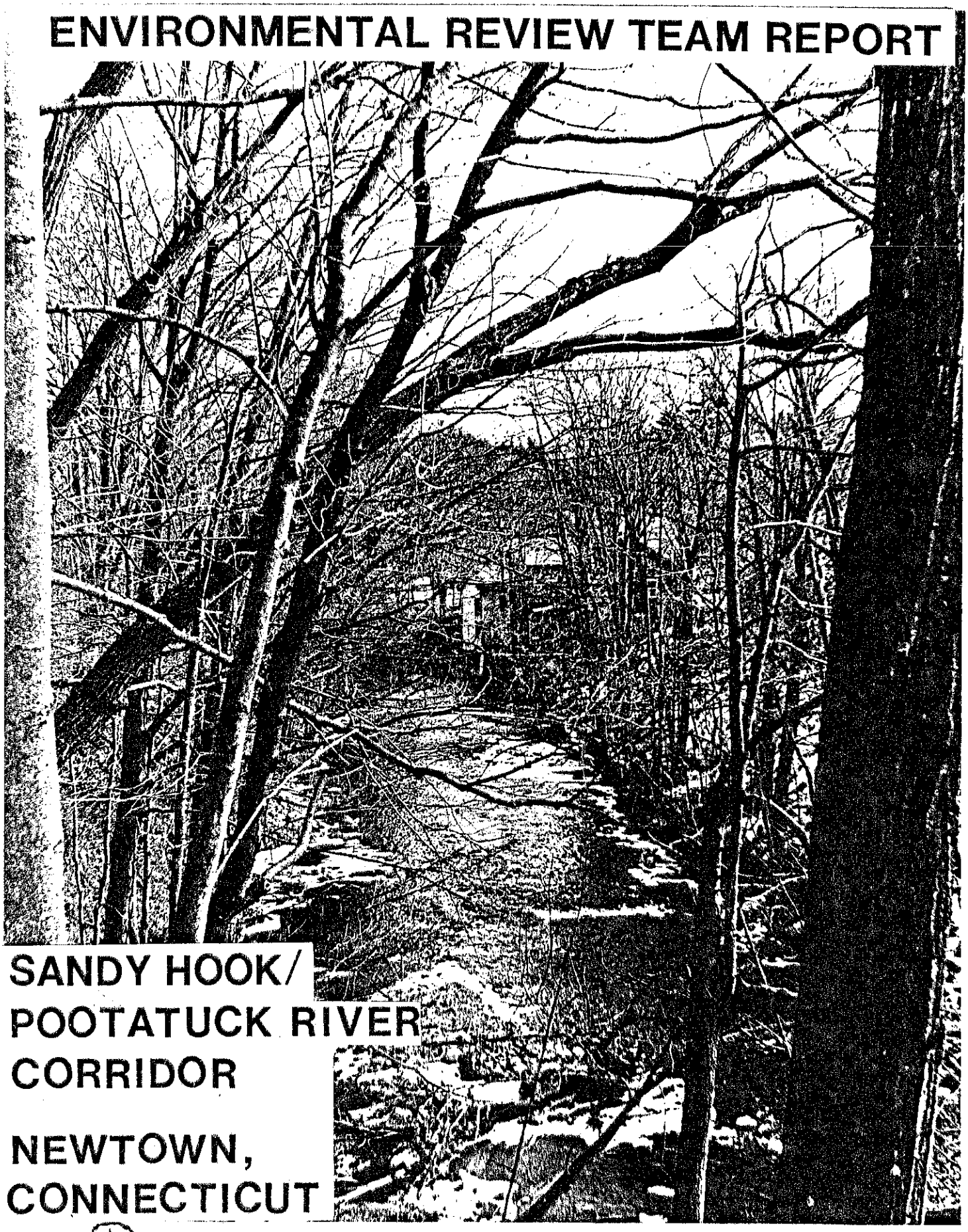
ENVIRONMENTAL REVIEW TEAM REPORT



SANDY HOOK/ POOTATUCK RIVER CORRIDOR

NEWTOWN, CONNECTICUT

KING'S MARK RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.

SANDY HOOK/POOTATUCK RIVER CORRIDOR ENVIRONMENTAL REVIEW

Newtown, Connecticut

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

Wallingford, Connecticut

for the

Newtown Office of the Selectman

and

The Sandy Hook Organization for Prosperity

MARCH 1986

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EXECUTIVE SUMMARY

This environmental review was the result of requests from the Newtown First Selectman's Office and the Sandy Hook Organization for Prosperity (SHOP), a group of local merchants and citizens. The ERT was requested to assist the town in identifying and evaluating the natural and historical resources in Sandy Hook and the adjacent Pootatuck River in order to enhance the economic, environmental and aesthetic viability of Sandy Hook.

The review process consisted of four phases: (1) inventory of Sandy Hook's natural and cultural attributes; (2) assessment of Sandy Hook's resources; (3) identification of natural, cultural or economic limitations and opportunities; and (4) formulation of planning guidelines.

The Sandy Hook community and the adjacent Pootatuck River corridor is approximately 175 acres in size. It is located one mile east of the center of Newtown, west of the Housatonic River and just north of Interstate 84. It encompasses both the natural and cultural assets of Sandy Hook and the Pootatuck River. The Pootatuck River is characterized by steep forested slopes on the northwestern side of the corridor. The majority of these steep slopes are located within Rocky Glen State Park, an 22 acre undeveloped park. Commercial, industrial and residential development occupies the eastern side of the river.

Through the inventory and assessment process, specific resources, areas of concern and development limitations and opportunites were defined. They fall into the following categories: (1) physical

characteristics; (2) biological attributes; (3) historical sites and buildings; and (4) land use and planning considerations.

Physical Characteristics

Slopes within the study area range from relatively flat to precipitous. The flatter slopes are located south of Route 34 and comprise largely of flood plains. These slopes are influenced by relatively thick sediments (i.e., sand and gravel). Continuing northward, the slopes become very steep, approaching 35 percent. These slopes are dictated by bedrock and preclude making hiking trails along this part of the river. Trails constructed here would have precipitous slopes and be a serious liability to the town.

Two types of bedrock underlie the study area: (1) Bristol gneiss; and (2) Rowe schist. These rocks are very old and have been geologically altered, folded and fractured.

The three major surficial geologic deposits in the study area include: (1) till; (2) stratified drift; and (3) alluvium. Alluvial deposits are regualted by Public Act 155 (Inland Wetlands and Water Courses Regulations). Because water is at or near ground surface throughout most of the year as well as being inundated by flood waters during severe storms, alluvial deposits hold very little potential for development.

Due to steep, rocky slopes, shallow soils in the central and northern sections, and alluvium soils in the southern sections of the study area, it seems likely that future development might occur only at a very low density, particularly since on-site septic systems would be required to serve new development.

As areas are developed in Sandy Hook, carefully planned and engineered septic systems would be needed and the volume of sewage or wastewater discharged would need to be limited.

Partially treated to non-treated effluent may be reaching the river. Untreated effluent introduces disease-producing organisms, viruses and nitrates into the river, presenting a public health hazard and threatening fish and wildlife species. As a result, any sewage discharging into the Pootatuck River demands immediate correction.

It is suggested that a sanitary survey of homes, businesses and industries be conducted in Sandy Hook to determine whether or not there are any direct sewage discharges into the Pootatuck River.

Soil erosion and sedimentation are additional sources of pollution adversely affecting the Pootactuck River. The construction of sediment detention basins may control unwanted sediment from reaching the river. Also, every effort should be made by the town to

sweep streets along the river and clean catch basins to minimize sediment from reaching the river.

Saco, Scarboro and Rippowam soils are poorly and very poorly drained. The development of trails or picnic areas on these soils may be damaged by flooding. Also, heavy foot traffic in these areas would create muddy conditions during most of the year because of a seasonally high water table.

Biological Attributes

The study area is delineated into four forest cover types: (1) mixed hardwood/streambelt; (2) old fields; (3) mixed hardwoods; and (4) hemlock/hardwoods. Steep slopes will limit the potential for forest management in some of these areas.

The Sandy Hook/Pootatuck River corridor is characterized by a number of diverse wildlife habitats including mixed hardwoods, riverbank, open fields, hemlock, flood plain and man-made, suburban habitat. Wildlife species such as white-tailed deer, gray squirrel, raccoon, chipmunk and a variety of birds have become acclimated to suburbanization and are commonly found within developed areas such as Sandy Hook.

The Sandy Hook portion of the Pootatuck River is a valuable fishery resource and it presently provides good trout fishing experiences. Through proper management and publicity, the fisheries could add to the overall quality of the river.

Enhanced accessibility to the river through paths and stairways, and the removal of litter from the riverbanks may improve the recreational fishing experience.

Existing water quality classification of the Pootatuck River in Sandy Hook is "Class B." Class B water supports recreational uses such as bathing, swimming and fishing. It also provides excellent wildlife habitat and has a good aesthetic value.

It is unlikely that dredging would result in significant improvements of water quality of the Pootatuck River. However, dredging would probably benefit related uses such as warmwater fish habitat and swimming.

The proposed establishment of a pond at the Sandy Hook center could potentially result in the loss of habitat important in maintaining the structure and function of the stream environment.

Historical Sites and Buildings

There are five historical buildings or sites and previous economic activities that significantly influenced the history and development of Sandy Hook. They are: (1) the Brick Store; (2) the Mill House; (3) the Dayton Street Bridge; (4) the Upper Store; and (5) the Fabric Fire Hose Company and Building.

Of possible historical significance is a small quarry located in the forested sections of the study. From the age of the trees in and around the quarry, it was determined that the quarry was abandoned shortly after the turn of the century. It appears that the quarry may have been a source of stone for the original dam at the old Fabric Fire Hose Building.

Land Use and Planning Considerations

Newtown's Plan of Development (1981) reflects present land uses in the Sandy Hook area with a retail business district in the center of Sandy Hook, an industrial corridor along the Pootatuck River and low to medium density residential use on available land. Existing land use is reflective of current zoning in the area.

The proposed conservation of land north of Rocky Glen State Park would create an open space corridor and provide opportunities for passive recreation, hiking and nature study.

Improvement of Black Bridge Road and Glen Road as specified in the town plan would greatly facilitate access to Sandy Hook from the north. However, steep slopes, shallow to bedrock soils and construction costs presents severe limitations to the improvement of the road.

The presence of the flood hazard area south of Church Hill Road will affect the feasibility and/or design of the proposed pocket park directly north of the Post Office and of the proposed parking lot west of the river and north of the Bassett Store block.

Plans for parking or other development in the Sandy Hook center should be coordinated with efforts to provide a walking or biking trail along this section of the Pootatuck River. Parking plans should also be coordinated with any subsurface sewage disposal systems which may be present or placed beneath the proposed parking area.

Improving access to the southern section of Rocky Glen State Park for passive recreation would enhance the use of this area.

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INTRODUCTION

Introduction

The Sandy Hook Organization for Prosperity (SHOP), with support from the First Selectman's Office, the Conservation Commission and the Planning and Zoning Commission, requested an environmental review be performed on the Sandy Hook community and the Pootatuck River corridor. The review area is located one mile east of the center of Newtown, west of the Housatonic River and just north of Interstate 84 (Figure 1).

The review area is approximately 175 acres in size, consisting of a strip approximately 2.5 miles long and one-quarter of a mile wide. It encompasses the natural and cultural resources of Sandy Hook and the Pootatuck River corridor. The Pootatuck River corridor is characterized by steep forested slopes on the northwestern side of the corridor. The majority of these steep slopes are located within Rocky Glen State Park, a 22 acre undeveloped park. Hemlock, black spruce, black oak, black birch, and sugar maple are the most common tree species in the park. Commercial, industrial, and residential development characterizes the eastern side of the river. Most of the development occurs on more moderate and suitable slopes.

Water quality classification of the Pootatuck River is presently Class B. Water quality, in general, is good with some sections of the river supporting a stocked trout population, and providing non-contact recreational opportunites.

Objectives of the ERT Study

SHOP, a group of local merchants and citizens, is presently in the process of revitalizing the commercial district of Sandy Hook. The river is key to the revitalization effort. Therefore, SHOP's goal is to "...enhance the economic, environmental and aesthetic viability of the Sandy Hook community by conserving and utilizing the natural and cultural features of the area..." Therefore, the ERT was specifically requested to: (1) inventory and assess the natural and historical resources in the Sandy Hook community and along the Pootatuck River; (2) assess existing water quality of the Pootatuck River, and review the impact of increased runoff and sewage disposal in the river; (3) evaluate existing and potential natural hazards such as flooding and how it influences existing or future land uses; and (4) provide planning guidelines to enhance the economic, environmental, and aesthetic viability of Sandy Hook.

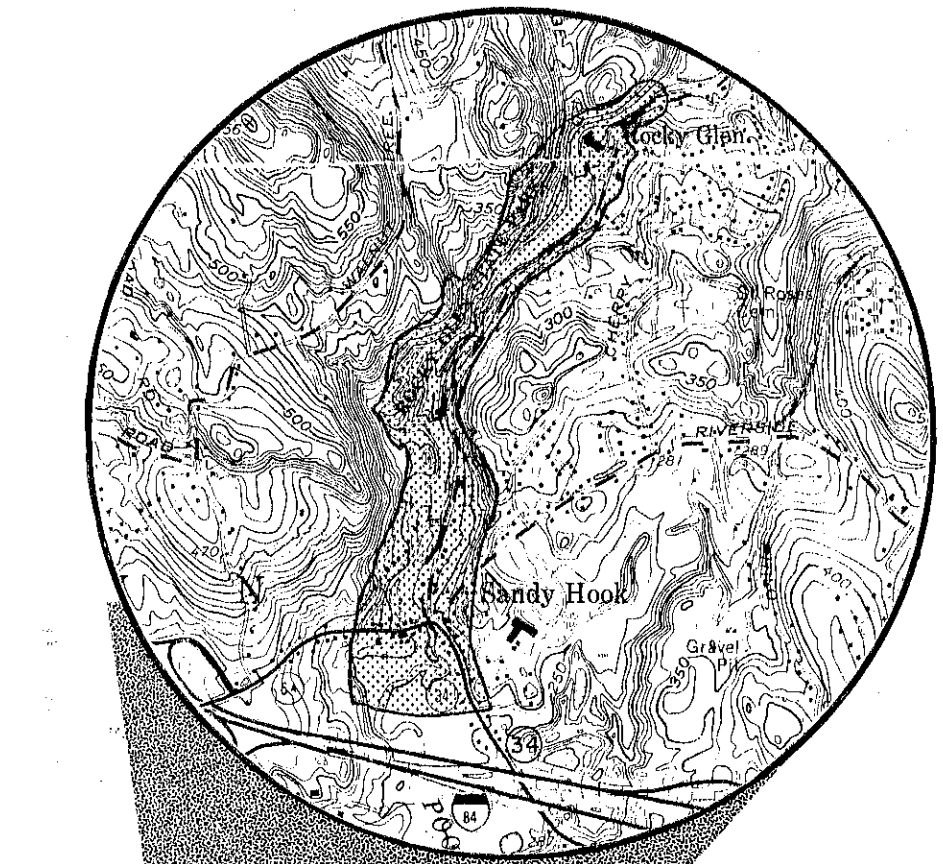
The ERT Process

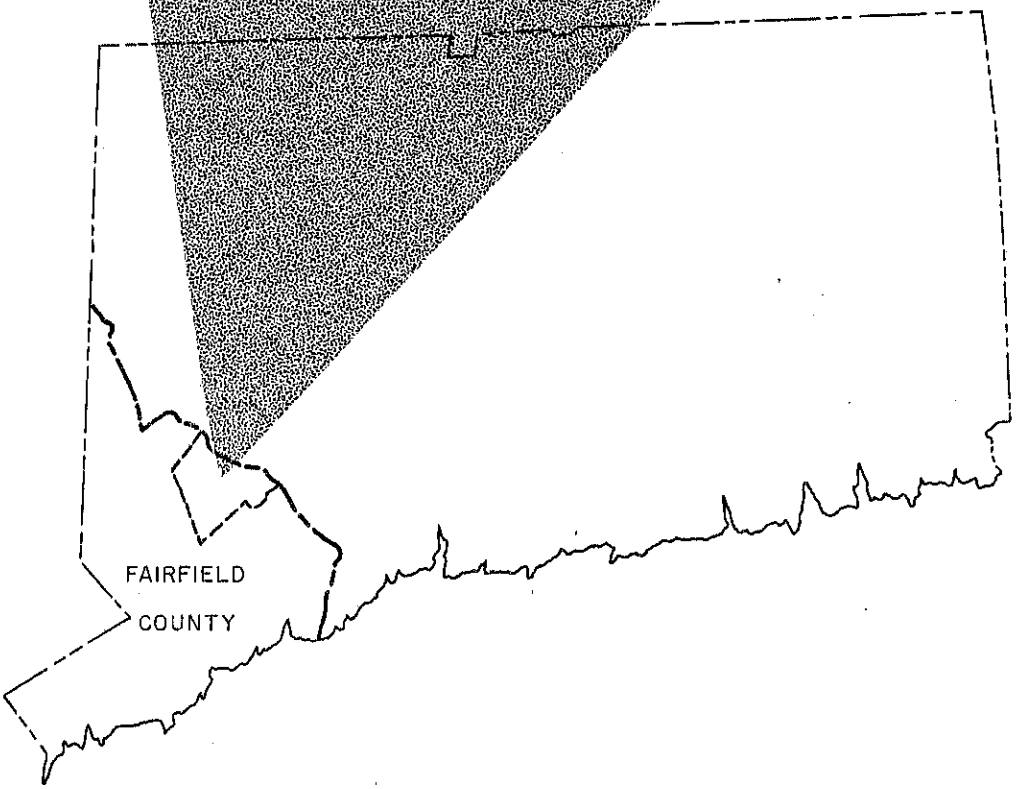
Through the efforts of the First Selectman's office, SHOP, the Conservation Commission, the Planning and Zoning Commission, and the King' Mark Environmental Review Team, this environmental review was conducted for the Town. This report does not present a "plan" for the Sandy Hook community. Rather, it provides an information base and series of guidelines which can be implemented to help conserve important natural and cultural resources, and plan for the revitalization of Sandy Hook.

The review process consisted of four phases: (1) inventory of Sandy Hook's natural and cultural resource base (collection of

Figure 1

LOCATION OF STUDY SITE



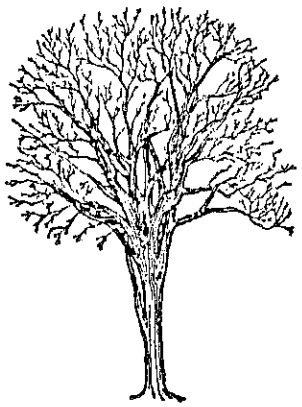


data); (2) assessment of these resources (analysis of data); (3) identification of natural and cultural resource capabilities; and (4) presentation of planning guidelines.

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

Once the Team members had assimilated an adequate data base, it was then necessary to analyze and interpret their findings. The results of this analysis enabled the Team members to arrive at an informed assessment of Sandy Hook's natural resource opportunities and limitations.

PHYSICAL CHARACTERISTICS



PHYSICAL CHARACTERISTICS OF SANDY HOOK AND THE POOTATUCK RIVER CORRIDOR

Topography and Setting

The study area is located along the east and west side of the Pootatuck River in the northern section of Newtown. The narrow strip of land, approximately 2.5 miles long and a quarter of a mile wide extends northward from Sandy Hook (just north of I-84) to Rocky Glen (about a quarter of a mile from where the Pootatuck River confluences the Housatonic River). The study area is densely developed in the Sandy Hook section, but is only slightly developed to the north.

Slopes within the study area range from relatively flat to precipitous (Figure 2). The flatter slopes are located south of Route 34 and comprise largely of flood plains on the Pootatuck River. North of Route 34, the land slopes gently to moderately towards the Pootatuck River. Especially in the southern areas, these slopes are influenced by relatively thick sediments (i.e., sand and gravel) that overlies the bedrock. Continuing northward, the slopes become very steep, and in some places precipitous on both sides of the river. These slopes are clearly dictated by bedrock, which outcrops at the surface forming steep ledges throughout this area.

The major topographic features within the study area are the Pootatuck River, and the rock ledges on the west side of the river in the central section of Rocky Glen State Park. As a result, these areas have a value in terms of passive recreational uses, such as hiking. Hiking trails could be created along the river or on top of the ledges. However, some of the precipitous cliffs associated with rock outcrop areas may prove hazardous for people using the trails.

Geology

The study area is located entirely within the Newtown topographic quadrangle. For the bedrock geology section of this report, the Team's geologist referenced John Rodgers Bedrock Geological Map of Connecticut (1985), and the bedrock geologic map (QR - 33, Rolfe S. Stanley et. al.) for the Newtown quadrangle. The latter was published by the U.S. Geological Survey. Both of these maps are available for purchase or review at the Department of Environmental Protection's (DEP) Natural Resources Center in Hartford.

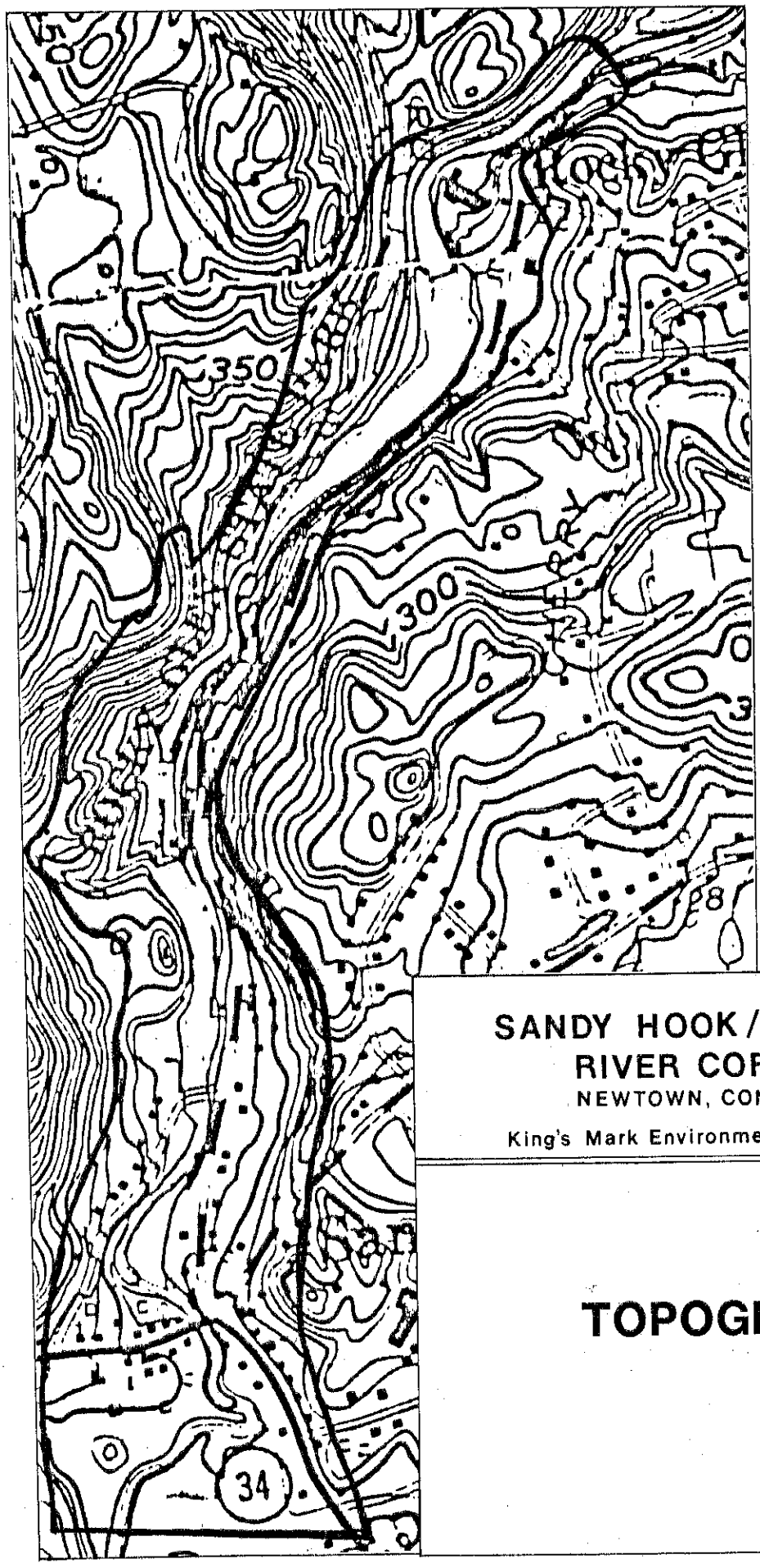
No surficial geologic map has been produced for the Newtown quadrangle to date. The Team's geologist referenced the Soil Survey of Fairfield County, and Water Resources Bulletin No. 19 (Lower Housatonic River Basin) for this section of the report.

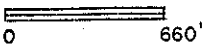
Bedrock Geology

Rodgers classifies the bedrock underlying the study area into two rock formations: (1) Bristol gneiss; and (2) Rowe schist (Figure 3). These rocks are very old ranging in age from 438 to 505 million years old (Ordivician Geologic Period). They have been geologically altered in composition, and folded and fractured over this long period of geologic time.

Stanley et. al. identifies a zone of fractured and altered rock along the Pootatuck River in the study area. Bristol gneiss underlies the southern part of the study area. It is described as a light, medium grained, massive to well-layered rock composed of the minerals plagioclase, quartz, and biotite. The rock unit also contains many layers of the minerals muscovite and garnet. It is

Figure 2





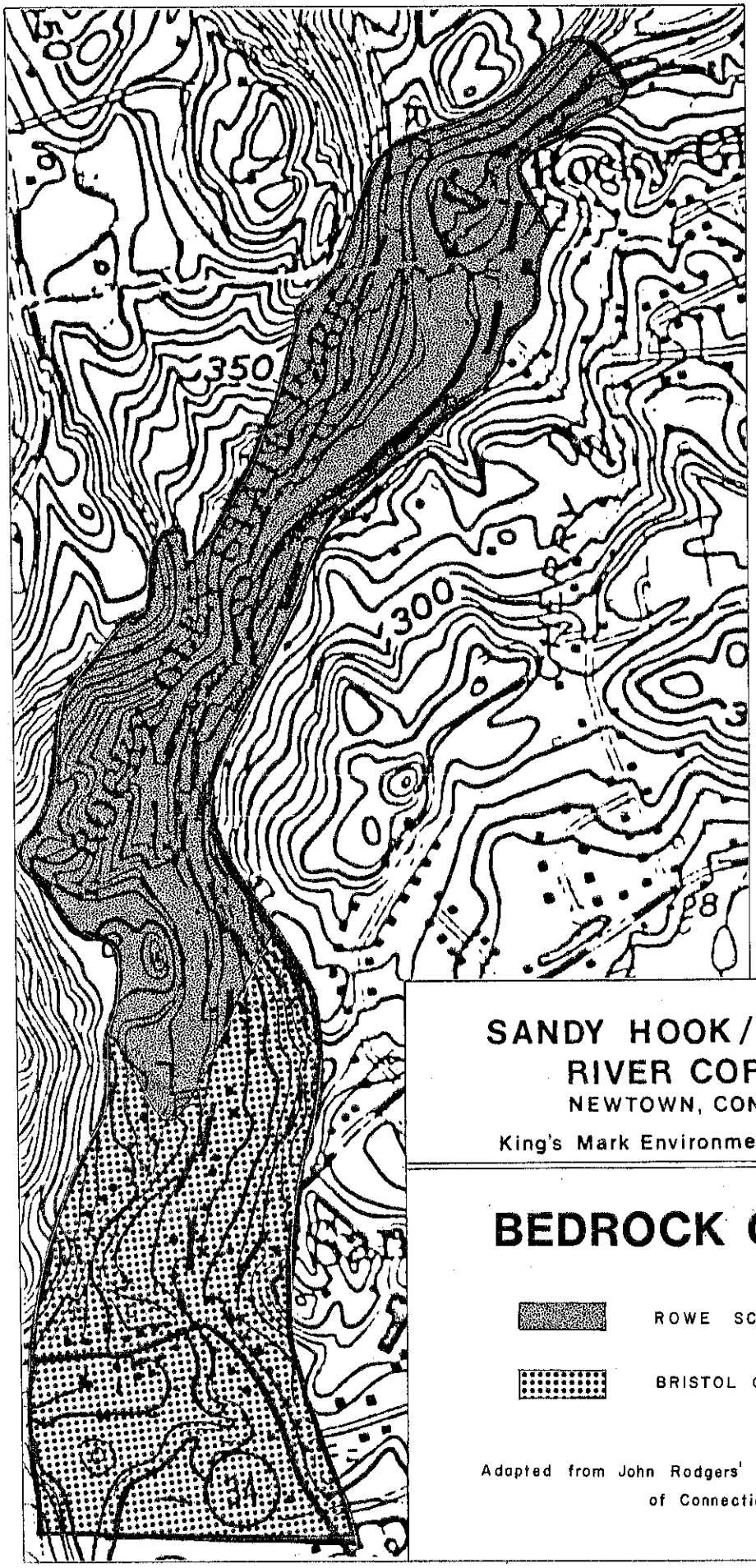
SANDY HOOK / POOTATUCK RIVER CORRIDOR

NEWTOWN, CONNECTICUT

King's Mark Environmental Review Team

TOPOGRAPHY

Figure 3



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BEDROCK GEOLOGY

ROWE SCHIST

BRISTOL GNEISS

Adapted from John Rodgers' 'Bedrock Geological Map of Connecticut

interlayered in places with dark amphibolite. The term "gneiss" refers to crystalline metamorphic rock having been altered by great heat and pressure within the earth's crust. Gneisses are distinquished by compositional banding of light and dark minerals. Typically, the light-colored minerals in the rock are quartz and feldspar, while biotite and amphibolite compose the darker minerals. The term "amphibolite" refers to dark-colored, metamorphic rocks in which the mineral amphibole and plagioclase are abundant, and generally contain little or no quartz.

Bedrock underlying the northern half of the study area is Rowe schist. The term "schist" refers to a crystalline, metamorphic rock identified by the layering in the rock. Schists are typically defined by a parallel alignment of platy, flaky or elongated minerals, such as biotite and muscovite. They are primarily composed of mica, quartz and feldspar, and occasionally spotted with garnets. Rodgers (1985) describes the rocks comprising Rowe schist as light gray to silvery, fine to medium grained, and generally poorly layered. The minerals making up the rock include quartz, muscovite, biotite, oligoclase, and generally garnet, staurolite, and kyanite or sillimanite. The rock may also contain layers of granofels, amphibolites, coticule, and calcsilicate rock.

Schists and gneisses are common rock types comprising upland areas in eastern and western Connecticut. Depth to bedrock in the study area ranges from zero where the rock breaks the ground surface to probably not more than 80 feet in the southern section of the study area. Interested persons should refer to the Bedrock Geology of the Newtown Quadrangle (QR-33, Stanley et. al.) for a more detailed

bedrock geological description of the study area.

According to Rock Hounds Guide to Connecticut (Ryerson, 1972) the study area includes an undocumented site of an old gold mine prospect. It is thought that the gold may have been "planted" to attract potential investors only to swindle them out of their investment. The supposed site is located on the west side of the Pootatuck River off of the abandoned Black Bridge Road.

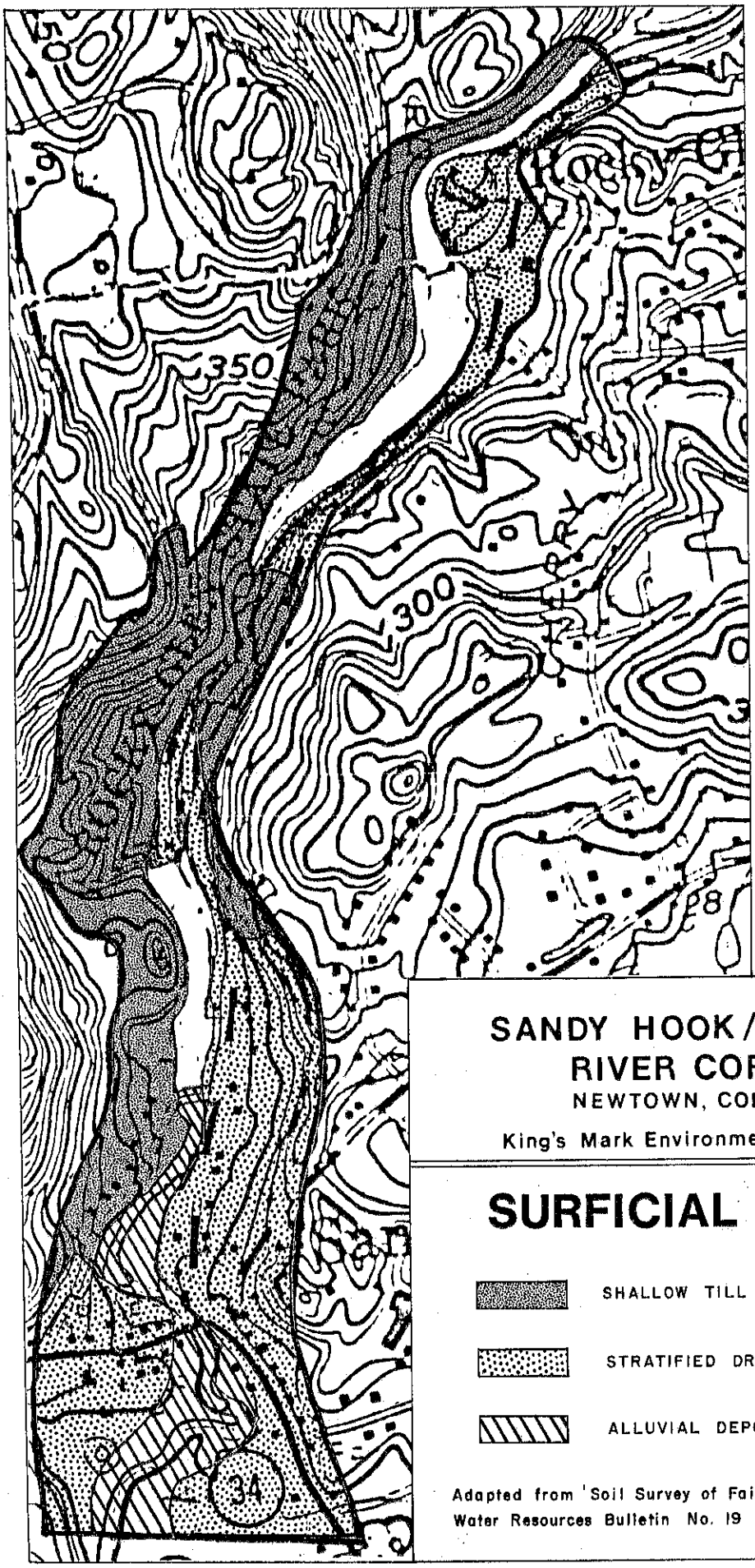
Close examination of rock outcrops may yield minerals such as quartz, garnet, staurolite, pyrite, galena, and calcite. It should also be pointed out that an attempt was made to mine coal in approximately the same area. The quality of the mined mineral, however, proved unsatisfactory because it contained only 10 percent carbon.

Surficial Geology

Surficial geologic materials consist of those unconsolidated rock particles and fragments, or other debris that overlie bedrock. The three major surficial geologic deposits in the study area include: (1) till; (2) stratified drift; and (3) alluvium (Figure 4). Till is the surficial geologic material covering the upland sections of the study area. It consists of rock particles and fragments that were accumulated by a moving sheet of glacier ice and later redeposited directly by the ice. These materials are non-sorted and consist generally of particles ranging in size from clay to boulders. Based on available soil mapping, the till within the study area appears to be generally shallow and is sandy, loose, and stony.

The other type of glacial sediment deposited in the Pootatuck

Figure 4



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SANDY HOOK / POOTATUCK RIVER CORRIDOR

NEWTOWN, CONNECTICUT

King's Mark Environmental Review Team

SURFICIAL GEOLOGY

- SHALLOW TILL DEPOSITS
- STRATIFIED DRIFT (SAND AND GRAVEL)
- ALLUVIAL DEPOSITS

Adapted from 'Soil Survey of Fairfield County, Connecticut' and Water Resources Bulletin No. 19 (Lower Housatonic River Basin)

River Valley is stratified drift. These deposits consist of poorly to well sorted sands and gravels deposited by glacial melt water streams. Generally speaking, the soils along the river delineated as Haven (HcB), Hinkley (HkD), Agawam (AfB), and Hinkley (HkC) are the areas covered by stratified drift deposits. Thicknesses of these deposits range from a few inches at the till-bedrock contact point to perhaps as much as 80 feet (see Figure 7).

In the southern limits of the study area, stratified drift deposits astride the Pootatuck River are post glacial sediments called "alluvium." "Alluvial" deposits consist of Rippowan (Ro) (i.e., fine sandy loam) and Saco (Sb) (i.e., silt loam) soils. These soils consist of sand, silt, and gravel mixed with organic material. These deposits occur as a thin cover on the Pootatuck River Valley floor. These soils are regulated by Public Act 155 (Inland Wetlands and Water Courses Regulations). Because water is at or near ground surface throughout most of the year and these areas are inundated by flood waters during severe storms, these areas in general hold very little potential for development.

Geologic Development Concerns

Town officials indicated that the existing commercial, industrial and residential uses in the study area are served by individual on-site septic systems and water supply wells. At the present time there are no public sewer or water lines in the study area.

Development in the study area is most dense in the center of Sandy Hook. Due to steep, rocky slopes, generally shallow soils in the central and northern sections, and alluvium soils in the

southern sections of the study area, it seems likely that future development might occur only at a very low density, particularly since on-site septic systems would be required to serve any new development. Even with the availability of a public sewer line, the geologic limitations would probably severely limit the development potential of remaining undeveloped land in the study area.

Based on soils mapping it appears that there may be isolated tracts in the study area where deep pockets of soils might be encountered. It seems likely that if these areas were to be developed, carefully planned and engineered septic systems would be required. The volume of sewage or wastewater to be discharged into the ground over a given area of land would also need to be limited (i.e., no laundromats, restaurants, or other generators of substantial flows).

Town officials (i.e., sanitarian) commented that there may be malfunctioning septic systems in the Sandy Hook proper whereby partially treated to non-treated effluent may be reaching or discharging into the Pootatuck River. In addition, there may also be discharges piped to the river without any treatment. Partially or untreated discharges of effluent ultimately reaching surface waters severely threatens water quality by introducing contaminants or disease-producing organisms, viruses, nitrates into the river. These contaminants are associated with the untreated effluent. More importantly, it presents a public health hazard, and threatens fish and wildlife dependent on high water quality. As a result, any sewage discharge to the Pootatuck River is of utmost concern demanding immediate attention and correction. In this regard,

consideration should be given to conducting a thorough sanitary survey of homes, businesses and industries in the Sandy Hook area. It is suggested that this survey visually inspect all septic systems in the study area. The survey might also include dye testing establishments in order to determine whether or not there are any direct sewage discharges into the Pootatuck River.

Another source of pollution potentially impacting the environmental health of the Pootatuck River is erosion and siltation. The greatest amount of sediment in the study area is probably generated by roads such as: (1) sand from paved roads and driveways; and (2) erosion of the gravel packed driveways and parking areas. Erosion control practices should be implemented to correct any known problem areas and to prevent future problems due to new construction. For example, the construction of a sediment detention basin may be a likely resolution to control unwanted sediment from reaching the river. Also, every effort should be made by the Town to sweep streets along the river and clean catch basins of sediment after the winter months. Methods for controlling erosion and sedimentation are described in detail in the Guidelines for Soil Erosion and Sediment Control for Connecticut (1985).

In July of 1970, the U.S. Geological Survey, in cooperation with the Town of Newtown, prepared a publication called Computer Modeling of Groundwater Availability in the Pootatuck River Valley, Newtown, Connecticut (Water Resources Investigations 78-77). A section of this report focuses on the surface water quality of the Pootatuck River.

According to the study, several samples were collected from the

river and one of its tributaries (i.e., Deep Brook to the south). According to this report, "...All surface water samples collected met the requirements for untreated sources of drinking water set by the Connecticut Department of Health (Connecticut General Assembly, 1975) except for total coliform bacteria." A probable cause for the elevated bacterial levels are from malfunctioning septic systems whose untreated effluent is reaching the Pootatuck River or effluent and other pollutants directly discharging into the river.

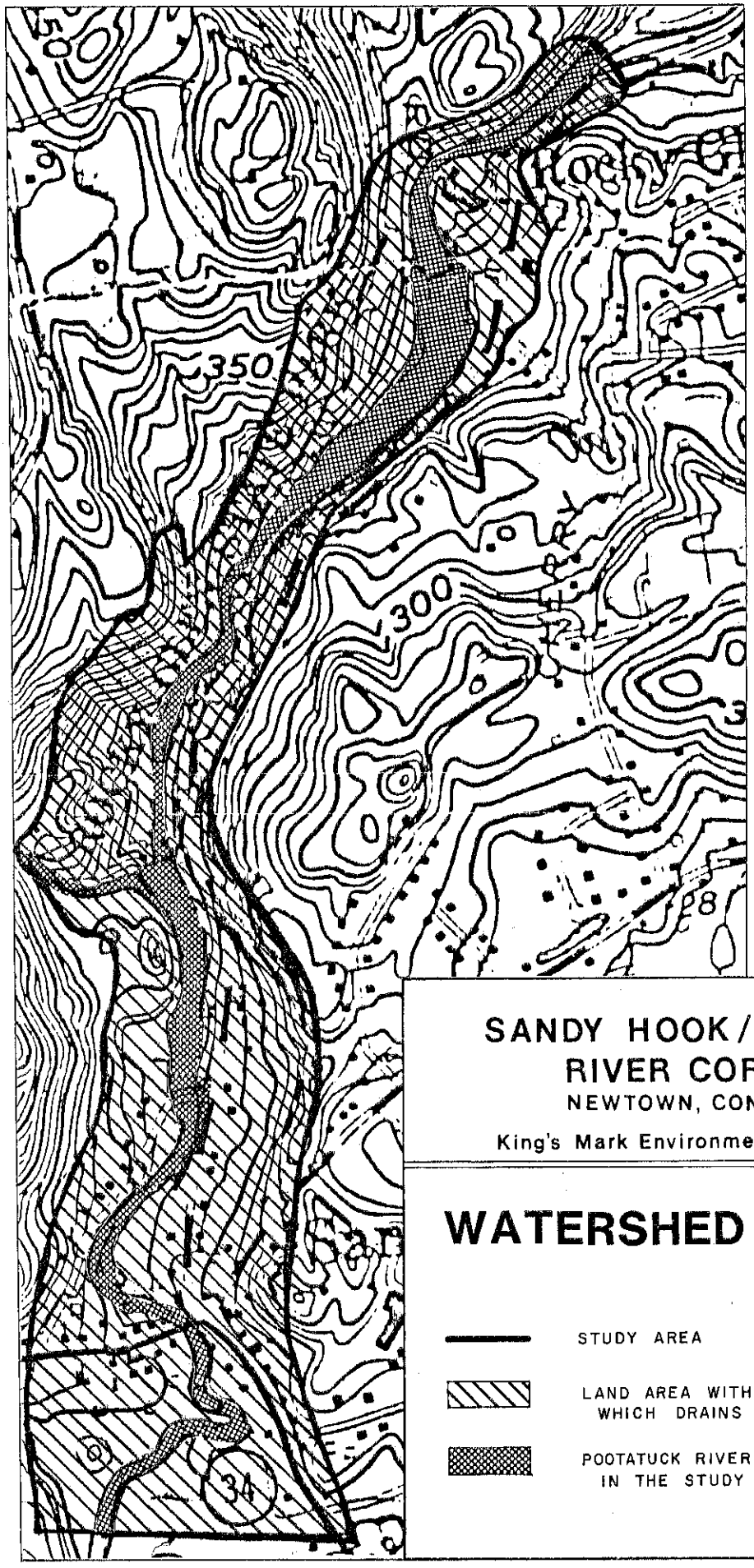
Hydrology

The study area is located entirely within the Pootatuck River watershed (Figure 5). The Pootatuck River originates in the towns of Easton and Monroe to the south. It flows northward through Newtown enroute to the Housatonic River. The size of the Pootatuck River watershed comprises approximately 26.1 square miles or 16,704 acres. The annual outflow for the river is estimated to be 43.7 cubic feet per second or 28.2 million gallons per day.

Surface runoff and groundwater in the study area flows downslope toward the river.

Precipitation resulting in surface runoff flows across the surface of the land until it reaches a brook or other body of water. Precipitation may also be absorbed into the ground, especially in the areas covered by permeable sands and gravels. Once it is absorbed, these waters may either be returned to the atmosphere through evaporation and plant transpiration, or percolate downward to the groundwater table. Once water reaches the groundwater table, it moves slowly downslope by the force of gravity, ultimately

Figure 5



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NEWTOWN, CONNECTICUT

King's Mark Environmental Review Team

WATERSHED BOUNDARY

STUDY AREA

LAND AREA WITHIN THE STUDY AREA WHICH DRAINS TO THE POOTATUCK RIVER

POOTATUCK RIVER AND MAJOR TRIBUTARY IN THE STUDY AREA

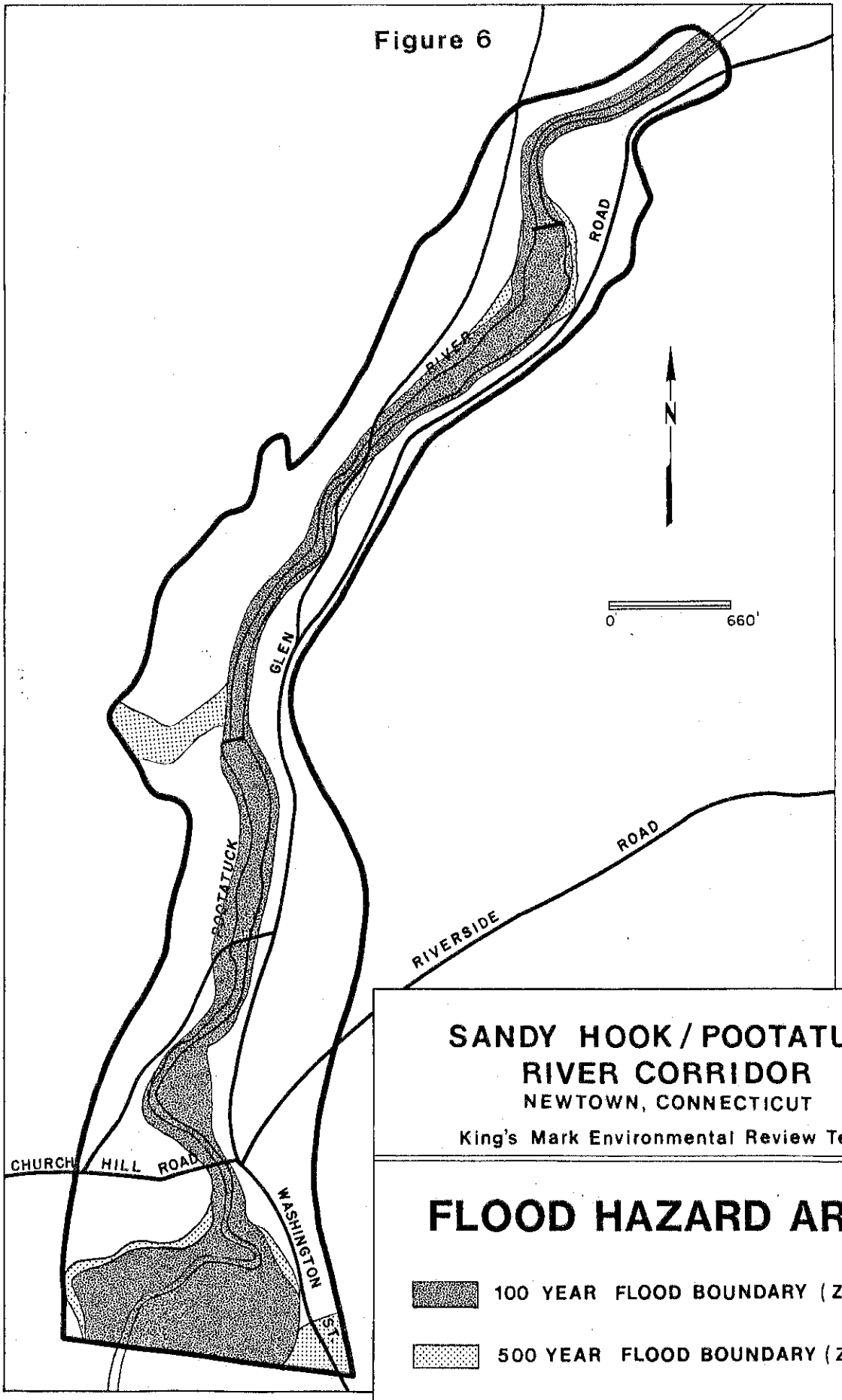
discharging to the surface in the form of a spring, wetland, stream, or directly into the river. Generally speaking, groundwater flow in the watershed parallels the surface flow pattern. It is largely controlled by the underlying bedrock in the upland sections of the study area.

Floodprone Areas

A flood insurance rate map for the Town of Newtown has been published by the Federal Emergency Management Agency, Federal Insurance Administration. Based on the flood insurance map, a narrow area paralleling the entire length of Pootatuck River in the study area lies within the 100 year flood boundary. The "100 year" flood boundary (designated as A-5) is relatively narrow in Sandy Hook, except south of Main Street where it fans out and includes a larger flat area. A 100 year flood is a flood with a one chance in 100, or one percent chance of occurring in any given year. It should be pointed out that this does not mean a flood of this magnitude will occur only once in a 100 year period. The probability of occurrence remains the same each year regardless of what happened the year before.

The "500 year" flood boundary has a two percent chance of occurring in a given year. It parallels the 100 year flood boundary in the south (i.e., south of Main Street) and in isolated areas in the northern reaches of the watershed. There may also be swamps, inland wetlands, and drainage channels subject to wetness, and perhaps some flooding during periods of heavy rain (Figure 6).

Figure 6



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FLOOD HAZARD AREAS

100 YEAR FLOOD BOUNDARY (Zone A-5)

500 YEAR FLOOD BOUNDARY (Zone B)

Adapted from Flood Insurance Rate Maps for Newtown, Connecticut

SOIL RESOURCES AND CHARACTERISTICS

Introduction

The soil map of the study area was taken from the Soil Survey of Fairfield County, Connecticut. The symbols on the map identify map units. Each map unit has a unique combination of soils. Areas with the same symbol have the same composition.

Further development is not anticipated within the study area. For this reason, descriptions of the various soils and map units are not included in this report. The descriptions can be looked up in the county soil survey report should the need arise.

Major Soil Units

The northern part of the study area is characterized by very steep soils and exposures of rock outcrop adjacent to the Pootatuck River (i.e., map units CrE, HrE and Rp) (Figure 7). The soils are underlain by consolidated bedrock at depths ranging from 10 inches to greater than 60 inches. Slopes greater than 35 percent dominate this area. These steep slopes preclude making hiking trails along this part of the river. Trails constructed here would have precipitous slopes down to the river and would be a serious liability to the town.

The southern part of the study area generally has slopes of less than 15 percent adjacent to the river (i.e., map units HkC, Sb, Sc, Ro) (see Figure 7). The soils here are very deep and composed of stratified, water-deposited materials.

Areas delineated Sb, Sc and Ro are poorly or very poorly drained

and have a high water table within 1.5 feet of the soil surface. These soils frequently are flooded by the Pootatuck River, and are inland wetlands. The development of trails or picnic areas on the Sb, Sc or Ro soil map units may be damaged by flooding. In addition, heavy foot traffic along these trails may create muddy conditions during a significant part of the year due to the seasonal high water table (see Figure 7).

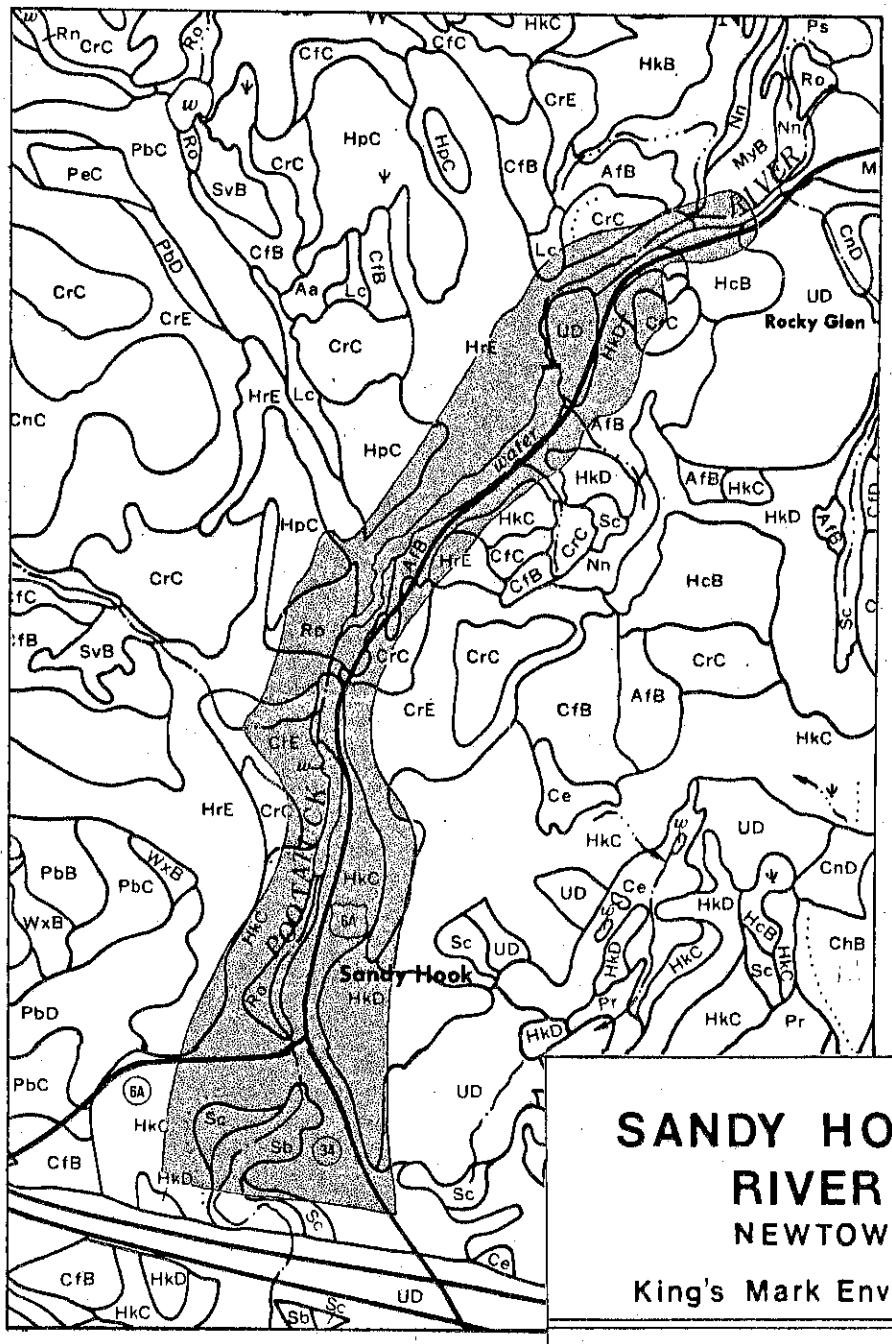
Areas labelled HkC are well drained and do not flood under present climatic conditions. This map unit is well suited to both trails and picnic areas (see Figure 7).

There is some stream bank erosion along the Pootatuck River in the southern part of the study area. This erosion problem would be extremely costly to correct and would involve the U. S. Army Corps of Engineers straightening this section of the river.

There was some concern about enlarging the parking lot west of the Pootatuck River and behind the Bassett Store block on Church Hill Road. The soils at this location are deep and well drained. They formed in alluvial sediments, and are stratified with fine sandy loam and silt loam materials. These soils are high enough on the landscape so they will not be flooded by the Pootatuck River. These soils extend approximately 300 feet south of the edge of the present parking area.

A location near the end of Dayton Road has a small area of poorly and very poorly drained soils. This area was too small to delineate on the map, but is identified by the special symbol (Ψ). Soils at this location have a high water table within 20 inches of the soil surface.

Figure 7



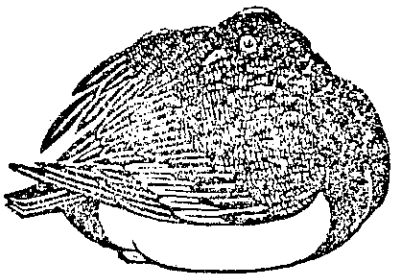
SANDY HOOK / POOTATUCK RIVER CORRIDOR

NEWTOWN, CONNECTICUT

King's Mark Environmental Review Team

SOILS

BIOLOGICAL RESOURCES



BIOLOGICAL CHARACTERISTICS OF SANDY HOOK AND THE POOTATUCK RIVER CORRIDOR

FORESTRY AND VEGETATIVE CHARACTERISTICS

Introduction

For the purposes of this report, the forested portion of the study area may be divided into four types of vegetation. For the most part, the boundaries of these types grade into one another, causing wide transition zones where tree species dominant in one type are present in another. These conditions cause difficulty in mapping. In other areas, transition zones are almost non-existent and mapping is greatly simplified. The four major vegetative types are discussed below.

Forest Cover Types

Mixed Hardwoods/Streambelt (Type 1)

This 10 acre lowlying area, located along the Pootatuck River south of Sandy Hook center, has great vegetative diversity. Sawtimber-sized red maple, sugar maple, and red oak are scattered throughout this area. It is dominated by pole-sized red maple, sugar maple, silver maple, aspen, and elm. The quality of the trees and the density of the population is extremely variable. The understory vegetation consists of hardwood tree seedlings, blue beech, spicebush, multiflora rose, barberry, raspberry, and blackberry (Figure 8).

Old Fields (Type 2)

Several different stages of old fields in the process of succession from open fields to young mixed hardwood stands are present in the study area. These old fields total 10 acres and are distinguished by varying red cedar, juniper, quaking aspen, gray birch, black cherry, sassafras, blue beech, red maple, and red oak. The shrub and woody species present in this forest type include highbush blueberry, gray-stemmed dogwood, barberry, multiflora rose, sweet fern, raspberry, and blackberry.

The eastern edge of the southern most portion of this type is bordered by sawtimber-sized Norway spruce (see Figure 8).

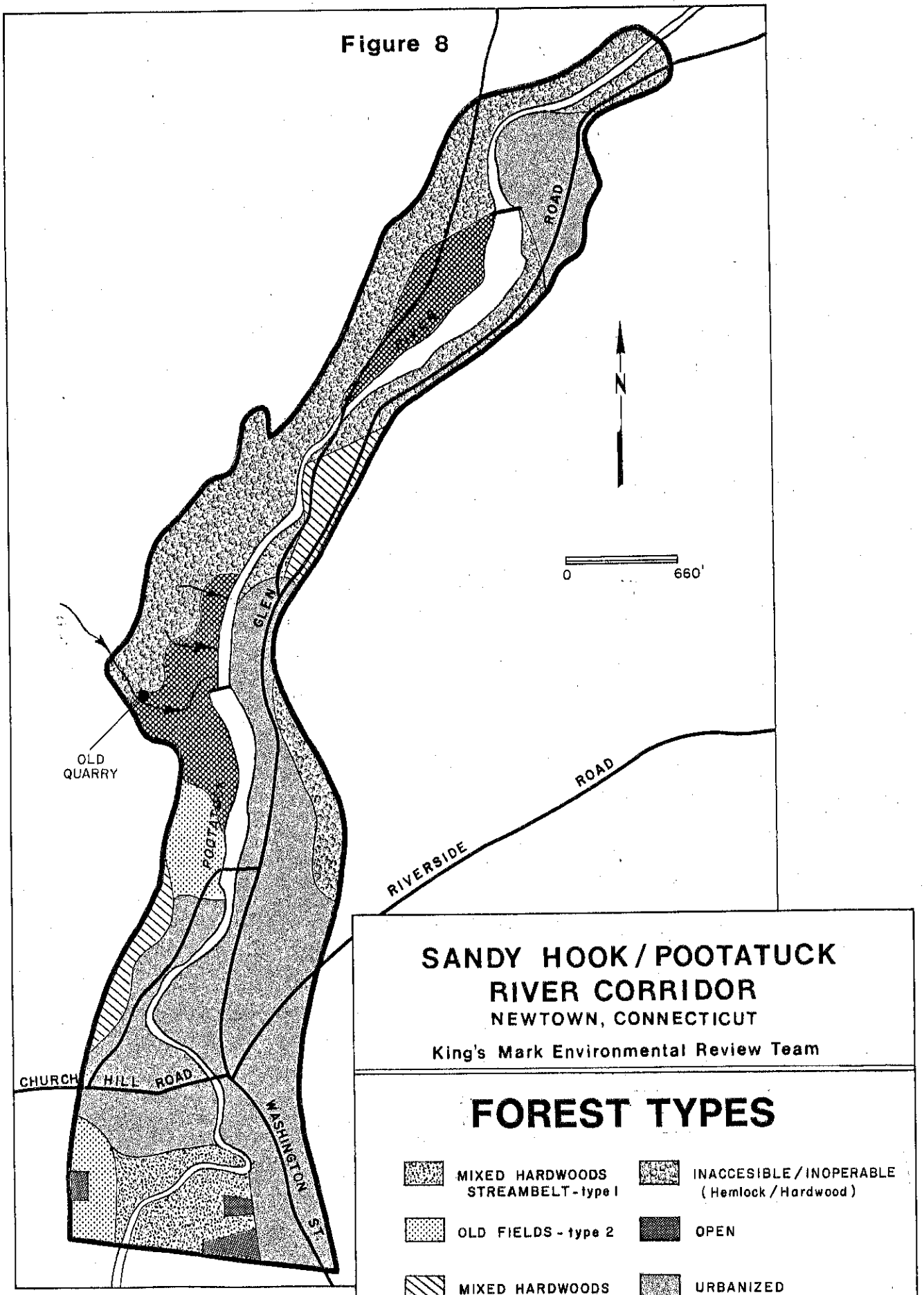
Mixed Hardwoods (Type 3)

Healthy sapling to pole-sized sugar maple, yellow birch, red oak, hickory, American beech, black birch, red maple, and white ash are present in this five acre area. Occasional sawtimber-sized red oak, white oak, sugar maple, and tulip tree are scattered throughout, but not in great numbers. The understory vegetation includes hardwood tree seedlings, shadbush, blue beech, flowering dogwood, hophornbeam, maple-leaved viburnum, multiflora rose, barberry, and red cedar (see Figure 8).

Hemlock/Hardwoods (Type 4)

Eastern hemlock is the dominant tree species present in this vegetative type. It covers a total of 75 acres. However, only 20 of these acres are accessible for forest management activity at the present time. Along with the sawtimber-sized hemlock are scattered

Figure 8



SANDY HOOK / POOTATUCK RIVER CORRIDOR

NEWTOWN, CONNECTICUT

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FOREST TYPES

- MIXED HARDWOODS STREAMBELT - type 1
- OLD FIELDS - type 2
- MIXED HARDWOODS type 3
- HEMLOCK / HARD-WOOD - type 4
- INACCESIBLE / INOPERABLE (Hemlock / Hardwood)
- OPEN
- URBANIZED
- WATER
- STREAM
- RIVER
- POND / DAM

sugar maple, white oak, black oak, red maple, black cherry, basswood, American beech, black birch, and yellow birch of similar size. Due to a dense overstory, the understory is sparse in most areas. Hemlock seedlings, lowbush blueberry, huckleberry, black birch seedlings, and occasional mountain laurel are the most abundant species in the understory (see Figure 8).

Of the total of 75 acres this type occupies, some 55 acres are inaccessible due to excessively steep slopes. Because of this, logging activity does not appear to have been a part of the history of this area.

Discussion

Of possible historical significance is a small quarry area encountered during inspection of the forested area. From the age of the trees in and around the quarry, it was determined the quarry was abandoned shortly after the turn of the century. It appears the quarry may have been the source of stone for the original dam at the adjacent old mill currently undergoing renovation. As the old roadbeds leading to the quarry come not only from the damsite, but from the village of Sandy Hook, it may be that the stone was used for milldams or bridge abutments in Sandy Hook center as well.

Finally, there is an historical record of the endangered plant Equisetum pratense or meadow horsetail occurring in the study area. It prefers rocky, hemlock, and ravine habitats. It is on DEP's non-regulatory category.

WILDLIFE RESOURCES OF THE SANDY HOOK/POOTATUCK RIVER CORRIDOR

Introduction

The Sandy Hook/Pootatuck River corridor is characterized by a number of diverse wildlife habitats including mixed hardwoods, streambank, open fields, hemlock, flood plain, and man-made or suburban habitat.

Despite encroachment and development of wildlife habitat, Connecticut supports a large variety of wildlife species. In fact, the varied terrain of thickets, woodland, abandoned fields, and wetlands existing in the state provide critical habitat for a large number of wildlife species. For example, white-tailed deer, regarded by many as an animal of the deep woods, are far more common in habitats mentioned above, than in the heavily forested areas (Jorgensen, 1978). Other wildlife species such as gray squirrel, raccoon, chipmunk, and numerous bird species have adapted to suburbanization, and are commonly found within built-up areas such as Sandy Hook.

The following is a general discussion on the most common wildlife species that may be encountered and observed in the Sandy Hook/Pootatuck River corridor.

Mammals

Gray Squirrel

The gray squirrel is the most familiar of all mammals native to Connecticut. It has adapted well to civilization, since man's terrestrial habits and the squirrel's arboreal habits do not conflict

to any great degree (Jorgensen, 1978). Around developed areas, such as Sandy Hook, gray squirrels easily become accustomed to people.

Old hardwood forests, consisting of a variety of oaks and maples are the preferred habitat for gray squirrels. Thus, the mixed hardwood/streambelt and mixed hardwood forest communities in the study area are ideal habitats for gray squirrels (Figure 9).

Gray squirrels either den in hollow trees or build aerial nests in tree branches. In both cases, they prefer a high site. Their nests, built of twigs and leaves are well constructed, and may last for years. After they are abandoned by the squirrels, other mammals or birds may occupy them. Finally, it eats a variety of hard fruit such as acorns, hickory nuts, beechnuts along with berries and mushrooms (Jorgensen, 1978).

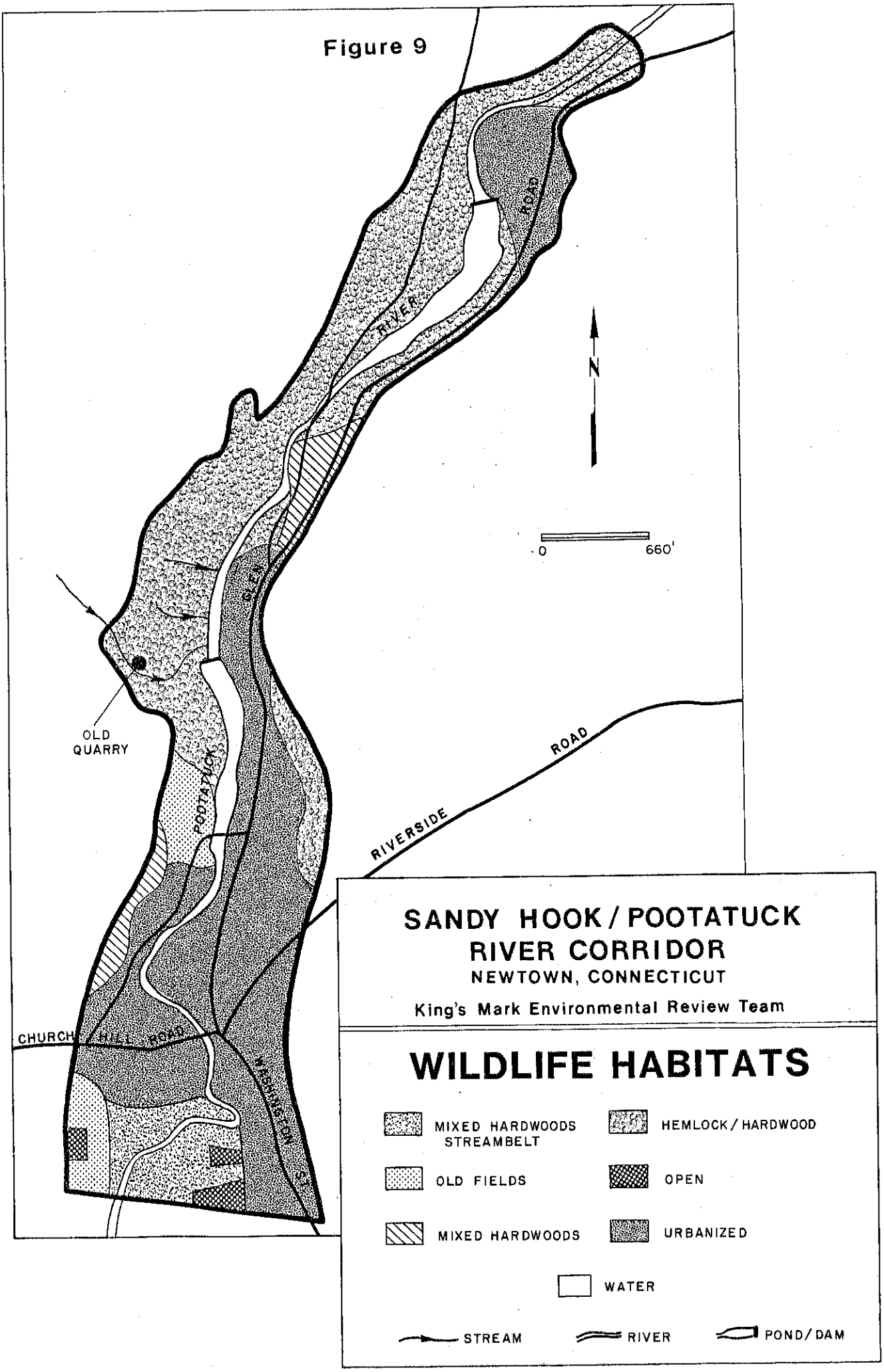
Red Squirrel

The red squirrel is the other diurnal tree squirrel one would encounter in Sandy Hook, especially in Rocky Glen State Park. It is about half the size of the gray squirrel, and it's coat is rusty, reddish-brown in summer, turning slightly grayer in the winter. Its underside is white.

The red squirrel prefers a mixed hardwood-conifer forest type such as the hemlock-hardwood forest community located in Rocky Glen State Park (see Figure 9).

In the deciduous forest, the red squirrel will den in hollow tree trunks and cavities. However, in coniferous forests, where hollow trees are rare, it builds spherical nests of twigs and grass. Finally, it's diet consists primarily of nuts, fruits, berries, and

Figure 9


ROAD
RIVER
N
0
660'
OLD
QUARRY
POOTATUCK
ROAD
RIVERSIDE
CHURCH HILL ROAD
WASHINGTON ST.
SANDY HOOK / POOTATUCK
RIVER CORRIDOR
NEWTOWN, CONNECTICUT
King's Mark Environmental Review Team
WILDLIFE HABITATS
MIXED HARDWOODS
STREAMBELT
HEMLOCK / HARDWOOD
OLD FIELDS
OPEN
MIXED HARDWOODS
URBANIZED
WATER
STREAM
RIVER
POND / DAM

seeds (Jorgensen, 1978).

Southern Flying Squirrel

Though this species is one of the most abundant squirrels in the state, its nocturnal habits and secretive behavior prevents it from being readily seen.

These squirrels are highly sociable and feed in groups. They prefer a mature hardwood forest type, such as the mixed hardwood type in the study area (see Figure 9).

Flying squirrels use tree cavities to nest. Their diet consists of nuts, seeds, berries, blossoms, and mushrooms. They also prey on moths, beetles, and small birds and their eggs (Jorgensen, 1978).

Eastern Chipmunk

At home in all types of habitats except marsh and open fields, the chipmunk seems to prefer the forest edge, stone walls, field edges, and hedgerows.

Stone walls play an important role in the chipmunk's habitat. They use stone walls to move from one area to another as well as to escape predators.

Food of the chipmunk consists primarily of the fruits or seeds of dogwood, blueberry, blackberry, Canada mayflower, acorns, and wild cherry. It's diet also includes insects and young birds.

Porcupine

The porcupine, a nocturnal species, prefers coniferous forest habitat consisting of hemlock or white pine interspersed with some

hardwood species. Thus, the 75 acre hemlock/hardwood habitat in Rocky Glen State Park is good wildlife habitat for the porcupine. Their winter diet consists mainly of the inner bark of various tree species. Porcupines consume twigs, buds, and leaves during the rest of the year.

Raccoon

Raccoons are common throughout Connecticut and have adapted well to man-made changes in their habitat. They often live in close proximity to developed areas. Though they inhabit a wide range of habitats, raccoons prefer mature woodlands along rivers, streams, ponds, and marshes. Thus, the mixed hardwoods/streambank habitat is ideal for raccoons. Sandy Hook in general provides adequate habitat for raccoons.

Opossum

The opossum is the only marsupial found in Connecticut. Mostly nocturnal, opossum inhabits woodland areas along streams, ponds, lakes, or marshes. Farmland and small woodlots are preferred over extensively forested areas. They are also common in built-up suburban areas, such as Sandy Hook.

The opossum is both a scavanger and an omnivore, feeding mostly at night. Its diet consists mainly of insects, reptiles, amphibians, birds and their eggs, and fruit and berries. They are very beneficial to society by feeding on many types of nuisance insects and small mammals.

Eastern Striped Skunk

The eastern striped skunk is one of the more common mammals found in Connecticut. Though well-adapted to suburbanized areas, its preferred habitat is open woodland, old fields or meadows.

It is a sedentary animal that feeds on insects, grubs, carrion, and household refuse.

Other Mammals

Finally, two larger wildlife species may inhabit the Sandy Hook/ Pootatuck River corridor. They are: white-tailed deer and red fox.

Deer are not abundant in the mature forest. They prefer field and forest edges, and frequent patches of woodland where there is an understory of herbaceous vegetation. Thus, the old fields and mixed hardwood forest cover types may provide important habitat for deer in the study area.

The red fox, being extremely adaptable, including the ability to live in proximity to developed areas, inhabits a wide variety of habitats including open woodland, forests, and fields such as the habitats found in the study area.

Birds

Since the Sandy Hook/Pootatuck River Corridor has a diverse number of wildlife habitats, it is difficult to fully evaluate existing bird populations in the study area. Therefore, only a general description of bird species by habitat type is discussed.

Mixed Hardwoods/Streambelt

This forest type offers unique wildlife habitat for a variety of bird species. The more common ones are: red-tailed, red-shouldered and broad-winged hawks, American kestrel, barn, screech and great horned owls, numerous species of woodpeckers, flycatchers, swallows, wrens, chicadees, nuthatches and titmice, various wood warblers, finches, blue jays, kingfishes, and others.

Old Fields

Old field wildlife habitat consists of open areas with various hardwood, coniferous, and herbaceous plant species scattered throughout. A wide diversity of bird species frequenting this area may include: numerous species of hawks, American kestrel, screech, barn and short-eared owls, whippoorwill, nighthawks, common flicker, flycatchers, swallows, common crow, wrens, mockingbirds and thrashers, thrushes and bluebirds, woodpeckers, pheasants, and numerous species of blackbirds and finches.

Mixed Hardwoods

This type of wildlife habitat is very limited in Sandy Hook. It does, however, provide habitat for a number of birds. They are: numerous species of hawks and owls, woodpeckers, chickadees, titmice and nuthatches, wood warblers, and others.

Hemlock/Hardwood

This wildlife habitat type is the most extensive in the study area, but it provides habitat to only a few bird species. The

dominant tree species is the eastern hemlock. Many hardwood species such as sugar maple, white oak, black oak, beech, and birch are interspersed throughout this area. Bird species utilizing or frequenting such habitat include northern goshawk, Cooper's hawk, chickadees, titmice and nuthatches, and others.

Reptiles and Amphibians

Reptiles and amphibians have been grouped together into the study of herpetology. Both are cold-blooded; that is, their blood is not necessarily cold, but that their body temperature varies with that of the surrounding atmosphere. Body temperature is not maintained internally at a constant level like mammals and birds.

Amphibians are more primitive than reptiles. While some species are better adapted to terrestrial life than others, none have been able to forsake the water entirely. Most amphibians return to water to breed, and require a cool, moist environment to survive.

There are two orders of amphibians: salamanders and frogs. Salamanders frequenting the study area, but seldom seen include spotted salamanders, red-backed salamanders, and newts. These species require cool moist habitat such as mixed hardwoods/streambelt habitat located in the southern section of the study area.

Frogs and toads utilizing the study area may include the American toad, woodland toad, spring peeper, green frog, bullfrog, northern leopard frog, and wood frog.

Finally, the reptiles are far more suited to a terrestrial environment than are the amphibians. Common reptiles inhabiting the study area may include: snapping turtle, eastern box turtle, spotted turtle, painted turtle, and various species of snakes.

FISHERY RESOURCES OF THE POOTATUCK RIVER CORRIDOR

Fish Habitat

The Sandy Hook corridor contains approximately 2.5 miles of the Pootatuck River beginning at Interstate 84 downstream to its confluence with the Housatonic River at Lake Lillonanah. The upper stretch of this section (Section 1), from Interstate 84 to a few hundred yards below Church Hill Road, Sandy Hook can be considered suitable trout habitat throughout (Figure 10). Most of this area of the river consists of short, shallow riffles, and long, deep pools. The substrate appears to consist of gravel and cobble, with undercut banks, downed trees, and snags providing a moderate amount of "holding" area for trout. The DEP has been stocking trout, predominately brown trout throughout this entire stretch, and public access is very good. Other fish species that would likely inhabit this area are brook trout, white suckers, fallfish, longnose dace, blacknose dace, common shiner, and tesselated darters .

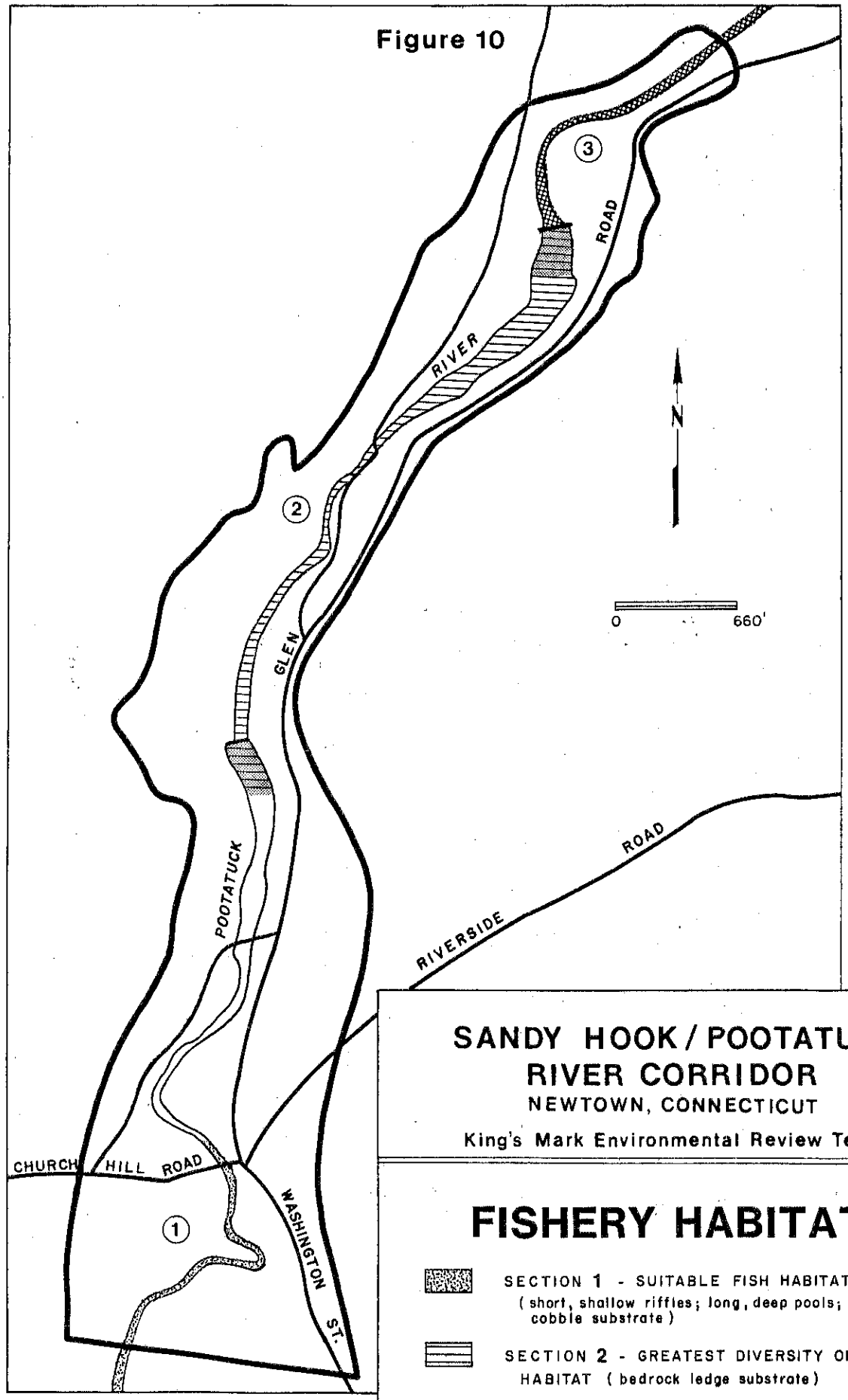
The middle section of the Sandy Hook/Pootatuck River Corridor is located along Glen Road from several hundred yards in back of the first dam to the second dam at the old Fabric Fire Hose Building (Section 2). This section has the greatest diversity of aquatic habitats occuring within the study area (see Figure 10). The area immediately behind both dams appear to be unsuitable for trout due to their shallowness, from sedimentation and siltation, and substrate (sand and silt). However, the dams may be beneficial in keeping stocked trout from moving downstream and out of the aforementioned area. Some possible disadvantages of these two dams are: (1) they

impede access to fish attempting to move upstream from Lake Lillonanah; and (2) they may possibly have an overall warming effect on the river. Advantages of these structures are that they provide diversity of habitat in the stream and help to oxygenate the water as it falls over the dams. Some deep pool areas, both above and below the dams, may serve as thermal refuge to fish during particularly dry summers when river flows are below normal. Along with white suckers and common shiners from the area above the dam, expected species would be bluegill sunfish, rock bass, carp, and possibly largemouth bass.

The area of the river from immediately below the first upstream dam down to the head of the pool behind the Fabric Fire Hose Building dam also provides some trout habitat with the substrate composed primarily of bedrock ledges (see Figure 10). Even though this area is encompassed in Rocky Glen State Park, public access is limited due to the severity of slope down to the river.

The last section of the river runs from just below the second dam (i.e., Fabric Fire Hose Building) to the confluence of Lake Lillonanah (Section 3). This area is fairly similar to the first section, but the substrate is composed of greater amounts of cobble and small boulders and there are fewer long, deep pools (see Figure 10). The same species of fish would be expected here as in section one and it is also stocked with trout by the DEP. This part of the river may serve as breeding (in spring) and nursery (in summer) areas for smallmouth bass coming from Lake Lillonanah.

Figure 10



SANDY HOOK / POOTATUCK RIVER CORRIDOR

NEWTOWN, CONNECTICUT

King's Mark Environmental Review Team

FISHERY HABITATS

- SECTION 1 - SUITABLE FISH HABITAT (short, shallow riffles; long, deep pools; gravel and cobble substrate)
- SECTION 2 - GREATEST DIVERSITY OF FISH HABITAT (bedrock ledge substrate)
- SECTION 3 - GOOD FISH HABITAT (breeding and nursery areas)
- UNSUITABLE FISH HABITAT (shallowness, sedimentation and silt)

Discussion

The Sandy Hook portion of the Pootatuck River is a valuable fishery resource and it presently provides a good quality trout fishing experience. Through proper management and publicity, the fisheries could add to the overall quality of the river, and the area in general. Two management guidelines would be: (1) try to improve the accessability of the area in Rocky Glen State Park via stairways or paths; and (2) remove the litter and trash along the banks of the river, possibly by a community or boy scout sponsored clean-up project.

WATER RESOURCES AND QUALITY

Description

The Pootatuck River is tributary to the Housatonic River. It's drainage basin encompasses 26.1 square miles and is contained within the towns of Newtown, Monroe, and Easton. The main stem of the river is approximately eight miles long and it falls approximately 400 feet over that distance. Almost half of the elevation is lost within one mile of the mouth, where the stream flows through a scenic gorge. Calculated values for average annual streamflow, and seven day, 10 year low flow at the mouth of the Pootatuck River are 41.2 and 5.5 cubic feet per second (cfs) respectively (Thomas, 1972).

Existing water quality classification of the Pootatuck River from it's origin to the confluence with Deep Brook is Class B, with a goal of Class A. The water quality classification from the confluence of Deep Brook downstream to the mouth of the Pootatuck River is Class B.

Water quality classification designated as "A" provides for protection which would support all water uses including drinking water. The character of Class A water should be uniformly excellent. All significant wastewater discharges are prohibited in Class A waters. Classification "B" supports recreational uses including bathing or swimming. It should provide excellent fish and wildlife habitat, and have good aesthetic value. The Pootatuck River is currently managed as a trout stream. Treated wastewater discharges are allowed in Class "B" waters under the National Pollutant Discharge Elimination System (NPDES) permitting system. For further details concerning water quality classifications

in Connecticut please refer to Connecticut Water Quality Standards, 1986 (DEP, 1986).

Existing Water Quality

The limited data available concerning water quality indicates that the Pootatuck River meets the established water quality classification in terms of it's ability to support aquatic life and non-contact recreation. However, sanitary quality of the stream is probably not consistent with Class B criteria which allows for contact recreation.

Recent water quality data for the Pootatuck River is not available. Routine ambient water quality monitoring was conducted by the State at one site near the mouth of the Pootatuck River between 1967 and 1973. The results of this monitoring documented elevated levels of coliform pollution was apparently not severe enough to result in oxygen depletion, or elevated levels of biochemical oxygen demand.

The U.S. Geological Survey conducted a study of groundwater availability in the Pootatuck Basin in 1976 (Haeni, 1978). Part of this study included surface water monitoring at four sites during 1976-1977. The results of this study were fairly consistent with earlier sampling conducted by the State. Water quality was acceptable with the exception of coliform bacteria levels which were elevated at some sites.

One significant wastewater discharge is located in the Pootatuck River Basin. Fairfield Hills Hospital discharges treated sewage into Deep Brook, a tributary that enters the Pootatuck River

just upstream from Sandy Hook. This facility is regulated by a dishcarge permit issued by DEP - Water Compliance Unit. The Fairfield Hills Sewage Treatment plant was established in the early 1900s and has undergone numerous modifications and additions since originally constructed as a primary waste treatment facility. The most recent modifications were made during the late 1960s. The existing facility provides advanced waste treatment for an average daily flow of 0.23 million gallons per day (MGD). The design flow is 0.5 MGD. Although relatively old, this facility consistently produces a high quality effluent. A study was conducted by DEP in 1980 to examine the impacts of total residual chlorine to the aquatic habitat of Deep Brook. Chlorine is used to disinfect the treated sewage effluent. This study concluded that although a section of Deep Brook was impacted during low flow conditions, the discharge does not adversely affect the Pootatuck River (Water Compliance Unit, 1980).

Based on available information, it is unlikely that the sanitary quality of the Pootatuck River meets Class B criteria. Widespread problems resulting from septic system failures have been documented in a report prepared by A. R. Lombardi and Associates for the Town of Newtown (1984). Efforts have been made by the local health department to minimize nuisance situations through on-site corrective measures. However, due to the magnitude of the problem, it is likely that bacterial pollution of the Pootatuck River will continue to occur.

A staff recommendation has been made to reevaluate the existing "B" classification in light of the above information.

The DEP issued a pollution abatement order to the Town of Newtown in 1977. In response to this order, a series of engineering firms were retained by the Town to develop a plan and implementation schedule for appropriate sewage disposal facilities, or other pollution abatement measures. A facilities plan was completed by A. R. Lombardi and Associates, Inc. (1984). This plan recommends the installation of municipal sewers for various parts of Newtown, including the Sandy Hook area. The plan also calls for the construction of an advanced waste treatment facility to be located adjacent to the Pootatuck River just upstream from Route 84. The proposed plant would be designed to treat 0.98 MGD, and discharge to the Pootatuck River via an extended outfall pipe terminating downstream from the dam at the old Fabric Fire Hose Building. Adoption of this plan was recommended by the Newtown Water Pollution Control Authority in 1985. In order to comply with the abatement order, the Town must adopt an approved plan by July, 1986. Given the most optimistic scenario, if the existing plan is adopted by the Town, construction would probably begin in approximately four years.

Potential Impacts

The primary activities which were reviewed in terms of potential impacts to the Pootatuck River are: (1) dredging of existing impoundments; (2) reestablishment of a pond at Sandy Hook Center; (3) increased sewage flow and runoff.

Dredging

The question of removing accumulated sediment from the two impoundments in the Sandy Hook area to improve water quality was raised by the ERT. Dredging can be employed: (1) to eliminate highly organic sediments having the capacity to exert an unacceptable oxygen demand on the overlying water column; (2) to remove sediments containing an accumulation of various toxic substances; or (3) to remove sediments supporting beds of nuisance aquatic plants. There is no evidence to indicate that either of the aformentioned problems exist in the Pootatuck River. Therefore, from the perspective of water quality, it is unlikely that dredging would result in significant improvements. However, dredging would probably benefit related uses of these impoundments, such as warmwater fish habitat and swimming.

A study should be conducted to examine the feasibility of dredging. This plan should include the following elements.

(1) Water depth;
(2) Sediment depth, underlying geology;
(3) Use objectives, desired water depths;
(4) Sediment volumes to be removed;
(5) Physical and chemical characteristics of the sediments;
(6) Methods;
    a. drawdown, excavation
    b. hydraulic dredging
    c. dragline
    d. capping
(7) Sediment processing and disposal;
(8) Permits;
(9) Costs;
(10) Timetable;
(11) Longevity of benefits;

Though dredging activities would be regulated by the local inland wetlands commission, a description of the project should be submitted

to the Dam Safety Section of the DEP Water Resources Unit for a determination of dam safety program requirements, if applicable.

Reestablishment of Pond at Sandy Hook Center

Impacts resulting from construction of a pond at Sandy Hook Center are difficult to assess without the benefit of rough dimensions, or some type of site plan illustrating existing and proposed channel configuration. However, impacts can be described in general terms. This section of the Pootatuck River has a relatively steep gradient resulting in swiftly flowing water, and an erosional substrate composed of relatively large stones. Erosional or riffle stream channels typically provide a diverse habitat, which in turn supports a diverse and productive assemblage of aquatic invertebrates and fish. This type of habitat fulfills the physical habitat requirements of some fish and many invertebrate species, which would not be present in the depositional habitat of an impoundment. Depending on the size of the proposed pond, it could potentially result in the loss of habitat important in maintaining the structure and function of the stream environment.

Dam construction is regulated by two sections within the DEP Water Resources Unit. The proposed dam would require approval of the Dam Safety Section. Because it would also result in the modification of existing stream channel configuration and flow patterns, a diversion permit would be required by the Water Allocation Section. Construction of a new impoundment on a free flowing stream for cosmetic reasons is usually discouraged.

Increased Sewage Flow and Runoff

According to the facilities plan prepared by A. R. Lombardi Associates for the Town of Newtown, the Sandy Hook area is one of the locations which is proposed for the installation of sanitary sewers. The plan also includes a proposal for a sewage treatment plant which will be designed to treat an anticipated flow of 0.98 MGD with a proposed reserve capacity of five percent for future growth. Projected increase in sewage flow from the Sandy Hook area resulting from the SHOP project would vary depending on the specific type of development planned. In terms of wastewater flow, these plans should be coordinated with the Newtown Health Department and Water Pollution Control Authority.

Potential adverse impacts from siltation and erosion could occur during construction activities, or result from poorly designed storm drainage systems. Best engineering practices should be employed to stabilize disturbed soil during construction and incorporated into the design of storm drainage systems for parking lots and other structures which may concentrate stormwater runoff. These practices are outlined in Guidelines for Soil Erosion and Sediment Control (1985).

These activities should be coordinated with the Town Engineering Department and the Planning and Zoning Commission.

Dam Activity on the Pootatuck River

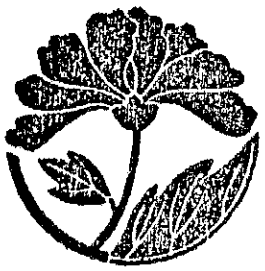
There are presently two inactive hydroelectric dams on the Pootatuck River: (1) the Sandy Hook Dam; and (2) the Lower Rocky Glen Dam.

The Sandy Hook dam is adjacent to the "Upper Shop" which is presently occupied by an art printing and distribution facility. The dam was constructed in 1870 as a stone masonry structure. The concrete face, walls, deck, and intake structure were added at a later date. The dam was originally used to store water for generating electricity for a manufacturing plant. The dam appears to be in fair condition and requires some repair. Finally, the dam is classified as a "Low Hazard Potential."

There are presently two separate small hydroelectric power projects proposed for the Sandy Hook Dam. Both proposals plan to renovate the generating unit to produce hydroelectricity. One of the proposals also calls for selling surplus power to local utility companies.

The Lower Rocky Glen Dam is adjacent to the historic Fabric Fire Hose Company Building presently being re-developed into offices. The dam is constructed out of concrete and masonry. A four acre pond was created by this dam, and it was used for occassional water power and industrial water supply. As to date, there are no plans to renovate the hydroelectric capacity of this dam.

CULTURAL RESOURCES



CULTURAL RESOURCES OF THE SANDY HOOK AND POOTATUCK RIVER CORRIDOR
Archaeological Considerations

The study area has never been systematically surveyed by archaeologists. However, recent studies and reviews of site files at the Laboratory of Anthropology of the University of Connecticut suggest that it is probable that the Pootatuck River Valley was an important focus of prehistoric use and settlement for at least the past 6000 years. This finding is substantiated by the ongoing archaeological studies of landscapes in Southbury along a tributary of the Housatonic River, south of the Shepaug Dam, and opposite Shady Rest in Newtown.

This work, being conducted by the Public Archaeology Survey Team (PAST) from the University of Connecticut has demonstrated that this area was used periodically for hunting camps and other activities by native populations as early as 6000 years ago. At least six such sites are known from the uplands and valley floor of the Housatonic River. Sometime during the 17th century, or perhaps somewhat earlier, a small village may have been constructed and inhabited for at least two centuries. By the mid-19th century, the village had been abandoned (Source: PAST, Report on the Southbury Archaeological Assessment, 1985).

Archaeological indications of prehistoric use of the Pootatuck River Valley in Newtown are also strong despite the lack of text excavations or even of systematic surveys. At least three sites have been recorded including two near the confluence of the Pootatuck and Housatonic Rivers, north of Rocky Glen. Given these signs and existing knowledge that the area was an important focus for historic

Indian settlement, the study area could certainly contain archaeological resources similiar to those already recorded in Southbury and elsewhere. Future land uses and management plans should consider the existence of these resources. Activities which could disturb or destroy the archaeological potential of such sites should be controlled and minimized.

Early History

The Town of Newtown was first settled in 1705. The village of Sandy Hook was started nine years later when Samuel Sanford was granted a permit. He built a grist mill at Pootatuck River.

The name Sandy Hook is a local name. No definite information is available as to where the name originated. The name first appeared in print in Barber's "Connecticut Historical Collections," published in 1836. The reference was to "...a thriving village, of fifty families, with several businesses." This would lead us to believe that the village and the name had been in existance for some time. No mention of the name had been made on the maps which had been made during the Revolutionary War by Andre Berthier and Erskine Hewitt.

There are other possibilities as to a source of the name Sandy Hook. There is a well defined hook in the river, south of the center of Sandy Hook. This coupled with the abundance of sand to the east of the river would combine to give the area the name Sandy Hook.

Since the establishment of Sanford's mill in 1711, Sandy Hook has been the center of commercial and industrial activity in Newtown. This was because of the availability of water power. At one time there were five dams between the Sandy Hook and the Housatonic

River. After 1800, there was a cotton mill, two woolen mills, a hat shop, a comb and button factory, a machine shop, a brass foundry, and a grist and saw mill. These were listed in Barbers "Connecticut Historical Collections."

A button and comb factory was started in Sandy Hook about 1840. Curtis Packaging is presently located here. The rubber industry was started in Sandy Hook by Nelson Goodyear in 1842. Rubber coats were manufactured in back of the stores in the center. Josiah Tomlinson, the brother-in-law of Charles Goodyear, began making rubber goods in the Glen. He went bankrupt and sold out to Frame and Grecian, who continued in the rubber business.

Frame and Grecian sold out to the New York Belting and Packing Company. The original building burned, and the New York Belting and Packing Company (NYB & P Co.) build the building that still stands in the Glen. The NYB & P Co. operated until 1900 when it moved to Passaic, New Jersey. The NYB & P Co. was reputed to be the largest manufacturer of rubber goods in the country in 1880.

When they moved, the Fabric Fire Hose Company moved in and continued to manufacture goods out of rubber. The Fabric Fire Hose Company was sold in 1979 and the building was closed. It is presently being re-developed into offices.

These industries helped make the village of Sandy Hook the commercial center of Newtown well into the 20th century. The increased use of the automobile and better roads, coupled with the convenience of electricity, served to diminish the importance of Sandy Hook as a commercial center. The large industries have gone, to be replaced by smaller establishments which do not impact on the

economy as much as the larger ones did in the past.

Historic Sites and Structures

There are numerous buildings of historical significance in Sandy Hook (Figure 11). They are briefly discussed below.

The Brick Store

Built by Glover and Warner in 1855. It has been continuously a general store since the beginning. For 125 years it was managed by the same family.

The Mill House

Built by the Sanford family possibly in the early 1700s. It has been a grist mill from construction up until the 1920s. It is now a residence.

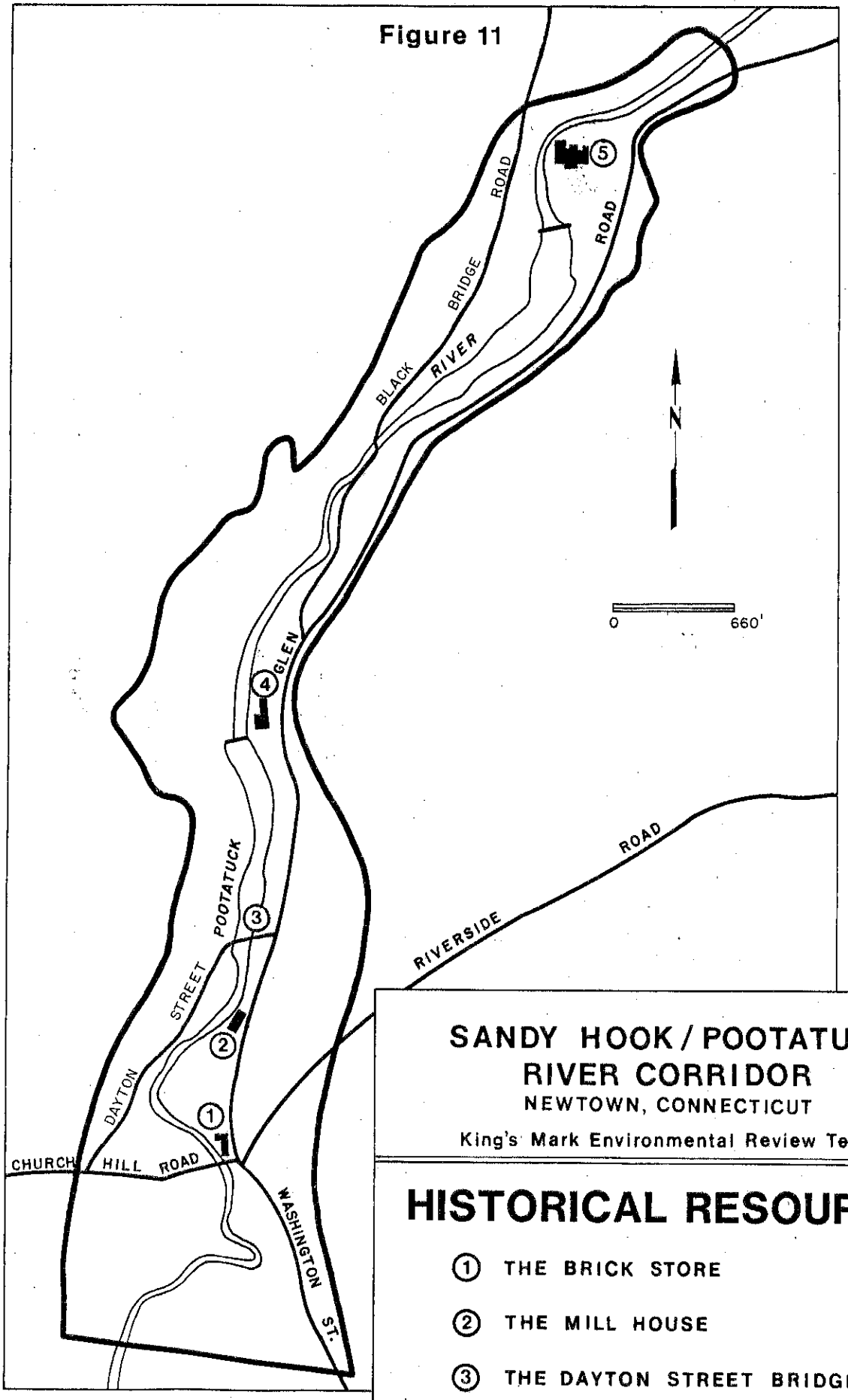
The Dayton Street Bridge

Built in the 1890s, a registered historic structure of unusual style and construction.

The Upper Shop

Built in 1855 by the New York Belting and Packing Company as a shop to reclaim rubber. It has been utilized as a cotton mill, machine shop, plastic factory, natural foods warehouse and distribution center, and now an art printing and distribution facility.

Figure 11



SANDY HOOK / POOTATUCK RIVER CORRIDOR

NEWTOWN, CONNECTICUT

King's Mark Environmental Review Team

HISTORICAL RESOURCES

1. THE BRICK STORE
2. THE MILL HOUSE
3. THE DAYTON STREET BRIDGE
4. THE UPPER SHOP
5. THE FABRIC FIRE HOSE BUILDING

The Fabric Fire Hose Building

Built circa 1855 by the New York Belting and Packing Company for the manufacture of rubber products. In 1880, it was said to be the largest manufacturer of rubber goods in the country. The building was taken over by the Fabric Fire Hose Company in 1900. They operated there until 1979. The building is now being renovated into offices. It is in the National Register of Historic Buildings. It is a classic example of a New England mill building.

LAND USE
AND
PLANNING CONSIDERATIONS

PLANNING CONSIDERATIONS AND LAND USE

Current Zoning and Existing Land Use

As shown in Figure 12, land use within the study area consists of residential, industrial, commercial, and undeveloped land. The central commercial zone, located astride the Pootatuck River, forms the heart of Sandy Hook. This area includes a variety of retail, office and general business establishments including a post office, framing store, liquor store, print shop, barber, consignment shop, restaurant, diner, general store, clothes store, TV store, rental shop, dry cleaners, auto parts store, gas station, tailoring shop, craft store, pizza parlor, and professional offices.

The only industry located within the study area is an art printing and distribution facility. The Fabric Fire Hose Company site, once supporting a major industry at the northern tip of the study area, is now being converted to office use.

Residential land use is scattered along the roads serving the study site. State roads in the study area include Church Hill Road, Washington Street, and Glen Road. The principal local roads are Dayton Street, Riverside Road, and Black Bridge Road. Permitted residential lot sizes vary from one-half acre to two or more acres in the area.

The majority of the land in the study area is undeveloped and is characterized by either wetlands or steeply sloping woodland. Rocky Glen State Park is a 22 acre tract located in the northwestern quarter of the study site. Hiking trails are present in the area south of Church Hill Road, and to the north of Dayton Street in Rocky

Glen State Park.

Existing land use is reflective of current zoning in the area (Figure 13).

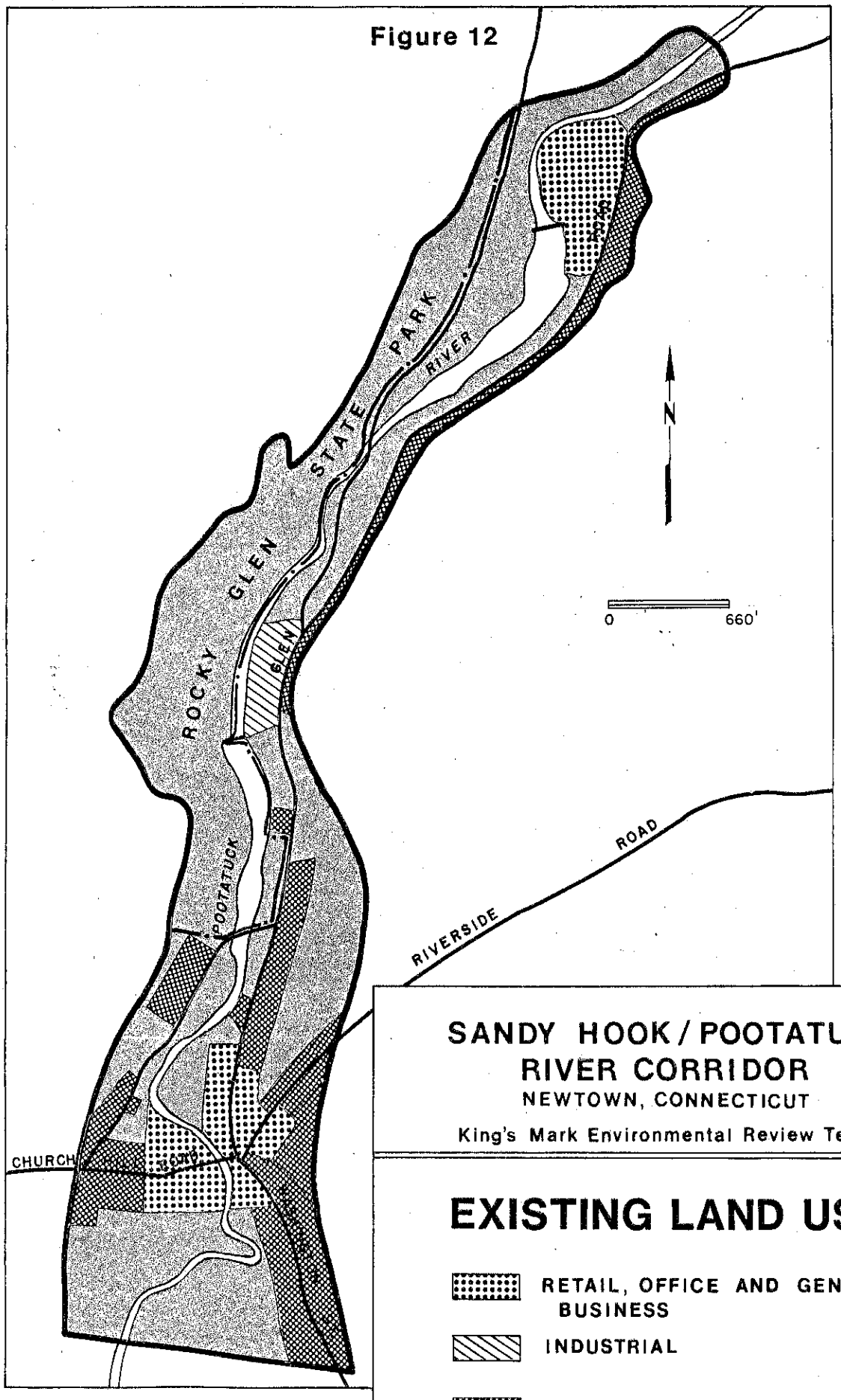
Sandy Hook and the Town and Regional Plans

The Land Use Plan presented in Newtown's Plan of Development (1981) reflects present land uses in the Sandy Hook area with a retail business district in the center of Sandy Hook, an industrial corridor along the Pootatuck River north of Sandy Hook center, and low to medium density residential use on available land elsewhere in the study area. To support this land use, the Town Plan identifies Sandy Hook as a potential area for public sewers. Sewering would, "...provide for present or anticipated wastewater problems..." in this area.

A review of the Town Plan identified three specific findings or recommendations related to the Sandy Hook community.

First, under the "Plan for Business" section of the Land Use Plan, Sandy Hook is identified as an area presently zoned for retail and general business development which has vacant parcels to accommodate additional development. According to the Plan, Sandy Hook can function as a neighborhood convenience shopping area, providing basic service facilities to adjacent residential areas, while maintaining the concentration of major business and retail uses in the Town Center. The plan further states that within the Sandy Hook area, "...growth will be occurring as infill, often on limited land areas. Parking, traffic control, evaluation of impact of traffic generation, and compatibility with existing development must

Figure 12



SANDY HOOK / POOTATUCK RIVER CORRIDOR

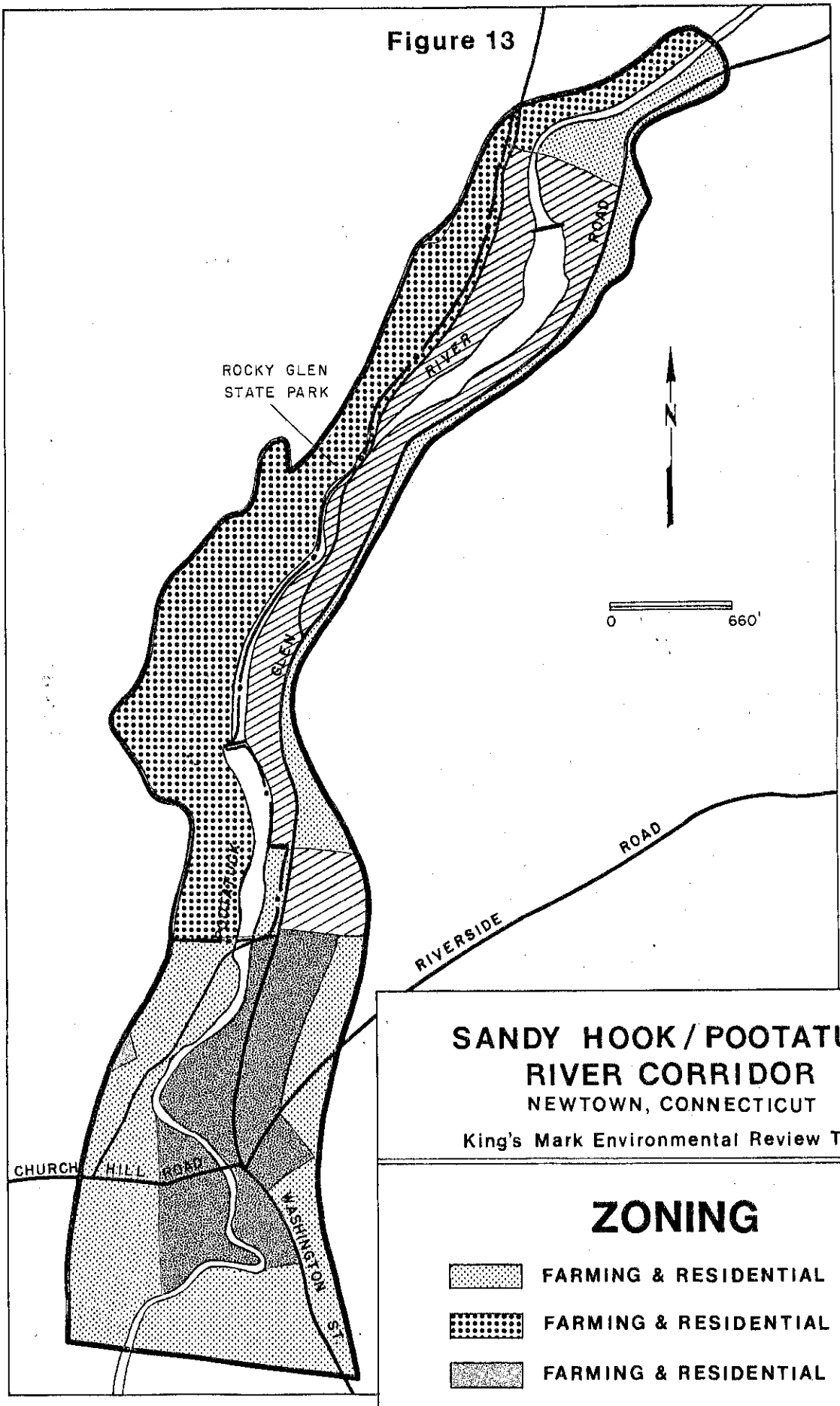
NEWTOWN, CONNECTICUT

King's Mark Environmental Review Team

EXISTING LAND USE

- RETAIL, OFFICE AND GENERAL BUSINESS
- INDUSTRIAL
- RESIDENTIAL
- UNDEVELOPED LAND

Figure 13



SANDY HOOK / POOTATUCK RIVER CORRIDOR

NEWTOWN, CONNECTICUT

King's Mark Environmental Review Team

ZONING

- FARMING & RESIDENTIAL 1/2 acre
- FARMING & RESIDENTIAL 1 acre
- FARMING & RESIDENTIAL 2 acres
- INDUSTRIAL
- RETAIL & GENERAL BUSINESS

be carefully regulated to avoid adding to congestion, impeding traffic movement, and effecting access to abutting property."

A second recommendation of the Town Plan directly relating to the Sandy Hook community is the proposed preservation of the land north of Rocky Glen State Park along the Pootatuck River to the Housatonic River. This proposed preservation would effectively result in an extension of Rocky Glen State Park to a town-owned piece of property along the Housatonic River. The preservation would create an open space corridor and, "...provide opportunities for passive recreation, hiking and nature study."

The third specific recommendation in the Town Plan relating to Sandy Hook calls for the improvement of Black Bridge Road and Glen Road (from the intersection of Black Bridge Road to Sandy Hook Center) to major collector status. Major collectors are defined in the plan as "...those streets which serve to distribute moderate volumes of traffic to and from large areas, and also serve less concentrated traffic generating uses." The standard for a major collector, according to the Plan, is a minimum pavement width of 30 feet.

Improvement of Black Bridge Road and Glen Road as specified by the Plan would greatly facilitate access to Sandy Hook from the north. It would also enhance access to Rocky Glen State Park. A field review of Black Bridge Road indicates that a new bridge crossing on the Pootatuck would be required for such a project. However, the steep slopes and shallow to bedrock conditions would present severe limitations for the construction of such a road. Providing safe access at the intersection of Glen Road and Black

Bridge Road would be particularly difficult.

In addition to the Town Plan, a "Proposed Open Space Plan" was prepared for Newtown in 1975. Although this plan was never formally adopted, it does contain information and recommendations relevant to the Sandy Hook community. Most notably, the Open Space Plan calls for the preservation of the Pootatuck River, and an adjacent open space corridor along the River in the Sandy Hook area. The Plan also calls for walking trails, and a biking trail along the Pootatuck in the study area. To implement the Open Space Plan, a variety of techniques were suggested such as land purchase, land donation, and easements.

The Housatonic Valley Council of Elected Officials regional land use plan identifies the Sandy Hook area as a location for eventual urban growth, with conservation of the flood plain area. According to the Regional Plan, future development in the area "...should be integrated with existing development, and complement past residential, commercial, and public service investments."

Flood Hazard Areas

As previously shown in Figure 6, portions of the study area along the Pootatuck River are located within a flood hazard area. These flood hazard areas are subject to periodic inundation which can severely impact public health, safety, and general welfare.

The Legislative Council of Newtown recognized the sensitive nature of the Town's flood hazard areas, and adopted a "Flood Damage Prevention Ordinance." This ordinance applies to all areas of special flood hazards (zones A, A1-A30 on the Newtown Flood Insurance

Rate Map - see Figure 6) which is defined as that land in the flood plain subject to a one percent or greater chance of flooding in any given year (i.e., a 100 year flood).

Under the ordinance, a permit is required from the Newtown Wetlands Enforcement Officer before any construction or development begins within the special flood hazard area. The ordinance stipulates that "...no structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance." The ordinance further requires that specific information be submitted as part of any permit application as to the nature and impact of the proposed project.

Within the study area, the presence of a flood hazard area appears to be most significant in that portion of the area south of Church Hill Road. Additional parking space and commercial development appears to be targeted for this area by a conceptual plan now under consideration by the SHOP. The presence of a flood hazard area in this vicinity will clearly affect the feasibility and/or design of these proposed facilities. The presence of a flood hazard area may also affect the feasibility and design of the "pocket park" proposed just north of the Post Office on Washington Street. Consultation by SHOP with the Newtown Wetland Enforcement Officer is suggested to scope out the development potential under the Flood Damage Prevention Ordinance in this area.

Site Improvement Planning

Based upon existing land use and circulation patterns, site improvement planning within the study area could be divided into

three general geographic zones. They are: (1) Sandy Hook Center; (2) Rocky Glen State Park; and (3) Black Bridge Road. A brief discussion of the planning opportunities and limitations of each zone is presented below.

Sandy Hook Center

As discussed above, Sandy Hook Center is the heart of Sandy Hook and serves as a neighborhood convenience shopping area. The Town Plan envisions growth via infill in this area, and underscores the importance of parking and traffic control as this growth occurs.

Parking has already been cited as a major limiting factor in the area by local merchants, and conceptual plans prepared by SHOP have identified additional parking areas south of the current business district. Portions of the area targeted for future parking appear to be located within a flood zone. Although this limiting factor does not preclude the development of parking in this area, it does indicate the need for very careful site planning and design.

Plans for parking or other development in this general area, should be coordinated with efforts to provide a walking trail or biking trail along this section of the Pootatuck River. Plans for parking should also be coordinated with any subsurface sewage disposal systems which may be present or planned beneath the proposed parking area.

The location and maintenance of a walking trail along the west side of the Pootatuck River, south of Sandy Hook Center is encouraged. This area is very scenic, and construction of a walking trail would highlight the streambelt location of Sandy Hook. The

location of the trail should generally follow the west bank of the River, and be coordinated with plans for the proposed parking area.

Ideally, a loop trail could be constructed running along both sides of the river with pedestrian bridges crossing the river in two locations. Such bridges would require particularly careful planning to accommodate the periodic flooding in the area.

The current efforts by SHOP should result in a land use plan for the Sandy Hook Center area. Efforts can then be directed towards implementation of the Plan through various strategies such as the procurement of grants and negotiations with landowners for needed parking spaces.

Rocky Glen State Park

At the northern end of Dayton Street, access to Rocky Glen State Park is readily available. While much of the Park is so steep that most recreational uses are precluded, the southern tip is characterized by slight to moderate slopes with good potential for a variety of passive recreational activities. A trail presently runs from the end of Dayton Street into this section of the Park. This trail is primative, and is maintained by those people walking along it.

Improving this southern tip of the Park for passive recreational use via a small parking lot, picnic tables, or expanded trail network would enhance the use of this tract. Increased "costs" in the form of maintenance would also be incurred however. Presently this portion of the Park may be viewed as an underutilized resource. The desirability of improving this section of the Park should be

considered in the preparation of future plans for the Sandy Hook area.

Black Bridge Road

Black Bridge Road in the study area consists of ±2500 linear feet north of the Pootatuck River and ±800 linear feet south of the river. Separating these two sections is a decrepit bridge, which is impassable for vehicles and all but the adventuresome pedestrian. As a result, Black Bridge Road is not currently realizing it's potential of providing access to Sandy Hook from the north.

As indicated earlier, improvement of Black Bridge Road to major collector status is recommended in the Town Plan. This would necessitate replacement of the present bridge and major reconstruction of the road to create a minimum 30 foot pavement width. The feasibility of such improvement appears dubious, due to extremely steep slopes along the road and the awkward intersection of Black Bridge Road with Glen Road. Reconstruction of the road to major collector standards would clearly be very expensive. Therefore, the town has no plans to upgrade the bridge. Though it has jurisdiction over the bridge, the Town would rely on state funds and technical assistance to complete the construction of a new bridge. The State Department of Transportation is presently inventorying bridges in Connecticut that are in need of repair or replacement. The Black Bridge received a low priority for repair or assistance. The cost of constructing a new bridge has been estimated to exceed $500,000. Therefore, due to financial and construction constraints, the improvement of this bridge and road seems limited.

Presently, Black Bridge Road provides a pleasant hiking experience with a scenic ridgeline to the west, attractive hemlock ravines, and the riffle and pool flow of the Pootatuck River. Until such time as the road is significantly improved, Black Bridge can continue to provide a convenient path for the tranquil enjoyment of this area. Consideration may be given to providing picnic tables in the vicinity of the bridge crossing. Any significant improvements in this area should be coordinated with the Park and Recreation Division of the DEP, which is responsible for Rocky Glen State Park.

APPENDIX A

SOILS LIMITATION CHART

SOILS LIMITATION CHART

Building Site Development

Soil Symbol	Soil Name	Shallow Excavation	Dwellings W/O Basements	Dwellings W/ Basements	Small Commercial Buildings	Sewer Systems
AfB	Agawam fine, sandy loams, 3-8% slopes	Severe: cutbanks, cave	slight	slight	moderate: slope	slight
CrC	Charlton part- fine, sandy loams, rocky, 3-15% slopes	moderate: slopes, large stones	moderate: slope, large stones	moderate: large stones slope	severe: slope	moderate: large stones
CrC	Hollis part	severe: depth to rock	severe: depth to rock	severe: depth to rock	severe: slope, depth to rock	severe: depth to rock
HcB	Haven-silt loam, 3-8% slope	severe: cutbanks, cave	moderate: frost action	slight	moderate: slope, frost action	slight
HkC	Hinckley gravelly, sandy loam, 8-15% slopes	severe: small stones, cutbanks, cave	moderate: slope	moderate: slope	severe: slope	moderate: slope
HkD	Hinckley gravelly, sandy loams,]5-35% slopes	severe: slope, small stones cutbanks cave	severe: slope	severe: slope	severe: slope	severe: slope
HpC	Hollis-part 3-15% slopes	severe: depth to rock	severe: depth to rock	severe: depth to rock	severe: depth to rock	severe: depth to rock
HpC	Charlton part 3-15% slopes	moderate: slope, lg. stones	moderate: slope, lg. stones	moderate: large stones, slope	severe: slope	moderate: slope, large stones

SOILS LIMITATION CHART (con't)

Soil Symbol	Soil Name	Building Site Development: Shallow Excavation	Dwellings W/O Basements	Dwellings W/ Basements	Small Commercial Buildings	Sewer Systems
HpC	Rock outcrop 3-15% slopes	--	--	--	--	--
HrE	Hollis part 15-45% slopes	severe: slope, depth to rock	severe: slope,	severe: slope, depth to rock	severe: slope, depth to rock	severe: slope, depth to rock
HrE	Charlton part 15-45% slopes	severe:	severe: slope	severe: slope	severe: slope	severe: slope
HrE	Rock outcrop	--	--	--	--	--
MyB	Merrimac sandy loam, 2-8% slopes	severe: cutbanks cave	slight	slight	moderate: slope	slight
Ro	Rippowam fine sandy loams, nearly flat	severe: floods, wetness, cutbanks, cave	severe: floods wetness, frost action	severe: floods wetness	severe: floods wetness, frost action	severe: floods wetness
Rp	Rock outcrop 3-15% slopes	--	--	--	--	--
Rp	Hollis part 3-45% slopes	severe: slope, depth to rock large stones	severe: slope, depth to rock, large stones	severe: slope, depth to rock, large stones	severe: slope, depth to rock, large stones	severe: slope, depth to rock, large stones
Sb	Saco silt loam, nearly flat	severe: wetness, cutbanks, cave	severe: floods, wetness, frost action	severe: floods wetness	severe: floods, wetness, frost action	severe: floods, wetness

SOILS LIMITATION CHART (Con't)

Soil Symbol	Soil Name	Building Site Development: Shallow Excavation	Dwellings W/O Basements	Dwellings W/ Basements	Small Commercial Buildings	Sewer Systems
Sc	Scarboro mucky, sandy, nearly level	severe: wetness, cutbanks, cave	severe: wetness	severe: wetness	severe: wetness	severe: wetness
UD	Udorthents 0-25% slope	—	—	—	—	—

SOILS LIMI. .TION CHART
RECREATIONAL DEVELOPMENT

Soil Symbol	Soil Name	Picnic Areas	Playgrounds	Paths and Trails
AfB	Agawam fine sandy loam 3-8% slopes	slight	moderate: slope	slight
CrC	Charlton part fine sandy loams, rocky, 3-15% slopes	moderate: slope	severe: slope	moderate: large stones
CrC	Hollis part	moderate: slope	severe: slope, depth to rock	moderate: large stones
HcB	Haven-silt loam 3-8% slopes	slight	moderate: slope	slight
HkC	Hinckley gravelly sandy loam, 8-15% slopes	moderate: too sandy, small stones	severe: slope, small stones	Moderate: too sandy, small stones
HkD	Hinckley gravelly sandy loam 15-35% slopes	severe: slope	severe: slope, small stones	moderate: too sandy, small stones
HpC	Hollis part 3-15% slopes	moderate: slope	severe: slope, depth to rock	moderate: large stones
HpC	Charlton part 3-15% slopes	moderate: slope	severe: slope	moderate: large stones
HpC	Rock outcrop 3-15% slopes	--	--	--
HrE	Hollis part 15-45% slopes	severe: slope	severe: slope, depth to rock	severe: slope
	Charlton part 15-45% slopes	severe: slope	severe: slope	severe: slope

SOILS LIMITATION CHART (Con't)
RECREATIONAL DEVELOPMENT

Soil Symbol	Soil Name	Picnic Areas	Playgrounds	Paths and Trails
MyB-sandy	Merrimac sandy loam 2-8% slopes	slight	moderate: slope	slope
Ro	Rippowam fine, sandy loam nearly flat	severe: wetness	severe: wetness, floods	severe: wetness
Rp	Rock outcrop 3-45% slopes	--	--	--
Rp	Hollis part 3-45% slope	severe: slope	severe: slope, depth to rock, large stones	severe: slope, large stones
Sb	Saco-silt loam, nearly level	severe: wetness	severe: floods, wetness	severe: wetness
Sc	Scarboro mucky, sandy loam, nearly level	severe: wetness	severe: wetness	severe: wetness
UD	Udorthents 0-25% slopes	--	--	--

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 - a 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 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 landowner/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 two (2) reviews per month.

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