WATERWORKS



New York State Federation of Lake Associations, Inc.

\$1.50 per copy

July 2001

Who Got the Dog??

For those who were in attendance at our Annual Conference and noticed the ongoing battle at the Silent Auction between George Kelley and Emily Martin, I want to report that Nannook is now located at the home of Emily. All in good fun George was insistent on raising the price of the big stuffed dog that Emily so desired. After being threatened(?) George did quit bidding but Emily had returned home and thought she had lost. The folks, having a big heart, donated funds to send the dog to Emily and George paid off his bid. Again, it is amazing the fun that we have at our conference.

Now for the rest of the story!

The conference was considered a success with about 160 people in attendance at the different sessions. The Friday session about "On-site Wastewater Treatment" was attended by 32 very interested folks and from this session the NYSFOLA Board of Directors are preparing a "white paper" to forward to the appropriate agencies and politicians.

Saturday's sessions reverted back to the study of limnology, aquatic plants, Watershed management, and legal matters as well as other interesting sessions. Sunday morning focused on aquatic plant management with discussion on chemical, biological and mechanical controls.



The silent auction was a success but we do need more donations next year to make this more interesting. We wish to thank Mary Howard of Thunderlake for the donation of a weeks vacation at their cottage.

Our appreciation goes out to the many exhibitors who were available for display to our lake members. The displays give everyone a chance to also learn more about lake ecology and presents the new tools available for everyone to use in their lake management.

Next year's Annual Conference will also be held at White Eagle Conference Center and this will be the first weekend in May. The important item for now is to mark next year's calendar for May 3-5, 2002 and plan on attending the Annual Conference and learn about your lake and watershed.

NYSFOLA's mission is to protect the water resources of New York State by assisting local organizations and individuals through public dialogue, education, information exchange and collaborative efforts.

inside...

Ask Dr. Lake

pages 6 & 7

NYSFOLA Office-

In May of 2000 at the Annual Conference I mentioned that probably by 2002, Marty and I would be relinquishing some of the everyday activities of the office to others. And at the recent Board of Directors meeting it was decided to relocate the NYSFOLA office beginning in January of 2002.

The basic operation of our organization will be located at the home of the very capable Nancy Mueller, 2574 Webb Rd. Lafayette, NY 13084-9704. At that time the phone will ring into that location and she will be available to answer your questions and assist you in the many ways that we are expected to.

This will be a transition over a couple of months and at first some of the records may still be at Findley Lake. Nancy will contact us here and then reply back if necessary. We will use the email for much of this, so expect a short delay in these actions.

The "WATERWORKS" will be edited by Nancy possibly in January but definitely with the March issue. She will also be Annual Conference registration and coordinate all the mailings etc., associated with that function.

There comes that time in everyone's life when we must take time to enjoy our families and the personal activities of the sunset years. It is with this consideration that Marty and I feel as though it is now time to pass the efforts of this organization on to others, knowing that it will be in good hands. We will definitely stay active with the Board and will help with the web and other activities of NYSFOLA. This is not a good bye, just a passing of the gavel.

Points of view expressed and products advertised herein do not necessarily reflect the views and policies of NYSFOLA or its members. Mention of trade names and commercial products shall not constitute an endorsement of their use.

NYSFOLA Officers-Board of Directors

George Kelley- President

315-852-6431

Lew Stone- Past President

518-656-9078

Willard Harman-Vice President

607-547-8778

Jack Baldwin-Secretary

716-346-5882

Donald Keppel- Treasurer

716-769-7231

Other Directors-

Tracey Clothier 518-668-9653 Don Cook - Dec.-March 716-293-2482 April-November 716-367-9293 Doug Gniewek 518-371-1676 Clifford Kraft 607-255-2775 Dean Long 518-587-8100 Kathleen McLaughlin John Miller-315-895-7502 Nancy Mueller 315-677-9359 Mark Randall 315-824-2013 Lyle Raymond 607-898-3636 Bob Rosati 607-863-4425 Rebecca Schnieder-607-255-2110 Jan Shields 518-686-7417 Helen Sick 716-728-5105 David Wright-914-962-1039

Scientific Advisory Board-Co-Chairman

Dean Long-518-885-0913 Willard Harman 607-547-8778

WATERWORKS-

Please send articles, comments or editorials

Don Keppel-Editor 2701 Shadyside Rd., Findley Lake, NY 14736 Fax/phone-800-796-FOLA E-mail- fola@nysfola.org

Website- www.nysfola.org

From the President

Dear Members,

July is here and hopefully we are all enjoying our short summer of boating, fishing, swimming and other recreational activities at our lakes. As I sit on my boat listening to the activities on "my" lake of 62 years, I wonder what it will be like in 2030 or 2050. Those of us who had the pleasure of growing up on NYS lakes, and are continuing to enjoy them, can reflect on many changes. We have seen changes in aquatic weeds, especially the infestations of Eurasian milfoil and the increase in weeds due to nutrient loading. We have seen the introduction of fish species or zebra mussels, which have affected fishing and swimming in many lakes. The ever-present acid rains have had devastating effects not only on our lakes but also on the trees and other vegetation in our watersheds.

Am I painting a picture of Gloom-and-Doom for the future? Not at all. Problems are only opportunities looking for solutions! NYSFOLA, through the efforts of its Associations and their members, seeks to address as many problems/opportunities as possible.

Recent efforts by NYSFOLA, in coalition with other organizations, have encouraged legislative action permitting more local control of boating problems, such as speed control and no-wake zones. As always, some people wanted more stringent legislation from the state level while others wanted less. The local control option attempts to place the responsibility at the level where the <u>local stakeholders</u> will be heard before specific controls are enacted.

Many lakes throughout NYS have been working very hard for several years to develop Watershed Management Plans to identify and prioritize problems affecting the quality of their lakes. This is not an easy process and those with completed or nearly completed Watershed Management Plans are to be congratulated. NYS-FOLA was fortunate to have received two USEPA-NYSDEC grants to provide seven NYSFOLA member lakes with funding to develop State of the Lake Reports and Watershed Management Plans. Two additional lakes, funded through other channels, have kept us informed about their efforts and progress. The NYS-FOLA Pilot Watershed Management Program Oversight Committee has completed its final report entitled "A Primer for Developing a Successful Watershed Management Program." Watch for information about this document, as well as members' State of the Lake Reports and Watershed Management Plans on the NYSFOLA web site. We will be making these documents available in order to assist other associations as they develop their own Watershed Management Plans.

Having a fully developed State of the Lake Report and Watershed Management Plan in place is important when seeking grants from both public and private sources. The following quote, from a recent grant opportunity, emphasizes the concept of "watershed partnership" required for some grant applications:

continued on page four

Travel the Internet with us!!! For all the computer buffs it is now possible to contact the NYS-FOLA Office by E-Mail. We try to check the mail box every evening for messages or questions that you have. We can be reached at ;-

fola@nysfola.org http://www.nysfola.org

or check-out the NYSFOLA homepage at;-

Presidents message from page three

"The primary purpose of the Watershed Assistance Grants (WAG) program is to support the growth and sustainability (i.e. organizational capacity) of local watershed partnerships in the United States. Grants of up to \$30,000 are available to partnerships meeting stated criteria..."

Although the grant funds for Watershed Management planning have ended, grants will continue to be available for implementation of required remediation projects. These will generally require organizations to have Watershed Management Plans in place. The key point - develop or complete your State of the Lake Reports and Watershed Management Plans. Since grant applications often have very short lead-times, having the management plans in hand is well worth the effort. Please contact NYSFOLA for assistance.

Another aspect of water quality in our lakes is the continued and growing concern with the treatment of wastewater, especially around the lakes and in the watersheds feeding the lakes. Effluent from septic systems seeps through the soils where bacteria generally degrade it to nearly harmless materials. This takes time, distance and the right soils in order for the job to be done completely before anything reaches our waters. The end products of malfunctioning systems are nitrogen and phosphorous that may seem harmless but are the ingredients that the lake plants just love for growth. In some older systems, where leach fields were placed much too close to the water's edge and the soils may be too saturated to do their job, more serious pollutants are released to the waters.

Unfortunately current wastewater treatment regulations and their implementation vary widely across New York State. Many NYSFOLA members have expressed concerns regarding these regulatory disparities. Our observations and concerns will soon be expressed in a NYSFOLA White Paper to be sent to appropriate state, county, and local agencies and officials. This document is nearing completion and NYSFOLA members can expect a copy in the next *WATERWORKS* newsletter.

Since problems are really opportunities, your lake association members have many opportunities to look forward to in the future.

George C. Kelley, President

E-MAIL ADDRESSES

Many times here at the office we receive information relative to Lake management, important environmental political activity, Watershed Grants and other important items. Many times this information has a short time for a reply and possibly is not well advertised by the media. Our mission statement announces that through public dialogue, education and information exchange we will help protect the waters of the state, and by faster communication this will be assisted.

With the modern method of e-mail it would be possible for us to disseminate this information quickly if we had your address in our computer. My request is for you to send us a short note by e-mail asking to be placed in this file and be sure that the correct address is attached. We will not load your computer with useless messages as we all receive enough of those now.

Global Warming

It must have made quite a splash. Sometime in October 1998, a chunk of ice larger than the state of Delaware broke off Antarctica's Ronne Ice Shelf and began floating north to eventually melt and add its enormous cargo of water to the slowly rising sea.

The breakup and melting of polar ice - Arctic ice has lost 40 percent of its volume in the last 40 years -is dramatic evidence of global warming. Since the late 19th century, mean surface temperatures have increased significantly - temperatures in Albany, New York have warmed by more than 1° F - and the 1990's were the warmest decade on record. Scientists anticipate that the average global surface temperature will rise by as much as 6.3° F by 2100, with significant regional variation. Evaporation will increase as the climate warms, which will increase average global rainfall. Soil moisture may decline in many regions, and intense rainstorms are likely to become more frequent.

The debate over global warming has shifted from whether, to how much for how long, and what we can do about it. The fact is, there is much that can be done. The earth's climate is changing because people are altering the chemical composition of the atmosphere. So-called greenhouse gases primarily carbon dioxide (C02), methane and nitrous oxide - trap some of the sun's energy. retaining heat somewhat like the glass panels of a greenhouse. Since the industrial revolution, fueled by the burning of coal and oil, atmospheric concentrations Of C02 have increased nearly 30 percent. Compounding the problem are emissions of synthetic greenhouse gases like chlorofluorocarbons (CFCs), most commonly used in refrigerants. A CFC molecule is several thousand times more effective at retaining heat than a C02 molecule.

One effect of global warming is the rising sea. Sea level rose by 10 to 15 inches along much of the, New York/New Jersey coastline during the last century, and it is likely to rise another two feet or more by 2100. At the same time, the warmer ocean can be expected to breed ever more powerful hurricanes, magnifying the impacts of sea level rise. The New Jersey coastline and Long Island's south shore, with their long narrow barrier islands, would bth suffer extensive damage from sea level rise and coastal storms. The Region's high-density coastal real estate and recreational beaches are at risk, as are the coastal salt marshes and tidal flats that provide flood protection, water quality benefits, and habitat for native species. Increased hurricane activity would have significant impacts on Caribbean islands.

The world community has demonstrated its ability to confront this global environmental problem. The discovery of an ozone hole over Antarctica, and the fact that CFCs were responsible for the breakdown of atmospheric ozone led, in 1989, to the Montreal Protocol in which nations agreed to the world-wide phase out of CFCs. EPA then banned the production and importation of CFCs. In a relatively short time, chemical substitutes for CFCs have been developed. CFCs continue to be smuggled into the United States and EPA aggressively polices illegal use of these destructive compounds.

Fortunately, much of EPA's work to reduce air pollution has the substantial side benefit of reducing the emission of various greenhouse gases. In addition, EPA proactively promotes a number of voluntary programs encouraging smarter and more efficient energy use. The Green Lights program encourages facilities in both the private and public sectors to convert to energy-efficient lighting. Reducing the use of electric power cuts the emission of greenhouse gases at the same time it cuts the participants' utility costs. Regionally, more than 300 Green Lights participants are saving over six billion kilowatt hours of electricity per year. This has reduced carbon dioxide pollution alone by some 8.7 million pounds, the equivalent of taking 256,000 cars off the road!

This is a fraction of EPA Region 2 report released last year.

"WATERWORKS" would appreciate information on your Lake Association. Would like to have a page set aside each issue for a different Association. Let's make yours next! Forward your write-up to the office by mail, fax, E-mail or pony express, but start now. Pictures can be included.

Thank you, Editor



Ask Dr. Lake

Dear Dr. Lake:

I get thoroughly lost in all the acronyms, abbreviations, and notations for lake programs and issues. Can you lead me out of the maze?

Tim Dill, Lake Klausen, NY

Dear Mr. Dill,

While I agree that many of these short-hand codes can appear to be hieroglyphic, you don't need a secret handshake or special decoder ring to understand them, although remembering all of them may require an advanced degree in governmentese. Many of these acronyms are woven within multiple layers of bureaucracy that increasing comprise the fabric of lake management. Some of the more important ones are as follows:

EPA- the U.S. Environmental Protection Agency, the federal entity that oversees everything from air pollution to zinc contamination, including most of the programs related to lake management. It is roughly the federal equivalent of....

DEC- a now defunct computer company, but more appropriately the NYS Department of Environmental Conservation, the state agency most closely associated with all that involves lakes. The DEC and the Federation of Lake Associations (FOLA) jointly run....

CSLAP ("See-Slap")- the (NY) Citizens Statewide Lake Assessment Program, a volunteer lake monitoring program that since 1986 has involved more than 175 lakes and 1300 volunteers from FOLA -member lake associations. CSLAP involves biweekly collection of water samples analyzed for a variety of chemical constituents, including...

TP- a cone-shaped home or the abbreviation of "Total Phosphorus", the form of this nutrient most commonly analyzed in water quality monitoring programs and most often indicted in algal blooms. Lakes with excessive phosphorus levels may land on the....

PWL (once called the *PWP*)- the state *Priority Waterbody List*, the updated version of the state *Priority Waterbody Problem list* (it remains unclear why the original was not the *PWPL*).

The *PWL* is the result of the state inventory of waterbodies (lakes, rivers, etc.) and whether they support their best intended use. This information from the *PWL* is used to assess the status of water resources in the state, as required by *EPA* through provisions in the....

305b-the section of the Clean Water Act that dictates the terms of this status report to Congress. The "305b Reports" are issued every few years, based on evaluation of data and information from a variety of sources, primarily county water quality committees, but also including CSLAP and other data. The report is on the DEC website. Waterbodies that are identified as partially or not supporting any designated use will usually be placed on the....

303d list- the section of the Clean Water Act that outlines procedures for identifying and managing the most significantly impacted waterbodies in each state. Provisions in this section mandate that management actions be performed to fully assess and address the problems that led to the listing. Both the 305b and 303d processes are being re-evaluated through the..

CALM- Consolidated Assessment and Listing Methodology guidance developed by EPA and DEC to improve the accuracy and completeness of these lists by standardizing evaluation of water quality standards attainment and monitoring programs. This will allow for a more consistent means by which 303d management actions will be developed; these actions have been somewhat generically termed.....

TMDLs-(Tim Dills) the acronym refers to Total Maximum Daily Loads, a process by which loads (non-point sources) and wasteloads (point sources) that contribute to a 303d listing are defined, and a proscriptive procedure for allocating the acceptable amount and distribution of these "pollutants" among the various land uses within the watershed of the lake of concern. Once these TMDLs have been determined, a variety of lake and watershed management strategies can be undertaken, including identifying BMPs to reduce the LAs to the lake, modifying existing SPDES and/or NPDES permits to reduce TP, TN, TKN, or NO3 contributions to the WLAs, or even applying FIFRA-regulated, SEQRA-approved chemicals to control nuisance SAV growth, even if 314 or 319 CWA funds cannot be secured. And so on.

I'm happy to provide some clarity (Zsd) to this process.

The ecologically destructive path we are on is as if all of humanity is in a giant car heading at a brick wall at 100 miles an hour and everyone in it is arguing about where to sit. There are a few screaming to put on the brakes and turn the wheel, but they are locked in the trunk.

-Dr. David Suzuki

GOT A WATERSHED?

"Watershed" is the current phrase of choice for water quality management in lakes, streams and groundwater. Management plans to reduce water pollution need a liberal sprinkling of "watersheds" in the text to be taken seriously. Federal and state funding agencies advocate the use of "watersheds" as the only proper way to conceive of anything to do with water resources management.

A surge in the use of "watershed" nomenclature, especially in the last decade or so, which has also been taken up by the news media, would have one believe that the using "watersheds" as the basis for water pollution control is a new discovery. It is more accurately a rebirth of "watersheds" for multiple uses, including water pollution control and aquatic habitat preservation in contrast to single or limited purposes as in the past. The new multiple use applications include land use management, since water and aquatic habitat quality are strongly linked to the type of land uses in the catchment areas that are the source of water for streams and lakes.

In 1885 the first watershed rules and regulations were enacted in New York State to protect public drinking water supplies from contamination by human and animal wastes. Controlling contamination at the source in the watershed was then the only known way of eliminating the risk of pathogens in the drinking water supply until the advent of chlorination facilities. New York City's regulations over its reservoirs is a current highly visible example of a modern-day application of this concept. Other New York State cities with long-standing watershed rules and regulations over the lake and reservoir watersheds that are their public water supply sources include Albany (Alcove Reservoir); Auburn (Owasco Lake); Canandaigua (Canandaigua Lake); Rochester (Hemlock Lake); and Syracuse (Skaneateles Lake). Larger villages and other municipal water suppliers also enacted watershed rules and regulations e.g., Geneseo (Consesus Lake); Penn Yan (Keuka Lake); and the Onondaga County Water Authority (Otisco Lake). Many of the older watershed rules and regulations from early in the 1900's have been recently updated to meet new pollution control needs.

After chlorination at the treatment plant became widespread, many municipal watershed rules and regulations were deemphasized, since this was easier and politically less trouble with upstream towns and landowners. New pathogens, toxic and hazardous substances have now emerged that require more sophisticated technology to remove and as a consequence, require substantial expenditures to implement at the treatment plant. It is frequently less costly to curtail the introduction of these pathogens and substances at the source in the watershed rather than attempting to remove them at the treatment plant.

In a much broader sense, watershed management has been recognized and used for 200 years for the purposes of navigation improvements, power generation, irrigation projects, and flood control at various times and places. These were often called "river basin" projects rather than "watershed" projects. Examples of federal level projects include the Missouri, Columbia, Ohio, and Tennessee River river basins.

In New York State, the construction and operation of the Erie Canal, completed in 1825, eventually drew upon and/or modified 40% of the surface water resources of the state to maintain water levels in the Canal. A series of storage reservoirs along the Susquehanna drainage divide were constructed e.g., DeRuyter, Tuscarora, Eaton, Bradley Brook, Jamesville, Cazenovia and Lake Moraine. The southern Adirondacks were also tapped for water, diverting a portion of the Black River at Forestport. In 1885 the Adirondack Forest Preserve was created to protect watersheds that provided water for the operation of the Erie Canal that was vital to New York City commercial interests.

continued on page 10

Good judgement comes from experience, and experience comes from bad judgement!

CSLAPpenings

For any Nostradaumus wannabes, Luddites, or others celestially tilted, the year 2000 was supposed to be the most tumultuous in a millennium, filled with portents of Armageddon and more earthly calamities and Y2Kasulties. But perhaps the historically unromantic who insisted that 2001 represents the true millennium were in hindsight correct. For, at least in a slightly narrower CSLAP universe, 2001 has been far more chaotic.

Many of you are aware that CSLAP Central has left the building and the trappings of suburbia and located to urbia (downtown Albany), without proper storage and preparatory space to serve your occasional but on-going CSLAP needs. We continue to search for the room to keep at hand, or at least close access, all that we need to run CSLAP. Your patience through these trying times has been greatly appreciated.

However, this patience may be further taxed by the recent loss of the Assistant CSLAP Coordinator to greener pastures in the DEC Environmental Permits unit. Betsy Hohenstein has been a valued member of and the most important cog in the daily management of CSLAP for the last nine years. For many of you, she was the primary link to the Program. Her dedication to CSLAP was matched only by her contribution to the continuing evolution of the program. She will be sorely missed, and we all wish her well in her future endeavors.

More immediately, it appears that our long-standing goal to provide CSLAP at no cost to FOLA members must come to an end. Due to staffing crises within the NYS Department of Health (DOH), environmental samples cannot continue to be analyzed as part of a "no-cost" arrangement between DEC and DOH. This is essentially an end point on a long slide that has increasingly delayed analysis and reporting of samples for several years, resulting in extended delays in transmitting reports back to CSLAP participants.

What this means for CSLAP (and other DEC monitoring programs) is that funds must be raised to cover at least a portion of the analytical services ("lab") bill incurred from CSLAP samples. I will work closely with the FOLA Executive Committee to determine the most appropriate amount, schedule, and logistic details of this fee structure, although it is likely that the charge to lake associations will be on the order of \$150-200 per year. This would constitute less than 20% of the actual program costs incurred in running CSLAP. These funds will likely be used, along with matching "funds" provided by CSLAP volunteer time, to apply for other grant monies to defray analytical and other CSLAP costs. At the same time, we will also evaluate whether we will retain the 'five year on-five year off' structure in place since 1990 More information about the future membership and fee structure for CSLAP will be provided through letters to participating lake associations in the fall and in the CSLAPpenings article in the next issue of <u>Waterworks</u>. We expect that future analytical arrangements will return data more quickly to the DEC and ultimately to the sampling volunteers, and provide a return to the stability that has centered CSLAP for the past fifteen years. While this puts CSLAP in the same category of every other volunteer monitoring program in the country, some of which charge lake associations several hundred dollars to participate in these programs, it is still a decision that DEC and FOLA reached neither lightly nor happily.

As we move further into the digital age, we welcome the opportunity to communicate with more lake associations through email. If you have an email address or addresses that you'd like to serve as a recipient of CSLAP Annual Reports (coming slowly but surely), correspondence, or other information, please forward them to me at sakishba@gw.dec.state.ny.us. Please recognize that hard copies will continue to be provided to all lakes, but electronic media may provide each of you an opportunity to better disseminate this information among your membership. Otherwise please don't hesitate to contact me through more traditional means at 518-402-8282 (phone), 518-402-9029 (fax), or snailmail at NYSDEC Division of Water, 625 Broadway-4th Floor, Albany NY 12233-3508

Got A Watershed?

Continued from page 8

The New York State Legislature passed a series of Acts in 1902 (Water Storage Commission), 1904 (River Improvement Act), 1905 (Water Supply Commission), 1907 (state-owned water power development), 1911 (drainage improvements), and 1915 (river regulating districts). These Acts were to regulate the flow of rivers and watercourses for flood control, improvement of low stream flow for power generation, and drainage improvements. The Black River/Hudson River Regulating District was created under the 1915 Act. More recently, many Small Watershed Protection Districts were created to construct flood control dams under the 1954 federal Watershed Protection and Flood Prevention Act and New York State legislation in 1957.

The foregoing examples illustrate the historical role of "watersheds" in water management for public water supply, navigation, power generation, flood control and drainage projects.

As already noted, many of these "improvement" projects as they were known, were called "river basin" projects. They may now be also referred to interchangeably as "watersheds." What's the difference? It has been traditional to call the larger rivers "drainage basins" and the smaller streams, or tributaries, "watersheds." The line between these definitions has always been a hazy one, and often depended on the preferences of governmental agencies. Dictionaries and glossaries define both terms as including the land area drained by a stream or river. The New York State Department of Environmental Conservation (NYSDEC) issued a "Primer on New York Watersheds" in 1995 that defines a drainage basin as a "large watershed" and divides the state into 17 major drainage basins.*

The watershed management concept has been expanded to become a useful method for comprehensive multi-purpose water resources management. This goes well beyond the old applications to also include recreational use, nutrient reduction, protection of aquatic habitats, and land use management to reduce nonpoint pollutant runoff. Greater emphasis is now placed on fostering locally generated and supported watershed management plans, rather than a "top down" approach from higher levels of government. This means developing a sense of local "ownership" in a watershed, as well as conducting educational programs to develop awareness of the benefits to be derived from actively managing it to achieve water quality protection, land use management, and aquatic habitat goals. In this way, the "watershed" concept is being taken to new levels. However, that is also why watershed management is a "rebirth," albeit in new expanded ways, rather than a new discovery.

--Lyle Raymond

*The 17 major drainage basins (i.e., "large watersheds") that have been delineated by NYSDEC in New York State are: (1) Lake Erie-Niagara River; (2) Allegheny River; (3) Lake Ontario and Minor Tributaries; (4) Genesee River; (5) Chemung River; (6) Susquehanna River; (7) Seneca-Oneida-Oswego River; (8) Black River; (9) St. Lawrence River; (10) Lake Champlain; (11) Upper Hudson River; (12) Mohawk River; (13) Lower Hudson River; (14) Delaware River; (15) Newark Bay; (16) Housatonic River; (17) Atlantic Ocean/Long Island Sound.

Note: George Kelley and Nancy Craft provided editing and critical review assistance in initial drafts of this article, and Nancy Jarvis Mueller's suggestions for changes to specific items were appreciated. However, responsibility for the final version rests solely with the author.

"If you run out of water, you run out of life" - Mikhail Gorbachev. The outlook for freshwater ecosystems is not very optimistic. According to World Resources Institute (WRI), almost 60 percent of the world's largest 227 rivers are strongly or moderately fragmented, more than 20 percent of the world's 10,000 known freshwater fish species have recently become extinct or been threatened; and four out of every 10 people live in river basins that experience water scarcity. At least 3.5 billion people (more than 50 percent of the world's current population) will face scant water supplies by 2025. Habitat destruction, dams and canals, non-native species, pollution and over-exploitation continue to be powerful sources of stress.

for more information contact WRI at; www.wri.org

Available at the office of NYSFOLA!!!

"DIET for a Small Lake"; Joint Publication of NYSFOLA and NYSDEC relative to watersheds and lakes.

Detailed instructions for preparing a Lake Management Plan; complete descriptions of Lake Restoration and Watershed Management Techniques; Comprehensive discussion of Lake Ecology.

Cost:- \$20.00, includes s & h

"Managing Lakes Through Community Participation"; 25 minute video, Why Associations are formed, how they get started, tackling priority issues, case study, ties with local government and lake community.

Cost:-\$15.00, plus \$2.00 s & h

"Water Quality Monitoring in Lakes and Tributaries"; video; demonstrates the techniques used for water quality monitoring, based on procedures used for CSLAP. Useful for starting a monitoring program.

Cost:- \$15.00, plus \$2.00 s & h

"Through the Looking Glass"; A Wisconsin Lakes Partnership publication containing information on nearly all aquatic plants. For information contact the office.

Are your dues paid? Services can only be maintained with your help.

Please stay current!

2001 Membership Dues-	(computed on calendar year)
Lake, Watershed and other Associa	ations;
Small Association, 10-74 members	\$35.00
	rs — \$75.00
	pers — \$150.00
	\$200.00
	\$20.00
	ng \$10.00
	\$200.00
	\$10.00
Member Information:-	Fee\$
Lake Association	Donation \$
Contact Name	Enclosed \$
Address	
City, State, Zip	
Telephone	Lake location (county)
Send payment to NYSFOLA office;	NYSFOLA
Phone/fax- 1-800-796-fola	2701 Shadyside Rd. PO Box 342
E-mail— fola@nysfola.org	Findley Lake, NY 14736

Calendar of Events

"Water Smart Communities" The Lake George Association, in partnership with the New York Planning Federation, presents a one-day conference. Tuesday, October 9th, 2001 at Sheraton Saratoga Springs, Saratoga, NY. For more information contact the NY planning Federation, 44 Central Ave., Albany, NY. 1-518-432-4094

"21st International Symposium", North American Lake Management Society (NALMS) will be holding the Symposium at the Monona Terrace Community and Convention Center at Madison, Wisconsin on November 7-9, 2001. Information is available from NALMS at: www.nalms.org

19th Annual NYSFOLA Conference", May 3-5, 2002 at the White Eagle Conference Center, Hamilton, NY. Additional information will be on our web page in the near future.

Regional Meetings

The seventh annual Western

New York Regional meeting will be held on October 27,2001. Meeting will convene at 10:00 A.M. at the American Legion Hall, County Road 36, Honeoye, NY. The Hall is located on County Route 36, 3/10 of a mile south of Route 20A.

A lunch buffet will be served at a total cost of \$9.00 including the registration. For more info contact Don Cook at 716-367-9293 or 716-293-2482, or email at; dcook@usadatanet.net

The Eastern Regional meeting will also be held on October 27, 2001., Final location is undecided at this time but the conference site will be off Route 301 in Putnam County, easily accessible from the Taconic Parkway or Route 9.

Driving instructions, final agenda etc. will be on the NYSFOLA web site as soon as finalized for both of these Regional Meetings

WATERWORKS

NYS Federation of Lake Associations. Inc. 2701 Shadyside Rd. P.O. Box 342 Findley Lake, NY 14736 Tel/Fax 1-800-796-FOLA E-mail- fola@nysfola.org

Pre-sorted Standard U.S. Postage **PAID** Findley Lake NY 14736 Permit No. 1

2001 Annual Conference