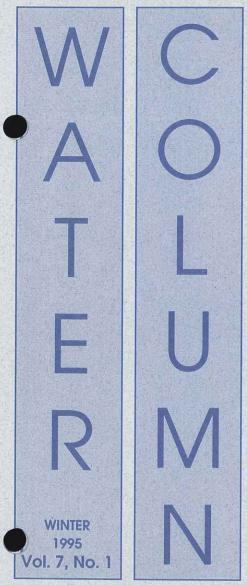


Office of Water Management Indiana Department of Environmental Management



1995 Lake Conference is Coming Soon!

The 1995 Indiana Lake Management Conference is just around the corner. This year's conference will be held at the Warsaw Holiday Inn. Registration information and a preliminary program is included in a pull-out at the center of this issue. Registration deadline is March 27. Register today!

Great American Secchi Dip-In a Success

Bob Carlson (Kent State University) writes us that the 1994 Great American Secchi Dip-In was a great success, thanks to the participation of over 800 volunteers in Illinois, Indiana, Ohio, Michigan, Minnesota, and Wisconsin. Over 40% of the volunteers who were asked to participate did so.

Dip-In volunteers will be receiving a summary of the data when everything is completed. The data have been checked and rechecked, and maps are being made from the data. The lowest transparency was six inches; the best, 34 feet. Both of these measurements were from Minnesota lakes.

Most volunteers questioned in a survey accompanying the Dip-In event thought their lakes were in very good to excellent condition, but what is meant by good condition varies from region to region. For example, volunteers in Ohio were more accepting of poorer transparencies than volunteers in Minnesota or Wisconsin. Algae, weeds, and turbidity were thought to be the biggest water quality problems, but trash and boating-related problems were problems to many volunteers. Jet skis and too many boats for small lakes were noted as problems for some.

With more funding, Bob hopes to extend the Dip-In from the initial Midwestern states to across the nation to produce the first snapshot of water quality in the U.S. By continuing the Dip-In for future years, regional and national changes could become apparent.

Thanks go out to all the Indiana volunteers who participated!

Legislative Update

Several bills have been introduced into the state legislature which will greatly affect the delivery of water protection programs in Indiana. Two of the bills are profiled below.

• **Senate Bill 309.** Introduced by Sen. Harold Wheeler, this bill will transfer the responsibilities for several major state water programs from IDEM to IDNR. Each of these programs is authorized by the Federal Clean Water Act.

Section 314—Clean Lakes Program (will affect the entire Indiana Clean Lakes Program including this *Water Column* newsletter, the Volunteer Lake Monitoring Program, the Indiana Lake Management Conference and the Lake Water Quality Assessment Program).

Section 319—Nonpoint Source Program (provides grants to local agencies for implementing best management practices and

(Continued on next page)

(LEGISSLATIVE UPDATE ... continued from page 1)

education programs designed to reduce runoff and associated pollutants).

Section 401—provides water quality protection and certification for activities covered by the Corps of Engineers Section 404 dredge and fill permits.

This bill was unanimously approved by the Senate Natural Resources Committee and forwarded to the Senate.

• Senate Bill 368. Also introduced by Sen. Wheeler, this bill will result in broad exemptions from environmental regulations for county drainage projects. Current water laws require that county surveyors and drainage boards work with state and federal agencies, particularly on projects which affect wetlands, to minimize the environmental impacts of drain maintenance and reconstruction through a permit process. County surveyors regulate over 36,000 miles of drains in 63 of Indiana's 92 counties.

Your state Senator or Representative can provide you with additional information and copies of these bills by writing them in care of: Statehouse, 200 W. Washington St., Indianapolis, IN 46204-2785.

Cars + Trout = Satisfied Customers All Around

Ken Vance's new car dealership in Eau Claire. Wisconsin is gaining national attention for the stormwater best management practices (BMPs) incorporated into its design. The dealership sits within the Lowes Creek watershed where it serves as a Priority Watershed Demonstration Project designed to improve water quality in the nearby creek. A number of on-site stormwater management practices are being demonstrated including, cleanwater diversion, roof and paved area runoff infiltration beds, grassy drainage swales, and zinc-free roofing. The objectives of these practices are to maximize stormwater infiltration while keeping water that does run off to Lowes Creek as cool and clean as possible for the stream's trout. Ken is a member of a group of 20 car dealerships from across the nation. After the group toured his site, four dealers from three states decided to incorporate stormwater management ideas into their new designs. (Keeping Current, Oct. 1994.)

Questions From Readers

- Q: Why are there so many lakes in Northern Indiana but so few in Southern Indiana?
- A: Nearly all of the approximately 400 natural lakes in Indiana were formed as a result of glaciers. As glaciers advanced they carved out depressions in the land. The Great Lakes were formed by this glacial carving. When the glaciers retreated they left huge blocks of ice buried in the loose rock and soil deposited by the glacier. When the buried ice blocks melted they left holes in the glacial till which became lakes. The resulting lakes are called "ice block" or "kettle" lakes and most natural lakes in Indiana were formed this way.

The last glaciers only extended to the center of the state and receded about 10,000 years ago so Indiana lakes are relatively young. The limited southward extent of the last period of glaciation is why there are virtually no natural lakes south of Indianapolis. By the way, the oldest and deepest lakes in the world were formed by shifting faults in the Earth's crust. One of these fault lakes, Lake Baikal in Russia, is 5,300 feet deep and over 25 million years old!

Zebra Mussels Are Now a Firefighter Hazard

Zebra mussels have been added to the list of occupational hazards for firefighters in Wallaceburg, Ontario, which is about 50 miles northwest of Detroit on the Sydenham River. A UPI article quotes Captain Eric Gorry of the Wallaceburg Fire Department as saying that zebra mussels living inside fire hydrants got into and clogged the hoses and pumps on three fire trucks. The mussels were discovered when the firefighters tried to use their equipment to douse a blaze at a retirement center. Fortunately, no one was hurt, but the retirement center was gutted. (Twine Line, Oct. 1994.)

To receive free quarterly issues of WATER COLUMN, send your name and address to:

WATER COLUMN

SPEA 347

Indiana University

Bloomington, IN 47405

Seventh Annual Indiana Lake Management Conference April 7-8, 1995 Warsaw Holiday Inn



Sponsors:

Indiana Department of Environmental Management
Indiana University School of Public & Environmental Affairs

Local Facilitators:

Kosciusko County Lakes Preservation and Development Council Lake Tippecanoe Property Owners, Inc. Kosciusko County Soil and Water Conservation District

Lodging: A block of rooms is being held at the Holiday Inn for the conference until March 28 at the rate of \$47 for a single and \$53 for a double. To reserve a room, call (219) 269-2323 and mention that you will be attending the Indiana Lake Management Conference.

Posters: Your lake organization or non-profit group is invited to bring displays, posters or sample materials. We will provide table space at no charge, but you need to supply any support materials. To reserve a table or space, check the box on the registration form.

1995 Indiana Lake Management Conference

The 1995 Indiana Lake Management Conference, our seventh annual event, promises to be an exciting and informative conference. This is the only time during 1995 that citizens, lake management professionals, scientists, and government officials will get together to exchange ideas on how to best manage and protect Indiana's lakes. This year, we return to our conference roots—Warsaw—where the first Indiana Lake Management Conference was held in 1989.

The timetable for this year's conference is different than in years past. We will begin Friday morning and conclude early Saturday afternoon. In between will be a plethora of activities and information for you to take in. Friday morning features a "Know Your Watershed" workshop conducted by the Conservation Technology Information Center (CTIC). The workshop includes videos, written materials, and discussion on watershed characteristics, building partnerships for managing watersheds, leadership and communication needs, and conflict resolution. After lunch, you won't want to miss the annual meeting of the Indiana Lakes Management Society (ILMS) where you can learn about the exciting things ILMS has planned for the future with their EPA lake education grant. We will then board buses for a tour of nonpoint source pollution management techniques implemented by the Upper Tippecanoe Water Quality Project. Our last bus stop will be at the Tippecanoe Country Club on beautiful Lake Tippecanoe where we will have a reception and cook-out. Buses will return you to the Holiday Inn at around 8:00 p.m.

On Saturday, you will hear talks about lake management and research activities in Indiana and a special session highlighting successful activities of lake associations around the state. Throughout the conference, the Exhibit Hall will be open and filled with the latest in lake management products and services.

We invite you to join us in Warsaw!

See the following pages for the agenda.

Bloomington, IN 47405

RI	EGISTRATION DEADLINE—March 27, 1995
Name(s)	
Address	
Affiliation	County
Telephone	Would like display space Would like display space
Registration fee of \$30 per per cook-out. Send check paya	person covers materials, breaks, Friday & Saturday lunch, and Friday evening ble to Indiana University to:
Bobby Brooking SPEA 340 Indiana University	Telephone: (812) 855-4556 FAX: (812) 855-7802

Tentative Agenda

Friday, April 7

8:00 a.m.	Registration Begins (in lobby on 1st floor) Exhibits Open (the exhibit hall is located on the 2nd Floor, overlooking the swimming pool)
9:00 a.m	Welcome
9:15 a.m 12:00 noon	"Know Your Watershed Workshop"Conducted by: Conservation Technology Information Center
12:00 noon 1:00 p.m.	Luncheon (dining room)
1:00 - 2:15 p.m.	Indiana Lakes Management Society Annual Meeting
2:15 p.m.	Buses begin loading for watershed tour
2:30 - 5:30 p.m.	Watershed tour of Upper Tippecanoe River Basin • Lead by Sam St. Clair, District Conservationist, Kosciusko Co.
5:30 - 8:00 p.m.	Reception and cook-out at Tippecanoe Country Club
8:00 p.m.	Return to Holiday Inn

Saturday, April 8

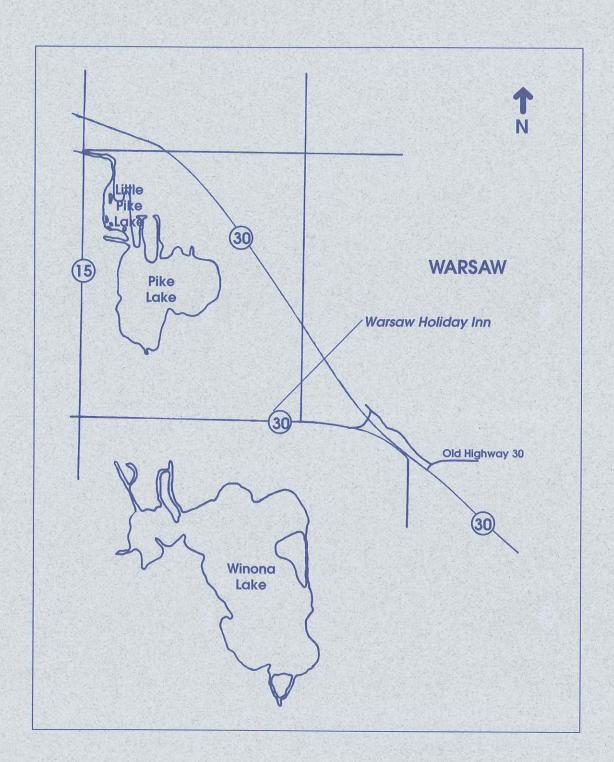
2:30 p.m.

7:30 - 8:30 a.m.	Continental breakfast in Exhibit Hall (sponsored by exhibitors) Registration Desk Open
8:30 a.m 12:00 noon	 What's Happening on Lakes Around Indiana Abundance and Size of Largemouth Bass in Indiana —Jed Pearson, Department of Natural Resources. The Ecology of Zebra Mussels in Inland Lakes —David Garton, Indiana University Kokomo. Affects of Acid Mine Drainage on Aquatic Macroinvertebrates in the South Fork Patoka River Watershed —G.B. Lowenguth, Indiana University; S.A. Sobiech, U.S. Fish & Wildlife Service; and N.E. Morales, Indiana University. The Starve Hollow Lake Project: How Good Things Can Happen When People Work Together — Kitty Motsinger, Natural Resources Conservation Service. The Economic Value of Indiana Lakes—John Fisher, Indiana University Bloomington. What Lake Associations Need to Know About Liability.
12:00 noon - 1:30 p.m.	Luncheon •Volunteer Monitoring Awards
1:30 -	Lake Association Success Stories

• Aquatic Macrophyte Planting for Habitat Improvement at Lake Maxinkuckee.

•Wetland Purchases for Lake Protection at Lake Wawasee.

•Septic System Dye Testing at Clear Lake.



Tips for Proper Operation and Maintenance of Septic Systems

In the last issue of *Water Column* we discussed how septic systems work. In Part 2 of this series, we will discuss proper operation and maintenance of septic systems. A septic system can be an effective wastewater treatment system when properly designed and maintained. By following the "DOs" and "DON'Ts" below, you can prevent the contamination of groundwater and your lake.

DO

- Pump the solids from the tank when necessary. This means every 2-3 years (more often if you use a garbage disposal).
- Limit the water entering your tank. Use watersaving fixtures. Avoid long showers, frequent baths, and excessive toilet flushing. Fix toilet float valves, leaks, and dripping faucets.
- Spread clothes washing over the entire week. Use only full loads in dishwasher and clothes washer.
- Divert surface water drainage away from the drainfield.
- Inspect the drainfield regularly. Soggy areas or very green grass indicate that the wastes are backing up to the ground surface rather than sinking down into the ground.

DON'T

- Do not put materials down drains that will clog the septic tank (fats, grease, coffee grounds, paper towels, sanitary napkins, disposable diapers, cigarette butts, etc.).
- Do not put toxic substances in drains that might end up in the groundwater (cleaning fluids, oils, paints, disinfectants, pesticides, etc.). These agents might also kill the microorganisms that break down waste.
- Do not use chemicals to clean or "sweeten" your system. They may interfere with the biological action in the tank, clog the drainfield by flushing sludge and scum into the field or add toxic chemicals to the groundwater.
- Avoid driving vehicles over the drainfield. Do not plant woody plants over the drainfield.

Meetings

March 13, 1995—Using Ecological Restoration to Meet Clean Water Act Goals. The Westin Hotel, Chicago, IL. Sponsored by U.S. EPA, USDA, USDOI, and NIRPC. Contact: Bob Kirschner, (312) 454-0401.

April 7-8, 1995—7th Indiana Lake Management Conference. Warsaw Holiday Inn. Sponsored by Indiana Department of Environmental Management. Contact: Bobby Brooking, (812) 855-4556; FAX: (812) 855-7802.

April 20-24, 1995—Clean Lakes Citizen Education Program: Geographic Information Systems and Lakes. Lisle, Illinois. Contact: Chris Davis, (217) 782-3362.

April 26-28, 1995—Enhancing the States'
Lake Management Programs: New Lake
Assessment Tools and Management
Approaches. Ramada Congress Hotel, Chicago,
IL. Sponsored by U.S. EPA and NIRPC.
Contact: Bob Kirschner, (312) 454-0401.

May 22-23, 1995—Clean Lakes Citizen Education Program: Lakes and Wetlands. Columbus, Ohio. Contact: Gail Hesse, (614) 644-2146; FAX: (614) 644-2329.

WATER COLUMN

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-In Memoriam-

Harold BonHomme

We have received word of the recent death of Harold BonHomme in Florida. Harold was a biologist with the State Board of Health and later, with the Department of Environmental Management for over 30 years. He retired from IDEM in 1992. Harold was largely responsible for the development of the Indiana Trophic State Index in the early 1970s. This index is an important lake assessment tool used to evaluate water quality changes and to establish policy on Indiana lakes. During the course of his career, Harold personally collected water samples from virtually every public lake in Indiana. He was a true trailblazer in Indiana lake study and his data will continue to be used for years to come.



WATER COLUMN

School of Public and Environmental Affairs Room 347 Indiana University Bloomington, IN 47405

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Robert Kirschner N.E. Illinois Planning Commission 400 West Madison St. Chicago, IL 60606