

APPENDIX B

PLAN FOR CONSERVATION AND RECREATION LANDS

Adopted September 11, 2009

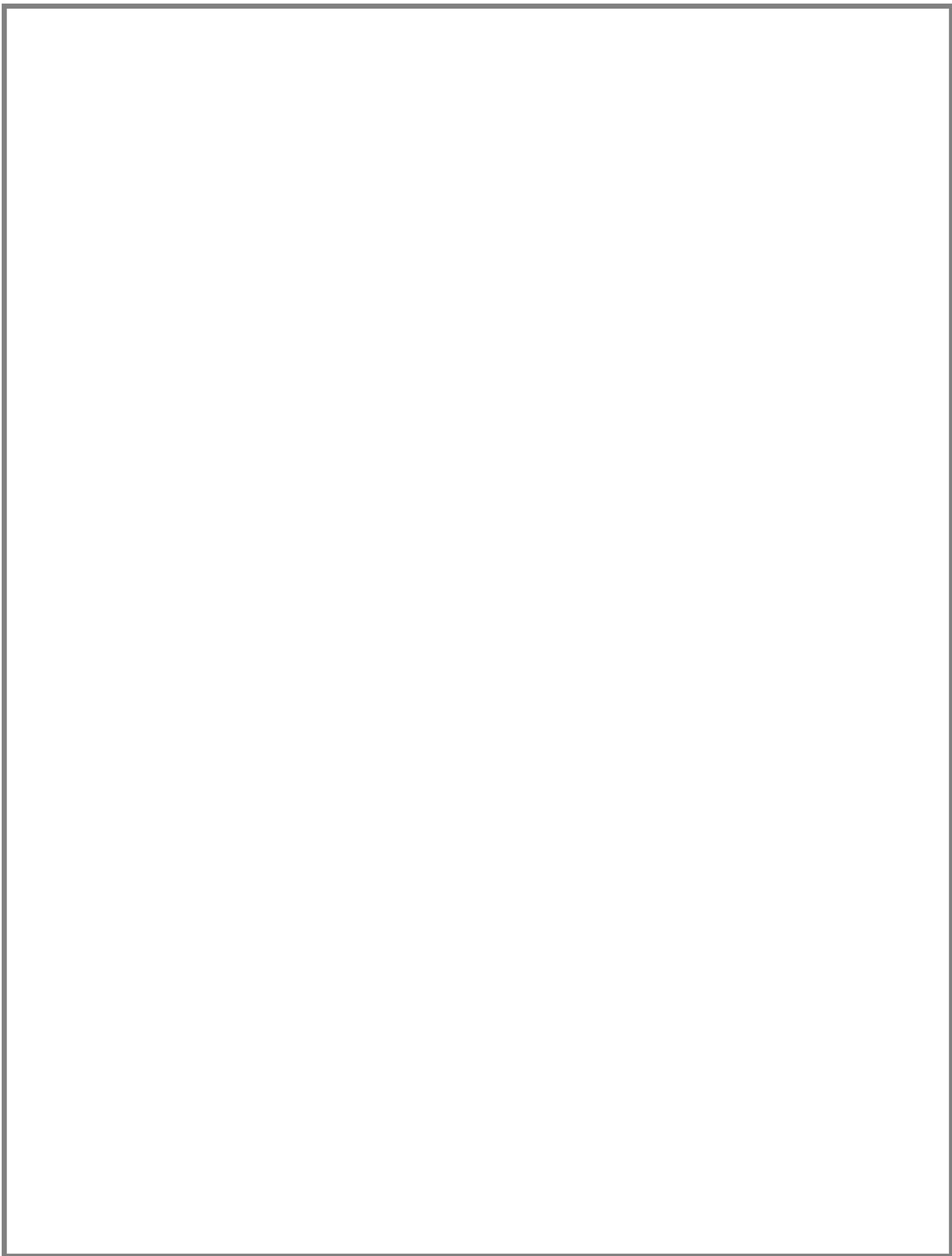
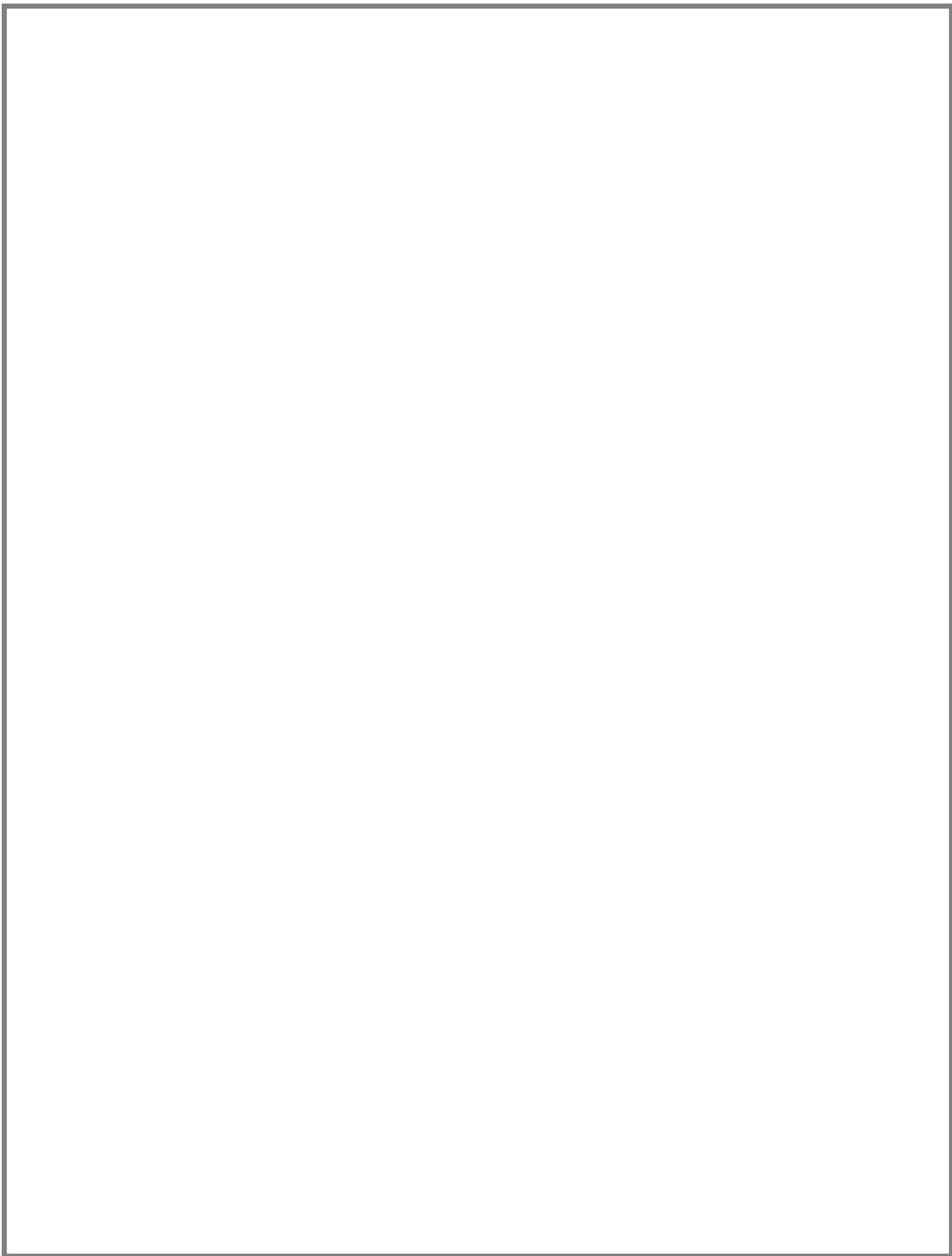


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EXECUTIVE SUMMARY

The Plan for Conservation and Recreation Lands (PCRL) was initiated by the Planning and Zoning Commission's Plan of Conservation and Development Steering Committee in 2001. Completion of the PCRL was mandated in the 2003 Plan of Conservation and Development (PCD), with the task assigned to the newly formed Conservation Commission. Accordingly, the Conservation Commission began inventorying, indexing, and researching land use and natural and cultural resources. Over the years the town has developed a considerable library of land use and resource studies, findings, and recommendations that have relevance today. This material was updated with current information by the Conservation Commission and provided the foundation for its recommendations. Major sources are referenced.

The Conservation Commission divided the town into fourteen "focus areas" in order to aid research and recommendations, and more importantly, to gain a town-wide vision of the town's assets. Each focus area has a significant concentration of characteristics that warrant the town's careful consideration for the future of that area.

The Conservation Commission's research and recommendations - in the form of a report dated January 31, 2008 - were turned over to the Planning and Zoning Commission for review, revision, and inclusion in the PCD. Ultimately, the recommendations contained in this plan need to be implemented by various town boards and commissions and the town's legislative body.

FINDINGS

- The needs and desires expressed by the community to retain and protect rural living and natural resources have remained largely unchanged through the years. Development pressures increase the necessity to plan carefully and act with renewed vigor to assure the continuance of the quality of life in town and to protect natural resources of significant local and regional importance, while working to mitigate the tax burden.
- Areas of the town most prone to increased development and density are generally located where valuable surface and underground water resources occur. The need to protect these waters substantially heightens the need for sound planning and enforcement.
- High quality economic development can be achieved in harmony with the conservation and recreation goals of the community - through careful planning, regulation, and enforcement.

GOALS AND OBJECTIVES

1. Maintain rural character

- Protect historic features and scenic vistas.
- Encourage farming.
- Maintain and enhance areas that define and shape community character.
- Minimize streets, roads, and paved areas that deface the landscape and increase the potential for pollution.
- Encourage high quality development and uses in existing areas, with minimum adverse impact on natural and cultural resources and the rural character of the town.

2. Permanently protect water quality and quantity

- Keep a low density of development within the upper and middle reaches of the Shunock, Wyassup, and Green Fall watersheds.
- Monitor surface and stratified drift aquifer water quantity and quality with an ongoing and effective program in order to find and take corrective action before large-scale damage occurs.
- Strictly regulate and enforce the protective intent of the aquifer protection overlay area and wetlands buffer zone regulations.
- Prevent overdevelopment that might impact water quality from point or non-point pollution sources, or lessen stream flow or water levels in wildlife habitats.

3. Protect the town's natural and historic resources

- Preserve rich agricultural soils.
- Only allow high-density residential development, including affordable and senior housing, in areas where such development is specifically planned and designated to minimize adverse impact to the town's natural resources.
- Protect the habitat of important and threatened species.
- Protect and preserve dark night skies.
- Ensure that commercial and industrial development protects and compliments the town's natural resources and recreation plans.
- Avoid traffic congestion and overdevelopment that will adversely impact air and water quality, and the historic and rural character of the town.

4. Provide areas for active and passive recreation

- Establish and identify trails and pathways for public use and access to recreation areas.
- Make trail maps available to the public.
- Where appropriate, encourage open space be open to the public for passive recreational use.
- Establish public parks to maximize public enjoyment of natural and historic resources.
- Establish active recreation areas in a location, in size, and a number adequate for the needs of the town.

5. Improve town regulatory procedures and prioritize land acquisition

- Develop an acquisition priorities list determined by importance.
- Designate the town agency/agencies responsible for each action step.
- Develop, implement, and update acquisition methods and programs.

- Develop and implement programs and procedures for ongoing tracking of protected and potential conservation lands.
- Develop and implement programs for maintenance and management of conservation and recreation land, including inspection and enforcement.
- Educate residents on the benefits of open space donation and sale of development rights.

LAND ACQUISITION

Lands must be acquired when opportunity arises. Recommendations are made for the purpose of informing all concerned that the subject property is considered to be of special importance for meeting conservation and/or recreation goals. This list must necessarily grow and evolve as land use decisions are made, and further resources are identified.

Initial Acquisition Recommendations

- Acquire key conservation and recreation lands in the ‘Shunock River and Valley’ and ‘North Stonington Village’ focus areas. If these lands are not acquired now, the town may soon lose its ability to do so.
- Expand the Rocky Hollow Recreation/Safety Complex. There is a desirable state owned 15 acre parcel on the west side of Rocky Hollow Road suitable for recreation and an additional 85 acres of state-owned land on the east side of Rocky Hollow Road adjacent to the eight acres that was acquired from the state for a town safety complex. The additional lands would provide the town with a centralized location with enough acreage to meet the town’s recreation and municipal facilities needs for years to come.
- Help the state acquire land on the northwest end of Assekong Swamp as a means of acquiring the state’s Rocky Hollow lands in trade. The state would achieve considerable added protection to the Assekong Wildlife Area, substantially increase both the area available for hunting and the protection to Assekong Brook, Swamp, and wetlands.
- Acquire Park Pond and available adjacent lands for a public park, nature preserve, and state historical heritage site within the Village National Register District. This is a unique conservation opportunity for the town. It is considered a high priority because of the urgent need for management, preservation, and conservation at the site.
- Acquire available conservation land in the Spaulding Pond - Bell Cedar Swamp focus area in order to protect: the rich biodiversity and many species of special concern; the special habitat that includes Bell Cedar Swamp and Spaulding Pond; and the several brooks, wetlands, and adjacent farmlands. This site will need special conservation and preservation efforts because its viability depends on good water quality and quantity, and adequate conservation management.

1.0 INTRODUCTION

North Stonington is a small town rich with natural resources and cultural history. The town retains a great sense of place, exhibited in the diversity of its flora and fauna, its working farms, and the many historic buildings, structures and cemeteries throughout town. Rural living is important to every resident, from the farmer who works land that has been in his family for generations, to the ex-urbanite who is embraced by the green landscape every time he steps out of his new house. It is available to the weekend fisherman pulling trout out of the river, the gardener with her hands in the soil, the hiker trekking through the woods, the star gazer viewing the nighttime sky, and the horseman enjoying the shade of a tree-lined road.

This dedication to preserving a rural way of life has left North Stonington with an abundance of natural resources not available to more developed towns. With Connecticut's food supply for a major crisis reported as not lasting more than a day and a half, and New London County cited as having one of the poorest levels of food security in the state, the town is positioned to be a regional food and water resource of major importance. Large commercial development in abutting towns and potential large developments within the town raise the importance of good planning and implementation, both to preserve the quality of life residents hold dear and to provide regional sustainability and security.

During the development of the town's 2003 Plan of Conservation and Development (PCD) the town contracted the Conway School of Landscape Design to develop a draft Plan of Conservation and Recreation Lands (PCRL). The 2003 PCD recommended that a Conservation Commission be established and tasked with finishing the PCRL. The Conservation Commission was established in November 2003. In January 2008 they delivered a report on the PCRL to the Planning and Zoning Commission, for final revision and review.

The primary purpose of the PCRL is to provide the town with a clear set of objectives and priorities for conservation and recreation. Good conservation is not merely a matter of acquiring and preserving land. It must also come from well thought out public policies in virtually every aspect of government, and conscientious decision-making by private citizens.

2.0 GENERAL GOALS AND RECOMMENDATIONS

2.1 MAINTAIN RURAL CHARACTER

1. Support both traditional and specialty farming (whether large or small scale), raising of crops, and animal husbandry. Consider establishing an Agricultural Commission. The town should be proactive in helping to obtain available grants, subsidies, tax relief, sale of development rights, and other helpful programs to maintain these activities. The town needs to invest in its rural future if it is to remain rural.
2. Keep traffic and other detrimental effects of development away from working farms.
3. Allow active farms to sell their crops retail and to have low profile signage along roads as needed.
4. Encourage the (re)establishment of small farms and the lease of small farm acreage by larger farms. (A state program could be created that mirrors the state forest program: instead of harvesting trees, the state could lease small farmland holdings for active farming. Towns wishing to participate could designate eligible lands. This program could help the state to achieve its open space goals while helping the town to provide economic development from farming and maintain its rural character.)
5. Support the Grange and Fair whenever possible. The North Stonington Agricultural Fair and the Grange support agricultural activities that are positive economic and recreational contributions to the town.
6. Expand Tax Abatement Opportunities. Adopt an open space ordinance under the provision of PA490 that extends tax relief to specifically designated lands important to the town's conservation and agricultural goals not already covered by PA490 or the former 10 Mill Law of 1913 (and revised in 1963).
7. Support rural-sensitive safety improvements to the existing Route 2. Oppose conversion to a four-lane highway. A four-lane Route 2 would adversely impact natural resources and town conservation efforts.
8. Encourage rural road design. Site design should fit landforms. Roads should not excessively disturb the land. Prohibit excessive width, excessive impervious coverage, and excessive excavation.
9. Encourage expansion of the Village Protection Overlay District and the North Stonington Village National Register of Historic Places district to include and buffer historic features associated with the village.
10. Promote businesses that contribute to the rural character of the town.

2.2 PERMANENTLY PROTECT WATER QUALITY AND QUANTITY

1. Allow no increase in the size of the existing commercial and industrial zones. Carefully regulate both site specific and overall build-out density of development within the present residential zones to prevent overuse or pollution of water and other natural resources. Buffer potential public water supply well-heads.
2. Develop and implement a program for monitoring pollution to surface and underground waters, and for maintaining an adequate quantity of water needed to protect species' habitat, conservation areas, and recreation resources of the town.
3. Remap the aquifer protection area to best describe its actual boundaries.
4. Avoid sewers in all residential zones. Sewers in residential areas will lead to increased density destroying rural character and leading to pollution of surface and underground waters from increased non-point source pollution, and leakage and other failures of the sewer infrastructure and systems.

2.3 PROTECT THE TOWN'S NATURAL AND HISTORIC RESOURCES

1. Discourage development on rich farmland soil. Site high-density zones and intensive uses elsewhere. Consider adopting Conservation Subdivision regulations.
2. Protect the habitat of threatened and important species. Species such as the Cardinal Flower, Canadian Warbler, and River Otter are indicative of a large biodiversity, however all these species require extensive habitats. Their preservation requires a combination of conservation land, environmentally sensitive development, and good land management practices from private citizens.
3. Protect and preserve dark night skies as one of the town's many natural, scenic, scientific and cultural resources. Zoning regulations should ensure the preservation of North Stonington's dark night skies through the reduction of light pollution for public and natural benefit, with thoughtful regard for security and visibility.
4. Designate the Shunock River and Valley and North Stonington Village focus areas as a corridor that is a central amenity of the community. This will help to focus town, state, and federal protection and conservation efforts.
5. Recognize the Green Falls River basin as an important resource.
6. Encourage properly managed lands in private ownership that are in harmony with the conservation and development goals of the town. Consider zoning incentives for large lot subdivision with significant acreage in preservation. Provide opportunities for private conservation such as sale or transfer of development rights.
7. Consider incentives for private conservation and environmentally sensitive site design.

8. Establish a state park or wildlife preserve at Lantern Hill and Lantern Hill Pond. This is a unique geologic feature and conservation opportunity that the tribe, town, and state should work on together.
9. Support energy conservation plans consistent with the rural character of the town.

2.4 PROVIDE APPROPRIATE AREAS FOR ACTIVE AND PASSIVE RECREATION

1. Encourage multiple-use of conservation and recreation lands where additional uses do not interfere with the primary conservation or recreation purpose. Passive recreation is often compatible with conservation. Farming and conservation can be compatible. Active recreation and school uses are often compatible. The use of school facilities, subject to suitable policies and procedures, would be beneficial to residents.
2. Discourage having tracts of land recommended for recreation use being closed to the public by restrictions. Conversely, conservation lands open to the public should have appropriate protective restrictions.
3. Enlarge the Rocky Hollow recreation area by acquiring additional land from the state for an expanded and centralized town recreation facility. Town-owned open space with little or no conservation or recreational value could be offered to the state in trade.
4. Develop a significant network of trails and pathways that will provide the public with safe active and passive recreational opportunities, and provide connectivity to conservation and recreation lands. The town has an abundance of trails, pathways, pentways, ancient roads, unimproved roads, and rights of way that should be mapped to show public ownership, permitted public use, and public use by right. Trails and pathways for bicycle, hiking, horseback riding, cross country skiing, and alternative sport use should be developed as a major endeavor of the town. Trails can provide many recreational opportunities. When considering land for open space, trails should not automatically be passed over in favor of large tracts of land.
5. Develop pocket parks where land areas are identified that have exceptional opportunity for one or more uses for public recreation, preservation of natural, cultural, and historic features, and education. These may be town or state owned and managed in a way that will actively contribute to the quality of life in the town.
6. Seek input from residents and stakeholders to ensure parks and recreation areas serve the needs of the surrounding residents: ensure that areas will be used and that activities planned are in harmony with the existing neighborhood.

2.5 IMPROVE REGULATORY PROCEDURES AND PRIORITIZE LAND ACQUISITION AND USES

1. Make sure the duties and authority of the various boards and commissions dealing with conservation and recreation are clear and that they are given the financial and legal power to carry out their respective missions.

2. Provide a professional expert grants writer to secure grants to help implement the recommendations of this plan.
3. Focus conservation efforts and resources on parcels that have been specifically recommended for conservation, recreation, protection of natural and cultural resources and features, protection and development of water resources and water supply management, open space, farming or farm land conservation, or other similar reasons.
4. Develop policies and procedures that will ensure accuracy and completeness of the town records. Track and document all additions, deletions or status changes to open space and recreation lands.
5. Keep open space and land use maps up to date. In order to intelligently plan for conservation and recreation, maps should be continually updated in conjunction with the town's Geographic Information System (GIS) Coordinator. GIS maps can be cropped, enlarged, combined, and layered providing an invaluable tool for detail study, research, and presentation purposes.
6. Carefully consider conservation easements held by the town, especially scattered small parcels, where enforcement will be difficult and potentially costly, and the public is excluded from use. While conservation easements can be a useful conservation tool between private citizens and willing land trusts, they are a tool the town should use with discretion. Land trusts are set up to manage property as the town has limited resources for this purpose.
7. Recognize that acquisition and management can sometimes be best achieved through partnerships with other governmental or private agencies. The town should be prepared to enter into such partnerships when appropriate.

3.0 BACKGROUND

The majority of land in North Stonington is as yet undeveloped. Open fields, mixed deciduous woodlands, wetlands, and swamps constitute the majority of the land area of the town. The majority of soils are stony with generally good drainage. The topography and geology have supported agriculture, milling, and limited mining activities.

The town is fortunate to have undeveloped areas of significant size that can substantially expand existing protected areas or help to provide a connective corridor for wildlife or recreation. The goal of the State of Connecticut is to preserve 21% of the land in the state as open space by the year 2023. This statewide goal can bring state help and financial support to a town that is proactive in acquiring conservation lands.

3.1 NATURAL AND CULTURAL RESOURCES

Water

North Stonington has abundant water bodies including large lakes, and an extensive network of ponds, streams, and wetlands. These water bodies provide significant quantity and quality of wildlife habitat. The town's primary drinking water source is a major stratified drift aquifer. The health and ecological functions of the town's water bodies are a most critical aspect of the town's physical, economic, and cultural wellbeing.

The Pawcatuck River is the largest river in North Stonington, forming the town's southeast border with Rhode Island. It receives, directly or indirectly, approximately two-thirds of the town's water drainage.

Wetlands are spread through every region of the town and affect all major land use plans. Laws are enacted to protect wetland areas because their ecological function is critical to all life. Wetlands provide overflow areas during flooding, water retention areas during times of heavy precipitation, and water reserves during times of drought.

North Stonington has six lakes and ponds with state owned boat launches on five of them. Water flow through the lakes is minimal. Residential development is attracted to the lakes making them especially vulnerable to ecological damage from the effects of overdevelopment within their basins.

There are eight water sub-basins mostly or partly within the town boundaries with another four barely entering. The Shunock and Wyassup sub-basins are the largest and encompass more than 60% of the town's land area. The interconnectedness of the sub-basins underscores the need for protection by all towns that share water resources in the region.

Several municipalities in Southeastern Connecticut, including North Stonington, recently participated in a comprehensive, stake-holder involved, planning process that culminated in the production of a Drinking Water Quality Management Plan. The participants recognized the need for a coordinated effort among the water supplier, the watershed communities, and the end users, to develop a common understanding of the valuable water resources the region possesses and to implement strategies to effectively manage and protect them in order to achieve long-term preservation of safe and sustainable public drinking water supplies.

Major stratified drift aquifers are located under 35% of the towns total land area. Nearly three-quarters of the town's residential population is served by private on-site wells. The Pawcatuck groundwater hydrologic system is a federally designated sole source aquifer due to its vital importance in supplying drinking water to the town and region for both present and future residential and economic development needs. It encompasses the Shunock, Wyassup, Pawcatuck, Ashaway and Green Falls sub regional drainage basins.

The region experienced drought conditions in the 1960's. Consequently the U.S. Geological Survey (USGS) conducted extensive research and testing of several of the most important stratified drift aquifers in southeastern Connecticut to determine their capacity to produce drinking water for regional and local supply. The Pawcatuck/ Shunock aquifer was determined by the USGS to be a very important drinking water resource. It is currently being used by public water supply companies and municipalities to supply drinking water to parts of Rhode Island and Connecticut. The aquifer is of major importance to the town's and region's water supply needs and plans for economic growth. The State of Connecticut legislature has given North Stonington the right to distribute water from this aquifer.

The North Stonington Water Pollution Control Authority outlined a water quality test program in a plan approved by the State of Connecticut Department of Environmental Protection. It was adopted by the town through the year 2020.

Several potentially high yield public water supplies have been identified by the USGS. The town of North Stonington has been given authority by the state legislature to be the distributor of drinking water to new service areas of the town. Both the Regional Planning Commission of the Southeastern Connecticut Council of Governments and the Governor's Commission for the Economic Diversification of Southeastern Connecticut have stressed the importance of these water supplies for the future of the region.

Wildlife and Vegetation

The town's topography and low human population promotes wildlife habitat. The Connecticut Department of Environmental Protection monitors and records species diversity and the location of sensitive ecological communities within the town. Natural Diversity Database sites are areas of habitat that the state feels should receive special attention. Thirty-five biodiversity locations are identified in the town with several significant concentrations. Both aquatic and surface vegetation in those sensitive areas, as well sensitive fauna, should be adequately protected. Invasive aquatic wetland and upland species are gaining a foothold and the need for their management has been identified.

The Connecticut Department of Environmental Protection inventories and manages the forest and wildlife resources at the Pachaug State Forest and the Assekonk Wildlife Management Area. The Fisheries Division is especially interested in North Stonington's coldwater fish population in the Shunock River, a state-designated and managed wild trout stream.

Approximately 70% of the town is forested. Forest cover not only provides forest resources and habitat, it has also been directly connected to water quality. State forest and wildlife management areas in North Stonington provide the majority of protected vegetative cover within the town. Lands now classified as forest land for tax relief purposes provide some temporarily protected forest cover, although timber can be harvested.

Many land areas have several conservation and recreation attributes such as where forest cover is combined with biodiversity sites, significant water and cultural features, and significant habitat for fish and wildlife. Conservation areas can also provide intangible amenities to residents, such as peace and quiet, dark night skies, and privacy.

Historic Sites

Historic sites and resources provide a major contribution to the rural character of the town and are attractive to high quality economic development. Historic sites are generally in close proximity to streams, lakes, and ponds. Many ponds and lakes themselves were reservoirs for the mills and other works that helped determine North Stonington's cultural heritage and the historic fabric of the community its residents now enjoy.

Historic and cultural features such as the more than 123 cemeteries, (said to be more than in any other town in the country), mill sites, stone walls, and old school houses are scattered throughout the town. The town's Cemetery Committee uses an 'adopt a cemetery' program to outsource upkeep of the cemeteries, many of which are ancient. The Old Plains Cemetery contains many rare examples of early stonemason's art, which require special preservation efforts, and has some of the earliest marked stones in town. Homes of historic importance exist throughout town, and the village of North Stonington, formerly known as "Milltown" is listed on the National Register of Historic Places.

The town has many public trails and pathways that were created throughout its milling, woodland harvesting, and farming history. These connective and access features can provide future generations with many recreational opportunities where they can enjoy the natural, cultural, and historic resources of the town.

Farms

Probably the most defining rural characteristic of North Stonington is its surviving farms and the vestiges of past agricultural activity, such as stonewalls, that continue to define the landscape. Prime agricultural farmland covers 15.4% of the town. **(See Figure 1 "Soils Map" and Figure 2 "Parcels with land classifications of farm or forest")** Conservation of farmland and the promotion of agriculture are top priorities. Loss of this resource occurs piecemeal - without much notice and little or no chance for reversal if strong steps for conservation are not taken.

While dairy farming has declined over the years, specialty farming and boarding horses have increased. An alarming trend is the amount of land being encumbered by homeowners associations with deed restrictions against owning livestock, in contradiction to the rural objectives of the town.

Map available online at:

http://www.NorthStoningtonCT.Gov/Pages/NStoningtonCT_BC/PZ/pocd/Figure1.pdf

Map available online at:

http://www.NorthStoningtonCT.Gov/Pages/NStoningtonCT_BC/PZ/pocd/Figure2.pdf

Dark Night Skies

As cities and towns all across the nation begin to recognize the beauty and realize the importance of a dark night sky, more and more regulations are being written to ensure their protection as an important resource. Visitors and residents North Stonington are fortunate to still be able enjoy this valuable resource that has been an integral part of human civilization since its beginning.

Light pollution created by improper lighting fixtures which direct light up into the sky instead of down toward the ground, creates a hazy blanket of light in the atmosphere which interferes with star-gazing as this artificial brightness causes the night sky to fade. Light pollution not only reduces visibility at night, it wastes energy, and disturbs wildlife that may depend on the natural cycle of darkness and light to survive.

Lighting that is energy efficient and night sky friendly may ultimately provide greater safety and security as all the light is cast downward over a designated area rather than some being scattered in other directions. The scientific, environmental, cultural and aesthetic aspects of preserving the night skies all must be taken into consideration as this is a resource that affects us in many ways, some of which are not yet fully understood.

3.2 OUTDOOR RECREATION

Passive recreational activities are non-motorized and do not significantly alter the natural aspects of the landscape. Passive recreation opportunities on public or private lands are abundant and a major economic resource of the town, improving the overall quality of life for residents. Conservation lands are generally used for passive recreation, unless sensitive resources preclude any public use. The extensive trail system in Pachaug State Forest and other nature preserves in town are in constant use by the public.

Active recreation opportunities involve a more intense use of the land that may somewhat alter the landscape but should not destroy its value. Conflicts frequently arise when an inappropriate location is chosen for active recreation. The need for additional public active recreational lands is recognized.

3.3 RESOURCE MANAGEMENT

The Pachaug State Forest (approximately 3,082 acres) and the Assekonk Wildlife Management Area (634 acres) are managed by the State of Connecticut Department of Environmental Protection. Various clubs and organizations manage large tracts of land generally serving as open

space and used for passive recreation, hunting, fishing, camping, or sporting activities, and generally open to the public by membership, fee, or permission. As custodians of these land areas, the owners generally manage the flora, fauna, and water resources.

Various land trusts own and manage conservation lands. These lands are generally open to the public for passive recreational use and enjoyment of nature. Private owners usually manage their land in harmony with good conservation practices. The town also holds tracts of land where conservation and recreation are encouraged.

The Purchasing of Development rights (PDR) is an effective means of preventing the loss of prime agricultural lands and preventing the fragmentation of open space. PDR programs are voluntary, public-private partnerships that help realize the permanent protection of lands that in many ways define the community. Under the Connecticut Farmland Protection Program, five of North Stonington's farms have sold their development rights to the state, resulting in the preservation of 381 acres of farmland. These parcels are managed privately by the owners.

3.4 GREENWAYS

Greenways are corridors that provide connectivity for wildlife and human benefit. They are often critical to species survival. They protect water resources and watersheds, thus ensuring good water quality and quantity now and in the future. Greenways can be defined by their functions and the areas they link. They may be natural - used only by wildlife, or have trails and roads for public access and recreational enjoyment of natural and historic resources. Historic trails and ancient pathways are a non-intrusive way of linking different areas.

State owned Pachaug State Forest and Assekonk Wildlife Management Area, town-owned lands, land trust and other non-profit organizations, provide a nucleus of open space that could be interconnected through a network of greenways and/or wildlife corridors.

4.0 MAPPING

Good mapping is vital to understanding where natural and cultural resources occur on the ground. Mapping is a fluid process that must be continually updated as resources are identified, and land uses change. The town's Geographic Information System enables the creation of maps with information that can be compared and contrasted for planning purposes. Attached is a series of maps on existing land uses (See Figure 3 "Conservation Commission Land Use Map"), natural and historic features, and conservation areas (See Figure 4 "Conservation Commission Planning Resource Map").

In order to recommend logical areas for future conservation, recreation, and greenways, the Conservation Commission is creating maps with "focus areas". A focus area is a section of a map that shows where significant concentrations of natural, recreational, and/or historic resources and features occur that are important to the town, where conservation and or recreation goals can be unified for planning and implementation purposes. Identifying resources requires extensive research and community outreach.

The Conservation Commission has begun to research fourteen preliminary focus areas, each defined by common attributes. General features, such Clark's Falls with its farmland, and the Shunock River and Valley with its water resources, will be mapped with a layer of specific features - farmland soils, historic buildings, wildlife habitats and the like. As new features are identified they can be added to the focus area.

4.1 PRELIMINARY FOCUS AREAS

(Roman numerals correspond to the Conservation Commission's *Focus Areas Map*)

I. Northwest Corner

Defining Features: Farms - High Acres, Flood Reed, Banker, Bison Brook and others.

Recreation: YMCA camp, Westbrook Fishing Club.

Other Features of Note: Prentice Mountain, Barnes Hill. Limestone mine, lime kiln, stucco cellar, grave of North Stonington gravestone carver.

II. Central Lakes

Defining Features: Lakes and wildlife - Wyassup, Billings, and Blue Lake, and the numerous Natural Resource Diversity areas where species of concern and endangered species are found.

Recreation: water sports, fishing, Camp Wightman church camp, and State boat launches, Pachaug State Forest

Other Features of Note: Bears Den (possible prospect hole for magnetic iron), Potholes on Ricktown Mountain, Ashwillet.

III. Pendleton Hill

Defining Features: Scenic areas - Palmer farm, First Baptist Church, Pendleton Hill, Legendwood Road.

Recreation: Groton Sportsmen's Club.

Other Features of Note: Puckhuninkonnuck Rock, site of first Baptist church, ancient stone bridges, colonial milestones.

IV. Green Falls River Corridor

Defining Feature: Green Falls River

Other Features of Note: large farms and farmland areas including Palmer and Bill farms, historic villages, grist mill, mill ponds, mill seats of Laurel Glen and Clarks Falls, important drinking water aquifers.

V. Chester Main

Defining Feature: Working farms - Stewart Hill, Miner's, Jonathan Edwards's winery and vineyards, Cool Breeze, Pickwick.

Other Features of Note: Horse Gravestone, mill seats.

VI. Lake of Isles

Defining Features: Lakes and Hills - Swantown Hill, Barnes Hill, Lake of Isles.

Recreation: Golf courses, boat launch.

Other Features of Note: Gold Mine, Bentley Place well and milk cellar, false lime kiln.

VII. Lantern Hill

Defining Features: Hills - Lantern and Long Hill, Wintechog Hill.

Recreation: Lantern Hill hiking trail, boat launches, rock climbing.

Other Features of Note: Biodiversity areas, geology, high cliffs, silica mine, mill seats, Lantern Hill Pond, Long Pond, Bush Pond, Silex Pond, Lantern Hill railroad bed, silica transfer station, Old Stone Church ruins, Indian cemeteries, Indian Trading Post, Pequot Indian reservation, Brown, Miner, Denison farms.

VIII. North Stonington Village

Defining Features: Historic Village -18th, 19th structures, mill ponds, reservoirs, canals, dams, mill seats, artifacts, Old Plains Cemetery, historic register district

Recreation: Village Green, town recreation and picnic area, bicentennial trail

Other Features of Note: public water supply well head, Park Pond and cold springs fen wetlands, biodiversity, aquifer

IX. Assekonk

Defining Feature: Biodiversity - Assekonk Wildlife Management Area, White cedar groves. Assekonk Pond, Swamp, and Brook

Recreation: Hunting and nature study.

Other Features of Note: Assekonk dam and reservoir pond, town recreation area, historic parade grounds.

X. Shunock River and Valley

Defining Features: Central river corridor - aquifer, wetlands, biodiversity sites, potential high-yield water resources important to the region, aquatic communities, beaver meadows, bogs, dams, and lodges, state designated and managed cold water stream.

Recreation: Canoeing, kayaking, nature study, hiking and horseback riding, conservation lands open to public for passive recreation.

Other Features of Note: Many mill seats, dams, reservoir ponds and canals, Richardson mill site, historic and geologic features, glacial esker.

XI. Spaulding Pond and Bell Cedar Swamp

Defining Features: Amazingly rich site of concentrated biodiversity, rare white cedar swamp

Other Features of Note: Reservoir ponds and dams, iron works site, bog iron ore in red brook, standing historic grist mill, Break Neck ledges, aquifer, large farmland fields.

XII. Southeast Agricultural

Defining Features: Large expanses of prime farm soils and with working farms, Beriah Lewis farm

Other Features of Note: Pawcatuck River and Green Falls River, sole-source stratified drift aquifer, potential high yield drinking water well head sites and Level B aquifers.

XIII. Southwest Agricultural

Defining Feature: Wychwood Farm with large poultry production and fields in cultivation.

XIV. Clarks Falls

Defining Feature: Large expanses of prime farm soils and farmlands with working farms, Palmer farm and others.

Recreation: Avalonia's Yannatos Preserve

Other Features of Note: Farm village of Clarks Falls, gristmill, Green Falls River, aquifer.

Map available online at:

http://www.NorthStoningtonCT.Gov/Pages/NStoningtonCT_BC/PZ/pocd/Figure3.pdf

Map available online at:

http://www.NorthStoningtonCT.Gov/Pages/NStoningtonCT_BC/PZ/pocd/Figure4.pdf

5.0 ACQUISITION RECOMMENDATIONS

The recommendations and mapping in this document are for the purpose of focusing the town's limited resources on the acquisition of land most appropriate to town goals, and are not meant in any way to discourage private land conservation efforts. Recommendations are made in two contexts: the first general in nature, and is town-wide providing long range goals for the town to work towards; and the second specific to particular parcels or resources whereby specific recommendations are offered to provide for immediate action as opportunities present themselves. No mathematical rating and ranking system can replace the accumulated wisdom and vision of the citizens of North Stonington.

Open space is protected to varying degrees by fee title to the land. Held by the town, state, and land trusts the land is dedicated in perpetuity to conservation and/or recreational uses by deeds and agreements filed in the land records of the town. Likewise, varying degrees of protection are provided by conservation agreements and the holding of development rights. (Although the degree of protection is considered high, changes can occur through extensive legislative action or judicial re-interpretation of terms.) Fee title offers one of the best ways to conserve large tracts of open space long term and provide substantial passive recreational opportunities. Requiring a certain percentage of land to be designated as open space in subdivisions is a tool for acquiring open space but may not provide useful land in every instance. Paying a fee in lieu of open space provides the town to acquire land it considers to be the best and of highest priority for conservation and recreational uses.

5.1 PROPOSED CONSERVATION LANDS

Bell Cedar Swamp qualifies as an important conservation protection site because of the rich biodiversity that has been identified. Acquisition by the state or land trust is recommended. Water quality and quantity are critical attributes of this area. Bell Cedar Swamp requires special attention and protection as it offers scarce natural diversity and a unique environment seldom available to the public to enjoy or study.

Park Pond qualifies as an important conservation site because of its unique cold-water aquatic habitats for threatened and state-designated important species. It could serve as a public park for nature study and passive recreation within the North Stonington Village National Historic Register District that would be in walking distance from the village center. Park Pond provides a

refuge for a variety of species during hot dry periods, during floods, and during cold winters. The site is also a treasure of the milling heritage of the town that could be restored and preserved. The mill site may qualify as a state heritage site, which could offer a level of protection.

5.2 PROPOSED WATER MANAGEMENT LANDS

Protection of the streams, wetlands, and headwater ponds and lakes that overlie and recharge aquifers is essential for protecting the quantity and quality of the town's drinking water over the long term. The drinking water resources in the Shunock, Green Fall, Wyassup, and Pawcatuck focus areas require maximum conservation of open lands and controlled development.

The Town of North Stonington should acquire fee title to those sites where public water supply wellheads could be developed or maintained. The state has given the town exclusive rights to distribute drinking water into new areas that would include important opportunities for commercial and industrial development. The availability of drinking water in the aquifer is large but limited. The town should not only acquire the recommended sites, it should also apply to the state for diversion permits to withdraw the drinking water from the aquifer that will serve the planned future needs of the town.

There is space within the approximately 8 acre, town owned parcel (# 6364) on Rocky Hollow Road, to house garage maintenance facilities with a separate access and adequate separation from the other town facilities. The town garage and maintenance department does not have enough land at its present site on Wyassup Road. It is located on the aquifer and is therefore inappropriate for a garage.

The land area known as the Hewitt Property (parcels #2284, 9641, and the former Dew Drop Inn restaurant) were acquired by the town in 2008. A committee has been formed to consider ways of using the property. A priority for use of this land should include protection for Shunock River water quality and quantity, and for the public water supply wellheads that supply Kingswood/Meadow Wood, the schools, and parts of the village. Recreation uses might include horseback riding activities. Uses that would support agriculture in town, such as a farmer's market or a teaching farm should be explored.

5.3 PROPOSED RECREATION LANDS

The town needs several parks that can provide outdoor public gathering places for residents to enjoy. Several possibilities exist including an expanded Rocky Hollow recreation area, the old parade grounds, and town owned lots in Kingswood/Meadow Wood.

The present town Rocky Hollow Recreation Area provides a nucleus for centralizing playing fields and expanding active recreation lands and facilities. An approximately 15-acre area (within Parcel #5607) for expanding facilities is adjacent to the approximately 9-acre area (also within parcel #5607) of state-owned land that is presently leased by the town for recreation. The site connects with the school recreational fields and facilities by way of a footbridge across Assekonk Pond. Acquisition from the state by the town of the 15-acre site is considered high priority. In exchange for the potentially beneficial 15 acre area (“B” on Map below), the town-owned 18 acre parcel (#2281)(“A” on Map below) at the edge of Assekonk Swamp that is of little use to the town but of value to the state, could be offered to the state. (See Figure 5)

The town should take the initiative to encourage the state as a top priority to acquire the 115-acre open parcel (# 5693) at the head of Assekonk swamp. The state would expand its wildlife management area by approximately 20% and add to the important protected Assekonk wetlands. The state would then be in a more favorable position to sell to, or swap with the town, giving the town the 85-acre parcel (#6365) - **Assekonk Swamp East**- for its long term municipal facilities expansion. This is considered a high priority acquisition and exchange opportunity because the parcel at the head of Assekonk Swamp could be lost to housing development at any time, and the town needs to develop a plan for its long-range municipal and recreational needs. (See Figure 5)

The old Parade Grounds owned by the town, at the edge of Meadow Wood, could provide fields for local events with access to trails around the Assekonk Wildlife area, and connect to town recreational facilities. (See Figure 5)

Map available online at:

http://www.NorthStoningtonCT.Gov/Pages/NStoningtonCT_BC/PZ/pocd/Figure5.pdf

Pachaug State Forest and Assekong Wildlife Management Area provide extensive opportunities for passive recreation. The state has a goal of expanding its ownership of open lands state wide. This provides North Stonington with the opportunity to add state-owned open space that is available to the public for state allowed active and passive recreational purposes. The town can recommend to the state land areas for state acquisition that would contribute to the town's plans.

Lantern Hill owned by the Mashantucket Tribal Nation provides an opportunity for a park should the tribe be willing to allow the land to be used for that purpose. The 1987 Regional Plan of Development slated Lantern Hill for a state park. Lantern Hill provides a wonderful opportunity for hiking, geologic and nature study, and spectacular views.

A town ice-skating pond should be re-established at the town owned pond next to the service station at Route 2 and Mystic Road where a town managed skating pond with shelter and warming pit was once enjoyed by many townspeople. The pond is shallow enough for safety and the nearby fire company could flood the ice to restore the surface as needed.

A cluster of undeveloped lots owned by the town near the high ground in the Kingswood subdivision could provide the residents in that area with a beautiful, well-shaded picnic ground and community gathering-place.

Passive recreation lands can be expanded through the state's, town's, or land trusts' acquisition of fee title tracts rather than through the acquisition of conservation easements on private land that would be closed to the public. Ecologically sensitive areas and species can be best protected under trust management. These tracts can provide connective corridors and trails for enhancing town-wide conservation and recreational opportunities.

6.0 MANAGEMENT

The following entities could hold and manage conservation lands: North Stonington's several active land trusts; the state; the town; and possibly even the Conservation Commission in the future, if designated to do so by appropriate authorities.

The land trusts active in town are the world wide The Nature Conservancy (TNC), the regional Avalonia Land Conservancy (ALC), and the local North Stonington Citizens Land Alliance (NSCLA). Land trusts encourage interested landowners to donate or sell land, conservation easements, and/or development rights to them.

Effective management of the town's resources is largely dependent on the ability and willingness of the townspeople and elected officials to understand the value in what they have and to work diligently to realize their stated goals in this and in other plans. In other words, conservation takes a strong management commitment. Short sightedness on the part of citizens, elected officials and other stake holders will be costly in the long-term with respect to preserving the kind of environment we desire, our quality of life, and the economic viability of North Stonington.

7.0 ACKNOWLEDGEMENTS

The Planning and Zoning Commission and Conservation Commission would like to thank Conservation Commissioners Richard Blogett and Bob Fleury, resident volunteer Nita Kincaid, Planning and Zoning Commission member Vilma Gregoropoulos and GIS Coordinator Marc Tate for their invaluable assistance with research and mapping.

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7.2 MAPS

- | | |
|-----------------|---|
| FIGURE 1 | SOILS MAP |
| FIGURE 2 | PARCELS WITH LAND CLASSIFICATIONS OF FARM OR FOREST |
| FIGURE 3 | CONSERVATION COMMISSION LAND USE MAP |
| FIGURE 4 | CONSERVATION COMMISSION PLANNING RESOURCE MAP |
| FIGURE 5 | ASSEKONK SWAMP LAND TRADE AND SUGGESTED STATE LAND PURCHASE BY NORTH STONINGTON CONSERVATION COMMISSION |

8.0 GLOSSARY AND DEFINITIONS

Conservation Restriction: a limitation, whether or not stated in the form of a restriction, easement, covenant or condition, in any deed, will or other instrument executed by or on behalf of the owner of the land described therein, including, but not limited to, the state or any political subdivision of the state, or in any order of taking such land whose purpose is to retain land or water areas predominately in their natural, scenic or open condition or in agricultural, farming, forest or open space use, in perpetuity.

Farm Land: any tract or tracts of land, including woodland and wasteland, constituting a farm unit. Ref: Sec. 12-107b(1) Connecticut General Statutes (CGS).

Forest Land: any tract or tracts of land aggregating twenty-five acres or more in area bearing tree growth that conforms to the forest stocking, distribution and condition standards established by the State Forester.... Ref. Sec. 12-107b(2) CGS.

Focus Area: an area with a concentration of significant natural, recreational, and or historic resources and features that are important to the town where conservation and or recreation goals can be unified for planning and implementation purposes.

Greenway: a conservation and or recreation corridor connecting open space parcels for people and wildlife.

PA 490: Since 1963, Public Act 490 provides for assessment of farm, forest, and open space land on the basis of its current use rather than market value. "Use value" is based on what the land is actually used for and not what it might potentially be worth on the market. Use value taxation is justified because the land requires little, if any, support from local government revenues (Source: NEMO Open Space Fact Sheet T6).

Open Space: any area of land, including forest land, land designated as wetland under section 22a030 and not excluding farm land, the preservation or restriction of the use of which would (A) maintain and enhance the conservation of natural or scenic resources, (B) protect natural streams or water supply, (C) promote conservation of soils, wetlands, beaches or tidal marshes, (D) enhance the value to the public of abutting or neighboring parks, forests, wildlife preserves, nature reservations or sanctuaries or other open spaces, (E) enhance public recreation opportunities, (F) preserve historic sites, or (G) promote orderly urban or suburban development. Ref: Sec. 12-107b(3). CGS [*Please recognize that the definition for Open Space in a plan such as the PCRL - which identifies potential areas for consideration, must necessarily differ from the town's Zoning Regulations where Open Space is narrowly defined as protected land. Each is correct within its different context.*]

Overlay Area: designated area or district, delineated by an overlay on the Zoning Map which is of such historical or environmental importance that it commands extraordinary measures for its protection from any activity or plan deemed detrimental to the underlying basis of its character (Reference: P&Z Regulations, definitions 1/09).

Parcel (Lot): an area or parcel of land, in the same ownership, designated and recorded in the land records of the Town by its owner as a separate lot (Reference: P&Z Regulations, definitions 1/09).

Passive recreation: Non-motorized recreational activities that leave the land essentially in its natural state.

Purchase of Development Rights (PDR): Voluntary, legal agreements that allow owners of land meeting certain criteria to sell the right to develop their property to a town or state government, or to a nonprofi organization. A conservation easement is then placed on the land and the agreement is recorded on the title to limit the future use of the land to agriculture or other open space uses (Source: EPA Smart Growth Policies Glossary).

Streambelts: The natural area along rivers, streams, wetland drainage creeks, and intermittent brooks.

Wetlands: land, including submerged land, as defined in Sect 2.1 (Conservation Commission) of the Inland Wetlands and Watercourses Regulations of the Town of North Stonington, that are regulated pursuant to Section 22a-28 through 22a-35 inclusive of the Connecticut General Statutes, as amended; which consist of any of the soil types designated as poorly drained, very poorly drained, alluvial and flood plain by the National Cooperative Soils Survey, as it may be amended from time to time, of the Soil Conservation Service of the U.S. Department of Agriculture (USDA). Such areas may include filled, graded or excavated sites, which possess an aquatic (saturated) soil moisture regime as defined by the USDA Cooperative Soil Survey. Ref: P&Z reg. definitions.

Wildlife corridors: Natural pathways for wildlife movement within and between important habitats.