

# Crafting a new approach for eco-regional management in the Adirondacks

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## Abstract

*The Adirondack Park and north country are being threatened by an increasing number of invasive species. Managing invasive species is similar to managing non-point pollution in that it requires efforts at the local as well as State level. The Adirondack Park Invasive Plant Program has trained volunteers and created a database to record locations of invading species; however, the scope of the program is limited and has no capacity to direct controls or oversee programs to limit their spread. A two-year study including three targeted surveys aimed at how to best develop a regional approach to controlling the spread of invasives points out additional needed actions. Survey data indicate broad consensus by lake groups, municipal officials and various advocacy groups that preventive measures need to be instituted. We believe this effort will likely require a Regional Board of Stakeholders that allows for shared decision-making, equitable sharing of resources and political action necessary to sustain this effort.*

Lakes and streams in the Adirondack Park and north country are now being invaded or threatened by an increasing number of invasive species. Currently 49 lakes/streams within the Park contain Eurasian water milfoil and/or other invasives including

zebra mussels in Lake Champlain and Lake George (Oles, 2005). These organisms not only pose a significant threat to the region's unique biota, but they also may pose a threat to the region's tourism and recreation economy.

In response, the Adirondack Park Invasive Plant Program (APIPP) has formed through a collaboration of The Adirondack Park Agency, the NYS Department of Environmental Conservation, the Nature Conservancy, and the Invasive Plant Council. APIPP is staffed by a coordinator and assistant to educate and train volunteers in detecting invasive plants and maintaining a data base inventory of invaded sites.

During the past two years, we frequently posed the question of how best to develop a regional approach to manage and control the spread of invasive species in the Adirondacks. We sampled attitudes and opinion from lake associations, municipal officials and advocacy groups. Using participatory action research methodology that allows a researcher to interact with subjects, provide feedback and record subsequent responses we mailed surveys, organized focus groups and conducted interviews of key informants (McTaggart, 1989; and Skaley and Richmond, 2005b).

Briefly summarized, our results indicate a strong consensus on deploying preventive measures including: 1) signage to inform lake users on how to avoid introducing alien species to waterways; and 2) establishing check stations to catch hitchhikers on boats and trailers. There is also strong support for legislation to outlaw the transport of invasive species and to focus

limited resources on boat launch areas. Responders also agree that sustained funding and volunteer commitment will be required for an extended length of time. While many lake groups indicate they will continue to support programs to control invading species and active management on their lake, all three survey groups indicate strong preference to secure funding from boat license fees and the New York State Environmental Protection Fund.

There is less consensus on how to control invasive plants such as Eurasian watermilfoil; although there is broad agreement that the problem will not solve itself and may seriously threaten the value of recreational waters and lake shore properties. In one reported case, a lake shore property assessment has been reduced because excessive "weeds" were devaluing the near shore recreational opportunity for the owner. With 30 percent of towns receiving half to 3/4 or more of their property tax revenue from these shoreline properties, and with 8-10 million annual visitors attracted to water environments and spending more than \$1.2 billion dollars in the region, a rapid spread of invasive species into more waterbodies could seriously impact the local economy (Skaley and Richmond, 2005b).

Efforts by APIPP to educate, train volunteers and inventory waterways have been successful in raising awareness, but have not addressed or supported control programs, are limited to the Park boundaries and are supported only by annual grants. Dependence on annual grants limits APIPP's scope of work and is not sustainable. Hopes have been expressed by financial supporters of APIPP that the

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recent report from the Invasive Species Task Force (ISTF, 2005) will encourage the Legislature to provide adequate funding to continue and expand this initiative. At this writing there is no assurance that the Governor and Legislature will act in this manner.

Is it time for a new approach? Similar to managing nonpoint sources in watershed management, early detection to limit the spread of invasive species requires broad stakeholder involvement. A more involved democratic framework needs to be considered to expand stakeholder participation in setting priorities, lobbying for funds and increasing local participation in decision-making. This particular stance is supported by a number of studies that have shown success by grassroots environmental management organizations (Koontz, et al. 2004; Weber, 2003; McGinnis et al, 1999; Mandell, 1999 and others).

Regulatory authority of state agencies and historical influence of nonresident interest groups have largely influenced the region's land use and protection policies with limited participation by the 150,000 year-round residents. Each interest group has struggled to protect its own idea of what the Adirondacks means to them while mostly ignoring what it meant to the year-round residents who not only provide the accommodations, but support the infrastructure that allows for their stay in the Park (Harris and Jarvis, 2004). McMartin (2002) describes in detail thirty years of controversy that emerged over the APA and its associated Land Use and Development Plan (Adirondack Park Agency, 1972). McMartin identifies many groups that formed to defend their respective interests as the Park plan and zoning measures were put in place. The distrust among these groups lingers today. While the contentious atmosphere has cooled in recent years, McMartin (2002) writes that there still is little middle ground on which to discuss concerns for the Park.

Under current law APA and the DEC define the rules and protocols for planning, decisions and implementation efforts. While state agencies and local municipalities routinely hold public hearings on initiatives, these forums do not necessarily allow for effective two-way communication, coordination and implementation in an inclusive way. Consensus will be needed between these agencies and stakeholder interests on a strategy to enhance political support for appropriate legislation and funding to support an Adirondack invasive species program.

According to our surveys, the Department of Environmental Conservation (DEC) is favored for a lead role; however, there is also recognition and strong support among all groups for an umbrella organization to coordinate an invasive species and watershed program. Explicit comments from the surveys and interviews acknowledge that it will take a substantial ongoing effort to effectively control the spread of invasive species and that such effort will require some level of coordination among the many interested parties (Skaley and Richmond, 2005 b).

In recognition of a need for a regional plan, Paul Smith's Adirondack Watershed Institute sponsored a workshop/conference in 2005 to discuss a draft aquatic nuisance species (ANS) management plan. Conference speakers outlined some of the current efforts under APIPP, the Lake Champlain Basin Program, and programs in Maine and Massachusetts as well as proposals from the Invasive Species Task Force. The Adirondack Park ANS Management Plan presented at the 2005 conference in a 3rd Draft focused on specific objectives to control the spread of invasive organisms. It was not clear, however, as to how the effort would be managed and funded. Lake groups present were quick to recognize the lack of a governance structure, and were concerned about how funds would be disseminated. A fourth draft of the ANS plan did incorporate many specific suggestions supported by workshop participants, but

has still left the organizational structure for regional management vaguely defined (<http://www.paulsmiths.edu/PAGE=1685/page.pl#Committee>).

Sustainability implies a balance between economic and environmental concerns so that the ecology of the region is not unduly impacted by economic development. To have effective ecosystem management in the complicated regulatory environment of the Adirondacks and to assure adequate participation, special emphasis should be placed on coordination and communication among all major stakeholders including those working to maintain a sustainable economy. Likewise, adequate technical support to execute prevention and control programs should be addressed. Finally, there should be sufficient political action to sustain funding and to support program implementation. These actions require shared decision making and lobbying to raise the necessary funds. Current literature and our experience with the Finger Lakes-Lake Ontario Watershed Protection Alliance (FL-LOWPA) model indicate that better decisions and programs emerge when these interactions take place within a neutral forum where participating parties share ideas and are coequal in decision-making. An umbrella organization with regional representation from major constituent interests could collectively address policy concerns and focus on sustaining a regional eco-management program including administration of State and/or private funds.

Because the Adirondacks have both a regulatory and biological landscape that is well defined and unique in the State, perhaps the region should uniquely define the way it develops its approach to manage invasives. A broad coalition of local residents, summer people, advocates and locally elected officials could work together within a "Regional Board of Stakeholders," not unlike FL-LOWPA. This governance structure could then embrace shared decision-making to set priorities and develop an equitable formula for sharing



resources, overseeing program initiatives, and lobbying to sustain funding. This implies geographic and broad representation among stakeholders operating within a democratic framework.

The original goal of APIPP to limit the spread of invasive species within the Park is still of highest priority. However, to sustain this effort requires a regional governance structure that has a strong institutional base, and can unite ecologic and economic interests to conserve the unique assemblage of communities, both biologic and cultural. While regional stakeholders need to debate the configuration of such a framework, there are examples of successful grassroots initiatives across the nation that may guide the process. In New York State FL-LOWPA has for over twenty years successfully managed and applied State funds to combat invasive species and address local and regional watershed concerns. The following are key elements to FL-LOWPA's success and should be considered as operational components of a Regional Board of Stakeholders:

- A strong political action base linking economic and citizen concerns with approaches to preserve the ecology of the regions' waterbodies.
- Regular public meetings to exchange information on local programs that aim 1) to preserve the aquatic biodiversity and water quality, 2) build communication channels to sustain a trusting relationship among institutional participants and local constituencies.
- A regional program coordinator and offices with links to a 501 c(3) economic development organization for contractual support and ties to the region's tourism economy to justify continued state and shared local funding.
- Local program initiatives, administered and implemented with technical/professional staff in each county (e.g. soil and water conservation districts and county extension personnel).
- A healthy political action base involv-

ing lake groups, environmental advocates and the Adirondack Association of Towns and Villages to lobby for legislation and funding that links local economic and citizen concerns with approaches to preserve the ecology of the region's waterbodies.

Park legislation may require that a Regional Board of Stakeholders work within established principles to preserve the region's unique character and to use the latest science to implement best management approaches to sustain the region's economy and ecology. At the same time the APA and DEC may well recognize the necessity for some devolution of authority and delegation of responsibility to local institutions. Balancing regulatory roles of state agencies with that of a Regional Board of Stakeholders is essential. A regional governing board needs flexibility to participate in lobbying for policy changes, and flexibility to initiate pilot programs to control invasive species. Such a Board also needs by-laws to limit the domination of any single group over the whole, to define operations, to minimize internal conflict, and to determine allocation of resources.

Fairness and equity with a willingness and flexibility to work "outside the box" when warranted, are necessary when a diverse group of stakeholder interests come together to address problems of mutual concern (Weber, 2003). Success in building this alliance depends on delivery of product. As product is recognized, trust in the process and the alliance will build. Based on our research, we believe it is possible for consensus to develop around a regional eco-management program in the Adirondacks. What form it takes is, as yet, unclear. Nevertheless, we have as an example more than 20 years of success in the FL-LOWPA model (Skaley and Richmond, 2005a) as well as the emergence of a number of similar successful grassroots environmental management organizations across the nation (Koontz et al,

2004; Mandell, 1999; McGinnis et al, 1999; and Weber, 2003). Therefore, we remain optimistic that by focusing on common interests a unique management structure can emerge for the Adirondacks and North Country.

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