



Office of Water Management
Indiana Department of
Environmental Management

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1995 Indiana Lake Management Conference to be Held in Warsaw

In 1995, the Indiana Lake Management Conference will return to its roots. The inaugural lake management conference was held seven years ago in Warsaw. At that first conference, 160 people came out to the Center Lake Pavilion to spend a day talking about Indiana lakes. The 7th Annual Indiana Lake Management Conference will be held April 7-8, 1995 at the Warsaw Holiday Inn.

The conference, an annual event sponsored by the Indiana Department of Environmental Management, is the only meeting in the state where citizens, lake management professionals, government officials, and university researchers come together to discuss management of Indiana's lakes. Mark your calendar!

Clean Lakes Program to be Featured on Basketball Half-time Report

The Indiana Clean Lakes Program (CLP) will be one of two water quality initiatives featured on the half-time report for the first televised Indiana University basketball game of the season on November 11. CLP staff were filmed while sampling on Lake Tippecanoe this past summer. The other story will highlight zebra mussel research ongoing at Lake Wawasee.

Starve Hollow Lake Watershed Project

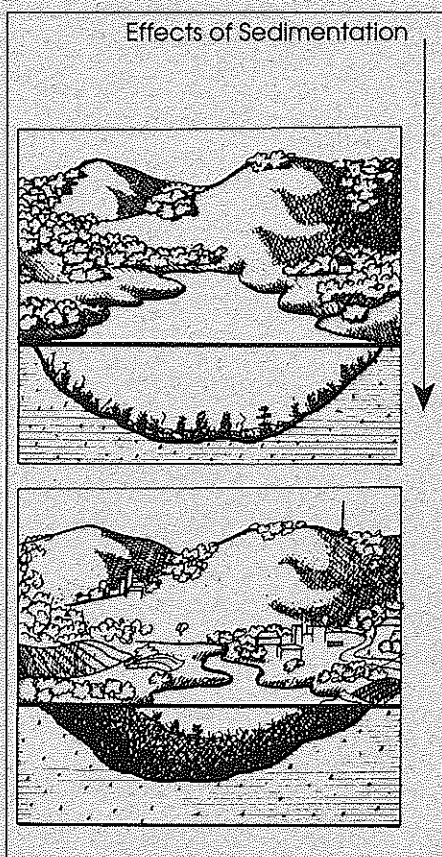
Starve Hollow Lake, a 145-acre lake located in Jackson County, has lost more than 20 acres of open water and wetlands since its construction in 1939. This is due to sediments entering the lake from the extensive agricultural fields within the watershed. The Jackson County Soil and Water Conservation District (SWCD) received a Section 319 nonpoint source grant early in 1993 from the Indiana Department of Environmental Management (IDEM) to help prevent soil and pollutants from entering the water. The funds were granted to the IDEM specifically for this project by the U.S. Environmental Protection Agency.

More than 70% of the soils in the watershed are highly erodible. The Section 319 funds of \$95,000 is supporting a cost-share program to help farmers install best management practices (BMPs) to control soil erosion in the watershed. Some of the BMPs being installed include vegetative filter strips, grassed waterways, grade stabilization structures, and water and sediment control basins.

In addition, area landowners have been informed about no-till drills available through the District. As of this fall, 200 acres had been seeded in 1994 with the no-till drills. Video and slides have also been taken to document the installation practices, and signs have been posted identifying the project area and listing the primary sponsor and the participating agencies.

(Continued on next page)

(STARVE HOLLOW LAKE . . .
continued from page 1)



The program has been well received by the landowners and the Jackson County SWCD is considering pursuit of additional funds through Section 319 or other programs to continue this work in the watershed. To learn more about this project in the Starve Hollow Lake watershed, please contact the Jackson County SWCD at 812/358-3380 or the IDEM's Office of Water Management,

Nonpoint Source Program at 317/243-5173.

Coordinated Resource Management Workshops

The Indiana Department of Environmental Management (IDEM) has awarded Section 319 funds to the U.S. Department of Agriculture Soil Conservation Service (SCS) to conduct a series of workshops throughout the state about the use of coordinated resource plans for watershed management. The funding was provided by the U.S. Environmental Protection Agency through a grant to the IDEM specifically for this project. The workshops will focus on educating local land users, managers, and other concerned parties on how to use the Coordinated Resource Management (CRM) process for cooperative development of management plans that reflect the best use of the many resources within the watershed.

CRM is a collaborative planning process. The CRM process began developing in 1948 and has been used predominantly in the Western United States by the Society for Range Management as a

method of conflict resolution for controversies that arose over the use of public lands and resources. The process provides a proven approach to development of cooperative resource management plans.

The workshops will be scheduled in the fall of 1994 and the spring, summer, and fall of 1995. Workshops currently scheduled for the fall of 1994 included one in Rushville on October 25-27, and one in Evansville on November 15-17. For more information on these workshops and others to be scheduled for 1995, please contact the state office of the SCS in Indianapolis at 317/290-3220 or the IDEM's Office of Water Management, Nonpoint Source Program at 317/243-5173.

Unusual Indiana Partnership Announces A Grand Plan For The Grand Marsh

A unique partnership of local, state, and federal agencies, conservation organizations and businesses formed the Indiana Grand Kankakee Marsh Restoration (Project) to help restore an area once considered one of the finest wetland habitats in the world. In April, the partners submitted a competitive grant application to the council committing over \$2.3 million in land, cash, and in-kind services. On September 13 the North American Wetlands Conservation Council awarded the Project a grant of \$1.5 million in matching funds.

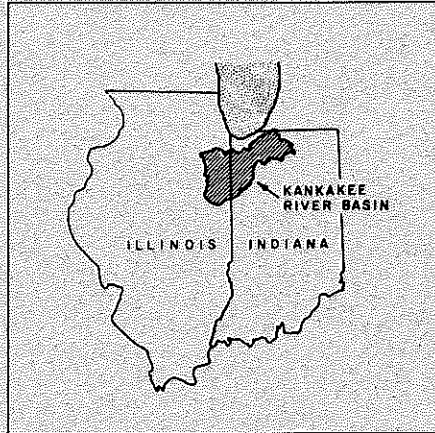
Plans for the initial two-year phase of the Indiana Grand Kankakee Marsh Restoration Project were announced recently by the 14 partners. The grant covers the first two years of the project and will protect, restore, and enhance 4,400 acres of wetlands in the Kankakee River Basin. The restoration project is part of a 10-year plan to further restore, protect and enhance 26,500 acres of wetlands and associated uplands in the Kankakee River Basin.

"This is a real feather in Indiana's wildlife management cap," declared Governor Evan Bayh. "Partnerships are the key to success for future wildlife habitat development and protection efforts."

The 14 founding partners of the Indiana Grand Kankakee Marsh Restoration Project are: Cedar Lake Fish and Game; Ducks Unlimited; Indiana Department of Natural Resources; Kankakee River Basin Commission; Lake County Parks; Lowel Parks Department; The Nature Conservancy; J. F. New and Associates; NIPSCO Industries, Inc.; Prime-Time Cable Ads; Snell Environmental Group,

Inc.; U.S. Fish and Wildlife Service; Waterfowl USA; and Wille and Stiener Real Estate. Dick Blythe of Blythe Sports Shops in Griffith and Valparaiso, Indiana, and Greg Costakis, a NIPSCO employee at Rollin M. Schafer Generating Station, where a large tract of land will become part of the project, serve as co-chairs of the committee. Lake County Park's Heritage Foundation will administer the project.

The project lies within the heart of the former 500,000-acre Grand Kankakee Marsh, one of the most significant natural regions in Indiana and also one of the most disturbed. From the 1850s to the early 1900s settlers undertook a massive effort to drain much of the marsh by channelizing the Kankakee River. Upon completion of the drainage project, the river had been shorted to one-third its



natural length. The wetland loss heralded the rapid decline in wetland-dependent species in northwest Indiana.

At least 220 state threatened or endangered animal and plant species, 5 federally endangered or threatened species, and 10 federal candidate species for threatened or endangered status are found in the project area. Presently, more than 100,000 waterfowl and nearly the entire continental population of greater sandhill cranes migrate through the region during the spring and fall.

In addition to wildlife values, this project increases Indiana's public land base, providing a broad range of outdoor recreational opportunities. Other benefits include enhanced water quality, reduced flooding of private land, groundwater recharge, and expanded green space.

The Indiana Grand Kankakee Marsh Restoration Project is part of the North American Waterfowl Management Plan, a cooperative international agreement between the United States, Canada and Mexico, to enhance and protect high quality wetland habitat throughout the continent. In the United States, initial efforts have focused on 10 of the most important waterfowl breeding, migration and wintering areas in the country.

For more information, contact Bob Nickovich, Lake County Parks 219/755-3696.

DNR Modifies Application Process for Aquatic Vegetation Control Permit

In an effort to comply with the Division of Fish & Wildlife's (DFW) charge to accept a greater role in environmental stewardship, the application review process for the Aquatic Vegetation Control permit has been modified. As part of the change, commercial applicators will be asked to submit their permit earlier to allow time for the involved parties to work out any concerns or difficulties. A meeting has been scheduled in northern Indiana in late November to inform the commercial applicators of the new procedures.

The modifications will allow more time for the applications to be thoroughly reviewed by biologists from the DFW, the Division of Soil Conservation and the Indiana Department of Environmental Management. While the process is not meant to be more restrictive than in the past, the new procedures will help safeguard plant species that are beneficial to aquatic environments. Permits that have the potential to negatively impact significant wetland vegetation, natural shorelines, wetland conservation areas and nature preserves will continue to be closely scrutinized.

For additional information about these changes, please contact the following Fish & Wildlife offices:

Fisheries North Region
Tri-Lakes Fisheries Station
5570 N. Fish Hatchery Road
Columbia City, IN 46725
219/691-3181

Fisheries South Region
Avoca State Fish Hatchery
P.O. Box 16
Avoca, IN 47420
812/279-1215

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New Educational Publications Available

Life on the Edge...Owning Waterfront Property

This new guidebook was designed to assist owners of waterfront property in preventing problems associated with waterfront living. It also shows how to enhance the environmental value of waterfront property. The book's straightforward writing style and attractive graphics make it highly readable.

Living on the Edge contains detailed information on virtually any topic of interest to a waterfront property owner. The 95-page book was written by Michael Dresen and Robert Korth of the University of Wisconsin Extension Lake Management Program. For information on obtaining the book, contact Dorothy Snyder, UW-Extension Lake Management Program, 715/346-2116.

Videos Help Kids Study Lake Eutrophication

Most kids these days can reel off long, complicated dinosaur names, why not teach them an important word like "eutrophication"?

A new educational program has been developed for upper elementary school students by the New Hampshire Department of Environmental Services. The Interactive Lake Ecology program features seven 5-to-7 minute videos, in which the narrator explains one concept about water and asks a thought-provoking question to whet students' appetites before they do activities from their workbooks that illustrate the concept.

The unique and contemporary videos, professionally produced with the collaboration of New Hampshire limnologists, use photography combined with animation. Special effects add visual interest—for example, the image of the narrator introducing a piece of monitoring equipment is superimposed on a view of someone using it.

The student workbook presents the basics of the water cycle, the food chain, watersheds, and lake ecology. Students read case studies of three different sample lakes. From data given in their workbooks, students record field observations, laboratory and field data, and land use within the watershed described in the case study. Using this log, the students determine the trophic classification of the lake and make recommendations for watershed protection. Experiments demonstrating various concepts reinforce the explanations provided in the video.

The teaching package containing the videos, a teaching guide, and 20 student workbooks may be purchased for \$94. For more information, contact Jody Connor or Natalie Landry, NHDES, 6 Hazen Drive, Concord, NH 03301; 603/271-3503.

Meetings

December 4-7, 1994. 56th Midwest Fish and Wildlife Conference. "The Future of Fish and Wildlife is Now," Indianapolis, Indiana. Contact: Debbie Fairhurst, Division of Fish and Wildlife, Atterbury Fish & Wildlife Area, Edinburgh, IN 46124. 318/232-7535.

December 12-13, 1994. National Groundwater Conference. "Protecting Ground Water: Promoting Understanding, Accepting Responsibility and Taking Action," Washington, DC. Contact: Stacey Safagaj, 202/833-8317.

April 7-8, 1995.. 7th Indiana Lake Management Conference. Warsaw Holiday Inn. Sponsored by Indiana Department of Environmental of Environmental Management. Contact: Bobby Brooking, 812/855-4556.

PERSPECTIVES

... like a boy of whom because of a wasting disease only the bones are left, the fertile and soft soil is everywhere eroded and only the sterile skeleton is left. But in those [old] times, when the land was still undamaged, its mountains were high and covered with earth and likewise its plains, which are now called stony fields, consisted of fertile soil.

—Pliny, the Greek philosopher, naturalist, and historian, writing about soil erosion which is thought to have contributed to the decline of the ancient Greek civilization.

Lake and River Enhancement FY 94-95 Funding Recommendations

The Indiana DNR Division of Soil Conservation has allotted \$830,000 for lake and river enhancement (LARE) projects for the current fiscal year. Division staff used a ranking formula developed in 1992 for recommending the lake and land treatment projects to be funded.

The following proposals for lake enhancement projects were approved at the July meeting of the State Soil Conservation Board:

<i>Lake</i>	<i>Location</i>	<i>Type</i>	<i>Estimate</i>
Lake Wawasee	Kosciusko/Noble	Feasibility	\$ 48,000
Crooked Lake	Whitley	Design	30,000
Lake Shafer	White	Design	18,500
Lake Manitou	Fulton	Construction	79,840
West Boggs Lake	Daviess	Construction	131,500
Sullivan Lake	Sullivan	Construction	76,000

The proposals are based on pre-applications, with the scope of work and final cost to be submitted later for individual Board approval. An additional \$100,000 in Build Indiana funds were recently approved by the State Budget Committee for Lake Shafer.

The Board also approved funding \$446,000 in watershed land treatment projects as follows:

<i>Watershed</i>	<i>Location</i>	<i>Estimate</i>	<i>Year</i>
Adams Lake	LaGrange	\$ 37,000	2
Blue River	Noble/Whitley	80,000	3
Cree/Schockopee	Noble	30,000	3
Lake of the Woods/ McClish Lake	Noble	30,000	2
Ridinger Lake	Kosciusko/Whitley	42,000	3
Lake Lemon	Monroe/Brown	0	2
West Boggs	Daviess/Martin	25,000	2
Lake Salinda	Washington	0	3
Upper Laughery	Ripley	65,000	3
Wildcat Creek	Clinton	12,000	3
Barr Creek	Posey/Vanderburgh	65,000	3
Cox Ditch	Vigo	0	3
Pigeon Creek	Gibson	60,000	2

Lake and River Enhancement Applications for Fiscal Year 1996

Pre-application forms are now available from the Lake and River Enhancement (LARE) Program for projects to be funded after July 1, 1995. Submittal of a pre-application form is required from any lake organization interested in acquiring funding for: (1) a diagnostic/feasibility study, (2) a design study, or (3) a construction project. Organizations which are interested should

complete the pre-application form and return it to LARE by January 31, 1995. For further information or to request an application form, contact: Barbara Curry at 317/233-3870.

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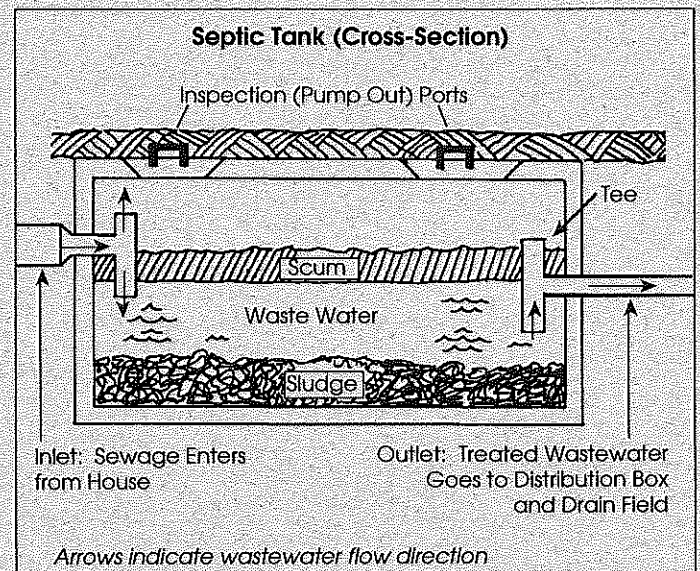
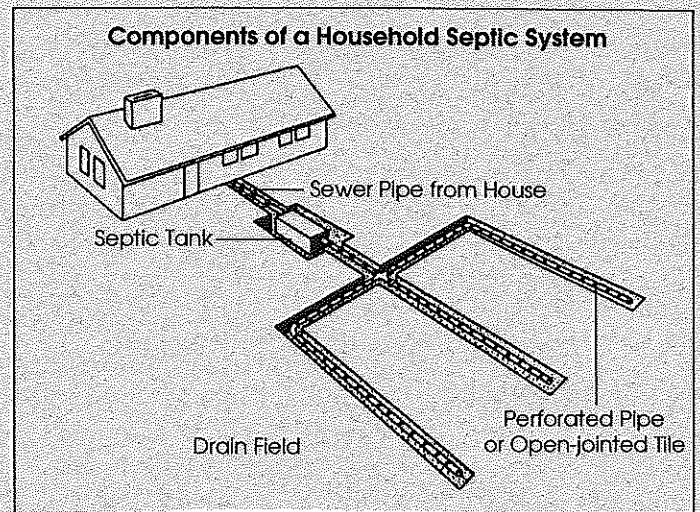
Just How DOES a Septic System Work?

Many lake property owners in Indiana rely on septic systems to treat household wastewater. A properly designed, installed and maintained septic system can be an effective method for onsite wastewater treatment. But many homeowners having such systems do not know how they work.

A typical septic system consists of an underground septic tank, a distribution box, and a drain field. Wastewater leaves the home through an underground pipe connected to the septic tank. In the tank, heavier solids in the wastewater settle to the bottom and accumulate as sludge. Grease, foam, and lighter solids float on the surface of the wastewater and form a layer of scum in the tank. Bacteria present in the septic tank digest some of the solids but most of the solids accumulate in the tank and need to be periodically pumped out.

Partially treated wastewater, or effluent, flows out of the septic tank, through the distribution box, and into the drain field. A baffle prevents floating material from flowing out into the drain field. The drain field consists of perforated pipe or open-jointed tile buried in a series of parallel trenches. Wastewater seeps out of the holes in the pipe and filters through a layer of coarse gravel and into the soil below the trench. The wastewater is treated and cleansed by bacteria and other organisms in the soil and also by physical and chemical reactions that occur within the soil. Eventually, the treated wastewater filters through the soil and enters the groundwater below the drain field.

Next issue, "Tips for Proper Operation and Maintenance of Septic Systems."



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