

8

User Conflicts: Learning to Share

Introduction

Ecologist Garrett Hardin (1968) spoke of the “*Tragedy of the Commons*” as a paradigm for the struggle of allocating limited resources in a world suffering from near limitless need. In many ways, the conflict among the various user groups for the allotment of lake-water resources can be described as a similar struggle, if not a tragedy. These struggles have not spared the lakes, ponds, and reservoirs of New York State. As the demands on limited resources exceed the carrying capacity of lakes, user conflicts need to be addressed and resolved. This problem will become increasingly important as population pressures continue to grow. The solutions invariably require that users share the lake resource and be willing to compromise on their demands without compromising the underlying health of the lake ecosystem. Lake associations can play a key leadership role in conflict resolution.

User conflicts include some of the most contentious issues for New York State lake residents and recreational lake users. Some of these detract from the recreational and aesthetic enjoyment of lakes, while others create situations where safety or human health can be compromised. People problems related to lakes often fall into the categories of incompatible uses, water-level issues and public access issues.

Incompatible uses

- *Water supply versus recreational use.* Water for swimming and recreation may seem a secondary concern compared to fulfilling the basic human needs of drinking water and hygiene or even irrigating crops. A plentiful supply of water and lakes in New York State allows recreation to take a higher priority than in many other states. Allocation of water from the Great Lakes, for instance, will become the focus for enormous



Fig. 8–1. Over 1,100 canoes and kayaks converged on Fourth Lake in July, 2008 during a charity event called “*One Square Mile of Hope.*” (CREDIT: ROY REEHL)

conflict in coming years as drought-stricken states and countries look for alternative water sources. (See Appendix E, “Interstate River Basin Commissions.”)

- *Excitement versus serenity.* People are universally drawn to a lake for escape and relaxation, but their methods for achieving this can differ dramatically. Some seek the excitement of speed, while others seek solitude. This dichotomy translates into conflicts between those who want noise and speed controls on a lake versus power boats and personal watercraft.
- *Pristine settings versus economic development.* Considerable disagreement can arise between people interested in maintaining scenic vistas such as forested “viewsheds,” and those desiring to increase lake development and local tax bases.
- *Moldy bread versus moldy lake.* Conflicts can arise between the pleasure of feeding waterfowl and the pleasure of a lake free of pathogens and algae.

Water-level issues

Power generation versus the interests of downstream water uses. Current practices for hydroelectric generation maximize power generation and minimize costs through dam operations by rapidly changing flows, alternating high flows and zero-flow periods and complete drawdowns on a daily basis. Such operations create conflict because they seriously impact anglers and their fish, boaters and other downstream users.

- *Internal lake association conflicts.* Some lake-shore owners desire a low water level to control weeds, repair docks and reduce erosion, while others want water level high enough to assure boat access and protect submerged water lines. These conflicts can occur throughout the year but are often exacerbated in the fall.
- *Ownership issues.* Who owns the keys to the dam, and who is responsible for maintaining or repairing the dam? Do we need more than Hans and his thumb? Who is responsible for protecting vulnerable downstream river uses and the value of lakefront properties? Most important, who is liable and accountable for any catastrophic tragedies in the event of a dam breach or failure?

Public access issues

- *“Outsiders” versus “Insiders.”* Non-residents who use New York State lakes through boat launches, marinas and other means of public or semi-private access are frequently pitted against lakefront or local residents who are opposed to opening the lake to non-residents. State and municipal governments try to strike a balance between providing residents and taxpayers access to waterfront recreation while protecting municipal water supplies, lakefront property values, and environmental stewardship.
- *Local anglers and lake users versus competitors at fishing tournaments and derbies.* A battle between two groups for big fish, which do not necessarily cooperate with either group trying to lure them.

Many management tools can be used to address user conflicts, but they can all be summed up in one word, “COMMUNICATION.” The development of bottom-up, holistic, lake-management plans requires interaction, cooperation and compromise among user groups. Most New York State lakes are multiple-use resources. Some uses may ultimately be incompatible,

but there is usually enough water or water surface in New York State to go around. Several management tools have been developed to address user conflicts if communication does not lead to compromise or if a management structure is needed to create a compromise.

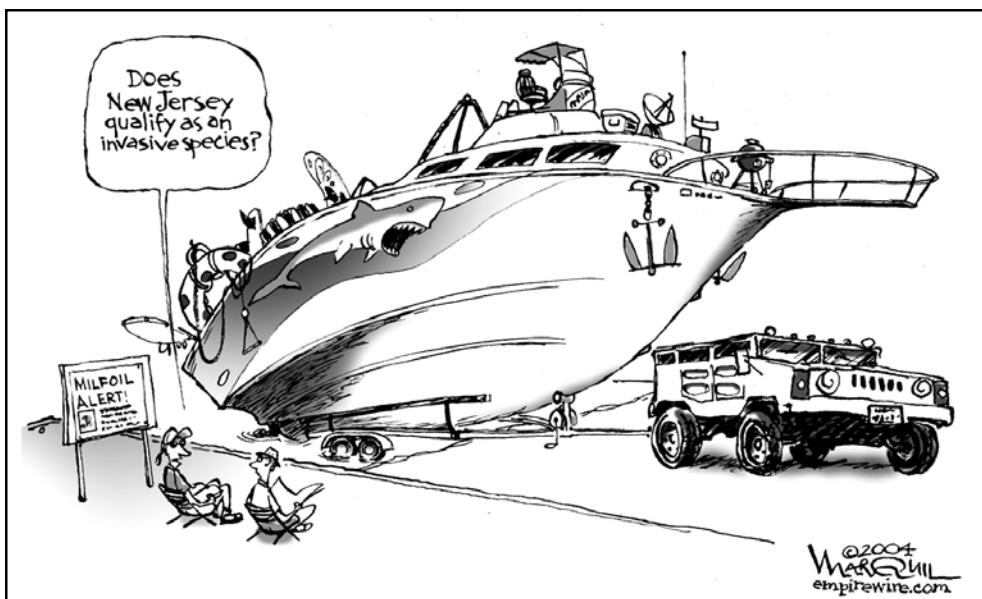


Fig. 8–2. Conflict can arise when residents have to share the lake with “outsiders.”

(CREDIT: MARK WILSON)

Incompatible uses: Use and user conflicts

Use restrictions

Applying restrictions by imposing limits or outright bans on a particular use of a lake can help to address conflicts among lake users. **Speed limits** are the most obvious and universally applied restriction. No overriding state law covers boat speed on New York State lakes as long as boaters operate in a “careful and prudent manner.” The New York State *Navigation Law*, however, does impose speed limits on specific New York State lakes, usually not exceeding 45mph during daytime hours and 25mph during nighttime hours. The navigation law names specific lakes or counties where more sweeping regulations have been enacted. These include Saratoga, Warren, Suffolk and Nassau counties. The law also authorizes several counties and towns to enact their own speed limits or **no-wake zones**.

The navigation law also provides no-wake zones within 100 feet of the lake shore on all navigable waters. It allows municipalities to govern the use of personal watercraft and jetskis provided that regulations do not restrict access to federally maintained navigational channels. Municipalities can regulate anchoring or mooring of vessels within 1,500 feet of the shore within their jurisdiction.

At the local level, ordinances are occasionally passed to restrict lake uses, particularly boat speed and certain watercraft (by size or type). Some lake associations have restricted motor size to less than 10 horsepower (hp), and others have banned power boating altogether. Many lake associations address the problem of excessive boating speed through limitations of motor size or by extending the state’s no-wake zone. Many of these ordinances are difficult to enforce, particularly if the enforcing authority that has jurisdiction over the lake is at a “higher level” than those passing the ordinance. Boat speed limits included in deed restrictions or passed through a lake-association referendum may not be readily enforced if the association does not have the jurisdiction or resources to provide law enforcement. Local ordinances may not

Case study: Speed limits on the Erie Canalway

Setting: The 524-mile Erie Canalway National Heritage Corridor includes the Mohawk River and portions of the Hudson River, several branch canals and many lakes, including Oneida Lake, Onondaga Lake, Cayuga Lake and Seneca Lake.

The problem: No speed limits existed throughout the corridor. Boat speed in the canal-run rivers was self-imposed and dictated by traffic, weather and river conditions. This prompted complaints about reckless watercraft, shoreline damage and excessive noise and affected paddlers, crew teams, lake and river-front residents and other recreational users.

Response: In 2005, the New York State Canal Corporation, which has regulatory responsibility over the use of the state canal, established speed limits for the entire Erie Canalway (Gurnet, 2005). Speed was restricted to 10 miles per hour (mph) in created sections of the canal, 45 mph in river segments within the Canal Run and the lakes within the corridor, and 5 mph within 100 feet of a dock, moored vessel or bridge. The 5 mph limit is consistent with the state no-wake-zone regulations on lakes. These limits were enacted for the state canal season, running from May 1 through November 15. New speed-limit signs were installed along the corridor, and educational flyers were provided.

Results: It is too early to determine whether speed limits have reduced user conflicts within the corridor. Enforcement is problematic due to limited staffing in the State Police Marine Patrol, the agency authorized to enforce these speed limits.

In 2005, canal usage increased by 7 percent despite substantially higher fuel prices (Allen, 2005). In 2006, Governor Pataki proposed eliminating tolls on the system in a one-year pilot program to promote as much as a 25 percent increase in recreational use of the canal (Azzopardi, 2006). This was later extended through 2007, but tolls were reinstated for the 2008 season. Studies had shown that boat traffic on the canal dropped 15 percent when fees were first imposed. Toll ranges from \$5 to \$100, depending on the size of the vessel, and generated about \$200,000 annually.

Case study: Access permits for the New York City Reservoir System

Setting: The New York City Reservoir System encompasses 18 collecting reservoirs, 6 balancing and distributing reservoirs, 3 lakes, 3 underground aqueducts and 8 connecting tunnels in the east and west side of the Hudson River.

The problem: The New York City Department of Environmental Protection (NYCDEP) is charged with protecting potable water sources for residents of New York City. It strives to identify sources of contaminants to the water supply, whether they are water-quality impurities, invasive species, chemical or biological pollutants. The large area encompassed by the New York City reservoirs exerts pressure to keep these reservoirs open to the public. There is continued effort to provide New Yorkers with recreational access to these resources, particularly residents from communities upended by the formation of these reservoirs during many decades. This desire is further compromised by increased security needs in light of the terrorist attacks in 2001.

Response: NYCDEP instituted fishing and boating permit program for each of the New York City Reservoirs. Permits are issued for what are referred to as "Fishing Properties." All boats must be approved and registered with NYCDEP. Only rowboats between 11'6" and 16' can be issued permits, valid from April 1 or ice-out until December 1. Anglers must store their fishing boats at designated storage areas. Some of the more than 240 boat-storage areas are occasionally restricted due to overcrowding. Each time a boat is brought into storage, it must be steam cleaned and registered with NYCDEP. Boats are not allowed within 500 feet of dams, dikes, tunnels, bridges or other structures on New York City property. In addition, boats are not allowed within 200 feet downstream of some spillways or at any distance from other spillways. Swimming or other forms of contact recreation are not allowed in any of these reservoirs.

be effective if policing is the responsibility of understaffed county sheriffs or state police. There are specific lake-use regulations enacted just for Lake George (6 NYCRR Part 646) and other individual lakes.

Use restrictions can be also be applied to individual properties. Restrictions may be defined in property deeds and affect the ability or inability of the owner to subdivide the land. Deed restrictions may be imposed on lake uses by the original owner of the land. These may include restrictions on dock size or construction materials, lake access, use or size of power boats and fishing limits. Some of these deed restrictions are implemented by a group of lake residents interested in promoting a particular use "philosophy," and new residents are often attracted to lake communities sharing this philosophy. Some of these restrictions, however, have been resisted or legally challenged by other residents. Legal interpretations of use restrictions have been variable. Some have been affirmed by judges, while others have been overturned, usually as too outdated or too vague to be enforced. Lake associations interested in the regulatory approach to boating restrictions should elicit the help of a knowledgeable attorney to determine which laws may apply to their lake.

Lake zoning

The term "zoning" usually refers to regulation of space on the land. Lake zoning, however, is the process by which the use of the lake surface is rationed among the recreational users by local residents or ordinances. Restrictions may be mandated by the physical characteristics of the lake. Waterskiing may not be allowed in some areas due to water depth. Narrowness of a channel may also restrict waterskiing because the New York State *Navigation Law* requires no-wake zones within 100 feet of shore. In most cases, lake zoning is an extremely valuable lake-management strategy. It forces equity, or at least a valiant effort at equity, for what might otherwise be an inherently selfish grab of resources.

Area zoning allocates lake uses to specific areas of the lake. Recreational use of the open water beyond 500 feet from the shoreline, for instance, can be limited to power boating, operating personal watercraft,

and sailing. Shoreline areas to a distance of 500 feet can be limited to non power-boating even though the navigation law may allow low-speed or no-wake power boating closer to the shore. Boat traffic may be allowed transit through the non-power-boating zone only to access the open water and may be directed with navigational channel buoys from the boat launch. Swimming may be restricted to beaches at the opposite end of the boat-launch site or within 100 feet of individual docks. All boat traffic may be banned from a buffer zone around a community water-intake pipe in order to protect a band of rare and endangered aquatic plants or to prevent fragmentation of a population of invasive plant species that would facilitate its dispersal. Fishing may be allowed from shorelines, docks or boats, but anchoring may be restricted to outside the swimming zones.

Time zoning allocates lake uses to specific times of the day. To avoid complaints about noise, power boating or personal watercraft could be restricted to the hours between 10 AM and 7 PM. Swimmers could be limited to the hours between noon and 6 PM, generally corresponding to the time when lifeguards are available and on duty. Passive boating could be restricted to early morning or evening when wave action is generally reduced and conflicts with powerboats may be minimal.

Swimming prohibited

Beach closures are often a last resort for dealing with lake pathogens although state law requires that beaches be closed if they violate water-quality standards. At the time of publication of this book, New York State is in transition from coliform-based standards to standards based on *Escherichia coli* or those based on *Enterococci*. State code currently allows counties to choose from either a total-coliform or fecal-coliform standard based on instantaneous or geometric mean numbers as discussed in Chapter four, “Problem diagnosis.”

There is a time lag between public exposure, sample collection and analyses. A few state regulatory agencies, therefore, have adopted pre-emptive standards to minimize public exposure to high levels of pathogenic organisms (Table 8–1).

| Agency | Pre-Emptive Standard for Closure |
|---|---|
| State Office of Parks and Recreation | > 0.5 inches of rain in a 24 hour period. Applied as guidance only to selected beaches |
| Cayuga County Department of Health and Human Services | Secchi disk transparency of < 4 feet and presence of chemical substances capable of toxic reactions or skin/membrane irritation |

Table 8–1. Regulatory agencies pre-emptive standards for beach closures.

Role of lake associations

Lake associations, and the meetings they hold, offer a rare opportunity for public discussions and a forum for building a common base of information and consensus. The associations also provide a mechanism for conducting user surveys, soliciting the opinion of experts and independent advisors, and distilling divergent opinions into a common, integrated management plan. In short, lake associations are an ideal agent for fostering constructive communication as a foundation for resolving, or at least compromising incompatible uses.

Water-level issues

Water-level control

Water levels change naturally in lakes and ponds by several feet or more each year. New York State lakes typically exhibit highest levels during spring snow melt; drop to their lowest levels from July through September when hot temperatures and plant growth drive evapo-transpiration rates up; and rise again with autumn rains.

Water levels have been managed for a variety of purposes since early European settlement including preventing flooding of shoreline property, preventing ice damage to docks and shorelines, maintaining sufficient water for fish or dam operations or providing a buffer for spring runoff. Conflicts over how to manage water levels can often resemble the fight between the Hatfields and McCoys. Someone removes a weir board or three or opens the valve allowing the water

level to drop. Sometimes this involves vandals or unimaginative thrill seekers, but it can also be the handiwork of a disgruntled lake resident with a perpetually flooded basement. Alternatively, someone puts in a weir board or three or closes the valve, and the lake fills to capacity. This is almost certainly a different lake resident whose lakefront property is harmed by receding water levels. These events repeat, usually as midnight or otherwise clandestine operations and cause the water level to yo-yo up and down.

The resolution of water-level control issues requires knowing who owns the dam. Many low-hazard (“A” level) dams are owned by individual landowners, while moderate-hazard (“B” level) dams are usually owned by municipalities, and the highest-hazard (“C” level) dams are owned by government or utilities. The New York State Code of Rules and Regulations (6NYCRR Part 608) and Environmental Conservation Law (ECL Article 15-0517) states that any person who “owns, erects, reconstructs, repairs, maintains, operates, or uses” a dam signifies ownership and, therefore, responsibility for the dam. The definition of ownership, or at least responsibility, may change shortly after this book is published. The Dam Safety section of the New York State Department of Environmental Conservation (DEC) should be consulted to determine the “practical” status of dam ownership (see Appendix F, “Internet resources”).

The decision about appropriate water level may be made diplomatically, at least at first. It is often made by a committee of lake residents, a municipality or some regulating authority such as DEC or one of the many state water-level-regulating districts. A few key elements should be part of the decision-making process whatever method a lake community uses to arrive at a decision about water level. First, it should be understood that drastically changing the natural pattern of water-level fluctuations will probably have negative impacts on shoreline plant communities and, therefore, on the associated aquatic organisms such as fish. Studies now indicate that most shoreline aquatic and wetland plants are adapted to and dependent upon the frequency, duration, magnitude and rate of change of flooding or drawdown periods. Without these events, the plants either die

or cannot reproduce. Unfortunately, fish species such as northern pike depend on the same flood events to access wetlands for spawning and, therefore, will also decline if the natural pattern is altered. Mimicking the natural pattern of lake-level fluctuations may be an important starting point for planning.

Equally important, the goals of the lake community and its residents must be articulated. These goals might include assurances that sufficient water exists to guarantee boat access, water intake and other “high-water” needs. At the same time, there may be a goal to maintain a sufficiently low water level to prevent flooding, allow aquatic plant control, maintain water movement and flow, and support downstream water needs.

Water-level manipulation may be dictated by or require permits from DEC or the Adirondack Park Agency (APA) (see Chapter six, “Aquatic plants”). Manipulation may be restricted by regulatory requirements associated with downstream flow and aquatic habitats. At least in small lakes, the ultimate decision about the most appropriate water level may be less important than consistency in water-level management. Great variations in water level in small lakes may create significant ecological disruption and render the lake susceptible to erosion and infestation by exotic and invasive plants.

Fixing the dam

Most readers are trying to manage existing lakes and ponds, not create a lake by building a dam from scratch. Details concerning the construction of ponds or of dams to create lakes are beyond the scope of this publication. Excellent publications from the U.S. Department of Agriculture (1982) or DEC (1989) already exist. Dam repair and maintenance, however, are common concerns for New York State lake residents and are often a fundamental part of lake-management plans.

DEC and dam owners each have specific roles and responsibilities when dams are constructed, reconstructed or rehabilitated. DEC issues dam safety permits for the construction, reconstruction or rehabilitation of dams, not for the dams themselves. The permitting program involves review of

dam design, oversight of construction or repair and inspections before the reservoir can be filled. The owner of a dam is responsible for making sure the dam is maintained and operated in a safe condition at all times. If reconstruction or rehabilitation of a dam is necessary, the owner hires a licensed professional engineer to develop an appropriate design for the dam work and to apply for all local, state and federal permits needed to carry out the project.

Dam repair, whether instituted as a means to better control water level or to minimize the threat of catastrophic failure, requires a permit from DEC if the dam has a height equal to or greater than 15 feet and a maximum impoundment capacity equal to or greater than one million gallons.

Reconstruction or repair of any impoundment with a capacity exceeding three million gallons also requires a permit regardless of the height of the structure.

Dock management

A **dock** may be the pathway from a home to the lake, but it is not always the path of least resistance. Dock construction can be a very contentious issue whether due to their prominence on an otherwise undisturbed shoreline or their sheer size. New York State *Municipal Law* Section 46A allows communities to regulate out to 1,500 feet from the shoreline, including the design and size of docks. This provides municipalities with the authority to regulate dock density, the size and length of docks and docking fees. Dock density refers to the number of docks per linear foot of shoreline, usually one dock per parcel.

Regulating authority also rests in some state agencies, with distinctions between state-owned lakes and navigable waters. The State Office of General Services (OGS) issues permits for actions, such as installing permanent docks and floats, when the state owns the lake bottom (See Appendix C, “Who Owns New York State Lakes?”). The list includes many of the large lakes in the state, including the Great Lakes, Lake Champlain, Lake George, Oneida Lake and the nine multi-use Finger Lakes. It also contains some smaller lakes in the state, usually up to the mean high-water mark. OGS can be contacted

to determine the “ownership” status of any lake in the state (see Appendix F, “Internet resources”). The state also owns the bottom of feeder lakes for the state canal and lakes and ponds residing on state land such as those in the Forest Preserve and state parks and management areas administered by DEC or the State Offices of Parks, Recreation, and Historic Preservation (OPRHP).

Most residential docks are exempt from permit requirements on state-owned lakes because they are within the riparian rights of the upland owner. These exemptions, outlined in *Public Lands Law*, Section 75, include non-commercial docks in existence prior to June 17, 1992 with a surface area of less than 5,000 square feet and docking capacity of no more than 7 boats up to 30 feet long. For docks constructed later, exemptions are limited to structures with a surface area of less than 4,000 square feet that do not exceed 15 feet in height above mean high water. To qualify for this exemption, however, docking facilities must have a capacity of 5 or fewer boats, and mooring facilities must have a capacity of fewer than 10 boats.

A Protection of Waters permit (ECL Article 15) from DEC is required for constructing, reconstructing or repairing docks or platforms and installing moorings on “navigable waters” in the state. As with the exemptions for “state-owned” lakes, however, there are also exceptions to the permit requirement under Protection of Waters. These include docks with a surface area of less than 4,000 square feet, mooring areas for fewer than 10 boats, temporary anchoring sites, docks approved prior to May 4, 1993, relocation or rearrangement of existing facilities and normal maintenance and repair of less than 50 percent of existing structures.

For those waterbodies not regulated by OGS, OPRHP administers the portions of the *Navigational Law* related to docks. The Lake George Park Commission, the U.S. Army Corps of Engineers, the APA and some counties also have jurisdiction in some waterbodies, and the Coast Guard may have some jurisdiction in navigable federal waterways.

The New York Planning Federation recommends no more than one dock per 125 feet of lakefront, extending up to 100 feet from the mean high-water

mark. Dock regulations should also consider the surrounding ecological habitat, the use of best management practices to control erosion and the potential for interference with navigation (Clothier, 2005).

Boat houses are tightly regulated through NYCRR 570.3, which defines a boathouse as a single-storied, covered structure without heat or kitchen, bath or sleeping facilities. The APA further clarified these definitions in 2002 and also the definitions associated with regulated “structures.” These refinements were adopted in part to address questions about regulatory authority over motorized floating cabins, which more closely resemble houseboats than boat houses and multi-level heated residences that realtors could market as year-round cabins.

While dock repair is usually more of a lakefront-property issue than a lake-management issue, the use of **de-icers** is a dock-repair strategy that dips into the realm of lake management. Also known as **ice bubblers** or ice eaters, de-icers have been used to prevent ice damage around boats, docks and breakwalls in areas where temperatures occasionally become cold enough to freeze lakes, rivers and brackish waters.

De-icers push deep, warmer waters upward, causing continuous water movement. A ½-hp motor will keep a 50-foot-diameter area clear of ice in quiet waters, while a ¾-hp motor will keep a 75-foot-diameter area open.

Effective use of de-icers along log cribbing on Lake George and other Adirondack lakes seems to be reducing ice-push damage. De-icers or ice-eaters can be obtained through most marine equipment suppliers.

A “bubbler” does not generally require a DEC permit around a private dock and breakwall. Safety issues must be considered, however, since the affected area can be widespread. Small bubblers may only thin and weaken the surrounding ice, posing an invisible danger to people using the lake ice for winter recreation. Use of such devices near public access areas may be restricted by community and park authorities. It is wise to contact local officials, the regional DEC office, and the APA if the lake is within the Adirondack Park before installing such a device.

Case study: Dock management using de-icers.

Lake setting: DeRuyter Reservoir is a 600-acre, multi-use impoundment in Central New York.

The problem: Lake-ice expansion extending more than 10 feet toward the shoreline caused docks anchored as deep as 10 feet to buckle and rotate. A camp owner installed a “permanent” dock using water-well casing with welded steel reinforcing bars. **Ice push** or expansion during the following winter bent and tilted the dock to about a 30-degree angle.

Response: After much work and new welds, the dock was restored to usable condition the next summer, and a de-icer was installed to prevent further ice push. The location of the de-icer took advantage of a slow water drift toward the outlet and the dam.

Results: The winter after installation, an area about 200 square feet around the dock was kept ice free. Slow water movement toward the dam outlet created an ice-free zone along the shore extending approximately 200 yards from the bubbler, allowing open-water winter fishing on this portion of the lake (Kelley, 2005).

There has been a long-standing concern about the use of pressure-treated lumber for docks on lakes, particularly on lakes serving as drinking-water sources. Cypress is perhaps the ideal choice for dock construction, though it may not be available at many lumberyards. Redwood, black locust and eastern red or northern white cedar are all excellent choices for their durability and weathering capability but can be rather expensive. Compressed sawdust composites or aluminum have been used in recent years for the same purpose. Other materials such as steel, plastic or concrete may have applications for support posts, but these non-wood alternatives may be expensive. Concrete may leach calcium into the surrounding waters, making a lake more susceptible to zebra mussel (*Dreissena polymorpha*) infestations.

Role of lake associations

Water-level decisions for moderate- to low-hazard dams are often the domain of lake associations. There are some dams in New York, such as a group of dams in Rensselaer County, which were originally owned by a private company that once needed a steady supply of water but were later sold to a lake association. This relieved the company of responsibility in water-level conflicts and the significant risk of litigation in the event of a dispute or catastrophic failure. Lake associations are also more likely to exert some influence on decisions by elected officials or municipal officers about water level and the timing and extent of drawdown. Disputes about the ownership of a dam are also more easily investigated by lake associations, particularly those with access to legal advice, time and a willingness to search through deeds and historical records. Lake associations may be needed to raise funds required to comply with changing regulations about what is deemed a “safe” dam, from hiring design engineers to interpreting new or updated laws. See DEC Dam Safety section, Appendix F, “Internet resources.”

Public-access issues

The access to environmental resources, whether for recreational use, commerce, or to quench thirst, can be viewed as inherently a legal issue. The legal use of and access to lakes is discussed in greater detail in Chapter ten, “Legal framework.” The intricacies of this issue are far too dynamic and changeable to fully address in this book, but several important issues are discussed below.

Guarding the keys to the lake

Many lake residents complain about overcrowding. Implicit in the complaint is the concern that non-residents get unfettered access to “their” lake through boat ramps, roadside points that serve as unofficial launches, other public waterways and even overly accommodating lake residents who allow access through their property. Increased **public access** is a stated goal of municipalities from the local to the federal level and is often a requirement for fish stocking and for receiving government grants for lake-management programs. This allows recreational opportunities for more people, including those taxpayers who do not own lakefront property, but it often results in user conflicts as a result of the increased noise and activity levels and competition for fish.

One way to reduce conflict is to limit access. Some towns or counties restrict access to only lake residents through the issuance or sale of local boat-registration stickers or beach tags. It is presumed that invited visitors of residents exert minimal impact on the lake, particularly if they are not launching “alien” boats.

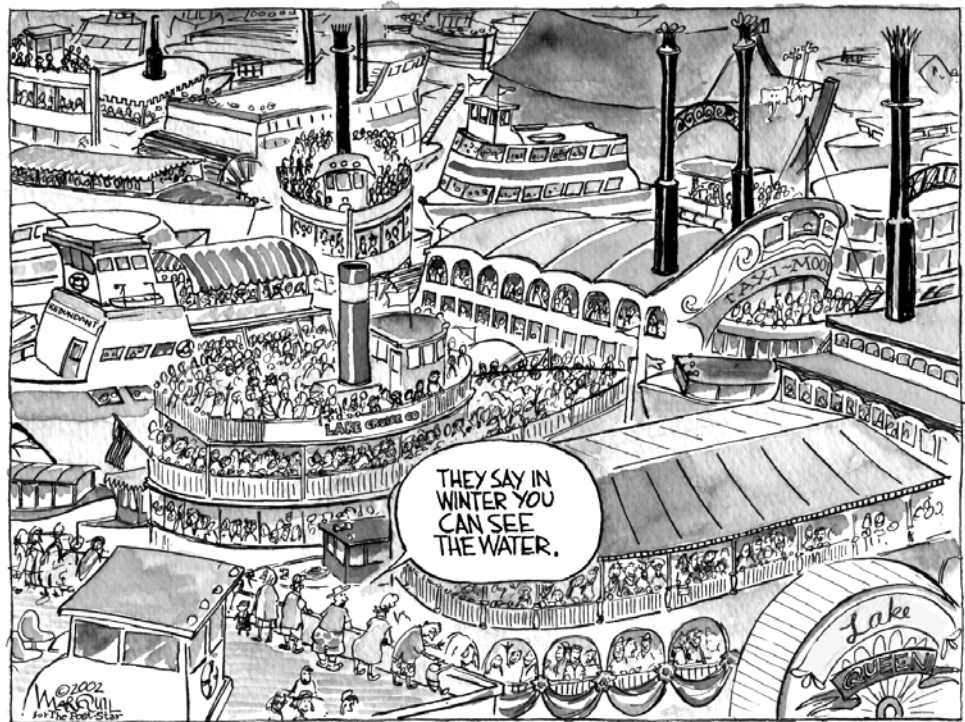


Fig. 8–3. Lake residents may fear that increased public access will result in overcrowding. (CREDIT: MARK WILSON)

Access points may be gated or otherwise blocked, with keys provided only to local residents. Entry through launch sites, whether town, county or state, may be further restricted after a certain “carrying capacity” is reached on fine summer days. Parking space may be limited in the lots associated with launch sites. In extreme cases, access sites can be removed, although this is usually contrary to the broader objectives of municipalities and the taxpayers they serve.

Increasing lake access could also be addressed by making all beaches public, as is done in Hawaii, although the liability issues may be problematic. Additional “passive” access could be provided through partnership with the town or county to promote non-power boating, picnicking and hiking trails along the lake.

User fees and licenses

In lieu of voluntary or regulated restrictions on lake use, user fees can be imposed to effectively restrict the use of and access to lakes. Launching fees are charged at some launch facilities. Licenses are required for boats registered in New York State and for the right to fish the waters of the state. Local licenses, issued by town or county recreation departments, may also be required for access to waterbodies or local parks associated with these waterbodies otherwise prohibited for recreational use. These generally take the form of boating licenses and fishing permits although boathouse registration, dock and mooring fees may also be charged. Some of these, such as fees charged by the Lake George Park Commission for the use of Lake George, are determined by New York State, while others are at the discretion of local authorities.

Private marinas charge fees for the use of dock slips, boat rentals, launching or other activities that ultimately “regulate” lake use. User fees may also be built into the costs associated with hotel rentals when these are served by private beaches with life guards.

Utility bills charged by municipalities may serve to restrict or otherwise regulate the use of lake water for a variety of drinking water, irrigation, domestic or industrial purposes. Municipal wastewater

treatment costs passed along to sewer customers may effectively reflect user fees if the effluent from the wastewater plant is discharged into a nearby lake. Receipt of wastewater can be considered a viable lake use because lake residents “use” the lake to dilute wastewater to save the cost of piping the effluent to a distant river. Several large lakes in New York State do receive wastewater. The use of a lake as a receptacle for wastewater, however, is usually incompatible with nearly all other lake uses.

Life’s a beach

There will always be debates about the merits of sailing versus power boating or warmwater versus coldwater fishing, but there is little question that everyone likes to swim where there’s a sandy beach. Unfortunately, naturally sandy beaches are not found at many New York State lakes, and many lake residents would like a pile of sand to “happen” on their shoreline. There is no doubt that some shoreline improvement projects are completed surreptitiously under the sparkle of moonlight, usually with help from a muscular friend with a dump truck and a load of clean white sand. The “Psst, Buddy” school of lake management was founded in part due to frustration with a seemingly endless list of shoreline regulations. Under ECL Article 15, however, bottom “improvement” materials are regulated as fill in “navigable waters” or nearby wetlands, and building a beach at a lake through alteration of the lake bottom requires a permit from DEC.

Role of lake associations

Lake associations usually cannot take on access issues, particularly those related to denying access, without consulting state and municipal officials and individual landowners. Many lake associations at private lakes, however, control access to members, lakefront residents and guests at beaches and launch sites. Lake associations also promote signage and other informational tools to minimize the introduction of exotic species at less formal launch sites, such as gaps between guard rails, flat spots near roadside parking sites and at parking lots of shoreline businesses.

Summing it up

These last three chapters have examined the lake-management toolbox for issues of aquatic plant control, algae control and management of user conflicts. While the management tools in each of these categories may be neatly tucked into separate compartments, there is much overlap. Many of these tools can be used to fix multiple problems, and the compartments really don't need to be separated. Lake management really involves integrating the various management tools. Some are highly specialized and expensive, others are hand crafted, and still others are cobbled together with duct tape into a single, comprehensive management approach to optimize lake uses and water-quality conditions. Even a skilled lake craftsman will get frustrated fixing the same problems repeatedly. A truly comprehensive lake-management plan does not focus only on dealing with the symptoms but also directs attention to the causes of problems. See Chapter nine, "Watershed

management" and Chapter eleven, "Management plan development" for further information.

Many in-lake management tools or strategies for modifying behaviors discussed in Chapters six through eight are really lake-management "band-aids." They address either the symptoms of the problem (such as algae bloom) or the cause of the problem (oxygen deficit triggering nutrient release from bottom sediments). They do not, however, address the source of the problems, such as failing septic systems, stormwater runoff, eroding soils from a poorly contained construction site or multiple public-access points. Without long-term strategies for managing the sources of problems or the actions that lead to the problems, lake managers will spend a lot of time and resources on band-aids. Chapter nine, "Watershed management," discusses the role of a lake watershed as the foundation for lake problems and the management strategies that can be utilized to develop long-term control of the most common lake problems in New York State lakes.