

Septic Systems

People who live in a home served by a sanitary sewer system place their trust in professionals whose jobs are to design, monitor and maintain the sewer systems. But for others who must utilize an on-lot individual sewage system, commonly called a septic system, the proper use and maintenance of the system is the responsibility of each homeowner. This publication is intended to help you understand, operate and maintain your septic system.

Septic systems originally were used to serve individual homes in rural areas where population densities were too low to economically justify sanitary sewers. Septic systems also have been used to serve more densely settled areas where, at least originally, occupancy was seasonal.

A functioning septic system, one that is of correct design for its site, will remove disease-causing organisms and some nutrients and chemicals from wastewater. However, it will not remove or treat many liquid pollutants such as solvents, automotive and lubricating oils, drain cleaners and other non-cleaning household chemicals. Proper location, design, construction, operation and maintenance of septic systems is critical to protecting water quality throughout a watershed. This is especially true when systems are located close to lakes and streams or in areas having shallow groundwater zones.

Septic systems that are not functioning properly can pose health threats. Bacterial contamination, for example, is a concern if the lake is used as a source of drinking water or for recreational activities involving body contact such as swimming.

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In addition to threatening human health, malfunctioning systems can also harm the ecology of lakes. Sewage is high in nutrients, nitrogen and phosphorus, which help plants grow. Untreated effluent that makes its way to lakes or tributary streams, either through surface flow or groundwater seepage, can contribute to increases in algae or aquatic plant growth. This over-enriched system, called *eutrophic*, can significantly impact the lake's health over a period of time.

Algae overgrowth, for instance, create blooms that cover surfaces, cloud water, block sunlight and deplete oxygen supplies needed by aquatic plants and animals. In extreme cases, oxygen depletion associated with untreated sewage has created massive fish kills. Some nutrients and other pollutants generally are very slow to leave a lake system. Thus, untreated sewage discharges can have lingering effects long after a malfunction has been repaired.

Signs of a problem

- Slow draining toilets, showers, or sinks.
- Sewage backing up in the basement or drains.
- Ponded water or wet areas over the absorption field in your lawn.
- Bright green grass over the absorption field may indicate that effluent is coming to the surface.
- A dense stand of aquatic plants or algae growing only along your shoreline.
- Sewage odors.
- Bacteria or nitrates show up in tests of a nearby drinking water well.
- Biodegradable dye flushed through your system is detected in the lake.

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.

from the **President**

Dear Members:

Fall has landed on our lakes—can Winter be far behind? As I write this message a winter blizzard is hitting North Dakota and moving toward the eastern states—a harbinger of things to come. I have mixed emotions this Fall, as I'm sure we all have, not because of the pending Winter but due to the tragic events the World Trade Center and the daily Anthrax news. These are indeed "the times that try men's souls".

I have noticed varying degrees of anxiety as I have been contacting people in different parts of the state. Understandably those in the lower Hudson and on Long Island have greater tensions than those in more distant upstate regions. Driving recently within New York State and adjacent states I felt the consistent but quiet determination of the people everywhere as expressed in the tremendous display of our American Flag. When I returned home I realized that "these (events) too shall pass"!

We certainly are all united and filled with resolve for our national efforts. However, we often need as individuals to find some respite for ourselves and for those close to us. As a teenager (many-many years ago) when the realities-of-the-world did not meet my idealistic expectations, I became frustrated and filled with rage as our teenagers do today. I had access to *My Lake* and remember the long walks, hill climbs, and boat pounding on storm waves that "soothed my savage breast".

As in the past *Our Lakes* can serve to reduce our stress and frustrations when we can return to them for walks and talks with friends, relatives and perhaps new acquaintances and to fish, cruise, and party. The lakes helped us to gain our perspective and "warmed the cockles of our hearts" during the good times. They are waiting to serve us again during these frightening times. If distance or circumstances prevents going to *Your Lake* let *Your Lake Memories* of past moments provide the solace to your soul now and during the Winter months ahead. Spring WILL come again to *Our Lakes* and to these times.

These are times of stress, but I think that is enough cliches for one letter.

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WATERWORKS-

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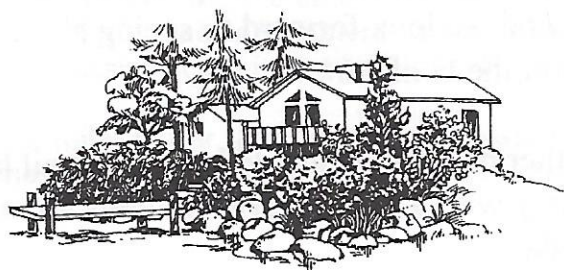
Septic Systems (continued from page one)

Septic systems are safe and effective if selected, designed, located and constructed correctly. However, homeowners must actively monitor and maintain their systems. Because nutrients and other, pollutants are generally very slow to leave a lake, a malfunctioning septic system can have a long term impact on the lake's health. The most common type of septic system consists of two primary components: 1) a septic tank for collecting waste and settling out solids; and 2) a soil absorption field for filtering the liquid waste. Where soil composition or depth is not suitable for a conventional septic tank/ absorption field, other systems, such as elevated sand mounds, may be used.

Older methods of sewage disposal may use dry-wells instead of an absorption field or use a cess-pool. These methods are allowed to be used, by law, if they were installed prior to the initiation of state regulations, but only until they are found to create a malfunction or be the source of a potential or actual health nuisance. These methods do not provide any certainty of adequate treatment and disposal of sewage.

The Septic Tank

The septic tank serves three functions: storage, settling and digestion. The tank must be able to store waste from high flow periods (e.g., the morning round of showers) until it can pass through the absorption field. Hence, the size of the septic tank is determined by the size of the household it is intended to serve. The formula accounts for the number of bedrooms in the house. The minimum size and the location of a septic tank and its absorption field must comply with state regulations.



Sewage flow coming from the house is separated into three fractions after it enters the tank. Grease, oils and other light materials accumulate at the top of the tank in a layer of scum. The heavier solids settle into a sludge layer at the bottom of the tank. The intermediate layer is wastewater. Wastewater passes on to the absorption field. The scum and sludge are held in the tank by a set of baffles. Since the settling process requires time, tanks are designed so that liquids are retained for about 24 hours, under normal flow conditions, before discharging to the absorption field.

Even though it has no moving parts, the septic tank requires regular maintenance. Annual inspections of the baffles are recommended to ensure that scum is not leaving the tank and entering the absorption field. Similarly, accumulated sludge must be removed on a regular basis. Otherwise, the tank capacity will be reduced so that solids are not able to settle out before the wastewater effluent leaves the tank.

The minimum frequency of sludge removal ("pumping") varies with the amount of use your system receives and may be regulated by local sewage management program ordinances. For the average family of four, a septic tank in normal use needs to be pumped out every three years. If you place heavier demands on a system, such as a large family or a garbage disposal, the tank may need to be pumped every year.

Due to several considerations, including personal safety measure requirements to protect the person making a thorough inspection of the tank, a professional contractor should do septic tank pumping and inspections. Warning: Never enter the tank unless equipped with self-contained breathing equipment or actively operating high volume forced ventilation to force outside air to ALL areas in the tank. Do not breathe the air inside an unventilated septic tank. It may contain LITTLE or NO OXYGEN. The lack of oxygen can cause unconsciousness without warning. Death can occur in this type of situation!

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Septic Systems

(from page three)

The Soil Filter

When the wastewater leaves the septic tank it flows to the absorption field. The absorption field consists of a network of perforated pipes (often plastic) laid out in a bed of trenches lined with gravel. The pipes are connected to the septic tank through a small chamber known as a distribution box. The distribution box is designed to distribute liquids equally among the absorption field pipes. Wastewater then flows through the gravel and into the surrounding soil. Microorganisms in the soil decompose many of the remaining contaminants. However, the soil cannot remove dissolved solvents, automotive and lubricating oils, drain cleaners, and other household chemicals that can easily percolate into groundwater.

If the absorption field is properly located, designed and installed it will accept septic tank effluent for a very long time. Design life is normally a minimum of 20-25 years. The design presumes that in operation: 1) the field does not become overloaded with liquid, and 2) the septic tank is properly maintained and does not allow sludge or scum to escape and clog the field. Minimizing household water usage and waste output will extend the life of the absorption field and help keep it in good operating condition.

The size and placement of the absorption field is determined by the type and depth of soils on the site, as well as the sewage load it is expected to handle. Some soils are better than others for placement of an absorption field. In sandy soils, for example, water may pass through too quickly to be treated efficiently, while heavy clay soils may not allow enough flow. In addition, there must be sufficient soil above the water table or bedrock for complete treatment (generally about six feet).

Some lake homes have septic systems that do not have sufficient capacity for the type of use they receive, are located too close to the water

table, and/ or are in poor soils. Your county conservation district can help you estimate the type, depth, and location of the various soils on your property. A final determination of their suitability for septic systems will be made by your local sewage enforcement officer.

The absorption field ceases to function when the soils surrounding it become saturated. This can happen when the system is overloaded or when the water table rises to the level of the absorption field. When the absorption field becomes saturated, septic effluent can rise to the field surface, enter groundwater, or travel underground and resurface at another water source—quite possibly your lake or a stream tributary to your lake! As you can see, whenever the absorption field becomes saturated, the sewage you flush flows essentially untreated into the surrounding environment.

Note; this article was produced by the Pennsylvania Association of Conservation Districts in their series called "LAKE NOTES". Other publications are available from this source. Please contact them on the web at www.pacd.org

Late Mailing

This issue of "WATERWORKS" was delayed in mailing due to the possible cross contamination in the postal service. We felt that a short delay until mailing of this type literature was considered safer, our members would appreciate it. At no time does the Board of Directors want to place the potential for harm in your homes.

Please be diligent in handling of all your mail and we look forward to seeing all next May at the conference.

Another newsletter should be in the mail late January with a preliminary conference agenda.

Septic System Tips

The following list of tips reduce impacts to your lake and environment.

- ♦ Limit the amount of water entering your septic tank. Give your system time to absorb exceptionally heavy loads. (It would be best not to immediately do five loads of laundry after hosting a party for twenty or so guests.) Use water-saving fixtures., Repair leaking toilets and dripping faucets.
- ♦ Do not connect foundation sump pumps or other "clean water" discharges to your septic system.
- ♦ Inspect your tank every year. Measure the level of sludge build-up and inspect the baffles for scum. Pump your septic tank at least every 3 years (or sooner as indicated by your annual inspection of the tank). Save money-organize neighborhood tank pumping!
- ♦ Get complete design and maintenance records from the previous owner when you buy a house with a septic system. Know the location of the system's components. Make a sketch showing locations and distances and keep the drawing in a safe place.
- ♦ Driveways, patios, aboveground pools and other structures should never be built over the absorption field. As much as one third of the water in septic effluent evaporates up through the ground over the absorption field.
- ♦ Avoid using a garbage disposal. Garbage disposals add tremendously to the amount of solids entering your septic tank.
- ♦ Discard grease in the garbage instead of the drain. Grease can clog the septic tank or the soils surrounding the absorption field. Also, use of liquid fabric softeners can contribute to excessive scum in the septic tank.
- ♦ Use toilet paper that decomposes easily. Purchase brands labeled "safe" for septic systems.
- ♦ Install a lint trap on your washing machine. Lint can clog the pipes in the absorption field.
- ♦ Read product labels! Use low phosphorus detergents and cleaning products whenever possible. Phosphorus is the nutrient most likely to cause damage to your lake after leaving a septic system
- ♦ Perform (at least) annual routine maintenance on any lift or distribution pumps associated with your system. Systems that utilize pumps will quickly back-up if a pump fails.
- ♦ Do not pour strong cleaning agents, chemicals, or old medicines down the drain. These can kill beneficial bacteria that break down waste in your septic system.
- ♦ Keep all non-biodegradable items such as sanitary napkins, disposable diapers, paper towels, and plastic out of your septic tank. They can block the tank's outlet and necessitate expensive repairs.
- ♦ Do not drive or park vehicles on your absorption field. Vehicles can compact soils and break pipes.
- ♦ Keep trees and shrubs at least 35 feet away from your field to prevent roots from plugging or breaking pipes.
- ♦ Avoid all so-called 'septic tank treatment' additives. No additive can alleviate the need to regularly pump your septic tank; some, potentially, may actually promote clogging of your absorption field or contaminate groundwater.
- ♦ Route surface water drainage away from your absorption field. Snowmelt, rain and other surface runoff can temporarily inundate your field.
- ♦ Do not inhale gas emitted from an open septic tank. The atmosphere produced in your septic tank may suffocate you.
- ♦ Locate your absorption field as far away as possible from surface water to reduce its potential of becoming a source of contamination.



Ask Dr. Lake

Dear Dr. Lake:

I read in your last column about 305b and 303d and other alphanumeric mumbojumbo having to do with the EPA or the Dewey decimal system or something like that. Anyway, you lost me. What should I know about this stuff?

Les Noan, Lost Lake, NY

Dear Mr. Noan,

While all of these acronyms might be confusing, once you learn about them, you'll pine for the days when they were merely confusing.

The chain of acronyms you refer to are part of the federal government's environmental reporting process. On a regular basis (at present, every five years), each state is required to report on the status of water resources within the state, a kind of environmental report card. The rules by which this reporting is conducted are found within Section 305b of the federal Clean Water Act- hence the document is known as the *305b report*. Within this report, states identify to what degree the surface water resources (lakes, rivers, estuaries, etc.) are supporting a variety of uses, such as drinking water, recreation, aquatic life, and fish consumption. The feds (in this case, EPA) asks if these uses are fully supported, partially supported, or not supported in each of these waterbodies. As I mentioned in my last column, the NYS version of the 305b report is found on the DEC website (at www.dec.state.ny.us)

Well, that wasn't so bad....

Not done yet. In addition to the federal reporting requirement, the state of New York also has an internal reporting system referred to as the *Priority Waterbody List*, or *PWL*. This list evaluates the same uses and waterbodies, but uses somewhat different categories to define use attainment. Specifically, lakes, rivers, and other waterbodies are classified as to whether these uses are attained, threatened, stressed, impaired, or precluded, and these designations are linked to the federal categories (fully supporting, partially supporting, etc.) through a matrix. Waterbodies with all uses attained are usually part of the state *Waterbody Inventory (WI)*, while the other categories are found within the *PWL*. New York State revises the *PWL/WI* by drainage basin (17 separate basins in NYS- Lower Hudson, Susquehanna,

continued next page

Champlain, ...) every five years or so. When it is time for a particular basin to be evaluated, the DEC solicits input from others knowledgeable about water quality in the basin, usually through *county water quality coordinating committees (WQCC)*. These committees are usually comprised of county agency staff (soil district, planning, health,), academia, and some lake associations, and with the DEC, they compile water quality assessments from water quality monitoring programs and other sources. These data serve to identify the priority waterbodies within each basin, for the purposes of funding and management attention. At present, these listings are not on the DEC website.

Is that it?

Not quite. In recent years, the EPA and the states have been using these various lists to identify the highest priority waterbodies- if you will, a worst of the worse list. The rules for this list are found under section 303(d) of the Clean Water Act- hence the *303d list*. This has a much stronger regulatory reach, for waterbodies on this list must be closely evaluated for the causes and sources of these problems. Remedial measures must be undertaken, under a defined schedule, to solve these water quality problems. This entire evaluation and remediation process is known as the "TMDL" process, which refers to the Total Maximum Daily Load calculations necessary to determine how much (pollution) is too much. Others refer to the acronym as Too Many D#@ Lawyers, since this can be a heavy legal burden for both the agencies and the lake communities to implement the TMDLs. This list, presently being revised, also appears on the DEC website. The entire TMDL process is continually evolving and subject to much controversy.

So what does this mean for my lake?

If your lake has been monitored and the water quality data have been accepted by the state, it probably, or will shortly, be on the PWL/WI, either listed as unimpacted, or as having some uses impacted. If not, then your lake association should work closely with your county water quality coordinating committee to make sure your lake concerns are being included in this process. If you are on the PWL, you may be assigned a higher ranking for a variety of state funding programs, such as the Bond Act. If your lake is on the 303d list, then it will be subject to more intensive study and management over the coming years.

*The Board of Directors and staff wish everyone a
Happy Holiday Season
And a Healthy, Prosperous New Year!!*

Managing Invasive Aquatic Vegetation in Oswego County

By: John DeHollander, Oswego County SWCD

In 1989, Oswego County implemented the first year of its water quality program funded through the Finger Lakes-Lake Ontario Watershed Protection Alliance (FL-LOWPA), referred to at the time as the Aquatic Vegetation Control Program. State funds were targeted to programs developed locally to address local needs. Management of invasive aquatic vegetation - non-native species such as Eurasian milfoil and more recently Water chestnut - has been an ongoing program focus for Oswego County's program.

Lake Neatahwanta, a 750-acre lake, located between the City of Fulton and the Town of Granby, has been a top water quality priority in Oswego County. Shoreline recreation, boating, and aesthetic enjoyment of this lake have been restricted by dense weed growth. Management strategies have included harvesting about 25 acres of primarily Eurasian milfoil annually, opening up channels to improve fishing access, and clearing shoreline areas near public access points. These strategies had improved recreational uses of the lake by treating the symptoms of a longterm problem, nutrient enrichment of this shallow lake. Since 1989, Lake Neatahwanta now suffers with a heavy algae bloom every year, limiting the growth of aquatic vegetation, to the point of not requiring any mechanical harvesting of Eurasian milfoil. Other strategies, like installation of Best Management Practices (BMPs) along the tributaries to the lake, have reduced nutrients and sediments entering the lake that provide conditions for the spread of dense aquatic vegetation. Over the course of the harvesting program, other local water bodies have needed relief from invasive aquatic vegetation. The harvesting program has been expanded to include: Wright's Landing at Oswego City Harbor, North Sandy Pond, Sunset Bay, and Oneida Lake.

During the 1990's, local concern about aquatic vegetation control began to shift to a new species. A different non-native plant, Water chestnut (*Trapa natans*, L.), was affecting the recreational use of Ox Creek, a primary tributary to the Oswego River. Water chestnut is a glossy, green, triangular-leaved plant that can easily choke water bodies, out competing the native flora. Because its foliage can create a dense, nearly impenetrable mat at the surface, fishing, swimming, boating, and other recreational activities are severely limited. In recent years, there were approximately 50 acres of Water chestnut present, while harvest activities concentrated on a targeted area of only 23 acres due to program limitations. This effort opened up the mouth of Ox Creek to the Oswego River, affording fisherman access to navigate their boats to an excellent fishing spot.

Currently, our primary mission in Oswego County is directed to the control of Water chestnut. This plant has now spread into many reaches of the Oswego River, as far north as Minetto, near the New York State Canal System Lock #5. It is also well established in the Seneca and Oneida Rivers, and there is now an expanding acreage of Water chestnut at the western end of Oneida Lake. Knowing the shallow depths and soft sediments at the bottom of Oneida Lake, resource managers and informed citizens are concerned that Oneida Lake will be prime territory for the expansion of this exotic species.

Managing the county's harvesting program in multiple water bodies where resource uses are simultaneously limited poses challenges. With a single harvesting machine, servicing these areas relies upon good scheduling and assistance from local highway departments, private citizens, as well as local matching funds. Limited mechanical harvesting, however, will not be enough to control Water chestnut within an open river system. For containment and/or eradication to be successful, additional control measures must be implemented.

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CSLAPpenings

CSLAP is a cooperative effort between DEC and NYSFOLA for statewide volunteer lake monitoring program. Volunteers who are current members of NYSFOLA take eight summer water samples for water quality information on lakes, especially related to eutrophication (productivity). Analysis of water quality provides the lake association and New York state with vital information about water quality.

Some things change, yet mostly stay the same. For a CSLAP volunteer returning to the program for the first time since the late 1980's, as a few did this year, the mechanics of the sampling program were comfortably familiar, even if the reasons for sampling or uses of the data have shifted. This continuity has been a great strength of the program, and an absolute necessity for comparing results from year to year, lake to lake, and among the more than 1300 volunteer monitors that have participated in CSLAP. There have been some modest changes this year- some good (more lakes sampled than ever before), some surprising (sampling boxes unexpectedly returned by the DOH via USPS rather than UPS), and some troubling (isolated filter contamination problems)- but all part of the normal oscillation around the fringes of the program. This remains a testament to the continuing dedication of CSLAP volunteers, reaffirming the adage "if it ain't broke, don't fix it".

But some things break and some things do change. As reported in the last issue of *Waterworks*, due to the transition of priorities by the State Health Department (DOH) to more immediate concerns such as AIDS, the West Nile virus, and anthrax, these labs have been unable to keep up with analytical demands associated with more pedestrian environmental monitoring, including those involved with CSLAP. This has led to a long-delayed need to begin charging NYSFOLA lake associations a fee of \$200 to participate in the 2002 CSLAP. These funds will be used to pay for analytical services and as matching funds for state and federal grants. A letter has been sent to all CSLAP lake associations providing greater details about this new policy. There will inevitably be some lake associations that are unable or unwilling to pay this fee; their contribution to CSLAP will be missed. But it is hoped that this change will result in more stable availability of analytical resources and a more timely receipt of sampling results.

And some things change for the better. With the explosion of home computer use, I encourage all CSLAP participants to forward their e-mail addresses to CSLAP central, via sakishba@gw.dec.state.ny.us, to improve information exchange. As the CSLAP database builds, these water quality data are filling knowledge gaps and meeting more lake management needs. Aquatic plant collections and identifications are expanding the state's non-indigenous species database. Nutrient data are serving as the primary source of information for the nutrient criteria initiative undertaken by EPA and the DEC. Lake perception data are being linked with similarly collected data in a dozen other northeast and upper midwest states to better understand the connection between water quality and use impairment. CSLAP volunteers continue to participate in the Great Secchi Dip-In, promoting the use of volunteers in collecting useful and important water quality data throughout the country. And CSLAP data continue to contribute to the growing body of information necessary to evaluate lake water quality conditions through everything from federal Clean Water Act and state priority listings (see the Dr. Lake column) to the everyday decision-making processes that towns, lake associations, and private lakefront homeowners employ to better manage and utilize their lake.

So while some things remain the same, some continue to change, and CSLAP data and volunteers will continue to contribute to the ever evolving, ever changing, universe of lake management.

CSLAP application form is enclosed with this issue of "WATERWORKS"

Managing Invasive Species- (continued from page eight)

Chemical treatment using a selective herbicide is not an option in the open waterways under New York State law. Physical removal by hand pulling is another strategy, but may not be enough to control the spread of the plant. Local riparian landowners have struggled to use this approach for years, but have not been able to inhibit reproduction of the plant. Area resource managers are currently investigating possible biological control agents for Water chestnut. As this invasive plant plagues water bodies in other parts of the northeastern United State including Lake Champlain, there is knowledge and experience to be shared.

To facilitate the dialogue on management options, Oswego and Madison Counties cosponsored in June '01 a Water Chestnut Conference in Syracuse, New York. This forum was funded in part through a Special Projects Fund grant through FL-LOWPA. Researchers and experts came together to discuss the latest work and approaches to controlling Water chestnut. Resource managers in Oswego County realize that more financial and program resources are needed to prevent the potentially devastating effects of Water chestnut on public waterways in this region of NYS.

Until a more comprehensive management strategy is established, Oswego County Soil and Water Conservation District will continue to dedicate FL-LOWPA resources to mechanically harvest priority areas to provide relief and public access to water resources at critical times of the year. Resource managers in Oswego County invite all stakeholders to help establish and work toward common goals for a better, more enjoyable environment.

Editors note;- enclosed in this issue of "WATERWORKS" is a paper relative to Aquatic Plant Control. Please make copies and distribute to your lake users!

In your community...

- ◆ Tell public officials about the recreational, economic and ecological value of lakes and your interest in keeping them clean, healthy, and useable.
- ◆ Support "best management practices" on agricultural land and construction sites in your watershed.
- ◆ Help ensure that construction site soil erosion and sedimentation control ordinances are enforced. Report problems to your county conservation officer.
- ◆ Encourage stormwater management practices that reduce runoff pollution.
- ◆ Advocate the safe and conservative use of salt on roads and promote the use of sand where practical.
- ◆ Support wetland preservation. Wetlands help protect lake water quality by acting as natural filters of pollutants. They help reduce flooding, furnish fish and wildlife habitat, provide recreation opportunities and aesthetics.
- ◆ Become active with groups that support projects and events that promote conservation, lake and watershed protection and clean-ups.

Encourage your local lake association to join and stay current
with their membership in NYSFOLA!

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 shipping & handling

"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!*

2002 Membership Fees- (computed on calendar year)

Lake, Watershed and other Associations;

Small Association, 10-74 members	\$35.00
Medium Association, 75-149 members	\$75.00
Large Association, 150 or more members	\$150.00
Park Districts (Town, County etc.)	\$200.00
Individual Membership	\$20.00
Member of Lake Assn. in good standing	\$10.00
Corporate Membership	\$200.00
Student	\$10.00

Member Information:-

Lake Association _____
 Contact Name _____
 Address _____
 City, State, Zip _____
 Telephone _____

Fee\$ _____
 Donation \$ _____
 Enclosed \$ _____

Lake location (county) _____

Send payment to NYSFOLA office ;
 Phone/fax- 1-800-796-fola
 E-mail— fola@nysfola.org

NYSFOLA
 2701 Shadyside Rd. PO Box 342
 Findley Lake, NY 14736

Calendar of Events

Periodically please check the Calendar on our web site for other important listings.

Soil Erosion and Sediment Control;

January 14-15, 2002. Implementing NJ's Erosion Control Standards, New Brunswick, New Jersey, for info call 732-932-9271

NALMS: 11th Annual Southeastern Lakes Management Conference; March 18 – 20, 2002 Winston-Salem, North Carolina. Adams Mark Hotel. Contact Barbara Wiggins at 828-254-5644 for more information.

Enhancing the States' Lake Management Programs; April 23 – 26, 2002, Congress Plaza Hotel, Chicago, Illinois. Contact Bob Kirschner 847-835-6837

NYSFOLA Annual Conference; May 3 – 5, 2002 at White Eagle, Hamilton, NY. Contact the office for more info.

Membership Fees

In order for all of us to have information as to our standing in the membership of NYSFOLA we have included a digit on your mailing label. This digit is relative to your standing in our organization. Your membership fees are based on the calendar year and we appreciate that some associations cannot submit fees until mid summer. This is no problem.

If the digit is a "2" you are current for 2002, If by chance the digit is a "7", "8", "9", "0", "1" or some other digit you will know when your organization last paid their fees.

This may not agree with your books and if so please contact the office so that it can be clarified. We have had organizations ask if we would send a bill each year. With a restrictive budget this only adds expense and if it can be avoided it is for the betterment of all our efforts.

We have included a registration form with this newsletter for your use **if needed**. Page eleven always has a form that can be used. The organization thanks you for your continued support.

WATERWORKS

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