

# **Report on Institutional Arrangements for Watershed Management of the Lake Champlain Basin**



**Lake Champlain  
Basin Program**

## **Executive Summary**

Prepared by  
Yellow Wood Associates, Inc.

for  
Lake Champlain Management Conference

January 1995

**REPORT ON INSTITUTIONAL ARRANGEMENTS FOR  
WATERSHED MANAGEMENT OF THE  
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**Executive Summary**

**JANUARY 1995**

Prepared by: Yellow Wood Associates, Inc.  
*in cooperation with :*  
Conservation Law Foundation  
Cornell University Local Government Program  
Cornell University Water Resources Institute

For: Lake Champlain Management Conference

**THIS PROGRAM IS SPONSORED BY U.S.E.P.A. AND THE STATES OF NEW YORK AND VERMONT.**

## Acknowledgements

The Yellow Wood Associates team wishes to express our appreciation to the members of the project advisory committee who reviewed our work in progress and provided us with detailed comments at several steps along the way. This group included: John Banta, Lisa Borre, Greg Campbell, David Coen, Monty Fisher, Sandy LaBarron, Kim Locke, Rose Paul and Lee Steppacher. We would especially like to thank Jim Connolly, our contract officer, for his attention to detail, contributions of new material, and guidance in addressing this complex and challenging topic. While the text has benefitted from review by members of the advisory committee and others, the accuracy of information, analysis, and opinions presented here are the sole responsibility of Yellow Wood Associates and do not necessarily reflect the views of the Management Conference or any other organization.

This work has brought us in contact with a large number of people in state agencies, nonprofit organizations and citizens groups who have contributed their insights into the webs and lacunae of institutional arrangements affecting the use and protection of resources in the Lake Champlain basin. Although they are too many to name individually, we are grateful, indeed, for their participation.

Thanks is due also to all the members of the team who have worked long and hard to come up with the recommendations contained herein. People who have worked on this project include: Lew Milford, Mark Sinclair, and Kim Davis and interns Marie McCarthy, Julie Taylor, and Ann Livingston from the Conservation Law Foundation; David Allee, Leonard Dworsky, David Kay, Bob Moore and Lyle Raymond from Cornell University; Shanna Ratner, Catherine Trask and Louis Borie from Yellow Wood Associates, Inc.

Sincerely,

A handwritten signature in cursive script, reading "Shanna Ratner".

Shanna Ratner  
Principal  
Yellow Wood Associates, Inc.  
January, 1995

This technical report is the eleventh in a series of reports prepared under the Lake Champlain Basin Program. Those in print are listed below.

#### Lake Champlain Basin Program Technical Reports

1. *A Research and Monitoring Agenda for Lake Champlain.* Proceedings of a Workshop, December 17-19, 1991, Burlington, VT. Lake Champlain Research Consortium. May, 1992.
2. *Design and Initial Implementation of a Comprehensive Agricultural Monitoring and Evaluation Network for the Lake Champlain Basin.* NY-VT Strategic Core Group. February, 1993.
3. (A) *GIS Management Plan for the Lake Champlain Basin Program.* Vermont Center for Geographic Information, Inc., and Associates in Rural Development. March, 1993.  
  
(B) *Handbook of GIS Standards and Procedures for the Lake Champlain Basin Program.* Vermont Center for Geographic Information, Inc. March, 1993.  
  
(C) *GIS Data Inventory for the Lake Champlain Basin Program.* Vermont Center for Geographic Information, Inc. March, 1993.
4. (A) *Lake Champlain Economic Database Project. Executive Summary.* Holmes & Associates. March 1993.  
  
(B) *Socio-Economic Profile, Database, and Description of the Tourism Economy for the Lake Champlain Basin.* Holmes & Associates. March 1993  
  
(B) *Socio-Economic Profile, Database, and Description of the Tourism Economy for the Lake Champlain Basin. Appendices.* Holmes & Associates. March 1993  
  
(C) *Potential Applications of Economic Instruments for Environmental Protection in the Lake Champlain Basin.* Anthony Artuso. March 1993.  
  
(D) *Conceptual Framework for Evaluation of Pollution Control Strategies and Water Quality Standards for Lake Champlain.* Anthony Artuso. March 1993.
5. *Lake Champlain Sediment Toxics Assessment Program. An Assessment of Sediment - Associated Contaminants in Lake Champlain - Phase 1.* Alan McIntosh, Editor, UVM School of Natural Resources. February 1994.  
  
*Lake Champlain Sediment Toxics Assessment Program. An Assessment of Sediment - Associated Contaminants in Lake Champlain - Phase 1. Executive Summary.* Alan McIntosh, Editor, UVM School of Natural Resources. February 1994.
6. (A) *Lake Champlain Nonpoint Source Pollution Assessment.* Lenore Budd, Associates in Rural Development Inc. and Donald Meals, UVM School of Natural Resources. February 1994.  
  
(B) *Lake Champlain Nonpoint Source Pollution Assessment. Appendices A-J.* Lenore Budd, Associates in Rural Development Inc. and Donald Meals, UVM School of Natural Resources. February 1994.

7. *Internal Phosphorus Loading Studies of St. Albans Bay. Executive Summary.* VT Dept of Environmental Conservation. March 1994.
  - (A) *Dynamic Mass Balance Model of Internal Phosphorus Loading in St. Albans Bay, Lake Champlain.* Eric Smeltzer, Neil Kamman, Karen Hyde and John C. Drake. March 1994.
  - (B) *History of Phosphorus Loading to St. Albans Bay, 1850 - 1990.* Karen Hyde, Neil Kamman and Eric Smeltzer. March 1994.
  - (C) *Assessment of Sediment Phosphorus Distribution and Long-Term Recycling in St. Albans Bay, Lake Champlain.* Scott Martin, Youngstown State University. March 1994.
8. *Lake Champlain Wetlands Acquisition Study.* Jon Binhammer, VT Nature Conservancy. June 1994.
9. *A Study of the Feasibility of Restoring Lake Sturgeon to Lake Champlain.* Deborah A. Moreau and Donna L. Parrish, VT Cooperative Fish & Wildlife Research Unit, University of Vermont. June 1994.
10. *Population Biology and Management of Lake Champlain Walleye.* Kathleen L. Newbrough, Donna L. Parrish, and Matthew G. Mitro, Fish & Wildlife Research Unit, University of Vermont. June 1994.
11. (A) *Report on Institutional Arrangements for Watershed Management of the Lake Champlain Basin. Executive Summary.* Yellow Wood Associates, Inc. January 1995.
  - (B) *Report on Institutional Arrangements for Watershed Management of the Lake Champlain Basin.* Yellow Wood Associates, Inc. January 1995.
  - (C) *Report on Institutional Arrangements for Watershed Management of the Lake Champlain Basin. Appendices.* Yellow Wood Associates, Inc. January 1995.

This report was funded and prepared under the authority of the Lake Champlain Special Designation Act of 1990, P.L. 101-596, through the U.S. Environmental Protection Agency (EPA grant #EPA X 001840-01). Publication of this report does not signify that the contents necessarily reflect the views of the States of New York and Vermont, the Lake Champlain Basin Program, or the U.S. Environmental Protection Agency.

February 1995

January 1995

## REPORT ON INSTITUTIONAL ARRANGEMENTS FOR WATERSHED MANAGEMENT OF THE LAKE CHAMPLAIN BASIN

### Executive Summary

#### I. Introduction

This report offers ideas and recommendations to the Lake Champlain Management Conference (LCMC) regarding the institutional arrangements best suited to successful, sustained implementation of the recently released Draft Lake Champlain Pollution Prevention, Restoration and Control Plan.<sup>1</sup> The Lake Champlain Management Conference is a 31 member board established by the Lake Champlain Special Designation Act of Congress in November 1990 to create a comprehensive plan for protecting the future of Lake Champlain and its surrounding watershed. LCMC provides guidance to The Lake Champlain Basin Program (LCBP), established to coordinate the activities being carried out under the Special Designation Act. The Special Designation Act authorized a five year life for the LCMC after which alternative institutional arrangements will be needed for Plan implementation and ongoing protection of the Lake and its watershed.

The ideas and recommendations for ongoing institutional arrangements for watershed management of Lake Champlain and its basin are based on

- Careful review of the Draft Action Plan for Lake Champlain;
- Analysis of existing institutional arrangements for watershed management of the Lake Champlain Basin in relation to the draft Action Plan, including the Lake Champlain Basin Program;
- Analysis of historical institutional arrangements for the management of Lake Champlain and its Basin;
- Identification of the existing legal and regulatory framework governing Lake Champlain and the watershed;
- Review of watershed management models from around the country;

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<sup>1</sup>Also referred to in this document as the "Plan".

- Identification of the unique political, economic, regulatory, and institutional features of the Lake Champlain Basin which have particular bearing on institutional arrangements and their viability.

Lessons learned from this research are summarized below.

The term "institutional arrangements" as used in this document refers to the formal and informal relationships among institutions responsible for resource management, broadly defined, in the Lake Champlain Basin. Institutional arrangements form the basis for understandings of how responsibility for the various functions required for watershed management will be shared.

The intent of recommendations contained in this report is to build upon existing institutional arrangements and the strengths of participating organizations rather than create new institutions, except in those few instances where institutions required for comprehensive planning and management are lacking. Institutional arrangements will be fostered through a committee structure that ties together existing organizations in the policy-making and implementation process. Recommended institutional arrangements are intended to foster existing partnerships and create opportunities for new partnerships between various groups of stakeholders. In recommending changes to existing institutional arrangements, the goal is to reduce fragmentation and duplication of effort, to increase efficiency and enhance cooperative relationships between and within governmental and non-governmental organizations with a stake in the future of Lake Champlain and to provide the simplest institutional framework capable of performing all necessary lake management functions. Neither the Draft Plan nor the recommendations for institutional arrangements call for new regulatory powers. Recommendations do, however, address the need for input from a full array of organized stakeholders into the policy-making process of existing regulatory agencies at the federal, state, provincial, and local government level.

## **II. Principles of Successful Watershed Management**

Recommendations to create and maintain institutional arrangements to protect Lake Champlain should be guided by certain fundamental principles. These principles, combined with the functional requirements of effective watershed management, should determine the kind of arrangements that

would best serve the environmental needs of the Lake and the cultural, recreational and economic needs of the communities that depend on the Lake.

There are at least four guiding principles that should be considered based on lessons learned from existing models of watershed management.

- First, any institutional arrangements dealing with complex watershed issues that involve multiple jurisdictions must have the ability to capture the political will to act decisively and creatively in the face of enormous technical, political and financial obstacles.
- Second, institutional arrangements must include a mechanism to involve and commit political leadership and the public at all levels to support stated goals and objectives.
- Third, there must be transparent and understandable mechanisms, such as monitoring programs and annual progress reports, to hold political leaders publicly accountable for their commitments.
- Fourth, public accountability must be judged against understandable and realistic criteria that can be used to measure success, failure, or the need for new directions.

There are at least four additional principles that should guide financing of watershed management efforts.

- Accountability is key. The public should know where the money spent on Action Plan implementation is coming from, where it is going, and what it is buying. Insofar as possible, money collected within the basin through fees and fines should be spent to improve the basin environment.
- Second, some portion of the funding available to finance implementation and further planning should be flexible and not tied to changes in political administrations or the short budget cycles of most public agencies. This can be achieved, in part, through creation of an endowment. There are a variety of models for operating an endowment that deserve further study if and when this recommendation is approved.
- Third, funding sources should be diverse to achieve maximum potential for

continuity of effort. Insofar as possible, stakeholder groups should seek financing independent of government.

- Finally, funds should be adequate to carry out specific tasks -- undercapitalized efforts should be discouraged.

The most significant fact concerning efforts to address environmental issues in the Lake Champlain basin is the discrepancy between the nature of the issue -- protection for a resource that respects no political boundaries -- and the nature of existing environmental protection efforts that depend on existing political boundaries, whether local, state, or federal. How to resolve the gap between the resource and the instruments of protection held by various governmental and private sector entities is the biggest challenge for creating an effective institutional structure for the protection of the Lake Champlain basin.

To capture and maintain the political will to act on the Plan, institutional capacity to consider environmental and economic consequences together will need to be developed. The most politically acceptable solutions will be those that serve environmental and economic objectives simultaneously.

### **III. General Institutional Lessons Learned from Watershed Management Efforts Elsewhere in the United States**

1. Complete stakeholder representation is key to negotiating workable solutions to plan implementation. Organized groups of stakeholders contribute effectively to both policy development, planning, and implementation in watersheds. Conflict can be expected, particularly in the implementation phase, and must be effectively managed, not avoided, to achieve lasting results. Effective conflict management (as opposed to conflict avoidance) can be achieved through training for participants and the use of a professional facilitator as needed. Conflict management works best when its principles are applied before positions harden. Therefore, it is critical that active participation of all stakeholder groups be achieved early in the policy cycle.

2. Most watersheds are managed not by a single institution but by a multiplicity of institutions whose activities are coordinated through a variety of institutional arrangements, both formal and informal. There has been an evolution in the United States away from top-down approaches and toward

bottom-up capacity-building approaches to watershed management. This is in keeping with the general approach of the LCBP. The emphasis here is on institutional arrangements through which management functions are distributed between multiple organizations versus consolidation of functions in a single institutional entity. This requires increased capacity to manage diverse partnerships.

3. Effective and enduring institutional arrangements for watershed management combine stability and flexibility. Institutional arrangements can effectively utilize temporary as well as standing committees to respond to emerging concerns. Use of temporary committees, as well as effective feedback mechanisms for policy-makers from various stakeholder groups, builds in the flexibility needed to respond to emerging concerns and is critical to sustaining long-term institutional viability. Flexible arrangements can support a base level ongoing effort that can grow and contract based on the availability of funds and public support for carrying out specific tasks.

#### **IV. Summary of Key Lessons from Analysis of Existing Arrangements for Watershed Management of Lake Champlain**

1. There is currently no single institution that represents the interests of local governments in the watershed management of the Lake Champlain basin. Local government participation is critical to effective watershed management. Without such a structure, local governments will continue to be inadequately represented in the policy-making process. A new organizational structure representing local governments in the basin is needed. Alternative models for such an organizational structure are presented in the full report.

2. The majority of business and economic development professionals interviewed for this study recognize the critical importance of environmental quality to maintaining a strong business climate for the region. Yet the business community and economic development interests in their entirety lack an organization that focuses on the Lake Champlain basin and would permit them to have a collective voice in policy development. Business interests cannot be adequately represented in the policy-making process without a structure that provides for input from all affected sectors, including real estate, banking, construction, utilities, heavy industry, retail trade, lodging, recreational services, and environmental businesses. A coalition of

existing business organizations is needed to focus on issues and opportunities for environmental protection and sustainable development in the Lake Champlain basin and to advise the policy-making process. Alternative models for such an organization are presented in the full report.

3. Canadian and Quebec involvement in Basin Program efforts, including participation with the Management Conference (in contrast to the Steering Committee; see below) is well below its potential. The majority of Canadians interviewed for this project expressed a desire to be more fully involved in planning and implementation efforts for Lake Champlain. They also expressed some frustration at how little is known in the States about Canadian circumstances, experiences, achievements, and issues. Institutional arrangements should support increasing integration of Canadian stakeholders in planning and implementation efforts.

4. Opportunities exist to build on and formalize the role of advisory bodies created over the past several years, particularly the Agricultural Advisory Council and the Mad River Project Intra-Basin Advisory Committee. The Agricultural Advisory Council was created in 1993 by the LCMC with the endorsement of state agricultural and environmental agencies. The Mad River Project Intra-Basin Advisory Committee was also formed in 1993 with the support of the LCBP.

5. Both States and the Federal Government of the United States are spending considerable sums of money on programs and projects related to the goals of the Draft Action Plan. In fact, the amounts of money spent in this way far overshadow the amounts provided by the Federal Government to the LCBP. For example, a rough estimate of the amount spent annually by Vermont Agency of Natural Resources within the basin is \$18 million while a similar rough estimate for New York State Department of Environmental Conservation is \$8-10 million. Traditional accounting systems are not designed to track expenditures by watershed boundaries. Technology is making it economically feasible to simultaneously track fiscal data in several frames, e.g. traditionally and by geographic region. Until it is possible to identify existing state and federal expenditures on plan-related activities within the basin, it will be impossible to take a comprehensive look at how these resources may best be allocated in light of the plan. The ecosystem approach to resource management applied to the Plan must also be applied to identification and allocation of financial resources at the state and federal levels. State and federal agencies should develop the capacity to track fiscal

data on a geographic basis corresponding, in this case, to the Lake Champlain basin. The first step in moving toward ecosystem budgeting will be an inventory of spending within the basin by all relevant state and federal programs. The inventory should include not only direct programs of the state and federal governments but also grants made by same to independent groups in the Basin. Preparing the inventory will generate new insights into spending patterns as well as provide a basis for evaluating the value of an ecosystem budgeting approach.

## **V. Summary of Lessons from the History of Institutional Arrangements for Lake Champlain**

1. The New England River Basin Commission initiative of the 1970's was entirely dependent on federal funds. It produced a five year management plan for Lake Champlain in 1979 but action to implement the plan failed to materialize when federal funds were withdrawn. It is a mistake to be completely reliant upon federal initiatives and funding for coordinating the management of the Lake Champlain watershed. While taking advantage of federal programs and funding wherever possible, institutional arrangements for the Lake Champlain watershed should be driven by state and provincial initiatives. Diversified funding, including ongoing financial commitments to coordinated management of base level activities by the States and Quebec, are essential to the continuity of management efforts. The level of funding required for coordinated management will vary depending upon the number and complexity of initiatives underway at any given time. The greater the commitment to program implementation, the greater the need for a corresponding commitment to fund increased coordination.

2. The Champlain Basin Compact (CHAMPCO) initiative of the 1960's was an effort to form a bi-state compact commission for the Lake Champlain basin. It failed due, in part, to poor lines of communication with state legislatures. This was also a factor in the failure to follow-up on the New England River Basin Commission efforts. It is a mistake to structure institutional arrangements for management of the Lake Champlain watershed without building in effective linkages to state (and provincial) legislatures. Recognizing the differences between the level of political representation on the New York side and on the Vermont side of the Basin, institutional arrangements governing watershed management must provide the means for ongoing linkages to both state legislatures.

3. The International Joint Commission (IJC) provides a forum for the U.S. Federal Government and the Government of Canada to address boundary waters issues of mutual concern. The IJC has proved useful in the past in carrying out specific research on Lake Champlain and providing a forum for public discussion on an issue by issue basis. The resources and capabilities of the IJC should not be forgotten in conceptualizing ongoing institutional arrangements for Lake Champlain. The IJC provides an institutional mechanism for involving the federal governments of the United States and Canada. The IJC can play a valuable role in Lake Champlain on an as needed basis.

4. There are a number of "flashpoints" that can derail, disrupt, and distort a management effort. These include Home Rule, private property rights, and perceived fairness and equity in who pays and who benefits. The best defense on these issues is a good offense. Institutional arrangements should be sufficiently inclusive to work effectively with these deeply entrenched value systems and not against them. Solutions must be sought that are not only compatible with but enhance these values in recognized ways that also support watershed management goals.

## **VI. The Watershed Approach to Resource Management**

A watershed approach to resource management is no longer a new concept. Governing based on the natural environment and not political boundaries has been instituted in a variety of forms throughout the United States.<sup>2</sup> Some of these programs have been successful and others have not. Within the context of Lake Champlain and the LCBP Draft Plan, a watershed approach includes the recognition that most basin-wide problems have local solutions. Institutional arrangements must therefore be flexible enough to identify issues and evaluate impacts for the entire watershed yet capable of targeting sub-watershed areas to direct resources and focus implementation efforts.

Recognizing the importance of local solutions, institutional arrangements

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<sup>2</sup> Some models of watershed management from around the United States reviewed as part of this research are included in the final report. Additional compendia of models are included in the bibliography.

must contribute to building capacity to plan and implement at the local level. This means, among other things, effective integration and support for the increasing number of nonprofit organizations and citizens groups within the basin organized around watershed issues. It also means increased attention to improving technical assistance delivery to localities and businesses.

### **Watershed Management Functions**

Efforts at watershed management across the United States have taken a myriad of institutional forms; however, the functions served by management institutions are relatively easy to categorize. Whereas not all functions are served in every watershed management scheme, those functions listed below suggest the range of what is possible based on current experience around the nation.

The three watershed management functions most needed here, as reported by 99 respondents to a survey sent to all participants in the Lake Champlain Basin Program, are public education and outreach, coordination of existing efforts, and monitoring of environmental conditions. Surveys of professional key informants involved in the individual action plan areas also identified a need for improved communication among stakeholders. In addition, the need for achieving regulatory consistency surfaced in every Action Plan area along with the need for more scientific research to provide a basis for appropriate policy development. The Management Conference's emphasis on local capacity building for plan implementation will require more and better developed technical assistance capacity than currently exists. Two functions that appear to be underdeveloped in the basin and for which demand is likely to increase as the plan moves toward implementation are environmental conflict resolution and economic and environmental impact analysis. Based on these findings, the functions highlighted below are those most in need of further development for Lake Champlain. Recommendations for institutional arrangements are directed toward fulfilling highlighted functions.

Functions related to coordination include **coordination of existing efforts**, **improved communication among various groups of stakeholders**, and **providing legislative linkages**.

Functions related to public education include **public education and outreach**, **forum for current and controversial issues**, and **funding for demonstration projects**.

#### Institutional Arrangements Executive Summary

Functions related to regulation include **policy development**, negotiated rule-making, **permit oversight and compliance**, enforcement, land use planning and controls, and **achieving regulatory consistency**.

Functions related to scientific research include **research**, **data management**, **monitoring of environmental conditions**, and **economic and environmental impact analysis**.

Functions related to technical assistance include **community outreach and capacity building**, **technical support to localities on environmental protection**, **technical support to businesses on environmental protection** and **environmental conflict resolution**.

One additional function served by at least one independent group in the majority of watershed management efforts is **advocacy and lobbying**.

### **VII. Summary of Recommendations for Institutional Arrangements for Watershed Management of the Lake Champlain Basin<sup>3</sup>**

Recommendations for institutional arrangements for watershed management of the Lake Champlain Basin contained in this report take into consideration all the lessons, shortcomings, and aspirations identified above. They are not definitive but are intended to provide the basis for discussion. Answering the question of "what works" will continue to be, in some degree, a matter of trial and error. The best way to capture the benefits of trial and error is through designing institutional arrangements that contain adequate feedback loops and designated time for reflection and are composed of learning organizations. To this end, the recommendations include some discussion of processes that will facilitate successful plan implementation. What is presented here represents a combination of best practices as identified through research and best judgement as to what, in keeping with the Plan, will best serve the interests of the Basin and its people.

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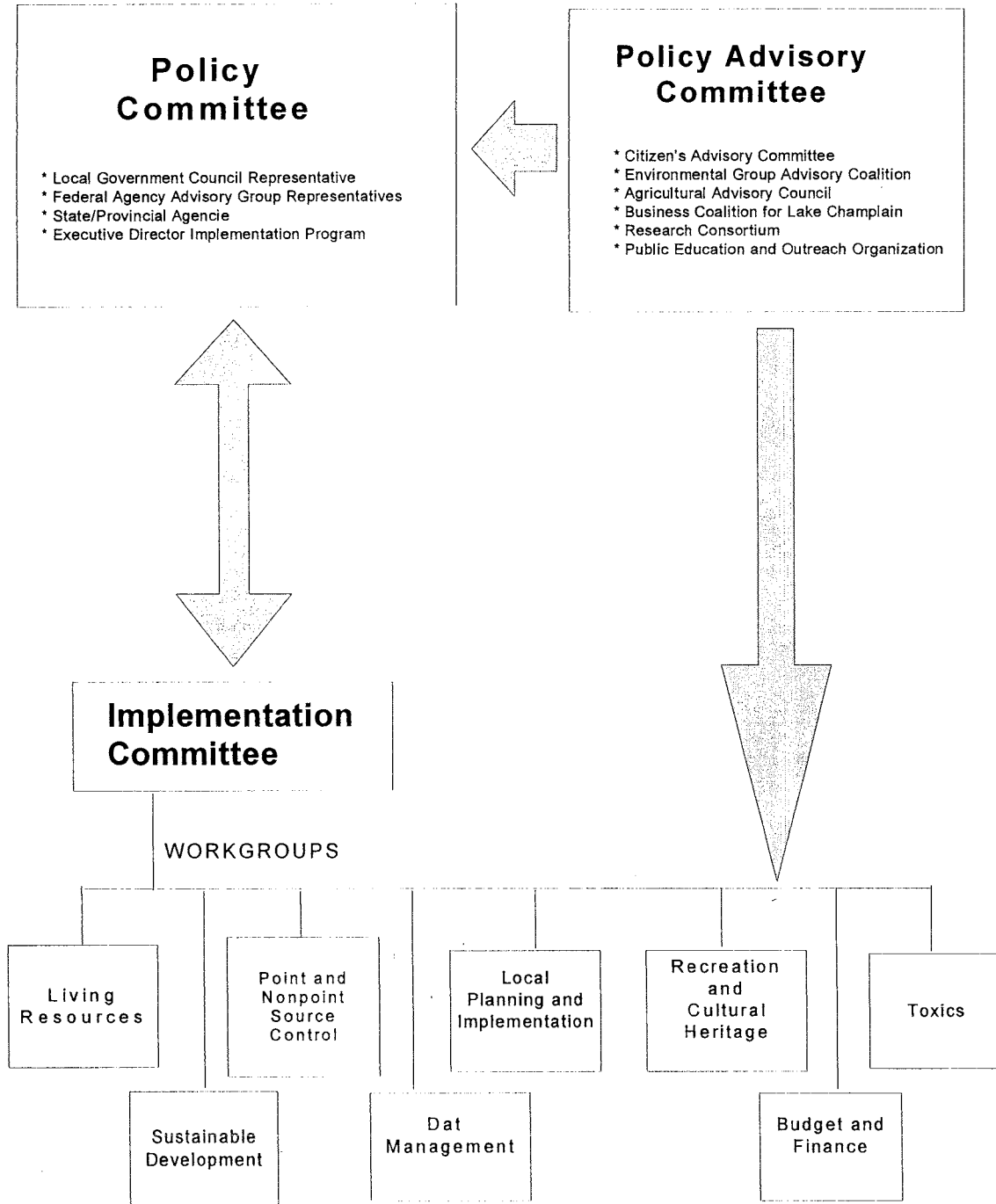
<sup>3</sup> Conservation Law Foundation, a collaborator on this report, has prepared a separate report that addresses some of these issues from a different perspective. CLF's approach to the institutional arrangements, among other things, calls for a more aggressive enforcement role when necessary. The CLF report is provided in the spirit of an open and informative discussion of the important issues facing the Basin Program.

#### **Institutional Arrangements Executive Summary**

The structure of proposed institutional arrangements is illustrated in the flow chart below. A description of the organizational structure and functions of each institution follows.

**Institutional Arrangements Executive Summary**

**Recommended Institutional Arrangements for Watershed  
Management of the Lake Champlain Basin**



## **A. The Policy Committee**

The Policy Committee is a governmental body whose members have responsibility for implementing laws related to basin management. The Policy Committee provides a vehicle for discussion and coordination of public policy at federal, state, provincial, and local government levels. Decisions regarding public policy are appropriately the province of government officials whose job it is to protect the public good. However, the institutional model presented here recognizes the critical importance of fostering dialogue and building consensus regarding public policy within and between stakeholder groups, and the importance of building that consensus into the public policy-making process. That is the role of the Policy Advisory Committee (described below).

The Policy Committee will be responsible for developing policies related to issues of basin-wide significance, addressing issues that require regulatory changes, agreeing on new policy directions, and approving priorities for Plan implementation as presented by the Implementation Committee. It will also approve any spending decisions of over \$25,000 made by the Implementation Committee. Policy Committee members will include commissioners, ministers or secretaries of State and Provincial Agencies, representatives of the Local Government Advisory Council (described below), representatives of the Federal Agency Advisory Group (described below), and the Executive Director of the Implementation Program (described below).

The Policy Committee will be informed by the Policy Advisory Committee which will be made up of representatives from stakeholder organizations described below. Policy Advisory Committee members will serve in an advisory capacity to the Policy Committee. Policy Advisory Committee members will attend Policy Committee meetings and will have the right to review materials presented to the Policy Committee and make recommendations on policy development. Members of the Policy Advisory Committee members will not vote on Policy Committee decisions. Each member of the Policy Committee, except the Executive Director of the Implementation Committee who serves in an ex officio capacity, will have a vote in its decision-making process. The composition of the Policy Committee will be individuals representing the following organizations:

#### **Institutional Arrangements Executive Summary**

New York State Department of Environmental Conservation  
New York State Adirondack Park Agency  
New York State Office of Parks, Recreation and Historic  
Preservation  
Vermont Agency of Natural Resources  
Vermont Department of Environmental Conservation  
Vermont Department of Fish and Wildlife  
Quebec Ministry of the Environment and Wildlife<sup>4</sup>  
Local Government Council member from Vermont  
Local Government Council member from New York  
Local Government Council member from Quebec  
Federal Advisory Committee representative from U.S. Environmental  
Protection Agency  
Federal Advisory Committee representative from U.S. Department of  
Agriculture  
Federal Advisory Committee representative<sup>5</sup>  
Executive Director of the Implementation Program, ex officio

The Policy Committee will be co-chaired by the representatives from the New York Department of Environmental Conservation, Vermont Agency of Natural Resources, and Quebec Ministry of the Environment and Wildlife.

#### **Steering Committee as Basis for Policy Committee**

The Policy Committee represents a modification of the existing Steering Committee. The Steering Committee was created in 1988 and renewed in 1992 through a Memorandum of Understanding between New York, Vermont, and Quebec. Its purpose is "to establish a forum for cooperative management of Lake Champlain and its watershed to enhance and preserve the character of the Lake and its environs;...to enhance and establish, where necessary, a process for the regular exchange of information and for more systematic cooperation in research and data gathering...; to provide a

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<sup>4</sup>Quebec involvement could be strengthened by inviting formal participation by two additional provincial agencies or departments.

<sup>5</sup>To be selected by members of the Federal Agency Advisory Group.

mechanism for the participation (of all signatories) in regulatory proceedings addressing significant actions affecting the Lake."<sup>6</sup>

The Steering Committee functions fundamentally as a policy-development and policy-coordinating body. It has proved capable of functioning effectively in this regard, having a number of achievements, including establishment of joint phosphorus standards, to its credit. In addition, the Steering Committee is the one existing governmental institution that formally represents both the States and Quebec. History suggests a strong and active involvement by the States and Quebec will be crucial to continuity of lake protection efforts. Our recommendation, therefore, is to utilize the Steering Committee as a building block toward an the overall policy-making body for lake management. The primary functions of the Policy Committee will be **policy development, achieving regulatory consistency and coordinating existing efforts** (through the Implementation Committee). **Permit issuing, oversight, and compliance and negotiated rule-making** will remain a function of existing state agencies, facilitated, as needed, through the Policy Committee.

There are several aspects of current Steering Committee process and composition that need to be addressed in the transition from the planning to implementation phase. First, the States and Quebec currently allocate no funds other than in-kind services to the Steering Committee. Funding will be needed to continue to actively coordinate lake management and plan implementation. EPA has allocated 2 million dollars to the management effort for Lake Champlain in each of the past four years. It is premature to estimate an implementation budget since priorities for implementation have not been finalized. However, administrative costs for the Basin Program have been running at 11.5 to 13.8 percent of 2 million over the past four years. It is recommended that the States and Quebec devise a formula to allocate baseline costs between them and commit to a multi-year appropriation of funds to the Policy Committee.<sup>7</sup> Allocation of resources by the states and Quebec will insure the effort does not fail due to fluctuating availability of

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<sup>6</sup> Memorandum of Understanding on Environmental Cooperation on the Management of Lake Champlain, August 18, 1992, p.3-4. Words in parentheses are added.

<sup>7</sup>Such a formula might include an equal split up to some amount with the remainder of responsibility allocated based on the percentage of the basin population in each state and Quebec.

#### Institutional Arrangements Executive Summary

federal dollars over time. All federal and other monies received above and beyond state and provincial allocations can be used to further the goals of plan implementation. The alternative is continued absolute dependence on the federal government for funding of lake management efforts.

Second, the Steering Committee as currently composed lacks organized representation from key stakeholders in the basin including local governments, the business community, nonprofit organizations actively involved in watershed management, agricultural interests, the U.S. Federal Government, and the full range of the research community active in the basin. It is recommended that a formal Policy Advisory Committee be formed to work with the Policy Committee. Policy Advisory Committee membership should be extended to representatives of the stakeholder groups described below.

Third, state agency representation on the Steering Committee is limited to New York State Department of Environmental Conservation, New York State Adirondack Park Agency, New York Office of Parks, Recreation and Historic Preservation, Vermont Agency of Natural Resources, Vermont Department of Environmental Conservation, Vermont Department of Fish and Wildlife, and the Quebec Ministry of the Environment and Wildlife. Whereas these are clearly the lead environmental protection agencies in their respective jurisdictions, addressing the full range of issues covered in the Lake Champlain Pollution, Prevention, Restoration and Control Plan will require ongoing cooperation, coordination, and resources from a variety of additional state agencies including but not limited to Agencies (or Departments) of Transportation, Agriculture, State, Community Development, Public Health, Economic Development, Tourism, and Historic Preservation. Some of these agencies have already been actively involved in the basin planning effort while others have not.

To promote intrastate agency coordination, it is recommended that New York State Department of Environmental Conservation and Vermont Agency of Natural Resources informally designate a key contact person at each relevant state agency to become the Lake Champlain liaison. These people would be responsible for keeping abreast of Policy Committee actions and providing input, directly or indirectly, from their agencies. It is further recommended that each state continue to support an overall Lake Champlain Coordinator position whose function would be, in part, to convene all state personnel working on Lake Champlain issues on at least a semi-annual basis

to share information and knowledge and to identify emerging issues.<sup>8</sup> As an alternative, the Coordinator would be responsible for obtaining comment from all relevant state agencies on policies proposed by the Policy Committee and promoting networking among state agency personnel. The Lake Champlain Coordinators would coordinate preparation of annual updates on state agency initiatives related to Plan implementation and would work with appropriate staff in each agency and the Budget and Finance Workgroup to develop an ecosystem budget for Lake Champlain and its basin. The Lake Champlain Coordinators would work with the Implementation Committee and its staff in preparing presentations to the Policy Committee.

### **Local Government Council**

As mentioned previously, there is at present no single representative body of local governments in the management of the Lake Champlain basin. In other watershed programs, local governments have been most effective when provided with a structured role in the management process. Local government participation is key to effective implementation at the sub-basin level. The LCMC should direct Basin Program staff to work with local government leaders and local government groups in 1995 to establish a Local Government Council for Lake Champlain.

In establishing a Local Government Council for Lake Champlain, attention must be paid to the differences in local government structure between Vermont and New York. In Vermont, most local government functions are performed at the town level. Only sheriffs and side judges serve at the county level. In New York, county governments provide a wide range of functions and receive considerable state funds. However, as in Vermont, local land use planning and zoning remain the province of local governments in New York (except in the Adirondack Park where there is separate authority for state zoning administered by Towns and Villages.) Therefore, it will be important to include both town and county representatives from New York while Vermont will be largely represented by town officials. Efforts should be

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<sup>8</sup> Research indicated that employees of VTANR and of NYSDEC working in the various Action Plan areas are often unaware of the full scope of their agency's involvement across all areas. By increasing awareness through regular meetings, opportunities for addressing linkages between agency efforts will be more likely to emerge.

made to ensure representation of towns across the rural/urban, lakeshore/inland, and income spectrums.

The LCMC can create incentives for the formation of a Lake Champlain Local Government Council by offering interim staff support for its formation, by offering three seats (one from Vermont, one from New York, and one from Quebec) on the Policy Committee to local government representatives under the condition that such a representative body is created, by offering to serve as an intermediary between local government concerns over federal and state mandates and the agencies whose mandates are of concern, and finally, by offering funding to a Local Government Council for use in providing technical assistance to local governments.

Existing organizations that ought to be included in discussions about a Lake Champlain Local Government Council include but are not limited to the Vermont League of Cities and Towns, the Adirondack Association of Towns and Villages, New York's county commissioners, the New York State Association of Counties, and the New York State Association of Towns. Alternative models of local government involvement in watershed management in New York and elsewhere are presented in the full report.

### **Federal Agency Advisory Group**

Under existing institutional arrangements, federal agencies are represented on the LCMC but not on the Steering Committee. We recommend federal agency participation on the Policy Committee through creation of a Federal Agency Advisory Group. The purpose of a Federal Advisory Group is to facilitate policy and program coordination between federal and state agencies and among the federal agencies themselves. The primary federal agencies involved to date in the LCMC have been the U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S. Department of Agriculture (Agricultural Stabilization and Conservation Service and Soil Conservation Service), and the National Park Service. For the implementation phase of the process, we recommend including representatives of the Economic Development Administration and the Farmers' Home Administration to the Federal Agency Advisory Group. In New York, where Housing and Urban Development (HUD) funds do not flow through a state agency, a representative from HUD should also be included.

To promote federal agency coordination, the Federal Agency Advisory

Group should designate a lead federal agency representative to serve as coordinator. To further facilitate coordination of the federal agencies, the States should request that each federal agency designate a Lake Champlain liaison to work with the Federal Agency Advisory Group's coordinator.

The Federal Agency Advisory Group should work with the Budget and Finance Workgroup to identify the full range of federal resources currently in use and available to support implementation of the Action Plan.

The appropriate role and level of activity of the Canadian federal agencies should be determined wholly by Quebec agency participants in the Policy Committee.

## **B. The Policy Advisory Committee**

The Policy Advisory Committee will provide a forum in which to work toward developing consensus among various groups of stakeholders regarding public policy in the basin. The Policy Advisory Committee will consist of representatives from the stakeholder groups described below. These stakeholder groups are designed to provide ongoing feedback to policymakers regarding the effectiveness and efficacy of policy decisions. It is anticipated that members of the various stakeholder groups will serve on the Policy Advisory Committee, as well as on Workgroups and the Implementation Committee. Their involvement at both the policy-making and plan implementation levels will provide an important link between the discussions of the Policy Committee and the activities of the Implementation Committee and Workgroups.

## **Stakeholder Groups**

### **1. Citizens Advisory Committees**

The existing Vermont, New York, and Quebec Citizens Advisory Committees (CACs) should each be represented on the Policy Advisory Committee. The primary functions of the CACs should be contributing to **public education and outreach efforts, providing citizen forums for current and controversial issues, and providing legislative linkages to the planning and implementation process.**

### *Legislative Linkages*

The Vermont CAC was created by the Vermont Legislature and has four Vermont Legislators as members.<sup>9</sup> The Vermont CAC submits a Lake Champlain Action Plan to the Vermont legislature each year. The CAC Action Plan includes joint recommendations developed in collaboration with the New York CAC. The legislative link in Vermont is relatively strong and enhanced by the fact that many Vermont legislators represent communities in the Vermont portion of the basin.

A stronger link to the New York legislature is needed. The New York CAC has no formal link to the New York legislature. Positions on the Management Conference created as designated seats for New York State Assembly appointments have gone unfilled. To strengthen the legislative link on the New York side in particular, we recommend that the New York CAC ask the New York State Department of Environmental Conservation Commissioner to appoint representatives of the three state politicians from the region to the CAC. In addition, the New York CAC should submit an annual report similar to the Vermont CAC report to the New York Legislature. Because part of the Adirondacks lies within the Lake Champlain watershed, the New York CAC may be able to reach and interest a greater number of New York State legislators by recognizing this connection.

Further, we recommend an annual joint legislative public hearing on Lake Champlain in conjunction with release of the annual report card. To facilitate New York legislative involvement, the first such conference might be held in Albany, New York.

Ideally, the Quebec CAC should be included in the formulation of joint recommendations and should perform the same legislative linking functions in Quebec as the Vermont and New York CACs do. The feasibility of this approach and its desirability from the perspective of Quebec stakeholders have not been determined.

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<sup>9</sup> There are also four Vermont legislators on the Management Conference and two New York appointees designated by the New York State Senate.

*Forum for Controversial Issues*

The CACs have effectively served as a forum for a broad spectrum of opinion. They are viewed as nonbureaucratic, easily accessible points of entry into the debate. It is important that their role in this regard be recognized and supported in the implementation effort. Staff support and funding for the CACs should be part of the commitment of state agencies to the ongoing process of lake management.

*Public Education and Outreach*

The CACs have played a significant role in public education and outreach in the plan formulation process. Their continuing role in this process should be in partnership with the Public Education and Outreach organization described below.

The two State CACs should be encouraged to include the Quebec CAC in their joint meetings and development of joint policy statements. The voice of the CACs can be furthered strengthened over time by collaborative efforts.

2. Environmental Group Advisory Coalition

The Environmental Group Advisory Coalition is envisioned as a forum for sub-basin watershed associations such as those represented in the Mad River Project Intra-Basin Advisory Committee, and environmental groups with broader agendas that are active in the basin. The Mad River Project Intra-Basin Advisory Committee formed in 1993 to advise the Mad River Management Demonstration Project funded by the Lake Champlain Basin Program. The Intra-Basin Advisory Committee brought together representatives of watershed associations throughout the basin with representatives from state agencies and university extension services that provide technical assistance to watershed groups. Members of the Lake Use/Land Use Subcommittee of the Technical Assistance Committee were also involved.

The sub-basin watershed associations represented in the Intra-Basin Advisory Committee are the groups doing hands-on work in resource management. Their experiences are vital to policy developers (and other environmental groups) in understanding what works and what doesn't.

Membership in the Environmental Group Advisory Coalition should be extended to all watershed groups within the basin, including Quebec, where several citizens groups are currently active. It should also include environmental groups active in the basin. The Environmental Group Advisory Coalition should be expanded to include a seat on the Policy Advisory Committee.

### 3. Agricultural Advisory Council

The Agricultural Advisory Council was created in 1993 by the Management Conference with the endorsement of state agricultural and environmental agencies. Formation of the Advisory Council was recommended by the NY-VT Strategic Core Group who prepared the "Design and Initial Implementation of a Comprehensive Agricultural Monitoring and Evaluation Network for the Lake Champlain Basin" from 1991 to 1993. The mission of the Agricultural Advisory Council is "to facilitate communication, cooperation, and coordination for implementing the Comprehensive Agricultural Monitoring and Evaluation Network (CAMEN) Plan, and for continuing a collaborative approach to manage agricultural nonpoint source pollution."

Given the economic and environmental importance of agriculture in the basin, we recommend the Agricultural Advisory Council be represented on the Policy Advisory Committee. We recommend that membership in the Agricultural Advisory Committee be extended to the Quebec Ministry of Agriculture, Quebec farmers, and Quebec farmer organizations active in the basin.

### 4. Business Coalition for Lake Champlain

As previously mentioned, there is no representative groups of businesses organized to focus on the Lake Champlain basin environment and economy. We recommend the Management Conference, through the Basin Program, work with established business groups across all relevant sectors in 1995 to encourage the formation of such a coalition. Relevant sectors include but are not limited to banking, construction, real estate, utilities, manufacturing, retail, services, lodging, recreation, and businesses within the basin that specialize in environmental protection.

Existing organizations that could be instrumental in forming a business coalition on Lake Champlain include but are not limited to Chambers of Commerce, the Vermont Economic Roundtable, Vermont Businesses for Social Responsibility, Vermont Retail Association, as well as key individuals from each sector identified above, some of whom have already been involved in the Basin Program. Incentives the LCMC can provide for creation of a business coalition for Lake Champlain include interim staff support for organizing and a seat on the Policy Advisory Committee. Models for effective business involvement in environmental policy development are presented in the full report.

## 5. Research Consortium

The existing Research Consortium is an independent nonprofit organization formed by seven academic institutions in the basin. The purpose of the Consortium is to coordinate and facilitate research and scholarship on the Lake Champlain ecosystem, to provide training and education to students on lake issues, and to assist in disseminating research results. The major function of the Research Consortium is to conduct policy-related research, including environmental and economic impact analyses. The Research Consortium provides a mechanism to get scientists interested and involved in management questions while getting scientific insights integrated into policy development and plan implementation. Member institutions are: Castleton State College, Johnson State College, Middlebury College, St. Michael's College, State University of New York Plattsburgh, Trinity College, and the University of Vermont.

The major role of the Research Consortium with regard to lake management is to provide scientific insight into policy development. This can occur most effectively when members of the scientific community sit at the table with the policy developers. The Consortium has an important role to play in working with the Implementation Committee to design effective, appropriate, policy-driven, affordable, and sustainable standards for monitoring in all relevant areas of the Action Plan. Monitoring itself should be a function of state agencies. As an independent institution, the Research Consortium can apply to receive funding to support policy-related research needs and does not need to depend on state funds. The more involved the members of the Research Consortium are in working with the Policy Committee, the Implementation Committee, and the Workgroups, the more

likely it is that research projects will be structured to support public policy goals. The Research Consortium should have a seat on the Policy Advisory Committee. Recommendations regarding broadening involvement of the number of type of researchers represented by the Consortium are contained in the full report.

## 6. Public Education and Outreach Organization

Public education and outreach has been an important and visible function of the Lake Champlain Basin Program. There is clear consensus about the continuing importance of public education and outreach to the plan implementation effort. The major institutional issue confronting the Public Education and Outreach initiative is the need to develop an organizational and financing structure that will permit continuity of effort in serving a wide range of needs and audiences throughout the basin. To this end, the creation of a public/private partnership supported by a combination of state and federal funding, foundation grants, and private contributions is recommended.

Public education and outreach is needed in every area of Action Plan implementation. The new entity should adopt nonprofit status to allow it maximum flexibility in fund raising. The States and Quebec should commit part of their annual appropriation to the new entity to provide a baseline budget. These funds will procure the services of the public education and outreach entity on behalf of the Implementation Committee and any other organizations selected by the Policy Committee (such as the CACs). As a separate entity offering specialized services in public education and outreach, this organization will be able to serve the needs of a wide variety of clients throughout the basin, not only those affiliated with or funded through the Implementation Committee.

Although public education and outreach is a recognized need in most state and federal agencies, some grant it a higher priority and are better able to carry it out than others. Therefore, the Policy Committee should request a review of the public education and outreach needs of state agencies with respect to areas covered by the Action Plan with an eye toward subcontracting appropriate tasks to the new entity. The Federal Advisory Group should consider a similar approach. In addition, the new entity should

develop its own creative approaches to fundraising through such mechanisms as estate planning and partnerships with the private sector.

The public education and outreach organization should cooperate with but remain institutionally separate from the proposed Lake Champlain Basin Science Center. The Lake Champlain Basin Science Center, proposed for the Burlington waterfront, is expected to house the Lake Research Program of the University of Vermont as well as a hands-on science museum for and about the Lake. As valuable as the Center will be in promoting education about Lake Champlain, it will be focused, as it should be, largely on maintaining its own well-being as a museum and research center and should not be expected to maintain a sufficiently broad focus on all regions of the basin and areas of plan implementation as will be needed in the basin.

### **C. The Implementation Committee**

The Implementation Committee's responsibility is to oversee implementation of Plan priorities, not to develop public policy for the basin. The Implementation Committee will inform development of public policy through regular presentations to the Policy Committee by its staff and Workgroup chairs. The Implementation Committee will consist of the chairpeople of each of the Workgroups described below. The Workgroups will consist of members of each of the relevant stakeholder groups, lay citizens, and state, local, and federal government representatives. There will be a minimum of eight members of the Implementation Committee, more if Workgroup subcommittees are formed.

The Implementation Committee will be supported by a professional staff including an Executive Director and at least three to four permanent staff. At least one of the professional staff should be bi-lingual. Staff will be assigned to support activities of specific Workgroups and will deliver regular presentations on Workgroup activities to the Policy Committee and the Policy Advisory Committee. There should be a comptroller on staff to work with the Budget and Finance Workgroup. Staff may also be assigned to work directly with organizations represented on the Policy Committee and Policy Advisory Committee as directed by the Policy Committee. The main functions of the Implementation Committee are to recommend allocation of resources to implementation activities, coordinate implementation activities, develop an overall monitoring plan for implementation activities, including a strategy for

public accountability, improve communication among stakeholders, and facilitate delivery of technical assistance for local capacity building in watershed management.

The Implementation Committee would have primary responsibility for working with the Workgroups in crafting implementation procedures at the basin and sub-basin levels. The Implementation Committee will have authority to assemble technical reviewers for implementation proposals as needed. Recommendations for institutional arrangements conducive to local capacity building for plan implementation are included in the final report.

Staff of the Implementation Committee will be supplemented by state and federal agency staff working with the various Workgroups. These arrangements may be informal as some are now or formalized as needed. The Implementation Committee will have the authority to initiate additional temporary and permanent advisory groups or workgroups as required to implement the Plan.

#### **D. Workgroups**

Workgroups will be comprised of members of the stakeholder groups identified above and lay people working on these issues. The chairperson of each Workgroup (or Workgroup subcommittee) will serve on the Implementation Committee. Workgroups are responsible for coordinating existing efforts and designing new efforts to implement the Action Plans. Workgroups are also responsible for developing benchmarks to measure progress toward goals established in the Action Plan along with designing monitoring programs to collect the data by which progress may be measured. Actual monitoring will be carried out through a combination of government and citizen-based activities. In addition, Workgroups are responsible for identifying regulatory inconsistencies at federal, state, and local levels in each Action Plan area and making recommendations to the Implementation Committee and the Policy Committee to promote consistency where needed.

Most Workgroups cover more than one Action Plan area. It is anticipated that each Workgroup may choose to form subcommittees along lines similar to those currently in existence. The first five Workgroups focus on the content of the Lake Champlain Pollution Prevention, Restoration and Control Plan. The three additional Workgroups cut across all Action Plan areas.

Recommendations for specific improvements in institutional arrangements within each Action Plan area are included in the final report.

1. Living Resources

The Workgroup on Living Resources will be responsible for coordinating and developing implementation strategies related to Action Plans for managing fish and wildlife, protecting wetlands, and managing non-native nuisance aquatic plants and animals.

2. Point and Nonpoint Source Control

The Workgroup on Point and Nonpoint Source Control will be responsible for coordinating and developing implementation strategies related to Action Plans for managing nonpoint source pollution and reducing nutrients. By focusing on both point and nonpoint source controls, the Workgroup can assist in coordinating strategies for achieving overall reductions in phosphorus and other pollutants.

3. Local Planning and Implementation

The Workgroup on Local Planning and Implementation will be responsible for coordinating and developing implementation strategies related to Action Plans for cooperative watershed planning and protection and protecting human health.

4. Recreation and Cultural Heritage

The Workgroup on Recreation and Cultural Heritage will be responsible for coordinating and developing implementation strategies for Action Plans for managing recreation and protecting cultural heritage resources.

5. Toxics

The Workgroup on Toxics will be responsible for coordinating and developing implementation strategies for the Action Plan on Preventing Pollution from Toxic Substances.

## 6. Sustainable Development

A Sustainable Development Workgroup is needed to facilitate integration and coordination of economic and environmental concerns across all Action Plan areas. It will be the responsibility of this Workgroup to develop a conceptual framework for sustainable development of the Lake Champlain basin including benchmarks and monitoring. It will be the further responsibility of this Workgroup to work with each of the other Workgroups and all the stakeholder groups to identify and examine the feasibility of opportunities for public/private partnerships and private sector investment in achieving Action Plan goals. The Sustainable Development Workgroup should, at a minimum, include members of the Business Coalition, state and federal agencies involved in community and economic development, the Environmental Group Advisory Coalition, the Local Government Council, and the Research Consortium.

## 7. Data Management

The Data Management Workgroup will be responsible for developing a management, use, and dissemination plan for existing data, including Geographic Information System data, that has been developed for Lake Champlain and its basin. The Data Management Workgroup should work closely with the Public Education and Outreach Organization to make sure that accurate data is used to inform public and private decision-making at all levels.

## 8. Budget and Finance

This Workgroup will be responsible for developing the budget and making financing recommendations for the Implementation Committee. The first step in achieving reliable continuation funding for lake management efforts is securing a multiyear appropriations commitment from New York, Vermont, and Quebec. Initially, this support may come from the general funds of the respective entities with dedicated funding mechanisms developed over time. Possible dedicated mechanisms include an income-tax checkoff, real estate transfer tax on transfers within the basin, identification and pooling of enforcement fines for plan-related activities in the basin, incentive/disincentive fees, and public/private partnerships. In addition to an ongoing dedicated source of state funding, the LCMC should consider establishing an endowment for ongoing lake management to be funded by

state monies matched with private contributions (including estate planning contributions), foundation grants, and possible sale of novelty items.

The second step is securing a commitment from the federal agencies, particularly the U.S. Environmental Protection Agency. The third step is to complete an inventory of all state, provincial, and federal expenditures within the basin on plan-related activities. The inventory should include direct program spending, grants to nongovernment programs, and revenues collected through taxes, fines, and fees related to lake use. How much money is currently being generated and how is it being used? The inventory should also include a comprehensive description of legally supported financing mechanisms such as special tax districts as well as intermediary organizations, such as the New York Natural Heritage Trust and the New England Interstate Water Pollution Control Commission, that are available to assist in financing lake management. The inventory is a necessary and significant first step in evaluation of the feasibility and desirability of ecosystem budgeting for Lake Champlain. Existing financing activities should be evaluated according to how well they meet the four financing criteria presented above. Finally, based on the results of the preceding steps, a comprehensive financing plan for lake management should be developed. The plan should include financing for coordination of existing activities and support for stakeholder groups as well as for specific implementation projects.

In the short run, the Budget and Finance Committee should investigate new sources of funding for the Implementation Committee and the stakeholder groups as requested by the Policy Committee. It will be the responsibility of the Budget and Finance Workgroup to work with the Lake Champlain Coordinator in each State and Quebec and with state and federal agencies to develop and implement a plan for ecosystem budgeting. The Budget and Finance Workgroup will make recommendations to the Implementation Committee regarding the allocation of existing state and federal program funds and grants to independent organizations who carry out work related to the Action Plan. Any budget and financing plans prepared by the Budget and Finance Workgroup should adhere to the principles of funding watershed management described previously.

A description of potential funding sources and financing mechanisms such as bonding, loans, grants, fees, and public/private partnerships are provided

in the final report. Examples of how these mechanisms have been used in other watershed management programs are also provided in the final report.

#### Advocacy Organization

It is anticipated that at least one independent advocacy organization and maybe several existing organizations will play an important role in measuring and evaluating the success of Plan implementation efforts. Independent advocacy organizations play this role in most watershed management programs.

### **VIII. Conclusion**

The Executive Summary briefly describes the principles of successful watershed management gleaned from studies of models throughout the country and specific lessons learned germane to Lake Champlain. It provides an overview of recommendations for institutional arrangements for watershed management that conform to these principles and are considered most likely to promote continuity of effort and effective plan implementation once the LCMC is disbanded. Greater detail regarding these recommendations can be found in the full report and extensive appendices which are listed below.

### **Appendices**

- Appendix A. Legal and Institutional Framework Governing  
Environmental and Related Activities in the Lake Champlain  
Basin
- Appendix B. Analysis of Existing Institutional Arrangements by Action Plan  
Area for Lake Champlain
- Appendix C. Potential Sources of Federal and Private Funds for  
Watershed Protection
- Appendix D. List of Key Informants
- Appendix E. Bibliography