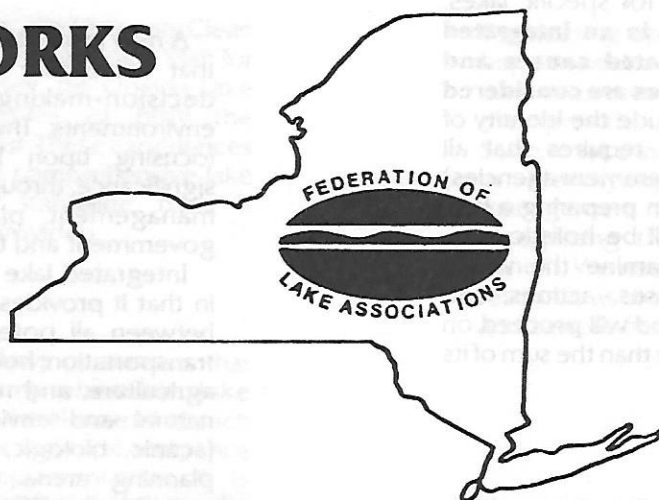


WATERWORKS



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LAKE MANAGEMENT IN NEW YORK: NEED FOR A COMPREHENSIVE APPROACH

*Prepared for the NY Federation of Lake Associations, Inc.
by the FLA SCIENTIFIC ADVISORY BOARD*

*edited by
Warren Flint, Chairman*

Introduction

Lakes are among New York State's most valuable economic and environmental resources. Their waters and surrounding lands provide boundless recreational opportunities, drinking water, and a basis for many commercial and industrial activities. Property owners and other residents in lake communities, as well as visitors and other lake users, have a substantial stake in ensuring the perpetuation of economically and environmentally sound, aesthetically attractive lake resources.

Lakes are composed of physical features, biological organisms, and chemical substances, and they are affected by processes that occur in their watersheds. The fundamental health of a lake and quality of its environment depends on the interaction between these various components and the strong influence that mankind has on affecting their natural function. Abuse or misuse of lake resources often occurs unintentionally as a result of not comprehending the complexity of the interaction of lake components and the impacts of human activities. Understanding of how lakes function and knowledgeable, purposeful management of lake resources are the keys to prevention of such abuses and consequent degradation of lake resources.

Systematic lake management is a thoughtful and integrated method that considers a broad array of problems and issues impinging on a lake and its surrounding environment. One of the keys to successful lake management is the development of a plan to protect, preserve, enhance, and restore lake

resources for enjoyment and use by present as well as future generations. Active lake management recognizes that what one does today determines the quality of the lake's resources tomorrow. Lake management strategies, however, should not imply restricted use of resources but instead should call for knowledgeable use of these resources in order to obtain **sustainable** social and economic benefits. **Successful lake management requires taking a proactive stance rather than a reactive posture to problems concerning the most sound uses of lake resources** (i.e., taking actions to predict and prevent problems rather than simply reacting to them after they have developed).

A well conceived, comprehensive lake management plan will consider a wide spectrum of issues. These can be identified in the context of broad community goals about which there usually is widespread agreement (e.g., the desirability of maintaining a healthy environment, attractive surroundings, a sound economy, etc.). Such issues might include:

- human health
- misuses of land resources
- productivity & diversity of fisheries
- commercial use & coexistence
- safe boating conditions
- recreational access
- maintenance of water quality
- aesthetic qualities
- land values
- aquatic nuisance vegetation

Many of these issues, and others, have been studied individually, on a generic basis, or for specific lakes. **Rarely have they been examined in an integrated fashion, however, where interrelated causes and effects and the underlying processes are considered together.** This integration must include the identity of trade-offs and compromises, and requires that all stakeholders (citizens as well as government agencies) be involved. This is the advantage in preparing a lake management plan. Such a plan will be holistic (e.g., comprehensive) in that it will examine the whole watershed and all of the processes, actions, and interactions taking place within it and will proceed on the premise that the whole is greater than the sum of its parts.

Problem

The long-term environmental quality of many New York lakes may be threatened without a change in management focus. Decision-making as it affects lake resources is driven by narrow interests, quick fixes, short-term goals, and a lack of sufficient awareness that health of New York's lakes is linked to that of a complex ecosystem which is encompassed by the entire watershed. Lakes and their watersheds are presently not treated as ecological systems or units in New York. Often the application of our ecologic, socio-economic and political knowledge to one resource problem is performed in isolation from other problems. Consequently, land use and other decisions are often made without adequate consideration of their impacts on the lakes themselves and on streams tributary to the lakes. With this short-sighted approach confounding effects between problems may ultimately cause failure of strategies developed to address the single problem.

Likewise, all too often, lake associations and concerned citizens tend to focus on only one or two problems associated with the lake environment, **addressing the symptoms of problems rather than their causes.** As a result, the programs they undertake to remedy a specific problem may have an adverse affect on another component of the lake ecosystem and cause even more serious problems in the future. For example, although successful nutrient abatement programs are occurring in many lakes, evidence is mounting that suggests significant progress toward improved water quality can also be gained in some lakes by manipulation of biological communities. In addition, many of the methods prescribed for treating aquatic weed nuisances in lakes may in fact be affecting other parts of the lake environment important to overall function, and may even be harmful to long-term human health. Unless we make full use of our knowledge in these areas, a serious danger exists that various strategies could be in conflict with one another.

Better public understanding of how ecological considerations affect the outcome of alternative management decisions is needed. The public has not been educated to think in ecosystem terms. Our political and social structures are not attuned to or correspond with natural, ecological units for management purposes. Presently, **state and local government units are not authorized or encouraged by law to draw upon special resources and formulate integrated lake management plans that are holistic in their outlook and which advocate long-term views.**

Need

A new institutional approach is needed in New York that will ensure that integrated, ecologically sound decision-making occurs for lakes and their environments. The best way to accomplish this is by focusing upon lakes as resources of statewide significance, through a program of comprehensive lake management planning, in which all levels of government and the private sector would have a role.

Integrated lake management planning is important in that it provides for consideration of the interaction between all potential man-made efforts to provide transportation, housing, commercial, industrial, energy, agriculture, and recreational facilities and the various natural and environmental resource characteristics (scenic, biologic, geologic and hydrologic) in the planning arena. Lake management planning also provides a mechanism for considering the relationship and interplay of all levels of government and the private sector. Comprehensive planning will establish priorities and provide essential guidance for zoning, capital budgeting, economic development, and other future actions which must be taken to meet goals and objectives.

Institutions, both public and private, that can address resource management concerns are well-established and they have the potential to undertake comprehensive lake management planning. But, they currently are not directing attention in an integrated fashion on lake resources. **Restructuring is required at the State level in order to establish a framework for integrated lake management on a consistent statewide basis and to provide guidance to the public regarding the development of sound strategies to achieve statewide goals for lake use and preservation.**

The development of a lake management unit within the Department of Environmental Conservation (DEC) would be the most desirable response to this need because many of the specialized resources and skills are already present, but dispersed in this department and DEC could utilize resources within other state departments and academia. Development of such an umbrella unit would conscientiously focus on interdisciplinary and integrative factors. Disciplines needing coverage would include, for example, fisheries, limnology, sociology, economics, resource planning, law, public health, soil conservation, land use planning, sanitary engineering, etc. The unit would take a watershed, ecosystem approach in its planning, technical assistance, and research activities, while also being able to respond to local concerns. Outreach, education, and coordination would be important activities of this umbrella unit. Basically, it would be charged with the carrying out of comprehensive lake management planning on a statewide level while integrating all other parties of interest as participants.

With technical guidance and financial assistance from the State, county governments also could provide technical planning assistance to lake and other watershed planning groups. County government also could have a role in plan implementation, particularly through the technical planning assistance. Local governments (city, town, village) could have a strong role in planning and plan implementation through leadership at the state and county levels. Several

regional programs in the state (e.g., the 12 county Clean Lakes operation in the Finger Lakes region, the Plan for the Future of the Lake George Park, the Oneida Lake Commission) serve as examples of how the institutional restructuring can occur. These experiences can be built upon to accomplish comprehensive lake management planning on a statewide basis if appropriate State leadership is provided.

Proposal

There are currently no State laws or statutes that authorize or encourage comprehensive lake management planning, set forth the elements of such plans, or provide financial and /or technical assistance for plan development and implementation. It is recommended that **statewide enabling legislation be established that encourages the integrated understanding of aquatic resources in a focused manner toward the development of comprehensive planning for New York lakes.** Legislation should:

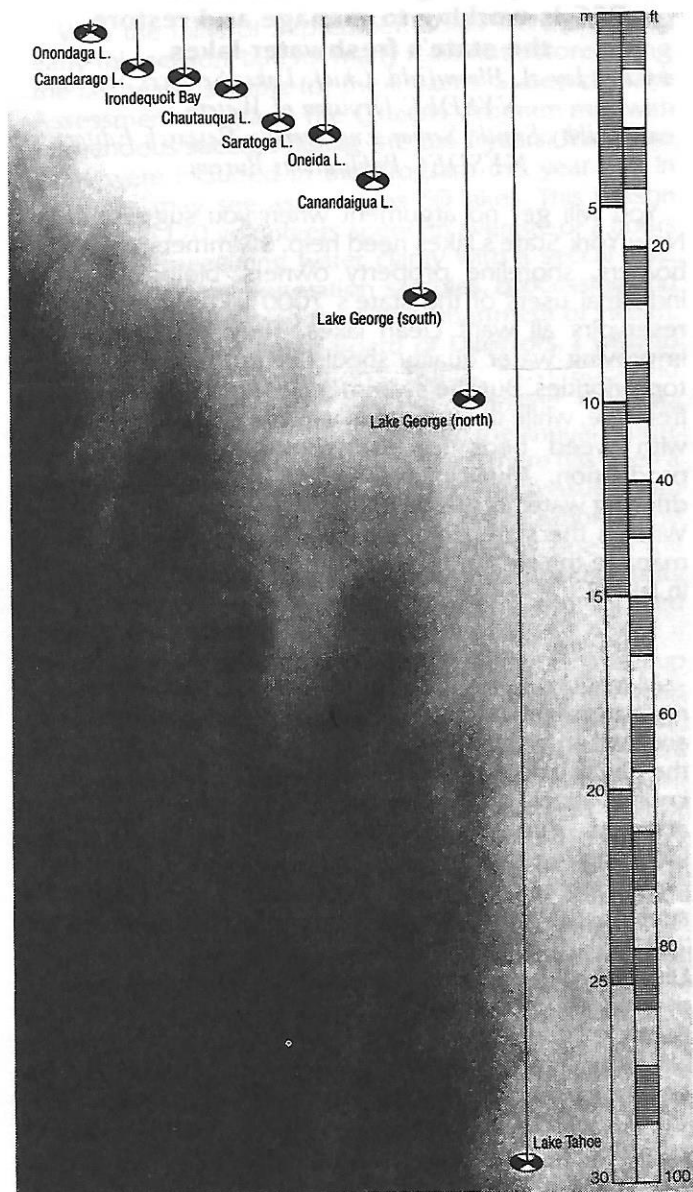
1. encourage the establishment of county and local lake management organizations, such as private lake associations and county lake commissions, maintain a network for information exchange and organize lake management task forces;
2. establish a lake management unit in DEC with interdisciplinary capabilities to provide technical assistance to county and local lake groups in the development of lake management plans, to undertake research related to lake management issues, to administer a program of financial assistance (see below), and to prepare a generic statewide lake management plan; and
3. provide State funding, including demonstration grants, to assist county and local organizations with implementation of elements of their comprehensive lake management plans as well as with plan development.

What are the goals of this proposed program? From the New York Federation of Lake Association's perspective, there are five very basic and straightforward goals:

1. to ensure that the quality of lake resources in New York is maintained or restored for the benefit and enjoyment of present and future generations;
2. to enhance public awareness of the important role that is played by lakes in our society and economy;
3. to promote the need for perpetuating healthy lake environments in a way that emphasizes the sustainability of these resources and not just their use;
4. to advance the concept of shared stewardship by making it clear that the responsibility for conserving and managing lakes does not rest just with government alone, but must be shared by all who benefit from these resources; and
5. to provide a broad forum for discussion and resolution of problems and issues pertaining to lake management in a manner that encourages a spirit of cooperation and coordination among all parties of interest.

By focusing upon the five goals described above, we hope to seek a blend between the biological aspects of lake resources and the socio-economic benefits that they provide. This will be done by encouraging the State to take the lead through the proposed legislation in identifying the need for sound biological management of our lakes, while at the same time recognizing that these resources provide a public benefit. We need to consider what is both good for the resource as well as the needs of those who use them and benefit from them.

(continued on page 4)



Typical midsummer Secchi disk measurements from New York lakes compared to measurements from Lake Tahoe (California/Nevada), an ultra-oligotrophic lake.

(continued from page 3)

In summary, lakes are one of New York State's most valuable resources. Unfortunately, because of lack of a coherent, well-defined lake resource management program with strong state leadership and broad legislative support, the importance of lakes to the state is not fully recognized. By default, management of lakes in most areas of the state has been delegated to local government. It is local government which has land use control responsibilities. Local land use controls, or the lack thereof, exert the greatest overall influence on lakes. **Local government has not been provided with proper guidance and resources to do an adequate job of managing lakes. Therefore, it is time for a statewide initiative that presents the required guidance and provides the appropriate resources to protect, restore, and preserve our lakes for future generations.**

Improving New York's Lakes DEC is working to manage and restore the state's freshwater lakes

*by Dr. Jay A. Bloomfield, Chief, Lakes Services Section,
NYSDEC Division of Water
and Libby Smith, Senior Engineering Research Editor,
NYSDEC Publications Bureau*

You will get no argument when you suggest that New York State's lakes need help. Swimmers, anglers, boaters, shoreline property owners, biologists and industrial users of the state's 7000 lakes, ponds and reservoirs all want clean lakes. They all agree that improving water quality should be among the state's top priorities. But the swimmer prefers a warm, weed-free lake, while the fisherman wants a cool, deep water with weed beds for fish spawning and oxygen production. Municipalities want a source of pure drinking water as well as a place to empty wastewaters. What is the state doing to balance conflicting needs, manage the wealth of waters and restore water quality in lakes?

Regulatory Mechanisms

Managing lakes for good water quality involves regulatory programs, proven restoration techniques and citizen cooperation, all working together to allow the best mix of uses. The state environmental conservation laws control a multitude of human activities that affect lakes and their watersheds, including regulations about how and where petroleum products can be used and stored, effluent limits for substances discharged into receiving waters (the "SPDES" program - State Pollutant Discharge Elimination System) and how highways are built and maintained. Road salt, fertilizer and herbicide use is restricted under state regulations, and proposed alterations to banks and wetlands must be reviewed for environmental impacts.

DEC acts as consultant to regional, county and municipal planning boards where local regulations can be used to protect watersheds. Localities, working individually or in conjunction with others who share a lakeshore, can enact restrictions on the type and density of proposed developments. They can also work together to control the impacts of lake use by restricting the number of boats and moorings, the speed of powerboats, and the areas where they can be operated.

Controlling External Loadings

Over the long term, it is vital to control what drains into a lake in order to preserve or improve its water quality. Many restoration techniques are targeted at reducing rampant weed and algae growth, the most obvious evidence of a eutrophic condition. Programs to reduce external loadings of nutrient compounds and sediments have, in many cases, reduced the growth of nuisance weeds and improved conditions for all aquatic life. Eroded soil can muddy the water and clog the gills of aquatic organisms, while making the lake shallower. While some sediments are bound to cloud the water during heavy rains or spring snowmelt, bank plantings, careful grading and construction of holding lagoons for stormwater can all reduce runoff and the amount of muck accumulating a lake. Riprap and bank plantings on the channels of tributary streams also helps to control sediment buildup.

The construction of new sewer lines that divert wastes from the lake have had dramatic effects in upgrading water quality. New or improved sewage treatment plants that can offer advanced secondary treatment with phosphorus removal have also improved the quality of tributary streams, and consequently have improved lake waters. Where large scale sewage treatment systems are not appropriate, individual or small-scale septic systems continue to function, with better siting and proper maintenance overseen by localities.

Point sources of pollution are not difficult to locate, identify or monitor. It is far more difficult to find a non-point source of pollution, to control excess fertilizer, animal wastes and herbicides that may trickle into the water from lawns and fields. Individual property owners can practice good management techniques by not planting deciduous trees near the water's edge or piling raked leaves and grass clippings on shore. Cleanup of stumps and branches on shore lines and in shallow waters can also remove organic nutrients. One source of nutrient loading was curtailed when the state banned the sale of phosphorus-containing detergents in 1973, but phosphorus and nitrogen compounds continue to seep into lakes, nourishing aquatic weeds and algae into rampant fertility.

Reducing Internal Loadings

Where these nutrient compounds are already present in a body of water, they persist through the plant cycles of growth and decay. The nutrients stay available for new plant growth, even when external loadings are reduced. Several techniques are available to remove the compounds from the growth cycle; chemical bonding and physical removal. Just as alum works to coagulate materials in a water treatment plant, it can bond with phosphorus in bottom sediments, making the nutrient unavailable for plant growth. Experimental alum seeding on several lakes has proved effective in reducing weed growth and algae blooms. However, it is costly, labor-intensive and must be repeated. Physically removing the nutrient-rich bottom sediments by dredging or pumping is another, more drastic, approach requiring heavy equipment and proper disposal of the dredged material. Merely dumping it on the shore would allow nutrients to leach back into the lake.

Physical Alterations

Other physical restoration techniques include manipulating the lake level, in situations where it will not harm docks or cottages. Winter draw-down will freeze-kill or dry out plants rooted in shallow areas. Conversely, deepening a lake with a dredge or backhoe is an expensive but long-lasting solution. Temporarily or permanently increasing a lake's level by building or raising a dam creates a depth where problem weeds cannot grow, keeps the lake's waters cooler and promotes the healthy spring and fall "turnover" circulation that aerates the water and redistributes nutrient compounds. Aeration can also be accomplished through manmade "bubbler" pumps or by constructing falls and riffles on the tributary streams.

Mechanical weed harvesting is effective if conducted on a regular basis, usually at least twice a summer. Large machines are used to cut rooted plants below the water surface. All of the cut stems must be removed, because small pieces can re-root. Individuals can hand cut weeds or pull weeds out at practically no cost, but again, all of the cut pieces should be removed.

Some of the most effective techniques involve mechanisms that prevent sunlight from reaching the water plants, although these may interfere with recreation. The apparatus can range from floating black plastic sunscreens to lightproof mats anchored to the bottom to smother weed growth. An inert chemical coloring compound has also been effective in limiting the growth of submerged aquatic plants in small water bodies.

Biological Controls

Bringing in new species to control plant or animal pests often results in unpredictable side effects and is not usually recommended. However, experimental introduction of grass carp has had some success. These fish, which are sterile and will not reproduce to become nuisances themselves, have proved to be useful weed munchers in warm water lakes.

Another long-range control on both quantity and quality of water entering a lake is to preserve existing wetlands. Emergent vegetation acts as a living filter, removing unwanted dissolved substances and slowing the flow of water. Suspended sediments settle out and do not enter the lake. Following the model of natural wetlands, manmade biological filters have been constructed, successfully treating and slowing stormwater runoff.

Chemical Controls

Water supply systems often use copper sulphate in the raw water reservoir to reduce the growth of algae that produce taste and odor problems. And experiments with spreading crushed limestone in acidified lakes have proved to be a temporary remedy for high pH. Introducing herbicides is a controversial approach requiring extensive environmental impact review and the issuing of state permits.

In slowing the eutrophication or aging process in a lake through any of these restoration techniques, it is wise to remember that some plant life is necessary to maintain a healthy aquatic ecosystem. The sad lesson learned from acidified lakes in the unbuffered granitic

bedrock of the Adirondacks is that the clearest waters support no life; no plants mean no food chain, which means no fish.

Prevention is the Best Policy

As is true in maintaining our health or that of an ecosystem, preventing abnormal conditions is the safest, least expensive and most desirable approach. Lake restoration begins when nutrients and erosion are controlled in a watershed. Keeping a lake, pond or reservoir in a healthy condition requires constant vigilance and sound environmental practices.

Editor's Column

With the rains of September, boats were put away early this season, but, for many folks not before taking the last water sample for the Citizens' Statewide Lake Assessment Program. The Citizens' Program met with tremendous success during the last 2 years. Thirty-five lakes were included in the Program this year and in 1988 we may see as many as 60 lakes. This season more than 170 volunteers spent an average of 2 hours per week measuring water clarity with a secchi disk, taking water and vegetation samples, processing and finally mailing them to the NYS Department of Health. On behalf of the entire Board of Directors, I wish to salute them for their efforts. During November and December, Scott and I will be compiling the data collected from this season and write the annual report.

As a result of the Citizens' Program there has been a surge of interest about lake management issues from lake associations, environmental organizations, and municipalities. Most likely this is directly due to the heightened awareness of decreased water quality throughout the state brought on by the focused attention to this issue by the Federation.

In response to the deluge of requests, DEC has set up a network of regional lake managers. These individuals (names and regional map elsewhere in *Waterworks*) are available for assistance with lake management issues to local associations. In the future they will also be involved with the training of volunteers for the Citizens' Program.

In addition, DEC is preparing a lake management guide/manual which would companion the CSLAP and serve as an effective tool for lake associations in the control of at least some of their individual lake management issues. Special emphasis will be given to the actual preparation of a lake management plan and a model will be provided.

Things are looking up for New York lakes, the Federation can take great pride in playing an important role in getting lakes the attention they need and deserve.

Special thanks to Mr. and Mrs. Ford of the Finger Lakes Region for the donation of \$920.00. This money was found in the treasury of the original New York Federation of Lake Associations which dissolved in 1979.

Tracey M. Clothier

Environmental Review Act Keeps Eye On Residential & Commercial Projects

More than 100 local government officials and the public got a lesson on the ins and outs of the State Environmental Quality Review Act in Lake George recently.

The training session was sponsored by the Warren County Planning Board and presented by representatives of the state Department of Environmental Conservation. More than half of those attending were members of the public who wanted to hear more about this law designed to protect the environment, in the face of the many developments planned in the area.

What is the State Environmental Quality Review Act (SEQR)?

Passed by the Legislature in 1975, updated this past June and written by the state Department of Environmental Conservation, the act protects the environment during study and review of residential and commercial projects by local planning boards, regional or state agencies. These projects can be modified during early stages of planning to protect the environment using the SEQR process.

How is SEQR implemented?

A lead agency assumes control of this process. That agency is the one primarily responsible for the project's approval and is usually a town planning board.

What is the first step of the SEQR process?

It must be decided if the proposed project requires the environmental review process. Projects are designated as unlisted, type one, type two, exempt and excluded.

A hypothetical example can be made, based on information given at the meeting. The names used are fictional.

James Smith, a local developer, has purchased 90 lakeside acres. He plans to build Lake Ridge Log Homes, a development of log homes on one-acre lots.

The local planning board is the lead agency. That board will review on-site community sewage for the hilly subdivision, traffic exiting near a densely traveled road and the proposal to cut many trees from 20 acres to provide a view of the lake.

Smith must submit an application for a major subdivision and must complete an environmental assessment form, part one.

What is an unlisted project?

This includes projects that are not type one or two and aren't exempt or excluded. Most "unlisted" projects would trigger SEQR, especially if they are close to the definition of type one projects.

What is a type one project?

This is a project likely to have a significant effect and may require an environmental impact statement such as:

- Construction of 10 or more residential units municipalities with no zoning or subdivision regulations, 50 units not to be connected to public water and sewage services, 250 units to be connected to community services in city or town of less than 150,000.
- A project altering 10 or more acres.
- Parking for 1,000 vehicles.
- A building exceeding 100 feet in height.
- A non-agricultural use in an agricultural district.
- An unlisted action occurring next to or within a historic building or area.

Smith's project, Lake Ridge Log Homes, would be considered type one due to environmental concerns

about traffic, sewage and runoff.

What are type two actions?

These are projects which pose no threat to the environment.

What are exempt and excluded projects?

These include projects started before SEQR began in 1976, those subject to the authority of the Adirondack Park Agency or the state Public Service Commission, maintenance or repair and emergency actions required to protect or preserve life.

What is the purpose of an environmental assessment form?

This form is a first step to determine if there is an environmental impact. The project is described and potential impacts on the environment noted.

What is the next step in the SEQR process?

After the environmental assessment form is submitted, a positive declaration of environmental impact or a negative declaration, indicating no impact, is made by the lead agency.

If there is a positive declaration, impacts, project boundaries, reasonable alternatives and solutions are identified in a process called scoping. A draft environmental impact statement is prepared by the project developer or sponsor. This document explains impacts and suggests ways to deal with them.

The board considering the Smith subdivision had made a positive declaration, stating there are environmental concerns about traffic, septic systems and storm water runoff.

What is the next step?

The draft environmental impact statement is accepted or returned to the developer for reworking and then accepted. This is prepared to find ways to lessen the impact to the environment or to find a less-damaging alternative.

There is a minimum 30-day public comment period, and then there could be a public hearing.

Developer Smith prepares a draft environmental impact statement and offers solutions for the traffic hazard. His engineer presents a community sewage treatment plan that is functional in rocky soils. That engineer also presents a storm-water runoff system that uses catch basins to trap water before it could flow into the lake.

What is the last step?

The final environmental impact statement is prepared by the lead agency and findings of fact are written to show that environmental impacts will be minimized.

The board had a public hearing on the Smith development and listened to neighbors raise concerns about the soils and about runoff. The board agreed that Smith has answered all environmental questions and issued its final environmental impact statement and its findings. Those findings are distributed to involved agencies and to Smith.

What is a conditioned negative declaration?

This declaration is for unlisted projects begun by the applicant that have impacts that easily can be modified. An environmental impact statement can be required.

A full environmental assessment form must be filed and the lead agency's imposed conditions must eliminate or significantly alter all important environmental impacts.

What authority does SEQR give?

SEQR provides involved agencies with the authority, following procedure, to set conditions on a project to insure protection of the environment.

Can the public participate in the SEQR process?

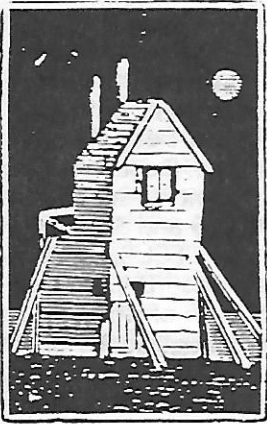
There are different times during the SEQR environmental impact statement process when members of the public can speak at a public hearing or can submit written comments.

Do other agencies offer comment?

During the environmental impact statement's public participation period, other local, regional or state agencies and governments can provide comment.

Agencies that might be part of the review process are local planning boards, the state Department of Health and the state Department of Environmental Conservation.

Reprinted from the Post Star



So you're going to sell your cottage?

by Bob Dunlop

You have had it up to the eyeballs with the traffic, maintenance, midnight motor-boat races, and every friend (loose terminology) you've ever had in the world enjoying your hospitality ... uninvited.

The equity you now have would make a huge vacation/retirement fund and dropping in on your second-cousin-twice-removed at their Palm Beach condominium would be sweet revenge. Whatever the reason for bailing out, you've decided to sell your cottage.

Uncork the wine ... why did you buy the cottage in the first place? Ahhhhh, the great outdoors, the smell of the pines, peace and tranquility, getting away from it all.

Remember what you wanted in a cottage? South or west exposure, deep water and shallow water with a beach, not too steep a lot, and, oh yes, good winter access, a stone fireplace and it must be winterized, of course.

And you compromised—slightly. Winterizing wasn't THAT big a job. And while you winterized, junior practiced his giant slalom technique on the "mild" incline down to the lake. Fortunately wood-frame construction made it relatively (your father did it) easy to install the picture window in the west wall.

So, who's going to buy your cottage? Someone just like you, with the same criteria that you had when you bought. This is the ace up your sleeve. You're seasoned cottagers now, and you know that there is a lot more to cottage life than watching the sunset through your new picture window.

Pour another glass of wine and remember the first years, the innocent years ...

Remember wanting a cottage with a basement to store all that stuff that goes along with cottaging? Instead, you bought a cottage built on piers. You assumed that the piers were sound and deep enough to be below the frost line. Remember being surprised during the first winter to discover that the floors were no longer level, doors wouldn't open or close because

the frames were out of square, and cracks that were little hairline things in the summer had grown to large voids? Frost heaving and adfreezing were added to your repertoire of casual conversation topics.

Frost heaving is self-explanatory. Adfreezing is not. Adfreezing occurs when the foundations are deep enough to ensure that the frost won't get under them, but ice lenses (disks of ice) form in the soil adjacent to the piers and stick to them. As the soil around a pier heaves, it lifts the ice lenses and the foundation. If the cottage had a full basement, long horizontal cracks would have shown up in the foundation walls a couple of feet below ground level. With piers, nothing was obvious. Properly draining soil or gravel around the piers will prevent this phenomenon, but you're selling now and you have to leave some work for the new owners.

In addition to the structure rising and falling with the seasons, you have learned about carpenter ants. You never did find the nest but you sure killed a lot of ants. With any luck the prospective purchaser won't notice the big black fellas.

If they missed the ants, maybe they won't notice that the roof has a low pitch (like so many of the prefab cottages do). It's the summer time so they'll never figure out that ice will form big dams at the eaves (now that it's heated in the winter) and cause water to back up under the shingles. Because the roof slope is less than a four-foot rise over a 12-foot run, specially designed low-slope shingles and eave protection should have been provided when the cottage was built, but local roofers tend to overlook such details.

Having paid no attention to the roof, the starry-eyed couple will likely not notice the deteriorating prefabricated metal chimney for the wood stove. With any luck, they'll totally ignore the wood stove itself. Even if they do notice, you can say with a clear conscience that most of the wood stoves in cottage country don't meet manufacturers' installation requirements and are a fire waiting to happen.

The odds of the stove burning down the cottage are lessened simply because the odds of an electrical fire have increased. Your brother-in-law did a little wiring to show his appreciation for letting him, the three kids and the dog use your cottage for the last week of July and the first week of August (since time began, as you recall).

Brothers-in-law are never big on doing electrical work by the book. They touch combinations of wires together so the lights go back on, put some tape on the connections, and tuck the excess wire into the hole that the porcupine chewed (and that's another story).

And then there's the plumbing. It's winterized—sort of. The heating cable to the lake always works. The pump and expansion tank do too as long as the light bulb (used for heat) doesn't burn out. To be safe you should drain the system at the end of every winter weekend, and if you know where all the low spots in the sagging plastic pipe are, it's no problem.

The solid-waste pump doesn't plug up often. When it does you don't need any special equipment to fix it. You just need the lungs of a native pearl diver to hold your breath while working in the holding tank. And the septic tank and bed work just great. Nobody has had to repair it, or even look at it, for the last 15 or 20 years!

But forget all that stuff, it does have the new picture window. It'll sell.

Reprinted from the Ontario Cottager

Lamprey program proposed

A program to control sea lamprey in Lake Champlain may start in 1989, with results the following year, a fisheries biologist said.

A draft statement on the project should be available later this month, with public comment taken this summer, biologist Jon Anderson said.

Lampreys feed on various kinds of sport fish. The eel-like parasites are native to the ocean, but they decimated the Great Lakes' trout population in the 1950s, having entered the St. Lawrence Seaway in the 1920s.

In Vermont, they attack primarily smooth-skinned fish like landlocked salmon and lake trout, although they also prey on white fish, northern pike, walleye, bass and perch.

The control project is an effort between Vermont, New York state and the U.S. Fish and Wildlife Department, said Angelo Incerpi, Vermont director of fisheries. Each state is providing \$300,000 and contracting with the federal government to do the treatment and monitoring.

The project involves treating Lake Champlain tributaries with a chemical that interferes with the lamprey's oxygen intake, Incerpi said.

The treatment kills larvae but not the adult fish.

Anderson said the program could increase the number of salmon by 10 and their size by two to three times. He predicted a significant benefit for brown trout and steelhead.

"I'm optimistic we will have treatment in 1989 and start to see some results in 1990 and really see something in 1991," he said.

Fifteen streams on both sides of the lake would be treated, said Paul Neth, an aquatic biologist with the New York Department of Environmental Conservation. Larger rivers, including the Winooski, Lamoille and Missisquoi in Vermont, would not be touched because of effects on other species of fish, Anderson said.

He said residents along the lake have been notified of the chemical treatment. They include 850 people in Vermont and slightly more in New York.

Current Studies on Use of Grass Carp

*by Patrick Festa and Edward Woltmann,
NYSDEC, Albany, New York*

The stocking or possession of grass carp remains illegal in New York State unless a permit from the Department of Environmental Conservation is obtained. To date, no permits have been issued.

This prohibition is now being reconsidered because of the availability of "sterile" triploid forms of this species.

In 1985, the Department initiated a study to evaluate the potential use of sterile grass carp for aquatic vegetation control in New York waters, and to provide baseline data for the possible establishment of stocking guidelines and criteria. This demonstration project entitled, "An Evaluation of Aquatic Vegetation Control with Sterile Grass Carp," is being conducted by the Bureau of Fisheries on four Long Island ponds. Funding for the project is received through the state's "Return a Gift to Wildlife" income tax checkoff.

Impacts of sterile grass carp stocking on aquatic plant biomass, water quality (total phosphorus, nitrate, total Kjeldahl nitrogen, conductivity, alkalinity, dissolved oxygen, and pH), fish community structure and condition, and phytoplankton (chlorophyll-a and

composition) in the study waters will be examined over the next two years. The collection of one year of baseline (pre-stocking) data and one year of post-stocking data has already been completed.

Sterile (triploid) grass carp were stocked in June 1986 in three of the project waters at densities of 15, 25 and 40 fish per acre. All fish were examined and certified as triploid by the USFWS prior to stocking. The most obvious change in the ponds after stocking has been a significant increase in total phosphorus and chlorophyll-a concentrations. While vegetation control was not noted during the stocking year, the fish were observed feeding on the vegetation. Rapid growth from the initial nine-inch size was observed with some fish reaching 16-18 inches four months after stocking.

State of New York

Department of Environmental Conservation

Notice of Public Hearing

Amendments to 6 NYCRR Part 325 Relating to the Application of Pesticides

Notice is hereby given that the Department of Environmental Conservation, pursuant to Sections 3-0301.2(m), 33-0303.3(e), 33-0905.5 and 33-1005 of the Environmental Conservation Law ("ECL"), will hold a series of public hearings on the Department's proposed amendments to Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6 NYCRR") REGARDING THE NOTIFICATION REQUIRED TO BE PROVIDED BY ALL CERTIFIED PESTICIDE APPLICATORS OR PERSONS WORKING UNDER THEIR SUPERVISION PRIOR TO PESTICIDE APPLICATIONS, AND THE WRITTEN CONTRACTS AND VISUAL NOTIFICATION REQUIRED TO BE PROVIDED BY COMMERCIAL PESTICIDE APPLICATORS OR PERSONS WORKING UNDER THEIR SUPERVISION FOR ANY COMMERCIAL LAWN APPLICATIONS.

The proposed amendments will describe the form and content of the notification required to be provided by certified private and commercial pesticide applicators or persons working under their supervision to the occupants of dwellings and to the owners or agents of multiple dwellings or other structures prior to any pesticide applications within or on the premises of the structure; describe the acceptable methods of providing the required notification; and establish the procedures for providing prior notification for community-wide, government-sponsored pest control programs and right-of-way treatments. The Department has proposed two identical sets of regulations, which differ only in the extent of the notification required to be provided by commercial applicators applying pesticides for the production of agricultural commodities or by private applicators and will adopt a final regulation based on the review of public comment received on the two proposed rules. The proposed regulations also describe the responsibility of owners of structures or their agents to provide notification to the occupants of these structures and the manner in which they must provide the notification to the occupants, prior to the application of a pesticide. The proposed regulations will describe the requirements for written contracts and visual notification for commercial lawn applications.

Statements or comments from the public are solicited on all aspects of the proposed regulations, including but not limited to the form of notification, newspaper notification, minimum time requirements,

posting requirements, methods to be used for the verification of notification, and the distance limitations for rights-of-way and agricultural applications. In addition, comments are invited on possible proposals to require: notification of property owners adjacent to treated premises; notification of occupants, owners or owner's agents of property located within a specific distance of the pesticide application; individual written notification of all community members where community-wide pesticide applications are planned; and posting for right-of-way applications.

The Department has prepared a Negative Declaration under the State Environmental Quality Review Act, and a Consolidated Regulatory Impact Statement and a Consolidated Regulatory Flexibility Analysis under the State Administrative Procedures Act.

Public hearings will be held at the following times and locations:

November 4, 1987

2:00 p.m. and 7:00 p.m.

Cheektowaga Town Hall Council Chambers
Broadway & Union Road
Cheektowaga, New York

November 5, 1987, at 2:00 p.m.

State Office Bldg., Room 313
164 Hawley Street
Binghamton, New York

November 6, 1987, at 10:00 a.m.

State Office Bldg.
Conference Room A
207 Genesee Street
Utica, New York

November 9, 1987, at 1:00 p.m.

Adirondack Park Agency
Conference Room
Route 86

Ray Brook, New York

November 13, 1987, at 10:00 a.m.

Community College of the Finger Lakes
Lecture Room D216
Lincoln Hill Road

Canandaigua, New York

November 16, 1987, at 10:00 a.m.

Public Safety Bldg.
Police Department Training Room
55 Broadway
Newburgh, New York

All hearing locations are reasonably accessible to handicapped persons. Interpreter services can be made available to deaf persons, at no charge, upon written request received by the Bureau of Hearings within a reasonable time period prior to the scheduled hearing.

All persons, organizations, corporations, or government agencies, etc., which may be affected by the permanent adoption of these amendments to the regulations are invited to attend the hearings and/or to submit either written or oral statements on the proposed amendments.

It is recommended that lengthy statements be submitted in writing, since a time limit on oral testimony may be imposed. It is only necessary to attend one of the hearings since a cumulative record will be compiled. Each hearing will continue until all persons wishing to make statements have been heard. Written statements received prior to or during each hearing and oral statements made at each hearing will be made

part of the official record and will be given equal weight.

Written statements may also be filed until 4:00 p.m. on November 20, 1987, with ROBERT S. DREW, CHIEF ADMINISTRATIVE LAW JUDGE, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, BUREAU OF HEARINGS, ROOM 612, 50 WOLF ROAD, ALBANY, NEW YORK 12233-1550 (Telephone 518-457-3468).

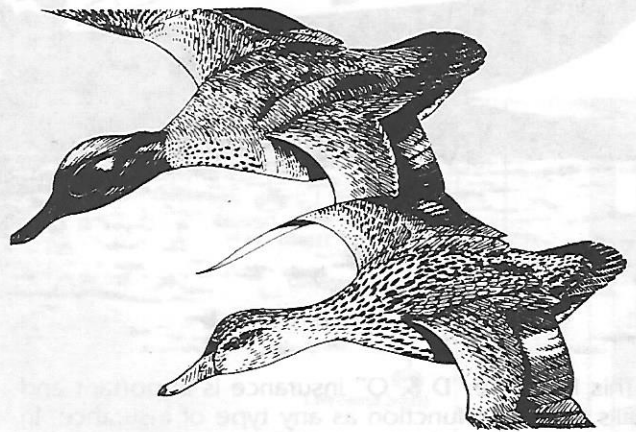
To request copies of the proposed amendments and/or to obtain additional information contact: DENISE E. STEPHENS, BUREAU OF PESTICIDES MANAGEMENT, ROOM 404, 50 WOLF ROAD, ALBANY, NEW YORK 12233-4251 (Telephone 518-457-7482). Copies are also available for review at the Department of Environmental Conservation Regional Offices.

Albany, New York

September 21, 1987

Robert S. Drew

Chief Administrative Law Judge



Director's and Officer's Liability Insurance

by Mr. Clifford J. Treese

We live and work in an environment of risk. One of the ways we financially deal with the risk is through the purchase of insurance. For most of our insurance purchases, the risk that we are financially protecting ourselves against has a common place or familiar feeling. Auto, health and homeowner insurance fall into this category of 'known' risk.

Other types of risk, however, particularly those that are outside of our conventional experience, either escape our notice or, when pointed out, strike us as fanciful or outlandish. Director's and Officer's Liability Insurance ("D & O") certainly falls into these latter categories.

Most of us, at one time or another, have served on the Board of a non-profit charitable or similar organization and the notion that we could suffer adverse personal financial loss while pursuing an acknowledged public good seems unreasonable. Yet, our actions as Board members are unarguably open to challenge no matter how benevolent are our or our organization's intentions. It is not always what we do or why we do it that are important, but the fact that someone else doesn't like it that can cause us grief.

In our litigious society, Boards of Directors of non-profit organizations are being held increasingly to the same legal standards as are the Boards of for-profit corporations. Worse yet, anyone can bring a law suit if they have the motive and the resources, and, while an organization may agree to indemnify its Board members in the event of such a suit, there still needs to be a way to fund the indemnification.



Kay Bradley and her father, Ben, testing the water in Babcock Lake in cooperation with the Citizen's Statewide Lake Assessment Program.

This is where "D & O" insurance is important and fulfills the same function as any type of insurance. In fact, Director's and Officer's Liability Insurance ("D & O") shares three important characteristics with other kinds of liability insurance.

1. It is liability based and therefore depends on negligence.
2. Coverage is afforded for certain wrongful acts even if the allegations are groundless, false and fraudulent.
3. Attorney's fees to cover defense costs are supplemental to the primary policy limits and are definitely included.

Unlike other kinds of liability insurance, however, "D & O" *doesn't* protect a Board from the legal consequences of negligent acts which result in the bodily injury, property damage or personal injury. These latter consequences are typically insured through a comprehensive general liability insurance policy. "D & O" insurance is for those other areas of Board activity which are so common that we either think they are unchallengeable or they are merely policy disputes or we overlook them:

1. Financial management of the organization's assets and resources.
2. Administrative duties involving establishing policies and enforcing rules and regulations.
3. Maintenance and operation of the organization's physical space and other assets.

An error or omission in these areas by the Board will usually not lead to bodily injury, property damage or personal injury. Yet, if someone alleges that a wrongful decision has been made and follows up this charge with a lawsuit, then the Board is faced with defending itself.

The possibility of such a suit depends on many factors some of which have already been mentioned. The argument being presented here is not based solely

on the facts of a potential suit, but on the notion that such litigation is far from uncommon and that the consequences can be destructive. Suffice it to say that once the suit is filed, a legal defense is required even if there is no eventual judgement of negligence, even if some type of tort reform provides limited immunity and even if the organization agrees to indemnify its Board.

Someone has to pay and this is the function of "D & O" insurance. The Board and the organization are insured against the financial consequences of certain defined wrongful acts and these financial consequences include payment for attorney's fees and judgments. As an individual, you do not have to risk, paying out of your own assets, the burden of the organization's defense, or, of your defense if you are charged, as a individual Director, with acting outside the scope of your duties. In a corresponding manner, as an organization, you do not have to risk your assets as you pursue your mission.

This type of coverage is vital at all levels that an organization operates: national and local. While underwriting considerations change when considering an organization's members, the same conditions and arguments prevail perhaps with even greater clarity.

Director's and Officer's Liability insurance presents its own complexities as a technical document. These technical considerations are left for further discussion at another time. "D & O" insurance is an important element in any group's risk management program. Its purchase is recognition that voluntary service is not without its own organization and personal financial risks.

(Questions regarding "D & O" insurance can be directed to Mr. Treese at (312) 259-4446 or (800) 2337-3762 ext. 150).

Region 1
Suzanne Brol
Division of Water, Room 111
NYSDEC Region 1 Headquarters
SUNY Campus, Building 40
Stony Brook, New York 11794
(516) 751-7725 ext. 246

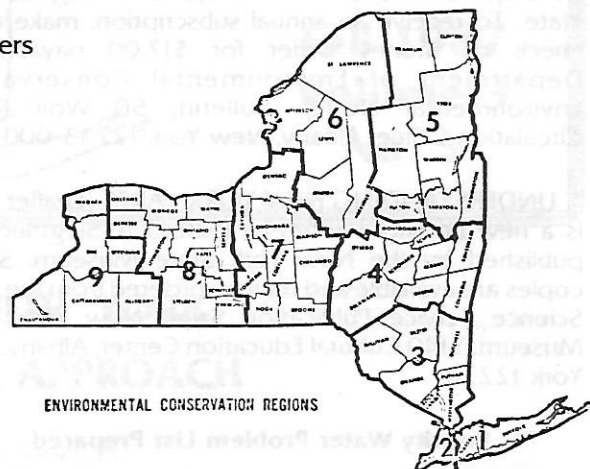
Region 5
Fred Dunlap
Environmental Quality
NYSDEC Region 5 Headquarters
Route 86
Ray Brook, New York 12977
(518) 891-1370

Region 8
Pradeep Jangbari
Division of Water
NYSDEC Region 8 Headquarters
6274 East Avon-Lima Road
Avon, New York 14414
(716) 226-2466

Region 2
Randy Austin
Division of Water
NYSDEC Region 2 Headquarters
Hunter's Point Plaza
47-40 21st Street
Long Island City, New York 11101
(718) 482-4933

Region 7
Charlie Branagh
Environmental Quality
NYSDEC Region 7 Headquarters
7481 Henry Clay Boulevard
Liverpool, New York 13088
(315) 428-4514

Region 4
Tom Blanchard
Division of Water
NYSDEC Region 4 Headquarters
2176 Guiderland Avenue
Schenectady, New York 12306



ENVIRONMENTAL CONSERVATION REGIONS

The Federation of Lake Associations

We are a coalition of organizations dedicated to the preservation and restoration of all lakes, ponds and rivers throughout New York State. We welcome and encourage the memberships of lake associations, property owner groups, fish and game clubs, corporations and individuals. The Federation is incorporated under two mirror organizations with the same officers and board of directors.

The Federation of Lake Associations, Inc. purposes are:

- * to provide a clearinghouse of environmental information and expertise in all matters pertaining to lake management.
- * to promote by education the wise use and appreciation of the lakes in New York State.
- * to provide a pool of technical knowledge and expertise to advise and assist member associations and individuals.
- * to establish liaison with other environmental groups and agencies.
- * to provide a coordinating structure for lake-related research projects.

The Federation of Lakes, Inc. purposes are:

- * to monitor and report to members on legislation and administrative actions affecting the waters of New York State.
- * to support and lobby for legislation and administrative actions which promote the sound management of the waters of New York State.

MEMBERSHIP CATEGORIES

Associations with up to 99 members				\$30.00/yr.
Associations with 100 to 199 members				\$50.00/yr.
Associations with 200 or more members				\$100.00/yr.
Individual	\$15.00/yr.	Corporate		\$100.00/yr.

Membership dues over \$5.00 are tax deductible contributions to the Federation of Lake Associations, to be used for educational, scientific and public information activities of the Federation.

APPLICATION FOR MEMBERSHIP

THE FEDERATION OF LAKE ASSOCIATIONS, INC., 273 HOLLYWOOD AVE., ROCHESTER, NY 14618

Type of Membership (please check) ☐ Association ☐ Individual ☐ Corporate

Association Name: _____

Assoc. Address: Street _____ City _____ State _____ Zip _____ County _____

President/Contact Person: _____

Summer Address _____ Winter Address _____

Summer Phone () _____ Winter Phone () _____

Total number of persons representing your association membership _____

Notes & Publications

STARTING AND BUILDING AN EFFECTIVE LAKE ASSOCIATION is a publication that describes how to form a new lake association and how to manage an existing association. To receive a free copy contact: NALMS, 1815 H Street, N.W., Suite 1000, Washington, D.C., 20006, or call (202) 833-3382.

Subscribers to the ENVIRONMENTAL NOTICE BULLETIN are aware of all major land use developments and other projects throughout the state. To receive an annual subscription, make out a check or money order for \$12.00 payable to: Department of Environmental Conservation, Environmental Notice Bulletin, 50 Wolf Road, Circulation Office, Albany, New York 12233-0001.

UNDERSTANDING NEW YORK LAKES (Leaflet #26) is a new booklet written by Clifford A. Siegfried and published by the New York State Museum. Single copies are available and may be ordered from the State Science Service Publication Sales, New York State Museum, 3140 Cultural Education Center, Albany, New York 12230.

Priority Water Problem List Prepared

Commissioner Jorling recently announced publication of DEC's Priority Water Problem List. The list contains 644 water bodies across the state where intended water uses are impaired by pollution. Acid rain

accounts for just over half of all problem cases recorded with 323 problem waters listed in the Adirondacks. High priority acid rain cases number 149, medium priority 156 and low priority 18. Non-point source pollution problems from agricultural run-off from pesticides and fertilizers, and urban run-off from fuels and other chemical contaminants were identified in 144 cases. The Priority Water Problem List is utilized for establishing priorities for water quality surveys, permit development, annual ambient water testing, wastewater treatment construction grants and stream classification reviews. The report and/or an executive summary is available from DEC's Division of Water, Bureau of Monitoring and Assessment, Room 328, 50 Wolf Road, Albany, New York 12233-0001.

CATSKILL PLANNING is an informational bulletin on land use issues for local government officials in the Catskills.

It is produced by The Catskill Center for Conservation and Development, Inc. in consultation with county Planning Directors of the Catskill region. The Catskill Center is a non-profit citizens organization serving the communities of the region with programs on land use planning, environmental management, open space and historic preservation, community revitalization and economic development.

CATSKILL PLANNING is distributed without charge to local governmental officials throughout the Catskills. It is available to the public by subscription. For more information contact: Catskill Planning, c/o The Catskill Center, Arkville, New York 12406, (914) 586-2611.

The Federation of Lake Associations, Inc.
273 Hollywood Avenue
Rochester, New York 14618