

Chapter 10

FUTURE RECOMMENDATIONS

The 1993 NRCS Erosion and Sedimentation Report contained a recommendation for long term funding of the recommended Soil Conservation Program at a level of \$16.5 million over a 20 year time period. The recommendation provided for 6 years of project implementation and 14 additional years of project benefits and maintenance. This recommendation still stands.

It is recommended that the Soil Conservation Program be implemented via a long term, stable, commitment of funding. The recommended program consists of 3 important components:

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| Recommendation 1. | Continue funding the county sediment reduction committees and locally led county sediment projects. |
| Recommendation 2. | Accelerate the Conservation Buffer Initiative within the Maumee Watershed. |
| Recommendation 3. | Establish a Toledo Harbor Trust Fund to provide for long term maintenance level activities after the project is ended. |

Recommendation 1

Continue County Sediment Reduction Program

NRCS is requesting a multi-year stable funding commitment to continue the pilot project and further implement the locally led sediment reduction projects over a 6 year time period. Continuing the county sediment program would:

- Continue Grants to county sediment groups to implement sediment reduction strategies and projects.

- Continue cost sharing for NRCS and County Sediment Committees to allocate to landowners who install sediment reduction practices.
- Allocate additional technical assistance funds for NRCS personnel to lead the project and provide assistance on the land to landowners installing sediment reduction practices.
- Result in a conducting an information and education program within the watershed, including a project newsletter, tours and field days.
- Continue NRCS leadership for conservation tillage transects on a sub-watershed basis each year.
- Include support for local conservation tillage clubs and conservation action projects within the watershed.

These components of the program would require \$9,577,010 in funding and would be implemented over a 6 year time period. Eighty-five percent of the funds are earmarked for grants to committees, cost sharing with landowners, and information activities. Fifteen percent is needed for NRCS for personnel, for project leadership and project technical assistance.

The grant funds for project implementation, cost sharing, and county level information activities would be awarded to county sediment committees via a competitive process. Soil and Water Conservation Districts and/or county sediment committees, would, at their discretion, be allowed to utilize up to 15% of awarded grant funds for personnel to carry out the projects.

In order to improve communications, a project newsletter will be published at least 3 times per year. The project advisory committee will be revamped to include better representation of all the stakeholders within the watershed.

Recommendation 2

Accelerate The Conservation Buffer Initiative

NRCS is requesting funding to accelerate the Conservation Buffer Initiative within the Maumee Watershed. The accelerated buffer program will be used to increase the rate of conservation buffer installation beyond that which would occur under the normal USDA program efforts. NRCS is requesting \$3.9 million in funding to implement the buffer component over a 6 year time period. The accelerated buffer program would include the following components:

- Design, development, and installation of buffer demonstration projects

- Watershed grants to groups to carry out buffer projects on a sub-watershed basis
- Development of a riparian buffer forest preserve demonstration project along the major tributaries in the Maumee watershed
- Watershed wide buffer information program and buffer tracking system to monitor the rate of new buffer installations.
- Technical assistance funding for NRCS personnel
- A recommendation for a State Enhancement Program for the USDA Conservation Reserve Program.

Design, Development, and Installation of Buffer Demonstration Projects

The buffer demonstration program will include an integrated effort to:

- Develop design standards for wetland-sediment traps
- Identify ways to leverage Toledo Harbor Program funding with the Continuous CRP program to construct the traps
- Construct and monitor demonstration projects using wetlands as sediment traps.

The design component will identify low cost ways of using gravity fed wetlands to trap sediment including determining appropriate watershed to wetland ratios, design depth, retention times, etc. The program component will identify ways to leverage project funds for this the practice with 15 year Continuous CRP contracts and will determine the level of incentives needed to gain landowner participation. The monitoring component will measure rates of sediment accumulations and/or outflow concentrations.

This project will be modeled after the Maumee Valley RC&D Marketing Wetlands for Profit project except that the focus will be on surface runoff - gravity fed wetlands without irrigation components in an effort to develop lower cost sediment traps. Scientists from the agricultural Research Service, Ohio State University and other institutions have expressed interest in this project and will be invited to participate in the monitoring and evaluation phase.

Approximately 20% of the accelerated buffer program funds (\$775,000) will be budgeted towards this activity with the goal of establishing 21 one demonstration projects (one in each county) over the 6 years of the project. These funds will be leveraged with Continuous CRP funding.

Watershed Grants For Sub-Watershed Groups To Carry Out Buffer Projects

Approximately 20 percent of the accelerated buffer program funds (\$775,000) will be made available to watershed groups to carry out watershed based buffer promotions on the major sub-watersheds in the Maumee Basin. These funds will be allocated on a competitive grant basis. They will be available for cost sharing and/or information and education to implement buffer projects.

Development Of A Riparian Buffer Forest Preserve Demonstration Project Along The Major Tributaries In The Maumee Watershed

Approximately 9% of the accelerated buffer program financial assistance funds (\$350,000) will be allocated design a project to plant Riparian Forest Buffers along the major tributaries in the watershed. The proposed concept will be to use the Continuous CRP to plant forest buffers with a 15 year contract. Simultaneously, project funds will be used to purchase a 20 to 30 year easement that is effective at the end of the CRP contract. The goal will be to provide the landowner an annual return until the trees reach a size that they become income generating and the forest is self sustaining. A goal of 70 acres per year will be established or 350 acres over the life of the project. At an average width of 50 feet this would equal 58 miles of riparian buffers.

The goal of this program will be to demonstrate program and funding mechanisms that could be used on a large scale basis to treat the entire watershed

Watershed Wide Buffer Information and Tracking Program

Approximately 5 percent of the accelerated buffer program funds (\$200,000) will be utilized for a conservation buffer information education program within the watershed. Watershed specific informational materials will be developed. Results of the wetland sediment traps studies will be published. A system for tracking and monitoring buffer installation rates will be developed.

NRCS Technical Assistance

Approximately 46 per cent of the accelerated buffer program funds (\$1,800,000) are designated for NRCS technical assistance to lead the accelerated buffer program and provide technical assistance to landowners who install buffer practices.

State Enhancement of the Continuous CRP Program

One of the key tools that will be used to install the Conservation Buffer Practices on a large scale in the watershed will be the Continuous Signup provisions of the existing USDA Conservation Reserve Program (CRP). The Continuous CRP program is currently funded by USDA and allows landowners to convert cropland to the conservation buffer practices of filter strips, grass waterways, riparian forest buffers, and restored wetlands. Landowners agree to convert cropland to these practices in exchange for a 10 to 15 year contract with USDA. The contract provides for annual rental payments which reimburse the landowner for the loss of income on this land. The program is currently popular within the Maumee Basin. Reimbursement is at the Federally established rates and landowners of eligible cropland are automatically eligible to enroll in the program. Widespread participation in this program would result in substantial sediment reduction.

A provisions in the USDA Conservation Reserve Program provides for state enhancement of the federal CRP program. State Enhancement of the CRP in the Maumee Watershed would provide the following benefits:

1. The additional state incentives could be used to increase rental rates beyond the federal maximum to increase participation rates for some or all of the conservation buffer practices.
2. The additional state enhancement efforts could be targeted to the most critical practices within the watershed such as the more erosive sub-watersheds or along stream corridors.
3. The state enhancement incentives could support increased cost-sharing of designing and constructing some practices, such as restored wetlands, to achieve increased the sediment trapping efficiency.

State Enhancement of the Continuous CRP requires that state government or non-USDA funding be utilized for the enhancement portion of the CRP program. This results in a leveraging of USDA funds. Currently numerous states such as Pennsylvania, Illinois, Kansas, and Minnesota have enacted state CRP enhancement programs. Increases in conservation buffer application rates have been experienced where such programs have been put into effect. This would be the expected effect in the Maumee watershed as well. Ohio currently does not have a state enhancement program.

It is recommended as a part of the accelerated conservation buffer program that the executive committee go on record as supporting a State CRP Enhancement program for the Maumee Watershed and actively explore a partnership with the State of Ohio which would result in the development of a State Enhanced CRP Program for the Maumee Watershed.

Recommendation 3

Establish A Toledo Harbor Trust Fund

The programs and practices within the Soil Conservation Program are designed to provide long term enduring conservation benefits which will persist long after the project is finished. However, over the long term, resource conditions may change, new landowners arrive and a new generation will inherit the land. It will require continued education of these new landowners and continued promotional efforts to maintain the benefits that will be gained as a result of implementing this program.

For this reason the 1993 Erosion and Sedimentation Report recommended establishment of a maintenance fund to conduct a maintenance level program in years 7-20. This report further develops that concept of a maintenance fund as a trust fund.

It is recommended that a **Toledo Harbor Trust Fund** be created. This fund would be modeled after the Lake Erie Protection Fund. The purpose would be to provide a long term dedicated source of funding to be used for maintenance of sediment reduction activities in the Maumee Watershed.

It is recommended that this fund be established at a level of approximately \$6 million through 6 annual contributions of \$1,000,000.

The interest from this fund would be available annually, starting in year 3 or 4 of the project, to fund via competitive grants continued sediment reduction activities within the watershed. Local sediment committees, units of governments, conservation organizations, and researchers would be eligible to apply for funding.

Creation and administration of this fund would require an entity that is charged with leadership for the fund and is capable of the appropriate financial expertise and safeguards to properly administer and disperse the grant funds. It is assumed that the administering entity would administer the fund on a percentage basis. This report does not presume to identify or recommend an administrator of the proposed fund. Clearly there are some challenges in implementing this idea. Several possible options as to how the fund might be administered are suggested for further exploration and discussion:

Option 1 Administer as a sub-fund within the Lake Erie Protection Fund.

The Ohio Lake Erie Office currently administers the Lake Erie Protection Fund. One alternative to explore further would be for this organization to administer a Toledo Harbor Trust Fund either parallel to or as a separate and distinct sub-fund within the existing Lake Erie Protection Fund. The advantage of this approach would be that the administering organization would already have in place the structure, expertise and experience needed to administer the fund. It is recommended that the feasibility of adopting this alternative be further explored.

Option 2 Create a NRCS Natural Resource Foundation.

A second option which might be considered would be the creation of a Natural Resource Foundation within or by the Natural Resources Conservation Service. The 1996 Farm Bill vested in NRCS the authority to create Natural Resource Foundation(s). This is a new authority and NRCS, particularly at the state level does not yet have experience or a track record in this area. It is uncertain as to how feasible this option is and it is recommended that this option be further explored to determine if this USDA authority could be applicable.

Option 3 Utilize a private non-profit foundation .

A third option might be to identify a private non-profit foundation that would be capable and willing to administer the fund under long term contract. Obviously there could be many challenges with this approach. However, given the right fit and the right contractual arrangements, this option might be a feasible alternative. It is recommended this alternative be further explored.

This report does not presume to recommend any of the above as viable or preferred alternatives. What is recommended is a long term stable maintenance component for the project and the idea of a trust fund could be one alternative that would achieve that goal and should be explored further.

Summary of Funding Recommendations

The funding recommended in the 1993 NRCS Erosion and Sedimentation Report for the Soil Conservation Program was recommended at \$16,493,245. This report reaffirms that 1993 recommendation, adjusted for inflation, as the needed level of funding. Table 6 contains the total funding recommendation, distributed by activity and by program year.

The County Sediment program is recommended for funding at \$9,521,011, the same level as was recommended in the 1993 report.

The Accelerated Conservation Buffer Program was not contained in the 1993 recommendation. It is added to this report as a 6 year period program with a requested funding level of \$3,900,000.

The Maintenance Fund was recommended for funding at \$6,943,232 in the 1993 report. This report recommends funding for that activity at a level of \$6,000,000. It recommends establishment of a trust fund as the vehicle for holding and distributing maintenance funds.

Funding of the total project funds is distributed at 52% financial assistance for funding project financial measures for the county sediment programs and the accelerated buffer initiative, approximately 18% technical assistance for funding NRCS personnel to assist landowners in carrying out the project, and 30% funding for the Trust Fund for long term maintenance.

The order of funding priority of the 3 components, in the view of NRCS, is as follows:

1 st Priority	Continue County Sediment Reduction Program
2 nd Priority	Accelerate Conservation Buffer Program
3 rd Priority	Establish Toledo Harbor Trust Fund

The total funding level of \$19,477,010 represents an increase of \$2,488,970 over the 1993 report. This increase is equal to an annual inflation rate of slightly less than 3 percent.

Funding Sources

It is recommended that two sources of funding be utilized to implement the three recommendations in this report. These include:

1. Redirection of Dredging Funds
2. 1996 Water Resources Development Act Funding

Redirection of Dredging Funds

Funds used to dredge are collected from shippers. As such they represent a user fee on those who would benefit from keeping the harbor open. During preparation of the LTMS Phase III report, after much debate the study team arrived at the consensus that it made sense to use such funds for prevention of a dredging problem rather than remediation after the sediment had settled out in the harbor.

This report further reaffirms that original recommendation of the study team that the appropriate source for the funding of the Soil Conservation Program would be redirecting of a portion of the dredging funds to upland land treatment programs.

This report further suggests that the accomplishments of this pilot project indicate that such an approach can achieve sediment reduction, and that the Ohio State University Economic Analysis supports the cost effectiveness of doing this.

Water Resources Development Act

The 1996 Water Resources Development Act (WRDA) provided for sediment transport modeling in the Great Lakes Harbors. The act authorizes appropriations of \$5 million per year over a 5 year period for a total authorization of \$25 million. In fiscal year 1998 \$1.5 million was appropriated to initiate projects on 3 harbors in the Great Lakes, one of which is Toledo.

According to the authors of the original legislation which served as the basis of the act, the intent of Congress was for this funding to go far beyond just studies and support actual programs which implemented sediment reduction within the watershed (Allegra Cangelosi, Northeast-Midwest Institute, personal communication).

This report asserts that the 3 recommendations for the Soil Conservation Programs represent the kinds of sediment reduction implementation envisioned by Congress under the Water Resources Development Act.

Table 5 Recommended Funding For Soil Conservation Program

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Continue County Sediment Reduction Program							
Financial Assistance To Landowners/SWCD's	\$1,322,520	\$1,322,520	\$1,322,520	\$1,322,520	\$1,322,520	\$1,322,520	\$7,935,122
Technical Assistance - NRCS	252,648	252,648	252,648	252,648	252,648	252,648	1,509,889
County Steering Committees	2,100	2,100	2,100	2,100	2,100	2,100	126,000
	<u>\$1,596,168</u>	<u>\$1,596,168</u>	<u>\$1,596,168</u>	<u>\$1,596,168</u>	<u>\$1,596,168</u>	<u>\$1,596,168</u>	\$9,577,010
Accelerate Conservation Buffer Program							
Financial Assistance For Buffer Projects	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$350,000	\$2,100,000
Technical Assistance - NRCS	<u>\$ 300,000</u>	<u>\$ 300,000</u>	<u>\$ 300,000</u>	<u>\$ 300,000</u>	<u>\$ 300,000</u>	<u>\$ 300,000</u>	\$1,800,000
	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$3,900,000
Establish Toledo Harbor Trust Fund							
Financial Assistance	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$6,000,000
PROJECT TOTAL	\$3,246,168	\$3,246,168	\$3,246,168	\$3,246,168	\$3,246,168	\$3,246,168	\$19,477,010