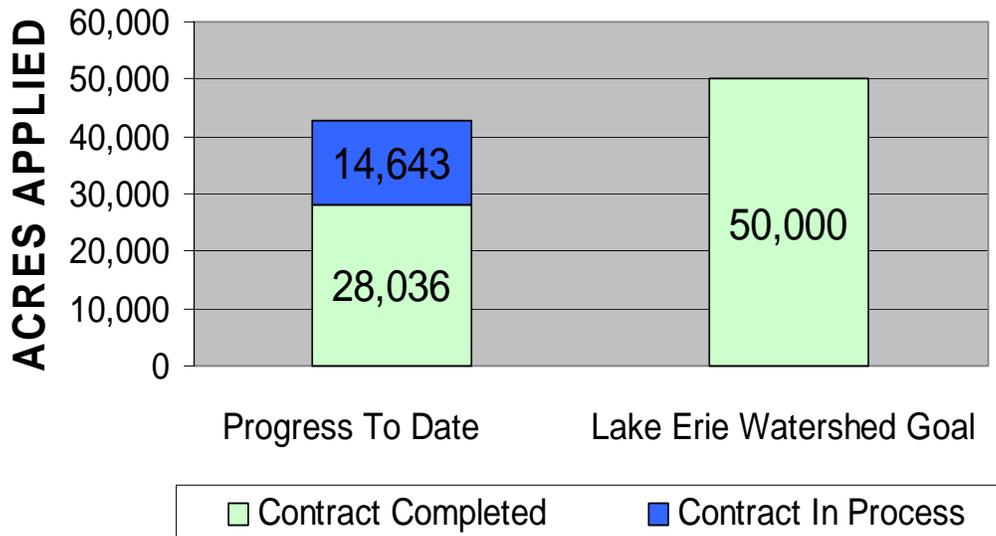
- Assisted the ODNR and the US Natural Resources Conservation Service (NRCS) in enrolling almost 30,667 acres of farmland in conservation program buffer contracts.

- Supported and assisted with the development of the Conservation Reserve Enhancement Program (CREP).
- Conducted Certified Crop Consultant Training Workshop.
- Developed Strategic Plan and marketing brochures.
- Installed signage denoting installed buffer areas.
- Provided funding for twelve summer interns.
- Created three portable displays for use at fairs, etc.
- Developed a Photo Resource Library.
- Utilized ODNR Remote Sensing Section to prepare County-level maps of buffer needs & buffer progress.
- Initiated Buffer Ohio Awards: 31 Lake Erie Watershed landowners have been recognized so far through local Soil & Water Conservation Districts.

Buffer team records show the following acres of conservation buffers installed and under a long term contract in the Lake Erie Watershed since the project was initiated in 1999:

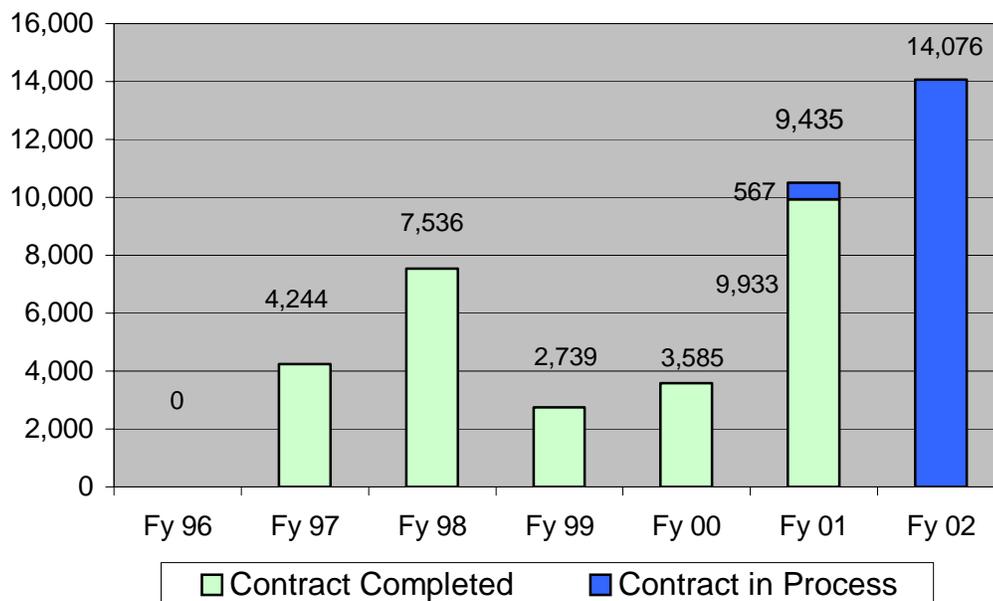
LAKE ERIE BUFFER ACRES

As Of 6-30-01



LAKE ERIE CONSERVATION BUFFER ACRES

As of 6/30/01



For more information about the Ohio Lake Erie Buffer Team or the conservation programs it promotes, please contact Steve Davis of the Natural Resources Conservation Service – United States Department of Agriculture in Lima at 419-222-0614 or by e-mail at: steve.davis@oh.nrcs.usda.gov.

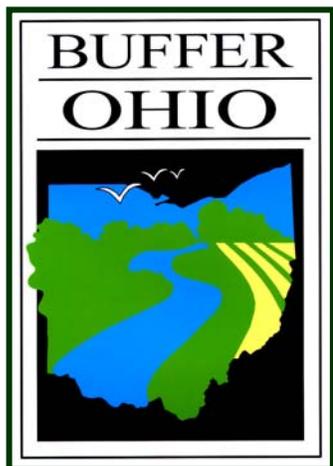
For press information, please contact Steve Davis, NRCS-USDA, 3900 Campus Drive, Suite A, Lima, OH 45804 at 419-222-0614 or by e-mail at: steve.davis@oh.nrcs.usda.gov.

Note: This news release, charts and the following photos of buffer practices are available on enclosed CD. Permission is given for use of images, please credit Lake Erie Buffer Team Photo



Photo 1

Aerial view of grass filter strip (conservation buffer) Seneca County Ohio.



BUFFER OHIO AWARDS PROGRAM

c/o USDA-NRCS
3900 Campus Drive
Lima, Ohio 45804

419-222-0614, ext. 108
steve.davis@oh.usda.gov

4/13/04

Partners:

Ohio Farm Bureau Federation

Ohio Corn Growers

Pheasants Forever

ODNR. Div of Wildlife

ODNR. Div of Forestry

ODNR Div. Of Soil &
Water Conservation

Ohio Wetlands Foundation

Nature Conservancy

Ohio Soybean Association

National Conservation Buffer
Council

USDA Farm Service Agency

USDA Natural Resources
Conservation Service

Ohio Federation of Soil and
Water Conservation Districts

Lake Erie Buffer Team

News Release

For Release: Wednesday, January 23, 2002
Columbus, Ohio

Hugh Core of Wapakoneta was recognized today as one of ten statewide Buffer Ohio Award Winners. The award was presented at the Annual Meeting of the Ohio Federation of Soil and Water Conservation Districts.

Buffer Ohio is a statewide awards program, which recognizes exceptional landowners who have done an outstanding job of applying and maintaining conservation buffer practices to the Ohio landscape. It is co-sponsored by Ohio Farm Bureau, Ohio Corn Growers, Pheasants Forever, ODNR Division of Wildlife, ODNR Division of Forestry, ODNR Division of Soil and Water Conservation, Ohio Wetlands Foundation, Nature Conservancy, Ohio Soybean Association, National Conservation Buffer Council, USDA Farm Service Agency, USDA Natural Resources Conservation Service, Ohio Federation of Soil and Water Conservation Districts, and the Lake Erie Buffer Team.



Conservation buffer practices include grass filter strips, riparian tree plantings, sod waterways, wetland restorations, and windbreaks. They are a fundamental part of the conservation effort to protect and enhance Ohio's precious soil, water, plant, and animal resources.

Buffer practices provide improved agricultural production, erosion control, water quality, and wildlife habitat benefits. Buffer areas trap sediment, nutrients, pesticides, provide food and cover for wildlife, and increase plant and animal diversity.

Hugh Core was recognized for his pioneering work to promote conservation buffer practices in Auglaize County. Hugh has installed nearly 75 acres of buffers along the open streams on his farms. Most of the plantings are in Switchgrass, a native warm season grass which provides excellent wildlife habitat cover. He is an advocate for the warm season grasses and attends the warm season grass training sessions to teach and explain how to establish and maintain Switchgrass. Hugh's Switchgrass filter strips were one stop on the 2001 Auglaize SWCD Official's Tour and there he explained the maintenance and care Switchgrass requires as well as the benefits as a wildlife cover. He is eager and willing to show people how grain farming, raising cattle, and installing buffers can all fit together to improve the rural environment and make our streams cleaner. Hugh has done an outstanding job of applying and maintaining the conservation buffer practices he has installed and has also helped others to install and maintain their own conservation practices.

As part of the award Hugh Core received a cash award, recognition plaque, and Buffer Ohio Jacket. Award recipients were selected based on a review of their conservation buffer accomplishments. Judging was done by a committee of the Buffer Ohio Partner Organizations.

For additional information please contact:

Auglaize SWCD
110 Industrial Drive Suite F/G
Wapakoneta, Ohio 45895
419-738-4016

Steve Davis
USDA Natural Resources Conservation Service
3900 Campus Drive, Suite A
Lima, Ohio 45804-3596
419-222-0614 ext. 108

Hugh Core
5902 National Road
Wapakoneta, Ohio 45895
419-657-6798

Note: Photo's of Mr. Core and the conservation practices he has applied are included on the enclosed CD.



Reforestation Utilizing Direct Seeding Techniques

Lima, Ohio June 25 - 26, 2003

Join us **June 25th and 26th** for a workshop on direct seeding for tree planting. The workshop will be held at **The Ohio State University - Lima campus, in Lima, Ohio.**

Scheduled Speakers:

Dr. Paul Wray, Iowa State Extension Forestry Specialist
John Olds & Bob Petrzela - Forestry Consultants - Iowa
Mark DeBrock, Ohio NRCS

Topics to be covered include:



- what is direct seeding
- pros and cons of direct seeding
- good site characteristics
- species that work best
- collect your own or purchase seed
- site preparation needs
- planting techniques
- post planting care
- equipment needs

Costs:

Workshop fee is \$30 - and include lunch both days.
Checks should be made out to
The Ohio State University

Tentative Agenda

June 25

11:00 Registration & Lunch
12:15 Welcome & Introductions
12:30 Details of direct seeding
4:00 Adjourn

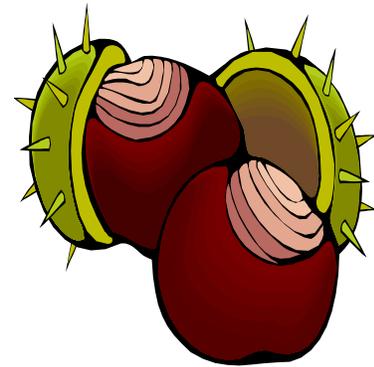
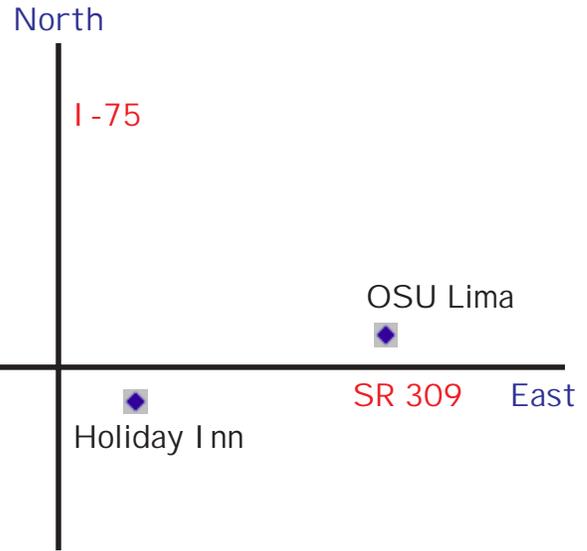
June 26

9:00 Field Demonstrations
12:00 Lunch
1:00 Ohio Specifications & Cost Sharing
1:45 Panel Discussion/Questions
3:00 Adjourn

This workshop is geared towards professional land managers such as consulting, industry and agency foresters, wildlife professionals, employees of Soil and Water Conservation Districts, NRCS and Extension agents and specialists.

We have reserved a block of rooms at a rate of \$72.00 per night. This room rate is good only until **June 4th** Please make your reservations prior to this date if you want the OSU rate. When making reservations use the code **COL**.

Holiday Inn - Lima
1920 Roschman Ave.
Lima, OH 45804
Tel: 1-419-222-0004
Fax: 1-419-222-2176



For more information contact either Randy Heiligmann at 614-292-9838, heiligmann.1@osu.edu or Kathy Smith at 614-688-3136, smith.81@osu.edu

Detach and mail the following registration form with payment to:
Ohio Woodland Stewards Program
210 Kottman Hall
2021 Coffey Road
Columbus, OH 43210

This course is worth 8.75 category 1 CFE credits through Society of American Foresters

This workshop is sponsored by Ohio NRCS - Lake Erie CREP Program, Lake Erie Buffer Program, Ohio Society of American Foresters, Ohio Federation of Soil & Water Conservation Districts - Forestry Committee, Ohio Division of Forestry and the Renewable Resource Extension Act.

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____ Email _____

Affiliation _____

Registration Deadline is June 6, 2003
Make checks payable to The Ohio State University

LAKE ERIE CONSERVATION BUFFER PROGRAM

BUFFERS BENEFIT OUR LAKES & OUR LAND

- Buffers improve water quality in Lake Erie by filtering sediment and pollutants.
- Buffers make farming more convenient and more profitable.
- Buffers reduce soil erosion and reduce sediment delivery to the lake.
- Buffers restore habitat, and improve the fishery resources.

CONSERVATION BUFFERS

- GRASS FILTERS
- WINDBREAKS
- WETLANDS
- RIPARIAN FORESTS

BUFFER PROGRAM ASSISTANCE INCLUDES...

- Financial assistance payments to farmers provided by the USDA Conservation Reserve Program and the Lake Erie Enhanced CRP Program (CREP).
- Assistance provided to landowners by USDA Natural Resources Conservation Service, USDA Farm Service Agency and Local Soil & Water Conservation Districts.
- Forestry and wildlife habitat planning assistance provided by ODNR Divisions of Wildlife, Forestry and Soil & Water Conservation.
- Specialized equipment, seed, and planting assistance provided by local organizations such as Pheasants Forever, local SWCD's and others.

...is a partnership to install 50,000 acres of conservation buffers in the Lake Erie Watershed.

Buffers are strips or small areas of land in strategic places, maintained in permanent vegetation to provide many conservation benefits.

FOR MORE INFORMATION CONTACT YOUR LOCAL USDA AGRICULTURAL SERVICE CENTER OFFICE.

SCALE FACTOR: 814.323%

Table Top Display

One of Three Developed for Use in the Watershed

LAKE ERIE BUFFER PROGRAM

INFORMATION NOW AVAILABLE ONLINE!



- Conservation Buffer Practices
- Conservation Buffer Programs
- Benefits of Buffers
- Testimonials of Ohio Farmers
- Strategic Plan
- Buffer Ohio Awards Program
- Buffer Team Members
- Downloads & News Releases
- Resourceful Links

Please report problems encountered with this site to the [Webmaster](#).

Mission Statement
The Ohio Lake Erie Buffer Team is a diverse group of public and private agriculture and natural resource organizations educating and encouraging farmers and landowners to implement conservation buffer technologies that protect Ohio's soil and water resources.

Ohio Lake Erie Buffer Team Goal
Enroll 50,000 acres of new conservation buffers into available conservation reserve programs by the end of 2005.

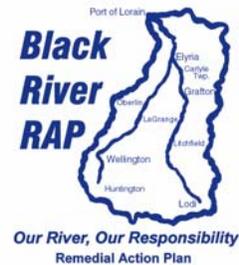
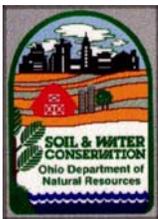
[Goal Progress Chart](#) [Yearly Progress Chart](#)

Ohio Lake Erie Buffer Program Information is now available via the Ohio NRCS Homepage at:

http://www.oh.nrcs.usda.gov/Lake_Erie/Erie_Buffer/buffer.index.html

The plan can also be accessed by going to www.oh.nrcs.usda.gov and searching through the "Programs Button" on the Ohio Home page. The Lake Erie Buffer Team extends a hearty thanks to the Ohio NRCS staff for their assistance in making the information available online. For additional info contact: steve.davis@oh.usda.gov.

Ohio Lake Erie Buffer Team



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The State of Ohio and all Buffer Team Members are Equal Opportunity Employers and Providers.