TOWN OF BOWERS COMPREHENSIVE PLAN

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1. Background and Goals

1.1. Background

The Town of Bowers has historically been a small, overwhelmingly residential waterman's village located on a neck of habitable land lying between the Delaware Bay on the east, the St. Jones River on the North, and the Murderkill River on the South. This location is unsuitable for, and incapable of, sustaining significant development. However, in recent decades, the demand for resort and waterfront real estate has created pressures in the Town and along the bay for additional residential and resort development with its accompanying commercial development. In the face of this pressure for increased development, the Town Council has determined it should, as authorized by law, revise its Comprehensive Zoning Ordinance.

1.2. Goals

The general goals which this Comprehensive Plan is designed to achieve are:

- 1.2.1 To prohibit industrial, manufacturing, and large commercial development in the Town.
- 1.2.2 To strictly limit residential development, by allowing only those uses which are compatible with the character and history of the community and which are readily supportable by the natural environmental features and existing infrastructure.
- 1.2.3 To strictly control the number and types of commercial activities in order to provide only those which are necessary, appropriate and compatible with the character and location of the Town.
- 1.2.4 To protect and preserve the natural environment, wildlife, wetlands, and beaches and to permit, where appropriate, the agricultural use of land.
- 1.2.5 To preserve the tranquil bayfront community nature of the Town.
- 1.2.6 To prevent the overcrowding of land by imposing limits on the percentage of total lot area that can be built upon, and by requiring front, side, and rear yard setbacks.
- 1.2.7 To develop a means of balancing the competing interests of abutting waterfront property owners in maximizing their own enjoyment of the bay's view, light, and air.

1.3. Objective

The primary objective of this Comprehensive Plan is to examine and inventory the natural and man-made features of the Town to facilitate the continuing modification of the existing zoning and subdivision ordinance to reflect the changing needs of the community.

2. Profile

2.1. General Information

2.1.1. Location

Bowers Beach is located in South Murderkill Hundred, Kent County, Delaware. To the east of the town is the Delaware Bay, to the north the St. Jones River, and to the south the Murderkill River.

The only access to the Town is by way of Road 18 which leads eastward to the Town's western boundary from U.S. Route 113.

2.1.2. History/historical Demographics

Bowers Beach, one of the earliest settlements along the Delaware Bay, was named "Whitwells' Delight" in the late 1600's by Francis Whitwell. At that time, the tract contained 834 acres of woodland and 540 acres of meadow. In 1685, William Frampton acquired the property and called it "Dover Peers". Frampton died and the land was sold to William Bassett.

Later on, 420 acres of Whitwells' Delight was owned by Nathaniel and Mary Hunn. Nathaniel died, and in 1734 his children sold the 420 acres to John Bowers. Since then, August 16, 1734, the area "between the mouths of the St. Jones and Murderkill Rivers" has been known as Bowers' Beach.

The land passed to John Bowers' son and then to his granddaughter. She was the last person to own the land to carry the Bowers' name.

John Booth acquired part of the land in 1750, and sold that part the same year to Benjamin Chew. Joseph Wood owned the Bowers Beach properties by the 1800's. Eventually, the properties were sold to many owners.

Bowers was first incorporated on March 9, 1907, and was reincorporated in 1962.

Source: Montgomery, Gail Stewart, "Delaware Discovered

Series, Vol. 1" (1974).

2.1.3. Population

The population of Bowers showed a decrease in population from 1960 to 1990. However, from 1990 to 2000, the population increased from 179 to 305 according to the 2000 census of the U.S. Census Bureau.

Population		Percentage of Change
1960	324	
1970	268	-17%
1980	198	-26%
1990	179	-10%
2000	305	+70%

While this represents an increase of 70% in the last decade, the population is still below the 1960 level. The major increase was between 1990 and 1995 when the population went from 179 to 280. The general trend is consistent with County statistics taken from the 2006 Economic Development Strategy Initiative Final Report which showed a significant decline in growth from 1960 to 1990, but has seen population growth over 2% per year since 1990.

Demographics

The current population is relatively evenly divided over the various age groups with 25 to 55 years of age comprising approximately 44% of the demographics. Of the 305 residents of the Town of Bowers Beach, 60 are enrolled in school. 51% of the population has resided in the same house since 1995. The median family income is \$45,625.00 with 10.6% of the families at or below poverty level.

Of the 146 employed residents over the age of 16 years, over 75% are in managerial, professional, service, or sales and office occupations. 4.1% are in farming, fishing, or forestry occupations. Private wage, salary, and government workers represent 89% of the employed residents. 90 % of the residents commute to work with an average commute of 34 minutes.

There appears from the data, that a major shift has taken place in the demographics over the last ten years, reflecting a trend from an economic foundation based on the fishing and agricultural industries to a primarily residential community. This trend is expected to continue.

All statistics were taken from the 2000 United States Census Bureau report.

3. Form of Government

3.1. Town Council

Bowers is governed by a Town Council consisting of four members and a mayor, who are chosen for two-year terms. The Council selects a Vice-Mayor, a Secretary, and a Treasurer from its own number.

3.2. Elections

Elections are held annually on the first Saturday in August, from 2:00 p.m. to 7:00 p.m.

3.3. Meetings

The Town Council meets monthly at 8:00 p.m. on the second Thursday of every month at the Bowers Beach Volunteer Fire Station.

3.4. Town Hall

No Town Hall presently exists. Business is conducted at the Bowers Fire Hall. Plans are being considered for a new town hall. Public participation is encouraged at all meetings. One week prior to each meeting, an agenda is posted on the Town Bulletin Board and places of business in the Town. This allows public discussion prior to motions made on the floor. The public is invited to request items be placed on the agenda. These requests can be made through the Mayor and/or up to one week prior to any meeting. Those items brought before council by the public at the meeting, will be placed on the agenda for the next meeting to encourage as much public input as possible. changes to the code, variances, appeals, and exceptional use petitions require a public hearing with due and proper notice as stated elsewhere in this plan and/or the zoning ordinance.

4. Revenues and Expenses

The Town is on a fiscal year which begins July 1 and runs through June 30.

The total assessed value of all taxable property in Bowers is \$5,299,600.00. The Town has adopted the Kent County assessment, on which that figure is based, pursuant to 22 Del.C. Ch. 11.

The Town's annual tax rate is presently .30 per \$100 of assessed valuation. Bowers also has a municipal tax of \$100.00 which is imposed on all improved property. Improved property is property with any structure, including travel

trailers, that has water, sewer, or electric hooked to it. Bowers also has a municipal tax of \$25.00 which is imposed on all unimproved property.

In F.Y. 2007, the Town's revenues consisted of the following:

Municipal Street Aid	\$	11,180.88
1.5% Transfer Tax	\$	56,386.40
Property Tax @.30	\$	15,898.80
Municipal Tax Improved	\$	49,192.88
Municipal Tax Unimp.	\$	2,150.00
Building Permits	\$	500.00
Interest on Accounts	\$	2,000.00
Total	\$1	137,308.96

In fiscal year 2007, Town expenditures were the following:

\$27,000.00
\$ 2,100.00
\$ 1,000.00
\$30,000.00
\$15,000.00
\$ 5,000.00
\$ 8,000.00
\$ 1,500.00
\$ 5,000.00
\$94,000.00

5. Public Services

5.1. Fire Protection

5.1.1. Service Area

The Bowers Fire Company serves the Town of Bowers, both sides of Bowers Beach Road (Rd 18), Skeeter Neck Road (Rd 372), Mulberrie Point Road (Rd 373), Old Bowers Road (Rd 374), and Whitwells Delight Road (Rd 375). It also serves both sides of U.S. 113 from approximately 200 ft south to the old Conley's Hardware property line to a point just past High Point Park, which is now known as Buffalo Run Road (Rd 376). Responsibilities go approximately 2 miles west to the second sharp curve where there is an imaginary line that cuts across a field back to Bowers Beach Road (Rd 18). Bowers Fire Company also serves both North and South bound portions of Bay Road and a small portion from the High Point traffic light to Buffalo Road which is known as Claphan Rd. This sets directly in front of High Point Park North and High Point Park South. The Bowers Fire Company also serves the Delaware Bay to the North, South and East

to the cross over buoys which would be the New Jersey Line. Bowers Fire Company, inc. was organized on April 5, 1938 and the fire station is located on Main Street. There are over 100 members. Of those members about 35 are active.

5.1.2. Equipment

The Fire Company owns on 3,000 gallon tanker, two 1,000 gallon pumpers, one mini pumper with foam, one heavy duty rescue truck, one ambulance, 3 rescue boats, one 75foot aerial truck and one Command Unit.

5.2. Police Protection

Bowers has no police force of its own, but occasionally hires off-duty State Police troopers to provide police protection.

5.3. Schools

There are no public schools within the Town limits. Bowers is located in the Lake Forest School District. Bowers' students go to Chipman Jr. High School, Center and Dorman Streets, Harrington; and Lake Forest High School, Felton. Bowers students attend either Frederica East Elementary in Frederica or they attend Central Elementary in Felton.

6. Streets

6.1. Town-maintained streets

Bowers maintains 1.76 miles of streets within its limits. These streets are: Bay Shore Drive, Canal Street; Church Street; Cooper Avenue; Cross Lane; Davidson Street; Main Street; Maple Lane; Middle Drive; Mulberry Drive; Murderkill Avenue; South Flack Avenue; Williams Avenue; and Wyatt Street.

Bav Shore Drive. The surface width of Bay Shore Drive is 14 feet, and the roadway width is 20 feet. This street has hot mix and is graded and drained.

Canal Street. The surface width is 14 feet and the roadway width is 18 feet. This street has surface treatment (tar and chip).

Church Street. The surface and roadway widths are 17 feet. The surface is hot mix on surface treatment.

Cooper Avenue. The surface width is 14-20 feet, and the roadway width is 18-28 feet. Part of Cooper Avenue is tar and chip, but the street is mostly hot mix on tar and chip.

Cross Lane. Cross Lane's surface is 10 feet wide. The

roadway width is 14 feet. This street is tar and chip. Davidson Street. This street is surfaced with tar and chip and has a surface of 15 feet, a roadway width of 19 feet.

Main Street. The Town maintains Main Street from Flack Avenue (Road 18A) to 264 feet east of Flack Avenue. This street is "Hot Mix". The surface width of Main Street is 18 feet, and the roadway width 24 feet.

Maple Lane. This street once had surface and roadway widths of 40 feet, and was topped with hot mix on tar and chip. Now the street has 10-foot surface and roadway width and is surfaced with tar and chip.

Middle Drive. This street has a 12-foot surface of tar and chip. Its roadway width is 16 feet.

Mulberry Drive. The 12-foot surface of this street is tar and chip. Its roadway width is 16 feet.

Murderkill Avenue. The surface and roadway widths of Murderkill Avenue varies from 14-26 feet. Part of its surface is hot mix on tar and chip, part tar and chip.

South Flack Avenue. The Town maintains 792 feet of this street. Its tar and chip surface is 14 feet wide. The roadway width is 18 feet.

Williams Avenue. This street is surfaced with tar and chip. Part of this street has 16-foot wide surface and roadway. The remainder has a surface width of 14 feet, a roadway width of 16 feet.

Wyatt Street. Wyatt Street has a surface width of 16 feet and a roadway width of 28 feet. It is topped with tar and chip. (See Road Inventory Appendix "A")

6.2. State-maintained streets

The State of Delaware maintains 1.13 miles of streets in Bowers. These streets are North Flack Avenue (Road 18A), Hubbard Avenue, from Main Street to south of Murderkill Avenue, and Main Street, from Atlantic Avenue to North Flack Avenue.

North Flack Avenue. (18A)

The State maintains the entire length of this street. It is topped with tar and chip, and has a surface width of 18

feet. The roadway width is 24 feet.

Hubbard Avenue. This street is maintained by the State from Main Street to south of Murderkill Avenue. Its surface width is 24 feet, the roadway width is 28 feet. The surface is tar and chip on concrete.

Main Street. The surface width of Main Street is 24 feet, the roadway width 40 feet. The surface is hot mix on concrete. (See Road Inventory Appendix "A")

6.3. Roads outside of Town Limits

Road 18. Road 18 (Main Street in the Town) travels to the Town of Bowers directly from U. S. 113.

Road 18 is surfaced with hot mix on concrete. The surface width of the road from the Town limits to U.S. Route 113 is 22-24 feet.

7. Utilities

7.1. Water

The Town water is presently individual wells and based upon the present restrictions on growth sees no need to change the existing condition. Sewer is provided and regulated by Kent County sewer and upgrades are the county responsibility. The Town has no plans for changing the system as described elsewhere herein.

7.2. Electric

Electric service is provided to Bowers by Delmarva Power and Light Company. The capacity of the distribution line to the Town is 25,000 kilovolts. There are no transmission lines into the Town.

7.3. Sanitary Sewer

Bowers is connected to the Kent County Sewer System. A pumping station is located in Town. An auxiliary pumping station is located 3 miles from Town. Existing lines were updated within the last ten years and are sufficient for any minor additions to service possible within the confines as reported herein.

Two unincorporated areas - South Bowers and Bay View Heights -- are located within the Bowers Sewer District and sewage from those areas is pumped through the two pumping stations noted.

8. Housing Summary

RESIDENTIAL

1-Unit, detached	149	58%
1-Unit, attached	32	12.5%
2-Units	9	3.5%
3 or 4 Units	4	1.6%
5 to 9 Units	3	1.2%
10-19 Units	2	.8%
Mobile Homes	58	22.6%
Total	257	Units
OCCUPIED	136	53%
SEASONAL	71	27%

HOUSING PIPELINE

Presently all three permitted houses are under construction. Geographic limitations allow for approximately 20 additional single family dwellings. The present housing mix shows that 13.8% of the houses have a value of less than \$50,000 and 46% have a value of less than \$100,000. With only 9% of the families at or below poverty level, current median income that exceeds county median income, and the current trends toward a commuting population of higher wage earners, it is the Town's position that no special provisions for affordable housing are required.

All statistics were taken from the 2000 United States Census Bureau report.

(See Map of Existing Uses Appendix "B")

9. Soil Conditions

The soil conditions in the Town of Bowers include: Tidal Marsh; Fallsington Sandy Loam; Sassafras Sandy Loam, 0-2 percent slopes; Sassafras Sand Loam, 2-5 percent slopes; Coastal Beaches (sand); and Fallsington Loam.

9.1. Tidal Marsh

Tidal marsh has a cover of salt tolerant vegetation, and at times is covered by a brackish water. Because of tidal flooding, Tidal Marshlands are severely limited for all uses. Tidal Marsh comprises a large area in the northern part of the Town, and also an area in the southern part of Town.

9.2. Fallsington Sandy Loam

This soil has a surface layer of dark grayish-brown sandy loam, and a subsurface of grayish-brown sandy loam. It retains moisture and is easy to work. It is poorly drained and has a water table near its surface unless drained artificially. Due to its high water table, Fallsington Sandy Loam is severely limited for disposal fields for septic tank systems, foundations for homes, roads and

streets, parking lots, gardens and cemeteries.

This type of soil can be found in an area north of the Murderkill River and west of the beach.

9.3. Sassafras Sandy Loam

0-2% slopes and 2-5% slopes.

These well-drained soils have a surface layer of dark grayish-brown sandy loam and a subsurface layer of brown sandy loam. There are few limitations on this soil for farm or non-farm uses. Sassafras Sandy Loam, 0-2 percent slopes can be found in the western part of Bowers, running from a little south of Main Street to an area north of that street. A small area of Sassafras Sandy Loam, 2-5 percent slopes, lies within that area.

9.4. Coastal Beach

The soil in this area is loose sand, which is salty and very dry and arid. The vegetation which grows in this area is limited to salt tolerant species. Because of these soil conditions, there are severe limitations for general community development and recreational uses in the coastal beach area, which lies in the eastern part of Bowers, along the Delaware Bay.

9.5. Fallsington Loam

This soil is gray on the surface, poorly drained and moderately permeable. There are severe limitations for septic tank disposal fields, as well as for basements, lawns and most community development and recreational uses. The soil is well suited to general farming if the land is drained. A small area of Fallsington Loam can be found just north of the center of Town.

Source: United States Department of Agriculture, Soil Conservation Service Soil Survey, Kent County, Delaware (see Appendix "C").

10. Statutory, Environmental Concerns

10.1. Beach Preservation Act (7 Del. C. Ch.68)

Delaware's Beach Preservation Act was enacted "to enhance, preserve and protect the public and private beaches of the State (and) to mitigate beach erosion." 7 Del.C. §6801. The Department of Natural Resources and Environmental Control (DNREC) has the authority to protect the beaches within the State, and has prepared maps designating a "building line", which is "a line generally paralleling the coast, seaward of which construction of any kind shall be prohibited without a permit or letter of approval from the

Department." 7 Del.C. §6802(4).

"Beach" under the Act includes the area "which extends from the mean high water line of the Atlantic Ocean and Delaware Bay landward 1,000 feet and seaward 2,500 feet, respectively", and encompasses "that area from the Delaware/Maryland line at Fenwick Island to the Old Marina Canal immediately north of Pickering Beach." 7 Del.C., §6802(1). The Beach Preservation Act declares these beaches to be "valuable natural features" and "an important economic resource for the people of the State." Further, the Act states that "development and habitation of beaches must be done with due consideration given to the natural forces impacting upon them and the dynamic nature of those natural features." 7 Del.C. §6801.

The Town of Bowers is within this beach area of Delaware and thus is subject to the Beach Preservation Act. The building line for the Town is shown on DNREC's Pickering Beach to Cape Henlopen maps, drawing no. 15479-19555-B, Sheets no. 72 and 73 (September 1979). (See Appendix "D"). Under the Act, a permit or letter or approval is required before any construction is undertaken on any beach seaward of the building line. Also, prior to construction landward of the building line, a letter of approval is needed from DNREC. "Construction" under the Act "includes any work or activity which is likely to have material physical effect on existing coastal conditions or natural shore and inlet processes." 7 Del.C. §6802(5).

It is the policy Town Council to work closely with DNREC is management of the beach, dunes, and other flood mitigation measures as well as wetland and habitat preservation. All construction within the town limits must comply with Kent County and DNREC regulations.

10.2. Wetlands

10.2.1. State Wetlands

Part of the incorporated limits of Bowers contain wetlands, and thus the Wetlands Act (7 Del.C. Ch. 66) regulates activities within some areas of the Town. The Department of Natural Resources and Environmental Control has inventoried the Wetland areas in the State, and has prepared photo/maps showing these areas. The Wetland areas of Bowers are shown on DNREC photo/maps nos. 19-16 and 21-14. (See Appendix "E"). As seen therein the following plants grow, or are capable of growing, in Bowers: saltmarsh cordgrass, marsh

elder, saltmarsh grass, saltmarsh hay, and switch grass.

The Wetlands Act declares the wetlands to be "in jeopardy of being lost or despoiled" by unregulated dredging, dumping, filling, and similar activities; the purpose of the Act is to protect the wetlands and prevent their destruction and despoilation. 7 Del.C., §6602.

A permit is required from DNREC for any activity in the wetlands. Under the Wetlands Act, "activity" is defined as "any dredging, draining, filling, bulkheading, construction of any kind, including but not limited to, construction of a pier, jetty, breakwater, boat ramp, or mining, drilling or excavation. " 7 Del.C. §6603. A permit is also needed to expand or extend a pre-existing use. In addition to a permit from DNREC, one seeking an extension or expansion of a pre-existing use must have municipal or county approval through zoning procedures. 7 Del.C. §6605.

Several factors are used by DNREC to determine whether or not a permit should be granted. These factors are: the

not a permit should be granted. These factors are: the environmental impact of the activity on the wetlands; the aesthetic effect; the number and type of public and private supporting facilities required for the activity and impact of such facilities; local comprehensive plans for development and/or conservation; and the activity's economic effect (jobs created and potential tax revenues). 7 Del.C. §6604(b)(1)(6).

Some activities are exempt from permit requirements. These activities are: mosquito control; construction of directional aids to navigation; duck blinds; foot bridges; the placing or boundary stakes; wildlife nesting structures; the grazing or domestic animals; haying; hunting; fishing and trapping. 7 Del.C. §6606.

10.2.2. Federal Wetlands Regulations

10.2.2 Federal Wetlands Regulations
Pursuant to §404 of the Clean Water Act (33 U.S.C. §1344),
the United States Army Corps of Engineers has jurisdiction
over navigable waters as to the discharge of dredged or
fill material. The Corps of Engineers regulations
promulgated under the authority of §404 uses the term
"waters of the United States" instead of "navigable
waters." 33 C.F.R. §328.1. "Waters of the United States" is
defined in the regulations at 33 C.F.R. §328.3(a) and
includes "wetlands." "Wetlands are defined as "those areas
that are inundated or saturated by surface or ground water
at a frequency and duration sufficient to support, and that
under normal circumstances do support,a prevalence of

vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." 33 C.F.R. §328.3(b).

§404 allows the Secretary of the Army, acting through the Chief of Engineers, to "issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites." Regulations promulgated under §404 require a permit for the "discharge of dredged or fill material into the waters of the United States." 33 C.F.R. §323.3(a). Under these regulations, "dredged material" is "material that is excavated or dredged from waters of the United States." "Discharge of dredged material" is defined as "any addition of dredged material into the waters of the United States." The term includes run-off or overflow from a contained land or water disposal area, but does not include plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products, nor does the term include de minimis incidental soil movement occurring during normal dredging operations. 33 C.F.R. S323.2(d).

"Fill material" is "any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of an (sic) waterbody." The term does not include a pollutant discharged into water to dispose of waste. That activity is regulated under §402 of the Clean Water Act. 33 C.F.R. §323.2(e). The "discharge of fill material" is the "addition of fill materials into waters of the United States." This term includes, but is not limited to, placement of fill needed for construction of a structure in a water of the United States; the building of a structure or impoundment requiring rock, sand or other material for its construction; site-development fills for recreational, industrial, commercial, residential and other uses; causeways or road fills; dams and dikes; artificial islands; property protection and/or reclamation devices (i.e., riprap, groins, seawalls, breakwaters, and revetments); beach nourishment; levees; intake and outfall pipes associated with power plants and subaqueous utility lines; and artificial reefs. The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber and forest products. 33 C.F.R. §323.2(f).

The following discharges do not require a permit:

Any discharge resulting from normal farming, silviculture, and ranching activities such as plowing, seeding, cultivating, minor drainage and harvesting for the production of food, fiber, and forest products, or upland water and soil conservation.

To fall under this exemption, the activity must be an established farming, silviculture, or ranching operation. Maintenance and emergency reconstruction of recently damaged parts of currently serviceable structures such as dikes, dams, levees, riprap, etc.

Construction or maintenance of farm or stock ponds or irrigations ditches, or the maintenance of drainage ditches.

Construction of temporary sedimentation basins on a construction site which does not include the placement of fill in waters of the United States.

An activity with respect to which a state has an approved program under the Clean Water Act.

Construction or maintenance of farm roads, forest roads, or temporary roads if such roads are constructed in accordance with best management practices.

Any discharge of dredged or fill material which contains a toxic pollutant requires a §404 permit. (See National Wetlands Map Appendix "F")

10.3. Coastal Zone Act

Bowers is located within the coastal zone of Delaware, and thus is subject to the Delaware Coastal Zone Act (see map appendix G). Because "the coastal areas of Delaware are the most critical areas for the future of the State in terms of the quality of life in the State," the purpose of the Coastal Zone Act is "to control the location, extent and type of industrial development in Delaware's coastal areas." 7 Del.C. §7001. By controlling industry in the coastal areas, "the State can better protect the natural environment of its bay and coastal areas and safeguard their use primarily for recreation and tourism." 7 Del.C. §7001.

The Coastal Zone Act prohibits the construction of new

heavy industry in the coastal area. Some examples of heavy industry are oil refineries, steel manufacturing plants, chemical plants. Examples of what is not considered heavy industry include automobile assembly plants, leather goods manufacturing establishments, garment factories. If a heavy industry use was not in operation on June 28, 1971, such use is prohibited by the Coastal Zone Act and no permit will be issued for such use.

Also prohibited in the coastal zone are offshore gas, liquid or solid bulk product transfer facilities which were not in operation on June 28, 1971. The Coastal Zone Act does not prohibit public sewage treatment or recycling plants.

Manufacturing uses are not prohibited by the Coastal Zone Act, but are allowed by permit. A permit is also required for expansions or extensions of non-conforming heavy industry uses, i.e., those in operation on June 28, 1971.

The Coastal Zone Act defines "manufacturing" as "the mechanical or chemical transformation of organic or inorganic substances into new products, characteristically using power-driven machines and materials handling equipment, and including establishments engaged in assembling component parts of manufactured products, provided the new product is not a structure or other fixed improvement." 7 Del.C. §7004(a). Once approval is obtained from the proper county or municipal authorities, the Department of Natural Resources and Environmental Control and the State Coastal Zone Industrial Control Board will then determine whether to grant or deny a permit. In passing on a request for a permit, these two authorities consider such factors as: environmental impact of the proposed use (air and water pollution, destruction of wetlands, noise, vibration, odors, etc.); economic effect; aesthetic effect; effect on neighboring land uses; and comprehensive plans of counties and municipalities for developing and/or conserving their jurisdictions.

Residential, agricultural, warehousing, retail or wholesale commercial uses and recreational uses are not regulated under the Coastal Zone Act. The Coastal Zone Act overrules local zoning if the zoning allows any industry which is prohibited by the Act. However, if the local zoning code does not allow a manufacturing use permitted by the Coastal Zone Act, no permit can be granted under the Act.

Source "Delaware Coastal Zone Act: Everything you Want to Know" (DNREC)

10.4. Coastal Barrier Resources Act

The Town of Bowers is not included in the Coastal Barrier. However, the lands north and south of the Town are included in the Coastal Barrier. In those areas federal financial assistance is unavailable for the construction of new structures or roads. Federal flood insurance is not available for new structures in those area.

10.5. Flood Insurance regulation

Bowers is located in a coastal flood plain area and the properties therein are subject to National Flood Insurance Regulations. (See: Flood Insurance Rate Map, published by the Federal Emergency Management Agency, appendix "H"). Coastal flood plain areas are those areas which are subject to inundation by the flood waters of a one hundred year flood. A "one hundred year flood", or "base flood", is a flood that, on the average, is likely to occur once every 100 years, i.e., a flood that has a 1% chance of occurring each year.

The coastal flood plain is further divided into two areas: the coastal high hazard areas (zones V1-V30) and the general flood plain area (zones A1-A30). Generally, lands east of the dune line of Bowers are within the coastal high hazard area (V), while lands west of the dune line are in the general flood plain (A).

Coastal high hazard areas are those areas in the one hundred year flood plain subject to high velocity waters (hurricane, wave wash, tsunamis, etc.), while general flood plain areas are those areas in the one hundred year flood plain not in the coastal high hazard areas.

Congress enacted the National Flood Insurance Act of 1968 (42 U.S.C. §4001 et seq.) as "a reasonable method of sharing the risk of flood losses." In order for a community to qualify for the sale of this federally subsidized insurance, the community must adopt flood plain management regulations designed to avoid future damages from flooding. FEMA has set forth the minimum requirements for such regulations (See: 44 C.F.R., Part 60). In addition to the minimum requirements, FEMA has set forth planning considerations which should be adopted in flood-prone communities, but are not required. (See: 44 C.F.R. §60.22).

Two reasons for the enactment of the National Flood

Insurance Act are (1) encourage State and local government to make appropriate land use adjustment to constrict the development of land which is exposed to flood damage and to minimize flood damage; and (2) to guide the development of proposed future construction, where practicable, away from locations which are threatened by flood hazards. 42 U.S.C. §4001(e).

The Town of Bowers amended its Flood Insurance Ordinance to comply with FEMA requirements. (See Ordinance No. 460 as amended December 12, 1991.) In F.Y. 2009. the Town plans another review of this ordinance.

10.6. Total Maximum Daily Loads

Presently the Jones and Murderkill Rivers are being monitored for the presence of elevated TMDLs and the source has been isolated to nutrient infiltration. DNREC is working with Kent County Sewer and other sources to mitigate these elevations through a Tributary Action Team. The Town has no industry or large scale agricultural areas and does not intend at any time to install its own waste water treatment plant and sees no need to initiate any mitigation plan at this time.

10.7. Agricultural Preservation

In order to encourage the Agricultural Areas within the Town limits, the Town designated under the original Zoning Ordinance and Comprehensive Plan, areas that are restricted in use to farming, recreation, and game preserve use. The specific restrictions are found in the Zoning Ordinance under Chapter 11. The stated purpose of these C/A (Conservation/Agricultural) areas is to permanently preserve the Town's wetlands, wildlife areas, and areas of special environmental quality, recreational potential, natural beauty, ecological importance, and areas needing special protection from erosion and pollution, protect flood plains from inappropriate development, and encourage agricultural use of productive soils.

11. Summary and Conclusions

The data compiled in this Comprehensive Plan reveals and establishes the following:

11.1. Community Character Design Plan

The Town has historically been a small, sparsely populated bay front waterman's and fishing boat village that consisted overwhelmingly of small residential dwellings and

seasonal cottages on small lots (i.e. less than 75' frontage). There have never been any manufacturing or heavy industrial uses in the Town and the few commercial uses were small operations [package store, groceries, boat supplies, restaurant, bars, and commercial fishing boats (head boats and charter boats)]. It is the intent of the Town to preserve the historical character of the Town as a small fishing town while accommodating the needs of the changing demographics.

11.2. Position on Population and Housing Growth

The Town foresees little significant growth in population. The Town does foresee a gradual change in demographics from a split between vacation/tourist residents and residents working in the local industries to a retirement and permanent resident community and with it a gradual upgrade of existing properties. The present population and the limitations on future growth indicate that the need to expand the physical or social infrastructure presently in place is not necessary. The Town parks and recreation area experience little use other than Town sponsored functions. The Town is committed to preserving its historic character and relies on its ongoing maintenance of the existing facilities to fulfill that need. However, the Town does recognize the need for a permanent Town Hall that can function as a true municipal meeting and activity center as well as a center for coordination of emergency response.

11.3. Streets/Transportation

The present system of roads seems adequate for any planned changes anticipated in this plan. The sizes and structure of the streets and roads within the Town for the residential and commercial uses presently in place as well as the limited expansion anticipated are also deemed adequate with regular maintenance that is presently being performed.

Of the 154 residents commuting to work, according to the 2000 census, only 6 residents reported commuting by means other than car pool or private car. Present trends show insufficient need for public transportation to make such service practical.

11.3.1. Outside Town Limits

The Town has only one means of ingress and egress and although this is a state-maintained hard-surface road, it is only two lanes. This road is subject to flooding at various points during some times of the year. This road is

not suitable or adequate to accommodate heavy industrial or commercial truck traffic or an inordinately large volume of automobile and boat trailer traffic. This main artery is prone to flooding outside of the Town Limits and concerns for egress during major storms is a concern to the Town the amount of permanent residences increases. In F.Y. 2009, the Town looks to develop a plan to meet with DelDOT, FEMA, and Homeland Security in order to make provision for reliable egress from the Town in the event of an emergency.

11.3.2. Within Town Limits

The inventory of town streets reveals that most of the Town's streets are inadequate for large volumes of traffic. Additionally, the streets within large areas of the town are not well-suited to accommodate a significant amount of on-street parking. The present Zoning Ordinances allow for this condition in restricting uses in these areas. The Code also addresses off-street parking in its application. It is noteworthy that there is a large state-owned and maintained parking area near the Murderkill River for patrons of the commercial fishing boats and for private trailered boats.

Flooding of roads in the center of Town and near the Murderkill River is a continuing problem. The Town is dedicated to meeting with FEMA to find remedies to the conditions. However, the existing low lying areas may be impossible to rectify. Outside funding would definitely be required.

11.4. Public Safety 11.4.1. Fire

Although the Town has its own resident volunteer fire company which appears adequately equipped to handle present residential development in the Town, it is questionable whether the fire company could provide adequate fire protection for any large industrial, manufacturing, or commercial development, or even for a large townhouse project. The Town has no fire hydrants and the fire company must depend for water on its trailer and pumper trucks which, in a large conflagration, may well prove inadequate if faced with any further major expansion within the Town.

11.4.2. Police

The Town has no police force and must depend on contracting for police services from off-duty state police. The Town's financial statement reveals that police protection is.a major expenditure for the Town that greatly exceeds any revenues from fines. Consequently, the Town is utterly

without police protection except for the extremely limited services that can be provided by the Delaware State Police and by contract with the State Police. In the event of police emergency, it is likely that a State Police officer would be at least 10 minutes to reach the Town and frequently much longer, depending upon his location at the time of the call.

11.5. Housing

A review of all the parcels within the Town confirms that the lands in the town consist overwhelmingly of: (a) large undeveloped tracts of wetlands and environmentally sensitive areas or (b) lots laid out and developed for single family residential dwellings. There are only a dozen commercial uses in the Town, most of which are located along the Mispillion River. The vast majority of building lots in the Town consist of separately owned lots of less than 75-foot frontage. In order to limit density (because of the numerous reasons evident in this comprehensive plan), the Town favors 75-foot frontage, 7,500 square-foot area lots. However, the Town Council recognizes that it is not sound land use planning, and creates undue and unfair hardships, to impose an unreasonably restrictive lot size requirement on those areas of the Town which already have been developed and have long existed as sub-75-foot frontage lots.

11.6. Annexation

Recognizing the possibility areas of land outside of the Town Limits within properties that are split by the Town line could possibly have an impact on the Town's comprehensive plan, the Town may see a necessity to annex these properties in order to better control conformance to the spirit of the Comprehensive Plan. Any use of the areas annexed would be within the present land use of that part of the property presently within the Town Limits. properties under consideration would fall under residential or agricultural use. Said annexation plan would not permit additional development which is restricted by the present zoning ordinances. Additionally, it may be necessary to consider annexation of a large state owned property in the center of Town presently used for recreational parking for the purpose of enhancing the municipal services, environmental, ground water, and water recharging conditions within the Town.

(An Annexation Plan is included in Appendix 1)

11.7. Redevelopment Strategy

It is quite clear that the developable land in the Town is surrounded on all sides by environmentally protected and environmentally sensitive areas. Large areas of the Town are either within or bordered by lands subject to the Delaware Beach Preservation Act, the Delaware Wetlands Act, the Delaware Subaqueous Lands Act, the Delaware Coastal Zone Act, the Federal Coastal Barrier Resources Act, the Federal Clean Water Act, and the National Flood Insurance Act.

All of these statutes underscore the delicate environment in which the Town exists and dictates that the Town's zoning severely restrict and control development. Consequently and in keeping with the Kent County Comprehensive Plan regarding the environmentally sensitive areas, the Town of Bowers is committed to maintaining land use at its present level with no expansion into any adjacent areas. It is the Town's position to remain steadfast in limiting further development to only those areas so designated on the Plan Map.

There are no areas presently considered for redevelopment. The Town relies upon the growing economic strength of its residents for a voluntary upgrade of residential properties as has been the trend over the past ten years and that these upgrades will be completed within the confines of the Zoning Ordinance. Further, properties in need of upgrades are not confined to one specific area, but rather scattered throughout the community making designation of a redevelopment area impractical if not impossible.

Those areas shown on the Future Land Use Map attached as Exhibit 2 represent no change to those uses that are already in place and the Town is of the position that no expansion of the existing areas where commercial use is permitted be expanded.

While there are no contiguous redevelopment areas, the Town's redevelopment strategy includes taking action on a parcel by parcel basis to redevelop and remedy buildings in disrepair.

11.8. Public Utilities

11.8.1. Water

Domestic water in the town is mainly supplied by individual

private wells. It is evident that any substantial increase in residential development, or any large industrial or commercial use drawing large volumes of water could threaten existing water supplies and hasten salt water intrusion from the adjoining bay.

The Town of Bowers presently has three wells that are deemed public water systems by the Delaware Department of Natural Resources. These serve the fire house, condominium units, and a small development respectively. The revised zoning ordinance will incorporate language that requires the present extent of impervious cover within 150' radius not be extended. A reference to the DNREC well head protection plan will also be incorporated once that plan has been issued.

11.8.2. Septic

The Town has a central sanitary sewage system provided by Kent county.

11.8.3. Storm Sewer/Drainage

Bowers has a few storm drains located on Main Street, near the church, and also near the corner of Main and Hubbard Avenue.

Some storm drains are also located on Hubbard Avenue. The Town did have more storm drains but they were removed when the sanitary sewer was installed. Storm water still tends to lay in parts of the Town, and many streets up to a block away from the Murderkill River are flooded with several feet of water during flood tides. As previously mentioned, alleviation of these conditions that have existed since prior to the Town's original Comprehensive Plan would require extensive outside resources the availability of which is unknown at this time. It is the Town's intent to address these conditions in the immediate future.

11.8.4. Electric

The Town has more than ample service from Delmarva Power and Light.

11.9. Intergovernmental Coordination

It is evident in the reevaluation of the Comprehensive Plan that as the demographics of the Town change and as the societal changes in the surrounding area impact the Town of Bowers, the necessity to interact with other government agencies has increased. The Town must now look at items such as emergency response, environmental impacts, public services, health, and welfare in terms of the Town as a microcosm of the county, state, and federal governments and

adjust accordingly. The Town recognizes the need, but is realistic in the anticipated time frame within which such a change can take place without disrupting the character of the Town and its residents. The Town sees the development of these relationships as gradual and necessary for the fulfillment of its Comprehensive Plan. The Town presently interacts with DelDOT, Kent County, FEMA, DNREC and other agencies on an as needed basis, but recognizes the need for establishing long term relationships with these and other agencies. The Town considers the Kent County comprehensive plan and the Delaware Strategies for Policy and Spending a relevant planning documents to the development and implementation of this plan.

11.10. Government and Finances

It is evident that the Town skimps along with a skeletal form of government and minimal finances and resources. Historically, the Town has had very few contested elections, largely because it is difficult to get individuals to run for these unpaid elective offices. It is equally difficult to fill the appointed offices. One reason for lack of interest in the Town government is probably the seasonal nature of the community. The Town has no Town Hall and "borrows" meeting space from the fire company. The Town does not have a trained building inspector, police officer or even a Town clerk. Consequently, the Town is ill-equipped to provide the type and quality of municipal services that would be required of a significantly more developed community.

The Town's relatively small tax base (\$5,299,600) coupled with its low tax rate (\$.30 per \$100.00 of assessed value) and resistance to tax increases, makes it difficult, if not impossible, for the Town to expand or improve its existing municipal services.

The limited amount of land available for development is reserved for low density residential development and there is no plan to expand any of the commercial areas. This limitation is presently a natural restraint on population growth as it has been for the last twenty years. A reasonably anticipated increase in the population would be estimated to be less than 100 persons based on approximately 20 new homes with families of four at each residence. No increase in the need for services is anticipated. It is the goal of the town to encourage the continuing improvement of the existing residential

properties in a manner consistent with the Zoning ordinances and the historic nature of the Town.

For the foregoing reasons, the Town Zoning Commission and Town Council have concluded that the Town Zoning Ordinance should prohibit industrial development and strictly limit commercial and dense residential development. Only those uses consistent with the unique and fragile nature of this small community should be allowed, subject to appropriate regulations.

Draft approved and adopted by the Town Council of the Town of Bowers Beach on Feb 12 , 2008.

Mayor

Shirey A. Rennington Souncil Member

Council Member

_Council Member

Council Member



