CONSERVATION ELEMENT

DATA INVENTORY AND ANALYSIS

PURPOSE

The purpose of the Conservation Element is to promote the conservation, use, and protection of natural resources in the Town.

NATURAL ENVIRONMENT

Climate

The Southeast Regional Climate Center identifies that from 1927 to 2007, the average annual maximum temperature is 81.1 F° and the average annual minimum temperature is 71.4 F° for the barrier island the Town is located on. The average annual total precipitation is 46.85 inches. Precipitation is not distributed evenly throughout the year. Precipitation ranges from an average monthly low of 1.81 inches in December, to 7.02 inches in September. Precipitation is heaviest from June through September with 50% of the rainfall occurring during these four months. No snowfall has been reported during this recording period.

Thunderstorms are common during the summer months. Hurricanes, which occur less frequently, have the potential to occur from June through November; heavy rainfall, high winds, and widespread flooding may accompany these storms. Records indicate that the Town has been brushed by or hit by a tropical storm or hurricane 51 times from 1871 through 2007. Two of the more devastating hurricanes which occurred struck in 1926 and in 1992 when Hurricane Andrew, a category 5 hurricane, made landfall in South Miami-Dade County. The most recent hurricane events occurred in 2005 with Hurricanes Katrina and Wilma. Both of these storms caused moderate damage to the area.

Soils

The U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) identifies Urban Land and Beaches as the only two coverage types found within the Town. The NRCS describes Urban Lands as areas that are more than 70% covered by buildings, streets, sidewalks and other structures so the natural soil is not readily accessible. The NRCS describes beaches as nearly level to sloping, narrow, sandy strips along the Atlantic Ocean of fine to coarse sand mixed with shell fragments. *Map FLU 2 Soils*, provides the general distribution of soils/coverage in the Town as mapped by the NRSC.

The beach along the Town's ocean frontage is created from a beach renourishment program. The deposit material utilized for the renourishment program was sand that was harvested from off-shore borrow sites that is similar to the beach sand which would naturally occur on this barrier island.

Physiography

Surfside is an Atlantic Ocean coastal community located on a barrier island on the southeast coast of the Florida peninsula in Miami-Dade County. The Town is separated from the mainland by the north end of the Biscayne Bay. The Biscayne Bay Inlet (Bakers Haulover Cut), less than one mile north of the Town, is the northern end of the barrier island, and Government Cut, approximately seven and one half miles

south of the Town, is the southern end. The Town itself is one mile in length from its north to south end and is approximately three-fourths of a mile wide at its widest point on the south end of Town. Biscaya Island, also a part of the Town, is a small residential neighborhood at the southwest corner of the Town that is separated from the barrier island by the dredged water feature referred to as Point Lake, but connectivity is maintained via a short bridge segment, referred to as Biscaya Bridge, on Eighty-Eighth Street.

The natural conditions of this barrier island have been highly altered. The one mile length of beach and dune along the Town's ocean frontage is created from a beach renourishment program. The restoration of the federally-authorized Dade County Shore Protection Project, which included the Town of Surfside, began in 1978 and was completed in January 1982. The project utilized sand from offshore borrow sites. The project included restoration of a 20 foot wide dune at elevation +10.7 ft NGVD and a 50 foot wide level berm at elevation +8.2 ft NGVD. Additional fill material equivalent to ten years of advance nourishment was placed seaward of the design berm. Though nourishment of several areas of the initial project was conducted between 1987 and 1990, the overall project has exceeded performance expectations. At the time of the compilation of this data in November of 2008, there is approximately 38.2 acres of beach seaward of the erosion control line within the Town.

The entirety of the Town's bay side shoreline, inclusive of Indian Creek and Point Lake, has been significantly altered and is bulkheaded, and the adjacent nearshore waters have been dredged. *Map FLU 5 Water Bodies*, identifies the water bodies that abut the limits of the Town.

Map FLU 3 Topography identifies the topography of the Town. The Town is nearly flat with elevations ranging only from 0 to 10 feet. The vast majority of the Town is 5 feet or less. The lowest elevation is found along the oceanfront coastline. The highest elevation is a narrow linear strip that runs approximately along Collins Avenue.

Soil Erosion

The entire length of ocean shoreline along the barrier island the Town is located on is recognized as 'Critically Eroded' by the Florida Department of Environmental Protection's Bureau of Beaches and Coastal Systems and is part of a long term beach renourishment program. The Bureau defines critically eroded as a segment of the shoreline where natural processes or human activity have caused or contributed to erosion and recession of the beach or dune system to such a degree that upland development, recreational interests, wildlife habitat, or important cultural resources are threatened or lost. Critically eroded areas may also include peripheral segments or gaps between identified critically eroded areas which, although they may be stable or slightly erosional now, their inclusion is necessary for continuity of management of the coastal system or for the design integrity of adjacent beach management projects.

The entirety of the Town's bayside shoreline, inclusive of Indian Creek and Point Lake is bulkheaded and the remainder of the Town is developed and does not experience erosion problems.

Commercially Valuable Minerals

There are no extractable, commercially valuable minerals in the Town.

Floodplains

The National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA) has identified the following flood zones within the Town:

Table 6-1. National Flood Insurance Program Flood Zones	
Zone	Description
VE	Coastal areas with a 1 percent or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26 percent chance of flooding over the life
	of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AE	Areas with a 1 percent annual chance of flooding and a 26 percent chance of flooding over the life of a 30-year mortgage. In most instances, base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
X	Areas outside the 1 percent annual chance floodplain, areas of 1 percent annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1 percent annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1 percent annual chance flood by levees. No base flood elevations or depths are shown within this zone. Insurance purchase is not required in this zone.
X500	Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood. An area inundated by 0.2 percent annual chance flooding.

Map FLU 4 FEMA Flood Zones, locates the flood zones within the Town. Nearly the entirety of the Town is an AE zone; this zone falls generally west of Collins Avenue. The X zone falls generally east of Collins Avenue; the VE zone is located in a narrow strip along the beach; and the X-500 is represented as a narrow strip located along the north end of Collins Avenue and also along the beach. Existing land uses found within these flood zones are illustrated in the *Future Land Use* map and described in the Future Land Use Element.

Land use, as it relates to the discharge of stormwater and to the use of natural drainage, is regulated through the South Florida Water Management District. The Florida Building Code regulates construction as it relates to flood zones.

Air

Air quality in the Town is generally good. Based upon ambient air quality monitoring, conducted by the Florida Department of Environmental Protection (FDEP) and documented in the 2006 Florida Air Monitoring Report, Miami-Dade County (and now all of Florida) is an attainment area for the six major air contaminants measured. These contaminates are carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, and sulfur dioxide. The attainment area designation indicates that the concentrations of major pollutants are within the acceptable limits set by the FDEP and the U.S. Environmental Protection Agency. Air quality is a matter that must be addressed at a regional level requiring the local, County and regional entities to coordinate air quality maintenance and improvement efforts.

Water Resources

The predominant water resources that are present are the Atlantic Ocean and Biscayne Bay. Indian Creek is a channel that separates the Town from the Islands of Indian Creek Village and Bay Harbor Islands, and Point Lake, the dredged channel and water body that separate Biscaya Island from the remainder of the Town, is considered part of Biscayne Bay.

Biscayne Bay, a sub-tropical estuary, is located along the coast of Miami-Dade and northeastern Monroe Counties. It is a marine ecosystem comprised of about 428 square miles with a watershed area of about 938 square miles. The bay can be divided into three general areas, north, central and south Biscayne Bay. North Biscayne Bay extends from Dumfoundling Bay (approximately NE 192nd Street) south to the

Rickenbacker Causeway. The Town of Surfside is located adjacent to the north portion of Biscayne Bay. This northern portion of the bay retains the most estuarine habitat found throughout the bay, but it is also the most altered by dredging and bulkheading. Although remaining shallow areas contain some productive seagrass beds, roughly 40 percent of this area is too deep or too turbid to support a productive estuarine ecosystem. The entirety of the Town's bayside shoreline, inclusive of Indian Creek and Point lake has been significantly altered through dredging and is bulkheaded.

Central Biscayne Bay, extending from the Rickenbacker Causeway south to Black Point, is more of a marine system that is heavily influenced by daily tidal flushing. Estuarine areas are limited to near shores areas close to major sources of freshwater inflow (canals). Seagrass meadows are extensive. A narrow band of mangrove-forested coastal wetlands begins at Matheson Hammock Park and extends southward along the shoreline.

Southern Biscayne Bay extends from Black Point to Jewfish Creek. This southern area is most profoundly affected by the reduction in historical freshwater flows and tends to become hypersaline during periods of low rainfall. The near shore freshwater wetlands have been significantly reduced and a transition to mangrove species is occurring. This southern area encompasses Biscayne National Park as well as Card and Barnes Sounds, which are both included in the Florida Keys National Marine Sanctuary.

The Bay supports a wide variety of plants and animals, some of which are important for fisheries. Many rare, threatened and endangered species inhabit this estuarine ecosystem including manatees and crocodiles. Historically, it is clear water supported a diversity of productive communities of seagrass, corals and sponges, and prior to settlement, mangroves and coastal wetlands rimmed the bay. Oyster bars and estuarine species like red and black drum were common. However, intensive development of the watershed has altered the natural cycle of freshwater inflows into the bay. Northern and central Biscayne Bay are strongly affected by the urban development associated with the growth of Miami-Dade County. Southern Biscayne Bay is influenced by drainage from the Everglades, which has been altered by canals and agricultural activities. Overall, Biscayne Bay shows increasing signs of distress; declines in fisheries, increased pollution and dramatic changes in near shore vegetation. Today, the bay is a pulsed system that alternates between marine conditions and extreme low salinities near the discharges of 19 major canals.

Biscayne Bay is now designated as an Outstanding Florida Water and an Aquatic Preserve under Florida statutes. The Biscayne Bay Aquatic Preserve was established by the Florida Legislature in 1974 and covers approximately 69,000 acres of state submerged land. The Aquatic Preserve consists of two separate areas of the bay, the northern part and the southern portion which is separated by Biscayne National Park, a submerged lands park encompassing the central portion of the bay. A variety of organizations have monitoring and research underway in Biscayne Bay and its watershed. The western edge of the Town abuts the northern portion of the Biscayne Bay Aquatic Preserve.

LAND COVER

Map FLU 6 Aerial, best exemplifies the land coverage within the Town. The land coverage can be categorized as Developed and Beach. Other than the beach and beach dune system, the Town is built out. There are no native preserves or remaining native habitats or wetlands within the Town. The beach and dune system, although created through a beach renourishment program, is owned by the State and maintained in a natural condition.

Natural Habitats

There is 38.2 acres of state owned beach seaward of the erosion control line, which runs approximately along the crest of the dune. This beach is maintained under an agreement with the State by the Miami-Dade Park and Recreation Department. The seaward face of the dune is vegetated. The beach is recognized as nesting habitat for the federally listed loggerhead, green, hawksbill, and leatherback sea

turtles. Sea turtles typically nest at night from March through November, with incubation lasting approximately 55 days. Threats to sea turtle nests are both man-made and naturally occurring. Detrimental activities include: physical disturbance of dune systems by development; the placement of physical obstructions on the beach entrapping adults and hatchlings; high raccoon predator populations; nest disturbance by stray or unleashed pets; or the disorientation of hatchlings from direct lighting of the beaches at night. Natural occurring coastal erosion which can cause cliffing and, although not frequent, hurricanes causing serious beach erosion or accretion are also detrimental to nesting success.

Along beachfront private properties, the Town has an established ocean bulkhead line. The zoning code prohibits development or any redevelopment seaward of this ocean bulkhead line. Seaward of the ocean bulkhead line there is approximately 19 acres that are undeveloped that lie adjacent to the State owned beach. Within this undeveloped ocean bulkhead setback area along the landward side of the dune, there is an unimproved maintenance path that is utilized by the State, the County and the Town that runs the entire length of the Town. This maintenance path is a popular public walking and biking path. The landward side of the dune in this area is more sparsely vegetated than the seaward side, and the property owners have landscaped the area nearest the bulkhead on many of the properties.

To limit impacts to the dune and dune vegetation, access to the beach is limited to seventeen (17) dune cross-over locations. Eight of these cross-overs correspond to the termination of the platted public right of ways that terminate at the State beach area and one is in front of the Town's Community Center site providing direct public access to the beach. Although the remaining cross-overs are located in front of private properties, the established maintenance path provides open public access to these cross-overs also.

Appendix 6-A. *Listed Wildlife Species* identifies those federal and state listed animal species that may be found within the Town. Listed and other animal species depend on native vegetative communities for refuge, foraging, nesting, and denning. The size, quality and connectivity of native communities all influence wildlife utilization. Due to the highly urbanized nature of the Town the listed species that may occur are limited to those that utilize the bay or coastal waters, or beach habitat.

Appendix 6-B. *Native Plant Species* contains a list of native plant species having the most likely potential to occur in the Town, and it identifies those species that are recognized as either threatened or endangered by the State or the federal government. This list contains dune and beach habitat vegetation along with coastal tree or shrub species that are recognized as native to Miami-Dade County.

Appendix 6-C. *Invasive Pest Plant Species* identifies the invasive exotic pest plant species that are problematic throughout South Florida and may occur in the Town. Due to the highly urbanized nature of the Town occurrence of these pest plant species will be limited, but may still occur and create problems on the beach and within landscaped areas if not maintained.

Conservation Opportunities

Conservation opportunities are enhanced through the public ownership of land. There is approximately 38 acres of state owned beach seaward of the erosion control line. The beach is maintained under an agreement with the State by the Miami-Dade Park and Recreation Department. The beach is maintained in a natural state. The Town has been built out since the 1980's; there are no preserves, wetlands or natural habitats within the Town other than the beach habitat. The Park and Recreation Element inventories and identified the parks located in the Town.

Potable Water

The Town of Surfside purchases their potable water supply directly from the Miami-Dade County Water and Sewer Department (WASD). Under this arrangement, the Town of Surfside coordinates with Miami-Dade County to ensure that adequate capacity is available for existing and future customers. The Biscayne Aquifer, an underground geologic formation, is the source of raw water for WASD. Approximately 330 million gallons per day are withdrawn from the aquifer through wells extending an average of 80 feet below the ground surface to meet the needs of the County.

The Town is served by the WASD Hialeah-Preston subarea, which lies generally north of Flagler Street. The Hialeah and the John E. Preston water treatment plants (WTPs) serving this subarea are located at 200 W. 2nd Avenue and 1100 W. 2nd Avenue, respectively. These adjacent facilities located in Hialeah share interconnected source water and finished water storage capacity and have similar treatment processes. There are no public wellfields or wellfield protection zones located in the Town of Surfside.

On a regional level the Town falls within the South Florida Water Management District (SFWMD) and within the SFWMD's Lower East Coast (LEC) Planning Area. The 2005-2006 Lower East Coast Water Supply Plan Update (2005-2006 LEC Plan Update), approved by the SFWMD on February 15, 2007, is one of four, long-term comprehensive regional water supply plan updates the District has developed for its planning areas. Previous water supply plans for the Lower East Coast (LEC) Planning Area include the 1998 Interim Plan for Lower East Coast Regional Water Supply, which provided recommendations to improve water resource management and benefit water users until the long-term regional water supply plan was completed, and the 2000 Lower East Coast Regional Water Supply Plan (2000 LEC Plan), which was completed in May 2000. The planning horizon for the 2000 LEC Plan was 2020; the planning horizon for the 2005-2006 LEC Plan Update is 2025.

As the state agency responsible for water supply in the region, including the Lower East Coast planning area, the SFWMD plays a vital role in resource protection. As a component of the District's Consumptive Use Permitting Program, the Regional Water Availability Rule was also adopted by the SFWMD Governing Board on February 15, 2007. This rule mandates the development of alternative water supplies, and increasing conservation and reuse to reduce the reliance on the regional system for future water supply needs. The Town of Surfside is working with WASD's Water Use Efficiency Section to identify the water conservation best management practices (BMPs) applicable to the Town to develop the Town's Water Conservation Plan as required by Miami-Dade County Ordinance 06-177.

The Town has completed their Utility Profile, and entered this data into the *Conserve Florida* on-line database, currently located at the conservefloridawater.org website. This data base is a component of Florida's Statewide Comprehensive Water Conservation Program.

Ground Water

The principal ground water resources for the LEC Planning Area are the Surficial Aquifer System (SAS), including the Biscayne aquifer, and the Floridian Aquifer System (FAS). The Surficial and Biscayne aquifers provide most of the fresh water for public water supply and agriculture within the LEC Planning Area. The 2005-2006 LEC Plan Update identifies the following:

Although the Biscayne Aquifer is part of the Surficial Aquifer System (SAS), it exists only along the coastal areas in Miami-Dade, Broward and southern Palm Beach counties. The Biscayne Aquifer is highly productive with high-quality fresh water. The extension of the SAS through central and northern Palm Beach County is less productive, but is still used for consumptive uses, including potable water. These aquifers are shallow, generally located within 200 feet of ground surface, and are connected to surface water systems, including canals, lakes and wetlands.

The Biscayne Aquifer and the extension of the SAS into northern Palm Beach County provide more than 1 billion gallons per day of high-quality, inexpensive fresh water for the populations of Palm Beach, Broward and Miami-Dade counties and the Florida Keys portion of Monroe County. This volume is heavily supported, especially during the annual dry season, as well as in periodic droughts, by water from the regional system, primarily the Everglades. During droughts, water from Lake Okeechobee has been required to supplement water from the Everglades to meet the needs of the coastal counties.

The Biscayne Aquifer is designated as a sole source aquifer by the U.S. Environmental Protection Agency (USEPA) under the *Safe Drinking Water Act* because it is a principal source of drinking water and is highly susceptible to contamination due to its high permeability and proximity to land surface in many locations. Protection of the Biscayne Aquifer is provided for through the District's *Basis of Review for Water Use Permit Applications* (SFWMD 2003) and in Chapter 373, Florida Statutes (F.S.), which limit the water availability for consumptive uses.

The Floridan Aquifer System (FAS) exists not just in the LEC Planning Area, but throughout the entire state and portions of adjacent states. The Upper Floridan Aquifer in southeast Florida contains brackish water and is increasingly being tapped as a source of raw water for treatment with reverse osmosis (RO) to create potable water. Brackish water from the Floridan Aquifer is also blended with fresh water prior to conventional water treatment to expand water supplies during the dry season. Additionally, the Floridan Aquifer is used for seasonal storage of treated fresh water within aquifer storage and recovery (ASR) systems. The Floridan Aquifer has been more extensively developed in the Upper East Coast (UEC) and Lower West Coast (LWC) planning areas of the South Florida Water Management District (SFWMD or District) than in the LEC Planning Area.

From Jupiter to southern Miami, water from the FAS is highly mineralized and not suitable for drinking water without specialized treatment. More than 600 feet of low permeability sediments confine this aquifer and create artesian conditions in the LEC Planning Area. Although the potentiometric surface of the aquifer is above land surface, the low permeability units of the intermediate confining unit prevent significant upward migration of saline waters into the shallower freshwater aquifers.

The top of the Upper Floridan Aquifer is approximately 900 feet in southeast Florida, and the base of the Upper Floridan extends as deep as 1,500 feet. At the base of the Lower Floridan Aquifer, there are cavernous zones with extremely high transmissivities collectively known as the boulder zone. Because of their depth and high salinity, these deeper zones of the Lower Floridan Aquifer are used primarily for disposal of treated wastewater.

Surface Water

Surface waters tend to contain silts and suspended sediments, algae, dissolved organic matter from topsoil, and chemical and microbiological contaminants from municipal wastewater discharges, stormwater runoff, and industrial and agricultural activities. Traditionally, surface water has not been used extensively for public supply in the LEC planning area.

Storm water throughout the developed areas of the SFWMD is often captured in constructed stormwater drainage and retention/detention systems. Water from these systems can be directly used to meet many non-potable water needs, such as golf course irrigation and other irrigation water needs. Stormwater, because of its diffuse and intermittent nature, is generally not considered a viable option for direct public-supply applications where reliability is a major consideration.

Pollutants

Waste generators, solid waste facilities, above and underground storage tanks, and dry cleaning facilities are licensed by the Florida Department of Environmental Protection (FDEP). Current information on these facilities is available through the Florida Department of Environmental Protection Division of Waste Management. Information on contaminated sites is also available through the U.S. Environmental Protection Agency (EPA) Resource Conservation Recovery Act (RCRA), Superfund, National Priorities List and the brownfield databases.

Within Miami-Dade County the Department of Environmental Resource Management (DERM) Pollution Remediation Section is currently contracted with the Florida Department of Environmental Protection (FDEP) to inspect all petroleum storage facilities in the County and oversee the cleanup of petroleum contamination in accordance with Chapters 62-761 and 62-770, Florida Administrative Code (F.A.C.), the stationary tank rule and the petroleum contamination cleanup criteria rule, respectively. The primary responsibility of DERM is to provide the technical oversight, management, and administrative activities necessary to prioritize, assess, and clean up sites contaminated by discharges of petroleum and petroleum products from stationary petroleum storage systems.

A November 2008 database search identifies that at this time there are no sites in the Town listed on the U.S. Environmental Protection Agency's (EPA) Federal Superfund list or the National Priorities List (NPL). There are no designated or candidate brownfields in the Town. Within the Town several sites are recognized by FDEP as having or had contamination issues. There are two operating dry cleaning facilities that are registered in the State Dry Cleaning Solvent Cleanup Program and awaiting cleanup, one closed dry cleaning facility with no tank or site information listed, and a closed petroleum facility with records indicating that all tanks had been removed by May of 1988.

The Town's Sanitary Department has three garbage trucks which collect trash and garbage on a weekly basis and haul it to Miami-Dade County's Resource Recovery Plant west of Miami International Airport and other Miami-Dade County landfills. The Town can provide public information regarding the safe disposal of household chemicals for its residents. Specifically, information can be made available on the free disposal of household hazardous wastes, information on disposal contractors available to small businesses and the special waste programs available for landfill disposal of non-typical materials, such as spill clean-ups and contaminated soils. Additionally the Town may consider contracting with a licensed hazardous waste hauler to execute a Household Hazardous Waste Mobil Collection Event. The Contractor would receive, catalog, inventory and prepare the manifest of disposal for the household products that are dropped off, as well as place them in appropriate containers and haul them away. Setting-up a system where the residents just drive up and 'pop the trunk' and let the contractor deal with the products from that point is an effective means to reduce the potential of contaminates being disposed of in inappropriate or detrimental ways. The Town could do this in conjunction with distributing informational handouts or gathering survey data from the event participants. Running it near Earth Day or in conjunction with spring cleaning drives has proven to increase participation. It is optimal to hold such an event in a paved area, and not near a school or park or an environmentally sensitive area to avoid the perception of putting environmentally sensitive sites at risk.

Greenhouse Gas Reduction Strategies

Climate change is largely attributed to the buildup of carbon dioxide and other greenhouse gas (GHG) concentrations in the atmosphere. Global emissions of GHG from human activities, such as the burning of fossil fuels and deforestation, have increased by 70% between 1970 and 2004 according to The American Planning Association (APA). In the April 2008, *Policy Guide on Planning and Climate Change*, the APA provides guidance for local governments toward the reduction of GHG emissions and on energy efficient land use decisions. The APA document indicates that effective actions to address GHG emissions should include a mix of education, incentives, subsidies, and regulation. The APA has suggested the following strategies for local governments to facilitate a reduction in GHG emissions: providing shopping, recreational and employment opportunities near residential areas, energy efficient buildings, convenient intermodal transportation systems, and the reduction of heat island effects through green spaces.

As currently developed, the Town of Surfside is a compact, walkable community that provides recreational, shopping, and employment opportunities completely within the municipality. The Future Land Use Element provides that the Town support green building standards through the Design Guidelines, consider all new residential development utilize green building standards and that all new municipal buildings will be build with nationally recognized green building standards.

Surfside already has convenient access to Miami-Dade Transit bus routes. The Future Land Use Element and Transportation Elements propose developing a Pedestrial and Bicyle Network Study to enhance links to parks, the business district and other Town amenities. The Town will also continue to support transit ready development and coordinate with Miami-Dade County on transit. To further reduce greenhouse gas production through transportation, the Town will support the Surfside Farmer's Market which promotes local agriculture, continue to allow home based businesses and continue curbise recycling programs.

In addition, the Town has significant open space and landscape requirements to diminish heat island effects. The Comprehensive Plan also includes policies to educate the public on the placement of canopy trees and other landscape materials to strategically provide shade, and educating the public on home energy reduction strategies and automobile idling.

Other policies that support energy efficiency include allowing for electric substations and use solar panels. Because of the compact, walkable nature of the Town, a map showing the energy conservation areas and features was not included.