KING'S MARK ENVIRONMENTAL REVIEW TEAM

REPORT FOR

SPRUCE GLEN AND ORCHARD GLEN

WALLINGFORD,
CONNECTICUT

King's Mark Resource Conservation and Development Area, Inc.

SPRUCE GLEN AND ORCHARD GLEN

WALLINGFORD, CONNECTICUT

Environmental Review Team Report

Prepared by the King's Mark Environmental Review Team
of the King's Mark Resource Conservation
and Development Area, Inc.

Wallingford, Connecticut

for the

Wallingford Land Trust

This report is not meant to compete with private consultants by supplying site designs or detailed solutions to development problems. This report identifies the existing resource base and evaluates its significance to the proposed development and also suggests considerations that should be of concern to the Land Trust and the Town. The results of the Team action are oriented toward the development of a better environmental quality and long-term economics of the land use. The opinions contained herein are those of the individual Team members and do not necessarily represent the views of any regulatory agency with which they may be employed.

AUGUST 1991

ACKNOWLEDGMENTS

The King's Mark Environmental Review Team Coordinator, Suzanne Ferrarotti, would like to thank and gratefully acknowledge the following Team members whose professionalism and expertise were invaluable to the completion of this study:

* Ray Joesten, Geologist
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  USDA - Soil Conservation Service
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* Jerry Milne, Forester
  Department of Environmental Protection - Western District
  393-0723

* Nicholas Bellantoni, State Archaeologist
  Connecticut State Museum of Natural History
  486-5248

* Richard Stoecker, Regional Planner
  South Central Council of Governments
  234-7555

I would also like to thank Susan Anderson, Secretary of the King's Mark Environmental Review Team, for assisting in the completion of this report.

Finally, special thanks to Jim Gaffey of the Wallingford Land Trust for his cooperation and assistance during this environmental review.

EXECUTIVE SUMMARY

Introduction

An environmental review was requested by the Wallingford Land Trust for the Spruce Glen and Orchard Glen properties located in the northern end of Wallingford near the Meriden Town Line. Spruce Glen is 51.2 acres in size and was acquired from the State of Connecticut in 1987, while Orchard Glen is a 17.16-acre parcel of land donated to the Land Trust by the FIP Corporation in 1986. The 2 parcels are contiguous and will be used for passive recreation such as hiking and cross-country skiing.

The purpose of this review is to inventory and assess existing natural resources to obtain baseline data to measure changes that occur to the properties over time. This environmental information will be used to assist the Land Trust in guiding conservation and development in this area.

The ERT Process

The review process consisted of 4 phases: (1) inventory of the site's natural resources; (2) assessment of these resources; (3) identification of resource problem areas; and (4) presentation of planning and land use guidelines. Based on the review process, specific resources, areas of concern, recreation limitations and development opportunities were identified.

Topographic and Geologic Maps

Several maps and reports of the parcels are available from the Connecticut State Geological and Natural History Survey in Hartford.

Topography

The 2 parcels are located near the northern border of the Wallingford 7.5' topographic quadrangle and the southern border of the Meriden quadrangle. The principle topographic features are the valleys of Spruce Glen Brook and an unnamed brook in the Orchard Glen parcel and the intervening ridge.

Bedrock and Surficial Geology

Spruce Glen and Orchard Glen are underlain by red micaceous sandstone of New Haven Arkose. Bedrock is exposed only in the bed of Spruce Glen Brook. Upland surfaces are overlain by till, and sand and gravel extend up the lower end of Spruce Glen to an elevation of approximately 150 feet above mean sea level.

Soil Resources

The 2 parcels have moderately to steeply sloping glacial till-derived soils. The predominant soil type is Wethersfield loam. The soils should be suitable for most of

the low intensity recreational uses planned. Several existing erosion problems were observed on the 2 parcels. Solutions to these problems must be carefully engineered.

Forestry Considerations

There are 9 stands of different forest cover types delineated on the parcels. The stands are primarily comprised of mixed hardwoods and hemlock. It is recommended that a detailed inventory and management plan be performed by a consulting forester to improve wildlife habitat, grow quality sawtimber and provide recreational opportunities.

Threatened and Endangered Plant and Animal Species

According to the Natural Diversity Data Base, there are no Threatened or Endangered Species or Connecticut "Species of Special Concern" on the parcels.

Archaeological Considerations

No known archaeological sites exist on the 2 parcels. However, a field review indicated a high probability that undiscovered prehistoric Indian sites may be located along the stream system. Current land use will have no adverse effect on these potential resources. If development projects are planned in the future which require subsurface disturbance, it is highly recommend that the Office of State Archaeology (486-5248) be contacted to conduct a survey to locate and preserve these cultural resources.

Planning Considerations

The parcels are characterized by densely forested woodlands. The predominant land use and zoning designation bordering the site to the south and east is Industrial (Corporate Park). Both parcels provide an excellent opportunity for passive recreation pursuits. The trail system passes through some very unique and diverse vegetation, landforms and ecosystems. The key improvements recommended for the parcels include the elimination of any potential hazards or liability risks such as trees leaning across or near the trail. Overall, limited enhancement of the parcels is required.

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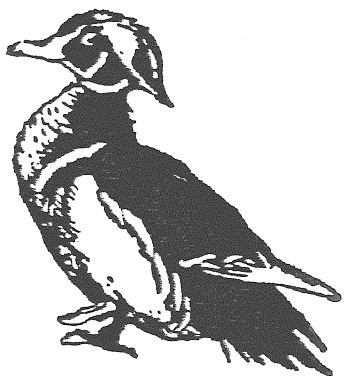


INTRODUCTION

An environmental review was requested by the Wallingford Land Trust for the Spruce Glen and Orchard Glen properties. Both parcels of open space are located in the north end of Wallingford near the Meriden Town Line. Access is provided by Barnes Industrial Park Road North.

Spruce Glen is 51.2 acres in size and was acquired from the State of Connecticut in 1987. Orchard Glen is a 17.16 acre parcel of land donated to the Wallingford Land Trust by the FIP Corporation in 1986. The State originally planned to use Spruce Glen as a rest stop on the northbound lane of the Wilbur Cross Parkway. The 2 contiguous parcels will be used for passive recreation such as hiking and cross-country skiing. The Land Trust requests baseline data to measures changes that occur to the parcels over time. The Land Trust is specifically concerned with the impacts of recreation on the physical resources present and how best to protect them.

The purpose of this review is to inventory and assess existing natural resources and discuss recreational opportunities, erosion and sediment (E&S) controls and the maintenance and regulatory activities necessary to maintain the parcels. Specific objectives include:

1) Assessing the hydrological and geological characteristics of the site, including geological development limitations and opportunities;
2) Determining the suitability of existing soils to support recreation;
3) Discussing soil erosion and sedimentation concerns;
4) Assessing the forestry resources, including management practices; and
5) Assessing planning and land use issues.

THE ENVIRONMENTAL REVIEW TEAM PROCESS

Through the efforts of the Wallingford Land Trust and the King's Mark Environmental Review Team (ERT), this environmental review and report was prepared for the Town. This report primarily provides a description of on-site natural resources and presents planning and land use guidelines. The review process consisted of 4 phases:

1) Inventory of the site's natural resources (collection of data);
2) Assessment of these resources (analysis of data);
3) Identification of resource problem areas; and
4) Presentation of planning and land use guidelines.

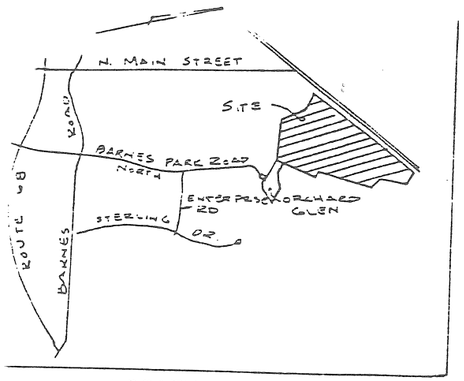
The data collection phase involved both literature and field research. The ERT field review took place on June 5, 1991. Field review and inspection of the site proved to be a most valuable component of this phase. The emphasis of the field review was on the exchange of ideas, concerns or alternatives. Mapped data or technical reports were also perused, and specific information concerning the site was collected. Being on-site also allowed Team members to check and confirm mapped information and identify other resources.

Once Team members had assimilated an adequate data base, they were able to analyze and interpret their findings. Results of this analysis enabled Team members to arrive at an informed assessment of the site's natural resource opportunities and limitations. Individual Team members then prepared and submitted their reports to the ERT Coordinator for compilation into the final ERT report.

Figure 1

LOCATION OF STUDY SITE

Figure 2



LOCATION MAP
1" = 2000'

SPRUCE GLEN

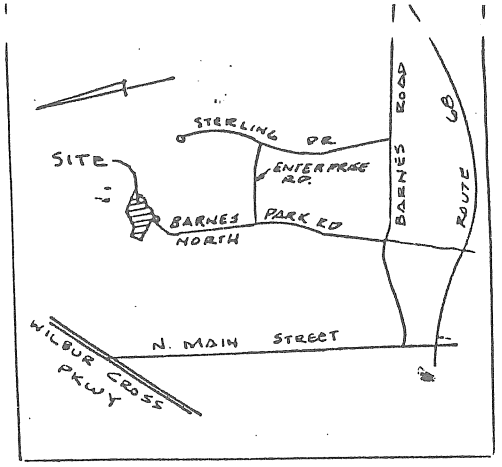
WALLINGFORD, CONNECTICUT

King's Mark Environmental Review Team

Scale: 1" = 200'

Site Map

Figure 3



LOCATION MAP
1" = 2000'

"SPRUCE GLEN"

OPEN FIELD
(LOW BROOK)

BROOK

FOOTBRIDGE

W.L.T. SIGN

DIRT ROAD

BARNES PARK ROAD NORTH

AREA = 17.16 AC ±

LEGEND
- WETLANDS
- PROPERTY LINE
- WALKING TRAIL
- WATERCOURSE

ORCHARD GLEN

WALLINGFORD, CONNECTICUT

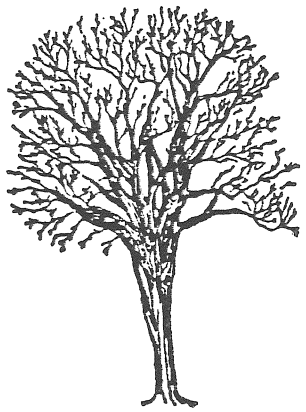
King's Mark Environmental Review Team

Scale: 1" = 200'

N

Site Map

NATURAL RESOURCE CHARACTERISTICS



TOPOGRAPHIC AND GEOLOGIC MAPS

Spruce Glen lies astride the border of the Wallingford and Meriden 7.5' topographic quadrangles. Orchard Glen is contiguous and is located near the northern border of the Wallingford 7.5' topographic quadrangle. The geology of surficial deposits has been mapped at 1:24,000 on The Surficial Geology of the Wallingford Quadrangle by Porter (1960) and on the Geologic Map of the Meriden Quadrangle, Connecticut by Hanshaw (1962). Bedrock geology of the area is shown at 1:125,000 on the Bedrock Geological Map of Connecticut by Rodgers (1985). These maps and reports are available from the Connecticut State Geological and Natural History Survey, Department of Environmental Protection (DEP), State Office Building, Hartford, CT 06115.

TOPOGRAPHY

The principal topographic features of the parcels are the valleys of Spruce Glen Brook and of an unnamed brook on the Orchard Glen parcel and the intervening ridge (see Figure 4). The flow of Spruce Glen Brook has formed a spectacular gorge in bedrock from just below the old mill site at the northerly border of the parcel to just above its confluence with the unnamed brook on the Orchard Glen parcel. The gorge widens just below a waterfall 8 to 10 feet high, located approximately 600 feet downstream from the footbridge at the old mill site. Slabby rock at the top of the fall overhangs the pool below, posing a danger to hikers.

BEDROCK AND SURFICIAL GEOLOGY

Spruce Glen and Orchard Glen are underlain by red micaceous sandstone of the New Haven Arkose. Bedrock is exposed only in the bed of Spruce Glen Brook, where the strata are nearly flat-lying and form a stepped pavement along the stream. The rocks of the New Haven Arkose and the paleoenvironments they record are described in the Guide to the Mesozoic Redbeds of Central Connecticut, Connecticut State Geological and Natural History Survey Guidebook No. 4 by Hubert (1978).

Upland surfaces are overlain by till, a poorly-sorted and unconsolidated sediment directly deposited by glacial ice. Sand and gravel, mapped as ice-contact stratified drift, extends up the lower end of the Spruce Glen parcel to an elevation of approximately 150 feet above mean sea level. The nature of the glacial deposits and their origin is discussed in Porter (1960). Steep-sided gullies are actively eroding where storm drainage from the parking lot adjacent to the Orchard Glen parcel and from the Wilbur Cross Parkway enters Orchard Glen and where drainage from the old dirt road along the ridgetop east of Spruce Glen Brook flows into the gorge.

SOIL RESOURCES

The 2 parcels have moderately to steeply sloping glacial till-derived soils. The predominant soil type is Wethersfield loam, a soil which has slow to very slow permeability in the substratum, resulting in perched water table conditions during wet periods. The soil has a severe erosion hazard on slopes greater than 7%. Cuts made in this soil type are extremely difficult to stabilize. Figure 5 and the soils chart included in Appendix A provide information on the other soil types present on the parcels.


Figure 4
Location of study site
SPRUCE GLEN AND ORCHARD GLEN
WALLINGFORD, CONNECTICUT
King's Mark Environmental Review Team
Scale: 1" = 2000'
Topography
Hooker Sch
Sacred Heart Cem
Trailer Park
AMTRAK
SOUTH BROAD
CORPORATE
Meetinghouse
CURTIS ST
YALE AVE
Brook
MILLER
TOLL ROAD
RADDOCK
CROSS
WILBUR
Golf Course
Memorial Hospital
MURDOCK
Res. Areas
Spruce Glen Br
BOUNDARY
TANKWOOD RD
MERIDEN
BM 204
BM 89
INTERCHANGE 66
PARKWAY
BARNES
North Farms Reservoir
NORTH

Figure 4 Topography

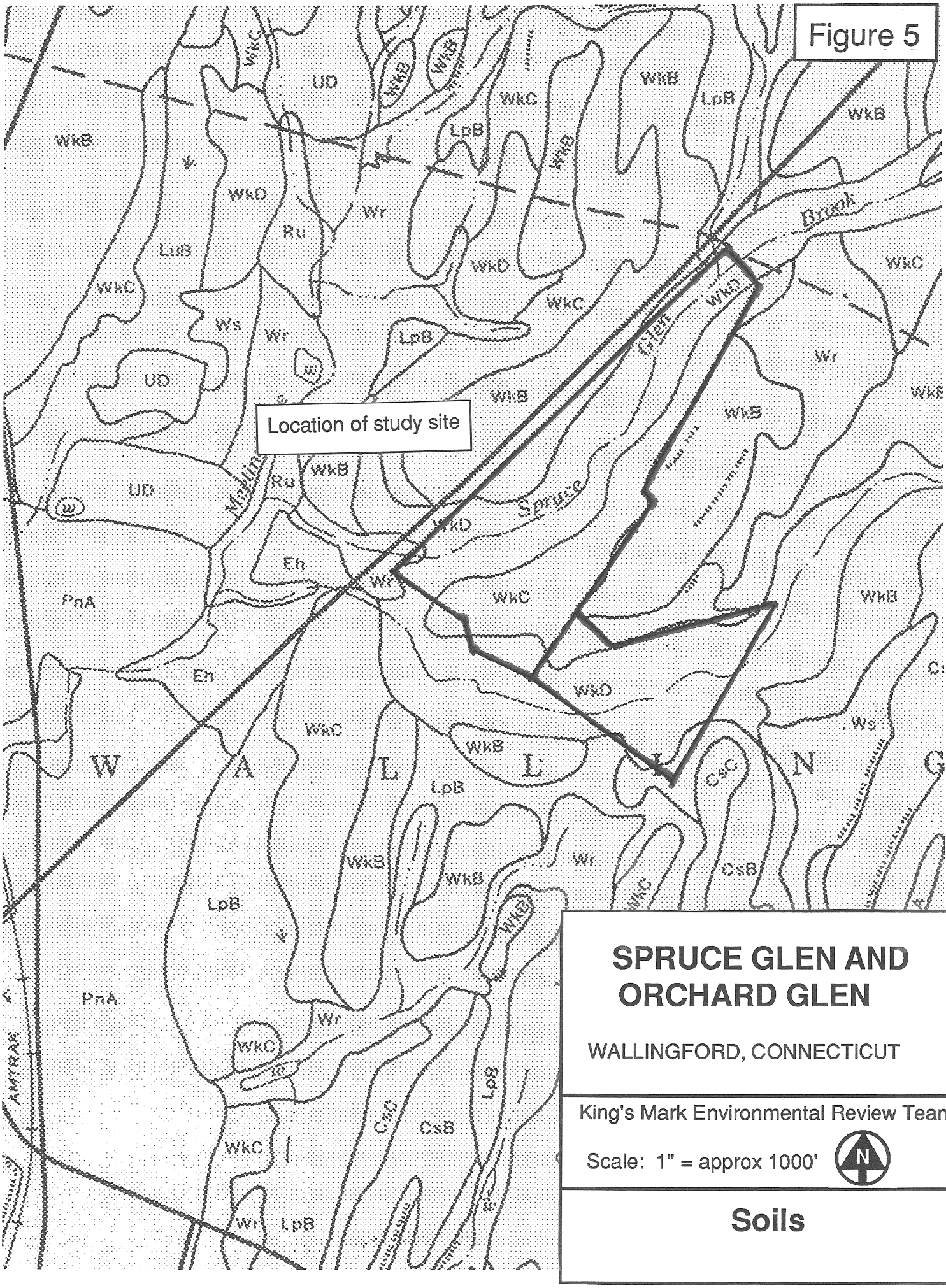


Figure 5
Location of study site
Brook
Spruce
Maple
WkC
UD
WkB
LpB
WkD
Wr
Ru
Ws
Eh
PnA
CsC
CsB
AMTRAK
W A L L E N G
SPRUCE GLEN AND ORCHARD GLEN
WALLINGFORD, CONNECTICUT
King's Mark Environmental Review Team
Scale: 1" = approx 1000'
N
Soils

Figure 5 Soils

The soils should be suitable for most of the low intensity recreational uses planned for the parcels. With a few improvements, the existing trail system can accommodate intended uses. There are some trail sections which should be relocated away from the edge of steep escarpments. Other sections require drainage improvements. The trail system on the Orchard Glen parcel needs a connector and stream crossing at the western end of the loop. The bridges at the existing stream crossings are well constructed and have minimal impact on the stream systems. The Land Trust could have an engineer evaluate these crossings to determine their capacity for different storm events.

Trail oriented activities on the site can include hiking, cross-country skiing, jogging and nature and history study. The use of 1-way trail loops is the most desirable configuration for a variety of reasons. First, it reduces the incidence of user encounters which increases solitude for hikers and nature seekers. Trails also concentrate the use of the parcel to specific areas which can be maintained. This minimizes impacts on the remainder of the parcel and provides large areas where wildlife can find refuge.

A small, very steep trail is forming along the north bank of Spruce Glen Brook where hikers try to access the appealing waterfall area. An erosion problem could result from continued use along this informal access route. The Land Trust should either provide safe access or employ some means of discouraging travel down this extremely steep slope.

Several existing erosion problems were observed on the 2 parcels. The first is along a small stream on the Orchard Glen parcel which receives runoff from a portion of the Barnes Industrial Park. Erosion begins below a paved leakoff from a parking area and continues down to the unnamed tributary of Spruce Glen Brook. Erosion is particularly acute at the trail crossing. It is caused by increased runoff flow volumes and velocities from paved areas and rooftops. This problem could have

been avoided by proper handling of runoff increases from the development. Because the stream system has been disturbed, there are few alternatives available to correct the erosion problem. One option is to line the channel with properly sized and bedded riprap and install a drop structure where the grade of the channel abruptly changes. Any solution must be carefully engineered.

Extreme gully erosion was observed at 2 locations along Spruce Glen Brook where concentrated water flow is directed down the steep escarpments. In one location on the south bank, it appears that the trail acts to concentrate and direct flows to one point on the escarpment. On the north bank, the gully is forming as a result of runoff from a storm drain on the parkway. At this location, the cut appears to have reached bedrock, and the rate of erosion has consequently slowed. The gully on the south bank will continue to erode back into the slope unless measures are taken to redirect runoff from this location. The use of a level spreader to evenly distribute flows might be a solution. This site must be carefully studied to assure that the solution selected does not cause an erosion problem in another location.

Streambank erosion was observed along Spruce Glen Brook above and below the bridge near the Mill Dam. During a major storm event, the north bridge abutment could wash out because channel flows are cutting into the bank above this location. This problem also requires an engineered solution.

An ongoing problem which can create erosion hazards throughout the property is the unauthorized use of off road vehicles. This problem occurs on open land throughout Connecticut. The best way to address it is through a public awareness/ educational effort by the Land Trust and by requiring registration of these vehicles.

FORESTRY CONSIDERATIONS

The Spruce Glen and Orchard Glen parcels have many different kinds of forest cover types. Based on the field review and a brief visit afterwards, 9 stands were delineated (see Figure 6).

Stand 1 is approximately 17 acres of mixed hardwoods and hemlock. Dominant species are red oak, beech, hemlock, sugar maple, hickory and tulip poplar. The trees are predominantly sawtimber-sized (i.e., trees large enough to be cut for lumber, generally over 12 inches in diameter at 4.5 feet from the ground). Some hemlock woolly adelgid, a new insect pest of hemlock, was found. It was only a light infestation, but should be monitored. The dominant trees in this stand are probably 80 to 100 years old.

Stand 2 is approximately 3 acres of mixed hardwoods in an early successional stage under the powerline right-of-way. Dominant species include sapling gray birch, sassafras and blackberries. The powerline provides a great deal of "edge" habitat, which is valuable for wildlife.

Stand 3 is approximately 12 acres of red oak, white oak and chestnut oak. Trees are small sawtimber-sized. The understory is comprised of black birch, striped maple and mountain laurel. The dominant trees are approximately 70 years old.

Stand 4 is approximately 3.6 acres of red maple, elm and white ash growing in a floodplain area.

Stand 5 is approximately 5 acres of red oak and chestnut oak. Trees are sawtimber-sized. The understory is comprised of mountain laurel and witchhazel. The trees are estimated to be 80 to 100 years old.

Stand 6 is approximately 5 acres of poletimber-sized (i.e., trees between 6 and 10 inches in diameter at 4.5 feet from the ground) mixed hardwoods. The trees are approximately 30 to 50 years old.

Stand 7 is approximately 8.3 acres of sawtimber-sized hemlock, with beech and red maple saplings and poles in the understory. In some areas, the shade is so dense that no light reaches the forest floor, and nothing is growing in the understory. Increment borings from a few of the biggest hemlocks indicate that these trees are approximately 170 years old. A small understory hemlock was found to be 115 years old. Light to moderate infestation of woolly adelgid and hemlock scale are present. Interestingly, the name "Spruce Glen" is probably a misnomer based on the presence of these hemlocks, because there are no spruces on the parcel.

Stand 8 is approximately 13 acres of small sawtimber- and poletimber-sized hemlock. These trees are approximately 75 years old. Most of this stand has extremely dense shade in the understory. Virtually nothing is growing on the forest floor, providing poor wildlife habitat because there is little food or cover near the ground. Hemlock looper, a native insect that defoliates hemlock, was found, but not in large quantities. Its presence should be monitored because this insect can quickly kill hemlocks by feeding on the needles and buds.

Stand 9 is approximately 1.5 acres of reverting field adjacent to the parkway near the old parkway rest area. It is not clear if this is part of the Land Trust property or if it is still part of the parkway right-of-way.

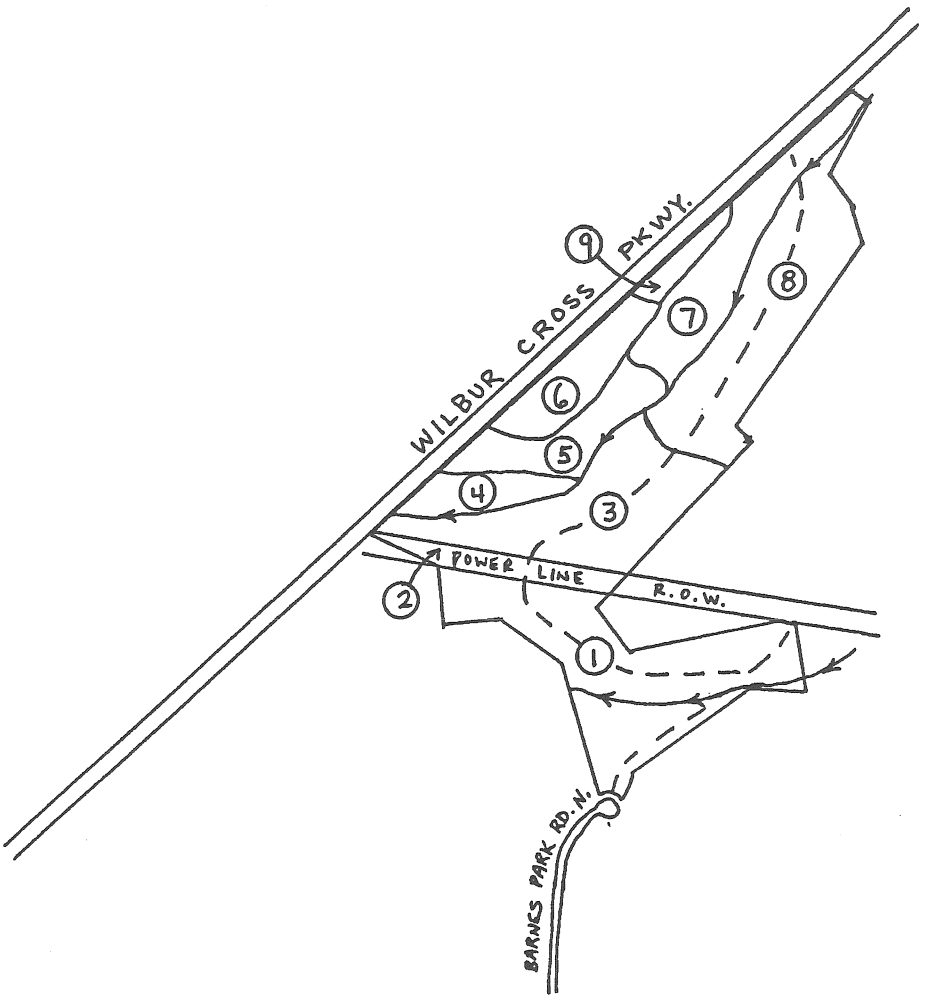
The parcels have a great deal of potential to become more productive as far as improving wildlife habitat, growing quality sawtimber and providing recreational opportunities. It is highly recommended that a detailed inventory and management plan be performed by a consulting forester. There are cost-share programs sponsored by the Federal government that will assist in funding this type of work. The Land Trust can contact the DEP Division of Forestry for more information.

THREATENED AND ENDANGERED PLANT AND ANIMAL SPECIES

According to Natural Diversity Data Base maps and files, there are no known extant populations of Federally Endangered and Threatened species or Connecticut "Species of Special Concern" occurring on the parcels.

Natural Diversity Data Base information includes all information regarding critical biologic resources available at the time of the request. This information is a compilation of data collected over the years by the Natural Resources Center's Geologic and Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultation with the Data Base should not be substituted for on-site surveys

Figure 6



Paved Road

Woods Trail

Stream

Stand #

SPRUCE GLEN AND ORCHARD GLEN

WALLINGFORD, CONNECTICUT

King's Mark Environmental Review Team

Scale: 1" = 1000'

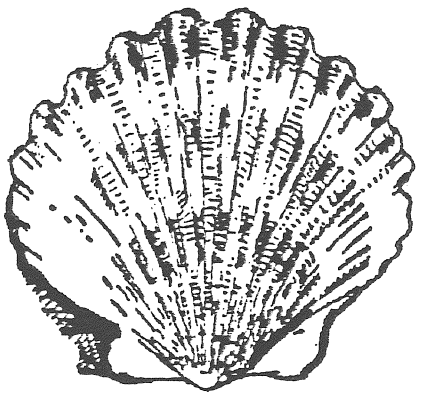
N

Forest Type Map

Figure 6 Forest Type Map

required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as enhance existing data. New information is incorporated into the Data Base as it becomes available.

ARCHAEOLOGICAL RESOURCES



ARCHAEOLOGICAL RESOURCES

A review of the State of Connecticut Archaeological Site Files and Maps shows no listing of Native American or colonial sites on the parcels. However, a field inspection of Spruce Glen and Orchard Glen indicated a high probability for prehistoric Indian camp sites to be located along the stream system. While these sites have yet to be discovered, their likelihood can be predicted by analyzing topographic features and the undisturbed condition of much of the area.

For thousands of years, groups of hunters and gatherers utilized secondary streams as sites for the economic pursuit of plants and animals. Areas of natural waterfalls were especially important for fishing sites. As a result, archaeologists have located small camps on well-drained soils adjacent to or overlooking freshwater drainage systems. Orchard Glen fits well into the predictive model of prehistoric Indian settlement and subsistence patterns.

Current use of the land as passive recreation will have no adverse impact on possible archaeological sites. If future plans to develop the parcels require any subsurface disturbance, the Office of State Archaeology (203/486-5248) should be notified to conduct an archaeological survey to locate and preserve any cultural resources there. With little open space remaining undisturbed in North Wallingford, Orchard Glen may be one of the last places in the area to discover and preserve archaeological resources for the community.

LAND USE AND PLANNING CONSIDERATIONS

PLANNING CONSIDERATIONS

Spruce Glen and Orchard Glen lie in the North Central District of Wallingford. The main access point and trailhead is located at the northern terminus of Barnes Industrial Park Road North. The predominant land use and zoning designation bordering the parcels to the south and east is Industrial (Corporate Park). A small orchard abutting the Spruce Glen parcel to the northeast remains active. The parcel is bounded to the west and north by the Wilbur Cross Parkway. Both parcels lie outside the Town's Watershed Protection District. The Wallingford Aquifer Protection District includes a small section of Spruce Glen near the parkway. Overhead distribution powerlines traverse the southwest sector of Spruce Glen.

Both parcels are characterized by densely forested woodlands. The main trail system follows the general contour of the land. A forestry management plan might be appropriate to thin out some of the mature and diseased hardwoods and pines to create better overall wildlife habitat.

Recreational Opportunities

Both parcels provide an excellent opportunity for passive recreation pursuits. The trail system passes through some very unique and diverse vegetation, landforms and ecosystems. Starting from the trailhead, a hiker will pass through a dense canopy of old growth hardwoods, cross under the powerlines, enter a pine forest stand, follow the southern ridge of a very steep geologic feature and reach a concrete footbridge over Spruce Glen Brook near the abandoned parkway rest area. On the northern ridge of Spruce Glen Brook, the vegetation changes to less mature hardwoods and more low-lying mountain laurel and ground cover. A trail runs close to the edge of the very steep slopes along the northwest ridge line with some excellent views of the steep gorge and small waterfall.

It is recommended that the parcels remain undeveloped and retain passive recreation activities (i.e., walking trails and cross-country skiing). The parcels provide an excellent opportunity to develop some environmental education/ awareness programs in conjunction with the local school systems, environmental groups, youth groups and the Land Trust. Guided nature walks could be established with experienced naturalists to point out the various unique habitat, vegetation and geologic formations along the trail system.

The Land Trust may wish to enlist the assistance of local environmental organizations (i.e., Audubon Society, Nature Conservancy and Sierra Club) or Scouts to maintain the trails and reinforce or erect some basic timber bridge crossings. Arrangements could be set up for limited camping opportunities with the Scouting organizations in exchange for assistance in trail and bridge maintenance and general habitat restoration and hazard elimination.

Hazard Elimination and Erosion Control

The key improvements recommended for the parcels include the elimination of any potential hazards or liability risks. There are a few leaning trees across the trail or near the trail which may cause injury if left standing. Some of the timber crossings may need reinforcement. The concrete footbridge over the mill race appears to be structurally sound. However, at some point the Land Trust may want to consult with a structural engineer to assure the stability of the footbridge. Undercut erosion is taking place near some of the steep slopes on the west side of the brook near the parkway. The trail could be pulled back from the steep slope in this area to alleviate any dangerous situations.

There are some deep gullies and channels created in part by the steep slopes on the parcels. The Land Trust could provide some additional runoff/drainage outlets at various points along the path to alleviate the problem. Riprap placed in some of the channels may curtail the amount of erosion along some of the steep slopes.

The perimeter fencing erected near the parkway and old rest area appears to be effective in reducing the litter, partying and vandalism on the parcel. The powerline right-of-way provides entry to motorized trail bikes. Mountain bicycles should not be encouraged on the trails due to the steep slopes and erosion potential.

Recreational Data

According to the 1990 Census, the current population of Wallingford is 40,822 persons. The total land area within the municipality is 39.8 square miles, resulting in a density calculation of 1,026 people per square mile.

The current 1987-92 Statewide Comprehensive Outdoor Recreation Plan (SCORP) produced by the DEP attempts to inventory and analyze open space and recreational opportunities within all planning regions and municipalities in the State. These data were gathered on Wallingford for the SCORP document:

Town of Wallingford - Open Space

DEP Owned Lands	315 acres
Town Owned Lands	1,201 acres
Privately Owned Lands	3,736 acres
Total Open Space (Private & Public)	5,252 acres

The total amount of designated open space within Wallingford is quite high when compared to other communities in the region and throughout the State. The Wallingford Land Trust is quite fortunate to have acquired both Spruce Glen and Orchard Glen. Combined, they provide a very unique opportunity for many passive recreational pursuits. Limited enhancement of the parcels is required. Environmental education programs could be arranged and sponsored by the Land Trust, local schools or community organizations.

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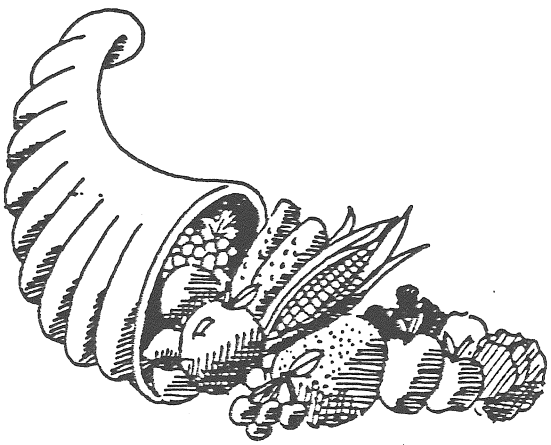
APPENDICIES



Appendix A: Soil Limitations Chart

MAP UNIT NAME	GENERAL SOIL PROPERTIES	DRAINAGE CLASS AND DEPTH TO SEASONAL HIGH WATER TABLE	DEPTH TO BEDROCK	MAJOR LIMITATIONS TO THE DEVELOPMENT OF: PATHS AND TRAILS	MAJOR LIMITATIONS TO THE DEVELOPMENT OF: PICNIC AREAS
†CsB - Cheshire fine sandy loam, 3-8% slopes	Very deep soils on uplands formed in glacial till derived mainly from red sandstone, shale and conglomerate	Well-drained > 6 feet	>60 inches	None	None
†LpB - Ludlow silt loam, 3-8% slopes	Very deep soils on uplands formed in glacial till derived from red sandstone, shale and conglomerate	Moderately well-drained 1.5-2.5 feet (perched)	>60 inches	Wetness	Wetness, percs slowly
†WkB - Wethersfield loam, 3-8% slopes	Very deep soils on uplands formed in glacial till derived from red sandstone, shale and conglomerate	Well-drained 1.5-2.5 feet (perched)	>60 inches	None	Percs slowly
°WkC - Wethersfield loam, 8-15% slopes	Very deep soils on uplands formed in glacial till derived from red sandstone, shale and conglomerate	Well-drained 1.5-2.5 feet (perched)	>60 inches	None	Percs slowly, slope

MAP UNIT NAME	GENERAL SOIL PROPERTIES	DRAINAGE CLASS AND DEPTH TO SEASONAL HIGH WATER TABLE	DEPTH TO BEDROCK	MAJOR LIMITATIONS TO THE DEVELOPMENT OF: PATHS AND TRAILS	MAJOR LIMITATIONS TO THE DEVELOPMENT OF: PICNIC AREAS
WkD - Wethersfield loam, 15-25% slopes	Very deep soils formed in glacial till derived mainly from red sandstone, shale and conglomerate	Well-drained 1.5-2.5 feet (perched)	>60 inches	Slope	Slope

†Prime Farmland soil

°Additional Farmland of Statewide Importance

NOTES

ABOUT THE TEAM

The King's Mark Environmental Review Team (ERT) is a group of environmental professionals drawn together from a variety of federal, state and regional agencies. Specialists on the Team include geologists, biologists, soil scientists, foresters, climatologists, landscape architects, recreational specialists, engineers and planners. The ERT operates with state funding under the aegis of the King's Mark Resource Conservation and Development (RC&D) Area - an 83-town area serving western Connecticut.

As a public service activity, the Team is available to serve towns and/or developers within the King's Mark RC&D Area - free of charge.

Purpose of the Environmental Review Team

The Environmental Review Team is available to assist towns and/or developers in the review of sites proposed for major land use activities. For example, the ERT has been involved in the review of a wide range of significant land use activities including subdivisions, sanitary landfills, commercial and industrial developments and recreational/open space projects.

Reviews are conducted in the interest of providing information and analysis that will assist towns and developers in environmentally sound decision-making. This is done through identifying the natural resource base of the site and highlighting opportunities and limitations for the proposed land use.

Requesting an Environmental Review

Environmental Reviews may be requested by the chief elected official of a municipality or the chairman of an administrative agency such as planning and zoning, conservation or inland wetlands. Environmental Review Request Forms are available at your local Soil and Water Conservation District and through the King's Mark ERT Coordinator. This request form must include a summary of the proposed project, a location map of the project site, written permission from the land owner/ developer allowing the Team to enter the property for purposes of review and a statement identifying the specific areas of concern the Team should investigate. When this request is approved by the local Soil and Water Conservation District and King's Mark RC&D Executive Committee, the Team will undertake the review. At present, the ERT can undertake approximately two (2) reviews per month.

For additional information regarding the Environmental Review Team, please contact your local Soil and Water Conservation District or Sue Ferrarotti, ERT Coordinator, King's Mark Environmental Review Team, King's Mark RC&D Area, 322 North Main Street, Wallingford, Connecticut 06492. King's Mark ERT phone number is 265-6695.