http://na.fs.fed.us/highlands

IW63

Highlands Conservation Act
PL 108-42

(Engrossed Amendment as Agreed to by Senate)

HR 1964 EAS

In the Senate of the United States,
October 10, 2004.

Resolved, That the bill from the House of Representatives (H.R. 1964) entitled `An Act to assist the States of Connecticut, New Jersey, New York, and Pennsylvania in conserving priority lands and natural resources in the Highlands region, and for other purposes.' do pass with the following

AMENDMENT:

Strike out all after the enacting clause and insert:

SECTION 1. SHORT TITLE.

This Act may be cited as the `Highlands Conservation Act'.

SEC. 2. PURPOSES.

The purposes of this Act are--

(1) to recognize the importance of the water, forest, agricultural, wildlife, recreational, and cultural resources of the Highlands region, and the national significance of the Highlands region to the United States;

(2) to authorize the Secretary of the Interior to work in partnership with the Secretary of Agriculture to provide financial assistance to the Highlands States to preserve and protect high priority conservation land in the Highlands region; and

(3) to continue the ongoing Forest Service programs in the Highlands region to assist the Highlands States, local units of government, and private forest and farm landowners in the conservation of land and natural resources in the Highlands region.

SEC. 3. DEFINITIONS.

In this Act:

(1) HIGHLANDS REGION- The term `Highlands region' means the area depicted on the map entitled `The Highlands Region', dated June 2004, including the list of municipalities included in the Highlands region, and

maintained in the headquarters of the Forest Service in Washington, District of Columbia.

(2) HIGHLANDS STATE- The term `Highlands State' means--

(A) the State of Connecticut;

(B) the State of New Jersey;

(C) the State of New York; and

(D) the State of Pennsylvania.

(3) LAND CONSERVATION PARTNERSHIP PROJECT- The term `land conservation partnership project' means a land conservation project--

(A) located in the Highlands region;

(B) identified by the Forest Service in the Study, the Update, or any subsequent Pennsylvania and Connecticut Update as having high conservation value; and

(C) in which a non-Federal entity acquires land or an interest in land from a willing seller to permanently protect, conserve, or preserve the land through a partnership with the Federal Government.

(4) NON-FEDERAL ENTITY- The term `non-Federal entity' means--

(A) any Highlands State; or

(B) any agency or department of any Highlands State with authority to own and manage land for conservation purposes, including the Palisades Interstate Park Commission.

(5) STUDY- The term `Study' means the New York-New Jersey Highlands Regional Study conducted by the Forest Service in 1990.

(6) UPDATE- The term `Update' means the New York-New Jersey Highlands Regional Study: 2002 Update conducted by the Forest Service.

(7) PENNSYLVANIA AND CONNECTICUT UPDATE- The term `Pennsylvania and Connecticut Update' means a report to be completed by the Forest Service that identifies areas having high conservation values in the States of Connecticut and Pennsylvania in a manner similar to that utilized in the Study and Update.

SEC. 4. LAND CONSERVATION PARTNERSHIP PROJECTS IN THE HIGHLANDS REGION.

(a) SUBMISSION OF PROPOSED PROJECTS- Each year, the governors of the Highlands States, with input from pertinent units of local government and the public, may--

(1) jointly identify land conservation partnership projects in the Highlands region from land identified as having high conservation values in the Study, the Update, or the Pennsylvania and Connecticut Update that shall be proposed for Federal financial assistance; and

(2) submit a list of those projects to the Secretary of the Interior.

(b) CONSIDERATION OF PROJECTS- Each year, the Secretary of the Interior, in consultation with the Secretary of Agriculture, shall submit to Congress a list

of the land conservation partnership projects submitted under subsection (a)(2) that are eligible to receive financial assistance under this section.

(c) ELIGIBILITY CONDITIONS- To be eligible for financial assistance under this section for a land conservation partnership project, a non-Federal entity shall enter into an agreement with the Secretary of the Interior that--

(1) identifies the non-Federal entity that shall own or hold and manage the land or interest in land;

(2) identifies the source of funds to provide the non-Federal share under subsection (d);

(3) describes the management objectives for the land that will ensure permanent protection and use of the land for the purpose for which the assistance will be provided;

(4) provides that, if the non-Federal entity converts, uses, or disposes of the land conservation partnership project for a purpose inconsistent with the purpose for which the assistance was provided, as determined by the Secretary of the Interior, the United States--

(A) may seek specific performance of the conditions of financial assistance in accordance with paragraph (3) in Federal court; and

(B) shall be entitled to reimbursement from the non-Federal entity in an amount that is, as determined at the time of conversion, use, or disposal, the greater of--

(i) the total amount of the financial assistance provided for the project by the Federal Government under this section; or

(ii) the amount by which the financial assistance increased the value of the land or interest in land; and

(5) provides that land conservation partnership projects will be consistent with areas identified as having high conservation value in--

(A) the Important Areas portion of the Study;

(B) the Conservation Focal Areas portion of the Update;

(C) the Conservation Priorities portion of the Update;

(D) land identified as having higher or highest resource value in the Conservation Values Assessment portion of the Update; and

(E) land identified as having high conservation value in the Pennsylvania and Connecticut Update.

(d) NON-FEDERAL SHARE REQUIREMENT- The Federal share of the cost of carrying out a land conservation partnership project under this section shall not exceed 50 percent of the total cost of the land conservation partnership project.

(e) AUTHORIZATION OF APPROPRIATIONS- There is authorized to be appropriated to the Secretary of the Interior $10,000,000 for each of fiscal years 2005 through 2014, to remain available until expended.

SEC. 5. FOREST SERVICE AND USDA PROGRAMS IN THE HIGHLANDS REGION.

(a) IN GENERAL- To meet the land resource goals of, and the scientific and conservation challenges identified in, the Study, Update, and any future study that the Forest Service may undertake in the Highlands region, the Secretary of Agriculture, acting through the Chief of the Forest Service and in consultation with the Chief of the National Resources Conservation Service, shall continue to assist the Highlands States, local units of government, and private forest and farm landowners in the conservation of land and natural resources in the Highlands region.

(b) DUTIES- The Forest Service shall--

(1) in consultation with the Highlands States, undertake other studies and research in the Highlands region consistent with the purposes of this Act, including a Pennsylvania and Connecticut Update;

(2) communicate the findings of the Study and Update and maintain a public dialogue regarding implementation of the Study and Update; and

(3) assist the Highland States, local units of government, individual landowners, and private organizations in identifying and using Forest Service and other technical and financial assistance programs of the Department of Agriculture.

(c) AUTHORIZATION OF APPROPRIATIONS- There is authorized to be appropriated to the Secretary of Agriculture to carry out this section $1,000,000 for each of fiscal years 2005 through 2014.

SEC. 6. PRIVATE PROPERTY PROTECTION AND LACK OF REGULATORY EFFECT.

(a) ACCESS TO PRIVATE PROPERTY- Nothing in this Act--

(1) requires a private property owner to permit public access (including Federal, State, or local government access) to private property; or

(2) modifies any provision of Federal, State, or local law with regard to public access to, or use of, private land.

(b) LIABILITY- Nothing in this Act creates any liability, or has any effect on liability under any other law, of a private property owner with respect to any persons injured on the private property.

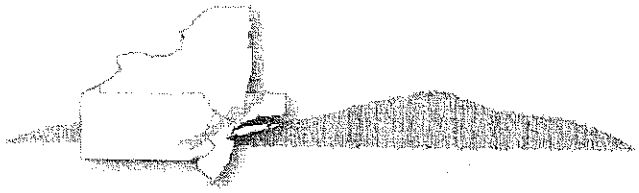
(c) RECOGNITION OF AUTHORITY TO CONTROL LAND USE- Nothing in this Act modifies any authority of Federal, State, or local governments to regulate land use.

(d) PARTICIPATION OF PRIVATE PROPERTY OWNERS- Nothing in this Act requires the owner of any private property located in the Highlands region to participate in the land conservation, financial, or technical assistance or any other programs established under this Act.

(e) PURCHASE OF LAND OR INTERESTS IN LAND FROM WILLING SELLERS ONLY- Funds appropriated to carry out this Act shall be used to purchase land or interests in land only from willing sellers.

Attest:

IW64



Connecticut Highlands Q&A

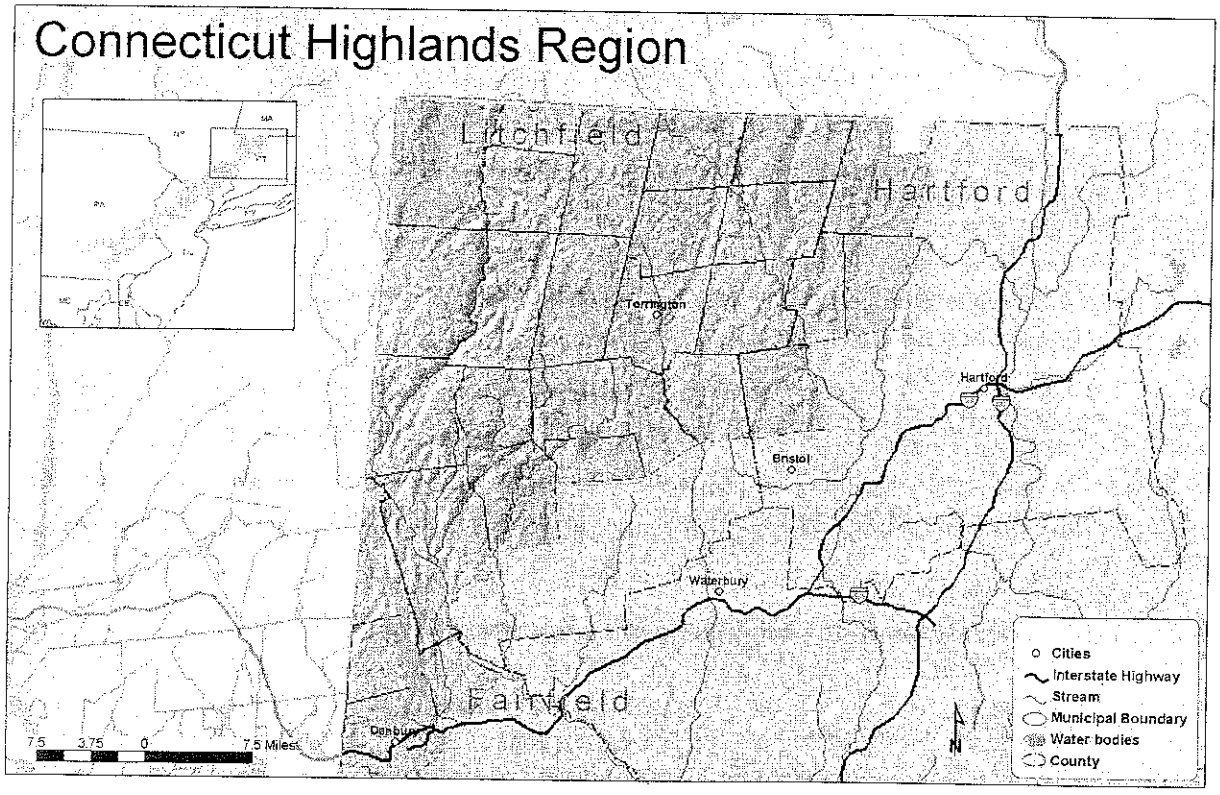
USDA Forest Service
Northeastern Area
State and Private Forestry

http://www.na.fs.fed.us/highlands

What are the Connecticut Highlands?

Connecticut's Highlands are a series of hills and ridges with a generally north-to-south orientation. Drainage in the Highlands follows this pattern as well; the Housatonic, Naugatuck, and Farmington Rivers wander from north to south through the hills.

Agriculture, water resources, and small industries maintained northwestern Connecticut's many communities for more than a century. Pressure from an expanding metropolitan corridor to the south and east is now driving land use change in the narrow valleys and the mountains of the Connecticut Highlands.



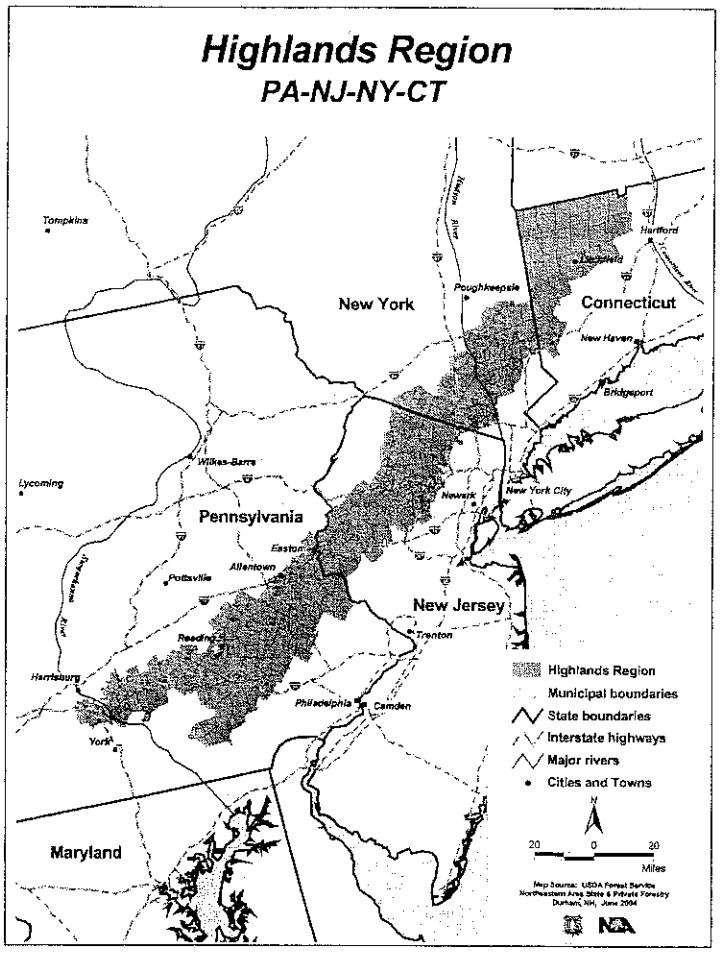
Where are the Connecticut Highlands?

In Connecticut, the Highlands extend from Danbury northwards along the state's western border, then eastward as far as the Farmington River. Their southern and eastern limits follow a jagged line enclosing the more rugged parts of this terrain, including the towns of: Granby, Simsbury,

Canton, Burlington, Harwinton, Litchfield, Morris, Washington, New Milford, and Brookfield, back to Danbury.

What is the Forest Service doing in the Highlands?
The US Forest Service will conduct a study in the Connecticut Highlands to assess the condition of the natural resources, analyze land cover change and potential land use, identify significant areas to conserve and protect, and develop strategies to protect the long-term integrity of the region.

The objective of this study is a thorough description and assessment of the natural resources and resource values in the Highlands. A set of resource evaluation maps that cover the Connecticut Highlands Region, and a composite Conservation Values Assessment map to identify areas of high conservation value will be produced. A report describing the data, the assessment process, and the results will accompany the maps.



Why is the Forest Service involved in the Highlands?
The United States Forest Service has been engaged in the Highlands since 1990, when the first study of the New York and New Jersey Highlands was initiated. The Forest Service completed an updated study in 2002. The goals and strategies set forth by the regional study have aided the co-operative efforts of landowners, municipal councils, the states, and groups interested in conservation.

What is the Federal role in the Highlands of Connecticut?
The Highlands Conservation Act of 2004, PL 108-42, recognized the Highlands as an area of national significance, including the sections of this landform in Connecticut and Pennsylvania. The Act authorizes federal assistance to the four Highlands states for land conservation partnership projects in which a state or a state agency acquires land or an interest in land from a willing seller to permanently protect land in the region. To be eligible, projects must describe management objectives that will ensure permanent protection and use of the land, and they must be consistent with areas identified as having high conservation value in a Highlands Regional Study.

The Highlands Conservation Act assigns to the Forest Service, US Department of Agriculture, responsibility for expanding the New York and New Jersey Regional Study to include the Highlands in Connecticut and Pennsylvania.

What is the Purpose of the Connecticut Highlands Study?

- To identify areas of high conservation value in the Highlands of Connecticut
- To study the implications of continued land use change for the Highlands' resources

The overarching questions addressed by the study are: What are the natural resources of the Highlands, where are they located, and what are the implications of continued land use change for the resources?

The purpose of the Resource Assessment part of the study is to answer the first question. The study will focus on an assessment of five natural resource categories: water, biodiversity, recreation and open space, farmland, forestland.

The purpose of the Future Impacts part of the study is to answer the second question.

Who will do the Resource Assessment Study?

The USDA Forest Service will coordinate the work of a study team in Connecticut. The study will be lead by a team from the University of Connecticut Cooperative Extension Service. The team will include representatives from: the Connecticut Department of Environmental Protection, the USDA Natural Resource Conservation Service, the U.S. Geological Survey, the Regional Plan Association, and the Housatonic Valley Association. Other agencies and organizations will add their information and knowledge.

How will the Resource Assessment be done?

To identify areas of high conservation value, and to fulfill the Highlands Conservation Act's requirement that the US Forest Service map areas of high resource value, the following objectives must be met:

- To locate and describe the natural and cultural resources important to the Highlands
- To evaluate the resources by applying a weighting scheme that reflects their relative values

What resources will be mapped and evaluated?

- Water resources, streams, rivers and lakes, wetlands, public water supplies, aquifers
- Areas that provide habitat for rare, threatened, and endangered plants or animals
- Places with recreational, scenic, and cultural importance
- Cultivated farmland
- Contiguous forest tracts and Forest Stewardship lands

Aren't there other values or places in the Highlands worth assessing?

There probably are; the location and importance of resources besides those we've listed will be a subject of the listening sessions and the work group sessions that take place during the study.

Who decides what's important enough to map?

The study team and the work groups will consider the data needs and the purposes of the study to reach a recommendation, which will be decided by the study's steering committee.

How will relative values be assigned, and who will do it?
The team will organize public listening sessions and work group sessions to be held periodically during the course of the study, with the purpose of enabling citizens and stakeholders to meet the study team, learn about what they are doing, and voice their suggestions and opinions regarding the study and the region. The work of generating a weighting scheme for the resource assessments and the final conservation values map will be informed by the community input process.

The study team and the work group will review the weighting scheme used for the 2002 New York and New Jersey Highlands Regional Study in light of the information they gain from the listening sessions and work group sessions; they will present their conclusions to the study's steering committee for a decision.

What will be the final product?
The result will be a composite map showing where areas of high conservation values are found.

What purpose will the Conservation Values Assessment map serve?
- First, it will permit the states to develop conservation partnership projects in areas of high conservation value that will be eligible for matching grants from the federal government.
- It will provide citizens, communities, and governments in the Highlands with a composite picture of natural resource value.
- It will be the frame of reference for a future study to explore the implications of continued land use change for the Highlands' resources.
- It will guide cooperative efforts to conserve and enhance the Highlands' resources.

What is the Work Group?
The Work Group includes those who are well versed in the politics and practicalities of conservation, both pro and con. They are people engaged at some level in exploring or advancing the issues at stake.

What does the Work Group do?
The Work Group will begin by reviewing the resource maps and other information gathered by the study team. The group will inform the study team of resource data that should be added to the study; they will tell the team what issues are most important, and they will aid the team in developing a weighting scheme for the resource assessments.

How can I get on the Work Group?
Letters of invitation were sent to every municipality, to environmental groups, the farming sector, landowners, developers, and those concerned with forestry. Work Group meetings will be held during the day. Membership will change as some drop out, others are recruited, and as some who hear about the work group join.

If you want to get on the work group, call the US Forest Service Highlands Office for information about the next meeting: (570) 296-9625.
The Work Group's first meeting is on Friday, 23 October, from 11:00 AM to 3:00 PM.

What are Listening Sessions?
Listening Sessions will be held in three locations in the Connecticut Highlands. Press releases and mailed invitations will be the primary means to promote attendance. They are public forums where the study team presents the resource data they have assembled. The purpose is to get the public's input in terms of issues, values, and special areas.

When and where will the Listening Sessions be held?
Public listening sessions will be held at 7:00 PM in the following places:

Wednesday, 19 October 2005,
New Milford High School, 388 Danbury Drive,
New Milford Connecticut 06776

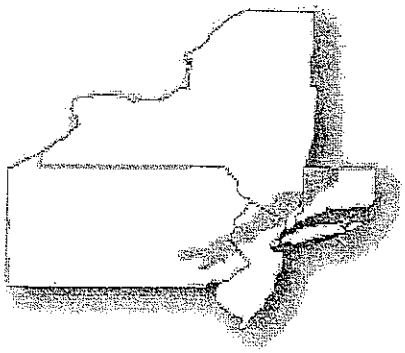
20 October 2005,
Litchfield County Extension Center, 843 University Drive,
Torrington, Connecticut 06790

7 November 2005,
Housatonic Valley Regional High School, 246 Warren Turnpike Road,
Falls Village, Connecticut 06031

Where can I learn more about the study and about the Highlands?
The US Forest Service's Highlands website provides information and links to additional information: http://www.na.fs.fed.us/highlands

Alphabetical List by County

CONNECTICUT revised 05/25/2005



Fairfield County, Connecticut

Brookfield
Danbury
New Fairfield
Sherman

Litchfield County, Connecticut

Barkhamstead
Canaan
Canton
Colebrook
Cornwall
Goshen
Harwinton
Kent
Litchfield
Morris
New Fairfield
New Hartford
New Milford
Norfolk
North Canaan
Salisbury
Sharon
Torrington
Warren
Washington
Winchester

Hartford County, Connecticut

Burlington
Granby
Hartland
Simsbury

Notes for CT municipalities:

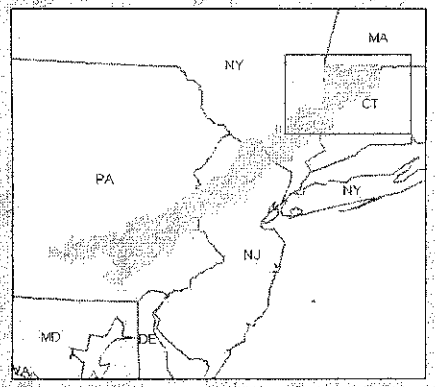
Minor Civil Divisions as follows:

Town (same as Township)

City

Un-incorporated places are Villages

Connecticut Highlands Region



Litchfield

Hartford

Fairfield

Torrington

Hartford

Bristol

Waterbury

Danbury

7.5 3.75 0 7.5 Miles

N

Cities
Interstate Highway
Stream
Municipal Boundary
Water bodies
County

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IW65

October 4, 2002

Mr. Louis G. Timolat
First Selectman
Town Hall
107 Main Street, P.O. Box 47
Falls Village CT 06031-0047

Dear Mr.Timolat:

Please find attached a copy of the newly prepared Management Plan for the Robbins Swamp Natural Area Preserve. This 785 acre Preserve, located entirely within the State owned, Robbins Swamp Wildlife Area, is a unique natural site designated as a Preserve by Governor John Rowland in 1998. The intent of this Management Plan is to protect the natural resource values of the Preserve while allowing for certain public uses.

A Public Hearing will be held in Falls Village on November 7, 2002 for the purpose of answering questions and receiving comment. I would be pleased to personally answer any questions you may have concerning this Plan or provide other information you may require. I can be reached through any of the following means: Telephone: (860) 424-3641; Fax: (860) 424-4070; email: jim.murphy@po.state.ct.us and by regular mail at the Natural Area Preserves Program, CT Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106.

Sincerely,

James E. Murphy

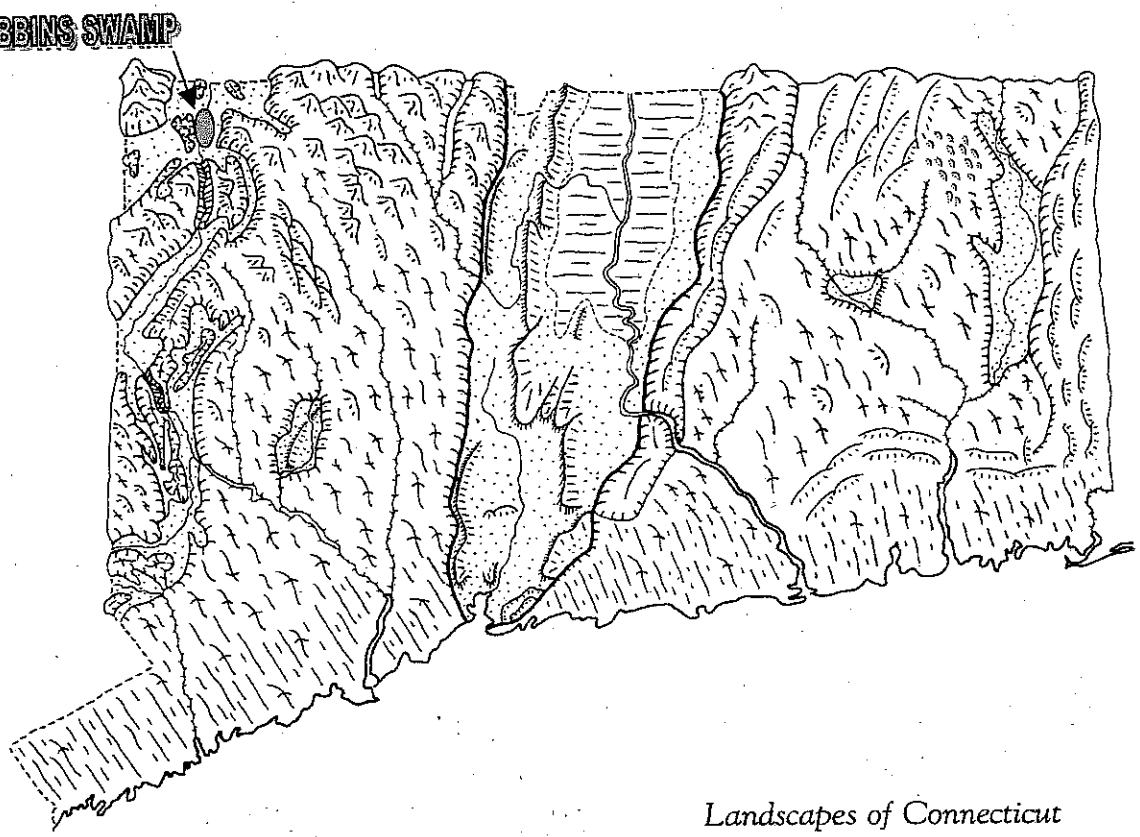
James E. Murphy
Natural Area Preserves Program

JEM;jem

A MANAGEMENT PLAN
FOR THE

ROBBINS SWAMP NATURAL AREA PRESERVE
AT THE

ROBBINS SWAMP WILDLIFE MANAGEMENT AREA



Landscapes of Connecticut

DECEMBER 2002

STATE OF CONNECTICUT
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

A MANAGEMENT PLAN FOR THE

ROBBINS SWAMP NATURAL AREA PRESERVE

INTRODUCTION

Section 23-5a of the Connecticut General Statutes establishes a State System of Natural Area Preserves. Carefully selected areas of outstanding scientific, educational, biological, geological, paleontological or scenic value may be designated as Natural Area Preserves and protected.

On April 22, 1998, Governor John Rowland designated this area as a Preserve. The Connecticut Department of Environmental Protection is charged with the responsibility to assure permanent protection of the Preserve and to make provision for its use for scientific, scenic, education and recreation purposes.

The area was acquired by the state in numerous transactions, beginning in 1971. Many of the parcels were purchased with Federal Aid in Wildlife Restoration monies (funds derived from a special federal excise tax on sporting arms and ammunition). The state's Natural Heritage Trust Program funded more recent purchases. The Department of Environmental Protection (DEP) Wildlife Division currently manages the Preserve as a Wildlife Management Area (WMA), with support from the DEP's Parks, Forestry and Field Services Divisions.

This Management Plan is authorized by Section 23-5c of the Connecticut General Statutes and its content is prescribed by Section 23-5c-1 of the Regulations of Connecticut State Agencies. This site is an outstanding example of the State's natural history and the purpose of this Management Plan is to protect the Preserve's protected resources and its other natural and cultural values.

SECTION 23-5c1 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES, STIPULATES THAT MANAGEMENT PLANS FOR NATURAL AREA PRESERVES, SHALL CONSIST OF THE INFORMATION INCLUDED ON THE FOLLOWING PAGES.....

A MANAGEMENT PLAN SHALL CONSIST OF :

BASIC INFORMATION

The Preserve (Figure 1) lies within the towns of Canaan and North Canaan and consists of four separate parcels of State owned land, totaling approximately 1,024 acres. The Preserve lies within that area bounded on the east by State Highway Route 7, on the south by Page Road and on the west and north by Sand Road. The Preserve is but a portion of the larger area commonly called Robbins Swamp. The Robbins Swamp Natural Area Preserve is the largest freshwater wetland in the State and it contains a broad diversity of upland and wetland plant associations, as well as a large number of plant and animal species listed as Endangered, Threatened or of Special Concern in Connecticut. It has also been classified as the most well developed Northern White Cedar Swamp in Connecticut.

PURPOSE OF THE PRESERVE

The purpose of designating this site as a Natural Area Preserve is to preserve an inland wetland and adjacent upland ecosystem...`` in as natural and wild a state as is consistent with the preservation and enhancement of protected resources and educational, scientific, biological, geological, paleontological and scenic purposes."

(Connecticut General Statutes, Section 23-5c)

GENERAL MANAGEMENT GOAL

- The Preserve will be managed to maintain, restore and enhance the site's diverse assemblage of upland and wetland plant and animal communities and allow for the Preserve's continued historic recreation uses.

SPECIFIC MANAGEMENT GOALS

- Preserve and enhance the Preserve's protected resources, especially endangered and threatened species and the essential habitat needed to sustain them.
- Preserve other biological, geological, paleontological values of the Preserve.
- Restore to the extent practical, natural features, values and protected resources.
- Provide for educational, scientific, scenic and recreational uses, which are consistent with the protection of protected resources.

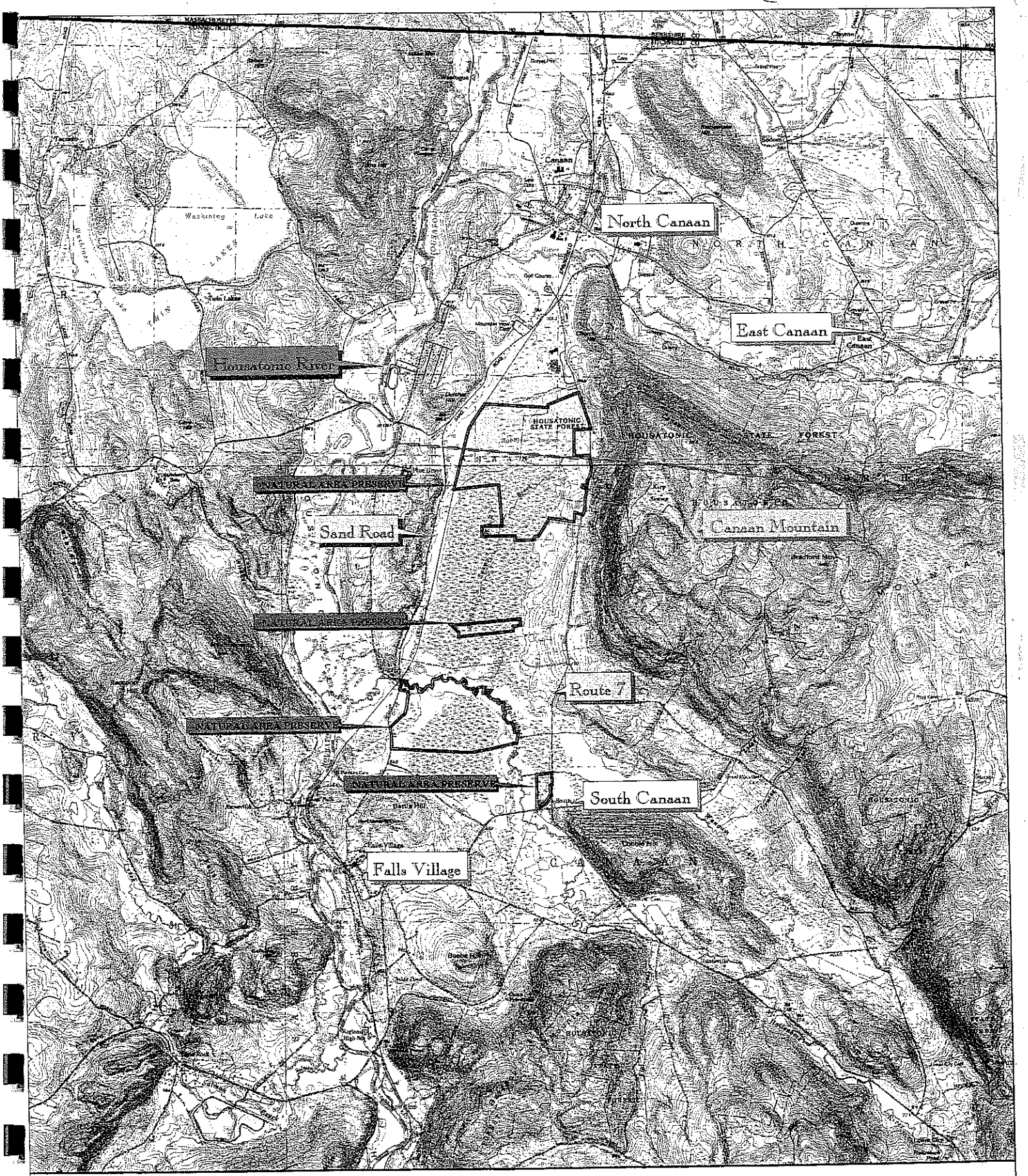


FIGURE 1

LOCATION MAP

ROBBINS SWAMP
A Connecticut Natural Area Preserve within the
ROBBINS SWAMP WILDLIFE AREA

2500 0 2500 5000 Feet

1:60000

Map printed 6/11/2002

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- Promote and preserve the habitat diversity of the area and the ecological integrity of the wetlands through habitat management, land acquisition and/or easement, education, promotion of wise land use and existing wetland regulations.

- Protect, preserve, and manage the populations of native plant species, especially for the Endangered, Threatened, and Species of Special Concern and the uncommon wildlife species found here.

- Protect, preserve, and manage the habitat for all native wildlife species, especially for the Endangered, Threatened, and Species of Special Concern and the uncommon wildlife species found here.

- Continue to actively manage for a diversity of wildlife habitat types by using various techniques including mowing, prescribed burning, selective vegetation control, forest management, and use of agricultural agreements. In particular, ongoing management for grassland birds such as bobolinks and meadowlarks should be supported and continued.

- Continue to provide quality hunting opportunities for waterfowl, turkey, pheasant and other small game species, and promote hunting for the herd reduction of white-tailed deer at levels determined by DEP's Wildlife Division.

- Continue to pursue acquisition of land that would both protect key habitat features and also provide for the increased opportunity for wildlife-based recreation.

- Protect, preserve and manage the occurrences of rare or uncommon natural communities known to occur within the Robbins Swamp Natural Area Preserve. Rare species often occur within these communities.

- Post boundaries of the Preserve using DEP/state signage, at least along roadways (particularly Route 7) and in uplands.

- Continue inventory and characterization of rare and uncommon species in the Robbins Swamp ecosystem.

- Continue to study and refine the classification and mapping of vegetation/natural communities of the Robbins Swamp ecosystem.

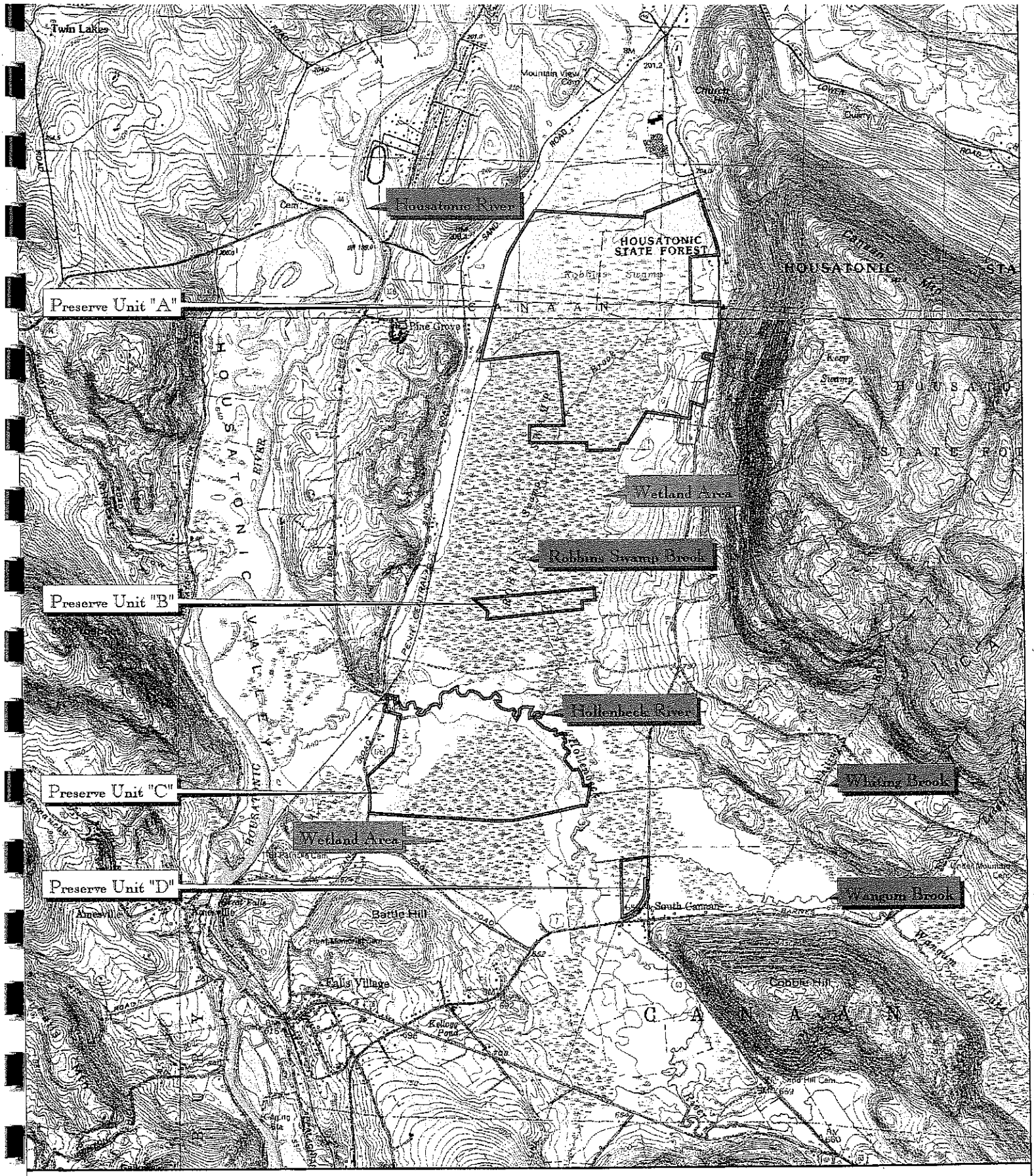

FIGURE 2

PRESERVE UNITS

ROBBINS SWAMP
A Connecticut Natural Area Preserve within the
ROBBINS SWAMP WILDLIFE AREA

1458 0 1458 2916 Feet

1:35000

Map printed 6/11/2002

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PROTECTED RESOURCES OF THE PRESERVE

GENERAL CHARACTERISTICS OF THE PRESERVE

Robbins Swamp occupies a low-lying basin that once contained glacial Lake Hollenbeck (Figure 2). This former lakebed contains a variety of wetland soil types including deep organic sediments, poorly drained soils, and poorly drained alluvial silts and loams. This variety of substrates in turn, supports a diversity of vegetation types including Northern White Cedar dominated swamps, Red Maple-Black Ash seepage swamps and open sedge (*Carex lacustris*) marshes. Numerous State listed Endangered and Threatened Species occur within the wetlands, as well as many more common but geographically restricted species. The Hollenbeck River flows through the southern part of the swamp, containing riverine and floodplain habitats, as well as a valuable fisheries habitat featuring the only viable population of burbot in the State. Burbot is a species listed as Endangered in Connecticut. Robbins Swamp Brook flows roughly north-south through the swamp, joining the Hollenbeck River at the southern end.

HYDROGEOLOGIC CHARACTERISTICS OF THE PRESERVE

Robbins Swamp lies within a broad, long and shallow basin, carved into the underlying soft marble bedrock by the combined effects of wind and water erosion and glacial scouring. During the waning of the last glacial period, approximately 15,000 years before the present, a large freshwater lake formed in this valley behind an ice and sediment dam located in the Amesville - Falls Village area of Canaan. Within this shallow lake, sand, gravel, silt and clay particles, washed from the surrounding uplands, settled onto the lake bottom. Eventually, the ice-sediment dam gave way and the lake waters drained away, leaving a broad, level valley (Figure 3). In the basin's wet soils, a mix of shallow wetland vegetation types, such as wet meadow, marsh and wooded swamp were to develop.

In Figure 3, the shoreline of former glacial Lake Hollenbeck is detailed. Within the lake's quiet waters, earth materials, washed from the surrounding uplands settled out. These sorted sediments, termed stratified drift, are a mix of layers, from coarse sand to fine clays (see Figure 4 for more detail). On the surrounding uplands, soils developed in the unsorted mixture of boulders, sand silt and clay dumped onto the landscape as the glacier melted. The soils of the uplands and those of the lowlands are very different in their structure, texture, fertility and water relations. These differences have played a major role in the development of plant associations and hence, creation of wildlife habitat. The extensive area of low lying, wet soils gave rise to development of the wide variety of wetland plant associations for which Robbins Swamp is noted.

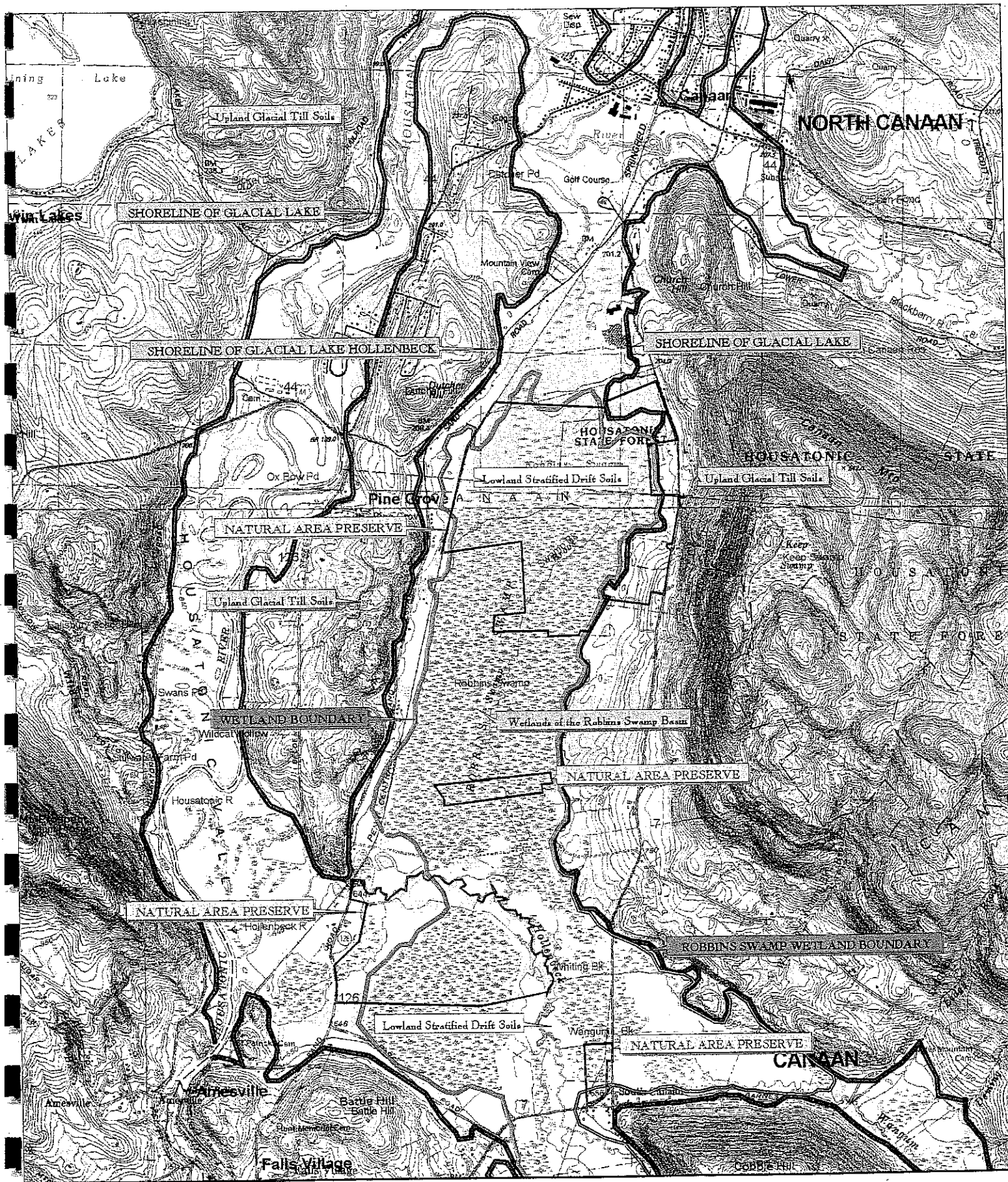


FIGURE 3

HYDROGEOLOGIC SETTING

ROBBINS SWAMP
A Connecticut Natural Area Preserve within the
ROBBINS SWAMP WILDLIFE AREA

1458 0 1458 2916 Feet

1:35000

Map printed 6/11/2002

N

PRIORITY CONSIDERATION FOR THIS NATURAL AREA PRESERVE

Recognizing, understanding and appreciating the basic, underlying hydrologic character of the Preserve is all important, as this wetland, having developed over thousands of years under certain groundwater and surface water flow conditions, is dependent upon the continuation of those patterns and their seasonal cycle. The quality, quantity and timing of incoming drainage has, and will continue to, strictly regulate the biological character of this, the largest inland wetland in Connecticut.

APPENDIX B OFFERS FURTHER ELABORATION OF THIS POINT

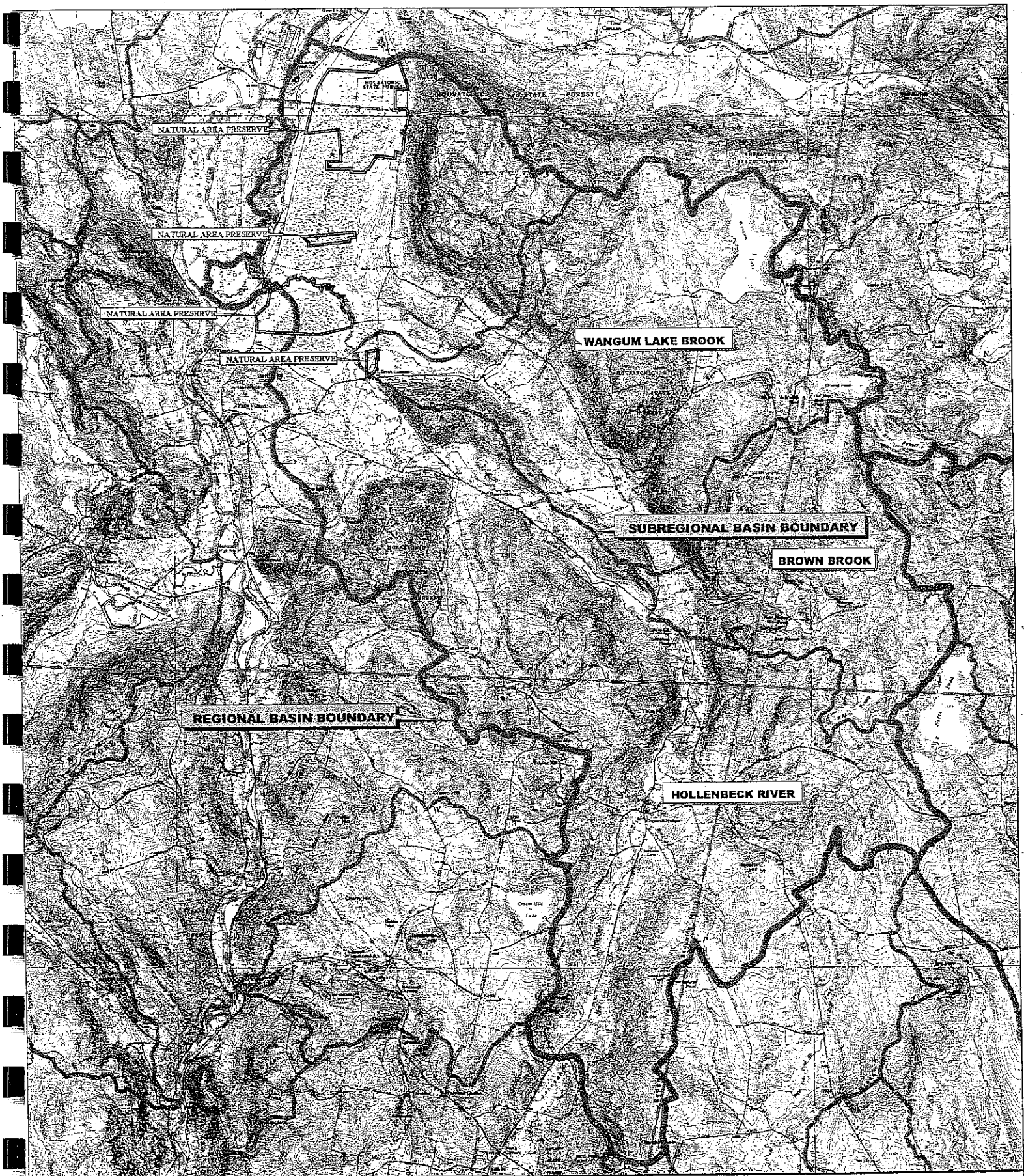


FIGURE 5

REGIONAL HYDROLOGIC BOUNDARIES

ROBBINS SWAMP
A Connecticut Natural Area Preserve within the
ROBBINS SWAMP WILDLIFE AREA

3333 0 3333 6666 Feet

1:80000

Map printed 6/11/2002

N

MANAGEMENT OF VISITORS AND USE

ZONES OF ALLOWABLE USES

The entire Preserve is open to the public through the access areas, though much of the Preserve's wetlands are impenetrable. Creating Use Zones is not now necessary. All of the Natural Area Preserve is open to hunting, fishing, and trapping and other passive recreational uses.

CHARACTER OF VISITOR ACTIVITY

The General Statutes state a Preserve shall be maintained in as natural and wild a state as is consistent with educational, scientific, biological, geological, paleontological and scenic purposes. Recreational activities may be allowed if they do not impact the protected resources of the Preserve.

Most of the lands within the Preserve were purchased with Federal funds specifically allotted to the State for the acquisition of lands for hunting. The site is currently managed by the Department as a Wildlife Area which is open to all forms of regulated hunting (as outlined in the Connecticut Hunting and Trapping Guide), including small game, (pheasant, grouse, woodcock, waterfowl, coyote, etc.), and deer and turkey hunting.

Robbins Swamp is a very popular hunting area. The old field agricultural areas offer excellent upland game and turkey hunting and the wetland area offers good deer and turkey hunting for those willing to make their way into the interior of this almost impenetrable wooded swamp. Although it receives high use by the hunting public, the area is not being degraded by this use because of the quotas in place and the self-regulating nature of hunters – who prefer to spread out in order to have the best chance of spotting game. The hunters do not require formal trails and use existing game trails or work their way through the flooded shrub and timber growth.

SPECIFIC USES and ACTIVITIES

Section 2 of Section 23-5c of the General Statutes states:...
" A Management Plan may permit recreational activities which do not adversely impact the protected resources of the Natural Area Preserve".

The principal use of this Preserve has been for a wide variety of recreational activities. The Regulations which govern development of a Management Plan note visitor activities and uses shall be consistent with the statutory purposes of a Preserve; visitors may be restricted to trails and; their presence regulated to prevent disturbance beyond which an area can tolerant without significant harm. The Department intends to allow the continued use of this Preserve for all the existing recreational purposes.

LAND USE:

Existing and proposed land uses of the uplands surrounding the Preserve need be considered in the long-term management of Robbins Swamp. Increased development may lead to increased soil erosion and subsequent sedimentation of streams and wetlands, storm water run-off from impermeable surfaces and nutrient enrichment from septic systems. Agricultural practices may also impact water quality. Some of the DEP owned lands within the Robbins Swamp system are leased to farmers for agricultural purposes and protective buffers have been established along adjacent wetlands and watercourses.

ADMINISTRATION

The Regional Wildlife Biologist responsible for managing The Robbins Swamp Wildlife Management Area shall be designated as the Preserve Site Manager and will have the authority and responsibility to assure protection of the Preserve's protected resources. The Site Manager shall be guided by this Management Plan and will receive advice and assistance from the Natural Area Preserves Program Manager and the Natural Area Preserves Advisory Committee.

USES OF THE PRESERVE, INCLUDING TRAIL CONSTRUCTION AND MAINTENANCE

There is no formal trail system within the Preserve and no such system is advocated. Visitors to the Preserve use existing animal trails or bushwack.

Some of the DEP owned lands within the Robbins Swamp system are leased to farmers for agricultural purposes and the Department intends to continue these agreements as the management practices create and enhance habitat for many species of wildlife.

Specific Buffers have been established to protect wetlands and watercourses adjacent to the leased fields:

- 100 foot buffer along the Housatonic River
- 75 foot buffer along the Hollenbeck River
- 50 foot buffer around sensitive wetlands

These buffers will remain in a natural, vegetated state so they may serve to filter surface runoff, shade the adjacent watercourse and provide wildlife habitat.

LANDSCAPE MANAGEMENT

Parking lots are mown as needed by the State, and may receive herbicide treatment for weed control.

Future landscape management may include burning and cutting for grassland bird management, and herbicide use for invasive species

SAFETY PRECAUTIONS

Guard rails, fences, steps and other safety devices are not now needed. Actions to control plants and animals that pose a threat to public health and safety may be initiated at the Site Manager's discretion.

Section 23-5i of the Connecticut General Statutes states that no policy or procedure related to the Natural Area Preserves Program, including preparation of a Management Plan..."**shall limit any other duly appointed public authority from exercising responsibility related to the suppression of fire, or any noxious insect, animal or plant,** when such action is deemed necessary to protect public health or safety" (emphasis added).

WATER CONTROL

Water control structures may be allowed in the future if necessary for the protection, maintenance or restoration of natural conditions or protected resources. The magnitude of these alterations will be assessed and any necessary actions shall be in conformance with the requirements and guidance described in the Management Provisions sector of this Plan.

It is particularly noteworthy that the largest, most extensive wetland in the Preserve, that within the Robbins Swamp Brook local basin, is entirely dependant upon the inflow from a relatively small upland drainage system. Any development within the uplands, or diversion of water from this basin must be closely managed to prevent damage to the wetland ecosystem.

EROSION CONTROL

There are currently no major erosion control issues within the Preserve. If in the future, erosion or soil deposition threatens the protected resources of the Preserve, control measures may be used. The magnitude of these alterations will be assessed and any necessary actions shall be in conformance with the requirements and guidance described in the Management Provisions sector of this Plan.

BUFFER AREAS

Buffer areas are necessary to help mitigate potential stresses to the Robbins Swamp ecosystem. While DEP should continue its efforts to acquire land parcels both within the swamp and surrounding uplands, it must be emphasized that all the buffer areas cannot be brought under conservation ownership. However, the current Site Manager has established strong, working relationships with many local landowners and municipal officials. Continuing such work is essential for educational opportunities and maintenance of the buffer areas.

A meeting of major landowners and conservation organizations should be held to discuss the long-term protection of the Robbins Swamp ecosystem with particular emphasis on buffer areas and uses.

On a smaller scale, for those DEP lands, which are leased to farmers, buffers to sensitive wetlands and the Hollenbeck River are described under the Section, "Uses Of The Preserve, Including Trail Construction And Maintenance."

RESEARCH OR EDUCATIONAL ACTIVITIES

Section (d) of Section 23-5c-1 of the Regulations of Connecticut State Agencies states:... **" A person wishing to engage in research or educational activities in a Natural Area Preserve shall obtain approval from the Commissioner. The Commissioner may approve research or educational activities with such conditions and restrictions as he or she deems necessary. A copy of the proposal for and results from any research conducted on a Natural Area Preserve shall be given to the Commissioner. A person authorized to engage in educational or research activities shall notify the Site Manager before commencing and upon completion of such activities."**

The principal, overriding use theme for this Preserve, will be that it serves as a Wildlife Management Area where different management measures are applied in order to create and maintain certain plant and animal species, populations and communities. Research will be approved, and management measures implemented, by Department staff. The Site Manager will assure that all necessary permits are obtained.

Use of the Preserve for educational purposes or for research by others is encouraged. Those wishing to utilize the Preserve for these purposes shall be required to first obtain the proper Authorization and shall contact the Site Manager for all necessary approvals.

RESEARCH AND STUDY NEEDS:

*A schedule for acquisition of data concerning the site's flora and fauna must be developed to more thoroughly evaluate the Preserve's species and communities.

*The hydrologic parameters of this Preserve must be more carefully assessed in order to protect the existing flow patterns, upon which this wetland ecosystem absolutely depends.

*The State of CT and The Nature Conservancy are working to consolidate management of Robbins Swamp. The Nature Conservancy currently owns several parcels of at the northern end of Robbins Swamp. On one of the parcels, is an old existing earthen dam. Reconstruction of this dam to create open water habitat should be evaluated.

*Invasive species should be monitored at least every two years to determine the need for control. Monitoring efforts with volunteers currently exists through The Nature Conservancy, and DEP efforts could be combined or accomplished with the Conservancy. Determine which, if any, invasive species are a threat to critical habitats or state-listed species. Determine management actions and monitoring.

*Common reed, an invasive species, is a known threat to protected resources. A study should be done to determine if control efforts are feasible and economical, as well as how to proceed

*Diseased *Thuja occidentalis* trees need to be examined by a forest pathologist.

*A study is needed to determine if herbicide use along the power line ROW is impacting calcareous wetland species.

*A study is needed to determine if herbicides are maintaining the population of *Carex castanea* along the railroad tracks.

*The Site Manager on a case-by-case basis should review sampling needs with input from appropriate DEP staff.

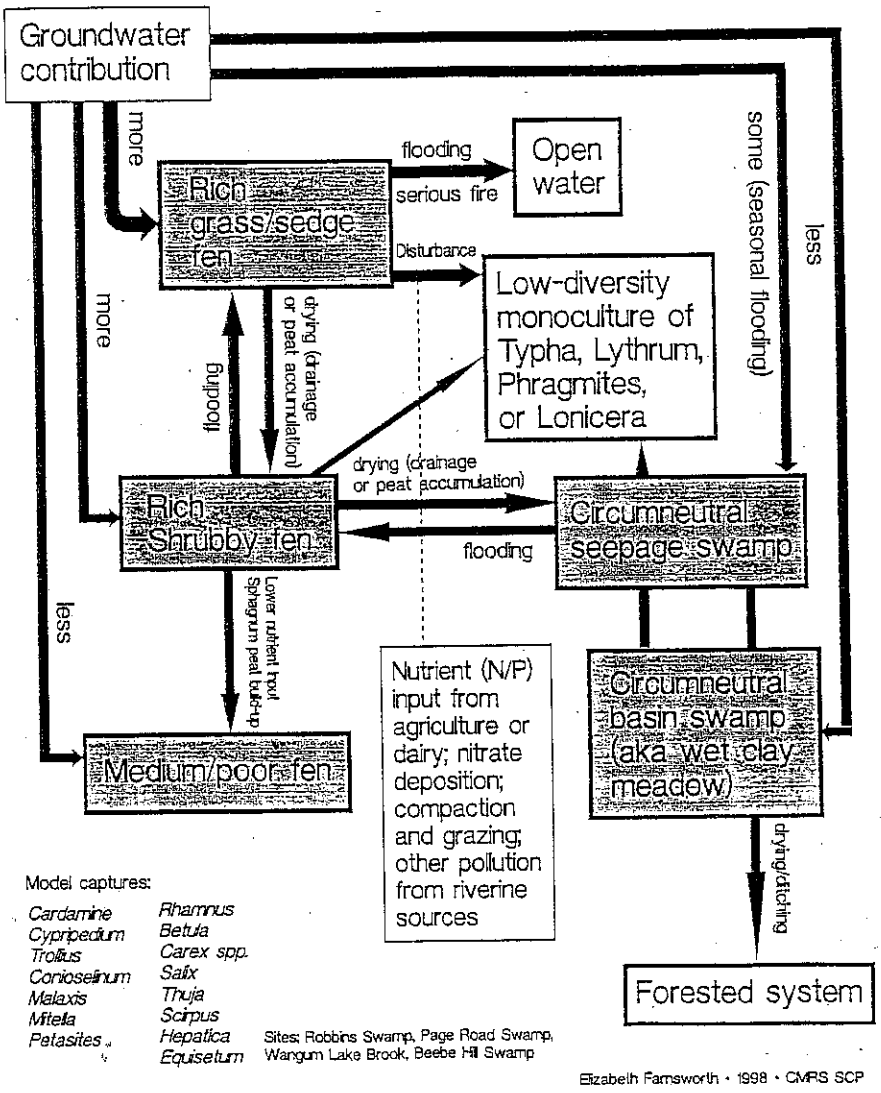
APPENDIX B

MODEL OF CALCAREOUS WETLAND COMMUNITIES from; SITE CONSERVATION AND MANAGEMENT PLAN FOR CANAAN MOUNTAIN – ROBBINS SWAMP MACROSITE

Robbins Swamp, Page Road Swamp, Wangum Lake Brook, and Beebe Hill Swamp all contain examples of calcareous wetland communities, from poor fens to circumneutral basin wetlands. These communities typically occupy low basins or the bottoms of slopes that intercept groundwater draining calcareous bedrock. As such, they share several features that derive from their position overlying marble/dolomitic bedrock, including: 1) circumneutral to alkaline waters; 2) high concentrations of dissolved calcium and magnesium; and 3) contact with groundwater as well as surficial water sources. Fens, which range from Maine to New York and west to Alberta, are frequently dominated by plants more characteristic of boreal climates; these species pushed south during the early post-glacial period and locally out competed more southern species in these cool wetland microhabitats (Mass. Heritage 1990). These species are typically restricted to fens, and are other rare; in Massachusetts, for example, 30 state-rare plants occur exclusively in calcareous fens (Mass. Heritage 1990); a similar number are expected for Connecticut. The level of groundwater input, the minerotrophic nutrient status, the accumulation of peat, and the successional age (from open water) of the wetland determine its vegetation composition, and thus its community classification (Mallik 1989, Motzkin 1994). Where groundwater is a major and constant contributor to hydrology, grasses and sedges predominate, and the community is identified as a rich fen. Organic matter content and nitrogen status of the substrate are important regulators of microbial activity, peat metabolism, and availability of nutrients for growth in fens (Groffman *et al.* 1996). Where graminoids are gradually replaced with shrubs, periodic drying occurs, and/or peat accretes over time, the area becomes a shrubby fen. Circumneutral seepage swamps, such as the formation at Wangum Lake Brook, may occur where groundwater seepage through adjacent upland bedrock is the main water source for the wetland (Caljouw, *unpublished data).* Where aerated ground- or surface waters discharge into the community, *Sphagnum* mosses increase in density, peat builds up in depth (slowing groundwater flow even further), hummocks form, and the wetland acidifies, becoming a poor fen. When contact with calcareous substrates is lost altogether, these formations can grade into bogs – acidic wetlands that derive most nutrients as oligotrophic systems. Circumneutral basin swamps, form in fine clay sediments that were deposited in glacial lakes. As such, they may be temporarily flooded or saturated due to the presence of a perched water table, but seasonal drying does occur (Cowardin *et al.* 1979). However, the hydrology of these systems is dominated by surficial run-off rather than groundwater release. Further ditching and planting makes these meadows suitable for agriculture or forage. Drier conditions in clayey soils slow turnover of organic matter and rate of microbial processes (*e.g.*, soil respiration); thus, they may have less capacity to attenuate nitrate inputs or to break down organic compounds (Groffman *et al.* 1996).

In all systems, disturbance can shift one community type to another state. For example, serious fire that degenerates the peat layer can revert a fen to open water. Drying or nutrient input can favor the proliferation of invasive wetlands species (Mass. Heritage 1990). Drying hastened by human activity can permit colonization by trees, causing a shift to a forested wetland and inhibiting growth of some rare herbaceous taxa (see above). Forested wetlands such as red maple swamps and northern white cedar stands can revert to shrub swamps, shallow marshes or wet meadows when water levels rise or when trees are cut (Golet *et al.* 1993).

MODEL OF CALCAREOUS WETLAND COMMUNITIES



Model and accompanying text reprinted with permission of Elizabeth Farnsworth and The Nature Conservancy 1998

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NATURAL RESOURCES CENTER
165 Capitol Avenue, Room 553
Hartford, Connecticut 06106
Connecticut Natural Diversity Data Base

CELEBRATE CONNECTICUT 350® YEARS 1985&1986

IW66

December 11, 1985

Ms. Susan J. Fitch
Vice Chairperson
Falls Village Conservation Commission
Canaan Town Hall
Falls Village, Connecticut 06031

Dear Ms. Fitch,

Your request regarding Robbins Swamp in Canaan and North Canaan was handed over to the Connecticut Natural Diversity Data Base of the Connecticut Geological and Natural History Survey. The following information is provided for Conservation Commission use.

o Portions of Robin Swamp have been included on the 1972 Natural Areas Inventory List (*please see attached explanation). (next page)

o Ecology/Biology

This swamp is the largest inland wetland in Connecticut. It is, also, one of the most significant because of the high concentration of state-listed "Species of Special Concern". Thirteen "Species of Special Concern" are known to be extant in Robbins Swamp. Names of species and locations are not provided due to their extremely sensitive nature.

Another factor contributing to this site's importance, is the diversity of habitats present. These habitats include: Thuja swamps, Hardwood Swamps, Floodplain Forests, Beaver Modified Wetlands, Mixed Emergent/Shrub Wetlands (Calcareous Fen) and other calcareous habitats. In Connecticut, all calcareous habitats are of limited distribution.

We are not in favor of any action that will infringe upon Robbins Swamp. Development proposals will slowly, but effectively, destroy the outstanding integrity of this area.

* In 1972 the Connecticut Forest and Park Association, Inc. prepared a Natural Areas Inventory which included 459 sites. These were nominated as significant sites for one or more of the following reasons: geologic, hydrologic, biologic, archeologic, cultural, aesthetic, research/eductional aspects.

I hope you find this information useful. If you have any questions, please feel free to contact me at the number listed on the previous page.

Sincerely,

Nancy M. Murray
Biologist/Data Manager

NMM/yla
Encls.

IW67

A RECOMMENDATION TO THE COMMISSIONER
OF ENVIRONMENTAL PROTECTION
from the
NATURAL AREA PRESERVES ADVISORY COMMITTEE

ROBBINS SWAMP
NATURAL AREA PRESERVE

The Natural Area Preserves Advisory Committee requests the Commissioner of Environmental Protection approve their recommendation to designate state owned lands within Robbins Swamp as a Natural Area Preserve. They further request the Commissioner initiate those formal adoption procedures required by statute which will lead to the Governor's official designation of Robbins Swamp as a Natural Area Preserve. The proposed Preserve, lying in the Towns of Canaan and North Canaan, will consist of approximately 785 acres of state-owned lands enclosed within the area bordered on the east by State Highway Route 7, on the south by Page Road and, on the west and north by Sand Road.

PRESERVE DESCRIPTION

Robbins Swamp is the largest freshwater wetland in the State of Connecticut. Underlain by calcareous bedrock, it occupies a lowlying basin which once contained a glacial lake; Lake Hollenbeck. This former lakebed contains a variety of wetland soil types, including deep organic sediments, poorly drained soils, and poorly drained alluvials silts and loams. This variety of substrate, in turn supports a diversity of vegetation types, including Northern White Cedar dominated swamps, Red Maple-Black Ash seepage swamps and open *Carex lacustris* marshes. This unique wetland has been found to contain a large number of Endangered and Threatened species as well as many, more common but geographically restricted species. The adjacent Hollenbeck River is also a valuable fisheries habitat and is known to contain the only viable population of burbot in the state.

State listed species and significant natural communities within the Preserve include:

Scientific Name	Common Name	1997 Proposed State Status	Last Date of Observation
Plants:			
Alopecurus aequalis	Orange Foxtail	Threatened	1988
Cardamine douglassii	Purple Cress	Special Concern	1988
Carex alopecoidea	Foxtail Sedge	Special Concern	1990
Carex aquatilis var. altior	Sedge	Special Concern	1990
Carex castanea	Chestnut Sedge	Endangered	1988
Cypripedium reginae	Showy Lady Slipper	Endangered	1992
Malaxis monophyllos	White Adder's-mouth	Endangered	1988
Mitella nuda	Naked Miterwort	Special Concern	1982
Petasites frigidus var. *palmatus*	Sweet Coltsfoot	Threatened	1988
Quercus macrocarpa	Burr Oak	Endangered	1996
Salix serissima	Autumn Willow	Special Concern	1988
Thuja occidentalis	Northern White Cedar	Threatened	1990

Scientific Name	Common Name	1997 Proposed State Status	Last Date of Observation
Animals:			
Ambystoma laterale	Blue-spotted Salamander	Threatened	1982
Natural Communities:			
Circumneutral Seepage Swamp			1991
Circumneutral Maple/Ash Basin Swamp			1987
Rich Fen			1991

PRESERVE MANAGEMENT CONCEPT

The proposed Robbins Swamp, Natural Area Preserve will consist of several state owned parcels, many of which were specifically acquired for the protection and enhancement of wildlife and their habitat. This same area also contains several unique natural communities and plant and animal species which have been designated as Endangered, Threatened or of Special Concern. Protection of these essential natural habitats and species in their natural state will be the Department's overriding management goal. Other plant and animal species, natural communities and features will be managed as necessary.

Established uses of this area, such as hunting, fishing and wildlife viewing, will be allowed to continue, as will other forms of passive, non-motorized recreational uses. A limited trail system may be developed to direct educational, scientific, scenic and recreational uses. The Department will not pursue development of roads into the Preserve nor emplacement of any permanent structures.

Protection of the Preserve's fisheries, wildlife, their habitat and the Endangered and Threatened species may require employment of varied management measures. Destructive threats posed by fire, flood, wind, disease or other natural causes will be addressed as necessary. Human uses will be monitored and managed as appropriate.

State statute requires preparation of a detailed Preserve Management Plan. This document will prescribe and guide measures needed to protect the Preserve's values. When prepared, this Plan will be offered for public comment, revised as necessary and then formally adopted and implemented.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Commissioner — Arthur J. Rocque, Jr.

DATE: APRIL 22, 1998

MAP SHOWING
NATURAL AREA PRESERVE
ROBBINS SWAMP
CANAAN & NORTH CANAAN, CONNECTICUT

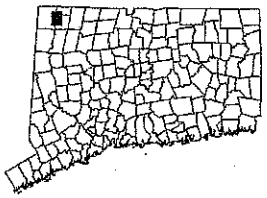
SCALE: 1:35,000

AREA OF PRESERVE: 786 acres more or less

PREPARED BY
THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION
NATURAL RESOURCES CENTER

LEGEND

Robbins Swamp
Natural Area Preserve Property Boundary



0.3 0 0.3 0.6 Miles

DATA SOURCES

BASE MAP INFORMATION - Topographic information originally derived from 1:24,000 scale 7.5 Minute U.S. Geological Survey DRGs (Digital Raster Graphics) for the Quadrangles of Ashley Falls, Bashbish Falls, Sharon, and South Canaan, CT. The data is neither complete nor current and based on 1:24,000 scale Topographic Quadrangle maps published in 1966 and photorevised in 1984.

PROPERTY BOUNDARIES - The location of property boundaries shown on this map were digitized from 1:24,000 scale 7.5 Minute U.S. Geological Survey DRGs. Boundary lines were referenced with parcel maps when this information was available. These boundaries are not survey accurate.

Connecticut Department of Environmental Protection
Arthur J. Rocque Jr., Commissioner
79 Elm Street
Hartford, Conn. 06106

IW68

STATE OF CONNECTICUT
EXECUTIVE CHAMBERS
HARTFORD, CONNECTICUT
06106

JOHN G. ROWLAND
GOVERNOR

September 11, 1995

Ms. Susan J. Kelsey
Northwest Hills Forestry
Woodland & Wildlike Management
Falls Village, Connecticut 06031

Dear Ms. Kelsey:

Thank you for your letter.

After reviewing your concerns, I have asked Sidney Holbrook, the Commissioner of the Department of Environmental Protection, to look into this issue for you. You should be hearing from his office in the near future.

Once again, thank you for writing.

Sincerely,

John G. Rowland
Governor

JGR/el

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

79 ELM STREET HARTFORD, CONNECTICUT 06106

PHONE: (203) 424-3001

Sidney J. Holbrook
Commissioner

September 19, 1995

Susan J. Kelsey, Forester
Northwest Hills Forestry
Falls Village, Connecticut 06031

Dear Ms. Kelsey:

Governor John G. Rowland has forwarded to me a copy of your letter concerning property in the Robbins Swamp and Canaan Mountain area that the Department of Environmental Protection have negotiated to purchase. Robbins Swamp is Connecticut's largest inland wetland and Canaan Mountain is the site of the State's Canaan Mountain Natural Area. Both areas are as close to a "wilderness" area as most Connecticut residents will ever experience. The proposed acquisition presents the State with a rare opportunity to unite these two unique areas with an open space greenway. Such a link is highly significant from a biological standpoint and an important attribute of sound stewardship of these two prized natural resources.

I have requested that the State Bond Commission approve the sale of general obligation bonds for the purchase of the parcel. The State Bond Commission has the unenviable responsibility of prioritizing request for bond funding from all state agencies. I remain confident that the State Bond Commission will be able to support this acquisition.

I appreciate your taking the time to communicate your concern for continued open space acquisition by the State to Governor Rowland. I know that he is very interested in citizen input into the governmental decision process and values your comments.

Sincerely,

Sidney J. Holbrook
Commissioner

SJH:CJR:mat

cc: Governor John G. Rowland