

Nonpoint Source Pollution in the Great Lakes Basin: Important Federal Laws and Programs; Great Lakes Laws and Statutes; International Agreements and Activities; and Key Studies

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FEDERAL LAWS AND PROGRAMS

Clean Water Act and Amendments

The Federal Water Pollution Control Act was passed by Congress in 1972. It is more commonly known as the Clean Water Act (CWA), and has been amended several times since it was first promulgated. The Act and its major amendments are described below.

1972 Federal Water Pollution Control Act (Clean Water Act) (P.L. 92-500)

Increased public awareness and concern for controlling water pollution led to enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the Clean Water Act. The Act established the basic structure for regulating discharges of pollutants into the waters of the U.S. It gave U.S. Environmental Protection Agency (U.S. EPA) the authority to implement pollution control programs such as setting wastewater standards for industry. The Clean Water Act also continued requirements to set water quality standards for all contaminants in surface waters. The Act recognized the need for planning to address the critical problems posed by nonpoint source pollution.

Nonpoint Sections include:

- *Section 208 Area-wide Waste Treatment Management:* calls for area-wide water pollution planning in areas designated by the governor of each state that would include both point and nonpoint sources and pollution abatement programs. These plans were required to “identify the nature, scope, and extent of nonpoint sources of water pollution as well as ways to control them.”
- *Section 303(d) Total Maximum Daily Load Program:* The purpose of this program is to identify waters not meeting state water quality standards, and for those waters, calculate the maximum amount of a pollutant the water can receive and still meet water quality standards. This is a restoration program according to U.S. EPA officials. This program was created in 1973; Section 303 of the Clean Water Act established the TMDL program.
- *Section 402 National Pollution Discharge Elimination System Permit Program:* The goal of this program is to assure that U.S. waters remain fishable, swimmable, and drinkable, through regulating point source discharges to surface water. The program ensures that discharges do not cause or contribute to a violation of water quality standards. The Clean Water Act of 1972 initiated control of wastewater discharges with responsibility of enforcement given to the Environmental Protection Agency. The U.S. EPA then created the National Pollutant Discharge Elimination System (NPDES) to track and control point sources of pollution in 1972. This program is largely delegated to states.

1987 Water Quality Act of 1987 (Clean Water Act Amendments) (P.L. 845)

Responding to renewed public concern for water quality issues, Congress was unusually united in overriding a presidential veto and passing the Clean Water Act Amendments in 1987. The new act focused on nonpoint source pollution as one of its four main areas.

The issue of nonpoint source pollution had been addressed in the past through the Clean Water Act. However, due to problems such as lack of funding, debates over regulatory versus voluntary approaches, and inadequate data, there was relatively little progress in the area of nonpoint source pollution control. Congress felt that there was a need for stronger federal leadership to help focus state and local efforts toward nonpoint source pollution.

In response, Congress created Section 319 which combined clauses relating to nonpoint source pollution that had been distributed through the Clean Water Act. Through the Section 319 Nonpoint Source Program, states were to address nonpoint source pollution by:

- *Conducting statewide assessments of their waters* to identify those that are impaired (do not fully support state water quality standards) or threatened (currently meet water quality standards but are unlikely to continue to meet water quality standards fully) because of nonpoint sources.
- *Developing nonpoint source management programs* to address the impaired or threatened waters identified in nonpoint source assessments.
- *Implementing their EPA-approved nonpoint source management programs* over a multiyear time frame.

These amendments also allowed for the establishment of a Great Lakes National Program Office within EPA and a Great Lakes Research Office within NOAA (33 U.S.C. 1268).

1996 National Section 319 Nonpoint Source Program

In 1995, representatives of EPA and the states, under the auspices of the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA), initiated joint discussions to develop a new framework for further strengthening state nonpoint source programs. Since the inception of the nonpoint source program in 1987, states had become more experienced at addressing nonpoint source pollution and programs had matured considerably.

These discussions resulted in a new national section 319 program and grant guidance that the U.S. EPA signed and ASIWPCA endorsed. This May 1996 guidance reflected the states' and U.S. EPA's joint commitment to upgrade state nonpoint source management programs to incorporate nine key program elements designed to achieve and maintain beneficial uses of water. The guidance also provided for revisions to the annual section 319 grant award to ensure a firm annual planning target for each state at the outset of each annual award cycle, reduce the amount and frequency of administrative oversight and reporting, and offer greater flexibility for the states and territories in establishing priorities for the use of these funds.

Additionally, a state that incorporates all nine key elements into its revised nonpoint source management program and has a proven track record of effective implementation of its nonpoint source programs is formally recognized by the Regional Administrator and the Assistant Administrator for Water as a Nonpoint Source Enhanced Benefits State. Nonpoint Source Enhanced Benefits States are afforded substantially reduced oversight and maximum flexibility to implement their state programs and to achieve water quality objectives. Thus, although the U.S. EPA greatly streamlined the section 319 grants program for all states, it also provided further flexibility to the Nonpoint Source Enhanced Benefits States with complete programs and proven track records.

The nine key elements that form the core of the states' upgraded nonpoint source management programs are the following:

1. Short- and long-term goals and objectives.
2. Strong working partnerships with all key stakeholders.
3. Balanced approach emphasizing statewide and watershed-level programs.

4. Plans to abate known impairments and prevent significant threats to water quality.
5. Identifying and progressively addressing impaired or threatened waters.
6. Establishing flexible, targeted, iterative approaches.
7. Identifying federal programs that are not consistent with state programs.
8. Efficient and effective program management and implementation.
9. Periodic review and evaluation of program success at least every 5 years.

1972 Coastal Zone Management Act (P.L. 92-583)

This act established a voluntary national program within the Department of Commerce to encourage coastal states to develop and implement coastal zone management plans.

The 1990 congress passed the Coastal Zone Act Reauthorization Amendments (CZARA) under the Omnibus Budget Reconciliation Act of 1990. Section 6217 of CZARA, requires 29 states and territories with approved Coastal Zone Management Programs to develop Coastal Nonpoint Pollution Control Programs. In its program, a state or territory describes how it will implement nonpoint source pollution controls, known as management measures, that conform to those described in *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*.

See “Coastal Zone Act Reauthorization Amendments” below for more information.

1972 Federal Environmental Pesticide Control Act (FEPCA) (P.L. 92-516)

The Federal Environmental Pesticide Control Act of 1972, enacted as P.L. 92-516, amended the 1947 Federal Insecticide, Fungicide, and Rodenticide Act (P.L. 80-102, June 25, 1947, 61 Stat. 163). The 1972 amendments established, under the Administrator of EPA, a program for controlling the sale, distribution, and application of pesticides through an administrative registration process. The amendments provided for classifying pesticides for "general" or "restricted" use. "Restricted" pesticides may only be applied by or under the direct supervision of a certified applicator.

1972 Rural Development Act of 1972 (P.L. 92-419)

This Act authorized the Secretary of Agriculture to assist farmers and communities in rural areas to install pollution control measures, making erosion control a multiple-purpose measure for reducing the rate at which nutrients are carried to receiving streams.

Title 15 of the 1972 Rural Development Act (P.L. 92-419) amended the Food and Agriculture Act of 1962 (P.L. 87-703) to add the purpose of preventing and abating agricultural pollution and included soil restoration and conservation practices as areas to be evaluated as part of the agricultural assistance program.

The Food and Agriculture Act of 1977 (P.L. 95-113) amended this law to authorize financial assistance to farmers for conducting conservation and environmental enhancement measures. Specific factors to be considered in implementing this program included: the need to encourage voluntary compliance to reduce point and nonpoint pollution, priorities established under the National Environmental Policy Act (NEPA), and priority conservation measures needed to improve water quality in rural areas.

1978 Canadian Fisheries Act (R.S. 1985, c. F-14)

For over 135 years, *the Fisheries Act* has been in place to conserve and protect fish and fish habitat in Canadian freshwater and marine commercial and recreational fisheries. The law restricts when and how fish may be caught and prohibits actions that are destructive to fish or fish habitat. Fish management plans that set out strategies for conserving fish species and their habitats are made under the authority of the *Department of Fisheries and Oceans Act* and *the Fisheries Act*.

The central pollution prevention provision was authorized in 1978 and is found in subsection 36(3) of the Act. This is commonly referred to as the “general prohibition”. This subsection prohibits the deposit, into fish-bearing waters, of substances that are deleterious to fish. The “general prohibition” provision can include harmful plant effluents and runoff of pesticides or fertilizers from land or individual substances deposited to water.

The Minister of Fisheries and Oceans Canada (DFO) has the legislative responsibility for the administration and enforcement of the *Fisheries Act*. In this context, Environment Canada works to: advance pollution prevention technologies; promote the development of preventative solutions; work with the provinces, territories, industry, other government departments and the public on issues relating to the pollution provisions of the *Fisheries Act*.

Farm Bills

Since the first farm bill in 1938, the Congress has provided critical assistance to protect farm income from adverse weather conditions, crop diseases and depressed commodity markets. U.S. farm policy today also provides for a careful balance and allocation of financial resources to support a wide range of national priorities, including conservation and resource protection. A description of the major farm bills that include conservation and pollution prevention provisions is provided below.

1985 Food Security Act (Farm Bill): (P.L. 99-198)

The Food Security Act was the first Farm bill to have a chapter devoted to conservation. Title XII-Conservation created the Highly Erodible Land (HEL), Wetland Conservation Compliance programs, and the Conservation Reserve Program (CRP). This bill included many new conservation programs to help reduce nonpoint source pollution as well as protect the soil resource productivity. The 1985 Farm Bill brought about a tremendous change in the nation’s agricultural conservation policy. Not since the Soil Conservation and Domestic Allotment Act of 1935 – the law that created the Soil Conservation Service and eventually led to the establishment of conservation districts – had Congress set forth such a sweeping conservation policy for the nation’s farms and ranches. This legislation allowed for the creation of the following conservation programs and provisions:

- *1985 Highly Erodible Land Conservation Compliance Program:* The Food Security Act of 1985, as amended, requires persons producing agriculture commodities to protect all cropland classified as being highly erodible from excessive erosion. The act’s provisions have been amended in the 1990, 1996, and 2002 Farm Bills. The purpose of these provisions is to remove the incentive to produce annually tilled agricultural commodity crops on highly erodible land (HEL) unless the HEL cropland is protected from excessive soil erosion.
- *1985 Conservation Reserve Program (part of 1985 Farm Bill) (USDA-FSA)* - This voluntary restoration and conservation program for agricultural landowners was created in 1985. Through this program, landowners receive annual rental payments and cost-share assistance to establish long-term, resource conserving vegetative covers on eligible farmland.
- *1985 Environmental Quality Incentives Program (USDA-NRCS)* - The purpose of this program, created in 1985, is to provide technical, educational, and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner. It funds pollution prevention, soil and water conservation, and water quality improvement activities.

- *1985 Wetland Reserve Program (USDA- NRCS)* - This voluntary program provides landowners with financial and technical assistance to restore and protect wetlands. It began in 1985, and it funds cleanup, restoration, and pollution prevention activities.

1990 Food, Agriculture, Conservation and Trade Act (Farm Bill) (P.L. 101-624)

The 1990 Farm Bill contains numerous subtitles and chapters related to sustainable agriculture. Major components of the conservation title include: highly erodible land and wetland conservation; agricultural water quality incentives; programs for environmental easement, watershed protection, flood control, integrated farm management, resource conservation, Great Plains Conservation, and state water quality coordination; administration of environmental programs; Agricultural Council on Environmental Quality; water quality research; education and coordination; water quality and nutrient management research; and pesticide record keeping.

1996 Federal Agricultural Improvement and Reform (FAIR) Act (Farm Bill) (P.L. 104-127)

The 1996 Farm Bill implemented new conservation measures and revitalized previous measures. Two of the "older measures" are the Sodbuster and Swampbuster provisions, introduced in the 1985 Farm Bill. This bill also created the Environmental Quality Incentives Program (EQIP) and the Wildlife Habitat Incentives Program (WHIP).

- *Environmental Quality Incentives Program (EQIP)*: The Environmental Quality Incentives Program (EQIP) was reauthorized in the Farm Security and Rural Investment Act of 2002 (Farm Bill) to provide a voluntary conservation program for farmers and ranchers that promotes agricultural production and environmental quality as compatible national goals. EQIP offers financial and technical help to assist eligible participants with installing or implementing structural and management practices on eligible agricultural land.
- *Wildlife Habitat Incentives Program (WHIP)*: This is a voluntary restoration program for the development and improvement of wildlife habitat, primarily on private lands. It provides technical assistance and up to 75 percent cost-share assistance to establish and improve fish and wildlife habitat. The program began in 1998.

2002 Farm Security and Rural Investment Act of 2002 Farm Bill (P.L. 107-171)

The Farm Security and Rural Investment Act of 2002 (Farm Bill) is touted as being the single most significant commitment of resources toward conservation on private lands in the nation's history. The legislation responds to a broad range of emerging natural resource challenges faced by farmers and ranchers, including soil erosion, wetlands, wildlife habitat, and farmland protection. Private landowners will benefit from a portfolio of voluntary assistance, including cost-share, land rental, incentive payments, and technical assistance. The 2002 Farm Bill places a strong emphasis on the conservation of working lands, ensuring that they remain both healthy and productive.

The 2002 farm bill created a new working lands policy called the Conservation Security Program (CSP) which provides a new model for farm policy. It has nearly doubled the funding for conservation incentives, rewarding the environmental benefits farmers provide rather than rewarding maximum production of a few intensive crops. The Farm Bill also authorized the Great Lakes Basin Program for Soil Erosion and Sediment Control. These two programs are described below.

- *2002 Conservation Security Program (CSP) (USDA-NRCS)* - CSP is a voluntary program that provides financial and technical assistance to promote the conservation and improvement of soil, water, air, energy, plant and animal life, and other conservation purposes on Tribal and private working lands. Working lands include cropland, grassland, prairie land, improved pasture, and range land, as well as forested land that is an incidental part of an agriculture operation. The Farm Security and Rural Investment Act of 2002 (2002 Farm Bill) (Pub. L. 107-171) amended the Food Security Act of 1985 to authorize the program.
- *Great Lakes Basin Program for Soil Erosion and Sediment Control* - Initiated in 1991 and authorized in the 2002 Farm Bill, this federal/state partnership has supported well over 200 demonstration and technical assistance projects throughout the Great Lakes region. The Basin Program is coordinated by the Great Lakes Commission in partnership with the U.S. Department of Agriculture's Natural Resources Conservation Service (USDA-NRCS), the U.S. EPA, and the U.S. Army Corps of Engineers.

1990 Coastal Zone Act Reauthorization Amendments, Section 6217

The Coastal Zone Management Act (CZMA) was reauthorized and amended as part of the Omnibus Budget Reconciliation Act of 1990 (P.L. 101-508). The amendments codified certain existing National Oceanic and Atmospheric Administration (NOAA) regulations. As part of the new requirements for nonpoint source controls [Section 6217(g)(3)(A)], states must issue management measures for certain categories of runoff and erosion. Section 6217 also requires states to evaluate nonpoint sources and to identify coastal areas that would be negatively affected by specified land uses. NOAA will evaluate the adequacy of the state's existing state CZMA boundary to determine whether it includes nonpoint sources that have a significant impact on coastal waters.

Section 6217(g) of the amendments required the U.S. EPA to develop guidance for state implementation of nonpoint source pollution management measures. On June 14, 1991 (56 FR 27618), the U.S. EPA proposed guidance on management measures for five major categories of nonpoint sources. On June 16, 1992 (57 FR 26845), the U.S. EPA provided an update on its development of guidance for an agricultural management measure for erosion and sediment control, an agricultural management measure for confined animal facility management, and a management measure for urban runoff in developing areas.

The CZMA amendments institute more stringent and far-reaching nonpoint source control requirements.

1990 Pollution Prevention Act (P.L. 101-508)

The Pollution Prevention Act focused industry, government, and public attention on reducing the amount of pollution through cost-effective changes in production, operation, and raw materials use.

The Act allowed for the creation of the 1993 Pollution Prevention (P2) Demonstration Grants Program, administered by the U.S. EPA. This program provides grants for capacity building and for innovative pollution prevention projects, especially those projects having potential for regional impacts. Funded projects include supporting the Great Lakes regional P2 roundtable, providing technical assistance, and coordinating P2 partnerships.

1991 National Water Quality Assessment (NAWQA) Program (U.S. Geological Survey)

The purpose of the NAWQA program, which began in 1991, is to describe the status and trends in the quality of the nation's water and to provide an understanding of the natural and human factors that affect the quality of these resources. Scientists with the NAWQA program have been collecting and analyzing data and information in more than 50 major river basins and aquifers across the nation, several of which fall within the Great Lakes basin. NAWQA has produced reports describing the status and trends of pesticides, nutrients,

volatile organic chemicals, trace elements, surface water quality modeling, and finding on nutrients and pesticides.

1995 Canadian Environmental Assessment Act (CEAA) (1992, c. 37)

The Canadian Environmental Assessment Act was first implemented on January 19, 1995, replacing the Federal Environmental Assessment and Review Process Guidelines Order that had been in place since 1984. It requires federal authorities, such as Agriculture and Agri-Food Canada (AAFC) and the Canadian Food Inspection Agency (CFIA), to subject certain projects to environmental assessments where they are the proponent, administrator of the land involved, contributing funds, or have a regulatory responsibility that has been identified in CEAA's Regulations. Environmental assessment (EA) is an important tool to ensure that environmental concerns are addressed in project proposals, by reviewing their environmental implications, and by making informed decisions on how to proceed with the projects.

1999 Canadian Environmental Protection Act (CEPA) (1999, c. 33)

The Canadian Environmental Protection Act, 1999 is the centerpiece of the federal government's pollution control regime. It is principally administered by Environment Canada, although Health Canada has certain responsibilities in relation to the assessment and regulation of toxic substances.

The underlying principles are to ensure pollution prevention, achieve sustainable development, protect biological diversity, exercise caution in cases of scientific uncertainty, adopt an ecosystem approach to environmental management, and virtually eliminate persistent and bioaccumulative toxic substances.

The Canadian Environmental Protection Act, 1999 contains numerous provisions which address water pollution and environmental enforcement, and, as a result, includes some provisions related to nonpoint source pollution. For example, the Act:

- Regulates nutrients such as phosphates that may adversely affect or degrade aquatic ecosystems (sections 116 to 119); and
- Regulates ocean dumping and protects the marine environment from land-based sources of pollution through non-regulatory means (sections 120 to 137).

GREAT LAKES LAWS AND STATUTES

1990 Great Lakes Critical Programs Act

This act, passed in 1990, amends part of the Federal Water Pollution Control Act (Clean Water Act) by putting into place requirements for the U.S. EPA's Great Lakes National Program Office (GLNPO) to implement Great Lakes programs such as the Great Lakes Water Quality Agreement of 1978 (see description below).

The Act directs the government of the United States to seek to attain the goals embodied in the Great Lakes Water Quality Agreement of 1978 (as amended in 1987) and any other Great Lakes agreements and amendments, with particular emphasis on goals related to the reduction of toxic pollutants. The Act directs the U.S. EPA to be the lead agency to meet the goals of the Great Lakes Water Quality Agreement, working cooperatively with other federal agencies, states and local authorities.

The Critical Programs Act also established EPA's Great Lakes National Program Office (GLNPO) within the Agency. It had previously been established by the Administrator of EPA. GLNPO is thus required to carry out other important provisions of the Critical Programs Act. Nonpoint source-related provisions include:

- Establishment of a Great Lakes system-wide surveillance network to monitor the water quality of the Great Lakes.
- Development of water quality guidance for the Great Lakes system for the purpose of developing water quality standards.
- Establishment of a Lake wide Management Plan (LaMP) for Lake Michigan and a process for development of LaMPs for the other Great Lakes.
- Development of a 5-year plan and program for the reduction of nutrients into the Great Lakes.

1990 Great Lakes Fish and Wildlife Restoration Act (P.L. 101-537)

The Act requires a comprehensive study of Great Lakes basin fishery resources, sets goals for the U.S. Fish and Wildlife Service in administering programs in the Great Lakes basin, and requires the Service to establish related offices.

Specifically, the purposes of the Act are to: carry out a comprehensive study of the status and the assessment, management and restoration needs of the fishery resources of the Great Lakes basin; develop proposals to implement recommendations resulting from the study; and provide assistance to the Great Lakes Fisheries Commission, states, Indian tribes and other interested entities to encourage cooperative conservation, restoration, and management of Great Lakes basin fish and wildlife resources and their habitat.

1995 Great Lakes Water Quality Initiative

The Great Lakes states agreed in 1989 to work with the U.S. EPA to develop uniform pollution limits to protect the lakes and implement the Clean Water Act (CWA). The goal was to set limits on a coordinated basis that would prevent further buildup of toxic pollutants in fish and wildlife. In the Great Lakes Critical Programs Act of 1990 (P.L.101-596, which amended the CWA), the U.S. Congress endorsed the process of establishing coordinated pollutant limits and specified a number of deadlines for the process.

In March of 1995, the U.S. EPA issued final water quality guidance for the Great Lakes system, known as the Great Lakes Water Quality Initiative (GLI). The guidance is required under section 118 of the CWA and was first proposed in 1993. Although classified as guidance, it is a regulation which is one of the most complex ever issued by the U.S. EPA. The primary purpose of the guidance is to provide a consistent level of protection for people and wildlife which may be exposed to toxic pollutants from the lakes.

The guidance establishes water quality criteria for 29 pollutants, with a particular focus on persistent bioaccumulative toxics. The guidance also includes implementation procedures, methodologies to develop criteria for additional pollutants, and anti-degradation provisions. The Great Lakes states are required to revise their water quality management programs and water quality standards consistent with the guidance.

2002 Great Lakes Legacy Act

The Great Lakes Legacy Act, signed into law in 2002, authorizes \$270 million over five years to remediate contaminated sediments in Great Lakes Areas of Concern. The Act provides \$50 million annually to monitor, evaluate or remediate contaminated sediments, or prevent new contamination. The Act also authorizes \$3 million annually for research on innovative technologies for remediating contaminated sediments; and \$1 million annually for public outreach and education. Many AOCs focus on pollution prevention and nonpoint source pollution in their remediation plans.

INTERNATIONAL AGREEMENTS AND ACTIVITIES

Great Lakes Water Quality Agreement

The Agreement, first signed in 1972, renewed in 1978, and amended in 1987, expresses the commitment of each country to restore and maintain the chemical, physical and biological integrity of the Great Lakes basin ecosystem and includes a number of objectives and guidelines to achieve these goals. It reaffirms the rights and obligation of Canada and the U.S. under the Boundary Waters Treaty and has become a major focus of International Joint Commission activity.

1972 Great Lakes Water Quality Agreement

The 1972 Agreement committed Canada and the U.S. to controlling pollution in the Great Lakes and cleaning up waste waters from industries and communities. The major issue at that time was phosphorus over-enrichment. The following annexes deal specifically with nonpoint source pollution:

Annex 3 - Control of Phosphorus: Describes the goals related to minimizing eutrophication problems and preventing degradation caused by excessive levels of phosphorus.

Annex 13 - Pollution from Nonpoint Sources: Seeks to further reduce nonpoint source inputs of phosphorus, sediments, toxic substances and microbial contaminants found in drainage from urban and rural land by first identifying land use activities contributing to water pollution and then developing and implementing watershed management plans to reduce nonpoint source inputs.

1978 Great Lakes Water Quality Agreement Amendments

In 1978, the Great Lakes Water Quality Agreement was amended to introduce the concept of the ecosystem approach which recognizes the interconnectedness of all components of the environment and the need for an integrated perspective in addressing issues of human health and environmental quality. It specifically set out "*to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem.*" The 1978 Amendment also committed Canada and the U.S. to the virtual elimination of persistent toxic substances and established a list of toxic chemicals for priority action.

1987 Great Lakes Water Quality Agreement Amendments

In 1987, a Protocol was signed amending the 1978 Agreement. The amendments aim to strengthen the management of the Agreement, develop ecosystem objectives and indicators, address nonpoint sources of pollution, contaminated sediments, airborne toxics, and contaminated groundwater, and improve monitoring. Under the Annex 2 management structure, water quality problems are addressed on a sub-basin, lake-wide, and basin-wide basis.

Annex 2 also introduced provisions to develop and implement Remedial Action Plans (RAPs) and Lakewide Management Plans (LaMPs). RAPs focus geographic Areas of Concern, follow an ecosystem approach, and draw upon broad local community involvement. LaMPs are designed to improve the environmental quality of the open waters of each of the Great Lakes, with a particular focus on critical pollutants.

1994 State of the Lakes Ecosystem Conference

The State of the Lakes Ecosystem Conferences (SOLEC) are hosted by the U.S. EPA and Environment Canada on behalf of the two countries. These conferences are held every two years in response to a reporting requirement of the binational Great Lakes Water Quality Agreement (GLWQA). The conferences are intended to report on the state of the Great Lakes ecosystem and the major factors impacting it, and to

provide a forum for exchange of this information amongst Great Lakes decision-makers.

The first conference, held in 1994, addressed the entire system with particular emphasis on aquatic community health, human health, aquatic habitat, toxic contaminants and nutrients in the water, and the changing Great Lakes economy. The 1996 conference focused on the nearshore lands and waters of the system where biological productivity is greatest and where humans have had maximum impact. Emphasis was placed on nearshore waters, coastal wetlands, lands near the Lakes, impacts of changing land use, and information availability and management.

For SOLEC 1998, the indicator development process became more formalized with the development of a suite of easily understood indicators that objectively represent the condition of the Great Lakes ecosystem components. At SOLEC 2000, the challenge was to evaluate the feasibility of the 80 indicators. SOLEC 2000 was the first conference to begin the actual assessment of the state of the lakes using these science-based indicators. The focus of SOLEC 2002 was to continue to update and assess the state of the Great Lakes using the current suite of indicators with an emphasis on biological integrity, the theme for SOLEC 2002. Work continues on the Great Lakes indicator suite in an effort to streamline this reporting to management and the public.

1997 Great Lakes Binational Toxics Strategy

The purpose of the Great Lakes Binational Toxics Strategy is to set forth a collaborative process by which Canada and the U.S. will work towards the goal of virtual elimination of persistent toxic substances resulting from human activity, particularly those which bioaccumulate from the Great Lakes basin so as to protect and ensure the health and integrity of the Great Lakes ecosystem. The goal of virtual elimination will be achieved through a variety of programs and actions, but the primary emphasis is on pollution prevention.

Through this Strategy, U.S. and Canada pledge to eliminate the release of certain pesticides and reduce the release of mercury, among addressing other pollutants.

KEY STUDIES

1970-1978 Pollution from Land Use Activities Reference Group (PLUARG) Studies

In a reference given by the U.S. and Canada (the Parties) in 1972, it was recommended that the International Joint Commission “study and make recommendations on the extent and cause of pollution from land use activities and on possible remedies.” A binational group was then assembled to assist the Commission in answering the reference. This group was called the Pollution from Land Use Activities Reference Group (PLUARG). The group was charged with addressing the following questions:

- 1) Are the boundary waters of the Great Lakes System being polluted by land drainage from land use and where is the pollution taking place?
- 2) If pollution is occurring, by what causes, to what extent and where is the pollution taking place?
- 3) What remedial measures would be most practicable to deal with such pollution, and what would be their probable cost?
- 4) What is the adequacy of existing programs and control measures for addressing non point pollution?”

Four individual task groups were created to address these questions. The first task group was charged with assessing problems, management programs and research, and attempting to set priorities in relation to the effects of land use activities on water quality in the Great Lakes basin. The second task group was charged with creating an inventory of land use and land use practices, emphasizing current trends. The third task group studied representative watersheds with the purpose of extrapolating data to the entire Great Lakes

Basin and to relate contamination of water quality to specific land uses and practices. The fourth task group was charged with assessing the degree of impairment of water quality in the Great Lakes, which also included an assessment of concentrations of contaminants in sediments, fish and other aquatic resources.

After five years of studies, workshops and public meetings a paper, titled “Environmental Management Strategy for the Great Lakes System”, was presented to the International Joint Commission in 1978 encompassing a number of findings and subsequent recommendations.

PLUARG was one of the first significant acknowledgements of the need to move beyond point sources of pollution, to consider nonpoint sources, such as agricultural fields, paved roads, and even the atmosphere. The study also reflected the dominant concerns of Great Lakes region residents in the 1970s, in its primary focus on eutrophication and toxic substances.

The initial focus of the reference group was Annex 3 of the Great Lakes Water Quality Agreement - nonpoint source pollution problem of phosphorus. The focus on Annex 3 and future phosphorus loads shifted quickly as PLUARG began exploring broader issues of nonpoint source pollution, including sediments, industrial organic compounds, fertilizers, pesticides and some heavy metals.

While focusing much of its attention, including recommendations for remedial action, to agriculture and forestry, PLUARG did consider urban development and its effects on water quality, noting that impervious surfaces such as roads and buildings alter regional hydrology, and that this has consequences in terms of nonpoint pollution. Developing urban land was identified as a significant source of several pollutants. The reference group also suggested that governments develop management plans for urban storm water runoff, to maintain natural stream flow and control the flow of sediment and toxics from commercial and industrial areas.

PLUARG noted that lack of research on urbanization had inhibited political action on this source of pollutants. Few studies had addressed pollution in coastal areas resulting from land use activities, and only a handful of studies had taken a "holistic approach" to water quality. In particular, PLUARG's final report noted the need for a more precise definition of pollution, for more research on the movement of phosphorus, heavy metals and other toxics from land use activities to water bodies, and for greater knowledge of tolerable waste loads in the Great Lakes (PLUARG 1978).

1972 Lake Erie Wastewater Management Study (LEWMS)

Congress mandated that the U.S. Army Corps of Engineers design and develop a program for the rehabilitation and environmental repair of Lake Erie (P.L. 92-500, Sections 108d and 108e). In cooperation with the U.S. EPA, USDA, and other federal and state agencies, the Corps undertook the Lake Erie Wastewater Management Study (LEWMS). This study identified phosphorus and sediments as the nonpoint source pollutants of most concern for Lake Erie and its tributaries.

1975 Great Lakes Basin Framework Study

The Water Resources Planning Act of 1965 (Public Law 89–80) created and empowered the U.S. Water Resources Council to oversee Framework Studies and assessments of water and related resources. The purpose of the framework study was to make a general survey of resources, identify problems, and determine future needs. The Great Lakes Basin Framework Study was begun in 1967 to develop an information base and to prepare components for a future comprehensive, coordinated, joint plan to guide the conservation, use, and development of water and land resources in the Great Lakes area through the year 2020. The following appendices relate to nonpoint source pollution:

Appendix 12: Shore Use and Erosion: This study contains an assessment of Great Lakes shoreland management problems, their causes, effects, and possible solutions. In the course of the study the Shore Use and Erosion

Work Group, with the cooperating federal and state agencies, developed a framework of information for future management of shoreland resources.

Appendix 13: Land Use and Management: This study contains an assessment of agricultural, forestry, urban, and other land resources. Management and major problems are outlined together with the potential to produce food, feed, fiber, and forest products. The information was intended to assist in developing a comprehensive plan for the coordinated and orderly development, management, and use of water and related land resources to satisfy projected needs in the basin.

Appendix 18: Erosion and Sedimentation: This study compiled data on erosion and sedimentation and aimed to define the nature, intensity, and trends of these problems within the basin. The study then considered alternative solutions to these problems and recommended those alternatives that were most desirable.

2001-2003 IJC Priorities Report

A fundamental role of the International Joint Commission (IJC) is to evaluate the progress of the U.S. and Canada in implementing the Great Lakes Water Quality Agreement. The IJC provides a report at least every two years that presents its finding, advice, and recommendations to the governments. Since 2001-2003, several IJC advisory boards have focused on a discrete set of priorities assigned to them by the Commissioners.

The 2001-2003 Priorities Report presents research, scientific, and policy arenas that are fundamental for advancing stewardship in the basin. Chapter Three deals with land use and urbanization, and the complex land use-water linkages. In this report, the Science Advisory Board of the International Joint Commission recommends that the U.S. and Canada undertake a major binational investigation and research effort to update and expand the PLUARG reports. It was recommended that this work be large-scale and comprehensive like the PLUARG studies, but with an exclusive focus on urbanizing development in the basin. Efforts are currently underway by the IJC to address key issues related to urbanization, though it does not appear that this will be on the scale of a reference study such as PLUARG.

1972 Lake Erie Wastewater Management Study (LEWMS)

U.S. Congress mandated that the United States Army Corps of Engineers design a program for the rehabilitation and environmental repair of Lake Erie. In cooperation with the USEPA, USDA, and other federal and state agencies, the Corps undertook the LEWMS. This study identified phosphorus and sediments as the nonpoint-source pollutants of most concern for Lake Erie and its tributaries.

1970s PLUARG Studies Begin

In a reference given by the U.S. and Canada in 1972, it was recommended that the International Joint Commission “study and make recommendations on the extent and cause of pollution from land use activities and on possible remedies.” A binational group was then assembled to assist the Commission in answering the reference. This group was called the Pollution from Land Use Activities Reference Group (PLUARG).

PLUARG was one of the first significant acknowledgements of the need to move beyond point sources of pollution, to consider nonpoint sources, such as agricultural fields, paved roads, and even the atmosphere. The study also reflected the dominant concerns of Great Lakes region residents in the 1970s, in its primary focus on eutrophication and toxic substances.

1972 Rural Development Act

This act authorized the Secretary of Agriculture to assist farmers and communities in rural areas to install pollution control measures, making erosion control a multi-purpose measure for reducing the rate at which nutrients are carried to receiving streams.

1972 Great Lakes Water Quality Agreement (GLWQA)

This 1972 agreement committed Canada and the United States to control pollution in the Great Lakes and cleaning up waste waters from industries and communities. The major issues at the time was Phosphorus over-enrichment. The following annexes address nonpoint source pollution:

Annex 3 - Control of Phosphorus: Describes the goals related to minimizing eutrophication problems and preventing degradation caused by excessive phosphorous levels.

Annex 13 – Pollution from Non-point Source: States that the parties shall seek further reduction in non-point source inputs of phosphorous, sediments, toxic substances and microbial contaminants.

1975 Great Lakes Basin Framework Study

The Water Resources Planning Act of 1965 created and empowered the U.S. Water Resources Council to oversee Framework Studies and assessments of water and related resources. The purpose of the framework study was to make a general survey of resources, identify problems, and determine future needs. The following appendices address nonpoint source pollution issues:

Appendix 12 - Shore Use and Erosion: This study contains an assessment of Great Lakes shoreland management problems, their causes, effects, and possible solutions. The Shore Use and Erosion Work Group developed a framework of information for future management of shoreland resources.

Appendix 13 - Land Use and Management: This study contains an assessment of agricultural, forestry, urban, and other land resources. The information was intended to assist in developing a comprehensive plan for the coordinated and orderly development, management, and use of water and related land resources to satisfy projected needs in the Basin.

Appendix 18 - Erosion and Sedimentation: This study compiled data on erosion and sedimentation and aimed to define the nature, intensity, and trends of these problems within the basin. The study then considered alternative solutions to these problems and recommended those alternatives that were most desirable.

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1972 Federal Environmental Pesticides Control Act (FEPCA)

This act amended the 1947 Federal Insecticide, Fungicide, and Rodenticide Act, establishing a program under the EPA for controlling the sale, distribution, and application of pesticides through an administrative registration process.

1972 Coastal Zone Management Act

This act established a voluntary national program within the Department of Commerce to encourage coastal states to develop and implement coastal zone management plans.

1972 Federal Water Pollution Control Act (Clean Water Act)

This act established the basic structure for regulating discharges of pollutants into the waters of the United States, and gave EPA authority to implement pollution control programs, such as setting wastewater standards for industry. Nonpoint source pollution sections include:

Section 208: Area-wide Waste Treatment Management

This Section calls for area-wide water pollution planning that would include both point and nonpoint sources and pollution abatement programs.

Section 303 (b): Total Maximum Daily Load Program

The purpose of this program is to identify waters not meeting state water quality standards, and for those waters, calculate the max amount of pollutant the water can receive while meeting water quality standards.

Section 303 (d): Impaired Waters List

This section requires, states, territories, and authorized tribes to develop lists of impaired waters, as well as establish priority rankings for waters on the lists and develop TMDLs for these waters.

Section 402: National Pollution Elimination System Permit Program

The goal of this program is to assure that U.S. waters remain fishable, swimmable, and drinkable, through regulating point source discharges to surface water.

1978 PLUARG studies are published

After five years of studies, workshops and public meetings the reference published a paper, titled "Environmental Management Strategy for the Great Lakes System", was presented to the International Joint Commission in 1978 encompassing a number of findings and subsequent recommendations.

The initial focus of the reference group was Annex 3 of the Great Lakes Water Quality Agreement - nonpoint source pollution problem of phosphorus. The focus on Annex 3 and future phosphorus loads shifted quickly as PLUARG began exploring broader issues of nonpoint source pollution, including sediments, industrial organic compounds, fertilizers, pesticides and some heavy metals.

PLUARG's final report noted the need for a more precise definition of pollution, for more research on the movement of phosphorus, heavy metals and other toxics from land use activities to water bodies, and for greater knowledge of tolerable waste loads in the Great Lakes. The numerous reports prepared under this reference became the standard regarding knowledge of nonpoint source pollution in the Great Lakes basin.

1985 Food Security Act (Farm Bill)

The Food Security Act was the first Farm bill to have a chapter devoted to conservation. The bill included many new conservation programs to help reduce nonpoint source pollution as well as protect the soil resource productivity. Not since the Soil Conservation and Domestic Allotment Act of 1935 had Congress set forth such a sweeping conservation policy for the nation's farms and ranches. This legislation allowed for the creation of the following conservation programs and provisions:

Highly Erodible Land Conservation Compliance Program:

This Act requires that all persons that produce agriculture commodities must protect all cropland classified as being highly erodible from excessive erosion. The purpose of these provisions is to remove the incentive to produce annually tilled agricultural commodity crops on highly erodible land (HEL).

Conservation Reserve Program: This voluntary restoration and conservation program allows agricultural landowners to receive annual rental payments and cost-share assistance to establish long-term, resource conserving vegetative covers on eligible farmland.

Environmental Quality Incentives Program: The purpose of this program is to provide technical, educational, and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner.

Wetland Reserve Program: This voluntary program provides landowners with financial and technical assistance to restore and protect wetlands. It began in 1985 and it funds cleanup, restoration, and pollution prevention activities.

1987 Water Quality Act of 1987 (Clean Water Act Amended)

The Clean Water Act Amendments in 1987 focused on Nonpoint source pollution as one of its four main areas. The issue of nonpoint source pollution had been addressed in the past through the Clean Water Act. However, due to problems such as lack of funding, debates over regulatory versus voluntary approaches, and inadequate data, there was relatively little progress in the area of nonpoint source pollution control. Congress felt that there was a need for stronger federal leadership to help focus state and local efforts toward nonpoint source pollution.

In response, Congress created Section 319 which combined clauses relating to nonpoint source pollution that had been distributed through the Clean Water Act.:

Section 319 - Nonpoint source program:

Through Section 319 Nonpoint Source Programs, states were to address nonpoint source pollution by

- *Conducting statewide assessments* of their waters to identify those that are impaired or threatened because of nonpoint sources;
- *Developing nonpoint source management programs* to address the impaired or threatened waters due to nonpoint source assessments; and,
- *Implementing their EPA-approved nonpoint source management programs* over a multiyear time frame.

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1978 First Amendment to the Great Lakes Water Quality Agreement

In 1978, the Great Lakes Water Quality Agreement was amended to introduce the concept of the ecosystem approach which recognizes the interconnectedness of all components of the environment and the need for an integrated perspective in addressing issues of human health and environmental quality. It specifically set out "*to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem.*"

1978 Canadian Fisheries Act

The Fisheries Act has been in place for over 135 years to conserve and protect fish and fish habitat in Canadian freshwater and marine commercial and recreational fisheries. The Central pollution prevention provision was authorized in 1978 and is commonly referred to as the "general prohibition". This subsection prohibits the deposit, into fish bearing waters, of substances that are deleterious to fish; this can include harmful plant effluents and runoff of pesticides or fertilizers from land or individual substances deposited to water.

1987 Great Lakes Water Quality Agreement Amendments

These 1987 amendments aim to strengthen the management of the Agreement, develop ecosystem objectives and indicators, address nonpoint sources of pollution, contaminated sediments, airborne toxics, and contaminated groundwater, and improve monitoring. Under the Annex 2 management structure, water quality problems are addressed on a sub-basin, lake-wide, and basin-wide basis. Annex 2 also introduced provisions to develop and implement Remedial Action Plans (RAPs) and Lakewide Management Plans (LaMPs). RAPs focus geographic Areas of Concern, take an ecosystem approach, and draw upon broad local community involvement. LaMPs are designed to improve the environmental quality of the open waters of each of the Great Lakes, with a particular focus on Critical Pollutants.

1990 Food, Conservation and Trade Act (1990) (Farm Bill)

The 1990 Farm Bill contains numerous subtitles and chapters related to sustainable agriculture. Major components of the conservation title include: Highly erodible land and wetland conservation; agricultural water quality incentives; programs for environmental easement, watershed protection, flood control, integrated farm management, resource conservation, Great Plains Conservation, state water quality coordination; administration of environmental programs; Agricultural Council on Environmental Quality; water quality research, education and coordination; water quality and nutrient management research; and pesticide record keeping.

1990 Great Lakes Fish and Wildlife Restoration Act

This act requires a comprehensive study of Great Lakes Basin fishery resources, specifically, the purposes of the Act are to: carry out a comprehensive study of the status and the assessment, management and restoration needs of the fishery resources of the Great Lakes Basin; develop proposals to implement recommendations from the study; provide assistance to the Great Lakes Fishery Commission, states, Indian tribes and other interested entities to restore and manage the fish and wildlife resources of the Great Lakes Basin.

1990 Pollution Prevention Act

The Pollution Prevention Act focused industry, government, and public attention on reducing the amount of pollution through cost-effective changes in production, operation, and raw materials use. The Act allowed for the creation of the 1993 Pollution Prevention (P2) Demonstration Grants Program, administered by EPA.

1990 Great Lakes Critical Programs Act

This act amends part of the Federal Water Pollution Control Act (Clean Water Act) by putting into place requirements for the US EPA’s Great Lakes National Program Office (GLNPO) to implement Great Lakes programs such as the Great Lakes Water Quality Agreement. This act, charges GLNPO, under the EPA, to carry out nonpoint source pollution related provisions, including: establishment of the Great Lakes system-wide surveillance network to monitor the water quality of the Great Lakes; development of water quality guidance for the Great Lakes; establishment and process of establishment of lake-wide management plans (LaMP) for the Great Lakes; Development of a 5-year plan and program for the reduction of nutrients into the Great Lakes.

1990 Coastal Zone Act Reauthorization Amendments (CZARA)

This act was reauthorized and amended as part of the Omnibus Budget Reconciliation Act of 1990. As part of the new requirements for nonpoint source controls (Section 6217), states must issue management measures for certain categories of runoff and erosion.

Section 6217 (g): requires states to evaluate nonpoint sources and to identify coastal areas that would be negatively affected by specified land uses. This section also required EPA to develop guidance for state implementation of nonpoint source pollution management measures for five major categories of nonpoint sources.

1994 State of the Lakes Ecosystem Conference

The State of the Lake Ecosystem Conferences are hosted by the U.S. EPA and Environment Canada on behalf of the US and Canada. These conferences are held every two years in response to a reporting requirement of the binational Great Lakes Water Quality Agreement (GLWQA). The conferences are intended to report on the state of the Great Lakes ecosystem and the major factors impacting it, and to provide a forum for exchange of this information amongst Great Lakes decision-makers.

1995 Great Lakes Water Quality Initiative

The Great Lakes states agreed in 1989 to work with the Environmental Protection Agency (EPA) to develop uniform pollution limits to protect the lakes and implement the Clean Water Act (CWA). The goal was to set limits on a coordinated basis that would prevent further buildup of toxic pollutants in fish and wildlife. In 1995 EPA issued final water quality guidance for the Great Lakes system, known as the Great Lakes Water Quality Initiative (GLI). The guidance is required under section 118 of the CWA. The Great Lakes states are required to revise their water quality management programs and water quality standards consistent with the guidance.

1995 Canadian Environmental Assessment Act

The Canadian Environmental Assessment Act (CEAA) was first implemented in 1995, replacing the Federal Environmental Assessment and Review Process Guidelines Order that had been in place since 1984. It requires federal authorities, such as Agriculture and Agri-Food Canada (AAFC) and the Canadian Food Inspection Agency (CFIA), to subject certain projects to environmental assessments where they are the proponent, administrator of the land involved, contributing funds, or have a regulatory responsibility that has been identified in CEAA's Regulations.

1991 National Water Quality Assessment (NWQA) Program

The purpose of the NAWQA program is to describe the status and trends in the quality of the nation’s water and to provide an understanding of the natural and human factors that affect the quality of these resources. NAWQA has produced reports describing the status and trends of pesticides, nutrients, volatile organic chemicals, trace elements, surface water quality modeling, and finding on nutrients and pesticides.

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1996 Changes to Section 319 - Nonpoint Source Program:

In 1995, representatives of EPA and the states, under the auspices of the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA), initiated joint discussions to develop a new framework for further strengthening state nonpoint source programs. There was a need to strengthen the programs as states had become more experienced at addressing nonpoint source pollution, and programs had matured considerably since the inception of the nonpoint source program in 1987. These discussions resulted in new national section 319 program and grant guidance that EPA signed and ASIWPCA endorsed.

2001-2003 IJC Priorities Report

The IJC provides a report at least every two years that presents its finding, advice and recommendations to the US and Canadian governments. Specific to the PLUARG reports, chapter three of the Priorities Report deals with land use and urbanization, and the complex land use-water linkages. In this report, the Science Advisory Board of the International Joint Commission recommends that the U.S. and Canada undertake a major binational investigation and research effort to update and expand the PLUARG reports. It was recommended that this work be large-scale and comprehensive like the PLUARG studies, but with an exclusive focus on urbanizing development in the basin.

1997 Great Lakes Binational Toxics Strategy

The purpose of the Great Lakes Binational Toxics Strategy is to set forth a collaborative process by which Canada and the U.S. will work towards the goal of virtual elimination of persistent toxic substances resulting from human activity, particularly those which bioaccumulate, from the Great Lakes basin, so as to protect and ensure the health and integrity of the Great Lakes ecosystem. The goal of virtual elimination will be achieved through a variety of programs and actions, but the primary emphasis will be on pollution prevention.

2002 Great Lakes Legacy Act

The Great Lakes Legacy Act, signed into law in 2002, authorizes \$270 million over five years to remediate contaminated sediments in Great Lakes Areas of Concern. The Act provides \$50 million annually to monitor, evaluate or remediate contaminated sediments, or prevent new contamination. The Act also authorizes \$3 million annually for research on innovative technologies for remediating contaminated sediments; and \$1 million annually for public outreach and education. Many AOCs focus on pollution prevention and nonpoint source pollution in their remediation plans.

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1996 Federal Agriculture Improvement and Reform (FAIR) Act (Farm Bill)

The 1996 Farm Bill implemented both new conservation measures and revitalized previous measures. Two of the "older measures" are the Sodbuster and Swampbuster provisions, introduced in the 1985 Farm Bill. Also created the Environmental Quality Incentives Program (EQIP) and the Wildlife Habitat Incentives Program (WHIP).

Environmental Quality Incentives Program (EQIP)

EQIP offers financial and technical help to assist eligible participants install or implement structural and management practices on eligible agricultural land.

Wildlife Habitat Incentives Program (WHIP)

This is a voluntary restoration program for the development and improvement of wildlife habitat, primarily on private lands. It provides technical assistance and up to 75 percent cost-share assistance to establish and improve fish and wildlife habitat.

1999 Canadian Environmental Protection Act (CEPA)

The Canadian Environmental Protection Act, 1999 is the centerpiece of the federal government's pollution control regime. The underlying principles are to ensure pollution prevention, achieve sustainable development, protect biological diversity, exercise caution in cases of scientific uncertainty, adopt an ecosystem approach to environmental management, and virtually eliminate persistent and bioaccumulative toxic substances.

Nonpoint source pollution provisions include: regulating nutrients such as phosphates that may adversely affect or degrade aquatic ecosystems and regulations on ocean dumping and protects the marine environment from land-based sources of pollution through non-regulatory means.

2002 Farm Security and Rural Investment Act of 2002 (Farm Bill)

The Farm Security and Rural Investment Act of 2002 (Farm Bill) is touted as being the single most significant commitment of resources toward conservation on private lands in the Nation's history. The legislation responds to a broad range of emerging natural resource challenges faced by farmers and ranchers, including soil erosion, wetlands, wildlife habitat, and farmland protection. The 2002 farm bill created a new working lands policy called the Conservation Security Program and the Great Lakes Basin Program for Soil Erosion and Sediment Control.

Great Lakes Basin Program for Soil Erosion And Sediment Control

This program, which was first initiated in 1991, was authorized in the 2002 Farm Bill. It is a federal/state partnership that has supported well over 200 demonstration and technical assistance projects throughout the Great Lakes region for soil erosion and sediment control.

2002 Conservation Security Program (SCP)

This is a voluntary program that provides financial and technical assistance to promote the conservation and improvement of soil, water, air, energy, plant and animal life, and other conservation purposes on Tribal and private working lands.