



GREAT LAKES

SOIL EROSION AND SEDIMENTATION SURVEY

**A Report to the
Natural Resources Management Committee
of the
GREAT LAKES COMMISSION**

APPENDICES

**Prepared by
Great Lakes Commission Staff**

October 1984



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APPENDIX A

SURVEY RECIPIENTS

1. FEDERAL AGENCIES

A) USDA SOIL CONSERVATION SERVICE

Mr. John J. Eckes
State Conservationist
USDA-Soil Conservation Service
Springer Federal Building
301 N. Randolph St.
Champaign, Illinois 61820

Mr. Paul A. Dodd
State Conservationist
USDA-Soil Conservation Service
James M. Hanley Federal Building
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Syracuse, New York 13260

Mr. Robert L. Eddleman
State Conservationist
Soil Conservation Service - USDA
Corporate Square - West
5610 Crawfordsville Road
Indianapolis, Indiana 46225

Mr. Robert R. Shaw
State Conservationist
USDA-Soil Conservation Service
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200 N. High Street
Columbus, Ohio 43215

Mr. Homer Hilner
State Conservationist
USDA - Soil Conservation Service
1405 S. Harrison Rd., #101
E. Lansing, Michigan 48823

Mr. Graham T. Munkittrick
State Conservationist
USDA-Soil Conservation Service
Federal Building - Courthouse
Box 985, Federal Square Station
Harrisburg, Pennsylvania 17108

Mr. Donald Ferren
State Conservationist
USDA-Soil Conservation Service
200 Federal Building
U.S. Courthouse
316 N. Robert Street
St. Paul, Minnesota 55101

Mr. Clifton A. Macquire
State Conservationist
USDA-Soil Conservation Service
4601 Hammersley Road
Madison, Wisconsin 53711

B) AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE

Mr. Gilbert A. Fricke
State Executive Director
ASCS-U.S. Dept. of Agriculture
Room 232, Federal Building
600 E. Monroe
Springfield, Illinois 62701

Mr. Frank A. Walkley
State Executive Director
ASCS-U.S. Dept. of Agriculture
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100 S. Clinton Street
Syracuse, New York 13260

Mr. William F. Johnson
State Executive Director
ASCS-U.S. Dept. of Agriculture
5610 Crawfordsville Road, Suite 1600
Indianapolis, Indiana 46224

Mr. John M. Stackhouse
State Executive Director
ASCS-U.S. Dept. of Agriculture
540 Federal Building
200 North High Street
Columbus, Ohio 43215

Mr. Robert L. Payne
Conservation Program Specialist
ASCS-U.S. Dept. of Agriculture
1405 S. Harrison
East Lansing, Michigan 48823

Mr. Eugene F. Thompson
Acting State Executive Director
ASCS-U.S. Dept. of Agriculture
Federal Court House Bldg.
228 Walnut Street, P.O. Box 1004
Harrisburg, Pennsylvania 17108

Mr. Donald L. Freidrich
State Executive Director
ASCS-U.S. Dept. of Agriculture
Federal Building & Courthouse
Room 230
316 Robert Street
St. Paul, Minnesota 55101

Mr. Kieran F. Powers
State Executive Director
ASCS-U.S. Dept. of Agriculture
4601 Hammersley Road
Madison, Wisconsin 53711

C) COOPERATIVE EXTENSION SERVICE

Dr. William R. Oschwald
Director of Extension Service
University of Illinois
Mumford Hall
Urbana, Illinois 61801

Dr. H. A. Wadsworth
Director, Extension Service
Purdue University
Agricultural Administration Building
West Lafayette, Indiana 47907

Dr. Gordon E. Guyer
Director
State Extension Service
Michigan State University
East Lansing, Michigan 48824

Dr. Norman A. Brown
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University of Minnesota
St. Paul, Minnesota 55108

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Director
Cooperative Extension Service
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103 Roberts Hall
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Cooperative Extension Service
Pennsylvania State University
University Park, Pennsylvania 16802

Dr. G. L. VandeBerg
Director
Cooperative Extension Service
University of Wisconsin
432 N. Lake Street
Madison, Wisconsin 53706

2. STATE AGENCIES

Mr. Ronald A. Darden
Natural Resources Division
Department of Agriculture
State Fairgrounds
Springfield, Illinois 62706

Mr. Henry G. Williams
Commissioner
New York Dept. of Environmental
Conservation
50 Wolf Road
Albany, New York 12233

Mr. James Ridenour
Director
Indiana Dept. of Natural Resources
608 State Office Building
Indianapolis, Indiana 46204

Mr. John H. Cousins
Chief, Division of Water
Ohio Department of Natural Resources
Fountain Square
Columbus, Ohio 43224

Mr. Larry Folks
Land Resoure Programs
Michigan Dept. of Natural Resources
P. O. Box 30028
Lansing, Michigan 48909

Mr. John E. McSparran
Director
Bureau of Resource Programs
Department of Environmental
Resources
P. O. Box 1467
Harrisburg, Pennsylvania 17120

Mr. Joseph Alexander
Commissioner
Department of Natural Resources
Box 37, 658 Cedar Street
St. Paul, Minnesota 55155

Mr. C. D. Bésadny
Secretary
Wisconsin Dept. of Natural Resources
101 S. Webster, GEF-2
Madison, Wisconsin 53702

3. U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. Kent Fuller
Acting Director
Great Lakes National Program Office
U.S. Environmental Protection Agency
536 South Clark Street
Chicago, Illinois 60605

4. U.S. ARMY CORPS OF ENGINEERS

Mr. Thomas Hempfling
Planning Division
U.S. Army Corps of Engineers
536 S. Clark Street
Chicago, Illinois 60605

APPENDIX B

SURVEY QUESTIONNAIRE FORMS

1. Survey Background and Directions
2. State Agency Questionnaire
3. Soil Conservation Service Questionnaire
4. Agricultural Stabilization and Conservation Service Questionnaire
5. Cooperative Extension Service Questionnaire
6. U.S. Environmental Protection Agency Questionnaire
7. U.S. Army Corps of Engineers Questionnaire



GREAT LAKES BASIN
SOIL EROSION/SEDIMENTATION SURVEY

Directions:

Please respond to each of the survey questions in the space provided. You will note that most pertain only to the Great Lakes Basin portion of your state. Best estimates are acceptable. Please return by _____ to the Great Lakes Commission, 2200 Bonisteel Blvd., Ann Arbor, MI 48109.

Objective:

To generate baseline data and related information which will assist the Great Lakes Commission in determining more effective means to address soil erosion and sedimentation problems in the Great Lakes Basin.

Approach:

Individualized surveys are being administered to the following agencies within each Great Lakes state: State Dept. of Natural Resources (or equivalent); Soil Conservation Service; State Extension Service; and the Agricultural Stabilization and Conservation Service. The U.S. EPA (Region V office) and the U.S. Army Corps of Engineers (North Central Division) will be surveyed as well. Following interpretation of responses and review by member states, the GLC will use survey results to develop recommendations for action.

Sponsorship:

The survey is being administered by the Great Lakes Commission with the technical assistance of the Soil Conservation Service (Michigan office).

The Great Lakes Commission is an interstate compact commission comprised of gubernatorially appointed and legislatively mandated representatives from the eight Great Lakes states. The Commission seeks to promote the wise use, development and conservation of the Great Lakes resource via information sharing among member states, coordination of state positions, and advocacy of those positions on which a majority of the states agree.

Questions:

Questions regarding survey content, objectives, and data availability should be directed to:

Michael J. Donahue
Great Lakes Commission
2200 Bonisteel Blvd.
Ann Arbor, MI 48109 (313-665-9135)
or
Homer Hilner
State Conservationist
Soil Conservation Service (MI)
1405 S. Harrison Rd., #101
E. Lansing, MI 48823
517-337-6702



GREAT LAKES BASIN
SOIL EROSION/SEDIMENTATION SURVEY

- State Agency -

Survey Recipient:

Survey Questions:

1. Funds expended by state and local agencies or organizations in FY '82 for erosion and sedimentation control in the Great Lakes drainage area in _____:

a. by state government for:

(1) Information and education - \$ _____

(2) Technical assistance - \$ _____

(3) Cost-sharing - \$ _____

b. By local (e.g. counties, municipalities, Soil Conservation Districts) for:

(1) Information and education - \$ _____

(2) Technical assistance - \$ _____

(3) Cost-sharing - \$ _____

Source of Information _____

2. Funds that need to be expended annually by state and local agencies for erosion and sedimentation control in the Great Lakes drainage area in _____:

a. By state government for:

(1) Information and education - \$ _____

(2) Technical assistance - \$ _____

(3) Cost-sharing - \$ _____

b. By local (e.g. counties, municipalities, soil conservation districts) for:

(1) Information and education - \$ _____

(2) Technical assistance - \$ _____

(3) Cost-sharing - \$ _____

Source of Information: _____

3. Miles of Great Lakes shoreline in _____ that are eroding or receding at a critical rate _____.

Source of information: _____

4. Funds spent to control Great Lakes shoreline erosion and recession in FY 82:

_____ - \$ _____ Others (please specify) - \$ _____

Source of Information: _____

5. Total public funds that would need to be expended to reduce Great Lakes shoreline erosion and recession to a tolerable rate (i.e., a rate uninfluenced by man's actions) \$ _____.

Source of Information: _____

6. What is your estimate of public funds that need to be expended annually for control of Great Lakes shoreline erosion and recession?

_____ - \$ _____ Others (please specify) - \$ _____

Source of Information: _____

7. Please provide us with a listing, brief description and funding level for current soil erosion/sedimentation programs presently undertaken by your office. [Attach additional pages or other prepared materials if necessary].

12. Please provide us with any reports or other materials relevant to your agency's involvement in soil erosion and sedimentation control problems in the Great Lakes basin.



GREAT LAKES BASIN
SOIL EROSION/SEDIMENTATION SURVEY

- Soil Conservation Service -

Survey Recipient:

Survey Questions:

1. How many acres of agricultural cropland in the Great Lakes drainage are in _____ were in row crops in 1972? _____. In 1982? _____.

Source of Information: _____

2. For the Great Lakes drainage area in _____, estimate gross erosion (sheet, rill, gully, and wind) in tons:

	<u>1972</u> <u>(Tons)</u>	<u>1982</u> <u>(Tons)</u>
Cropland	_____	_____
Grassland	_____	_____
Woodland	_____	_____

Urbanizing Area _____

Other _____

Source of Information: _____

3. For the Great Lakes drainage area in _____, estimate delivery of sediment to streams and bodies of water in tons/year _____.

Source of Information: _____

4. For the Great Lakes drainage area in _____, estimate miles of critically eroding streambanks. _____

Source of Information: _____

5. Amount of SCS funds spent in FY'82 for erosion and sediment control in the Great Lakes drainage area in _____ for:

a. Technical assistance - \$ _____

b. Financial assistance - \$ _____

Source of Information: _____

6. In order to provide an estimate of the magnitude of the problem, (assuming manpower were available and given present land use and technology), what amount of funds would be needed to control sheet, rill, gully, and wind erosion and the resultant sedimentation to a tolerable level in the Great Lakes drainage area in _____?

a. Sheet, rill, and gully erosion:

(1) Technical assistance - \$ _____

(2) Construction - \$ _____

b. Wind erosion:

(1) Technical assistance - \$ _____

(2) Construction - \$ _____

c. Streambank erosion:

(1) Technical assistance - \$ _____

(2) Construction - \$ _____

Source of Information: _____

7. What is your estimate of funds (1983 prices) that are needed annually for technical assistance in the Great Lakes drainage area in _____?

a. For sheet, rill, and gully erosion - \$ _____

b. For wind erosion - \$ _____

c. For streambank erosion - \$ _____

8. Please provide us with a listing, brief description and funding level for current soil erosion/sedimentation control programs presently undertaken by your office. [Attach additional pages if necessary].

9. In addition to current soil erosion/sedimentation control programs undertaken by your office, please list any new programs you feel are needed for addressing the problem. Please provide a brief description and funding level for each program. [Attach additional pages if necessary].

10. Please provide us with any suggestions or observations you may have regarding the abatement of soil erosion and sedimentation in the Great Lakes Basin.

11. What emerging or longer term concerns do you have which might now be addressed via interstate coordination among the Great Lakes Basin states?



**GREAT LAKES BASIN
SOIL EROSION/SEDIMENTATION SURVEY**

- Agricultural Stabilization and Conservation Service -

Survey Recipient:

Survey Questions:

1. ASCS funds spent in FY 82 for cost-sharing erosion and sediment control practices for the Great Lakes drainage area in _____ - \$ _____.

Source of Information: _____

2. Your estimate of ASCS funds that need to be spent annually for cost-sharing erosion and sediment control practices for the Great Lakes drainage area in _____ - \$ _____.

Source of Information: _____

3. Please provide us with a listing, brief description and funding level for current soil erosion/sedimentation programs presently undertaken by your office. [Attach additional pages if necessary].



GREAT LAKES BASIN
SOIL EROSION/SEDIMENTATION SURVEY

- Cooperative Extension Service -

Survey Recipient:

Survey Questions:

1. Extension funds expended in FY 82 for erosion and sediment control in the Great Lakes drainage area in _____ for:
 - a. Information and education - \$ _____
 - b. Technical assistance - \$ _____

Source of Information: _____

2. Funds needed annually by the Extension Service to bring erosion and sedimentation to a tolerable level for the Great Lakes drainage area in _____ for:
 - a. Information and education - \$ _____

b. Technical assistance - \$ _____

Source of Information: _____

3. Please provide us with a listing, brief description and funding level for current soil erosion/sedimentation control programs presently undertaken by your office. [Attach additional pages if necessary].

4. In addition to current soil erosion/sedimentation control programs undertaken by your office, please list any new programs you feel are needed for addressing the problem. Please provide a brief description and funding level for each program. [Attach additional pages if necessary].

5. Please provide us with any suggestions or observations you may have regarding the abatement of soil erosion and sedimentation in the Great Lakes Basin.

6. What emerging or longer term concerns do you have which might now be addressed via interstate coordination among the Great Lakes Basin states?



GREAT LAKES COMMISSION

GREAT LAKES BASIN
SOIL EROSION/SEDIMENTATION SURVEY

(U.S. EPA, Region V)

Survey Recipient: [add name]

Survey Questions:

1. U.S. EPA funds expended in FY 82 for erosion and sediment control in the Great Lakes drainage basin for:
 - a. Information and education - \$ _____
 - b. Technical assistance - \$ _____
 - c. Financial assistance - \$ _____

Source of Information: _____

2. Funds needed annually by the U.S. EPA to bring erosion and sedimentation to a tolerable rate (i.e., rate uninfluenced by man's actions) in the Great Lakes drainage basin for:
 - a. Information and education - \$ _____
 - b. Technical assistance - \$ _____
 - c. Financial assistance - \$ _____

Source of Information: _____

6. Please provide us with any suggestions or observations you may have regarding the abatement of soil erosion and sedimentation in the Great Lakes basin.

7. What emerging or longer term concerns do you have which might now be addressed via interstate coordination among the Great Lakes basin states?

8. Please provide us with any reports or other materials relevant to your agency's involvement in soil erosion and sedimentation control problems in the Great Lakes basin.



GREAT LAKES COMMISSION

GREAT LAKES BASIN
SOIL EROSION/SEDIMENTATION SURVEY

(U.S. Army Corps of Engineers)

Survey Recipient: [add name, agency]

Survey Questions:

1. Miles of Great Lakes shoreline that are eroding or receding at a critical rate _____.

Source of Information: _____

2. Funds spent to control erosion and recession in the Great Lakes basin in FY 82.

Corps - \$ _____ Others (please specify) - \$ _____

Source of Information: _____

3. Total funds that would need to be expended by the Corps to reduce the erosion or recession of shorelines in the Great Lakes basin to a tolerable rate (i.e., rate uninfluenced by man's actions) - \$ _____.

4. What is your estimate of funds that need to be expended annually for control of shoreline erosion and recession in the Great Lakes basin?

Corps - \$ _____ Others (please specify) - \$ _____

Source of information: _____

5. Please provide us with a listing, brief description and funding level for current soil erosion/sedimentation programs in the Great Lakes basin presently undertaken by your office. [Attach additional pages if necessary].

6. In addition to current soil erosion/sedimentation control programs undertaken by your office in the Great Lakes basin, please list any new programs you feel are needed for addressing the problem. Please provide a brief description and estimated funding level for each program. [Attach additional pages if necessary].

7. Please provide us with a listing and brief description of critical soil erosion/sedimentation problems and problem areas that need to be addressed in the Great Lakes basin.

8. Please provide us with any suggestions or observations you may have regarding the abatement of soil erosion and sedimentation in the Great Lakes basin.

APPENDIX C

BIBLIOGRAPHY

An agency-by-agency listing of pertinent reports is provided below. Most were recommended by survey respondents as helpful background information on soil erosion/sedimentation issues, agencies, programs, statistics, etc.

1. Federal Agencies:

U.S. Department of Agriculture

- Soil Conservation Service
- Agricultural Stabilization and Conservation Service
- Economic Research Service

U.S. Environmental Protection Agency

U.S. General Accounting Office

2. Regional Agencies/Organizations:

- Great Lakes Basin Commission
- Conservation Tillage Information Center, National Association of Conservation Districts

3. State Agencies:

- Illinois
- Indiana
- Michigan
- Minnesota
- New York
- Ohio
- Pennsylvania
- Wisconsin

1. FEDERAL AGENCIES

- Soil Conservation Service, U.S. Department of Agriculture. 1981.
America's Soil and Water: Conditions and Trends.
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Ohio Primary Target Area, Plan of Operations.
- Soil Conservation Service, U.S. Department of Agriculture. 1982.
A Proposal for Accelerated Erosion Control on Critical Areas of
Eroding Cropland in Michigan, Indiana, and Ohio.
- Soil Conservation Service, U.S. Department of Agriculture. 1983.
Proposal for Targeted Action in Four Critically Eroding Areas in New
York State.
- Soil Conservation Service, U.S. Department of Agriculture. 1984.
Soil and Water Conservation in Indiana.

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- Economic Research Service, U.S. Department of Agriculture. 1982. Cropland Trends Across the Nation. Ag. Econ. Rept. No. 494.
- Economic Research Service, U.S. Department of Agriculture. 1982. Major Uses of Land in the United States: 1978. Ag. Econ. Rept. No. 487 (written by Thomas H. Frey).
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- U.S. General Accounting Office. 1983. Agriculture's Soil Conservation Programs Miss Full Potential in the Fight Against Soil Erosion.
- U.S. Environmental Protection Agency. 1984. Report to Congress: Nonpoint Source Pollution in the United States.

2. REGIONAL AGENCIES/ORGANIZATIONS

Great Lakes Basin Commission. 1975. Great Lakes Basin Framework Study, Appendix 12: Shore Use and Erosion. Ann Arbor, MI.

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3. STATE AGENCIES

Department of Energy and Natural Resources, Illinois State Water Survey. 1983. Erosion and Sedimentation: A Threat to Our Water Resources. (written by Gail Taylor).

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Pollution Control. Testimony by Linda Bochert, to the Subcommittee on
Water Resources, Committee on Public Works and Transportation, U.S.
House of Representatives (November 11, 1983).