

Upper Merrimack River Local Advisory Committee

River Management and Implementation Plan

Adopted by Committee Vote February 22, 1994

Purpose

In developing this management and implementation plan, the Committee recognized the following statement of purpose:

To develop and assist in the adoption of a river management plan that will manage the special resources of the upper Merrimack River while recognizing the following areas of concern:

- To manage, maintain and enhance the water quality and natural, scenic, cultural, and recreational values of the river;
- To maintain local control;
- To focus on public involvement and education;
- To respect the rights of private landowners;
- To recognize the need for balanced use;
- To recognize present and future generations' use of the river.

Introduction

The Upper Merrimack River Local Advisory Committee was established through the New Hampshire Rivers Management and Protection Program (RSA-483). A principal duty of the Committee under this statute is to develop and assist in the implementation of a river corridor management plan.

This draft "Management and Implementation Plan" represents our initial attempt to carry out this important Committee function. It has been pulled together through roughly a year of background work studying resources and issues associated with the river. We have been assisted in this process by staff from the New Hampshire Department of Environmental Services (through the Rivers Management and Protection Program) and the National Park Service (through the federal Wild and Scenic River Study).

In addition, we have relied heavily upon the previous work of the Office of State Planning and River Area Planning Committee as embodied in the two volume Upper Merrimack River Corridor Plan (completed in March of 1991). Volume one of this effort represents a comprehensive study of the river's natural and cultural resources, and volume two is a comprehensive investigation of river management, including present management and recommendations for future actions. It contains many more recommendations and a great deal more detail than our "Management and Implementation Plan." By the same token, however, our plan contains many recommendations not specifically articulated in the two volume Corridor Plan.

Ours is designed primarily as an action plan for the most important initiatives rather than a comprehensive management resource. The two plans should be used together by those interested or involved in river-related resource management.

Management Provisions of the Rivers Management and Protection Program

In addition to establishing the Local Advisory Committee, the New Hampshire Rivers Management and Protection Program contains several important management provisions that are implemented by the State. Principal among these for the upper Merrimack are: establishment of a state policy against new dam construction; establishment of a protected instream flow; and specific siting requirements for new landfills and other solid waste facilities. In addition, the law provides guidance for increased scrutiny of channel alteration projects and water quality considerations.

These provisions are part of the foundation upon which this Management and Implementation Plan is built. All are presently in effect on the upper Merrimack except for the protected instream flow. Draft rules to implement the protected flow provisions are expected soon from the Department of Environmental Services.

Merrimack River Charrette

The Local Advisory Committee commends the effort behind the plans and concepts of Concord's Merrimack River Charrette as presented to the City Council on January 29, 1993. The Local Advisory Committee hereby amends its Management and Implementation Plan to urge future consideration of the Charrette Report and other interstate highway design alternatives.

Organization

This plan is organized around three sections: Water Resources Management; Riparian Lands Management; and Outstanding Resources Management. Subsections are used where appropriate, as follows:

Water Resources Management

- Water Quality
- Water Quantity
- Stream Channel Integrity

Riparian Lands Management

(no subsections)

Outstanding Resources Management

- Fish & Aquatic Resources
- Wildlife
- Agriculture
- Recreation
- Historical and Archaeological Resources
- Geologic and Natural Features

All of the recommended actions in this plan relate directly to one of the headings above, and redundancy between sections has been avoided wherever possible. Thus, for example, recommended actions for **Water Quality** are not repeated in the **Fish and Aquatic Resources** section despite the obvious overlap.

All of the recommendations are further broken down into "Key" or "Supporting" actions, depending upon our assessment of their importance. In addition, for each action, we have attempted to identify who is/are most directly responsible for carrying out that action ("Responsibility"). We have also suggested strategies for carrying out the action ("Implementation"). We have made every attempt to be realistic regarding the assigning of responsibilities and the mechanisms for achieving implementation, and have therefore not included any actions for which implementation appeared infeasible.

SECTION I: WATER RESOURCES MANAGEMENT

note: management goals in this section are referred to as "standards." This terminology is meant to reflect the fact that the bulk of water resource management provisions are backed up by specific, enforceable legislation and regulations to which standards and criteria can be applied.

In contrast, the goals for **Riparian Lands** and **Outstanding Resources** are expressed as "objectives" to better reflect the management philosophy and recommended actions articulated in these sections of the Plan.

note: the NH Rivers Management and Protection Program establishes a State policy against new dam construction on the upper Merrimack above the Garvin's Falls Dam. This policy is in no way intended to prohibit the re-licensing and continued operation of the Garvin's Falls hydroelectric facility (currently owned and operated by Public Service Company of New Hampshire). The Committee recognizes the continued operation of this facility as a public benefit which highlights a historically significant river function - power generation. The installation of fish passage at this facility in accordance with plans and timetables already in place will help ensure that this facility remains compatible with a balanced use philosophy which respects all important uses and values of the river.

WATER QUALITY

Standard: Maintain and enhance the Class B water quality standard, and avoid any degradation of important biological and chemical components of that standard.

Background: The upper Merrimack River currently meets its Class B water quality classification with only minor exceptions. The principal regulations used to achieve and maintain this level are the federal Clean Water Act as administered by the NH Department of Environmental Services and the State's own water pollution law (RSA-149). The "Key" and "Supporting" Actions of this plan are designed to work within this framework by complementing and building upon it. The implementation of these recommended actions would result in better and more effective control of point and nonpoint water pollution.

Key Actions

> Communities should develop and adopt Water Resource Management and Protection Plans pursuant to RSA 4-C:19

> Develop and implement a citizen water quality monitoring program. Obtain landowner permission where land access is required for sampling.

> Expand water quality criteria to include site specific resource uses and values inherent to the river

Regional Planning Commissions;
Local Governments

Local Advisory Committee;
Conservation Commissions;
Merrimack R. Watershed Council

NH Department of Environmental
Services

Implementation

Communities should initiate development of plans through planning boards and conservation commissions in consultation with Regional Planning Commissions

LAC seeks funds in consult with State Rivers Coordinator to develop program and meet training and equipment needs. LAC should work through Conservation Commissions to build support and recruit citizen volunteers, and should coordinate with Merrimack R. Watershed Education Project (NH Fish & Game)

Rivers Coordinator initiates necessary legislative and/or rulemaking changes

Responsibility

Supporting Actions

> Develop model stormwater management and erosion control guidelines for inclusion in local subdivision, site plan review, and excavation ordinances

> Develop and distribute annual education materials to report results of citizen water quality monitoring program

> Initiate projects to develop and demonstrate use of Best Management Practices for nonpoint source pollution control

> Prepare and distribute information on BMP's for nonpoint source pollution control

Responsibility

Local Advisory Committee;
Regional Planning Commissions

Local Advisory Committee;
Conservation Commissions

NH Department of Environmental Services; Soil Conservation Service; County Conservation Districts; UNH Coop Ext.

NH Department of Environmental Services; Soil Conservation Service, County Conservation Districts; UNH Coop Ext.

Implementation

Using the existing model developed by the NH Assoc. of Conservation Districts, the LAC, with assistance from the Regional Planning Commissions, should develop a regionally based model for distribution to local officials

Through summary reports, fact sheets, and public forums, the LAC should take the lead in publicity and education regarding the program, its results, and implications

The LAC submits proposals for demonstration projects to the NH DES. DES refines proposals for inclusion in yearly workplan. (guidelines for proposal development are available through the Rivers Coordinator)

Agencies distribute fact sheets and other information to local officials, developers, and cooperative extension.

WATER QUANTITY

Standard: Maintain flow conditions that will support the outstanding natural, cultural, and recreational resources associated with and dependant upon the river.

Background: NH presently has no comprehensive program for regulating the quantity of withdrawals from rivers. The State does have a registration program for withdrawals over 20,000 gallons per day. The Rivers Management and Protection Program directs the DES to develop a program for ensuring that designated rivers retain enough flow to support important river functions and values; draft rules in this regard are expected soon.

Key Actions

> Monitor and regulate water withdrawals to ensure the protection of adequate flows to achieve the management standard.

Responsibility

Department of Environmental
Services
DES Rivers Coordinator
Local Advisory Committee
NH Wetlands Board

Implementation

Rivers Coordinator implements protected flow through legislative rulemaking process of the Rivers Management and Protection Program. LAC works with Rivers Coordinator and resource experts to ensure that proposed flows satisfy resource protection goals. Also, monitor ongoing efforts within the Legislature to establish a withdrawal permitting system. Support such legislation if appropriate to satisfy standard.

Supporting Actions

> Establish and monitor a new flow gauging station at Sewall's Falls or other suitable sites.

NH Fish & Game
NH DES - Water Resources
US Geological Survey

Rivers Coordinator and LAC contact NH Fish and Game to initiate process.

Supporting Actions (cont.)

> Make sure that all withdrawals over 20,000 gallons per day are registered with the state.

Responsibility

Conservation Commissions
Local Advisory Committee
DES - Water Resources Div.

Implementation

LAC and Conservation Commissions identify known users and check with DES Water Resources Division to ensure registration

STREAM CHANNEL INTEGRITY

Standard: Avoid alterations to the natural stream channel and banks that would degrade their natural appearance and functions, unless no feasible alternatives exist, and mitigate the impacts of existing and future alterations to the greatest extent possible

Background: Proposed alterations to the stream channel and bank presently require review and permitting by the NH Wetlands Board. The US Army Corps of Engineers also reviews proposed projects, but only initiates their full permitting review procedures in cases where a project's potential impacts are large or controversial.

Key Actions	Responsibility	Implementation
> Proposed alterations to the natural stream channel and bank should be allowed only after: 1) scrutiny to establish project need; 2) careful analysis of alternatives; 3) analysis of long-term compatibility with the natural river system (including up and downstream considerations)	Local Advisory Committee NH Wetlands Board US Army Corps of Engineers	LAC should notify the Wetlands Board and Army Corps of its desire to see this standard implemented. LAC should review all permit applications to reinforce the standard. The Army Corps should recognize this standard by requiring individual project review when so requested by the LAC or NH Rivers Coordinator.
> State agencies owning and managing lands along the river should recognize and abide by the standards of this section.	Local Advisory Committee State Agency Heads	LAC seeks recognition by agency heads

Key Actions (cont.)

> Restoration of natural streambank conditions should be encouraged for existing and future problem areas

Responsibility

Local Advisory Committee
UNH Coop Ext
Merrimack River Watershed Council
DES Rivers Coordinator
Soil Conservation Service

Implementation

LAC works with other appropriate groups to develop and distribute landowners guide for streambank plantings and vegetative restoration

SECTION II: RIPARIAN LANDS MANAGEMENT

RIPARIAN LANDS MANAGEMENT

Objective: Effectively manage riparian lands to protect river uses and values.

Background: The Local Advisory Committee recognizes that, with wise planning, a full range of appropriate land uses can be developed for lands in proximity to the river without thereby jeopardizing water quality or other important river values. Such a full range of uses is compatible with the Committee's balanced use philosophy and with the rights of landowners to pursue the highest and best use of their property, subject to applicable state and local law.

Key Actions

> Communities should adopt a version of the Office of State Planning Model Shoreland Ordinance to include building and septic setbacks and maintenance of vegetative buffers, subject to allowances for agricultural Best Management Practices (BMP's).

> Communities should work in coordinated fashion to identify existing and potential nonpoint source water pollution threats and adopt BMP's to address them.

> Communities should adopt special provisions for building activities on slopes over 15% and should define slopes > 25% as unbuildable.

Responsibility

Planning Boards
Local Advisory Committee

Planning Boards
Regional Planning Commissions
NH DES - Water Supply &
Pollution Control Div.
Soil Conservation Service

Planning Boards
Conservation Commissions
Local Advisory Committee

Implementation

A model ordinance is available through the Office of State Planning. Canterbury and Pembroke have thorough ordinances which can serve as local models.

Planning Boards adopt BMP's for inclusion in Site Plan Review and Subdivision Regulations. SCS and Cooperative Extension continue work with individual landowners.

Planning Boards recommend appropriate policies to local governing body.

Key Actions (cont.)

> Communities should prohibit the use of raised septic systems in floodplain areas as a part of a comprehensive floodplain ordinance

> State agencies owning and managing lands along the river should recognize and abide by the standards of this section

> Communities should encourage, or where appropriate require clustering of new development to preserve open space near the river.

> Communities should develop and adopt wetlands protection ordinances, including the identification and protection of Prime Wetlands.

> Educational materials about the functions, values, and beneficial management of riparian zone lands should be developed and distributed to riverfront landowners.

Responsibility

Planning Boards
Conservation Commissions

Local Advisory Committee
State Agency Heads

Planning Boards
Conservation Commissions
Local Advisory Committee

Planning Boards
Conservation Commissions
NH DES - Wetlands Board

Local Advisory Committee
DES Rivers Coordinator
Merrimack River Watershed
Council
Conservation Commissions

Implementation

Planning Boards recommend to local legislative body as a part of new or revised floodplain ordinance

LAC seeks recognition by agency heads

Planning Boards recommend the appropriate policies to the local legislative body

Conservation Commissions initiate mapping and identification, and submit Prime Wetlands documentation to Wetlands Board for review. Planning boards recommend appropriate policies to the local legislative body

Local Advisory Committee works with MRWC and Rivers Coordinator to produce and distribute materials

Supporting Actions

> Communities should review and update subdivision, site plan review, excavation, and erosion and sediment control standards as outlined in the "Handbooks" prepared for each upper Merrimack community in May 1992.

> Communities should allocate a percentage of the Current Use change tax toward purchase of conservation lands.

Responsibility

Planning Boards
Local Advisory Committee
Office of State Planning
Regional Planning Commissions

Planning Boards
Conservation Commissions

Implementation

Handbooks have been presented to Planning Boards. LAC members should stimulate action through Planning Boards and Conservation Commissions

Conservation Commissions should sponsor action similar to those taken in Concord, Boscawen, and Canterbury

SECTION III: OUTSTANDING RESOURCES MANAGEMENT

AGRICULTURE

Objective: Maintain and protect existing agricultural land uses along the Merrimack River and continue to promote the use of agricultural Best Management Practices to protect water quality.

Background: An agricultural subcommittee of the Local Advisory Committee has been meeting periodically over the past year-and-a-half to discuss issues and develop recommendations for inclusion in this plan. We have also received input from the NH Commissioner of Agriculture, the Soil Conservation Service, UNH Cooperative Extension, and the Agricultural Stabilization and Conservation Service.

Key Actions	Responsibility	Implementation
<p>> Communities should formally recognize the value of Prime Agricultural land.</p>	<p>Planning Boards</p>	<p>Appropriate language should be included in community Master Plans</p>
<p>> Communities should establish a policy encouraging the donation of easements on agricultural lands. This should include explicit reference as to the public benefits thereof to satisfy IRS tax deductibility provisions.</p>	<p>Planning Boards Conservation Commissions</p>	<p>Planning Boards and Conservation Commissions should work to include the appropriate language in community Master Plans</p>
<p>> Communities should protect agricultural lands through zoning ordinances such as floodplain regulation, cluster provisions, and "right to farm" provisions (see NH RSA 672:1).</p>	<p>Planning Boards Regional Planning Commissions</p>	<p>Planning Boards should obtain model ordinances and other technical assistance from the RPC's</p>

Key Actions (cont.)

> If/when the State develops a permitting system for water withdrawals, agriculture should be recognized as a valid and priority water use.

> As specialty crops requiring more irrigation become increasingly popular, UNH Cooperative Extension, the ASCS, and SCS should emphasize water conservation practices and technologies.

> ASCS cost sharing programs related to conservation of the river should be fully funded.

> State Best Management Practices should be used for sludge and septage application on riverbottom agricultural lands.

> The purchase of agricultural development rights should be encouraged to prevent the loss of riverbottom agricultural lands.

Responsibility

Local Advisory Committee
DES Rivers Coordinator

UNH Cooperative Ext.
Soil Conservation Service
Agricultural Stabilization and
Conservation Service
Agricultural operators

UNH Cooperative Ext.
ASCS
Local Advisory Committee

Local Advisory Committee
Local Boards

Society for the Protection of NH
Forests
Conservation Commissions
Land Trusts
other

Rivers Coordinator and LAC monitor legislative progress and comment as appropriate

Listed organizations should work with individual operators converting, or considering conversion, to high water use crops

The Local Advisory Committee should support applications made to the ASCS

LAC should review state BMP plan under development with provisions for modification if necessary

Conservation Commissions should use revenue from Current Use Change Tax. LAC should support any efforts to re-establish a state funding mechanism. LAC should help identify funding sources for interested landowners.

Implementation

RECREATION

Objective: To accommodate and provide opportunity for a variety of recreational uses of the river and river corridor while protecting the interests of landowners and the integrity of natural and cultural river values.

Background: A recreational subcommittee of the Local Advisory Committee sent a mailing to Recreation and Conservation Commissions in all of the upper Merrimack communities asking for input on the recreational issues and features under LAC consideration. Verbal and written responses have been incorporated into the recommendations of this chapter.

Key Actions

> Each community should have at least one publicly owned access area for canoe and/or boat launching.

> All publicly owned access/launching areas should post signs for establishing a "carry-in, carry-out" refuse policy and reminding users to treat riverfront lands with care and respect to protect the natural habitat from erosion and other degradation, and the rights of property owners.

Responsibility

Conservation Commissions
Recreation Commissions
Public Lands Managers
Planning Boards

Public Lands Managers
DES Rivers Coordinator
Conservation Commissions
Recreation Commissions
Local Advisory Committee

Implementation

Conservation Commissions and town boards should investigate the upgrading of present sites or the establishment of new areas looking first to existing public land areas.

The Local Advisory Committee should work with the DES Rivers Coordinator and town boards to develop content of signs. LAC and Rivers Coordinator should coordinate sign production and distribution.

Key Actions (Cont)

> Riverfront lands which receive high public use should be periodically patrolled for refuse removal, etc.

> A limited number of publicly owned and managed camping sites should be developed along the upper Merrimack. These should be primitive, river access sites with outhouse-type facilities, and with a "carry-in, carry-out" refuse policy.

> The maintenance and enhancement of important river views should be encouraged.

Responsibility

Public Lands Managers
Conservation Commissions
Recreation Commissions
Local Advisory Committee

Public Lands Managers
Conservation Commissions
Recreation Commissions
Local Advisory Committee
State

Conservation Commissions
Recreation Commissions
Public Lands Managers
Local Advisory Committee
Department of Transportation

Implementation

Recreation and Conservation Commissions should organize volunteer efforts (civic groups, Scouts, etc.) as appropriate for the season and specific needs of individual sites/areas. Public lands might be taken care of by the appropriate agency staff.

Opportunities on existing public lands should be explored. Other sites, or easements to them, should be purchased from willing sellers.

The LAC should work with local boards to identify and protect important viewsheds through selective cutting, roadside maintenance, scenic easements, or other appropriate means.

Key Actions (Cont)

> Signage noted above for publicly owned access and recreation sites should be made available to the owners of privately owned access and recreation areas where public use occurs.

> The abandoned Northern Railroad corridor should be preserved in public ownership for future transportation and/ or recreational use

> Efforts to enforce existing laws and regulations regarding headway speed, litter, and other marine safety issues should be increased. Publicly owned ramp accesses should be posted with speed restrictions where applicable.

Supporting Actions

> Recreational needs and issues should be periodically reviewed for the upper Merrimack as a whole.

Responsibility

Local Advisory Committee
DES Rivers Coordinator
Conservation Commissions
Recreation Commissions

NH Department of Transportation
State and local Heritage Trail
Committees

NH Department of Safety,
Div. of Marine Safety
Public Lands Managers
Local Advisory Committee

Local Advisory Committee

Implementation

The Local Advisory Committee should work with local boards to make signs available and notify landowners thereof

The LAC should monitor the ongoing legal disputes between the State of NH and Guilford Transportation

Local Advisory Committee and DES Rivers Coordinator should seek additional patrolling of problem areas through the Division of Marine Safety.

The Local Advisory Committee should monitor recreational needs and issues.

WILDLIFE

Objective: Maintain and enhance wildlife and wildlife habitat dependant upon the river and river corridor given the need to balance the needs of wildlife with the needs of riparian landowners and the other outstanding natural and cultural resources included in this plan.

Background: The ability of the upper Merrimack River to support present and future wildlife populations, including riparian habitat critical for migratory birds, waterfowl, Bald Eagles, and other river dependant species will be heavily dependant upon the management of riparian lands. This management plan contains a separate chapter on riparian lands management, and this wildlife chapter does not repeat all of the recommendations made there.

Key Actions

> Seek the protection of important wildlife habitat areas through a variety of means, including: clustering; subdivision set-asides; set-backs; voluntary agreements; easements; and fee purchase.

> Continue to identify critical wildlife habitat areas, including Bald Eagle roosting areas, waterfowl nesting and holding areas, important wetlands, important travel corridors, etc.

Conservation Commissions
Planning Boards
NH Fish & Game
UMRLAC
Private Organizations

Conservation Commissions
NH Fish & Game
Audubon Society
US Fish & Wildlife Service

Implementation

The LAC should work with Conservation Commissions and Planning Boards in the review of permit applications. Planning Boards should target clustering where appropriate. The most important areas should receive permanent protection through purchase, easements, or agreements.

The LAC should contact Conservation commissions and resource experts/agencies to encourage further identifications and assessment work.

Responsibility

Supporting Actions

> Conduct workshops for riparian landowners on wildlife habitat maintenance and enhancement.

Responsibility

Conservation Commissions
Local Advisory Committee
NH Fish & Game

Implementation

The Local Advisory Committee members should work with Conservation Commissions, SCS and Conservation Districts, NH Fish & Game, UNH Cooperative Extension - Wildlife, and the Audubon Society to establish a program of workshops

HISTORICAL AND ARCHAEOLOGICAL

Objective: Monitor and protect known sites of historical and archaeological significance, and promote public appreciation and awareness of these resources. Continue to identify and document additional sites.

Background: The NH Division of Historical resources monitors and researches historic and archaeological sites in cooperation with local historical societies. Sites listed, or officially eligible for listing, in the National register of Historical Places receive strong protection from federal agency actions pursuant to the Historic Preservation Act of 1966. State RSA 227C ("Historic Preservation") provides listed sites with a lesser degree of protection (advisory only) from State agency actions.

Key Actions

> Public and private landowners should be notified as to known or suspected sites on their property.

> Where possible, written agreements should be developed with landowners to protect known sites on a voluntary basis.

> A systematic inventory and assessment of sites should be conducted on a proactive basis, and eligibility for National Register or other listings/status should be established.

Local Historical Societies

Div. of Historical Resources
Local Historical Societies

Local Historical Societies
Div. of Historical Resources
Local Advisory Committee

Implementation

State DHR works with local Historical Societies in notification

Local Historical Societies work with DHR to identify and contact interested landowners. Sites on public lands should be pursued through the appropriate agency.

Local Advisory Committee stimulates activity in each community through subcommittee action.

Responsibility

Div. of Historical Resources

Key Actions (Cont.)

> An interpretive museum should be established at the Sewall's Falls site, utilizing the historic generating buildings. This should be devoted to the historical development of the region and the preservation of Native American artifacts.

> Communities should work together to develop a historic features trail in conjunction with the Heritage Trail and the development of a canoe guide.

> The Local Advisory Committee should review all permit applications for potential impacts on river-related sites.

Responsibility

Local Advisory Committee
Div. of Historical Resources
Sewall's Falls agency partnership group
Historical Societies

Local Advisory Committee
Historical Societies
Heritage Trail Committees
Merrimack R. Watershed Council

Local Advisory Committee
DES Rivers Coordinator

Implementation

LAC contacts agencies to stimulate action and assist in fundraising

LAC contacts Historical Societies and Heritage Trail Committees to stimulate action.

Rivers Coordinator ensures that all permit applications reach LAC in timely fashion.

GEOLOGIC AND NATURAL FEATURES

Objective: Promote the understanding and protection of special geologic and natural features associated with the river, including: varved glacial deposits; high sand dunes; rare plant communities; floodplain forests; oxbow ponds; and beaches.

Background: The ability of the upper Merrimack to support special geologic and natural features is critically linked to riparian lands management and stream channel integrity. This management plan contains separate chapters for each of these topics, and all of the provisions relevant to the protection of geologic and natural features are not repeated here.

Key Actions

> Efforts to locate, identify, and document important geologic and natural features of the river area should continue.

> Educational materials about the values and management needs of special features should be prepared and distributed to river users, landowners, town boards, school groups, and other parties. Interpretive signs could be posted to educate river users about sensitive features and the need to respect them.

Conservation Commissions

Conservation Commissions
NH Natural Heritage Inventory
Local Advisory Committee
Conservation Commissions
SPNHF - Outdoor Education
Center

Implementation

Local Advisory Committee
(subcommittee) contacts Conservation
commissions to initiate action.

LAC contacts Heritage Inventory to assess
needs and appropriate actions in this area.

Responsibility

The Nature Conservancy
NH Natural Heritage Inventory
Local Advisory Committee

Key Actions (cont.)

> Public lands managers should work to protect special river-related features on public lands (for example high river bluffs) through setbacks, vegetative buffers, agreements, easements, etc.

> Communities should work to protect special river-related features through setbacks, subdivision set-asides, agreements, easements, etc.

> Purchase of fee title or easements should be pursued for the most important or vulnerable areas.

Responsibility

Public Lands Managers
DES Rivers Coordinator
Natural Heritage Inventory
Local Advisory Committee

Conservation Commissions
Planning Boards
The Nature Conservancy
SPNHF; Local Land Trusts

Conservation Commissions
Planning Boards
The Nature Conservancy
SPNHF; Local Land Trusts

Implementation

Rivers Coordinator and LAC work with landowning agencies to reach agreements.

LAC monitors permit applications and works with Conservation Commissions to set priorities. Nature Conservancy helps to structure any easements or agreements.

LAC works with Conservation Commissions and TNC to identify most important and vulnerable sites, and to seek funds.

FISH AND AQUATIC RESOURCES

Objective:

Maintain, enhance and promote populations of resident and anadromous fish, freshwater mussels, and other aquatic resources.

Background:

The ability of the upper Merrimack River to support present and future populations of resident and anadromous fish and other aquatic resources (including diverse freshwater mussel populations) is linked heavily to water flow, water quality, and stream channel conditions. Each of these has its own chapter in this management plan, and the important management recommendations made in those chapters are not repeated here.

Key Actions

> Review all permits applications for impacts upon resident and anadromous fish, including important habitat, water quality, and streamflow parameters.

DES Rivers Coordinator
NH Fish & Game
US Fish & Wildlife Service
State Legislature
NH Wetlands Board

> Maintain adequate flow conditions to support and enhance current resident fish, aquatic resources, and anadromous fish habitat.

NH DES -Water Supply & Pollution Control Div.
DES Rivers Coordinator
Local Advisory Committee

> Maintain adequate water quality conditions to support and enhance current resident fish, aquatic resources, and anadromous fish habitat.

Implementation

Rivers Coordinator supplies LAC with permit applications

LAC and Rivers Coordinator facilitate expert review of draft Instream Flow Rules when they are released

Point and nonpoint water pollution control measures (see water quality chapter) should be monitored for effectiveness relative to fish habitat viability

Responsibility

Local Advisory Committee
DES Rivers Coordinator
NH Wetlands Board

Supporting Actions

> Continue research efforts to identify significant aquatic resources and their ecological role.

> Work to identify the specific flow requirements necessary to maintain and enhance resident and anadromous fish and aquatic resources.

Responsibility

NH Natural Heritage Inventory
NH Fish & Game
US Fish & Wildlife Service

DES Rivers Coordinator
Local Advisory Committee
NH Fish & Game
US Fish & Wildlife Service

Implementation

LAC should provide support to agencies doing research, including the Natural Heritage Inventory's Mussel investigations planned for summer '93.

Research may be needed to assess the effectiveness of proposed protected flow levels in sustaining species diversity and habitat quality. This will need to be revisited when draft rules are promulgated under the Rivers Management and Protection Program.