



Middle Township
Cape May County, New Jersey
Open Space and Recreation Plan
April 2013



Middle Township Open Space and Recreation Plan

Adopted by the Planning Board on April 25, 2013

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Middle Township Hockey Association
Cape May County Disc Golf Association
Cape Express Soccer Club
South Jersey Triathlon Club

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The original of this document has been signed and
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1.0 Executive Summary

Middle Township is a rural community with valuable natural, cultural and historic resources that serve the residents, visitors, and the region. In addition to the vast open space and many recreation facilities, its diverse commercial corridors and developed areas include the county's only college, its only hospital, and the county seat. It is physically located in the center of the County, and therefore hosts a tremendous number of travelers through its unique collection of hamlets, villages, and town centers. Cape May County is a tourism destination, and the Township experiences significant increases in population, traffic and economic activity during the summer months.

Middle Township is exceptionally positioned to be the hub of open space and recreation for Cape May County for several reasons. It is centrally located; the number of existing recreation amenities is high; and the Township's development policies and laws encourage preservation of land, as well as commercial recreation uses.

The list below demonstrates just a few of the Township's assets in this regard:

- Twenty one (21) recreation and open space facilities, including the nationally-recognized Cape May County Zoo

- Diverse and distinct ecosystems including salt and freshwater wetlands, upland and wetland forests, and the internationally renowned Delaware Bay ecosystem, one of the largest and most biologically diverse estuaries in the United States
- Considerable Federal, State, County, Township, and nonprofit preserved open space, including 4,800 acres of the Cape May National Wildlife Refuge
- Water access along the entire east and west borders
- Significant historic structures

This Open Space and Recreation Plan (Plan) is an important part of the centers-based development policy adopted by the Township in 2010 and outlined in the master plan. Growth is encouraged in the areas of existing infrastructure, while the surrounding environs are intended for open space, recreation, agriculture and large lot residential.

Prior to this Plan, the Township has not engaged in a comprehensive public process to determine the future of open space and recreation. Consequently, there was overwhelming consensus that the effort was long overdue. The process led to two conclusions: open space must be protected based on the significant benefits provided to our present

and future well-being; and that the Township's recreation program needs to be a comprehensive and coordinated system providing a diverse range of programs and facilities for all ages and interests.

The **2003 Middle Township Master Plan** had a short Recreation Plan section which identified eight (8) municipal and one (1) County recreation facility. Recommendations of the 2003 Recreation Plan included:

1. Expansion of Martin Luther King Center
2. Development of the Fort Apache site, now called Ockie Wisting
3. Skate park at the Clarence Davies Complex
4. Continued expanded recreational amenities at the Clarence Davies Complex
5. Expand the bike path as a recreational opportunity and an alternate mode of transportation.

All of the recommendations in the 2003 Recreation Plan have been implemented, with the exception of Fort Apache/Ockie Wisting development. Recommendations and plans for the site are included in this report. Additionally, although the bike path has been extended through three (3) phases, there are still plans to continue the path to a phase 4 and beyond.

The major goals of this 2013 Open Space and Recreation Plan are to:

- Maintain the character and integrity of each community within the Township
- Promote the preservation and management of land for wildlife habitat, to improve water quality and supply, and to provide for open space
- Develop public recreation facilities that meet the current and future needs of the residents, and contribute to an improved quality of life

Throughout the process of developing the Plan, many opportunities were identified, including:

- Working with other government agencies and nonprofits that have conservation and recreation as their core mission

- Expanding nature tourism and sports tournaments to promote the local economy
- Promoting historic preservation as an asset of the community

Significant public input (described in Chapter 9.0: Public Participation) has resulted in a comprehensive Plan, identifying diverse strategies to implement a wide variety of goals and objectives (listed in Chapter 2.0: Goals and Policies). The Project Team, made up of volunteer members of the Environmental Commission, Recreation Advisory Board, Economic Development Council, Planning Board, and Township Committee, was fully committed to the success of the project, as evidenced in the many hours invested. Their extensive and meaningful input has created immeasurable value to this plan.

A few of the primary recommendations of the plan include:

Prioritize and support the acquisition of land for conservation based on ecological value, such as groundwater recharge areas, wildlife habitat, and flood hazard areas.

Develop Ockie Wisting Recreation Complex

Redesign the Davies Sports Complex

Improve three Delaware Bay recreation areas

Identify connectors to and expand the Middle Township Bike Path

Increase public information regarding all recreation and open space facilities in the Township

This Plan is consistent with the following planning documents:

- Middle Township's 2010 Master Plan and associated elements
- Middle Township's 2010 Natural Resource Inventory
- Middle Township 2011 Transportation Study Circulation Element
- Cape May County Comprehensive Plan
- Cape May County Open Space and Recreation Plan
- New Jersey State Development and Redevelopment Plan and Draft State Strategic Plan
- New Jersey Statewide Comprehensive Outdoor Recreation Plan

The Bayshore Heritage Byway Corridor Management Plan is hereby incorporated into this Open Space and Recreation Plan. The 142-mile Bayshore Heritage Byway follows Route 47 into Middle Township, then turns west onto Bayshore road in Green Creek, Middle Township, where it continues into Lower Township. The purpose of the route is to preserve, enhance and promote the environmental, cultural and historic resources along the Delaware Bay. The goal is to support sustainable tourism development. The entire plan is available at http://www.lardnerklein.com/BHB_index.html.

In addition, the Plan meets the NJDEP Green Acres Open Space and Recreation Plan Guidelines; advances the Township's bronze certification in the Sustainable Jersey program; and satisfies requirements of the Township's Plan Implementation Agreement for State Plan Endorsement.

The Plan was funded in part by the Geraldine R. Dodge Foundation, through the Association of New Jersey Environmental Commissions. The matching grant program provides funding to help towns develop "capacity-based, sustainable land use plans and ordinances." Another goal of the program is to provide Environmental Commissions the opportunity to participate in the local land use planning process.

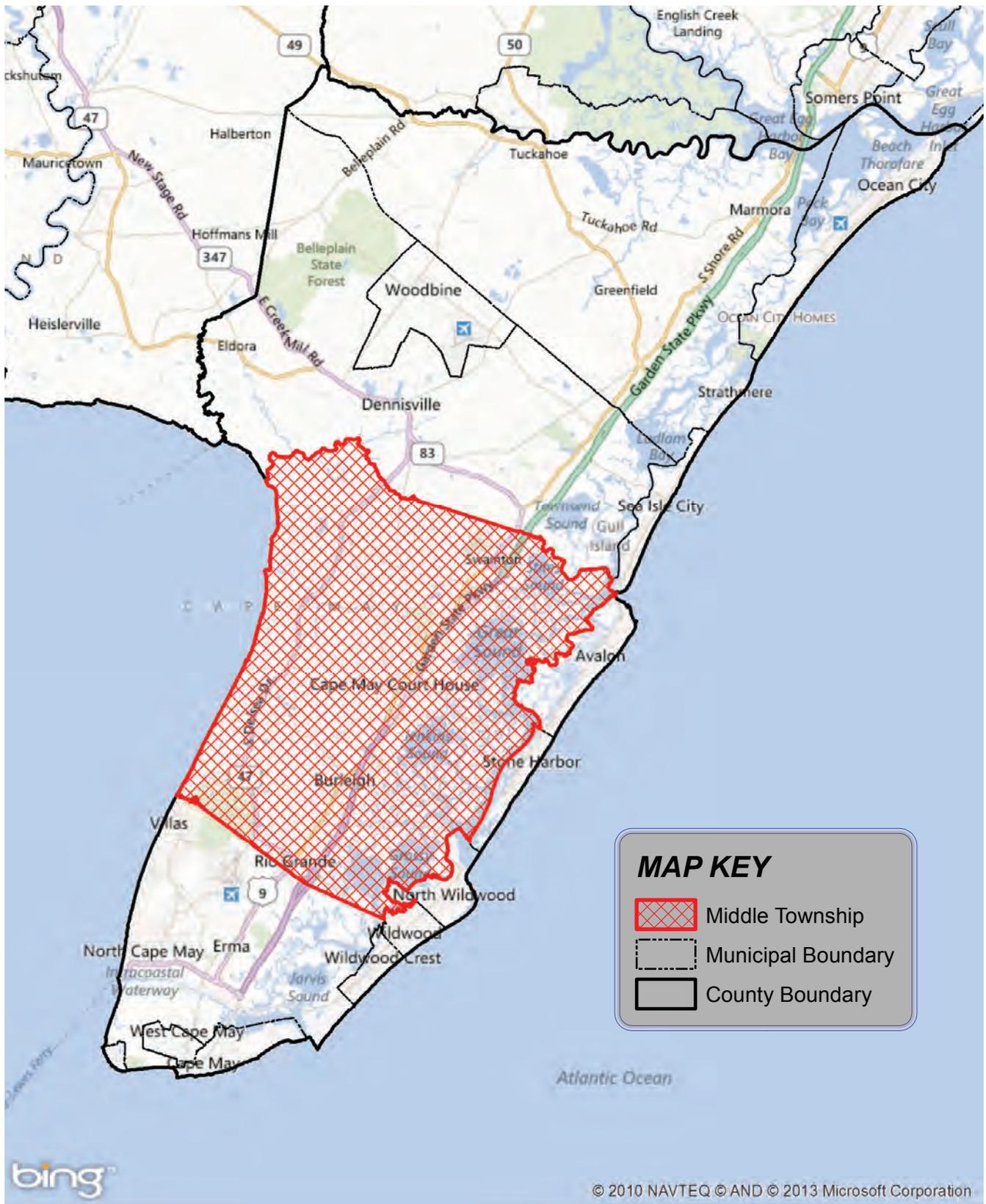


FIGURE: MIDDLE TOWNSHIP LOCATION MAP

SOURCE: GIS DATA PROVIDED BY BINGMAPS, & NJDEP <http://njgin.nj.gov/>



DATE:
3-8-13

DRAWN BY:
PLL

1 inch = 20,000 feet





2.0 Goals and Policies

2.1 GOAL: Maintain the character and integrity of each community within the Township.

2.1.1 Policy: Recognize, value, support and promote those traditions and landscapes that create the character of the Township, such as open space, working farms, and water based activities such as aquaculture and boating.

2.1.2 Policy: In developing or redeveloping recreational sites, protect the character of the surrounding neighborhood; consider impacts on habitat, aesthetics, traffic and parking.

2.2 GOAL: Support the centers based development policy and ensure consistency with the Township's master plan.

2.2.1 Policy: Within the centers, develop recreation assets which serve residential population and complement commercial uses. For example, a bike trail and sidewalks that connect public facilities, commercial areas and neighborhoods.

2.2.2 Policy: Outside the centers, maintain and support the expansion of open space primarily for conservation and passive recreation purposes.

2.2.3 Policy: Leverage the Township's status as a "smart growth" community as endorsed by the State Planning Commission by applying for State grants and technical assistance. The State Strategic Plan prioritizes directing state resources to smart growth communities.

2.2.4 Policy: Implement the recommendations of the Middle Township 2011 Transportation Study (adopted as the Circulation Element of the master plan) as well as the Township's Complete Streets policy that prioritize pedestrian and bicycle safety. For example, private and public development within the centers must include sidewalks.

2.2.5 Policy: Support the Township's open space regulations, including:

- Section 250-624 Open Space requirements for large developments
- Section 250-628 Cape May Tributaries and Bays East Overlay Zones which requires a soils

test to determine lot size

- Section 250-635 Design Standards for Townhouse Development and Multifamily Residential which requires 10% open space
- Section 250-625 Noncontiguous Parcel Cluster that allows land in the environs to be preserved with the development rights conveyed to a parcel in the center
- Section 250-626 Open Space Clustering that allows a subdivision to have reduced lot sizes if an area of the subdivision is preserved as open space

2.3 GOAL: Develop public recreation facilities that meet the current and future needs of the residents, and contribute to an improved quality of life.

2.3.1 Policy: Implement the recommendations of this Plan, which are based on public input, evaluation of current recreation facilities, and anticipated population growth.

2.3.2 Policy: Continue to solicit public input regarding the recreation needs of the community through public meetings and surveys.

2.4 GOAL: Promote the preservation and management of land for wildlife, for water quality and supply, and for open space.

2.4.1 Policy: Inform and educate the public regarding the importance and benefits of land preservation through:

- Posting benefits on the Township's Environmental Commission webpage
- Facilitating partnerships among the schools and environmental organizations for educational field trips
- Continued public education by the Environmental Commission at public events such as Harvest Fest and Earth Day

2.4.2 Policy: Support and facilitate acquisition of land by government agencies and nonprofit conservation groups.

2.4.3 Policy: Consider priority acquisition areas outlined in this report in land use decision making.

2.5 GOAL: Support nature tourism and its positive effect on the local and regional economy.

2.5.1 Policy: Identify and support new business opportunities that take advantage of the natural resources of the Township, including water access, land preservation areas, agriculture, and unique wildlife.

2.5.2 Policy: Support and encourage existing businesses that contribute to nature tourism such as retail stores, campgrounds, and marinas.

2.5.3 Policy: Partner or support nature tourism events.

2.5.4 Policy: Work with regional tourism and business organizations, as well as with other municipalities to promote Middle Township's natural resources as an integral part of an overall regional destination.

2.6 GOAL: Support private recreation facilities that contribute to the local economy, improve the quality of life for residents, and provide alternative activities to typical shore recreation.

2.6.1 Policy: Consistent with the master plan, maintain and expand zoning and other codes which encourage recreation uses, particularly active recreation facilities in the Township.

2.6.2. Policy: Identify and promote partnerships to create "packages" which include lodging (campgrounds and regional lodging), meals at area restaurants, and visits to recreational facilities such as wineries and golf courses.

2.7 GOAL: Develop public access points along the Delaware Bay to be more accommodating to visitors and residents, while maintaining the critical wildlife habitat.

2.7.1 Policy: Develop site plans with minimal improvements such as identification sign and designated parking for Reeds Beach, Cooks Beach, and Norburys Landing.

2.7.2 Policy: Continue to work with Federal, State and local agencies and private organizations to stabilize the shoreline.

2.8 GOAL: Fund open space and recreation programs without fully depending on the municipal taxes.

2.8.1 Policy: Pursue all appropriate private and public grant funds.

2.8.2 Policy: Develop and maintain an active list of private sponsors, including businesses, and community organizations.

2.8.3 Policy: Create a volunteer bank of workers and suppliers to rely upon for construction of recreation projects.

2.9 GOAL: Prioritize connectivity of facilities and trails to enhance the recreation experience.

2.9.1 Policy: Identify destinations with the ability to develop safe access to the bike path.

2.10 GOAL: Preserve and enhance the historic and cultural resources of the Township.

2.10.1 Policy: Pursue grants to create an inventory of historic resources and work towards designation and protection of those resources.

2.10.2 Policy: Identify historic assets with signs.

2.10.3 Policy: Support historic preservation efforts by other entities.

2.11 GOAL: Continue and expand partnerships with other government agencies and nonprofit organizations to implement open space and recreation facilities and programs.

2.11.1 Policy: Involve other agencies to complement and enhance the efforts of the Township. For example, establish educational programs to be run by other groups at Township facilities.

2.11.2 Policy: Prioritize projects that advance the goals and objectives of other agencies.

2.12 GOAL: Support efforts which promote health and wellness.

2.12.1 Policy: Encourage organized fundraising events such as runs, bike races, and triathlons which improve health, support local charitable organizations, and benefit the local economy.

2.12.2 Policy: Encourage private fitness centers, wellness studios, and other private sector businesses that improve health and complement recreation efforts in the Township.



3.0 Inventory of Open Space and Recreation

The natural environment truly defines the character of the Township. The abundance of valuable ecosystems, many of which are protected by environmental laws and engineering constraints, maintains our rural nature that is so valued. In fact, 50% of the Township’s area is wetlands, and another 20% is floodplains, waterways or other open water bodies. (Middle Township Master Plan, 2010). Much of this undevelopable land corresponds to the 22,000 acres of preserved

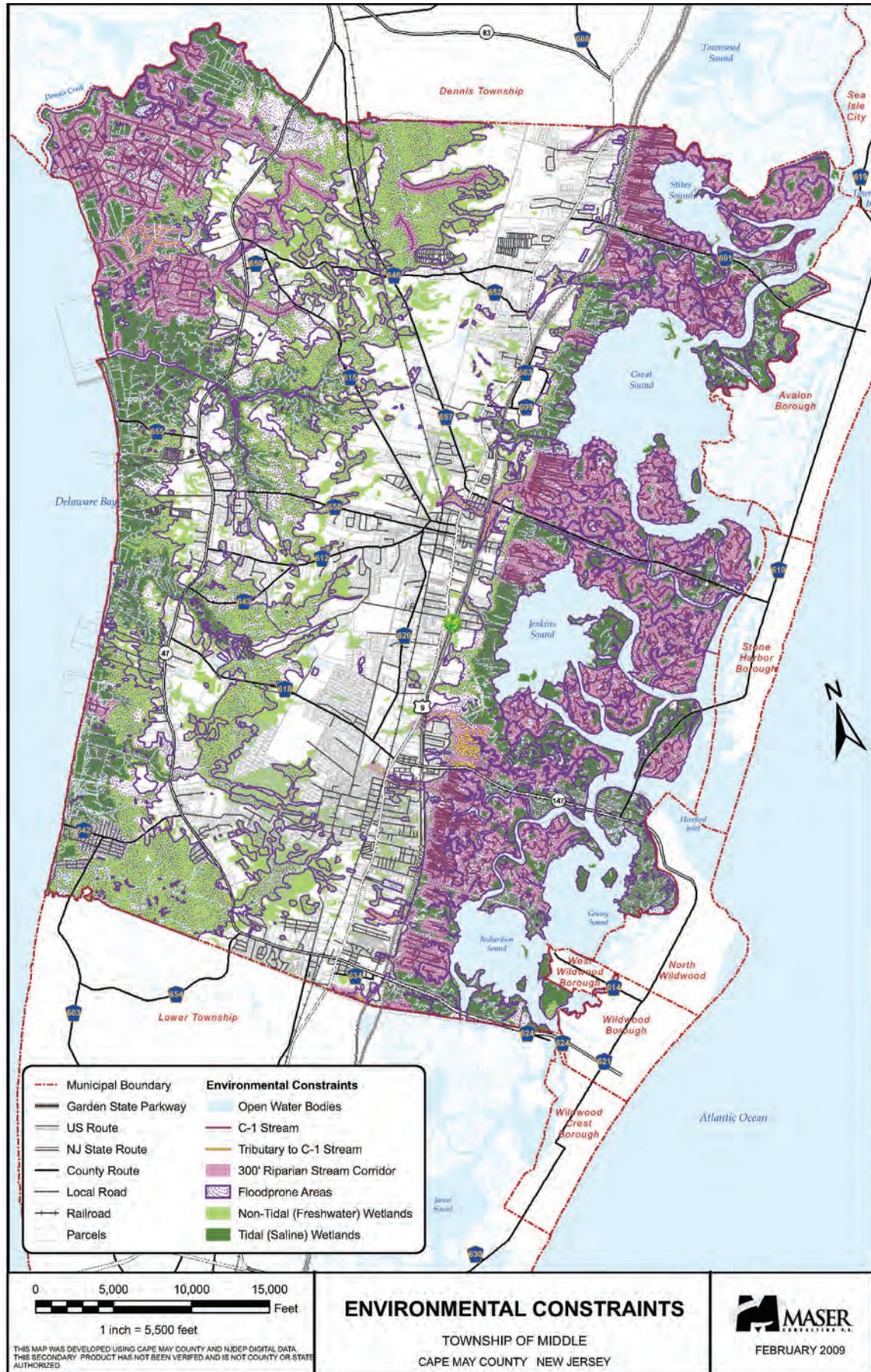
land owned by Federal, State, County, Township and nonprofit agencies. Wetlands, floodplains, and waterways in the Township are illustrated on the map on page 13. The inventory of recreational facilities and open space by ownership is shown on page 14.

In addition to the significant amount of land preserved, there are several municipal policies and regulations (see Chapter 2.0: Goals and Policies), as well as acquisition plans of public agencies (see Chapter 7.0: Open Space Systems Map) that will increase the amount of land for open space and recreation purposes in the future.

Ownership of Open Space and Recreation Lands	Acres	Percent of Total
Township	159	0.3%
County	3,441*	8%
Federal	4,832	11%
State and Nonprofit	14,074	31.4%
Total Preserved Land	22,506	50.2%**
Other Land Uses	22,294	49.85
Total Land Area of Twp	44,800	100%

*705 acres is County-owned development rights
 ** Much of this land is environmentally sensitive as indicated.

Environmental Constraints





3.1 Township Owned Lands

Chapter 6.0 contains a description of existing Township facilities, needs and recommendations.

3.1.1 Robert “Ockie” Wisting Recreation Complex

Block 466.01, Lot 47
7 Fulling Mill Road, Rio Grande
82 acres

3.1.2 Clarence and Georgiana Davies Sports Complex and Baker Center

Block 94, Lots 14.01, 16
626 Goshen Road, Cape May Court House
65 acres

3.1.3 Martin Luther King Center

Block 936, Lot 8
207 West Main Street, Whitesboro
6.86 acres

3.1.4 Middle Township Bike Path

Clarence Davies Sports Complex to Indian Trail Road
4.5 miles

3.1.5 Rio Grande Park

Block 1421, Lot 8
Railroad Avenue, Rio Grande
2.57 acres

3.1.6 Goshen Historic Schoolhouse and Mini Park

Block 49, Lot 5
316 Route 47 North
1.35 acres

3.1.7 Carol Nicoletta Park - Shellbay Avenue Pier

Block 335.03, Lot 1
525 E. Shellbay Avenue
3,264 square feet

3.1.8 Avalon Manor Fishing Pier

Block 118-03, Lot 9
701 Avalon Boulevard, Avalon Manor

3.1.9 Bidwell Jetty at Reeds Beach

Block 506, Lot 18.31
301 Beach Avenue, Cape May Court House

3.1.10 Norbury’s Landing

Block 404, Lot 10
Millman Avenue at the Delaware Bay, Del Haven
82 feet x 66 feet

3.2 School District Facilities

3.2.1 Elementary School #1

215 Eldredge Road, Cape May Court House
12.3 acres

Amenities:

Two (2) playgrounds

3.2.2 Elementary School #2 and Memorial Field

101 West Pacific Avenue
Cape May Court House
22.9 acres

Amenities:

Playground

One (1) basketball court

One (1) Football field

Athletic track

Track and field area

3.2.3 Middle School and High School

1 Penkethman Way, Cape May Court House
60.73 acres

Amenities:

One (1) soccer field

One (1) baseball field

One (1) softball field

Two (2) lacrosse/field hockey fields

Four (4) tennis courts

3.2.4 Boyd Street Fields

220 South Boyd Street, Cape May Court House
4.31 acres

Amenities:

Two (2) softball fields

One (1) soccer field



3.3 Cape May County Recreational Facilities

The County of Cape May owns and operates several recreation complexes with a variety of amenities. There are slightly less than 2,000 acres managed by the County Parks Department.

3.3.1 County Park Central and Zoo

707 Route 9 North, Cape May Court House
230 acres

Cape May County Park Central is over 200 acres (including the zoo) with many forested areas maintained in their natural state.

- Amenities:
- Zoo (87 acres)
- 16 covered picnic areas
- 2-3 miles paved and unpaved trails
- Freshwater pond fishing
- Disc golf course
- Playground





3.3.2 County Park South

130 Bayshore Road, Del Haven

The Fishing Creek Wildlife Preserve is the largest of the county's three parks, consisting of more than 1,700 acres, 736 acres are in Middle Township. Ten acres are developed and provide the amenities below, with the rest of the park mostly wetlands, providing habitat to diverse plant and animal life located in the Delaware Bay Estuary.
(www.capemaycountygov.net)

Amenities:
Playground
One (1) soccer field
One (1) baseball field
Two (2) basketball courts
Picnic shelters



3.3.3

County Park East

Crest Haven Road, Cape May Court House
 16.29 acres

Just across Route 9 from the County Park Central and Zoo, this site provides more active recreation opportunities for the community.

Amenities:

- One (1) soccer field
- One (1) softball field
- Three (3) tennis courts
- Two (2) basketball courts
- Trails
- Wildlife viewing
- Freshwater pond fishing
- Covered picnic area

3.3.4

County Special Services Pool

Crest Haven Road, Cape May Court House

Indoor 25 meter pool
 Open to public on limited basis



3.4 Cape May County Open Space and Farmland Preservation

On November 9th, 1989, the voters of Cape May County approved, by a two to one margin, a ballot question endorsing the establishment of a trust fund to preserve open space and agricultural land. The trust is funded by a County property tax of one cent per \$100 assessed valuation (known as the Open Space Preservation Tax) and currently generates approximately \$5 million annually. Once the funds were in place, the County established the Division of Open Space and Farmland Preservation to administer the program, which focused on the outright purchase of open space parcels, and the purchase of development rights on active agricultural lands from willing sellers. From 1989 to 2011, the County was successful in purchasing 1,190 acres of open space (\$25,322,575 spent) and deed restricting 3,135 acres of farmland (\$32,492,236 spent). This has resulted in the permanent preservation of 4,325 acres through the utilization of nearly \$58 million of Trust Fund dollars. (Source: www.capemaycountygov.net)

**3.4.1 County Farmland Preservation
1,622 acres in Middle Township**

**3.4.2 County Open Space
705 acres in Middle Township**

3.5 State of New Jersey Owned Lands

All Wildlife Management Areas (WMA's) are managed by the New Jersey Division of Fish and Wildlife, which is part of the New Jersey Department of Environmental Protection.

3.5.1 Beaver Swamp Wildlife Management Area

This WMA totals 2,928 acres, of which 1,718 acres are in Middle Township. The area consists of swamps, dense forest, creeks and small ponds, and located at the head of Sluice Creek at the most northwestern area of the Township. The balance of the area is in Dennis Township. Land Acquisition by the State started in 1964, particularly through the Green Acres program.



3.5.2 Dennis Creek Wildlife Management Area

This WMA totals 8,040 acres, of which 3,078 acres are in Middle Township. It is also located at the northwestern part of the Township. In Dennis Township the area abuts the coastal forest section of the Belleplain State Forest. It is considered one of the finest salt marshes in the state due to its wildlife, including birds such as northern harriers and short-eared owls, as well as many fish and shellfish, such as perch and blue crabs.

3.5.3 Cape May Wetlands Wildlife Management Area

This 17,273-acre WMA stretches from upper Township to Lower Township. Middle Township contains 6,619 acres of the area, which contains most of the brackish water wetlands between the Garden State Parkway and the Atlantic Ocean barrier islands.

3.5.4 New Jersey Natural Lands Trust

The New Jersey Natural Lands Trust is non-profit land conservation organization dedicated to protecting the forests, fields, streams, and wetlands that are essential to the sustainability of life in eastern Pennsylvania and southern New Jersey.

www.natlands.org/who-we-are/mission-and-history/



3.6 Federally Owned Lands

Cape May National Wildlife Refuge
Refuge headquarters: 24 Kimble’s Beach Road,
Cape May Court House
4,832 acres

Established in 1989, Cape May National Wildlife Refuge (NWR), managed by the US Fish and Wildlife Service ensures critical habitat for wildlife and hundreds of thousands of migrating birds each year. Today the refuge encompasses almost 12,000 acres within the Cape May Peninsula, of which 4,832 acres are in Middle Township. Habitats such as grasslands, salt marshes, bogs, maritime forests, and beachfront are home to a variety of wildlife including State and Federally threatened and endangered species. (Source: www.fws.gov)

The Mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the

United States for the benefit of present and future generations of Americans.

The Service plans to acquire a total of 24,797 acres in Cape May County including a total of 9,356 acres in Middle Township within the approved refuge acquisition boundary from willing sellers as funds become available. The Service has already spent over \$32 million to acquire the almost 12,000 acres it currently manages in the Cape May NWR. The Service estimates it will require about \$15.9 million more to buy all the properties within the approved refuge acquisition boundary in Cape May County.

The fact that a property is within the approved refuge acquisition boundary does not in any way restrict what the owner may or may not do with his/her property. It only means that if the owner is interested in selling the Service is an interested buyer.



**3.6.1
Songbird Trail**

This one-mile trail, part of which is universally accessible, starts on the north side of Kimbles Beach Road. This trail begins in the parking lot, extends to the edge of shrub/scrub habitat, winds through a forest segment with vernal pools and ends along Kimbles Beach Road. Often seen on this trail are American kestrels, bluebirds, and box turtles. Frogs regularly call from the vernal pools. (Source: www.fws.gov)



**3.6.2
Woodcock Trail**

End of Woodcock Lane, a residential road about 0.4 miles south of Kimbles Beach Road off of Route 47. This is a one-mile-long loop through grassland habitat. There are also side trails of 0.4 miles that extend through a forested section and end at a view of the Delaware Bay salt marsh. Often seen here are great crested flycatchers, blue grosbeaks, a variety of sparrows, spotted turtles, and frogs. (Source: www.fws.gov)

**3.6.3
Goshen Ponds
Bucks Avenue**

**3.6.4
Hand's Landing
Kimble's Beach Road**

For more information:
<http://www.fws.gov/northeast/capemay/visit.html>



3.7 State and Non-Profit

3.7.1

Lizard Tail Swamp Preserve, co-owned by the State of New Jersey and the Nature Conservancy

Court House - Dennisville Road
Cape May Court House
379 acres

There is a diverse habitat at this wildlife management area located at the headwaters of Bidwell Creek, which provides a critical feeding and resting habitat for migrating birds. In addition, it contains a corridor of forest that is the primary source of drinking water for the area.

A three mile trail system was recently completed by the Nature Conservancy funded by the Federal Highway Administration and the NJ Department of Environmental Protection. (Source: The Nature Conservancy website, www.Nature.org)



3.8 Non-Profit

3.8.1 The Nature Conservancy

The Nature Conservancy works to protect ecologically important lands and waters for nature and people. They have protected more than 119 million acres of land and 5,000 miles of rivers worldwide and operate more than 100 marine conservation projects globally.

The Nature Conservancy lands in Middle Township include:

- Diana Wintch Preserve at Bidwell Creek (on west side of Dennisville-Court House Road): 462 acres
- Lizard Tail Swamp Preserve, exclusive of NJDEP co-owned portion: (east side of Dennisville-Court House Road): 80 acres
- Indian Trail Swamp Preserve (south side of Indian Trail Road): 725 acres
- Sunray Beach Preserve at Sunray Road, Del Haven: 104 acres

Ownership of the Sunray Beach Preserve is being transferred from the Nature Conservancy to US Fish and Wildlife Service. Sunray Beach Preserve consists of 1,600-foot beachfront and extraordinary coastal dunes on the Delaware Bay, backed by woodlands, salt marsh and freshwater wetlands. The various habitats in the preserve are used as resting and feeding areas by migratory shorebirds each spring.

Sunray Beach's coastal dune community represents one of the best of its kind in the state. The virtually unchanged landscape at Sunray Beach, amid burgeoning development in the region, echoes the Cape May County of years past. Its extensive coastal dunes remain much the same since first viewed by European immigrants arriving to settle the area. (Source: The Nature Conservancy website, www.Nature.org)

For more information, www.Nature.org.



3.8.2 The Wetlands Institute

Stone Harbor Boulevard, Cape May Court House
34 acres

The Wetlands Institute's mission is to promote appreciation, understanding and stewardship of wetlands and coastal ecosystems through programs in conservation, research, and education.

The Wetlands Institute promotes the conservation and preservation of coastal ecosystems by providing engaging experiences for residents, families, students, and tourists. The site's pristine coastal wetlands serve as its laboratory and classroom. The Wetlands Institute hosts more than 18,000 visitors annually and has more than 2,600 members. The Wetlands Institute's 1/4 mile salt marsh trail, elevated boardwalk, Scotch Bonnet Creek overlook, elevated decks, and observation tower provide outstanding opportunities for wildlife viewing.

3.8.3 New Jersey Audubon's Cape May Bird Observatory

600 Route 47 North, Goshen
25 acres

Cape May Bird Observatory's Center for Research and Education is located in Middle Township. The Society's mission is to understand and instill appreciation of the needs of resident and migrating birds so that human ambitions do not undermine them.

Activities offered by the Cape May Bird Observatory include

- Weekly Walks & Activities
- Boat Trips
- Special Events & Programs
- School of Birding Workshops

3.9 Water Access

The following public open space and recreation facilities provide access to tidal waters, including the Delaware Bay, the inter-coastal waterways, and the tidal creeks within the Township.

- Reeds Beach Jetty
- Norbury's Landing
- Shellbay Pier
- Avalon Manor Fishing Pier

With over 30 miles of coastline along the Delaware Bay and inter coastal waterways, there are many more locations where residents and visitors fish, crab, boat and enjoy the benefits and beautiful scenery of the Township's waterways.

3.10 Recreation Programs

The Township Recreation Department has a variety of sports and recreation programs.

- Football for grades 1-8
- Baseball and softball through the Middle Township Baseball Softball Association
- Soccer for ages 5-13
- Hockey for ages 7-18 through the Middle Township Hockey Association
- Lacrosse for grades 3-8
- Wrestling for grades K-8
- Travel Basketball for grades 3-8
- In-house Basketball for grades K-2
- Track and Field for ages 5-14
- Camp Unity Summer Camp for grades K-7
- Homework Club
- Double Dutch Jump Rope for grades K-8
- Kids Zumba for grades K-8

In addition, the Recreation Department organizes the Easter Egg Hunt; Memorial Day Parade and Bike Decorating Contest; July 4th Fireworks; Harvest Festival; Halloween Parade and Christmas in Court House & Christmas Parade.

For more information:

<http://www.middleborough.com/Recreation/recreation.htm>

Summary of Public Facilities and Permitted Activities

FACILITY	Recreation Bldg	Playground	Sports fields	Trails-paved	Trails-unpaved	Wildlife Viewing	Fishing	Picnic area	Tennis Courts	Basketball Courts	Hockey Rink	Skate park	Kayak launch	Bathrooms
Davies Sports Complex	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Ockie Wisting Recreation Complex	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Martin Luther King Center	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Rio Grande Park	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Shellbay Park	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Goshen Mini Park	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Bidwells Jetty at Reed's Beach	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Norbury's Landing	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Bike Path	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Avalon Manor Fishing Pier	•	•	•	•	•	•	•	•	•	•	•	•	•	•
County Park Central and Zoo	•	•	•	•	•	•	•	•	•	•	•	•	•	•
County Park East	•	•	•	•	•	•	•	•	•	•	•	•	•	•
County Park South	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Lizard Tail Swamp	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Beaver Swamp	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Dennis Creek	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Songbird Trail	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Woodcock Trail	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Diana Wintsch Preserve	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Hand's Landing Preserve	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Footnote on Songbird Trail and Woodcock Trail:

*These National Wildlife Refuge System sites encourage six priority public uses: hunting, fishing, wildlife observation, wildlife photography, interpretation and environmental education.

3.11 Privately Owned Recreation

There are thirteen campgrounds, eight marinas, and six golf courses in Middle Township, providing amenities for residents and visitors, and supporting the local tourism economy. In addition, there are several farms that offer horseback riding and an archery center.

3.11.1 Campgrounds

Name	Acres	Campsites
Ponderosa	11	100
Acorn	74	330
Adventure Bound Camping Resorts	34	400
Bay Cove	59	144
Big Timberlake	89	800
Cape Shores Resort Inc.	10	200
Delsea Woods Community LLC.	50	100
Green Holly	75	456
Hideaway Beach	149	344
King Nummy	85	456
Old Stagecoach	35	229
Sea Pines Campground	76	553
Shellbay	79	296
Total	826	4,408

Source: 2010 Master Plan, Maser Consulting

3.11.2 Marinas

Name	Acres
Avalon Pointe Marina at Avalon Manor	4.6
Bayway Marina in Goshen	43
Camp Marine Services	0.44
Dad's Place Marina	13
Grassy Sound Marina	3
Pier 47 Marina	5
Smokey's Marina at Reeds Beach	10.6
Stone Harbor Marina	4.1
Total	83.74 acres
<i>Source: Middle Township Tax Assessor</i>	

For more information:

http://www.capemaycountygov.net/Documents/Planning/Updated_Boaters_Guide_2010.pdf

3.11.3 Golf Courses

Name	Acres
Sand Barrens Golf Club	236.65
Avalon Golf Club	134.85
Stone Harbor Golf Club	177.38
Laguna Oaks Golf Course	120.36
Wildwood Golf and Country Club	351
Cape May Par 3 & Driving Range	9.43
Total	1,029.67
<i>Source: Middle Township Tax Assessor</i>	



4.0 Needs Analysis

Open space and recreation needs are based on interviews with over twenty stakeholder groups, 188 responses to a public survey, two public meetings, and six Project Team meetings.

Overwhelmingly, the public enjoys the rural character of the Township and wants to continue to preserve land for both conservation and recreation purposes.

Regarding Township recreation facilities, the public indicated a preference for maintenance and improvements to the ten (10) existing recreation facilities rather than direct resources into acquiring and developing new sites. Improvements would include adding amenities at some facilities, as outlined in the Chapter 6 Recommendations.

The public survey, conducted during the month of November 2012, asked the question: “What does Middle need?” The most common responses, in order, were:

- paved trails
- unpaved trails
- indoor swimming pool
- picnic areas
- playgrounds
- fishing and crabbing area
- wildlife viewing areas
- canoe/kayak launch

In addition to the responses above, the need for more fields, courts and rinks was documented. Interviews with stakeholder groups, survey comments, public input at meetings, and through the experience of the recreation department, overuse of active sports amenities is widespread. According to the Middle Township Recreation Department, participation in organized sports continues to increase.

4.1 Acquisition and Preservation of Land

There are many benefits, both direct and indirect, from the preservation of land. Continued acquisition of land by State, Federal and Nonprofit organizations is planned. Chapter 5.0: Resource Assessment discusses the benefits of land preservation and Chapter 7.0: Open Space Systems Maps identifies known future land acquisition areas.

As in all coastal communities, land along the shoreline is subject to storms, tidal flow, and sea level rise. Beach replenishment and shore stabilization programs, conducted in an environmentally sensitive manner, are important to maintain the ecosystems and recreation opportunities of the many Delaware Bay communities in Middle Township.



Reeds Beach

4.2 Passive and Active Recreation Facilities

The Township owns and maintains ten (10) facilities that provide a wide variety of recreational amenities to residents and visitors. The following general needs were identified as part of the public input process:

- Redevelop existing recreation facilities as needed; preserve undeveloped sites as wildlife habitats and for passive recreation (such as hiking and wildlife viewing)
- Increase public information regarding facilities, including directional and interpretive signs and a Township-wide map with all recreation facilities
- Improve site access and parking
- Increase safe connections between trails, public facilities, and neighborhoods
- Improve maintenance and lighting, in an environmentally sound manner
- Make more facilities handicapped and stroller accessible
- Meet recreational needs of all ages
- Offer a variety of programs and facilities
- Concentrate like amenities in one location for supervision and administrative purposes

The following specific amenities were identified as needs:

- Multi-use trails, paved and unpaved
- Indoor swimming pool
- Picnic areas
- Playgrounds
- Fishing and crabbing areas
- Wildlife viewing areas

- Kayak/canoe launches
- Boat ramp
- Dog park
- Safe water access
- Plaza area
- Soccer fields
- Hockey rink
- Permanent softball field, and 50/70 sized baseball field
- One multipurpose artificial turf or synthetic turf field
- Regulation sized disc golf course
- Indoor basketball courts
- Lacrosse field
- Indoor recreation space for a variety of programs, including wrestling, gymnastics, cheerleading, fitness and other programs

4.3 Programs

Programs have the ability to improve the quality of life for all residents, provide activities for our youth, and create economic activity through attracting visits to events.

There is an abundance of natural, cultural, historic and recreational resources that could provide the basis of organized sports and recreation programs. Ideas for programs include:

- Additional organized sports and activities
- Nature tourism
- Historic preservation
- Sports tournaments
- Agricultural and cultural activities and tourism
- Youth sports camps
- Community clean up days



US Fish and Wildlife Cape May National Wildlife Refuge

4.4 General Guidelines for Recreational Facilities

Type of Facility	National Recreation and Park Standards	Need for Middle Township	Currently Available (ALL facilities*)	Surplus or Deficit
Baseball Fields	1/5,000 population	4	3	-1
Softball fields	1/5,000 population	4	7	+3
Little League fields	1/5,000 populations	4	4	--
Basketball Courts	1/5,000 population	4	4 indoor 7 outdoor	+7 outdoor
Community/ Recreation Centers	1/25,000 population	1	2	+1
Field Hockey Fields	1/20,000 population	1	1	--
Football Fields	1/20,000 population	1	2	+1
Running track	1/20,000 population	1	1	--
Soccer fields	1/10,000 population	2	10	+8
Swimming pools	1/20,000 population	1	1	--
Tennis courts	1/2,000 population	10	10	--
Trails	1 system per region	1	1	--
Volleyball courts	1/5,000 population	4	2 indoor	-2
*Township, School District and County				

The Township's population according to the 2010 census is estimated to be 18,911.

The chart above outlines the general guidelines for recreational facilities as established by the National Recreation and Parks Association. This information, combined with the real demand for facilities, was used to determine the recommendations of Chapter 6.0.

The Township is compliant with the general guidelines for facilities, with the following exceptions:

- One (1) baseball field
- Volleyball courts (2)
- The swimming pool is primarily used by the Special Services School District and has limited public hours

4.5 Future Needs

Middle Township was one of only four (4) Cape May County towns that saw an increase in population between 2000 and 2010, and in fact, saw the largest increase in the County. The population increased 15% from 16,405 in 2000 to 18,911 in 2010. The County overall saw a 5% decrease in population during that same period. (US Census Bureau) The South Jersey Transportation Planning Organization estimates Middle Township population will continue to increase another 15% to 21,872 by the year 2020.

Anticipating increased need for facilities based on the requirements above, the Township would continue to comply with the guidelines above with the exception of:

- One (1) more baseball field
- One (1) more Little League field
- A second swimming pool
- A second running track
- An additional tennis court
- An additional volleyball court

While population may be an indicator of the quantity of recreation facilities needed in general, the trend in increased physical activity for youth and concerns for health have led parents to rely more on local recreation programs. In addition, local interest in specific sports can dictate greater needs for facilities, for example, in Middle Township, soccer and basketball.

4.6 Assessment of land and facility capacity for present and future need

The existing recreation facilities have the land to accommodate future needs outlined above. Specifically, the following facilities have the capacity to develop to function better, or to expand facilities:

- Ockie Wisting – over 80 acres of currently undeveloped land (however, much of the land is wetlands and can only accommodate nature trails)
- Clarence Davies Sports Complex – can be re-

configured to add fields, courts, indoor space, and rinks

- Railroad Avenue – currently underutilized, particularly the area of the hockey rink that needs to be removed
- All of the water based recreation areas (Reeds Beach, Norbury's Landing, Carol Nicoletta - Shellbay Pier, Avalon Manor Fishing Pier) have the ability to increase capacity for wildlife viewing by improving parking, signage, and public information regarding site

4.7 Financial Considerations and Needs

The Township needs to explore and develop creative ways to construct, staff, and maintain its present and future recreational facilities and amenities without depending fully on municipal taxes.



Tennis Courts at County Park East

Trail at Lizard Tail Swamp





5.0 Resource Assessment

5.1.1 Natural Benefits – Introduction

Special thanks to Steve Atzert and Betsy Haskin of the Environmental Commission for the development of this chapter.

Nature provides many benefits, both direct and indirect, to each one of us and to society as a whole. It is important to weigh these benefits in all land use decision making. Outdoor recreation is an important part of our life here in Middle Township and we enjoy fishing, boating, swimming, and hunting, hiking, biking, seeing wildlife, or simply being outside. What is less easily seen, are many other natural benefits that we receive. Our marshes, both salt and fresh, filter pollutants from runoff and absorb flood waters. Our saltwater marshes also dampen storm impacts while providing a valuable nursery for fishes. Our uplands are the place where rainwater flows into the ground and recharges underground water supplies. Our forests store carbon and keep us cool, while all plants give us oxygen and prevent soil erosion. Our sandy beaches buffer storm impacts. Our farms supply food and our beekeepers, honey and pollinators for crops and gardens. Our quality of life: the clean water, clean air, and local produce, is maintained

by the natural benefits we enjoy. This is what we want to give our children to enjoy in the future.

The following subsections detail the value of natural benefits at the Global, State, and Township levels.

5.1.2 Value of Natural Benefits at the Global Level

The benefits provided to us by natural systems dwarf the market economy on a global scale. The direct and indirect benefits of nature are estimated in *The Value of the World's Ecosystem Services and Natural Capital* (1997), Costanza et al. The study estimates the current (1994) economic value of 17 ecosystem services for 16 biomes, based on published studies and a few original calculations. For the entire planet, the value (most of which is outside the market) is estimated to be in the range of US \$16-54 trillion per year, with an average of US \$33 trillion per year. Because of the nature of the uncertainties, this must be considered a minimum estimate. Global gross national product total is around US \$18 trillion per

year, quite a bit less than the \$54 trillion from the global ecosystem.

The authors state,

“The services of ecological systems and the natural capital stocks that produce them are critical to the functioning of the Earth’s life-support system. They contribute to human welfare, both directly and indirectly, and therefore represent part of the total economic value of the planet. Because these services are not fully captured in markets or adequately quantified in terms comparable with economic services and manufactured capital, they are often given too little weight in policy decisions.”

“It is also important to recognize that a minimum level of ecosystem “infrastructure” is necessary in order to allow production of the services. Several authors have stressed the importance of this ‘infrastructure’ of the ecosystem itself as a contributor to its total value. This component of the value is not included in the current analysis.”

Table 5.1.2a on the following page lists the 17 ecosystem services considered in the Value of the World’s Ecosystem Services and Natural Capital (1997), Costanza, et al.

5.1.3 Value of Natural Benefits (Ecosystem Services) in New Jersey

Another study moves from the global scale to look at New Jersey specifically in *The Value of New Jersey’s Ecosystem Services and Natural Capital* (2006), Costanza et al. The 167-page report is available online.

<http://www.state.nj.us/dep/dsr/naturalcap/nat-cap-2.pdf>

This study estimates the total annual value of these ecosystem services in New Jersey as \$19.4 billion/year in 2004 dollars. Other studies which include only original, peer reviewed work estimate ecosystem value of \$11.6 billion/year. The

researchers believe for a number of reasons, that the dollar amounts in the New Jersey report are almost certainly conservative and underestimate the true value of New Jersey’s ecosystem services. These reasons include gaps in the valuation literature as well as a number of technical factors discussed in the report.

The researchers state,

“The benefits provided by natural capital include both goods and services; goods come from both ecosystems (e.g., timber) and abiotic non-living sources (e.g., mineral deposits), while services are mainly provided by ecosystems. Examples of ecosystem services (“ecoservices”) include temporary storage of flood waters by wetlands, long-term storage of climate-altering greenhouse gases in forests, dilution and assimilation of wastes by rivers, and numerous others. All of these services provide economic value to human beings....this report covers twelve different types of ecosystem and twelve different ecoservices.”

“For policy, planning, and regulatory decisions, it is important for New Jerseyans to know not only what ecosystem goods and services will be affected by public and private actions, but also what their economic value is relative to other marketed and non-marketed goods and services, such as those provided by physical capital (e.g., roads), human capital investment (e.g., education), etc. As a way of expressing these relative values or ‘trade-offs’, this study estimated the dollar value of the ecoservices produced by New Jerseys ecosystems.”

Table 5.1.2a

#	ECOSYSTEM SERVICE*	ECOSYSTEM FUNCTIONS	EXAMPLES
1	Gas regulation	Regulation of atmospheric chemical composition.	CO ₂ /O ₂ balance, O ₃ for UVB protection, and SO _x levels.
2	Climate regulation	Regulation of global temperature, precipitation, and other biologically mediated climatic processes at global or local levels.	Green-house gas regulation, Dimethylsulfide (DMS) production affecting cloud formation.
3	Disturbance regulation	Capacitance, damping, and integrity of ecosystem response to environmental fluctuations	Storm protection, flood control, drought recovery, and other aspects of habitat response to environmental variability mainly controlled by vegetation structure.
4	Water regulation	Regulation of hydrological flows.	Provisioning of water for agricultural (e.g., milling) processes or transportation.
5	Water supply	Storage and retention of water.	Provisioning of water by watersheds, reservoirs, and aquifers
6	Erosion control and sediment retention	Retention of soil within an ecosystem.	Prevention of loss of soil by wind, runoff, or other removal processes, storage of silt in lakes and wetlands
7	Soil formation	Soil formation processes.	Weathering of rock and the accumulation of organic material.
8	Nutrient cycling	Storage, internal cycling, processing, and acquisition of nutrients.	Nitrogen fixation, N, P, and other elemental or nutrient cycles.
9	Waste treatment	Recovery of mobile nutrients and removal or breakdown of excess or xenic nutrients and compounds.	Waste treatment, pollution control, detoxification.
10	Pollination	Movement of floral gametes.	Provisioning of pollinators for the the reproduction of plant populations.
11	Biological control	Trophic-dynamic regulations of populations	Keystone predator control of prey species, reduction of herbivory by top predators.
12	Refugia	Habitat for resident and transient populations.	Nurseries, habitat for migratory species, regional habitats for locally harvested species, or over wintering grounds.
13	Food production	That portion of gross primary production extractable as food.	Production of fish, game, crops, nuts, fruits by hunting, gathering, subsistence farming, or fishing.
14	Raw materials	That portion of gross primary production extractable as raw materials.	The production of lumber, fuel, or fodder.
15	Genetic resources	Sources of unique biological materials and products.	Medicine, products for materials science, genes for resistance to plant pathogens and crop pests, ornamental species (pets and horticultural varieties of plants).
16	Recreation	Providing opportunities for recreational activities.	Eco-tourism, sport fishing, and other outdoor recreational activities.
17	Cultural	Providing opportunities for noncommercial uses.	Aesthetic, artistic, educational, spiritual, and/or scientific values of ecosystems.

*We include ecosystem “goods” along with ecosystem services

5.1.4 Value of Natural Benefits (Ecosystem Services) in Middle Township

Many decisions on environmental policy and land use are made at the local level, and it is therefore important to translate the statewide results described above into local values.

Working from the New Jersey ecosystem services study cited above and Table 1: Land Use/Land Cover Classifications from the Middle Township Natural Resources Inventory, we estimate the total value of ecosystem services generated in Middle Township somewhere between \$266 million and \$418 million in 2012 dollars. These total values are high for the size of Middle Township when compared to the size of New Jersey.

The substantially greater value is due to the fact that Middle Township has many higher value land cover types which provide more natural benefits.

Beaches (including dunes) provide by far the highest natural benefit value per acre (\$51,364). Estuary waters provide the second highest natural value per acre (\$14,202). Freshwater wetlands provide the third highest natural value per acre (\$14,098). Saltwater wetlands provide the fourth highest natural value per acre (\$7,771). These \$ value/acre are from the New Jersey ecosystem service study cited above adjusted to November 2012 dollars.

Middle Township has beaches and dunes (101 acres) and has many acres of estuary waters (8,553 acres) freshwater wetlands (11,118 acres) and saltwater wetlands (15,723 acres).

In summary, Middle Township receives generous natural benefits from its beaches, wetlands, estuarine water and forests and this Plan acknowledges those benefits.

5.1.5 Value of Natural Benefits (Ecosystem Goods) in New Jersey

As opposed to services provided by natural systems, ecosystem goods are physical commodities that can be weighed, packaged, and transported. The ecosystem goods generated in New Jersey are described in *Valuing New Jersey's Natural Capital: An Assessment of the Economic Value of the State's Natural Resources* (William Mates, 2007.) This 98-page report is available online.

<http://www.state.nj.us/dep/dsr/naturalcap/nat-cap-3.pdf>

This study estimates the annual value of the goods provided by New Jersey's natural capital at \$5.9 billion/year in Total Economic Value (range of \$2.8 billion/year to \$9.7 billion/year) in 2004 dollars. See table 5.1.5a below for a breakdown of the \$5.9 billion/year average estimate for ecosystem goods in New Jersey.

The two New Jersey natural benefits studies together show that on an annual basis, New Jersey's natural capital is more valuable as a provider of ecosystem services (range of \$11.6 billion/year to \$19.4 billion/year) than as sources of harvestable ecosystem goods (range of \$2.8 billion/year to \$9.7 billion/year).

The researchers state,

“New Jersey has a measure of control over the future capacity of its natural capital to produce valuable natural goods. To the extent of that control, the quantities of those goods available in the future should be a matter for informed and deliberate public choice.”

“Farmland and marine ecosystems generate the highest values in terms of total value, followed by barren land (which includes mines and quarries), forests, and freshwater wetlands. In terms of value per acre, barren land ranks first, followed by farmland, marine ecosystems, and open fresh waters.”

Table 5.1.5a Total Annual Ecogoods Values NJ (2004 Millions \$/year) /(middle estimates)

Natural Good	MV	CS	TEV	Share
Farm products	\$447.6	\$3,228.4	\$3,676.0	62.7%
Fish (total)*	157.0	800.7	957.7	16.3%
Minerals	320.9	266.3	587.2	10.0%
Raw water	169.2	211.4	380.6	6.5%
Sawtimber	48.9	97.8	146.7	2.5%
Fuelwood	38.5	56.6	95.1	1.6%
Game/fur animals	3.4	17.7	21.1	0.4%
Total or avg.	\$1,185.5	\$4,678.9	\$5,864.4	100.0%
Commercial fish	123.0	627.3	750.3	12.8%
Recreational fish	34.0	173.4	207.4	3.5%

MV = market value

CS = Consumer surplus

TEV = Total economic value (MV + CS)

Total Economic Value (or Total Willingness to Pay) has two main components: Market Value and Consumer Surplus. Consumer Surplus is the amount that consumers would be willing to pay for a good but do not actually have to pay under prevailing market conditions.

* = Commercial and recreational fisheries

5.1.6 Value of Natural Benefits (Ecosystem Goods) in Middle Township

The annual value of Ecosystem Goods in Middle Township is not defined in this Plan. It is certain that a number of the natural goods listed in Table 5.1.5a are produced and harvested in Middle Township.

5.2 Provide Open Space and Recreational Opportunities

Chapter 3 Inventory shows a large portion of the Township is wetlands with some open space owned by the Township, the County, the State, the federal government and private non-profit organizations, singly or in partnership. The Inventory section of the plan also shows many passive and active recreational opportunities within the Township.

The two Middle Township annual ecosystem services tables were developed as follows and are shown on pages 38 and 39.

Costanza et al. (2006) Table 4 and Table 5 \$/Acre values are the basis of \$/Acre values in the Middle Township ecoservices estimates. However, those values were adjusted to November 2012 dollars. The adjustments were made by dividing the November 2012 Consumer Price Index (CPI) (230.221) by the 2004 Annual Consumer Price Index (CPI) (188.900) ($230.221/188.900 = 1.2187$) and multiplying all \$/Acre values in Table 4 and Table 5 of Costanza et al. (2006) by that figure.

Table 1: Land Use/Land Cover Classifications from the Middle Township Natural Resources Inventory was the basis for the acre figures used in the Middle Township ecosystem services tables.

- Urban land
- Agricultural land
- Barren lands
- Forests
- Water
- Wetlands

These Land Use/Land Cover types and acres were adjusted to mesh them with the ecosystem type breakdown used in the Costanza et al. (2006) report.

- Upland Right-of-Way Undeveloped was moved from Urban lands to Forests
- Phragmites Dominated Urban Area was moved from Urban lands to Freshwater wetlands
- 200 acres (Cape May County Zoo) was moved from Urban lands to Urban greenspace
- Beaches were moved from Barren lands to Beach
- The first four subgroups under Water were moved to Open fresh water
- The last four subgroups under Water were moved to Estuary
- The first five and last 13 subgroups under Wetlands were moved to Freshwater wetlands
- Saline Marsh (Low Marsh) and Saline Marsh (High Marsh) were moved from Wetlands to Saltwater wetlands
- Vegetated Dune Community was moved from Wetlands to Beach

5.3 Create an Integrated Open Space and Recreational System

The Township already has four (4) miles of paved bike path connecting the Davies Recreational Center, to the County Zoo and to Indian Trail Road. The Township is already planning to extend the bike path an additional two (2) miles south from Indian Trail Road to the Martin Luther King Jr. Community Center and to Rio Grande Park. This will require obtaining a right-of-way from Atlantic City Electric.

In recognition of the importance of connecting people to nature, this Plan discusses 1) extending the Bike Path north from the Cape May County Zoo to the Middle Township/Dennis Township line, 2) extending the Bike path south from the Rio Grande Park to the Middle Township/Lower Township line, and 3) creating bike path spurs to link neighborhoods to the main north/south bike path or to link recreational or open space areas to the main north/south bike path. This will require obtaining Rights-of-Way from additional

landowners (such as, the State of New Jersey, the Nature Conservancy, and Atlantic City Electric.)

The organization Garden State Greenways identifies larger areas of undeveloped land with important natural resource values, as well as connectors between these hubs. In addition, “Garden State Greenways provides a statewide vision, suggested goals, detailed maps and powerful Geographic Information System (GIS) data and planning tools to help coordinate efforts of private groups and government agencies.” (www.GardenStateGreenways.org)

The Township will utilize the website in continuing to preserve open land and to identify opportunities for connecting open space and recreation facilities.

5.4 Support Conservation Objectives

The Open Space in the Township creates a framework for protecting wildlife habitat, creeks, streams and forested areas, and preserving farmland.

Middle Township has varied and pristine lands that support many plants and animals that are rare. The State of New Jersey lists the animals that are in danger of becoming extinct in New Jersey. The map on page 40 illustrates Threatened and Endangered Species in Middle Township

Endangered Species are those whose prospects for survival in New Jersey are in immediate danger because of a loss or change in habitat, over-exploitation, predation, competition, disease, disturbance or contamination.

Threatened Species are those who may become endangered if conditions surrounding them continue to deteriorate.

Rare plants are listed by both federal and state government. Acquisition of these lands will help to ensure survival of these species.

Summary of average value of annual ecosystem services generated in Middle Township, New Jersey based on Type A studies (in November 2012 dollars).

Name	(Acres)	Gas/Climate Regulation (\$/Acre)	Disturbance Regulation (\$/Acre)	Water Regulation (\$/Acre)	Water Supply (\$/Acre)	Soil Formation (\$/Acre)	Nutrient Cycling (\$/Acre)	Waste Treatment (\$/Acre)	Pollination (\$/Acre)	Biological Control (\$/Acre)	Habitat/Refugia (\$/Acre)	Aesthetic & Recreation (\$/Acre)	Cultural & Spiritual (\$/Acre)	Sum of preceding 12 Columns (\$/Acre)	Sum of preceding Column x Acres (\$)
Coastal & Marine															
Coastal Shelf	0				756		881						43	1680	0
Beach	101		33241									18094	29	51364	5187764
Estuary	8553				60							443	369	872	7458216
Saltwater Wetlands	15723		1					7422				280	38	7741	121711743
Terrestrial															
Forest	8167	73			11				197		1136	158		1575	12863025
Grass/Rangelands	0	6				7						1		14	0
Croplands	1754								10			18		28	49112
Freshwater Wetlands	11118			7260	1415						6	1915		10596	117806328
Open Fresh Water	329				498							434		932	306628
Riparian Buffer	0		107		2341							1670	5	4123	0
Urban Greenspace	200	409		7								2597		3013	602600
Urban or Barren	7050													0	0
Total	52995														
Totals		677991	3373064	80718080	16498829	0	0	116696106	1626439	0	17535839	28856139	2929		265985416

Summary of average value of annual ecosystem services generated in Middle Township, New Jersey based on Type A, B, and C studies (in November 2012 dollars).

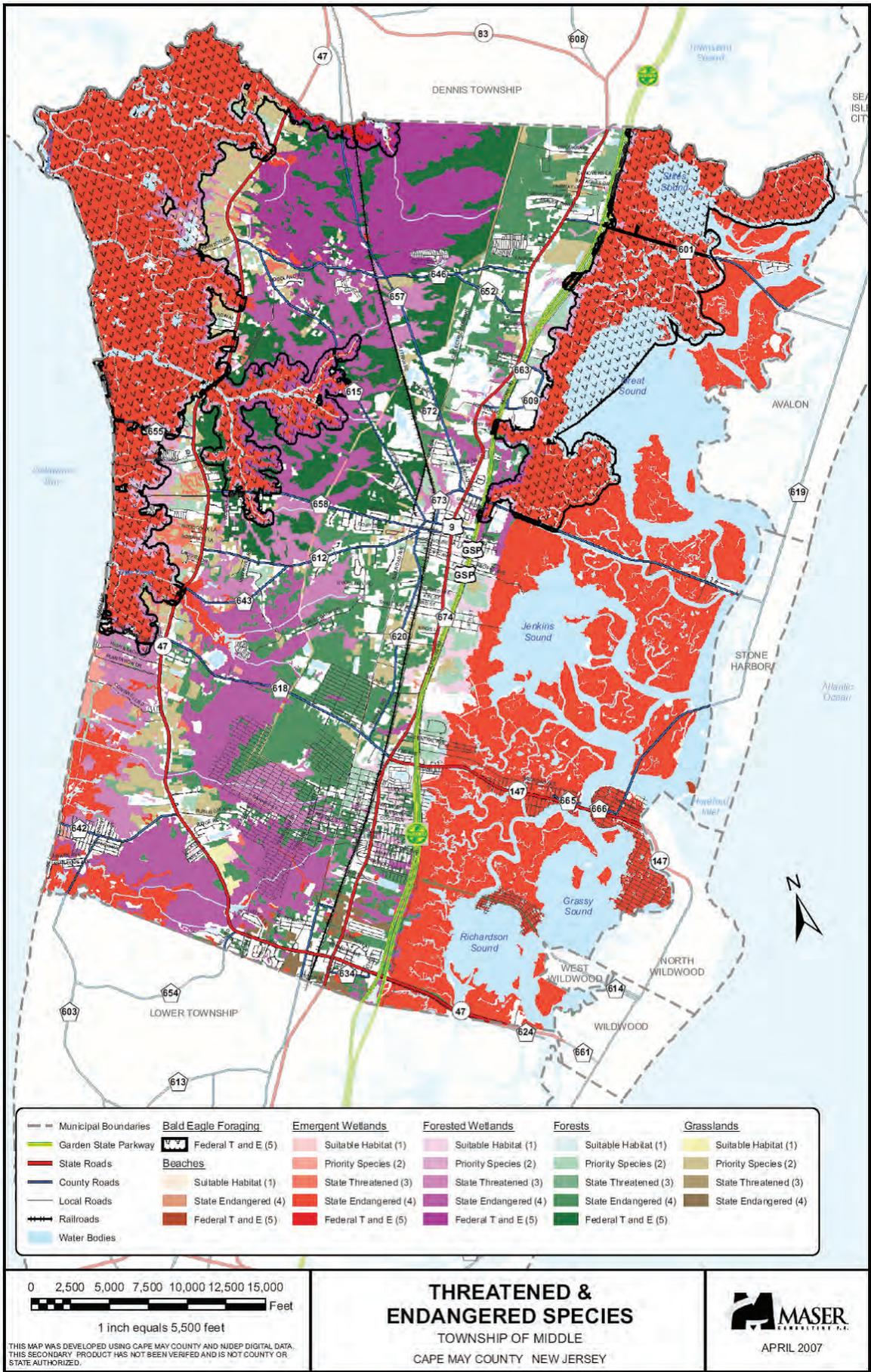
Name	Acres	Gas/Climate Regulation (\$/Acre)	Disturbance Regulation (\$/Acre)	Water Regulation (\$/Acre)	Water Supply (\$/Acre)	Soil Formation (\$/Acre)	Nutrient Cycling (\$/Acre)	Waste Treatment (\$/Acre)	Pollination (\$/Acre)	Biological Control (\$/Acre)	Habitat/Refugia (\$/Acre)	Aesthetic & Recreation (\$/Acre)	Cultural & Spiritual (\$/Acre)	Sum of preceding 12 Columns (\$/Acre)	Sum of preceding Column x Acres (\$)
Coastal & Marine															
Coastal Shelf	0				635		881			24			43	1583	0
Beach	101		33241									18094	29	51364	5187764
Estuary	8553		348		60		12989			48		383	356	18	14202
Saltwater Wetlands	15723		378					6597				245	32	219	7471
Terrestrial															
Forest	8167	66			199	6		54	197	2	1125	149	1	1799	14692433
Grass/Rangelands	0	4		2		4		54	16	15		1		96	0
Croplands	1754								10	15	1013	18		1056	1852224
Freshwater Wetlands	11118	163	4457	3639	1882			1021			138	1713	1085	14098	156741564
Open Fresh Water	329				498							434		932	306628
Riparian Buffer	0		107		2341							1670	5	4123	0
Urban Greenspace	200	409		7								2597		3013	602600
Urban or Barren	7050													0	0
Total	52995														
Totals		2433056	61830005	40459802	23226331	49002	111094917	115517127	1626439	453188	19626895	26331273	15671417		418319452

Shaded cells indicate ecosystem services that do not occur or are known to be negligible. Open cells indicate lack of available date.

Type A studies are peer-reviewed empirical analyses that use conventional environmental economic techniques (e.g., Travel Cost, Hedonic Pricing and Contingent Valuation) to elicit individual consumer preferences for environmental services.

Type B studies are commonly referred to as the "grey literature" and generally represent non peer-reviewed analyses such as technical reports, PhD Theses and government documents using conventional environmental economic techniques that also focus on individual consumer preferences.

Type C studies represent secondary, summary studies such as statistical meta-analyses of primary valuation literature that include both conventional environmental economic techniques as well as non-conventional techniques (Energy analyses, Marginal product estimation) to generate synthesis estimates of ecosystem service values.



Streams are the lifeblood of Middle Township and are a part of the aquifer and surface water system. Water quantity and quality are important to protect for drinking water and estuary health.

Rank A – 13-14 in/yr

Rank B – 11-12 in/yr

Rank C – 8-10 in/yr

(See Water Resources map on page 42)

Little of these prime ground water recharge areas are located in:

- The Cape May National Wildlife Refuge lands already purchased or the total Cape May NWR approved refuge acquisition area,
- The State of New Jersey Division of Fish and Wildlife Dennis Creek Wildlife Management Area, the Beaver Swamp Wildlife Management Area or the Cape May Coastland Wildlife Management Area.
- The Nature Conservancy Diane Wintch, Lizard Tail Swamp, Hands Landing, Goshen Pond, Sun Ray Beach or Indian Trail properties, or
- The New Jersey Natural Lands Trust (NJDEP) (Block 55.01, Lot 60, 40.16 acres, Block 56.01,b Lot 1, 163.42 acres, Lot 117, 0.8 acres and Lot 119, 5.59 acres)

There are some prime ground water recharge areas in some Cape May County Open Space and Farmland Preservation properties. Also about 60 percent of the Lizard Tail Swamp property jointly owned by the New Jersey Department of Environmental Protection and TNC is either Ranked A, B or C (Middle Township, Block 96.01, Lot 1 333.89 acres).

Prime groundwater recharge areas lie outside currently protected lands which leaves these sites vulnerable to development that can negatively impact the groundwater supply of the Township. This Plan proposes some options in the Action Plan to address the need to protect our ground water supply. Current development regulations require that there be no net increase in runoff from a property when development takes place. This regulation helps insure that development does not result in reduced recharge to groundwater but it is important that the water returning to aquifers be of high quality so that aquifers are not contaminated.

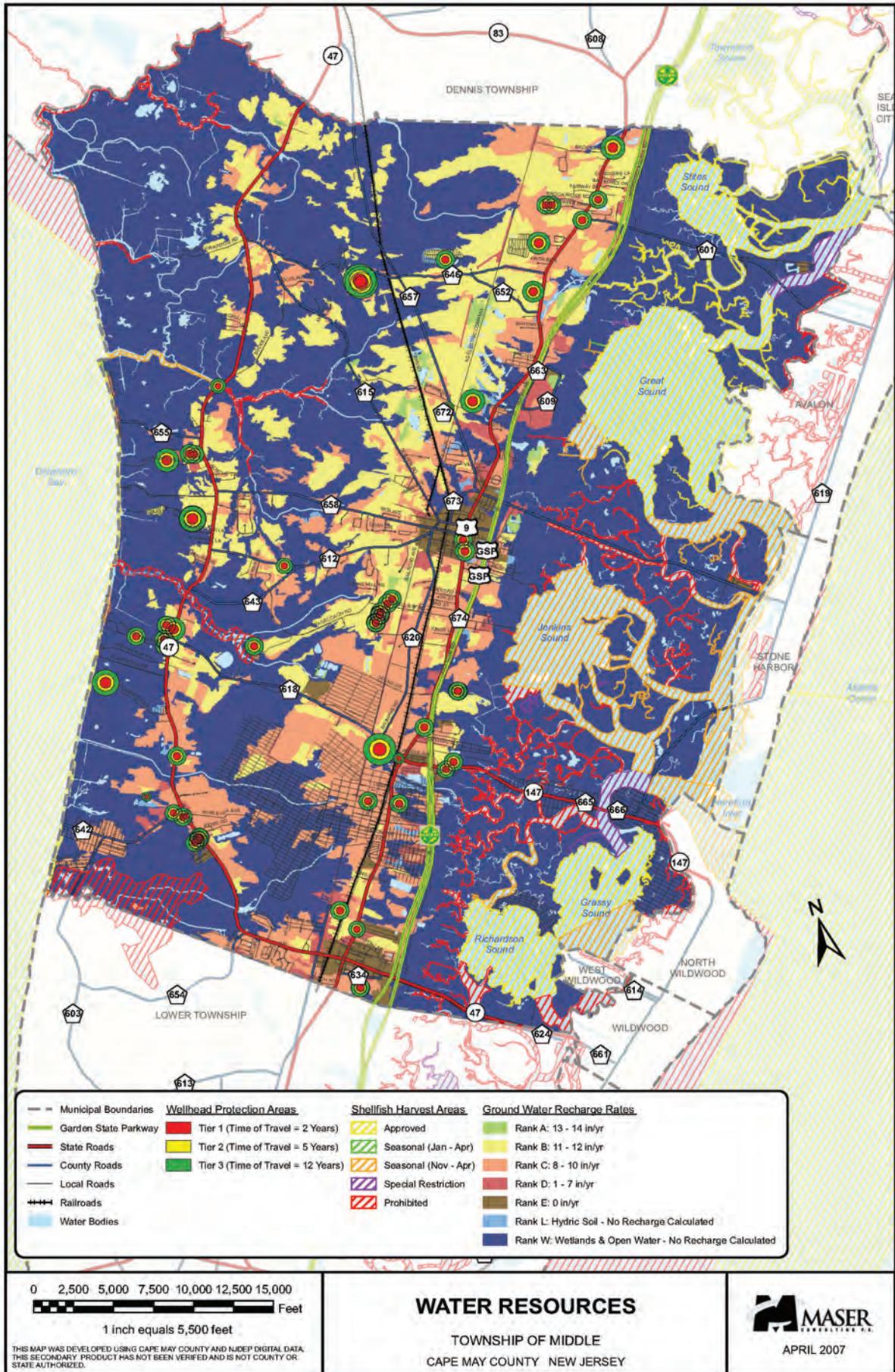
All of the streams that flow into the Delaware Bay and Atlantic Ocean from Middle Township are Category One streams, defined in the existing NJDEP Surface Water Quality Standards rules as waters protected from any measurable changes in water quality because of their exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resources.

Category One waters have more stringent antidegradation requirements to protect fisheries and residents. A 300-foot vegetated buffer is required along all Category 1 streams, and acquisition of stream buffer areas will help to protect residents from flood damage as well as protect water quality.

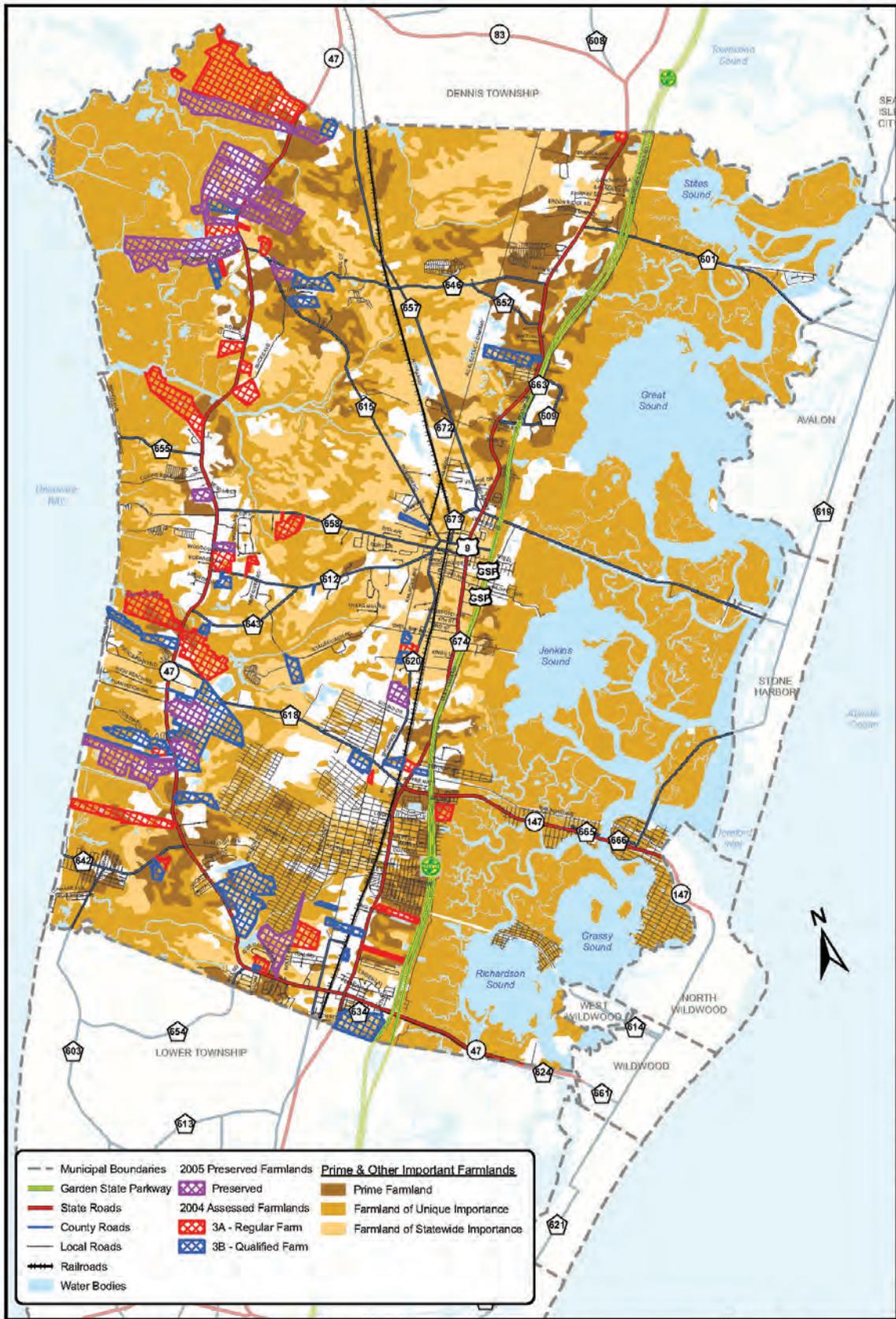
Forests with 50% canopy cover are valuable resources providing carbon storage, groundwater recharge, soil retention and cooling of the land. They can additionally be used for hiking trails and picnic areas, wildlife viewing and peaceful enjoyment of the outdoors if preserved as open space.

Working farms are an important part of life in Middle Township. Additional farmland can be preserved as a large amount of prime soil for farmland is not yet protected. See Farmland Soils map on page 43. Several farms are presently awaiting funds for preservation from Cape May County.

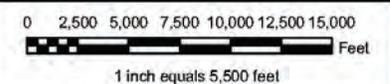
The Open Space in the Township does not adequately address the protection of the ground water supply. The largest portion of prime ground water recharge areas within Middle Township are in the Route 9 corridor. The Middle Township Natural Resources Inventory rates the best water recharge areas as:



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— Municipal Boundaries	2005 Preserved Farmlands	Prime & Other Important Farmlands
— Garden State Parkway	2004 Assessed Farmlands	Prime Farmland
— State Roads	3A - Regular Farm	Farmland of Unique Importance
— County Roads	3B - Qualified Farm	Farmland of Statewide Importance
— Local Roads		
— Railroads		
— Water Bodies		



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FARMLAND SOILS
TOWNSHIP OF MIDDLE
CAPE MAY COUNTY NEW JERSEY



APRIL 2007

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The Township has considerable cultural and historic resources. The Middle Township Natural Resources Inventory (2010) describes those resources, including early settlement, Goshen, Whitesboro, and lists the historic and cultural assets in the Township. A map of these resources is shown on page 45.

The Township has flood hazard areas as defined by FEMA Flood Insurance Rate Maps (FIRMs). In particular, areas along the Delaware Bay; the boulevards into Avalon, Stone Harbor, and the Wildwoods; Avalon and Stone Harbor Manor; and of course all of the coastal wetlands area are the main areas that are subject to tidal and storm flooding.

5.5 Support Community Objectives for Development and Land Use

In order to develop or to maintain working farms the Township needs a reliable water supply. This makes protecting prime ground water recharge areas that much more important.

N.J.A.C.7:8 Stormwater Management Rules and N.J.A.C. 7:14A Stormwater Permitting Rules are the foundation for assuring rain water infiltrate in our prime groundwater recharge areas as development progresses. The filtration rate and flow path must be adequate to clean the water before it recharges shallow water tables.

For new development, a regulatory requirement of preserving 100 percent of the average annual groundwater recharge has been set. For example, if an undeveloped parcel of land currently recharges on average one million gallons of rainfall per year, after developing the property, the land must continue to recharge one million gallons of rainfall. The use of stormwater best management practices (BMPs) that promote infiltration will be the key to achieving this regulatory requirement.

(New Jersey's Stormwater Regulations
http://water.rutgers.edu/Fact_Sheets/fs556.pdf)

The 10 Towns Great Swamp Watershed Committee (from northern New Jersey) has placed a Model Stormwater Management ordinance online: <http://www.tentowns.org/10t/ordstrmw.htm>

5.6 Provide Additional Public Access to Coastal and Inland Waters

The location of the Open Space in the Township does offer the possibility of additional public access to coastal and inland waters. Section 6.3.4 of the Plan discusses public access to tidal waters and recommends the development of a Municipal Public Access Plan.

5.7 Develop Recreational Facilities

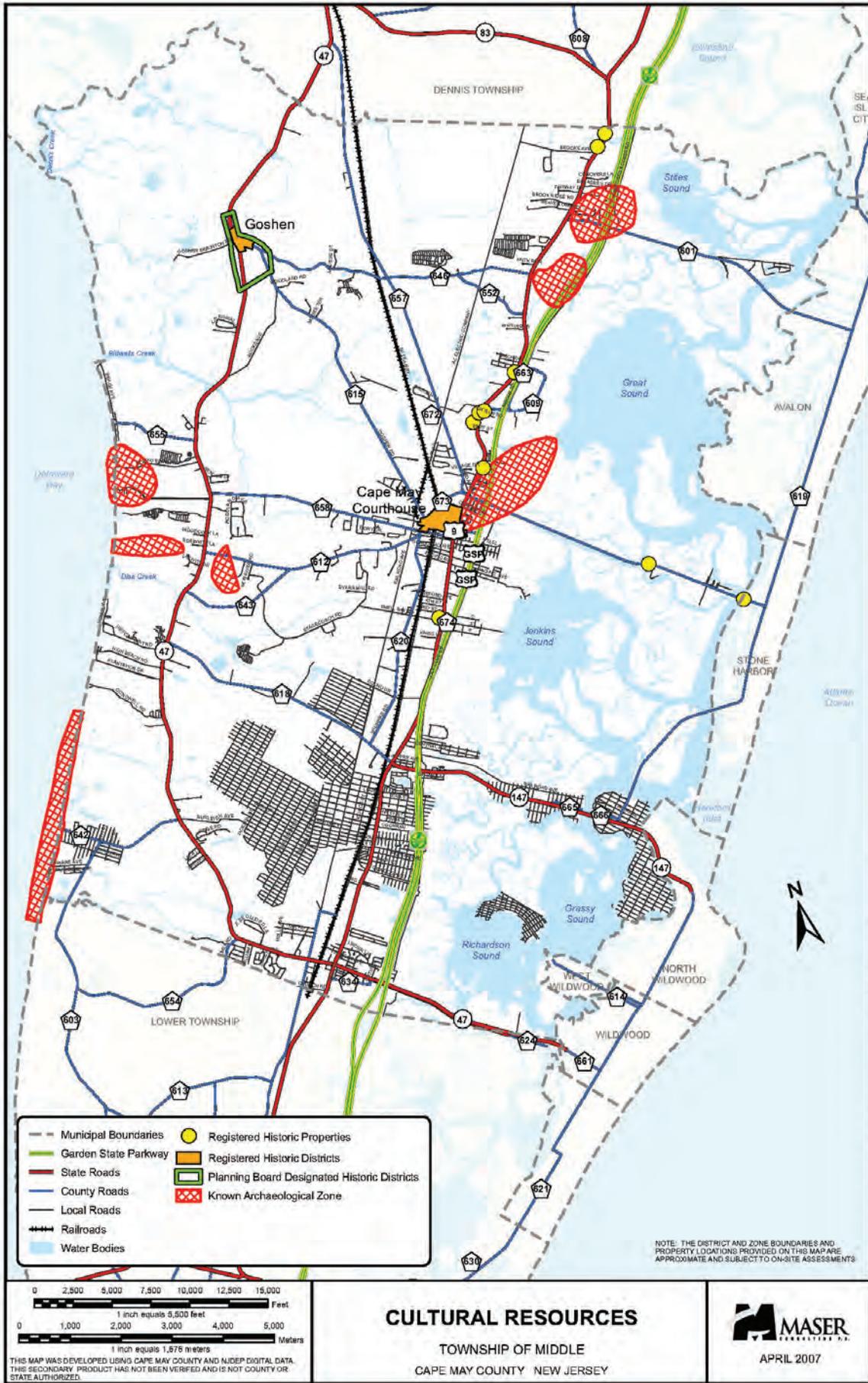
Chapter 6: Recommendations and Action Plan discusses proposals to expand passive and active recreational facilities.

5.8 Existing Preservation Policies and Regulations

With the exception of the County Farmland Program, all of the public entities and private non-profit organizations purchasing land in Middle Township acquire the land in “fee simple” or “fee title”. This means the purchaser gets 100% interest in the land.

In the Farmland Preservation Program the County only purchases the developments rights to the properties. The seller may continue farming and the seller controls access to the property.

Middle Township believes in supporting vibrant agricultural and ecotourism economies.



0 2,500 5,000 7,500 10,000 12,500 15,000 Feet
 1 inch equals 5,000 feet
 0 1,000 2,000 3,000 4,000 5,000 Meters
 1 inch equals 1,575 meters
 THIS MAP WAS DEVELOPED USING CAPE MAY COUNTY AND NJDEP DIGITAL DATA. THIS SECONDARY PRODUCT HAS NOT BEEN VERIFIED AND IS NOT COUNTY OR STATE AUTHORIZED.

CULTURAL RESOURCES
 TOWNSHIP OF MIDDLE
 CAPE MAY COUNTY NEW JERSEY



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6.0 Recommendations and Action Plan

6.1 Acquisition of Land

Recognizing the many benefits of preserved land as discussed in Chapter 5.0: Resource Assessment, the Township should continue to support the acquisition of land for conservation and recreation purposes.

The following lands should be prioritized:

- Lands within Rank A or B ground water recharge areas
- Lands within defined wellhead protection areas
- Lands containing cultural or historic resources
- Lands adjacent to: public open space; preserved farmland; recreation facilities; or lands identified for Federal acquisition as part of the Cape May National Wildlife Refuge
- Lands containing threatened and endangered species habitat
- Lands that are forested with at least 50% canopy cover
- Flood Hazard Areas

In addition, the Township should consider acquisition of incidental parcels to create better access, more parking, or enhanced circulation for the recommended improvements to recreation facilities as outlined in Section 6.2. Chapter 7.0 discusses acquisition plans of US Fish and Wildlife, as well as The Nature Conservancy.

6.2 Recommended Improvements to Existing Township Recreation Facilities

Overall, more public information regarding all Township facilities should be available. Specific ideas include:

- Update the Recreation Department's website to include all facilities, including links to other public recreation facilities in the Township
- Create a brochure with wildlife viewing and trails
- Support or sponsor a "Challenge" to visit all recreation facilities within Township, including State, Federal and nonprofit facilities
- Name facilities that don't have one already. Name should be descriptive and exemplify the assets of the facility. This can be done through a contest at the school district, possibly following an educational tour of the Township's facilities.
- Encourage associations to assist with public information
- Establish a hiking club and/or conservation club, and work with New Jersey Audubon and the Wetlands Institute to provide information about events
- Support educational field trips by Middle Township Schools to local conservation lands, such as US Fish and Wildlife's Cape May National Wildlife Refuge

The recommendations below are site specific, and take into consideration the comments received throughout the public input period, including improve and enhance existing facilities; provide additional amenities; and concentrate like activities in one location for better management.



Township Owned Lands

6.2.1

Robert “Ockie” Wisting Recreation Complex

7 Fulling Mill Road, Rio Grande
82 acres

In 2002, the former Fort Apache campground was purchased by the Township with a combination of loans and grants from New Jersey Green Acres and the New Jersey Environmental Infrastructure Financing Program. The purpose of the acquisition was to redevelop the 82 acre site into an active and passive recreation area, along with preserving open space and protection of the watershed. Site design and some site improvements were completed, however, no recreation improvements have been constructed to date.

Existing Amenities:

Undeveloped trails; Freshwater pond fishing

Need: Develop site with active and passive recreation

Public input demonstrates overwhelming support to develop the site for active and passive recreation. The property is currently open to the public for hiking and fishing, although the trails are overgrown and parking is not clearly marked. The front of the site has water and sewer infrastructure. The back half of the site has extensive wetlands limiting development to unpaved trails where permitted by State permit.

Recommendations: Develop the site with passive and active recreational amenities that serve the entire Township and region, with attention to the needs of the Township’s southern communities. Also consider partnerships with private entities to help fund improvements.

A site plan has been developed which includes the following amenities:

- A series of trails with an approximate length of 2 miles

- Fitness stations
- Partnership with Cape Express Soccer Club to construct five fields, parking and lighting
- Partnership with Cape May County Disc Golf Association for regulation size course
- Wildlife observation deck and fishing pier at pond
- Gazebo and picnic area
- Playground
- Demonstration garden for native species plants
- Building with restrooms, and possibly a police substation
- Stage for concerts and performances

The trails will be a series of loops designed to highlight a variety of local vegetation, including a butterfly and birding area. Frequently occurring curves and spurs to the lake will add interest. The trail will be constructed on an existing earthen road, with the majority of the trail handicap accessible, with interpretative educational signage, trail maps and markers and rest areas with natural rustic themes.

Concept plan for Ockie Wisting Recreation Complex (right)





**6.2.2
Clarence and Georgiana Davies Sports
Complex and Baker Center**

Block 94, Lots 14.01, 16
626 Goshen Road, Cape May Court House
65 acres



The Davies Complex is the Township's main outdoor sports facility, containing a variety of fields and other amenities.

Existing Amenities:

- Recreation building
- Two (2) indoor basketball courts
- Two (2) baseball fields
- Three (3) softball fields
- One (1) Little League field
- Four (4) soccer fields
- One (1) hockey rink
- Skate park
- Two (2) playgrounds
- Trails
- Wildlife viewing
- Freshwater pond
- Picnic area
- Bathrooms



6.2.3 Martin Luther King Center

Block 936, Lot 8
207 West Main Street, Whitesboro
6.86 acres

The Martin Luther King Center is a well-maintained recreation facility that also functions as a community center. It provides a variety of community activities such as exercise classes for all ages, community events, meeting space to community groups, as well as an after school program and homework club. It is the location of several outdoor amenities as well, and is the main location for the Township's basketball program.

Existing Amenities:

Recreation building
Two (2) indoor basketball courts
Two (2) outdoor basketball courts

Playground
One (1) Little League field
Two (2) tennis courts
Bathrooms

Needs: Tennis courts in disrepair; additional indoor basketball courts, more programs.

Recommendations:

Build onto the success of this facility as a community center that serves different ages and interests, with an expansion of programs (such as nutrition and fitness) and additional amenities:

- Additional indoor basketball courts
- Work out and exercise equipment area with showers
- Nature park on the undeveloped area behind the building
- Repair of tennis courts



**6.2.4 Middle Township Bike Path
Clarence Davies Center to Indian Trail Road**

Approximately 4.5 miles from Clarence Davies Center to Indian Trail Road

The Middle Township Bike Path is one of the most popular amenities, as shown by the use of the path, as well as comments made through the public input process.

Existing Amenities: The bike path connects the Davies Sport Complex to the Cape May County Park and Zoo, Atlantic Cape Community College, and then proceeds south for approximately four (4) miles. Phase 4, as shown on the map, will add another two miles.

Needs: Overwhelmingly, expanding the path both north and south is desirable so that it spans the entire Township, and eventually connects with

bike paths in adjacent towns. One of the major challenges is getting to the path, especially by bike or foot, since most of the public access points are via heavily travelled or high speed roads. Also, parking is limited and in some cases, non-existent at the access points.

Recommendations:

- Extend bike path to the north and south borders of Township
- Safe connections, preferably sidewalks, to residential neighborhoods, adjacent communities' bike paths, and recreational and other public facilities (such as schools)
- Link to Lower Township's bike path to south and Lizard Tail Swamp Wildlife Management area to north
- Identify opportunity for privately funded linkages (i.e. from campgrounds and neighborhoods)
- Improve parking at access points
- Consider naming the path to reflect the beauty, nature, and opportunities for wildlife viewing



Parking Area at Shellbay Avenue entrance of bike path



**6.2.5
Rio Grande Park**

Block 1421, Lot 8
Railroad Avenue, Rio Grande
2.57 acres



Rio Grande Park is a smaller park serving the needs of the surrounding neighborhoods with basketball courts, a baseball field, and playground. An unused and dilapidated hockey rink also exists on site.

Existing Amenities:

- Playground
- One (1) softball field
- Two (2) basketball courts
- One (1) hockey rink

Needs: Improve maintenance, address underutilized/unused hockey rink.

Recommendations:

- Improve maintenance
- Continue to maintain baseball field to be used for tournaments
- Remove unused and dilapidated hockey rink
- Increase public information regarding site



6.2.6 Goshen Historic Schoolhouse and Mini Park

Block 49, Lot 5
316 Route 47 North
1.35 acres

This site, owned by the Goshen Volunteer Fire Company, contains an historic schoolhouse as well as a recently installed playground. Goshen School was built in 1872 and used as a school until 1962. The Building has been nominated for listing on the National Register of Historic Places, however it has severe structural deterioration and is in need of immediate stabilization and repair. The Fire Company has received a \$30,000 grant and has applied for additional funds for the preservation of the building to be open to the public. It is envisioned that the School House will serve as The Goshen Community Center and a source of pride for the Goshen community in Middle Township. The School House is well located in the

center of Goshen as well as the center of Cape May County and occupies a prominent location along State Route 47. It has ample land to create not only the much needed community center but also additional recreational opportunities and parking. When fully realized the project will also offer space for education uses, public services, cultural venues and much needed support space for the Goshen Fire Company.

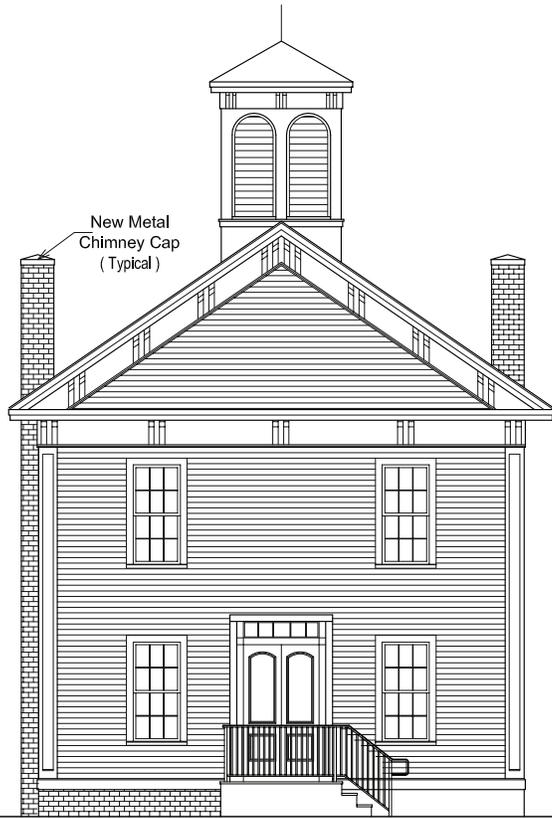
Existing Amenities:

Schoolhouse, Playground

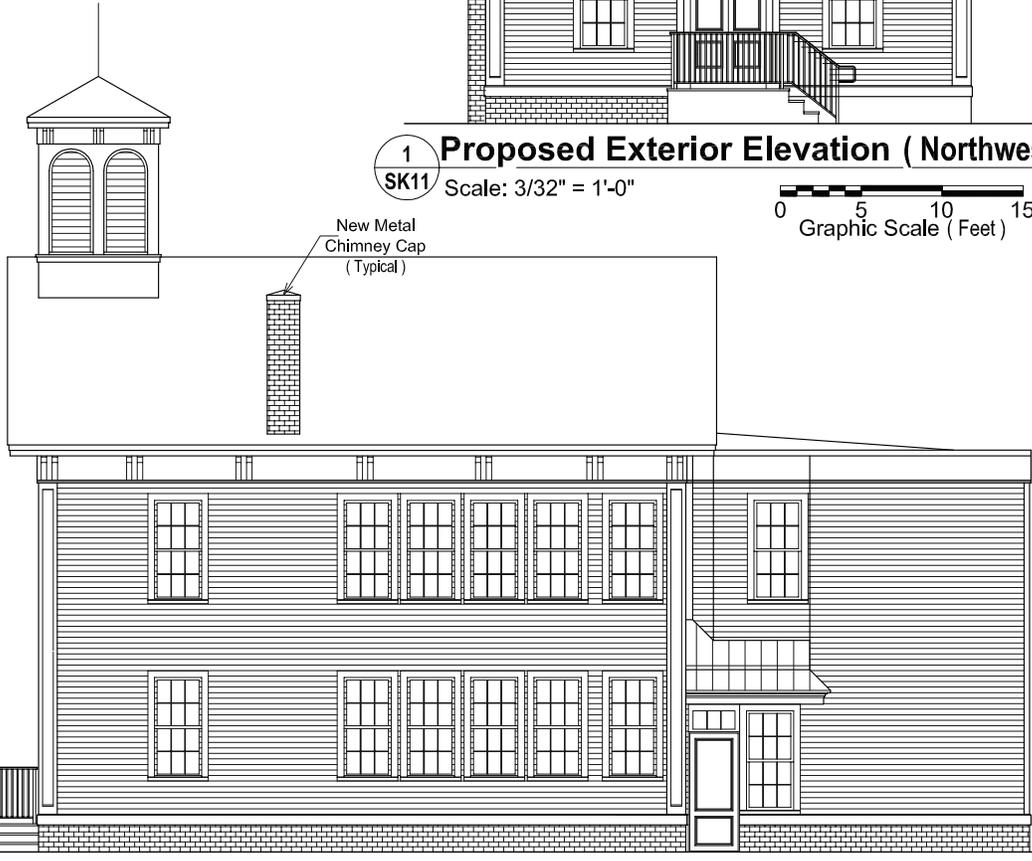
Needs: Funds to preserve the Goshen Schoolhouse and develop the site as planned.

Recommendations:

- Provide support to the revitalization efforts of the Goshen Schoolhouse, including helping to identify grant opportunities, and letters of support for grant applications
- Increase public information regarding site



1 Proposed Exterior Elevation (Northwest)
 SK11 Scale: 3/32" = 1'-0"



2 Proposed Exterior Elevation (Southwest)
 SK11 Scale: 3/32" = 1'-0"



Proposed Exterior Elevations
 Goshen Public Schoolhouse
 State Highway Route 47 North, Goshen, Cape May County, New Jersey 08218

Sketch Number:
SK11



6.2.7
Carol Nicoletta Park - Shellbay Avenue Pier

Block 335.03, Lot 1
525 E. Shellbay Avenue
3,264 sf



Shellbay Pier is a well-used site for fishing, and includes interpretive signage for wildlife.

Existing Amenities:

- Public Access to intercoastal waterway
- Saltwater fishing
- Crabbing
- Wildlife viewing
- Covered picnic area
- Bathrooms (seasonal)

Needs: Improved public information.

Recommendations:

- Increase public information regarding site
- Improve maintenance



Source: Cape May County Park System Master Plan, 2004

6.2.8 Avalon Manor Fishing Pier

Block 118-03, Lot 9
701 Avalon Boulevard

Avalon Manor Fishing Pier is one of the lesser known recreation facilities in the Township, yet a great opportunity for public access to waterways for fishing and wildlife viewing. It is in a remote location, which makes it difficult to direct users to the site. The pier has structural issues, and is partially on private property.

Existing Amenities:

Public access to intercoastal waterway
Saltwater fishing
Wildlife viewing

Needs: Address structural issues of pier; resolve property issues; improve parking and circulation, signage and public information.

In addition, due to accretion on the northern side of the pier (i.e., exposed mudflats at mid to low tide), water depths are insufficient for fishing. This limiting condition forces anglers to cast south from the pier into the marina basin that contributes to user conflicts between the fishing public and boat traffic.

Recommendations: Increase public information regarding site. Work with adjacent property owner to rebuild pier in appropriate locations to maximize public access and resolve property issues. Include effective circulation and parking in the redesign of the site.



Avalon Manor Fishing Pier

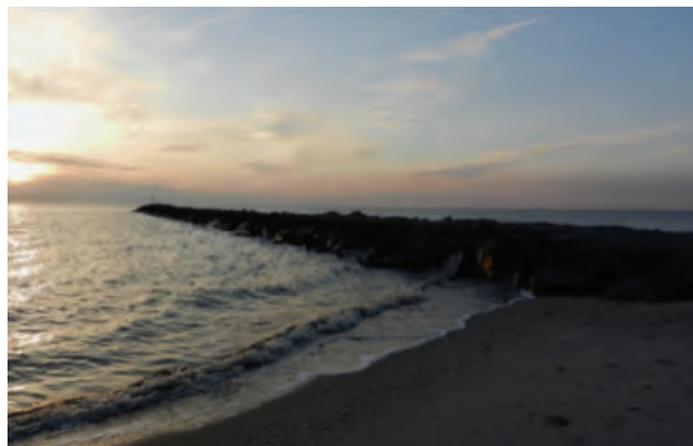
In rebuilding the pier to address structural deficiencies, it is equally important to *reconfigure* the pier. The configuration with greatest merit is to narrow the width of the pier and provide a “L” extension to the north from its present terminus. Doing so would provide greater frontage along fishable waters, largely outside of the marina basin. This configuration can be achieved without significantly increasing the existing water coverage, it provides for expanded fishing areas and allows for circulation/parking to be addressed. Public restrooms and a fish cleaning station are additional amenities that warrant consideration.



6.2.9 Bidwell Jetty at Reeds Beach

Block 506, Lot 18.31
301 Beach Avenue, Cape May Court House
0.67 acres

Reeds Beach is one of many important Delaware Bay beaches for horseshoe crabs and migrating birds, as well as other wildlife. The jetty provides an excellent location for fishing and wildlife viewing.



Bidwell Jetty at Reeds Beach

Existing Amenities:

Public access to Delaware Bay
Surf fishing
Saltwater fishing
Wildlife viewing

Needs: Lack of signage and public information. Improve parking and access. Improve maintenance.

Recommendations:

- Increase public information regarding site
- Improve signage directing people to site
- Add identification (name of facility) signage on site
- Develop site plan that will a) identify locations for identification and interpretive signage; b) maximize wildlife viewing and educational opportunities; c) improve parking and circulation without impacting wildlife; d) consideration for kayak/canoe launch
- Accommodate increased visits during shorebird migration period



Concept plan for Reeds Beach improvements



6.2.10 Norbury's Landing

Block 404, Lot 10
Millman Boulevard, Del Haven
82 feet x 66 feet

Norbury's Landing provides an excellent opportunity for wildlife viewing with a unique tidal flat landscape.

Existing Amenities and Activities:

Public Access to Delaware Bay
Saltwater Fishing
Wildlife Viewing
Beach Walks

Needs: Lack of signage and public information. Improve maintenance.

Recommendations:

- Increase public information regarding site
- Improve signage directing people to site
- Add identification (name of facility) signage on site
- Develop site plan that will a) identify locations for identification and interpretive signage; b) maximize wildlife viewing and educational opportunities; c) improve parking and circulation without impacting wildlife; d) consideration for kayak/canoe launch
- Accommodate increased visits during shorebird migration period



Norbury's Landing



“Story Time” sculpture by Gary Price, Cape May County Library, Cape May Court House

6.3 Other Facilities

The Township supports the following facilities to be built and maintained by private entities.

6.3.1 Indoor swimming pool

An indoor pool was the third most requested facility. If well run, and with appropriate user fees, tournaments, and other revenue producing activities, a pool may support itself. The Township would work with a private developer to help facilitate the siting, construction and operation of a pool.

6.3.2 Off-Road Bicycle Trails

Unpaved trails were the second most requested facility, and bicycling is the second most popular activity as represented in the public survey. The Jersey Off Road Bicycle Association (JORBA) helps to identify locations and guide local volunteers

to build and maintain trails. Although there has not been a Township owned site identified as meeting the needs of such a trail, the Township will encourage partnerships among JORBA and the other public agencies and organizations that have land in Middle Township.

6.3.3 Pocket Parks and Plazas

Within the more densely populated residential and commercial areas, the installation of public art, playground equipment, benches, picnic tables, and natural features is recommended. There is one example of this in the Township currently, at the County Library on Mechanic Street. The Township should work with local businesses and community organizations to fund construction or help maintain the site as a sponsor.



Tidal Creek at Goshen Landing

6.3.4 Municipal Public Access Plan (MPAP) Sites

The State of New Jersey allows for a municipality to voluntarily develop and adopt a MPAP which identifies public access points to State-owned waters. The basis for the MPAP is the Public Trust Doctrine, which protects the public's right to access tidal waterways and their shores. Public access to tidal waters is a right based in common law that predates the founding of our country and has been validated by court cases, legislation and regulations.

Water bodies within the Township or adjacent to Township lands include:

- Delaware Bay
- Great Sound
- Jenkins Sound
- Grassy Sound

- Richardson Sound
- Approximately twenty (20) tidal creeks listed in Section 6.5

The main benefit of a MPAP to both the public and private property owners serves also a unique funding opportunity. Specific projects identified in a MPAP can be funded by a private property owner as an alternative to providing public access on his or her property.

Considering the abundance of opportunities for accessing public waters, it makes sense for the township to choose where and how public access locations are developed. The specific recommendation of this report is that the Township develops site plans for the following locations that would include amenities identified throughout the public process and listed on the following page.



Scotch Bonnet Bridge on Stone Harbor Boulevard, Cape May Court House

In addition to the four (4) sites outlined above (Shellbay Pier, Avalon Manor Pier, Reeds Beach, Norbury’s Landing), as well as the many privately owned public access points such as marinas, there are other locations that should be developed in the future to accommodate the public while respecting and preserving the existing wildlife habitats and plant life:

- Cooks Beach (end of Cook’s Beach Road)
- Goshen Landing (end of Goshen Landing Road)
- Nummy Island (Ocean Drive between North Wildwood and Stone Harbor)

In addition, the Township will encourage site development by the County for safe public access at Scotch Bonnet Bridge on Stone Harbor Boulevard, and other locations on County roads as appropriate.

Amenities at these public access points may include:

- Canoe and kayak launch
- Fishing and crabbing areas
- Boat ramp
- Hunting
- Unpaved trails
- Wildlife viewing areas, including minimal structures



Access to Scotch Bonnet Bridge on Stone Harbor Boulevard



6.4 Programs

6.4.1 Additional organized sports, activities and programs

Regarding youth activities, there has been a significant shift towards organized sports. With each new organized sport or program there is a high level of participation. Some examples of programs **for all ages** that are recommended include:

- Nutrition
- Exercise
- Cheerleading
- Outdoor movie nights (summer months)
- Family skate night
- Boxing

6.4.2 Nature Tourism

The Delaware Bay area of Middle Township is a critical ecosystem and habitat for spawning horseshoe crabs, migrating birds, and a wide array of other plant and wildlife species.

Nature tourism brings over \$522 million dollars to Cape May annually.

Watchable Wildlife, a nonprofit organization dedicated to advancing wildlife viewing as a viable economic and conservation enterprise for communities, held a workshop in Cape May County in 2012. They presented the U.S. Fish and Wildlife Service 2011 National Survey of Wildlife-Associated Recreation Overview Report dated August 2012, which stated: "Wildlife watching is a favorite pastime for millions in the U.S. Nearly 71.8 million people 16 years old and older fed, photographed, and observed wildlife in 2011. They spent \$55 billion on their activities". Additionally, the report states: "In 2011, more than 2.8 million New Jersey residents and visitors participated in wildlife-related recreation generating over \$4.1 billion in revenues."

Thousands of nature tourists come to Cape May County to take advantage of the rare opportunities afforded here, however (with the exception of some of the commercial establishments advertising as part of events), Middle Township has not actively pursued economic benefits. Before doing so, however, the Township should make the wildlife viewing locations more accommodating and user friendly, as outlined in the specific facility recommendations in Section 6.2.

This category includes supporting nonprofit nature tourism events and activities by the Wetlands Institute and New Jersey Audubon's Cape May Bird Observatory, and other organizations. Topics of nature tourism events could include: horseshoe crabs; water quality and water supply; shorebird education and events; nature photography.



Interpretive Sign in front of the Old Court House building

6.4.3 Historic Preservation

Middle Township has a rich history, and there is much interest as shown by several surveys and public meetings. Currently, there are no formalized historic programs focused on Middle Township. The Township adopted an ordinance establishing a Historic Preservation Commission in 1986 that would serve in an advisory (rather than regulatory) capacity on development applications. The Township should consider appointing members that can work to implement the recommendations of this report.

Some projects can include:

- Inventory of historic buildings and design guidelines for their preservation
- Educate schoolchildren regarding the history of Middle Township through a partnership with local historians or the Cape May County Museum
- Develop a series of lectures on any of the following topics: Settlement of Middle Township; history of the County seat; churches; cemeteries Middle Township families; Farming; Photos and documents; Fishing/oystering along the Delaware Bay; Native American settlement; Industry/economic development

6.4.4 Sporting Tournaments

For every sport offered by the Township, there is an opportunity to host tournaments that can provide an activity for our children, improve skills, create relationships with other communities, and have a positive impact on the local economy.

The Township and/or its associations can work with established tournament organizers to determine the requirements to host tournaments. Work cooperatively with the Economic Development Council and Chamber of Commerce to market local businesses to the tournament participants via tournament website and in welcome packets, and program books/schedules.

6.4.5 Sports Camps

During the offseason for sports, fields, courts and rinks can be used for sports camps, generating revenue for the program and improving the skills of the players. Also provides an opportunity for the private sector if the camp is not run by volunteers or recreation staff.



Local farm market

6.4.6 Agriculture and Cultural Tourism

Middle Township has a long history of agriculture. Supporting programs on a variety of topics can improve the quality of life for residents as well as attract visitors for economic development purposes. Preferably led by nonprofit agencies or volunteer groups, the Township can engage in partnerships for educational and tourism programs for all ages on the following topics:

- Oyster fisheries
- Coop/community gardens
- Farm/winery education and tours

6.4.7 Community clean up days

Community clean up days can focus on the Township's open space and recreation facilities. Such events help supplement the efforts of the public works department, bring residents together to accomplish an important goal, and improve community pride. The Environmental Commission has been organizing community clean ups since 2011.

6.5 Public Information and Signage

6.5.1 Branding

To assist in the identification of Middle Township's many recreation and open space assets, create a logo and tag line for Middle Township Recreation programs and facilities. Use the logo on all signs, publications and web based information.

6.5.2 User Friendly Maps

Middle Township is fortunate to have so many recreation facilities and opportunities, however fitting them all onto one easy-to-read map is difficult. Therefore, it is recommended that a series of maps are created with like or complementary activities. Some examples include:

- Sports complexes (which can be used for tournaments)
- Hiking/walking/biking trails and wildlife viewing locations
- Marinas and public access points for water based recreation identifying boat ramps, kayak/canoe launch, fishing and crabbing locations
- Playgrounds, picnic areas and campgrounds
- Golf courses and restaurants
- Wineries and farm markets
- Historic properties and Cape May County Museum

6.5.3 Coordination with Other Efforts

Cape May County is currently in the process of developing a county-wide way finding sign system which will result in templates, icons, and color schemes and typefaces for municipalities to use. The scope of the project also includes identifying grant programs to pay for the signs.

Bayshore Heritage Byway project sponsored by the NJ Department of Transportation is a 142 mile scenic corridor that highlights the natural, cultural, and historic resources of the Delaware Bay. The program has created a logo, and has prioritized sign coordination.

Watchable Wildlife promotes nature tourism and has created a binocular icon for nature viewing which should be used at all such locations in the Township.



One of the few remaining State highway signs identifying waterways (on Route 47 in Dias Creek, Middle Township)

6.5.4 Identify waterways

The Township's access to waterways is a great asset that should be identified and appreciated. There are many unique and historical names of waterways. Install signs identifying all water bodies, particularly where they cross roadways, such as:

- Uncle Aarons Creek at Rt. 9
- Deep Creek at Rt. 9
- Holmes Creek tributary (two locations) at Rt. 9
- Crooked Creek at Rt. 9
- Gravelly Run at Rt. 9
- Cresse Creek at Rt. 9
- Sluice Creek at Rt. 47
- Crow Creek at Rt. 47
- Goshen Creek at Rt. 47
- Bidwell Creek tributary (two locations) at Rt. 47
- Dias Creek at Rt. 47
- Green Creek at Rt. 47
- Sluice Creek at Courthouse-Dennisville Road/ County Road 657
- Bidwell Creek Tributary (two locations) at Courthouse-Dennisville Road/County Road 657
- Crooked Creek at Courthouse-Dennisville Road/County Road 657
- Stone Harbor Canal at Courthouse-Dennisville Road/County Road 657
- Scotch Bonnet (two locations) at Courthouse-Dennisville Road/County Road 657
- Goth Creek at Courthouse-Dennisville Road/

- County Road 657
- Goshen Creek at Goshen Road/County Road 615
- Bidwell Creek tributary (two locations) at Goshen Road/County Road 615
- Deep Creek at Avalon Boulevard/County Road 601
- Leonard Thorofare at Avalon Boulevard/ County Road 601
- Ingram Thorofare tributary at Avalon Boulevard/ County Road 601
- Gravens Thorofare tributary at Avalon Boulevard/County Road 601
- Holmes Creek at Crest Haven Road/County Road 609
- Skeeter Island Creek and tributary at Hand Avenue/County Road 658
- Dias Creek at Springers Mill Road/County Road 643

6.6 Funding Options

6.6.1 Township based

- Tournament fees
- Sports camp fees
- User fees where appropriate
- Fundraising and charity events
- Private partnerships
- Sponsorships (donations, signs, advertising in program books, announce local businesses at sporting events)
- Adopt-a-Park Program

6.6.2 County Open Space Funds

The County is expanding the Open Space Program to include two (2) new additional eligible categories, Parks and Recreation Development and Historic Preservation. The expanded program took effect January 1, 2013.

6.6.3 State Funding Programs

The State of New Jersey provides annual PILOT payments (Payment in Lieu of Taxes) to the municipalities with preserved open space. The amount is based on the total percentage of

preserved land multiplied by the number of acres. The chart below illustrates the payments that have been made to the Township from 2000-2010.

Green Acres PILOT payments

2000	\$71,986.91
2001	\$74,478.65
2002	\$69,946.31
2003	\$68,940.62
2004	\$67,501.97
2005	\$68,896.82
2006	\$67,855.32
2007	\$67,247.78
2008	\$65,465.13
2009	\$66,844.90
2010	\$71,221.06

- Green Acres and Blue Acres Grants & Loans
- NJDOT bike path and sidewalk grants (Safe Routes to Transit)
- Community Stewardship Incentive Program Grant
- Endangered Species - Conserve Wildlife Matching Grant
- Green Communities Grant (Urban and Community Forestry Program)
- Historic Preservation Certified Local Government Grants
- National Recreational Trails Program
- Shore Protection Grants & Loans

6.6.4 Federal Funding Programs

- The Land and Water Conservation Fund (LWCF)
- National Recreation Park Association Grants
- Arbor Day Foundation and TD Bank Provide Grants for TD Green Streets
- The National Endowment for the Arts (NEA) Funding
- Inclusion of People with Disabilities
- Estuary Habitat Restoration Program Coastal and Marine Habitat Restoration Project Grants
- Communication for Healthy Communities

6.6.5 Private Funding

Individual and Corporate Donors give \$15 billion annually, and this sector of grants is growing, especially corporate giving.

6.7 Action Plan Priorities

- Develop Ockie Wisting Recreation Complex
- Add recommended improvements to Reeds Beach
- Continue to redesign the Davies Sports Complex Repair tennis courts at the Martin Luther King Center
- Establish Middle Township Recreation logo
- Develop series of maps for nature and cultural tourism
- Improve fields for recreation programs and to attract tournaments
Identify a location for an off-road biking trail
- Pursue funding for additional indoor basketball courts at Martin Luther King Center
- Expand bike path and its connections



7.0 Open Space Systems Map

The intent of the Open Space Systems Map is to provide a general overview of the Township's vision of the future open space character of the community by depicting the existing and proposed parkland, greenways and related open space of conservation and recreation interests.

7.1 Existing Recreation and Open Space Inventory

The Recreation and Open Space Inventory (ROSI) database maintained by the Green Acres Program includes municipal, county and nonprofit parkland encumbered by the Green Acres Program.

According to the Green Acres website, "Each Local Unit (municipality or County) is required to prepare a ROSI as a condition of applying for and receiving Green Acres funding. The ROSI lists all Green Acres-funded properties ("funded parkland") as well as all other lands held for conservation and/or recreation purposes at the time the Local Unit last received funding from Green Acres ("unfunded parkland"). Lands listed on a ROSI include those owned, leased, or otherwise controlled by the Local Unit and may include land owned in fee, land leased by the Local Unit for recreation purposes, land owned by a private entity upon which the Local Unit holds a conservation easement, or any land in which the Local Unit holds a specific recreation and/or conservation interest."

The Green Acres Recreation and Open Space Inventory for Middle Township can be found at <http://www.nj.gov/dep/greenacres>

7.2 Future Open Space

Chapter 6.0 recommends priority lands for acquisition to be pursued or supported by the Township.

7.2.1 US Fish and Wildlife Service Future Acquisition Areas

The Service has already acquired about 12,000 acres in Cape May County, including 4,832 acres in Middle Township. The Service plans to acquire a total of 24,797 acres in Cape May County for the Cape May National Wildlife Refuge, including a total of 9,356 acres in Middle Township. These additional purchases will be within the approved refuge acquisition boundary from willing sellers as funds become available. The Service has already spent over \$32 million to acquire the almost 12,000 acre it currently manages in the Cape May NWR. The Service estimates it will require about \$15.9 million more to buy all the remaining properties within the approved refuge acquisition boundary of refuge.

7.2.2 The Nature Conservancy

TNC's acquisition plan in Middle Township is to purchase properties that are contiguous to lands already owned, specifically the Indian Trail and Lizard Tail Swamp preserves. The goal is to "fill in the gaps" to create a larger area of preservation. No more than 100 acres at each facility is expected to be purchased. Additionally, TNC's acquisition area at Indian Trail overlaps with the State and Federal acquisition areas, therefore a partnership with those agencies are involved.



Open Space Systems Map



8.0 Additional Parcel Data Requirements

To coordinate efficient open space planning in New Jersey, the following information from this Open Space and Recreation plan will be entered into the Green Acres Program GIS database in shape file format:

- a) Existing preserved open space sites documented in the plan's inventory (Recreation and Open Space Inventory) delineated at the block and lot level.
- b) Potential open space and greenway areas identified in the same detail outlined in the plan's resource assessment.



9.0 Public Participation

The opportunity for public participation in the development of this plan has been extensive, including:

- Interviews with twenty five (25) stakeholder groups, representing hundreds of members
- Public survey with 188 responses representing over 600 people
- Fifteen (15) press releases resulting in approximately fifteen news articles
- Two (2) public input meetings with over 60 people each
- A website with progressive versions of the Plan, the inventory map, concept plans, public survey results, news articles, meeting notices, and more.
- Over 300 hours of volunteer time by Project Team members

The first step in the development of this Plan was to designate members of the Project Team, which included a diverse representation of the public, including members of the Recreation Advisory Board, Economic Development Council, Environmental Commission and Planning Board.

Next, stakeholder groups were identified and twenty (25) sports, environmental, conservation, and recreation groups provided input on what they felt were important issues for Middle Township.

A few months after project start, the Project Team took a field trip to visit some of the lesser known sites in the Township. Seven sites were toured, including Lizard Tail Swamp, Beaver Creek, Reeds Beach and Norburys Landing (Delaware Bay beach areas), the US Fish and Wildlife trails, County Park South, and the Ockie Wisting Recreation Complex. Since many of the participants had never visited the sites, and may not have even been aware of their existence, the tour brought to light the need for public information regarding all of the recreation and open space assets in the Township. The photos and story received a lot of media attention, and the experience set the goal to improve public information.

A public survey was developed and posted on line, and 188 responses were received. From stakeholder and public survey comments, as

well as the input from the Project Team, a draft plan was developed. A public meeting to solicit additional input was held, and a revised draft was distributed and posted on the Township's website. A second public meeting was held with additional public input, and the final plan was presented to the Planning Board on April 9, 2013 with public hearing and adoption by the Planning Board on April 25, 2013.



The Project Team takes a tour of several of the Township's open space and recreation opportunities early in the process.



The first public meeting on the Plan, held on January 22, 2013 at the Martin Luther King Center.



The second public meeting was held at DeVico Senior Center on March 21, 2013.



10.0 Plan Adoption

This Open Space and Recreation Plan was developed under the guidance of the Project Team. The Project Team consisted of members of Township Committee, Economic Development Council, the Environmental Commission, the Recreation Advisory Board, the Planning Board, as well as members of other government and nonprofit agencies.

Consistent with New Jersey Municipal Land Use Law (40:55D-28), the Planning Board reviewed the Open Space and Recreation Plan on April 9, 2013, at which time they tentatively approved the document and set a hearing date for the adoption of the plan. Notice of the hearing was published April 10, 2013 which is at least ten days prior to the hearing as required by law. In addition, the document was available for review by the public ten days prior to the hearing.

The Plan was adopted unanimously by the Middle Township Planning Board on April 25, 2013.