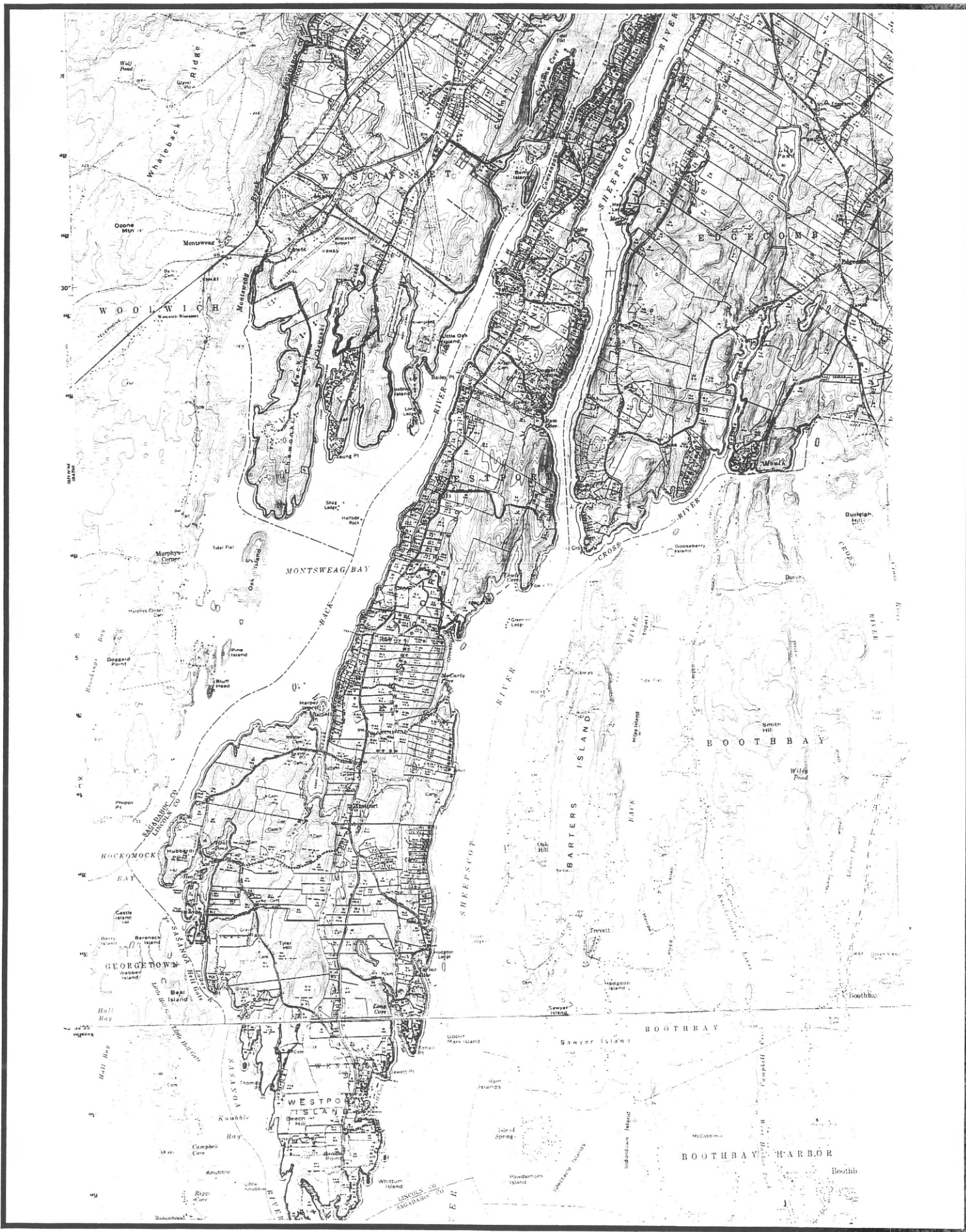


Draft

**TOWN OF WESTPORT
COMPREHENSIVE PLAN
(Update)**

2002



1970 USGS Map with 1998 Tax Parcels– Westport Island

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1. HISTORY

Westport is located in the middle of the Sheepscot River just below Wiscasset and extends down river for ten miles toward the mouth of the river where it looks out to the Atlantic Ocean. It faces Edgecomb and Barters Island on the east shore, and Wiscasset, Woolwich, and Georgetown on the West shore. Route 144 starts at the south end and runs up the center of the island to the bridge which connects Westport to the mainland. The Town is almost completely residential, with most of the houses on the shore.

Westport, once called "Jeremysquam," became a separate town by an act of the Legislature in 1828. Until then, it was part of Edgecomb and was included in Pownalborough. This entire area was part of Massachusetts until 1820.

There are early references to settlers in the 1600's, but due to Indian wars, no permanent settlements were made until about 1735. The island was claimed by the Plymouth Company that had been granted land 15 miles on each side of the Kennebec River by the English Crown. At the same time, it was claimed by a group of Boston men who called themselves the Wiscasset Proprietors. After much litigation, the Wiscasset lands were granted to the Plymouth Company, and "Jeremysquam" to the Wiscasset Proprietors (also known as Proprietors of Long Island or Boston Company).

The claim of the Wiscasset Proprietors went back to the purchase from the Indians by George Deere in 1639. The island was divided into 30 plots of 100 acres each, and these were sold to people who came to live on the island or who resold to settlers. There was so much difficulty with land claims that in 1815 the State of Massachusetts stepped in and each owner, some of whom had lived here for over 50 years, had to buy his property at about 7½ cents per acre. There is a map in the Massachusetts Historical Society which shows these lots and, to this day, many of the Island's lots follow these lines.

Most of the early settlers were farmers, and each farm was an independent unit. They raised their own food, produced leather and wool from their cattle and sheep, and cut their own wood. Some earned their living from the sea, and all early transportation was by water.

The first areas to be settled were the mill sites. There were four early mills, initially used for grinding meal. They later became sawmills, employing many people. All were run by the power of the tides.

The fishing business was very important just prior to the Civil War. There were large wharves from which the vessels went out to the Grand Banks for cod and other food fish. Each member of the crew along with the owners claimed a share of the catch, and the profits were divided. There was some boat building, but no large vessels were built on Westport. However, many residents served on ships sailing out of Bath and Wiscasset, including some famous sea captains in the China and other trades.

In the 1880's the steamboat business was established and Westport had two ports of call – upper and lower landing- or the “Junction,” so called because passengers transferred there to smaller boats. This business was abandoned around the 1920's with the coming of the automobile and better roads. After the bridge between Westport and Woolwich (near Montsweag Bay) was taken out by ice, the ferry, once privately owned and later taken over by the Town, was the only connection with the mainland until 1950 when the causeway bridge was built. The causeway was replaced by a bridge funded by Maine Yankee in 1975.

In the early 1900's, the ice business flourished in Maine. The Knickerbocker Ice Company had a pond at the north end, and the Jewett family built a stone dam at Jewett's Cove and erected several buildings and wharves for the ice trade.

The island once grew large trees, most of which have long since been cut down and turned into timber products by the tide mills, and later by portable mills run by gasoline engines. It was at the end of these timber operations in 1918 that the big fire destroyed over 20 buildings.

There have been several grocery stores, boarding houses, and once even a stone quarry was planned. However, the largest commercial operation currently is an inn. There are a number of small, home-based businesses which are summarized in the Economy section of the Plan. Fishing and lobstering are undertaken by a few people. Although there are farms that raise animals and/or vegetables, the owners do not depend upon farming for their total livelihood.

2. NATURAL RESOURCES

Introduction

Geographically, Westport is a small island community, consisting of 8.73 square miles, making it the third smallest municipality in Lincoln County (Boothbay Harbor and Southport are smaller). Based on a year 2000 population of 745 people, there were 85 people per square mile (in 1980, there were 48 people per square mile). Westport Island, often referred to as a rock island, is about 11 miles by about one and a half to two miles at its widest. The Town is situated in the lower Sheepscot River, about three miles downstream from Wiscasset. It is bounded by the Sheepscot River, the Back River, and the Sasanoa River.

For most of its history, Westport has been a largely undiscovered farming and rural-residential community naturally barred to access by its island nature. For many years, access to the island was only by boat. As family farming became uneconomical and farming abandoned, the natural island seclusion increasingly attracted residential and seasonal housing. Commercial development has been virtually non-existent owing to the distance from major highways and the island's limited water supply. Over a period of many years, the perimeter shoreline of the island has been intensively developed, while significant tracts in the center of the island have remained undeveloped.

In considering the future, the natural constraints imposed by the island's geography, and the values of her citizens must guide Westport. Natural constraints include available water supply and the need to manage septic needs within the limitations of the thin soils and granite foundation of the island. The values of the citizens are coincident with the rich natural, scenic and environmental assets of the island which combine to create the natural, rustic, rural character and seclusion that citizens highly value.

Marine Resources

Westport Island is part of a Midcoast system of salt marshes, tidal estuaries as well as islands in estuaries that create hugely productive nurseries for lobsters, hermit crabs, green crabs, and other shellfish, finfish and harbor seals. Estuaries are ecological zones occupying the fluctuating boundaries between the salt water of the ocean and the fresh water of the rivers. It is therefore no surprise to find flounder, striped bass, shad, sculpin, sturgeon, alewife, rare Atlantic salmon, herring and smelt which are still in evidence in the Kennebec, Back River and Sheepscot River region. Short nosed Sturgeon (*acipenser brevirostrum*), a species currently listed as federally endangered, is thought to breed in these estuaries according to studies done by the Nature Conservancy of Maine. The varied aquatic plants: sea kelp, brownish-green rock weed and salt water grasses along mud flats definitely contribute to rich symbiotic feeding grounds for breeding fish. Today, scientists recognize healthy salt marshes as one of the most productive systems for breeding birds and fish in the world. In the U. S. alone, more than two thirds of fish harvested commercially find shelter, food and a habitat to breed during their varying stages of life in these vital salt marshes. Coastal Maine residents care about the salt marshes a great deal

because of the culture, history, and priceless life-ecosystems which are integrally dependent, that vitally impact on a continuing basis our economic survival and way of living.

The coastal shore lands of Westport comprise imposing rocky ledges rich in granite, covered with gnarled pitch pine and red pine and carpeted with crow berry (*Corema conradii*), alongside gray-green varieties of lichens as well as mosses in abundance. The Midcoast region is thought to have well over 300 different species of plants, some of which are rare and protected. Many of these plants may be located in Westport including Lupines, goldenrod, fringed polygata, white ladyslippers (*Cypripedium acaule*), snowy ladyslippers (*Cypripedium reginae*), Eastern Prairie fringed orchid, Hellaborine Orchid (*Epipactis helleborine*), furbish lousewort, red moccasin flower, rose pogonia, and heather in several varieties. Fragrant wild lilies and daylillies crouch in abundance alongside the older roadways along with bayberry, mature rhododendrons and creeping yews. In the spring, Canada Mayflowers and moccasin flowers bloom throughout the woods along with four varying types of ladyslippers, various wild orchids, along with an occasional small whorled pogonia (*Isotria medeolides*). These areas are now considered threatened throughout their range as they are found only along the North Atlantic Coast.

Coastal Access

Although Westport is an island, there is no place that can be truly called a harbor that can provide shelter for more than a limited number of boats and that has sufficient depth for secure mooring on a 24-hour basis.

The Ferry Landing is a boat launching area on Westport with some space for parking cars and trailers. Also easily accessible to Westport residents are several access points in Wiscasset including two public ramps at the Town dock, and another adjacent to Maine Yankee on the Back River, opposite Westport's Ferry Landing.

There are tidal mud flats at various locations around Westport which yield marine worms and some shellfish, but not of commercial quantity. The only flats which are open are Squam Creek (except during periods of high runoff), Fowle Cove and Greenleaf Cove. The rest of the island is closed because of chlorinated overboard discharge systems.

Geology

Geologically, Westport is made up of Bedrock, covered for the most part with thin, relatively poor soils. According to the Soil Survey of Knox and Lincoln Counties (Soil Conservation Service), the general landscape of Westport was shaped by events that occurred during the Pleistocene epoch, which began about two million years ago. There were at least four periods of glaciation during which huge ice sheets covered all of Lincoln County. The last major glaciation spread southeast and reached its maximum extent on the continental shelf by about 18,000 years ago. As it moved, the glacier ground up rocks beneath it and deposited this newly eroded material under the ice as a compact layer of glacial till, a dense mixture of ground rocks ranging in size from clay size particles to large boulders. The soils of Westport developed in this dense glacial till. The sheer weight of the ice sheet thousands of feet thick depressed the land surface,

while the large quantities of water tied up in the ice lowered the surface of the sea by as much as 300 to 350 feet.

As the ice melted and its weight was removed, the land began to rebound and emerge from the sea. This emergence lasted from about 13,000 years ago to 10,000 years ago when sea level was about 180 feet below the present level. Since that time, a slow submergence of the land has brought the sea up to its present level.

Soils

The soils of Westport belong to the Lyman-Tunbridge-rock outcrop soil association. This soil association consists of gently sloping to very steep exposures of bedrock; and shallow and moderately deep, gently sloping to steep, somewhat excessively drained and well drained soils, formed in glacial till. Lyman-Tunbridge-rock outcrop soils are found mainly on side slopes of higher elevation coastal areas.

The rock outcrop consists mainly of exposures of hard, unweathered bedrock. Lyman soils are shallow, gently sloping to steep, and somewhat excessively drained. The surface layer and the subsoil are fine sandy loam. Below that, there is hard, unweathered bedrock. Tunbridge soils are moderately deep, gently sloping to steep, and well drained. The surface layer and the subsoil are fine sandy loam and gravelly fine sandy loam. The substratum is gravelly fine sandy loam. Below that, there is hard, unweathered bedrock.

Both Lyman and Tunbridge soils endemic to Westport have severe limitations for septic tank absorption fields because of shallow depth to bedrock.

Groundwater

The hydrological studies of the Maine Coast conducted by the Maine Geological Survey show that the sources of fresh water for Westport, and coastal communities with similar geographic and geological structure, are not from off-island aquifers or origins. Rather, Westport's fresh water is derived entirely from the island's rainfall. Moreover, Westport's geography is dome-shaped. The preponderance of rainwater runs down the mostly rock surface into the Sheepscot River surrounding Westport. The remaining rainwater percolates down into bedrock via naturally occurring cracks and fissures. Westport's fresh water supply is contained in fractures within the underlying bedrock. These fractures generally trend north-south, along the length of the island. Water constantly moves through the bedrock fractures as it flows downhill to the ocean or a stream. In general, the quantity of water available appears to be adequate for the island's foreseeable needs, although heavy demand during dry summer periods has led to some wells going dry as well as cases of salt water intrusion in some wells close to the coast. Salt water intrusion occurs where pumping fresh water out of the ground allows salt water from the ocean to flow in to take its place. Without a reservoir, or other off-island source of fresh water, Westport development and quality of life is constrained by the limits of rainwater and its seasonal ebb and flow.

While groundwater quantity may not be an immediate issue, at least in most areas, there is the issue that the bedrock water supply is vulnerable to contamination. Quantities of pollutants as small as a few gallons can travel long distances down and along bedrock fractures, and still remain concentrated enough to contaminate large quantities of groundwater. Potential contaminants include septic tank seepage, road salt, herbicides and pesticides, as well as petroleum products, MBTEs and solvents, to name a few. Once groundwater is contaminated, it is very difficult or impossible to clean up in as much as it is contained deep in the bedrock. Moreover, due to the aforementioned shallow soil conditions over bedrock in most areas of Westport, it is highly unlikely that Westport would be able to address groundwater contamination with a public water system, whether located on the island or extended to the island from a nearby community. The island's citizens will have to continue to depend on private wells and individual septic systems, with all the associated vulnerabilities.

In the summer of 2001, Westport hired the firm Stratex to undertake an aquifer and soil carrying capacity study of the island. The study included an evaluation of the island's system of bedrock faults, a review of a Town well survey questionnaire, and an examination of well data on file with the Maine Geological Survey. Some of the major recommendations of the study (see appendix for more detail) include:

1. Minimize ground water recharge reductions and enhance recharge where possible (lot sizes over 2.5 acres produce negligible loss of recharge);
2. Prevent degradation of ground water quality by:
 - A 200 foot setback between wells and the shoreline to prevent salt water intrusion;
 - A 200 foot setback between septic systems and downgradient (downhill) wells to protect against viral contamination;
3. Limit land use activities in areas of bedrock aquifer protection zones (no chemical or petroleum storage); and
4. Utilize recommended lot sizes based on soil recharge capability to minimize nitrate-nitrogen contamination from residual wastewater (the minimum single family lot densities recommended to protect water quality ranged from one acre for sand and gravel soils, to five acres for glaciomarine clay-silt soils).

To ensure protection of the island's groundwater resources in accordance with the recommendations of the study, it would be prudent to require that applicants for large developments including commercial projects be required to submit the result of hydrogeologic studies to demonstrate that these projects will not make unreasonable demands on groundwater or adversely impact existing users. These studies should also document that there will be adequate provision for the disposal of subsurface sewage disposal and hazardous materials used on or generated by these projects. It will also be important to continue rigorous enforcement of the State plumbing code, and to encourage state-of-the-art septic system technology, as well as regular pumping of septic systems. Finally, it would be prudent to implement the recommendations of the study.

Surface Water

There are no rivers or great ponds on Westport Island, although there are several small creeks, a number of intermittent streams that drain wetlands and several small ponds including Meadow Pond (off Post Office Road) and Beaver (Ice) Pond off East Shore Road/Route 144.

Wetlands

Wetlands are considered to be those areas where water is the primary factor controlling the plant and animal life found there. Wetlands play a significant role in the overall balance of the environment. They serve as both seasonal and year-round habitat for a large number of species, and they act as natural sponges, absorbing large quantities of run-off for later release.

Westport is one of the towns included in the publication "Significant Fish and Wildlife Resources of Mid-Coastal Maine," (1989), produced by the Maine Department of Inland Fisheries and Wildlife. This document is referred to in this section and following sections as the 1989 IFW report.

The IFW report identifies eight significant wetland areas in Westport. Other, smaller wetland areas are identified on the National Wetlands Inventory. The eight wetlands identified in the 1989 IFW report are:

1. Half mile west of Tarbox Cove;
2. Anderson Bog
3. Doggett Road
4. Northeast of Knight Cemetery
5. Heal Pond
6. Squam Creek
7. East of Tarbox Cemetery
8. South of McCarty Cove

One of the wetlands, Anderson Bog (also called Meadow Pond), is classified as "high" value. Four are classified as "moderate" value (Half mile west of Tarbox Cove, Doggett Road, Northeast of Knight Cemetery, and Squam Creek), and two are classified as "low" value (East of Tarbox Cemetery and South of McCarty Cove).

Four of the identified wetlands are afforded protection under Westport's Shoreland Zoning Ordinance and are classified as pond districts. These are: Squam Creek Marsh (Squam Creek), Heal's Upper Mill (Heal Pond), Meadow Pond (Anderson Bog) and Beaver Pond (connects to the wetland referred to as Half Mile west of Tarbox Cove).

There are also numerous vernal pools that exist during the warm months. Essentially, vernal pools may be temporary, yet some in this area are permanent bodies of water. These pools support breeding habitat for a rich variety of amphibians and invertebrates, (except fish), due to the fact that the vernal pool will almost always dry up in summer. These vernal pools provide an

essential breeding, fish-free habitat for such things as the commonly named peeper, blue frogs, rare spotted salamanders of several colors and varieties including the protected Northern Dusky Salamander (*Desmognathus fuscus*), blanding's turtles, and spotted turtles. They also provide a safe feeding and watering area for birds and mammals. Cranberry bogs and blue iris, as well as other wetland plants, are integrally inclusive to the areas where vernal pools exist.

Forests

Westport Island is about 95% forested. The forests of Westport support a mix of hardwood/deciduous formations inclusive of significant areas of old growth woodlands containing combinations of eastern hemlock, cedar, red spruce, white pine, black pine, redwood, tamarack laced with tree lichens, and a few American elms. The forested areas provide important values at the local level including wildlife habitat and water quality improvement. Water quality is an important consideration due to the shallow soil over sand/clay and granite bedrock. There is salt intrusion into some shoreline-area residents' wells in summer; and wells that are dug are highly vulnerable to any hint of man-made pollution. The more forested areas we maintain, and the less human infringement we deal with, the better the chances of insuring pure water for our residents.

Wildlife

More than 70 species of birds nest along the greater Midcoast area, frequently fishing offshore. Many of these can be found in Westport. The wide mud flats provide important feeding grounds year-round for local and migratory birds. Nearly 275 species of birds have been spotted in the Midcoast area. Spring warblers, black ducks, wintering sea ducks, cormorants, piping plovers, roseate terns, snowy egrets, Canada geese, loons, bufflehead ducks, kingfishers, puffins, barred owls, great horned owls, snowy owls, sawwhet owls, American Peregrine Falcons, American Kestrels, and terns can be spotted by birders at certain times throughout the year. For about eight years now the younger eagles have been wintering over in this area instead of migrating south during the coldest months, so they have been spotted regularly by residents year round on Westport Island.

Deer, porcupine, red foxes, Virginia flying squirrels, weasels, and otter can be seen on a fairly regular basis. Less frequently, moose, beavers, coyotes, and an occasional black bear can be sighted. Wild roses, choke cherries, blackberries, cranberries, huckleberries, blueberries and raspberries may be found in all areas of open space on Westport island, providing plenty of food for the animals that winter here.

The 1989 IFW report identifies a number of significant wildlife areas on Westport as described in the paragraphs below. The description of these areas is taken from a 1990 IFW publication "Conservation of Land Fisheries and Wildlife Habitat" (the 1990 IFW report).

- 1. Coastal Wildlife Concentration areas.** Coastal wildlife concentration areas include a variety of important wildlife habitats. These areas are special because of the abundance

and diversity of wildlife they support, and because of their importance to rare species. Many different kinds of birds commonly use these habitats during a part or all of their life cycles. Waterfowl, wading birds, shorebirds, seabirds, osprey, loons, bald eagles and seals are just some of the wildlife depending on Maine's coastline for feeding, resting, wintering, breeding, and migration habitat. There are eight coastal wildlife concentration areas including:

Brookings/Hockomock Bays
Montsweag Bay
Greenleaf Cove
Whittam/MacMahan Islands
Knubble Bay
Hodgdon Ledge
Upper Mark Island
Quarry Point

One of these, Brookings/Hockomock Bays, is classified Class A, meaning that it is "significant on a national or state level." The other seven are classified as Class C, meaning that they are "significant on the local level." These areas are afforded protection under Westport's Shoreland Zoning Ordinance.

2. Deer Yards

Wintering has long been considered a "bottleneck" for survival of white-tailed deer in the northeast. During winter, deer in northern climates often subsist on limited quantities of low quality foods, while simultaneously coping with low temperatures, chilling winds, and high energy requirements to stay warm. In Maine, studies indicate that mortality of deer can exceed 35% during severe winters. The primary behavioral mechanism for deer to conserve energy during winter is to move to traditional wintering areas or "yards." These wintering areas provide deer with shelter from radiant heat loss as well as improved mobility in snow. The conifer canopy in a deer yard moderates the effects of winter by maintaining warmer than average temperatures and greatly reducing wind velocity. The conifer cover also intercepts much of the snowfall and ground accumulations become firmly packed. This makes traveling much easier for deer and decreases their energy demands. IFW has identified three deer wintering areas in Westport:

- a. An area from Tarbox Cove to Route 144 bordered by East Shore Road;
- b. An area west of Rum Cove between Greenleaf Road and Fowles Point Road in the center of the island; and
- c. An area from Heal Cove to Squam Creek.

The Heal Cove area is of unknown value. The other two areas are classified as “moderate value.” It should be noted that these deer yards were identified a number of years ago and may no longer be used by deer. The inventory of deer yards has not been reviewed or updated.

3. Seal Haul Outs

Maine has the largest population of harbor seals on the Atlantic Coast, and supports the only significant breeding population in the Eastern United States. Gray Seals, which are much larger than harbor seals, are uncommon but regular visitors to Maine and usually are found around remote offshore ledges and islands. Seal haul-outs are ledges, beaches and coastal islands traditionally used by seals for pupping and resting. These sites are necessary for survival of both adults and young. Whelping or “pupping” sites are used from year to year by the same breeding females, many of which were probably born on these ledges. Direct access to high quality feeding areas, and lack of human disturbance, are important characteristics of seal haul-outs. Seal haul-outs in Westport include those located at Upper Mark Island, Greenleaf Cove and Seal Rocks off Clough Point. Seals have been resting on the ice along Squam Creek and Heal Cove during the coldest time of spring although in warmer months they prefer the rocks offshore for sunning.

4. Seabird Nesting Islands

There are between three and four thousand islands and exposed ledges along the Maine coast. More than three hundred and fifty of these are traditional nesting islands used by twenty species of seabirds. Many of these birds are at the northern or southern limit of their range. For several species (common eider, black guillemot, Atlantic puffin, razorbill auk, great cormorant, Leach’s storm-Petrel), Maine is the only state in the contiguous 48 states with significant breeding populations. Nesting seabirds are extremely vulnerable to the effects of development and human disturbance during the nesting season. Disrupting the birds at this time can result in excessive mortality of chicks and eggs from predation or exposure.

In addition to its role as a seal haul-out, Upper Mark Island is the Town’s only seabird nesting island.

5. Waterfowl and Wading Bird Habitat

Waterfowl and wading birds are a diverse group of species which make significant but not exclusive use of inland and coastal wetlands. Waterfowl are defined in Maine statute as species of the family Anatidae, which include ducks and geese but not grebes and loons. Wading birds include bitterns, herons, egrets, ibis, rails, coots and moorhens.

Waterfowl and wading bird habitat areas in Westport include the following:

- a. South of Colby Cove; bounded by Route 144, Doggett Road and Haskell Road (WWH 031659);
- b. South of Doggett Road, north of Colby Road (WWH 031666);
- c. South of Sortwell Road, north of Hopkins Road, east of 144 (WWH 031667);
- d. South of Hopkins Road; east of 144 (WWH 031664);
- e. Squam Creek, south of West Shore Road, west of 144 (WWH 031663);
- f. South of Post Office Road, west of 144 (WWH 031660);
- g. Within East Shore Road east of 144 (WWH 031661).

Clough Point

At the confluence of the Back River and the Sheepscot Rivers, the area of Clough Point Nature Preserve hosts bald eagles and osprey every year. In 1972, the Clough Point Nature Preserve was established under the auspices of the U.S. Department of the Interior, the State of Maine Bureau of Parks and Recreation, and the Town of Westport. In 1998, the Soules of Westport donated additional acreage to this preserve to enhance the area for protected species. Clough Point is just one preserve among numerous, far larger conservation areas, easements and land trusts which are inclusive of a vast estuarine ecosystem rich in salt marshes and wetlands, providing critical habitat for birds of prey, that comprise the Kennebec River, Back River and Sheepscot River area.

Scenic Areas

There are five places in Westport where views from the road to the water, waterfront, coves, or ponds are particularly scenic. These places are located at the Westport Bridge, the Squam Creek Dike Bridge, the Heal Cove-Heal Pond Dike Bridge, the Long Cove Bridge, and the East Shore Road overlook opposite Hodgdon Ledge.

There are also eight areas along the roads of Westport where there are concentrations of particularly mature trees. These areas include the North End Road, three stretches along Route 144, most of the West Shore Road, the lower stretch of the East Shore Road and Fowles Point Road.

In addition to the areas mentioned above, there are stretches along all of Westport's secondary roads (which are mainly gravel roads) which are still sparsely populated. Their lack of development adds to the rural charm and atmosphere of the Town. These roads include the Greenleaf Cove Road, the Sortwell Road and the Old Post Office Road.

3. POPULATION

Westport's Population Growth

As the century opened in 1900, Westport had a population of 330 people, but a decline was underway that persisted for about 30 years, leaving only 108 residents on the island by 1930. With that figure, the population had bottomed out, and it then remained at the level of about 125 persons through the Great Depression of the thirties, through World War II, and on into the post-war years.

Beginning in 1960, Westport began a 40-year period of rapid population growth. The Town's population growth rate between 1960 and 1970 was 71%; from 1970-80 it was 84%, and from 1980-90 it was 58%. Between 1960 and 1990, the Town's population grew at a far greater rate than that of Lincoln County, as shown in Table 1, below. However, between 1990 and 2000, the Town's growth rate (12%) was on a par with that of Lincoln County (11%).

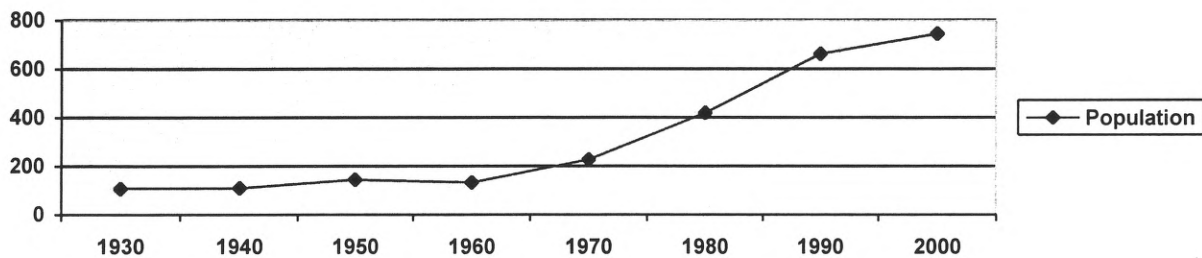


Table 1
Population of Westport and Lincoln County

	<u>1890</u>	<u>1900</u>	<u>1910</u>	<u>1920</u>	<u>1930</u>	<u>1940</u>
Westport	451	330	284	165	108	111
Lincoln Co.	21,996	19,669	18,216	15,976	15,398	16,294
	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Westport	146	133	228	420	663	745
Lincoln Co.	18,004	18,497	20,537	25,691	30,357	33,616
	<u>Change</u> <u>1960-70</u>	<u>Change</u> <u>1970-80</u>	<u>Change</u> <u>1980-90</u>	<u>Change</u> <u>1990-2000</u>		
Westport	71%	84%	58%	12%		
Lincoln Co.	11%	25%	18%	11%		

Source: U.S. Census, 1890-2000

Population Projections

The State of Maine no longer prepares population projections at the municipal level. However, county-level population projections contained in the State Planning Office's Maine County Economic Forecast (December, 1999) indicate that Lincoln County's population as a whole will grow at an average annual rate of 1.3% for the period 1998-2005, and 1.2% for the period 2005-2010. This translates into a 10-year growth rate of about 14.3% for the County, or an increase of about 4,800 people, resulting in a County population of about 38,400. While it is difficult to project exactly what will happen in Westport, it is reasonable to assume, based on 1990-2000 growth rates, that the Town will grow at about the same rate as the County. A 14.3% growth rate in Westport would result in a gain of about 107 people, resulting in a population in the year 2010 of about 852 people. This is a conservative figure. The actual rate of growth may depend upon the economy, the growth of the seasonal and secondary home market, land availability and land development forces in nearby communities.

Population Comparisons with Surrounding Areas

Some idea of the magnitude of the population growth on Westport Island can be gained from Table 2 below, which gives figures for Westport, the surrounding towns, the County, and the State. Westport's population growth from 1970 to 1980 reached an astonishing 84%, compared with 25% for Lincoln County, and 13% for the state as a whole. During the next decade, for Westport, as for most of the surrounding area, the rate of growth dropped off. But at 58%, Westport's was still the highest rate of any in Lincoln County during the 80's. Growth slowed even more during the 1990's. While Westport had the highest growth rate (12%), it was on a par with that of Edgecomb (10%) and Lincoln County (11%).

Table 2 Comparative Population Change							
	1970	1980	1990	2000	% Change 1970-80	% Change 1980-90	% Change 1990-00
Westport	228	420	663	745	84%	58%	12%
Edgecomb	549	841	993	1,090	53%	18%	10%
Wiscasset	2,244	2,832	3,339	3,603	26%	18%	8%
Lincoln Co.	20,537	25,691	30,357	33,616	25%	18%	11%
Maine	993,722	1,125,043	1,227,928	1,274,923	13%	9%	4%

Source: U.S. Census, 1970-2000

Population by Age Group

There are several trends in the size of the various age groups on Westport Island in the years since 1970, as shown in Table 3. One of the clearest is the steady decline in the percentage of children under 5, and an overall reduction in the percentage of children between the ages of 5 and 17. There

has been a marked decline in the percentage of people aged 18 to 44 (from 40% in 1990 to 28% in 2000). Finally, there has been a gradual increase since 1970 in the numbers of residents in the 45-64 age group and in the 65 and older category. The same trends can be seen at the County level. Overall, Westport's population is aging as indicated in the rise in the median age from 36.5 years in 1990 to 44.8 years in 2000.

Table 3
Population by Age Categories

		<u>Under 5</u>	<u>5-17</u>	<u>18-44</u>	<u>45-64</u>	<u>65 & Over</u>	<u>Median Age</u>
Westport	1970	10%	27%	33%	20%	10%	
	1980	8%	19%	43%	20%	10%	31.8
	1990	8%	16%	40%	22%	14%	36.5
	2000	4%	18%	28%	33%	17%	44.8
Lincoln County	1970	8%	25%	29%	23%	16%	
	1980	7%	21%	36%	21%	16%	33.6
	1990	7%	18%	37%	21%	17%	37.4
	2000	5%	18%	31%	28%	18%	42.6

Source: U.S. Census, 1970-2000

Average Household Size

Since 1970, the size of the average Westport household has declined from 3.4 persons to 2.3 in 2000. This decline is consistent with the available data for Lincoln County. The decline may reflect the relative decrease in the population of very young children on the island in the Under 5 age group during the same period, as seen in Table 3.

Table 4
Households and Household Size

		<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
# households	Westport	67	158	265	318
	Lincoln Co.		9,494	11,968	14,158
	Maine		395,184	465,312	518,200
Average hh Size	Westport	3.4	2.7	2.5	2.3
	Lincoln Co.	3.0	2.7	2.5	2.4
	Maine	3.2	2.8	2.6	2.4

Source: U.S. Census 1970-2000

Household & Per Capita Income

Based on data from the 1990 Census, Westport had a high per capita income and a higher median household income than Wiscasset, Edgecomb, Lincoln County or the State of Maine.

Table 5
Median Household and Per capita Income - 1989

	<u>Per capita Income</u>	<u>Median Household Income</u>
Westport	\$17,280	\$33,500
Wiscasset	\$12,260	\$29,397
Edgecomb	\$16,289	\$32,670
Lincoln Co	\$13,479	\$28,373
Maine	\$12,957	\$27,854

Source: 1990 Census

The State Planning Office has prepared county level estimates of per capita income as well as projections to the year 2010. These estimates and projections, which are contained in its Maine County Economic Forecast (December, 1999) indicate that Lincoln County's per capita income figures are roughly on a par with those of the State as whole, but will increase at a slower rate than the State rate through the 2010 forecast period as shown in Table 6.

Table 6
Per Capita Personal Income

	<u>1997</u>	<u>2005</u>	<u>2010</u>	Annual Average % Change <u>1997-2010</u>
Lincoln County	\$23,985	\$29,682	\$34,184	2.8%
Maine	\$21,937	\$29,417	\$35,652	3.8%

Source: Maine County Economic Forecast, Maine State Planning Office, 1999

Educational Attainment

Based on 1990 Census data, approximately 84.3% of the year-round population of Westport has graduated from high school, compared to 81.4% at the County level and 78.8% at the State level. The percentage of Westport residents with at least a bachelor's degree (19.6%) is somewhat higher than the State average (18.8%) but less than the average for Lincoln County (22.2%).

Table 7
Educational Attainment – 1990

	Total # of Persons	% High School Grad	% Bachelor's Degree
	<u>25+ Years</u>	<u>or Higher</u>	<u>or Higher</u>
Westport	464	84.3%	19.6%
Lincoln County	20,674	81.4%	22.2%
Maine	795,613	78.8%	18.8%

Source: U.S. Census, 1990

4. ECONOMY

Employment

Westport is a small island and a small town. There are very few employment possibilities on Westport. Based on information from the Maine Department of Labor, there were 346 people in the labor force in the year 2000, of which 337 were employed and 9 were unemployed. Westport's 2000 unemployment rate (2.7%) compares favorably with that of the surrounding towns, Lincoln County and the State of Maine, as shown in Table 1.

Table 1 Summary of Employment, Unemployment, 2000				
	<u>Labor Force</u>	<u>Employed</u>	<u>Unemployed</u>	<u>Unemployment Rate</u>
Westport	346	337	9	2.6%
Edgecomb	520	497	23	4.4%
Wiscasset	1,423	1,371	52	3.7%
Lincoln County	18,240	17,750	500	2.7%
Maine	688,800	664,600	24,200	3.5%

Source: Maine Department of Labor, 2001

Place of Work

According to the 1990 Census, of the 320 workers who reported their job locations, only 24, or 8%, were employed by the various small businesses located on the island (see Table 2). The remaining 296, or 92% of the total, worked off the island. The principal off-island job locations were Wiscasset (77 persons or 24%), and Bath (99 persons or 31%), which together served as job sites for over half of Westport's work force.

Table 2 Place of Work – Westport Residents, 1990					
<u>Place</u>	<u>#</u>	<u>%</u>	<u>Place</u>	<u>#</u>	<u>%</u>
Augusta	17	5%	Portland	6	2%
Bath	99	31%	Topsham	21	7%
Boothbay Harbor	6	2%	Westport	24	8%
Brunswick	22	7%	Wiscasset	77	24%
Damariscotta	16	5%	Other	26	8%
Freeport	6	2%	Total	320	100%

Source: U.S. Census, 1990

Employment by Industry

Table 3 contains a breakdown of the labor force by industry for Westport, Lincoln County and the State of Maine as reflected in the 1990 Census. Westport had a significantly higher percentage of residents employed in manufacturing of durable goods and retail trade than the other two jurisdictions.

Table 3 Labor Force Employment By Industry – 1990						
	<u>Westport</u>		<u>Lincoln County</u>		<u>State</u>	
	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>
Agriculture, Forestry, fishing	3	1	709	5	16,263	3
Construction	31	9	1,447	11	42,026	7
Manufacturing, non-durable goods	9	3	456	3	54,741	10
Manufacturing, durable goods	85	25	2,132	16	57,890	10
Transportation	3	1	357	3	19,567	3
Communications, public utilities	13	4	456	3	12,710	2
Wholesale trade	9	3	306	2	20,818	4
Retail trade	87	26	2,445	18	105,312	18
Finance, insurance, real estate	11	3	576	4	31,992	6
Business and repair services	8	2	458	3	19,839	4
Personal services	14	4	562	4	18,322	3
Entertainment, recreation	1	1	112	1	5,333	1
Health services	5	1	999	7	52,675	9
Educational services	20	6	1,100	8	53,685	9
Other professional, related services	18	5	901	7	35,588	6
Public administration	18	5	681	5	25,081	4
Total	335	99	13,697	100	571,842	99

Source: 1990 Census

Employment by Occupation

Table 4 contains an occupational breakdown for Westport, Lincoln County and the State of Maine as reflected in the 1990 Census. Westport had about the same percentage of residents (55%) employed in white collar occupations as the County (52%) and the State (54%).

Table 4
Labor Force Employment By Industry – 1990

	<u>Westport</u>		<u>Lincoln County</u>		<u>State</u>	
	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>
White Collar						
Executive, Administrative	48	14	1,475	11	61,376	11
Professional, Specialty	36	11	2,024	15	79,155	14
Technical	7	2	382	3	18,523	3
Sales	30	9	1,316	10	62,139	11
Administrative Support	64	19	1,716	13	85,388	15
Total White Collar	185	55	6,913	52	306,581	54
Blue Collar						
Service Occupations	35	10	1,697	12	77,715	14
Farming, Forestry	3	1	741	5	15,773	3
Production, Craft, Repair	57	17	2,637	19	76,847	13
Laborers	55	16	1,709	12	94,926	17
Total Blue Collar	150	44	6,784	48	265,261	47
Total	335	99	13,697	100	571,842	101

Source: 1990 Census

Agriculture, Forestry, & Marine

Despite Westport's rural appearance, there is no longer any significant commercial agriculture or forestry activity on the island. Similarly, despite the island's extensive coastline, there is very little commercial maritime activity on Westport, with the exception of several individuals who earn a living worming and lobstering.

Tourism

Although Westport is very close to popular tourist destinations like Boothbay Harbor and Freeport, the impact of tourism on the island and its economy is less than might be assumed. There are indirect effects - some island residents are employed in off-island tourism related businesses. But for the most part, the ebb and flow of tourist traffic passes the island by. The explanation is that Westport offers almost no significant attractions for tourists - there are no beaches, no harbors, no shopping possibilities, and no restaurants. The single exception is the Squire Tarbox Inn, which offers dining and lodging, but with room for only 22 guests. Because Westport's one good highway leads only to the island's southern end and no further, there is no possibility to offer services to tourists passing through en route to other destinations, as is the case, for example, with neighboring Edgcomb which stands astride the main route to Boothbay Harbor. In short, Westport has been spared both the benefits and the problems connected with a large influx of summer tourists.

Business and Commercial

Table 5 contains a breakdown of the types of businesses in Westport as of 2001.

Table 5			
Type of Business – 2001			
(at least part of business conducted on the island)			
Type of Business	Number	Type of Business	Number
Antiques	2	House cleaning	3
Arborist	1	Inn owner	1
Artist	3	Lawn care	2
Artist supplies	1	Lawyers	4
Boat builder	2	Lobsterman	5
Carpenter, light construction	10	Manufacturing (light)	2
Crafts (Association)	13	Marine construction	2
Cleaning company (commercial)	1	Mason	1
Commercial fisherman	1	Real estate	1
Computer company	1	Store owner	2
Electrician	1	Tree farm	1
Heavy equipment, construction	2	Total	62

Source: Selectman, 2001.

Summary

With over 90% of its work force employed off the island, Westport fits the classic definition of a bedroom community. There is no commercial or industrial blight here, but neither are there many job possibilities, and almost no tax revenues directly generated by business activity. Given the island's location well off the beaten track, with no through highway, no established harbor, and the relatively high cost of island land, it is unlikely that any but quite small firms will choose to settle here. As for retail possibilities, the island's population base is probably too small to support anything more than perhaps the existing convenience store/gasoline station, particularly in view of the pull of the stronger shopping opportunities in Bath and Wiscasset, and along Route 1. It seems likely that Westport will remain a bedroom community, and that its economic well being will remain closely linked to the fortunes of the surrounding area, particularly Bath and Wiscasset.

5. LAND USE

Background

Westport is a long, narrow island, whose northern end is about a mile south of the center of Wiscasset, on the Sheepscot River. The island runs roughly north-south. The Sheepscot divides around the island, with the main channel, the Sheepscot River proper, flowing down its eastern side. The Sheepscot maintains a depth of about 70 feet as it flows past Westport, and is never narrower than about one quarter mile. On the western side of the island, the Sheepscot becomes the Back River, a much shallower though usually broader body of water. About halfway down the island, the Back River flows into the Sasanoa River, which continues southward along past Westport's southern end. Most, though by no means all, of the boat traffic passing along the island uses the deeper and more navigable Sheepscot, on the eastern side. All of the waters surrounding Westport are salt, with a tidal rise of about 10 feet.

Geologically speaking, Westport owes its existence to the long spine of bedrock which forms it and which runs down its length, a distance of about 11 miles (Westport is the longest undivided island in the State). Where ledge is not exposed on the surface, soil is typically quite shallow, ranging in depth from several inches to several feet in most places. The northern six miles or so of the island are quite narrow, extending from about one quarter to one mile in width. There is an appreciable broadening on the southern end, so that the island's width reaches as much as one and a half to two miles in some places. On the northern end, the central ridge is about 100 feet above sea level at its highest points. At the southern end, one hill reaches 150 feet. Approaches to the water on the western side are generally gradual, but are often precipitous on the Sheepscot side. Westport's land area is 8.73 square miles, or about 5,587 acres.

Westport is connected to the mainland by a single, high span, two lane bridge on State Route 144, which crosses the Back River from Wiscasset at a point about one and one half miles south of the island's northern end. Route 144 then curves south down the length of the island, until it reaches Westport's southern extremity nine miles later. Route 144 is the island's main traffic artery. A fact of life on Westport is the island's proximity to the Maine Yankee nuclear power station in Wiscasset, located just across the Back River, about three miles down the island from its northern end. The proximity to the plant may have inhibited growth in the past. While the plant has ceased operations, Maine Yankee stores high level nuclear waste on the site.

Residential Development

Westport's population according to US Census figures for 2000 is 745 persons. This gives an average population density of 84 persons per square mile, or .13 persons per acre. This compares with 59 per square mile for the neighboring town of Edgecomb. As indicated on the Housing and Subdivisions Map, Westport's residences are not distributed evenly. The northern quarter of the island is almost completely subdivided, and many lots have been built on. Other groups of homes are found in the central part of the island along Route 144 and the nearby eastern shore area. On the island's southern end, there is a long string of homes along the Sheepscot shore area, and small groups in the coves on the Sasanoa side.

However Westport does not have an area that would clearly qualify as a village center. Near approximations are a small group of houses near the Fire House and the Town Office on Route 144, about four miles down the island from the northern end, and another small group near the Town Hall and adjacent Community Church about three miles further south. While there are a number of small businesses scattered about the island, there is nothing that could be called a commercial center.

During the summer of 2001, the selectmen conducted a count and determined that there are about 540 structures on the island and roughly 800 parcels of land. The term "structure" is meant to include dwellings and commercial buildings, but not accessory buildings such as barns or sheds.

Based on an analysis of historical development trends conducted by the Lincoln County Planner, there were 124 principal structures in 1891; 134 in 1941; 154 in 1957; and 215 in 1970. Since there are now about 540 structures, it is clear that the most significant period of growth in Westport has occurred during the past three decades, when structures were added at a rate of about 10.5 structures per year, compared to slightly more than one structure per year between 1891 and 1970. There are several characteristics of the Town's growth over the past 30 years:

1. There have been only a few subdivisions of consequence in Westport since 1970, but there has been a substantial increase in the number of lots, many of which have not been reviewed as part of a subdivision.
2. There are now 260 vacant parcels. While not all are suitable for or intended for development, many could be improved with homes in the coming years. Even if additional lots are not created, the Town will continue to grow.
3. Since 1970, there has been a proliferation of lots with frontage on Route 144, many of which have not yet been developed. Route 144 still maintains an attractive and relatively rural appearance.

Seasonal Residents

There are an appreciable number of people who summer on Westport. In the year 2000, 34% of all housing on the island was seasonal, amounting to about 174 homes. Some of these are primarily for weekend use. Although reliable data is not available, on the average, over the course of the summer, seasonal residents might amount to about a quarter of the island's population. Many of these people have been summering on Westport for years, and blend in easily with the year round population. Given the paucity of public services here, it can scarcely be said that they represent much pressure on Westport's facilities. However, they do avail themselves of some of the island's drinking water resources, and do increase the burden of septic waste the island must absorb. At the same time, they represent a smaller drain on the island's limited water and sewage disposal resources than full time residents on that land would create. The seasonal residents are, in any case, a factor to be considered in plans for Westport's future growth.

Commercial And Industrial Use

There are about 62 small businesses active on Westport. Most are one or two person enterprises. The largest of these include the Squire Tarbox Inn, which employs up to 12 persons during the summer season; and G and D Construction firm, which employs a total of about 5 persons. In addition to these three firms, there are an additional 45 or so persons running businesses on or around the island (see Economy section). There is no industry on the island. There is one grocery/convenience store currently operating on the island.

Most of these business activities operate out of the owners' homes, and they are scattered up and down the island. At this stage of the island's development, there is no existing section of Westport that could in any sense be considered a commercial area.

As discussed earlier in the section dealing with Westport's Economy, there is virtually no tourist business on the island, with the single exception of the Squire Tarbox Inn and Restaurant.

Since 1974 there has been little change in the commercial use of land or the business use of buildings, although the number of small, mostly home-based businesses has grown from 23 in 1991 to 62 in 2001. This is due in part to the geographical location which makes property on Westport less than ideal for business purposes, and in part to the relatively high cost of taxes, services, and transportation compared to surrounding communities.

Most commercial users on Westport are confined to Route 144 and are in homes or in combination with dwelling units.

In the Comprehensive Planning Committee's 2001 Survey, respondents generally supported limited commercial use of property, but they also supported a site plan review process for non-residential uses, as well as the rural nature of the community. The Town's preferences indicate that we should allow the retention, expansion, or creation of small businesses provided:

1. The scale and intensity of the business activity is in keeping with the rural character of the Town.
2. The businesses do not overtax either the Town's natural resources or roads.
3. The use is carried out in a way which protects neighboring properties from adverse impacts from noise, odors, drainage, or visual factors.

Agricultural and Forestry Activities

Despite the undoubted rural character of Westport, agriculture of a commercial nature is virtually non-existent on the island. Animal husbandry is limited to a herd of sheep at the Squire Tarbox Inn. There is no regular commercial forestry activity on Westport. Some residents participate in the Maine State Tree Growth Program. State figures for the year 2000 indicate that a total of 16 parcels of land consisting of 586 acres (about 10% of the land area of the Town) were in Tree Growth on Westport: 217 acres of softwood, 72 acres of hardwood, and 298 acres of mixed hard/softwood.

Publicly Owned Land and Buildings

The Town of Westport owns the Town Hall, and owns or controls several tracts of land. These include the approximately one-acre lot on which the Town Hall is located. A five-acre plot next to the Fire House was donated to the Town to permit enlarging the Fire House and as a site for the new Town Office. The Town also owns the 7.1 acre Clough Point tract on the northern end of the island, deeded to Westport for recreation use; this section includes 1,200 feet of shoreland along the Back River. Westport also owns an additional five or six acres in small pieces scattered about the northern end of the island. The Town also owns the land making up its 19.5 miles of town road, amounting to about 64 acres. This includes the old Ferry Road, which dead-ends at the Back River, thus providing public access to the water for boating.

Large Undeveloped Tracts of Land

Most of the island's residents live on small plots of land of less than 6 acres in size. A review of the Property Map shows that some of the larger tracts include prime waterfront footage. Although some of the land in these larger tracts is occupied by ponds and wetlands, and some is too steep or could not meet septic waste disposal criteria, and thus could not be built on, it is clear that there is still attractive real estate available on the island that could be subdivided and developed.

Historic and Archaeological Resources

The Maine Historic Preservation Commission has identified three types of archaeological or historic sites in Westport:

1. Pre-historic Archaeological Sites. Westport has twelve pre-historic archaeological sites. All are shell middens (heaps) located on the Sheepscot River in the shoreland zone. Seven of these sites are not considered significant. Of the remaining five, not enough is known about three of them to make a determination, but two may be eligible for the National Register.
2. Historical Archaeological Sites. The Town's single historic archaeological site is Fort McDonough (1814). This was in the form of a five-pointed star. These works were constructed of earth and logs and mounted with sixteen pounders. A ship trying to pass between Fort Edgecomb and Fort McDonough would have had to make several tacks before getting on a course to make Wiscasset Harbor. If a landing in force were made against McDonough, the guns would have been spiked and the men would have moved to Edgecomb protective works.
3. Historic Buildings, Structures, Objects. There are two buildings listed on the National Register of Historic Places: the Squire Tarbox House, located on Route 144, and the Josiah K. Parsons Homestead, located on Greenleaf Cove Road. In addition, both the Westport Community Church and the Westport Town Hall have been determined to be eligible to be listed in the Register. The Town Hall was built around 1800 as a church, was acquired by the Town in 1885, and has been used as a Town Hall since that time.

There are places where old saw mills and grist mills powered by water once stood, but except for old pilings, nothing remains today.

Westport Ordinances Affecting Land Use

1. Shoreland Zoning Ordinance. This state mandated municipal ordinance regulates residential and commercial construction and certain other activities within the land area 250 feet from the high water mark of any pond, river, or salt water body. It establishes a Pond District around four Westport ponds and marshes within which review and approval of construction is required, and sets various minimum dimensional requirements, including a 2-acre lot size, 200 feet shoreline frontage, and 100 feet shoreline setback for single family dwellings. The ordinance establishes a Rural Residential District for the remaining shoreland zone, designates permitted land uses, and sets various minimum dimensional requirements, including 2 acre lot size, 150 feet shoreline frontage, and 75 feet shoreline setback for single family dwellings.
2. Minimum Lot Size Ordinance. For area outside the Shoreline Zone, this ordinance sets various minimum dimensional requirements, including 1 1/2 acre lot size for single family dwellings, 1 1/2 acres for each family living unit for 2 family or multiple residential dwellings, and 3 acres for commercial and industrial structures.
3. Building Code Ordinance. This ordinance regulates construction, location, relocation, and replacement of structures including requirements for permits, minimum lot sizes, building standards, appeals and variances.
4. Cluster Residential Development. This ordinance permits the Planning Board to approve cluster residential developments in all residential districts, provided that overall residential density does not exceed the density that would be permitted if lots conformed to district requirements, and that no individual lot size be reduced to less than 50% of that required by the district.
5. Subdivision Standards and Procedure. This ordinance establishes criteria for the review and approval of minor (3 to 5 lots) and major (more than 5 lots) subdivisions.
6. Mobile Home Ordinance. This ordinance establishes minimum standards governing the construction, operation, maintenance, and inspection of mobile home parks, including issuance of permits; inspections; location, space, and general layout; roadways, service buildings, sanitation, electricity, alterations and additions.

Rural Character Analysis

Westport's unique character is an amalgam of factors. Westport is a small island, isolated in numerous ways from the mainland. The sense of separation is heightened by the fact that the link to the mainland is a single bridge. Despite the fact that there is no commercial agriculture practiced on Westport, the appearance and atmosphere are rural, partly because of the abundance of wooded areas, partly because of the scattered placement and low density of homesites, partly because there

are very few signs of commercial activity, partly because there are few multifamily buildings, and partly because there are no developments with streets and homes that are obviously laid out on a grid. If this rural character is to be preserved, then future development on the island will have to be carried out in ways which will minimize damage to the factors that make up that character.

The section dealing with population gives some indication of how rapidly Westport has grown since 1960. Some residents are concerned that population growth, if allowed to continue, will mean the end of Westport's unique atmosphere. Others believe that some change is inevitable and that nothing should be done to check growth. Most would agree that continued growth of the island's population is probably inevitable and that the Town should take some steps to protect those aspects of Westport's character which residents would like to see preserved as far into the future as possible.

As the data presented earlier in the section dealing with Westport's economy make clear, there are sharp financial limits to what Westport can undertake. For the reasons discussed earlier, tourism will probably never provide much public revenue for Westport. Given the island's somewhat isolated situation, commercial activities that could generate tax revenues of any consequence are unlikely to be established here. The cost of land, pushed up by the proximity to water, is now probably too high to make it cost-effective for even light industry to settle here. Westport is basically a bedroom community, with most of its residents earning their income on the mainland. The factors which have created this situation are unlikely to change. For all of these reasons, the single significant source of public revenue is likely to remain property taxes. Unfortunately these have reached a very high level on Westport, as in other Maine communities. From 1970 to 2000, taxes on property in the Town of Westport have gone up by a factor of 7.8, from \$51,645 to \$988,839. During that same period, the population went up by a factor of 3.3, from 228 to 745. That is, during this thirty-year period, town property taxes went up about 19 times, while the population that had to carry those taxes increased only about 3 times.

The factors mentioned above - the island's limited land area and population, its isolation, the fact that it is primarily, though not exclusively, a bedroom community for residents employed in surrounding towns on the mainland, that it lacks any commercial, agricultural, or forestry base of its own, and finally, its very limited financial resources - these factors suggest that the island's growth management needs are likely to be less complex than those of some of the surrounding towns, and, since financial resources are so limited, they must be carefully prioritized. The principal goals, as they relate to land use, would be:

- Protection of the island's rural, non-commercial character.
- Protection of the island's water supply and the carrying capacity of the land.
- Protection of the island's environmental assets, including the rivers which surround it.
- Reasonable regulation of commercial and residential development to protect against damage to the above goals.

Growth/Rural Area Analysis

According to the Comprehensive Planning and Land Use Regulation Act, Westport's Comprehensive Plan must identify and designate at least two basic types of geographic areas: Growth Areas and Rural Areas.

- Growth Areas are defined in the Act as "those areas suitable for orderly residential, commercial and industrial development forecast over the next 10 years," and
- Rural Areas "are those areas where protection should be provided for agricultural, forest, open space and scenic lands within the municipality."

The Act also states that "A municipality is not required to identify growth areas for residential growth if it demonstrates that it is not possible to accommodate future residential growth in these areas because of severe physical limitations, including, without limitation, the lack of adequate water supply and sewage disposal services, very shallow soils or limitations imposed by protected natural resources; or if it demonstrates that the municipality has experienced minimal or no residential development over the past decade and this condition is expected to continue over the 10-year planning period. A municipality exercising the discretion afforded by this paragraph shall review the basis for its demonstration during the periodic revisions undertaken pursuant to section 4327."

Land use planning for Westport must be consistent with existing state legislation, and must be tailored to meet the island's situation and its needs, as they can be foreseen over the next decade. There is a wide range of views among Westport residents about what directions land use planning should take, and the degree to which land use planning should be allowed to infringe upon a land owner's right to do with his property as he sees fit. The views and desires of the residents of Westport must be given due consideration in determining the objectives of the Comprehensive Planning and Land Use Regulation Act. For Westport, the division into Growth Areas and Rural Areas would be quite arbitrary because of the Town's physical limitations.

The island has no commercial agricultural or forest activities to protect. To limit the size of the Growth Area would be to group all new residential construction for the next decade into a single small area or group of areas. There is no compelling justification for such concentrated development. There is no "town center" in Westport, around which most new residential construction could naturally be grouped. There are no town facilities to speak of that could be more efficiently used if new residential construction were more tightly grouped. On the contrary, grouping new construction in this way would only tend to increase the pressure on the underground fresh water supply in the area selected, as well as to increase the ever present risk of pollution of the fresh water supply by concentrating septic waste disposal systems in a limited area. The Town's 2001 Aquifer Delineation and Soil Carrying Capacity study documents the limitations of the islands soils and ground water to support intense development. For the most part, the soils on Westport have severe limitations for subsurface sewage disposal systems. Ground water is limited in many areas and can easily be contaminated. The Town has no public water supply or sewer system, and, because of the distance and cost, it would be impractical to extend such services from Wiscasset into Westport.

6. HOUSING

Westport's dwellings have been and continue to be almost exclusively single-family homes. The number of housing units has kept pace with the population, there having been a decrease in the average number of persons per household over the years 1970-2000. The age and condition of the structures are not seen as cause for concern.

Housing demand has historically been met by house-by-house construction, usually on the orders of the future owner and resident. Few houses have been built on the island for speculation. There have been no housing developments. Demand for year-round housing has been met by new construction and the conversion of seasonal dwellings. Rental units are available, but are few in number.

Basically, Westport is a bedroom community, with most of the working population finding employment on the mainland. No major employers are located on the island, and chances appear small any will establish themselves here, due to Westport's small size, location off main routes, and relatively high land costs.

The following tables provide information about the number, value, affordability and other characteristics of Westport's housing stock.

Changes in Total Housing Stock

Table 1 includes a summary of the changes in total housing stock since 1980 in Westport, Lincoln County and the State. Between 1980 and 1990, Westport experienced an increase of 69 housing units, resulting in a housing growth rate of 21%, which was higher than that of Lincoln County and the State. Between 1990 and 2000, there was an increase of 111 housing units resulting in a growth rate of 28% which was significantly higher than in the County or State. Based on the growth rate of the last 20 years, Westport can anticipate an increase of 107-142 housing units over the next 10 years.

Table 1							
Changes In Total Housing Stock							
	<u>Total Number of Units</u>			<u>Increases, 1980-90</u>		<u>Increases, 1990-2000</u>	
	<u>1980</u>	<u>1990</u>	<u>2000</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>
Westport	330	399	510	69	21	111	28
Lincoln County	14,977	17,538	20,849	2,561	17	3,311	19
State of Maine	501,093	587,045	651,901	85,952	17	64,856	11

Source: U.S. Census, 1980, 1990, 2000

Housing Types

Table 2 contains a breakdown of housing units in 1990 by housing type, as reported in the 1990 Census (as of this writing, a similar breakdown is not yet available from the 2000 Census). The category “multi-family dwellings” includes duplexes, which the Census did not tabulate separately. In 1990, 87% of the housing units in Westport were single family dwellings. This is a much high percentage than in Lincoln County (79%) or the State as a whole (65%). Westport has a much lower percentage of multi-family dwellings (1%) than Lincoln County (8%) or the State (24%), but about the same percentage of mobile homes (12%).

Table 2 Total Housing Units By Type Of Structure							
	Single-Family Dwellings		Multi-Family Dwellings		Mobile Homes		Total
	#	%	#	%	#	%	
1990							
Westport	348	87	4	1	47	12	399
Lincoln County	13,774	79	1,406	8	2,358	13	17,538
State of Maine	378,413	65	140,613	24	68,019	12	587,045
2000							
Westport							510
Lincoln County							20,849
State of Maine							651,901

Source: U.S. Census, 1990, 2000

Housing Occupancy Characteristics

Table 3 contains information on the total number year-round and seasonal dwellings in Westport and Lincoln County. Between 1980 and 2000, the percentage of year-round dwellings in Westport fluctuated substantially, ranging from a low of 52% in 1980 to a high of 70% in 1990. During the same 20-year period, the percentage of year-round housing in Lincoln County remained relatively constant (71%-73%). The conversion from seasonal to year-round dwellings may account for some of the statistical changes in Westport.

Table 4 contains information on owner-occupied and renter-occupied dwellings in Westport and Lincoln County. Between 1980 and 2000, the percentage of owner-occupied dwellings remained the same (83%). In Westport, however, the percentage of owner-occupied dwellings gradually increased from 81% in 1980 to 89% in 2000.

Table 3
Year-Round and Seasonal Dwellings

	<u>Total Dwellings</u>	<u>Total Year Round Dwellings</u>		<u>Total Seasonal Dwellings</u>	
	<u>#</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>
Westport					
1980	330	170	52	160	48
1990	399	280	70	119	30
2000	510	336	66	174	34
Lincoln County					
1980	14,977	10,590	71	4,387	29
1990	17,538	12,852	73	4,686	27
2000	20,849	14,989	72	5,860	28

Source: U.S. Census, 1980, 1990, 2000

Table 4
Housing Occupancy Characteristics

	<u>Total Occupied</u>	<u>Owner Occupied Dwellings</u>		<u>Renter Occupied Dwellings</u>	
	<u>#</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>
Westport					
1980	158	128	81	30	19
1990	265	223	84	42	16
2000	318	283	89	35	11
Lincoln County					
1980	9,494	7,896	83	1,598	17
1990	11,968	9,955	83	2,013	17
2000	14,158	11,755	83	2,403	17

Source: U.S. Census, 1980, 1990, 2000

Housing Age and Services

Table 5 contains information on the age of housing and the percentage of homes with complete plumbing and kitchen facilities, as well as the percentage of homes with four or more bedrooms. Statistics on the age of housing have sometimes been used as a measure of the extent of substandard housing, but these are not necessarily a reliable gauge. Old housing in Westport does not necessarily mean deteriorated housing. As shown in Table 5, Westport has a lower percentage of homes constructed before 1939 (28%) than Lincoln County (39%), and a slightly higher percentage of homes with four or more bedrooms (20%) than in Lincoln. Westport has a very high percentage of homes with complete plumbing and kitchen facilities.

Housing

Table 5
Year – Round Housing Age And Other Characteristics – 1990

	Structure Built Between 1980-90 %	Structure Built Before 1939 %	4 or More Bedrooms %	Complete Plumbing Facilities %	Complete Kitchen Facilities %
Westport	32	28	20	98	-
Lincoln County	21	39	19	97	98

Source: 1990 Census

Housing Values and Costs

Based on 1990 Census data, as shown in Table 6, the median value of a home in Westport (\$122,300) was substantially higher than it was in Lincoln County (\$103,000) or the State (\$87,400). Median owner costs with a mortgage (\$840) were much higher than in the other two jurisdictions. Gross rent in Westport (\$346) was significantly lower than in either Lincoln County (\$438) or the State (\$419).

Housing costs have risen significantly since 1990. Based on data obtained from the Maine Municipal Association, the median home value in Westport in 1999 was \$148,993. Based on information from the Maine Real Estate Information System, the median selling price of a home in Lincoln County in 2000 was \$111,450.

TABLE 6
1990 Housing Costs

	Median Value Owner Occupied Unit	<u>Median Owner Costs</u>		<u>Median Rental Costs</u>	
		With Mortgage	Without Mortgage	Gross Rent	% of Income
Westport	\$122,300	\$840	\$163	\$346	12.2
Lincoln County	\$103,000	\$619	\$212	\$438	26.0
State of Maine	\$87,400	\$664	\$222	\$419	26.8

Source: 1990 Census

Housing Affordability

One of the goals set forth in the State's growth management law is to encourage and promote affordable, decent housing opportunities for all Maine citizens." The law is based on the premise

that any village or town is a more desirable place to live when composed of citizens of all income levels. Affordable, decent housing to accommodate a portion of all income levels is identified as an important element to providing a foundation for economic balance. However, the steady rise in land and home values has created difficult obstacles for low-income people.

Westport is a relatively long and narrow rock-island on the lower Sheepscot River. The consequence of this geographic distinction is that the great majority of the buildable land is on the shoreline where property values have escalated.

The State's growth management law requires that each municipality "...shall seek to achieve a level of 10% of new residential development, based on a 5-year historical average of residential development in the municipality, meeting the definition of affordable housing." Affordable housing is defined as an owner-occupied unit whose price results in a monthly housing cost that does not exceed 30% of the household's gross monthly income. Monthly cost includes mortgage principal and interest, insurance, real estate taxes and utilities. A rental unit would follow the same formula, where the monthly rate includes utilities.

The 1990 Census documents that 9.6% of the population in Lincoln County (2.0% in Westport) were below the poverty level in 1989. According to a 1997 Census estimate, very little has changed over the years – 9.6% of the population in Lincoln County are still below the poverty level. The 1997 Census estimate of Lincoln County's median household income was \$35,696; a low income family is one that is at 80% of median household income (\$28,557) or below, while a very low income family is one that is at 50% of median household income (\$17,848) or below.

Applying the formulas for monthly housing costs:

Very Low Income: $\$17,848 \times 30\% / 12 = \$446/\text{month}$

Low Income: $\$17,849 - \$28,557 \times 30\% / 12 = \$446 - \$714/\text{month}$

According to the 2000 Census, there are 318 occupied homes on Westport. According to the latest data from the Assessor's office, there are 45 mobile homes on the island. Year-round rental rates for mobile homes are now between \$400 per month (two bedroom) and \$500 per month (three bedroom). The current housing stock appears to meet or exceed the need for low cost housing for low and very low income people.

Nevertheless, affordable housing is an issue with which Westport must be concerned. Existing ordinances permitting low cost mobile and moveable homes must be maintained. Westport's ordinances currently permit the construction or creation of duplex homes or apartments, and this will help increase the number of available rental units. We do not believe that acreage restrictions should be relaxed, because of Westport's very limited land area and the importance of maintaining high septic waste standards to protect the island's water supply.

7. TRANSPORTATION

The Role of the Maine Department of Transportation

The Maine Department of Transportation (MDOT) is responsible for the planning, development and preservation of a multi-modal transportation system including highways and bridges, air transportation, ferry systems, transit systems and rail transportation.

MDOT's investments in the transportation system are guided by the following

- 1. Twenty-Year Plan.** MDOT's Twenty Year Plan is a policy document that describes the current condition of the State's transportation infrastructure, outlines some of the factors likely to affect performance, and describes the steps to be taken to meet broad goals for all modes of travel.
- 2. Six-Year Transportation Improvement Plan.** MDOT's Six Year Plan provides a link between the Twenty-Year Plan, which is policy based, and the Biennial Transportation Improvement Program (BTIP), which is project based and fiscally limited. The Six Year Plan provides municipalities with the opportunity to plan for anticipated improvements in a more timely manner than is allowed by the BTIP. There is a reasonable expectation that projects listed in the Six-Year will be implemented within the next six years, subject to funding availability. Projects listed in the six year plan which may be of interest to Westport include:
 - Airports – At the Wiscasset Airport, acquisition of land in the approaches.
 - Passenger Marine Services – Continued work with Bath and Boothbay Harbor on the development of shoreside facilities for various marine services including high speed ferries, water taxis and cruise ships.
 - Park and Ride Lots – The identification of park and ride lots for prioritization by the Regional Transportation Advisory Committees (RTACs).
 - Rockland Branch – Rail improvements and stations for the Rockland Branch rail between Brunswick and Rockland to support passenger excursions and connectivity to the proposed AMTRAK service between Brunswick and Boston and the marine highway along the coast of Maine.
 - Feasibility Studies – Continued work by MDOT on a number of feasibility studies which may lead to projects scheduled for construction in future Six-Year plans. Studies which may impact Westport include the Bath Westerly Access (feasibility of strategies to improve access to Bath and the Sagadahoc Bridge from points west), and the Wiscasset Route 1 Corridor (preliminary engineering and environmental studies of alternative to relieve U.S. Route 1 congestion and improve safety in the Wiscasset area).

- Access Management – MDOT has drafted access management standards that potentially will significantly impact the nature of future development on State and State aid highways.
 - Rural Road Initiative – The Rural Road Initiative, enacted by the Legislature in 1999, creates a new framework for addressing improvement needs other than periodic resurfacing on minor collector roads such Route 144 in Westport. Under this program, the State provides two thirds of the funding cost while the municipality provides the remaining one-third. Funding is awarded on a project-by-project basis, depending upon municipal interest.
3. **Biennial Transportation Improvement Program (BTIP)** – The BTIP for specific projects for the FY 2002/03 biennium is based on the Six Year Plan.
 4. **Regional Transportation Advisory Committee (RTAC)** – The Regional Transportation Advisory Committee for Region 5 advises MDOT on transportation policy issues. Region 5 includes all of Knox and Lincoln Counties and portions of Waldo and Sagadahoc Counties. It also includes several towns in Cumberland County.

Town Roads - Overview

State Route 144, which is classified by the MDOT as a minor collector, is the Town's major traffic artery. It connects Westport island to mainland Wiscasset by a two-lane bridge which crosses the Back River. Route 144 runs from the bridge south about nine miles down the length of the island. Road use on Westport Island is basically limited to Westport residents. Westport is not a tourist attraction. Based on traffic count data obtained from the Maine Department of Transportation, the Average Annual Daily Traffic at the Westport/Wiscasset Town line increased between 1990 and 1995, then declined between 1995 and 1997, as shown below.

<p style="text-align: center;">Table 1 Route 144 AADT at Westport/Wiscasset Town Line</p>				
1990	1992	1995	1996	1997
1140	1110	1630	1540	1470

The AADT on Route 144 was 550 just south of Fowles Point Road (1995 count) and 160 just south of East Shore Road (1997 count).

According to MDOT data, the island has approximately 5.88 miles of State Assisted road, and 19.52 miles of town roads, as shown in Table 2. Most of the latter are gravel. Over the years, the gravel roads have been improved. The current road system allows access to summer homes and camps and to most parts of the island. Fire lanes have been laid out and posted to cover the island. Considerable growth could take place without the need for more roads, but the need for improved roads and increased maintenance would result. Several current subdivisions have their own road systems which connect to the island system.

Westport contracts for snow plowing of its own roads and state Route 144. Private contractors plow the private roads.

The only real safety problem other than excessive speed is the "S" turn on Route 144 as it approaches the Westport Island bridge from Wiscasset. According to MDOT data, within the past three years there have been nine accidents on Route 144 between Fowles Point Road and Greenleaf Cove.

Table 2	
Town Road Mileage (MDOT data)	
Name of Road	Mileage
Route 144	5.88 (State aid)
	2.93 (Town)
Bayshore Road	.91
Bridge Hill Road	.25
Doggetts Road	.5
East Shore Road	2.09
Ferry Road	.20
Fowles Point Road	.97
Greenleaf Road	.83
Greenleaf Cove Road	.62
Harriman Road	.37
Junction Road	.71
Lord Road	.59
Mendes Road	.38
North End Road	1.31
Old Causeway Road	.05
Post Office Road	1.05
Sortwell Road	.76
West Shore Road	3.8
Willis Point Road	.70
?	.25
?	.25
Total	25.4

While traffic congestion is not a problem in Westport, the Town's residents are impacted by summer traffic problems in Wiscasset. It is not uncommon to have traffic backed up on both lanes of Route 1 due to inability to get through Wiscasset's town center. The problem is well documented and the Maine Department of Transportation (MDOT) is studying alternative, long-range solutions which at this time do not involve a bypass through any portion of Westport.

Road Conditions – Historical Perspective

Historically, there were many sections of Westport roads where automobiles might be mired in the Spring of the year. To a great extent these problem areas have been corrected by excavating ditches to drain off water, and adding gravel to stabilize the road surface.

Prior to 1970, Route 144, maintained by the state, was the only fully paved road. This originally was a "tarred" or macadam pavement. Periodically, possibly every year, this was given another spray coating of tar and covered with sand, thus building up the thickness of paved surface. In the early 1970's, some of the Town's gravel roads were paved by a surface treatment of tar. This served to lessen the amount of grading required to maintain the traveled way. However, grading of shoulders was neglected.

From the early 1970's to the 1990's, no follow-up applications of tar and sand were made and, as the growth of weeds and brush and build up of sand accumulated on shoulders, poor drainage caused the hardened surfaces to break up in many areas. There were sections of paving where adequate gravel base and free drainage of water resulted in longer life of the surface pavement. In some areas an additional application of "hot top" or asphalt pavement was made and the road surface was retained. Other areas were left in broken condition or had gravel added and were thereafter treated as gravel roads. However the acknowledged necessity of frequent grading of gravel roads was not done.

Town Road Committee Report

In 1990, The Town of Westport voted to authorize a general survey of each Town road to determine its current general condition, to locate specific areas that cause continuing deterioration, and to estimate the cost for bringing each road to a reasonable standard condition with respect to "safety" and with respect to "ease of routine annual maintenance." The Town of Westport requested this study so that it would have a valid reference for Town residents to use when they vote on appropriating future road budgets and when they vote on where and how these budgets should be allocated.

The result of this research was to firmly establish what Westport residents have long suspected:

1. Westport has a difficult geography for road construction and maintenance.
2. The size of the road budget, and the Town's method of allocating funds, do not achieve a solution to the road problems. The small budget has been divided between all roads in an effort to be "fair," which has meant that no road received enough money to provide any lasting improvement.

The considered opinion of the Road Committee was that the Town should contract to have all roads improved to a condition ready to be paved, and then pave only the roads supported by town vote. This would sufficiently improve roads to the point where maintenance costs could be more accurately estimated for the Budget each year. The maintenance, prior to paving, would primarily be road grading, ditch cleaning, and culvert replacement. When roads are paved, the grading would be confined to just shoulders and ditch slopes.

The Paving Issue

For the year ending December 31, 2000, the Town received about \$125,000 annually in excise taxes. From this, approximately \$52,800 was spent for snow removal, \$50,000 was set aside for tarring, and the rest was used for annual upkeep of the roads including gravel, spring grading, beaver control, culvert replacement and shoulder work. The State highway subsidy, approximately \$30,000 in 2000, is used for improvements or tarring projects. It took the Town two years of saving tarring money and State highway subsidy money to pay for tarring 11,000 feet of the approximately three miles of Route 144 for which the Town is responsible. The Town needs to complete approximately .4 of a mile of Route 144 to Harriman's Point Road.

In recent years, Town tarring projects included the following:

- 1994 Haskell and Doggett Roads. These roads received a shim coat but not a top coat and are now showing signs of breaking down.
- 1995 East Shore Road - north end
- 1996 Lord Road
- 1997 North End Road
- 1998 East Shore Road - south end and Post Office Road by Ron Harrison

In 1998, the State tarred Route 144 from the bridge to just below the Tarbox Inn.

Tarred roads need to be resurfaced about every eight years. Therefore, beginning in 2002, the Town needs to begin an eight-year pavement program in order to keep these roads from falling apart. However, prior to beginning the program, the Town needs to spend approximately \$194,000 to improve other tarred roads including the .4 of a mile of Route 144 (\$53,000) and 2.6 miles of other currently tarred roads (\$141,000) including:

Ferry Road	.2 mile
Greenleaf Road	.5 mile
West Shore Road	.7 mile of north end
West Shore Road	.7 mile of south end
Post Office Road	.4 mile from Newcombs to just past Jean Smith's
Post Office Road	.1 mile near the radio tower

The Town will not be able to pay for these improvements and implement an eight-year paving program using only excise tax money and State highway subsidy money. The Town will either have to borrow money or raise money through property taxes.

Parking

Westport has no parking facilities to speak of other than the parking lot at the Town Office. There does not appear to be a need for additional parking facilities because the Town has no commercial center. The Squire Tarbox Inn has sufficient off road parking for its own purposes.

Air Transportation

Wiscasset Municipal Airport is the only public service airport between Portland and Rockland. It does not provide scheduled commercial service, but serves as a general aviation airport for private aircraft. The airport is located in Wiscasset on Chewonki Neck Road, just off Route 144, not far from the Westport bridge. It is adjacent to the now-decommissioned Maine Yankee Nuclear Plant. Airport facilities include a 3,400-foot runway, two taxi-ways, fuel, hangars, a terminal building and lounge, and an aircraft maintenance facility.

There are 25 aircraft based at the airport (down from 40 ten years ago) including 24 single-engine planes and a jet. There were 20,000 take-offs and landings in 2000, down from 30,000 ten years ago. Wicked Good Aviation is the only fixed-base operator at the airport. It provides aircraft maintenance and fuel, but does not provide flight instruction or aircraft rental.

Rail Transportation

The Maine Department of Transportation has been aggressive in purchasing abandoned railroad rights-of-way for possible future freight and passenger service. MDOT has completed engineering and design work and has begun rehabilitation of the 50+ miles of rail corridor known as the Rockland Branch which runs between Brunswick and Rockland. Rail improvements will be phased in over several years. Safe Handling currently leases the Rockland Branch from MDOT to transport products for Dragon Cement.

When improvements on the Rockland Branch are completed, this rail line will support passenger excursions, connectivity to the AMTRAK service between Brunswick and Boston and to the marine highway along the Maine coast. MDOT is also looking at using the Rockland Branch for commuter rail service. MDOT is negotiating to extend AMTRAK service to Brunswick. Brunswick has purchased the former station site to support the return of passenger rail service. These developments suggest that passenger rail service may someday be reasonably convenient for Westport residents.

Public Transportation System

There is no public transportation in Westport. The major public transportation services available to residents of Westport include Coastal Trans and Concord Trailways and Vermont Transit.

1. **Coastal Trans, Inc. (CTI).** Coastal Trans is a non-profit public transportation service subsidized by various levels of government available on a limited schedule to residents of Knox, Lincoln and Sagadahoc Counties as well as the towns of Brunswick and Harpswell. Coastal Trans' mission is to provide non-emergency transportation services to the low income, elderly, disabled, and general population of its service area. Currently, Coastal Trans provides door-to-door van service between Westport and Damariscotta/Newcastle Monday through Friday. The majority of Coastal Trans' clients are either clients of or receive financial support from the Maine Department of Human Services, but the service is also available to the general public.

2. **Concord Trailways/Vermont Transit.** Concord Trailways currently offers daily trips to Portland, Boston and Logan Airport. Vermont Transit, headquartered in Brunswick, provides intercity bus service between the Midcoast area and areas outside Region 5.

Planning Considerations

1. **Road Paving.** The excise money and State highway subsidy money available to Westport are not sufficient to pay for needed road improvements and implement an eight-year highway road paving program. The Town will either have to raise additional money or undertake fewer road improvements and/or let tarred roads deteriorate.
2. **Access Management.** Westport may benefit in the long run from State-level access management controls along Route 1 because the proposed State rules may limit future congestion that would otherwise result from land development patterns.
3. **Route 1.** Route 1 is the Town's link to the outside world and as such, Town residents have a vested interest in congestion related studies in Wiscasset and Bath.

8. PUBLIC FACILITIES AND SERVICES

There are a number of public facilities and services available to the residents of Westport. Some of these are provided by the Town, but others are made available by volunteers, private groups and organizations, the Town of Wiscasset, and Lincoln County.

Town Government

Westport is governed by the Town Meeting/Selectmen form of government. An Annual Town Meeting is held in March, at which time the Town's voters elect municipal officers and appropriate funds for the coming year. Elected officers and officials and their terms of office are shown below:

Selectmen (3)	3 years (staggered terms)
Town Clerk	1 year
Treasurer	1 year
Tax Collector	1 year
Road Commissioner	3 years
School Board Members	1 year (staggered terms)

Appointed positions include:

- Code Enforcement Officer
- Constable/Shellfish Warden/Animal Control Officer
- Director of Emergency Management
- Harbor Master and Port Warden
- Health Officer
- Plumbing Inspector
- Tree Warden

Appointed boards and committees include:

- Ad Hoc Standing Committee
- Board of Appeals
- Cemetery Committee
- Comprehensive Plan Committee
- Conservation Commission
- Harbor Committee
- Planning Board
- Shellfish Committee

Westport's form of government appears to work well for the community. There does not appear to be a need to change the form of government even as Westport grows over the next ten years.

Municipal Buildings

Municipal buildings include the Town Hall, which was constructed in 1885, as well as the Town Office which was built in 1998. Both the Town Hall and the Town Office are in good condition. The Town Hall has been used for Town Meetings, and is rented by the Town for private gatherings such as receptions, dances and dinners. The Town Office contains a number of offices and several small meeting rooms. Parking lots serve both facilities and are large enough to accommodate most functions.

Fire Protection

Fire protection is provided by the Westport Volunteer Fire Department, a non-profit organization consisting of about 10 active members (down from as many as 25 a decade ago). The Fire Station is located on Route 144 in the center of the island. Vehicles include a 2002 four wheel drive Ford, a 1963 Ford pumper, a 1987 LaFrance pumper, and a 1978 tank truck that will need to be replaced within the next five years at a cost of about \$50,000. With the exception of the tank truck, all of the vehicles are in very good condition. Water is obtained from a small pond off Route 144. Dispatching service is provided by Lincoln County to Fire Department volunteers through pagers. Two of the volunteers are Emergency Medical Technicians. The Fire Department has a mutual aid agreement with all of Lincoln County through the Lincoln County Fire Chiefs Association.

The Fire Department maintains its equipment in good condition and conducts a number of fund-raising efforts throughout the year to minimize the extent to which it must rely on taxes for support.

According to the Fire Chief, the number of calls for service has increased as the Town has grown. There were 59 calls in 2000 (including five structure fires), up from about 39 calls in 1999. Apart from the need to replace the tank truck, the Fire Department appears to have sufficient fire fighting equipment to meet the needs of the community for the next ten years or so. However, there will be a need for an additional 5-8 volunteer firemen.

Library

Westport has no public library, but regularly provides financial support to the Wiscasset Library. All Westport residents can obtain membership at the Wiscasset Library without charge. The Maine State Library also provides services, and the Internet is a wealth of information for anyone that has access to a computer. There does not seem to be a need for a town-based library, either in the foreseeable future or within the next 10 years.

Public Health and Social Services

Westport does not have its own medical facilities, but residents have access to a number of nearby services. Emergency medical services are provided by Wiscasset Ambulance. Hospitals include Mid Coast Hospital in Brunswick, Miles Memorial Hospital in Damariscotta,

MaineGeneral Medical Center in Augusta and Maine Medical Center in Portland. There are several dozen nursing homes and assisted care facilities within 30 miles.

Public health and social services are provided for Westport by state and regional agencies with offices in Lincoln County, as well as some locally-based agencies. In response to annual agency requests, the Town has provided financial support to the following agencies:

- Kno-Wal-Lin: Home nursing care for Knox, Waldo and Lincoln counties. Offices in Damariscotta.
- Senior Spectrum (Wiscasset): “Meals on Wheels” and other services for the elderly.
- Coastal Economic Development (Brunswick): Regional anti-poverty agencies using state and federal funds.
- Coastal Trans. (Damariscotta): Non-emergency (medical and non-medical) transportation for needy and elderly.
- New Hope for Women (Damariscotta): Spousal abuse assistance.
- Jessie Albert Dental Clinic (Bath): Dental clinic which also serves the needy.
- Lincoln County Animal Shelter (Edgecomb): Shelter for strays.

Police Protection

Westport does not have its own police force. Law enforcement is provided by the Lincoln County Sheriff’s Department out of Wiscasset and the Maine State Police. The Lincoln County Sheriff’s Department has 13 full-time patrolmen and three full-time detectives.

Public Road Maintenance

Wiscasset does not have its own public works department. The Town contracts for snow plowing of its roads and State Route 144. The Town also contracts for road improvement work. Westport is too small a town to have its own public works department, so contracting appears to be a cost effective alternative for providing road work and snow plowing services. It is not likely that the Town’s population will grow enough to justify having a public works department.

Solid Waste

Westport pays an annual fee to the Town of Wiscasset (\$54,688 in 2000) so that its residents can dispose of their solid waste at the Wiscasset Waste Transfer Station. The fee is population-based, and varies depending upon tipping fees charged to the Town of Wiscasset (currently about \$53/ton). Residents are individually responsible for delivery of solid waste to the transfer station.

Lincoln County operates a recycling station not far from the Wiscasset Transfer Station. There is no requirement that Westport residents participate in recycling. Incentives for recycling include personal commitment to the environment and the knowledge that recycling may reduce trash disposal costs charged by the Town of Wiscasset to the Town of Westport.

Based on data obtained from the State Planning Office, in the year 2000 there were 4,593.15 tons of waste generated in the Wiscasset region which includes Wiscasset, Westport and Alna. Of this amount, 2,651 tons were incinerated, 1,825.15 tons were recycled, and 117 tons were landfilled. The adjusted recycling rate was 44.7%.

Schools

Westport has not had its own school since a one-room schoolhouse closed in 1962. For the past 40 years, students have been transported by Town buses to the Wiscasset school system where they attend as tuition students. Wiscasset's schools include the primary school (grades K-5), the middle school (grades 6-8) and the high school (grades 9-12). Wiscasset has applied to the Maine Department of Education for funds to renovate and possibly expand the middle school.

During the 2001-2002 year, there were 977 students enrolled in the Wiscasset system including 109 from Westport (11% of the total), 67 7th and 8th graders from Edgecomb, 110 students from Alna, and 42 students from a variety of other communities. Altogether, non-resident enrollment accounts for 34% of the total Wiscasset school system enrollment.

Not all Westport students attend Wiscasset schools. As of February 1, 2001, a total of eight students attended other schools including Brunswick (3), Center for Teaching and Learning (1), Kents Hill (1), Morse (1) and Sheepscot Valley (2). Westport's 2001 student population (117) is higher than it was in 1985 (85) and 1990 (106).

The Town of Westport is currently exploring several options for meeting its long-range school needs. These include staying with the Wiscasset system or building a new school with other tuition towns. Some of the issues facing Westport include:

- A lack of representation on the Wiscasset School Board or other effective means of representation;
- Wiscasset's high tuition costs (Wiscasset charges the State allowable tuition rates plus administrative costs associated with transportation as well as special education); and
- Potential for declining enrollments. While the number of school-age children has increased over the past 20 years as Westport has grown, the number of children under five years of age is now less than it was in 1980, as shown in the table below. Assuming that the number of pre-school children remains about the same over the next 10 years, school enrollment will continue to decline (the total number of children in the 5-17 category would decline to about 83 in 13 years).

Numbers of Children by Major Age Category			
	Under 5	5-17	Total
1980	34	79	113
1990	51	105	156
2000	32	135	167

Source: U.S. Census, 1980, 1990, 2000

The following is a summary of Westport's school enrollment by grade for the period 1991-2001.

Westport October Enrollments Total Resident Enrollment											
Grade	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Elem. Spec.	1			2	1		1	1	2	2	
K	8	8	4	8	8	6	12	12	5	6	3
1	13	15	8	6	11	11	7	8	14	7	6
2	7	8	16	8	3	12	11	10	13	11	9
3	7	8	9	13	11	3	13	12	7	12	11
4	8	9	9	8	14	11	2	3	11	8	12
5	12	8	9	9	9	14	11	11	11	10	10
6	10	10	9	8	9	8	15	15	4	9	9
7	7	10	11	7	11	5	9	9	11	4	11
8	6	6	12	11	9	8	7	7	13	11	3
Total Elem	79	82	87	80	86	78	88	88	91	80	76
9	4	7	6	6	11	5	6	7	6	13	13
10	7	5	7	5	7	9	6	4	9	7	11
11	6	6	5	6	5	8	10	10	5	7	9
12	5	5	7	3	7	4	8	9	6	7	7
Sec Spec	2	3	2	3	4	2	2	1	2	3	2
Total Sec	24	26	27	23	34	28	32	31	28	37	42
Total	103	108	114	103	120	106	120	119	119	117	118

Source: Maine Department of Education

Recreation

Westport does not have a full range of recreational facilities. The customary recreational facilities normally associated with a school location, such as ball fields and playgrounds, do not exist because Westport relies upon Wiscasset for its school needs. Wiscasset has tennis courts,

outside basketball courts, a baseball field, a softball field, and a community playground which are open to the residents of the surrounding towns. The Wiscasset Recreation Department sponsors trips and activities during the year which are available to Westport residents on a "space available" basis.

Other regional facilities include two YMCA's and their associated programs in Bath and Boothbay.

Westport residents have access to the water at Ferry Boat Landing. The Town owns eight acres of land with 1,200 feet of waterfront at the north end of the island at Clough Point.

Informal recreational opportunities abound including boating, swimming, fishing, clamming, hiking, hunting, snowshoeing, cross-country skiing, snowmobiling, skating and sledding.

9. REGIONAL COORDINATION

Westport is linked in a number of ways to other nearby communities. In particular, Westport benefits from and supports the role of Wiscasset as a Service Center for the immediate region. The following is a summary of Westport's regional coordination/cooperation efforts. This Plan envisions that these efforts will continue to be supported, and that they will benefit all participating communities.

Fire Protection: Dispatching service is provided by Lincoln County to the Fire Department volunteers through pagers. The Fire Department has mutual aid agreements with all of Lincoln County through the Lincoln County Fire Chiefs Association.

Library: Westport regularly provides financial support to the Wiscasset Library; Westport residents can obtain membership at no charge.

Public Health and Social Services: Westport provides financial support to a number of public health and social service agencies which, in turn, provide assistance to Westport residents. These agencies include Kno-Wal-Lin, Senior Spectrum, Coastal Economic Development, Coastal Trans, New Hope for Women, Jessie Albert Dental Clinic, and Lincoln County Animal Shelter.

Schools: Westport buses most of its students to the Wiscasset school system. School Committee members from Westport have been meeting with officials from Edgecomb, Woolwich, Arrowsic and Georgetown to explore options for the future education of Westport children.

Solid Waste: Westport pays an annual fee to Wiscasset so that Westport residents can take their solid waste to the Wiscasset Waste Transfer Station. Town residents also use the nearby Lincoln County recycling facility located near the Wiscasset Waste Transfer Station.

Recreational Facilities: Westport relies on Wiscasset for the use of various recreational facilities which are available to Westport residents through the school system.

10. FISCAL CAPACITY

Westport does not have any industrial or commercial base from which to draw revenue. By and large all money raised by Westport derives from residential property owners. Given past trends, there is little likelihood of any increased assistance from the state in the near future. On the contrary, Westport's increased state valuation has led to a reduction in state financial assistance for education. Under these circumstances, every effort must be made by Westport's officials and representatives to hold the line on expenditures. This is one reason why there is a need to develop a Capital Investment Program to review and budget for significant anticipated town needs well in advance. There is also a need for the School Committee to examine all options for Westport, in cooperation with the other towns who send tuition students to Wiscasset, to deal with our financially costly dependence on Wiscasset schools, without diminishing the quality of our children's education.

Rising expenditures will continue to be a burden for the community, since there is little give in the town's fiscal situation. Westport offers virtually no public services beyond public education, road maintenance and snow removal, and fire protection. Westport has no indebtedness. In view of the island's small size and limited fiscal capacity, minimizing debt seems like a sound policy. Continuing increases in education costs, and possibly a larger fee for Westport if the costs of the Wiscasset Transfer Station continue to grow, will in all likelihood mean further increases in the island's taxes. Considering that Westport has virtually no commercial or industrial base, it is evident that the funds will have to continue to come from personal property taxes. Under the circumstances, the time has probably arrived for the State Legislature to tackle funding the costs of education by some more equitable means than property taxes.

Historical Valuations and Taxes

Both the Town of Westport and the State of Maine compute valuations for the Town. The State compiles and adjusts its figures to reflect actual property transactions, and hence market values. Westport's valuations will reflect market value only in those years in which the Town conducts a revaluation and adjusts values to reflect market conditions. State valuation figures for any given year are two years old, and thus do not reflect recent changes in overall property values. State law requires that when a municipality's valuation drops below 70% of the State valuation, a revaluation must be undertaken.

Table 1 provides a summary of Westport's State valuation, municipal valuation, the tax assessment and tax rate for the years 1993 through 2000, as reflected in municipal valuations prepared by the State Bureau of Taxation and in municipal valuation returns.

During the period 1993 through 2000, Westport's assessed valuation rose from \$77.1 million to \$85.2 million, or 11%. A high valuation does not necessarily mean that taxes are high. A community with a high valuation can raise a given sum of money with a relatively low tax rate, whereas a community with a low valuation can raise the same amount of money only with a higher tax rate. In this case, however, during the 1993-00 period, Westport's tax assessment rose from \$524,184 to \$988,839, an increase of 89%.

Table 1
Historical Valuation And Taxes

	State Valuation	Municipal Valuation	Westport Tax Assessment	Tax Rate
1993	\$72,100,000	\$77,085,908	\$524,184	6.8
1995	\$72,050,000	\$79,263,442	\$578,623	7.3
1997	\$72,800,000	\$82,092,456	\$747,042	9.1
1999	\$91,050,000	\$82,906,437	\$870,519	10.5
2000	\$79,650,000	\$85,244,747	\$988,839	11.16

Source: Municipal Valuation Returns Statistical Summary, 1993-2000, State Bureau of Taxation

Valuation Comparisons

State valuation comparisons and per capita valuations are two measures of a community's wealth relative to other communities. Table 2 contains a summary of State valuations and per capita valuations for Westport, Edgecomb, Wiscasset, Lincoln County and the State. In round figures, Westport's per capita valuation (\$107,000) is almost twice as high as the State average (\$57,000), but is only slightly above the average for Lincoln County (\$105,000). Both Edgecomb and Wiscasset have smaller per capita valuations than Westport.

Table 2
Comparative Valuation Figures

	2000 Population	2000 State Valuation	Full Value Per Capita
Westport	745	\$79,650,000	\$106,913
Edgecomb	1,090	\$92,000,000	\$84,403
Wiscasset	3,603	\$344,900,000	\$95,726
Lincoln County	30,357	\$3,182,550,000	\$104,837
Maine	1,274,923	\$72,302,650,000	\$56,711

Source: Municipal Valuation Returns Statistical Summary, 2000, State Bureau of Taxation and U.S. Census, 2000

Exempt Property

Table 3 provides an overview of tax exempt property in Westport, Edgecomb, Wiscasset, Lincoln County and the State of Maine. The value of total exemptions in Westport as a percentage of the total municipal valuation (1%) is lower than in all comparison jurisdictions. The average value of exemptions in Lincoln County is 6% of total valuations; the average for the State is 17%. The low percentage in Westport is in part a reflection of the Town's lack of public facilities and services.

Table 3
Comparative Tax Exemptions - 2000

	Total Municipal Valuations	Total Exemptions	% of Valuation
Westport	\$85,244,747	\$863,955	1%
Edgecomb	\$82,959,776	\$2,806,049	3%
Wiscasset	\$316,162,607	\$23,605,300	7%
Lincoln County	\$3,180,472,897	\$188,117,615	6%
Maine	\$73,462,620,511	\$12,493,894,733	17%

Source: Municipal Valuation Returns Statistical Summary, 2000, State Bureau of Taxation

Property Tax Burden

The Maine Municipal Association has compiled comparative tax burdens for municipalities, based on the 1999 full value tax rate. Two measures are used to illustrate the tax burden at the taxpayer level; the tax paid on a median value home and tax paid as a percent of the median household income. In the Property Tax Burden column in Table 4, the numbers represent statewide rankings where 1 is the highest tax burden, and 487 is the lowest. The tax burden in Westport (240) is lower than in Edgecomb (96) and Wiscasset (88).

Table 4

Property Tax Burden Indicators

	Full Value Mil Rate	Median Household Income	Median Home Value	Taxes Paid Median Home	Tax as % of Household Income	Property Tax Burden
Westport	10.76	\$42,149	\$148,993	\$1,603	3.8%	240
Edgecomb	14.82	\$41,967	\$140,098	\$2,076	4.9%	96
Wiscasset	14.84	\$35,575	\$120,652	\$1,791	5.0%	88

Source: 2000 Property Tax Burden Indicators for Municipalities in Maine, Maine Municipal Association

Town Revenues and Expenditures

Table 5 contains a summary of municipal revenues and expenditures for the period 1995 through 1999, as reflected in the Town's annual reports. Overall, revenues have kept pace with expenditures, primarily because of increases in the local tax. In 1995, property tax revenues provided about 85% of the Town's revenues. The figure for 1999 was somewhat higher (89%).

Between 1995 and 1999, taxes increased by 46%. The single largest expenditure item is education. Educational expenses increased 30% during the 1995-99 period, accounting for 62% of all expenditures in 1995 and 69% of all expenditures in 1999.

Table 5
Westport Revenues and Expenditures
For the Year Ending December 31

	1995	1996	1997	1998	1999	2000
Revenues						
Taxes	674,599	797,135	852,885	873,182	983,346	
Licenses and Permits	3,651	1,973	2,628	4,675	5,939	
Intergovern. Revenue	100,217	80,595	83,727	106,444	107,569	
Interest	7,284	6,961	7,302	8,257	7,769	
Donation	9,008	6,108	3,008	5,424	2,013	
Other Revenues	629	4,061	6,200	9,001	2,530	
Total Revenue	795,388	896,833	955,750	1,006,983	1,109,166	
Expenditures						
General Government	49,659	61,478	50,452	57,275	49,561	
Protection	7,234	5,061	5,763	9,676	9,198	
Highway	110,629	120,672	101,315	123,003	77,367	
Health and Sanitation	26,534	26,038	29,843	32,103	58,096	
Social, Human Services	8,781	7,640	9,294	7,558	9,570	
Education	517,230	504,843	529,520	590,587	670,887	
Debt Service		13,875	12,694	13,469	20,662	
Employee Benefits	4,888	3,096	5,906	5,486	5,899	
Special Assessments	50,843	54,491	59,974	65,672	75,953	
Misc.		489	2,490	6,134	1,086	
Capital Improvements	64,339	3,294	124,627	64,554	0	
Total Expenditures	840,137	800,977	931,878	975,517	978,279	
Excess						
Revenues/Expenses	(44,749)	95,856	23,872	31,466	130,887	
Other Financing Sources	35,000	0	0	0	0	
Adjusted Excess Revenue	(9,749)	95,856	23,872	31,466	130,887	
Fund Balance, Dec. 31	359,717	455,573	479,445	510,911	641,798	

11. CAPITAL INVESTMENT PLAN

A key element of any plan for the future of Westport is the balancing of the Town's needs and wishes with the ability to pay for them. A capital investment plan develops projected capital expenditures for improvements to roads, buildings, equipment and other Town infrastructure that will be needed to support Town services in the next few years, and indicates the timing and funding sources which can be used for them. It also provides a basis for residents and town officials to discuss major issues and the options available for dealing with them, including priorities of needs, timing of projects, and ability and willingness to pay for them.

Obviously Westport can simply borrow for needed improvements, but there are alternatives. The principal possibilities are:

1. Level funding, which is spending only that amount available from the annual appropriation;
2. Reserve funds, which is the use of funds previously set aside for specific purposes; and
3. Grant monies, if the Town is fortunate enough to qualify.

Westport has a number of reserve funds which it uses to address capital needs. The Town's reserve funds, and the amounts in them as of 2001, include:

Town Office Building:	\$5,000
Old Town Hall:	\$5,000
School Bus:	\$31,233
Fire Truck:	\$9,705
Town Roads:	\$30,000
Municipal Landing:	\$9,772

The Comprehensive Plan Committee recommends that the Selectmen develop a capital investment plan by appointing a committee of residents qualified in areas such as construction, fire protection, roads, finance, education, real estate, and planning. The Committee should be charged with the task of thoroughly investigating and recommending specific courses of action for renovation, expansion, replacement or substitution of capital assets and/or existing or proposed facilities for the Town of Westport. A capital investment plan can serve to:

1. Help smooth out abrupt changes in the property tax burden by providing a multi-year view of projected capital expenses. This would let Westport anticipate future projects and prepare for their financial impact.
2. Enable a more focussed discussion of priorities by permitting examination of all major projects under consideration, including their projected costs and timing, rather than looking at such projects one by one, as the need for each develops.
3. Serve as a tool for current year budget development in evaluating the impact of deferring proposed projects, reserving funds for future projects, or applying various other financing alternatives.

4. Remain a flexible working document by periodic updates as new information becomes known.

A capital investment plan generally focuses on major capital needs in excess of a specified amount (such as \$1,500). The following is an initial summary of capital needs prepared by the Comprehensive Plan Committee. The list will need to be refined and updated by the committee appointed by the Selectmen.

Draft Summary of Major Capital Needs				
Capital Need	Priority	Time Frame	Cost	Funding Source(s)
1. Fire Truck	High	1-5 years	\$50,000	Town**, Fire Dept.
2. School Buse(s)	High	1-3 years	\$52,000	Town**
3. Old Town Hall	Medium	5-8 years	Unknown	Town
4. Fire House	High	1-3 years	Unknown	Town, Fire Dept.
5. Salt Shed	Low	5+ years	Unknown	Town, State \$
6. Municipal Landing	High	Unknown	Unknown	Town**, Boat Excise \$
7. Church	Medium	3-5 years	Unknown	Community Association
8. Tarred Roads	High	1-3 Years	\$194,000	Town

** Reserve funds

Notes to Table

1. Fire Truck: This includes replacement of the 1978 tank truck. The Town adds money each year to a fire truck reserve fund. As of Dec. 31, 2001, there was \$9,705 in this account.
2. School Buses: The Town adds money each year to a reserve fund for school bus replacement. As of Dec. 31, 2001, there was \$31,233 in this account.
4. Fire House: There is a need to replace the old boiler.
5. Salt Shed: This will depend upon the availability of State cost-sharing money.
6. Municipal Landing: The Town has been placing boat excise funds in a reserve fund for potential purchase of land at the turn-around at Ferry Landing. As of Dec. 31, 2001, there was \$9,772 in this account.
8. Tarred Roads: This includes fixing 0.4 mile of Route 144 and 2.6 miles of other currently tarred roads.

All of these items are optional in the sense that each would require approval by the Town Meeting. If a majority of the Town's voters favors a project on the above list, it will eventually be carried out. If not, it will be deferred or abandoned. The above projects include some short-term investments, such as improving tarred roads, as well as others such as the salt shed which may not be implemented for a number of years.

12. SUMMARY OF FINDINGS

Natural Resources

1. Soils. The soils of Westport belong to the Lyman-Tunbridge-rock outcrop association and have severe limitations for septic tank absorption fields because of shallow depth to bedrock.
2. Groundwater. The source of fresh water for Westport is derived exclusively from the island's rainfall. The island's future development is constrained by the limited recharge capability of the island's soils, the potential of nitrate-nitrogen contamination from residual wastewater, and salt water intrusion in some parts of the island. There is a need to protect the quantity and quality of the island's groundwater. It is not feasible or practical to develop a public water supply system, or to extend water lines from Wiscasset.
3. Wildlife/Marine Resources. There is a diverse array of wildlife resources on Westport and in the immediate marine environment.

Population

1. Growth. Most of the Town's population growth has occurred during the past 30 years. It is likely that Westport's population will continue to grow at about the same rate as Lincoln County.
2. Composition. There has been a steady decline in the percentage of children under 5 years of age.
3. Income and Education. Westport has higher per capita and median household incomes, and higher levels of educational attainment, than Lincoln County or the State.

Economy

1. Employment. There are very few employment opportunities on the island. Westport relies upon nearby service centers for job opportunities. Over 90% of the work force is employed off-island.
2. Agriculture/Forestry. There is no longer any significant commercial agriculture or forestry activity on the island.
3. Bedroom Community. Westport fits the classic definition of a bedroom community. There is virtually no tax revenue derived from business activity. Westport offers virtually no significant attractions for tourists. The island's location off the beaten track, its small population and the high cost of land, combine to make significant commercial development highly unlikely. Westport residents have easy access to commercial businesses in nearby service centers.

Land Use

1. Residential Development. There have been few subdivisions of any significance since 1970, but there has been a substantial increase in the number of lots, many of which have not been reviewed as part of a subdivision.
2. Vacant Parcels. There are 260 vacant parcels of land, many of which could be developed as home sites in the coming years.
3. Seasonal Residents. In the year 2000, about 34% of all housing on the island was seasonal (about 174 homes).
4. Commercial and Industrial Use. There are about 62 small businesses that are active on Westport. Most of these are home-based businesses. Since 1974, there has been little change in the commercial use of land or the business use of buildings.
5. Maine Yankee. Maine Yankee is no longer functioning as a nuclear power plant, but there are serious concerns about the storage of spent fuel (over 900 tons), the security of the plant, and the need for an evacuation plan in the event of an accidental release of radioactivity from spent fuel.
6. Regional Development. There is the potential that Westport will be impacted by development in the nearby region. While the possibility of a bypass through Westport appears to have diminished, Westport could be impacted by rail passenger service between Brunswick and Rockland, redevelopment of the Maine Yankee site, and development/ change on Route 144 between the bridge and Route 1.
7. Growth/Rural Area. There is no compelling justification for the establishment of a growth area in Westport. There is no town center around which new residential growth could be concentrated. There are no town facilities that could service such facilities. Given Westport's limited tax base (virtually all residential), the Town is ill-equipped financially to provide growth-related services. The Town's 2001 Aquifer Delineation and Soil Carrying Capacity study documents the limitation of the island's soils and ground water to support intense development. Finally, Westport is located close to a service center that can provide growth-related services. For these reasons, it makes sense to designate the entire community as a rural area.
8. Land Use Management. There is a need to develop and/or refine an effective land use management system to ensure that future growth is in keeping with the rural character of the community and that it minimizes adverse impacts on the Town's natural resources. The need includes an update of the Town's subdivision regulations, the development of a site plan review ordinance, and standards to ensure that lot-by-lot development that is not part of a subdivision does not adversely impact ground water supplies.

Housing

1. Housing Stock. Given past trends, Westport can anticipate an increase of 107-142 housing units over the next 10 years. This growth does not translate directly to population increases because many of the new housing units will be seasonal dwellings.
2. Affordable Housing. The current housing stock appears to meet or exceed the need for low cost housing for low and very low income people. Year-round rental rates for mobile homes are now between \$400 per month (two bedroom) and \$500 per month (three bedroom). There are about 45 mobile homes on the island. Mobile homes are allowed throughout the community.

Transportation

1. Paving. There is a need to begin a pavement program to keep existing tarred roads from falling apart. The Town will not be able to pay for improvements and implement a paving program using only excise tax money and State highway subsidy money.
2. Route 144. There is a need to ensure that development along Route 144 is in keeping with the rural character of the community.

Public Facilities

1. Regional Linkages. Westport benefits from and supports the role of Wiscasset as a service center for many of its public services and facilities including library services, solid waste disposal, schools and recreation. The Town also supports a number of regional public health and social services agencies which, in turn, provide assistance to Westport residents.
2. School System. There are continuing concerns related to whether Westport should continue to rely on the Wiscasset school system or consider other alternatives.

Fiscal Capacity

1. Capital Investment Plan. The Town has a number of reserve funds which it uses to address long-range capital needs. However, there is a need to refine the summary of capital needs included in this plan.

13. GOALS, POLICIES, STRATEGIES

ECONOMY

Goals:

1. Promote an economic climate which increases job opportunities and overall economic well-being, consistent with Westport's small-town atmosphere.

Policies	Strategies	Responsibility/Date
1. <u>Non-Residential Development</u> . Ensure that future non-residential development does not threaten the small-town nature of Westport and does not adversely impact the quality of the Town's water resources including ground water, by way of wastewater disposal or other adverse impacts.	A. <u>Small Businesses</u> . Continue to allow small businesses in the community, but enact a site plan review ordinance to ensure that new businesses do not adversely impact the Town's water resources including ground water,	Town Meeting/Planning Board/2003
	B. <u>Home Occupations</u> . Continue to allow home occupations throughout the community, but provide for site plan review of any water use or waste water disposal beyond normal household use, as well as standards for safe access into and out of the site, the scale and intensity of the home occupation, and the impact of the home occupation on abutting properties in terms of noise and hours of operation.	Town Meeting/Planning Board/2003
	C. <u>Site Plan Review Ordinance</u> . Adopt a site plan review ordinance for non-residential development. Include provisions regulating size and type of structure, as well as impacts on Town facilities and services. Include environmental standards aimed at minimizing environmental impacts and preserving significant resources, including ground water resources, to the maximum extent possible.	Town Meeting/Planning Board/2003
	D. <u>Regional Context</u> . Continue to rely upon nearby Service Centers such as Wiscasset, to provide major employment opportunities as well as places to shop and do business.	Town/Ongoing

HOUSING

Goals:

1. Encourage and promote affordable, decent housing opportunities for all citizens of Westport.

Policies	Strategies	Responsibility/Date
1. <u>Incentives</u> . Provide developers with incentives for construction of affordable housing.	A. <u>Subdivision Standards</u> . Amend the Town's Subdivision Standards and Procedures to require a minimum of 10% of new residential development in Westport containing 10 or more lots to be constructed and maintained as affordable housing.	Town Meeting/Planning Board/2003
2. <u>Environmental Protection and Housing Costs</u> . Assure that the Town's land use regulations balance the need to protect the environment and character of Westport with the impact of these regulations on housing costs. The intent is to permit the development of modestly priced housing.	A. <u>Mobile Homes</u> . Treat manufacturing housing meeting Federal and/or State construction standards as a single-family home subject to the same regulations as a single-family dwelling. B. <u>Rental Housing</u> . Allow and encourage private owners to create additional rental housing by conversion of existing buildings and new construction provided minimum acceptable standards for acreage, water and sewer are met.	Town/Ongoing Town /Ongoing
3. <u>Affordable Housing Actions</u> . Undertake local initiatives aimed at providing affordable housing opportunities.	A. <u>Housing Committee</u> . Establish a Housing Committee to assist persons interested in residing in Westport who are having problems locating affordable accommodations. The Housing Committee would also serve as a point of contact for Westport with organizations in the surrounding communities working to alleviate problems of affordable housing. B. <u>Financial Programs</u> . Investigate Federal and State financial aid programs to support development of affordable housing.	Selectmen/2002 Housing Committee/Ongoing

Policies	Strategies	Responsibility/Date
	C. <u>Monitoring</u> . Monitor the availability of affordable housing to meet the needs of lower income families.	Housing Committee/Ongoing
	D. <u>Elderly Housing Assistance</u> . Continue to rely upon regional facilities in Service Centers to provide congregate care, low income elderly housing, and other forms of housing assistance for the elderly.	Town/Ongoing

MARINE RESOURCES

Goals:

1. Address the State's coastal policies
2. Protect the State's marine resources industry, ports and harbors from incompatible development and promote access to the shore for commercial fishermen and the public.

Policies	Strategies	Responsibility/Date
1. <u>Port and Harbor Development</u> (coastal policy). Promote the maintenance, development and revitalization of the State's ports and harbors for fishing, transportation and recreation.	A. <u>Port and Harbor Development</u> . Not applicable. <i>Westport Island has no ports or harbors per se. One of six Westport fishing boats uses a neighbor's private dock; the rest have their own facilities. There is a facility (Ferry Landing) for small trailerable boats. This landing also includes some parking for cars/trailers, but only along the roadway.</i>	Not applicable
2. <u>Marine Resource Management</u> (coastal policy). Manage the marine environment and its related resources to preserve and improve the ecological integrity and diversity of marine communities and habitats, to expand our understanding of the	A. <u>Shellfish Ordinance</u> . Take steps to update and file the Town's Shellfish Ordinance with the State so that the ordinance can be administered in accordance with State law. <i>No appreciable harvest has taken place on the island for a number of years, although there has been some recreational harvesting as well as worming.</i>	Shellfish Committee/2003

Policies	Strategies	Responsibility/Date
communities and habitats, to expand our understanding of the productivity of the Gulf of Maine and coastal waters and to enhance the economic value of the State's renewable marine resources.	<p>B. <u>Upper Mark Island</u>. Continue to include Upper Mark Island in the Resource Protection District.</p> <p><i>This small, uninhabited island is listed by the Department of Inland Fisheries and Wildlife as a Colonial Nesting Seabird Island.</i></p>	Town/Ongoing
3. <u>Shoreline Management and Access</u> (coastal policy). Support shoreline management that gives preference to water-dependent uses over other uses, that promotes public access to the shoreline and that considers the cumulative effects of development on coastal resources	<p>A. <u>Clough Point Park</u>. Continue to make Clough Point Park available to the public.</p> <p><i>This eight-acre park at the north end of the island has 1,200 feet of waterfront. It overlooks Fort Edgecomb and Wiscasset Harbor. Walking trails have been cut by members of the Recreation Committee and volunteers, and a half dozen donated picnic tables are in place.</i></p> <p>B. <u>Other Access Points</u>. Continue to provide public access in other areas.</p> <p><i>The aforementioned marina and public landing at Ferry Road give access to the surrounding waters. Eighty-five acres of shoreline land on the western side of the island are in conservation easement.</i></p> <p>C. <u>Shoreland Zoning</u>. Continue to protect other shoreland areas through the Town's Shoreland Zoning Ordinance.</p> <p><i>Much of the rest of the land that falls within the shore land zone is privately owned. Development along the shoreline is regulated by the Town's Shoreland Zoning Ordinance.</i></p>	<p>Town/Selectmen/Ongoing</p> <p>Town/Selectmen/Ongoing</p> <p>Town/Selectmen/Ongoing</p>

Policies	Strategies	Responsibility/Date
4. <u>Hazard Area Development</u> (coastal policy). Discourage growth and new development in coastal areas where, because of coastal storms, flooding, landslides or sea-level rise, it is hazardous to human health and safety;	<p>A. <u>Hazard Area Development</u>. Enact a floodplain management ordinance and join the floodplain management program.</p> <p><i>Past experience indicates that there is little danger of flooding on Westport; only a single home has suffered storm/tidal damage in recent years. The state at one time advised that there were several areas that appeared vulnerable to flooding, but examination of these sites by Westport Planning Board members did not confirm the likelihood. The Town's Shoreland Zoning Ordinance will contribute to protection against hazard area development.</i></p>	Town Meeting/Planning Board/2006
5. <u>State and Local Cooperative Management</u> (coastal policy). Encourage and support cooperative state and municipal management of coastal resources;	<p>A. <u>State and Local Cooperative Management</u>. Continue to work with state agencies on a wide variety of topics affecting the coastal environment including the Departments of Environmental Protection (shoreland zoning ordinance), Marine Resources (Shellfish Management) and Transportation (the Regional Transportation Advisory Committee and the Wiscasset Public Advisory Committee).</p> <p>B. <u>Maine Yankee Evacuation Plan</u>. Encourage State officials to develop, or to require the development of, a warning and evacuation plan for Maine Yankee.</p> <p><i>Even though Maine Yankee is no longer producing power, there is a risk to the general public in the event that there is an accidental release of radioactivity from spent fuel. There are over 900 tons of spent fuel on the site; this is 3% of the country's total.</i></p> <p>C. <u>Maine Yankee Security</u>. Encourage State officials to develop, or to require the development of, adequate security precautions to minimize terrorist threats to Maine Yankee.</p>	<p>Selectmen/Planning Board/Ongoing</p> <p>Selectmen/Ongoing</p> <p>Selectmen/Ongoing</p>

Policies	Strategies	Responsibility/Date
6. <u>Scenic and Natural Areas Protection</u> (coastal Policy). Protect and manage critical habitat and natural areas of state and national significance and maintain the scenic beauty and character of the coast even in areas where development occurs.	<p>A. <u>Shoreland Zoning</u>. Continue strict administration of the Town's Shoreland Zoning Ordinance.</p> <p><i>Shoreline zoning and strict enforcement of State Plumbing Code will protect many of our natural areas. Westport, although an island, has only a few views of the water from its main roads and these are all on private land. Keeping tree cutting to selective versus clear cutting and mowing open fields should help to maintain the island's charm.</i></p> <p>B. <u>Landowner Cooperation</u>. Encourage landowners to preserve the island's character.</p> <p><i>Encouraging owners to keep land in tree growth or to put land into conservation easements are other recommended ways of preserving the island's character.</i></p> <p>C. <u>Route 144</u>. Consider making Route 144, as well as East and West Shore Roads, scenic byways.</p>	<p>Selectmen/Code Enforcement Officer/Planning Board/Ongoing</p> <p>Planning Board/Ongoing</p> <p>Selectmen/2003</p>
7. <u>Recreation and Tourism</u> (coastal policy). Expand the opportunities for outdoor recreation and encourage appropriate coastal tourist activities and development.	<p>A. <u>Recreational Opportunities</u>. Retain existing recreational opportunities offered by public facilities and encourage landowners to continue to make their land available for outdoor recreation.</p> <p><i>Recreation on Westport takes many forms. Clough Point Park with its walks and picnic tables, a basketball backstop at the Town Hall, and the Ferry Landing launching area are some of the most obvious. The Community Association and other volunteers organize a regular schedule of social events on the island.</i></p> <p><i>We do not have a school on Westport. Therefore, we do not have the usual playing fields that towns with schools enjoy.</i></p>	Selectmen/Planning Board/Ongoing

Policies	Strategies	Responsibility/Date
	<p><i>We do have boating, swimming, fishing, hunting, snowmobiling, cross country skiing, skating, hiking, and sledding as activities. Facilities not on Westport Island are readily accessible in surrounding towns - Recreation Department in Wiscasset, YMCA's in Bath and Boothbay Harbor.</i></p> <p><i>As far as tourism is concerned, Westport has no public beaches or other tourist attractions to bring travelers to the island, with the exception of the Squire Tarbox Inn and Restaurant, which caters to a very small clientele. Our summer population increases by approximately 50% due to people vacationing at private summer homes on the island. These visitors, many of whom have been coming to Westport for years, also participate in firehouse suppers, and other aspects of the island's community life.</i></p>	
<p>8. <u>Water Quality</u>. Restore and maintain the quality of our fresh, marine and estuarine waters to allow for the broadest possible diversity of public and private uses.</p>	<p>A. See Natural Resources.</p> <p><i>To the best of our knowledge, Westport's only source of fresh water is that which falls from the sky and seeps underground through a network of fractures in the island's core of rock. Experts from the state and elsewhere consider it unlikely that any fresh water is also coming to Westport via deep aquifers from Wiscasset, Edgecomb or other off-island sources, but to determine that definitively would be prohibitively expensive. The bottom line is that protection of the island's water supply is paramount. The fractured rock aquifers which the island has are more vulnerable to spreading pollutants than the sand/gravel aquifers more common on the mainland, which tend to filter out pollutants. During dry summers, a number of wells run dry. Underground steel fuel tanks are a potential source of ground water pollution, but to the best of our knowledge, all have been removed. There is some salt water intrusion into a few wells near the shoreline. Such intrusion is often a consequence of high demands on wells located at the edges of the underground fresh water sources, adjacent</i></p>	<p>Selectmen/Ongoing</p>

Policies	Strategies	Responsibility/Date
	<p><i>to the surrounding salt water. Regulating growth in such areas, which the Shoreline Zoning Ordinance does, will contribute to a solution. Prohibiting industrial development by companies using large amounts of water would also help. Careful placement of septic tanks, and prohibiting building on steep slopes and/or shallow soils will also reduce the potential for pollution, as will limiting salt in road sand and requiring hydrological studies by developers. Shoreline zoning requirements also help us protect our fresh water ponds and streams.</i></p>	
<p>9. <u>Air Quality</u>. Restore and maintain coastal air quality to protect the health of citizens and visitors and to protect enjoyment of the natural beauty and maritime characteristics of the Maine coast.</p>	<p>A. Air Quality. Monitor state initiatives and regional development proposals that could impact Westport. Represent the concerns of Westport as appropriate.</p> <p><i>Westport feels that air quality is of a national/regional scope. There is little we can do about acid rain. We cannot change prevailing winds. We have no dumps on the island so this helps on a local level. Recycling is becoming a household word and, with Westport's participation, Lincoln County is actively involved in this field.</i></p> <p><i>Living next to Maine Yankee has involved uncertainties, but re-development of the Maine Yankee site could substantially affect air quality and create other impacts such as light pollution, noise, and adverse aesthetic conditions.</i></p>	<p>Selectmen/Planning Board/Ongoing</p>

NATURAL RESOURCES

Goals

1. Protect the quality of Westport's water resources.
2. Protect Westport's critical natural resources including, without limitation, wetlands, wildlife and fisheries habitat, shorelands, forests, scenic vistas, and unique natural areas from inappropriate land use activities.

Policies	Strategies	Responsibility/Date
1. <u>Ground Water Resources</u> . Take steps to protect and conserve ground water. Manage and control waste in a manner that minimizes the risk of adversely impacting the Town's ground water. Strive to achieve a balance between development and development limitations imposed by limited ground water resources and poor soils for waste disposal.	A. <u>Areas of Salt Water Intrusion</u> . Limit subdivisions and commercial development in areas with salt water intrusion problems unless the owner/applicant can demonstrate that there is sufficient water to support the change and its use will not adversely impact neighboring wells.	Town/Planning Board/2003
	B. <u>High Impact Water Uses</u> . Adopt ground water protection standards for uses, other than single family dwellings, that could adversely impact ground water by way of bacteria, nitrates, petroleum or hazardous chemicals. Consider including such standards in the subdivision ordinance and in a site plan review ordinance.	Town/Planning Board/2003
	C. <u>Ground water conservation</u> . Require the use of water conservation devices and practices in areas where there are water quantity problems. Review the use of water softening devices.	Town/Planning Board/2003
	D. <u>Hazardous Waste</u> . Prepare and adopt an ordinance to require a permit from the Planning Board for any new activity involving the processing, storage or generation of hazardous waste as defined by the Maine Department of Environmental Protection (not including normal household uses and materials, and heating fuel), and to prohibit any commercial or other land use that would risk polluting the Town's ground water supply, such as, but not limited to, junkyards and landfills, that would risk pollution of the fresh water supply of the site in question or that of adjacent land.	Town/Planning Board/2003

Policies	Strategies	Responsibility/Date
	<p>E. <u>Sanitary System Technology</u>. Monitor the development and use of new-technology sanitary waste systems and keep the Selectmen and Planning Board informed of their apparent effectiveness and their potential impact on public health, safety and the environment.</p> <p>F. <u>Hydrogeologic Assessment for Non-Residential Uses</u>. Prepare and adopt an ordinance to require, at the expense of the applicant, a hydrogeologic assessment for proposed non-residential uses.</p> <p>G. <u>Hydrogeologic Assessment for Subdivisions</u>. Amend the Subdivision Ordinance to require that subdivision applicants provide at their expense a hydrologic survey to document that the proposed land use will not unreasonably risk adjacent wells.</p> <p>H. <u>Tanks</u>. Require that storage of hazardous material be in above-ground tanks, properly bermed, on impervious pads, in compliance with Federal and State requirements.</p> <p>I. <u>Existing Sanitary Systems</u>. Strictly administer the state plumbing code and monitor existing systems with a view to strengthening the management and control of wastes.</p> <p>J. <u>Exempt Lots</u>. Strengthen the Town's ordinances to include a review of lots exempt from the subdivision review process.</p>	<p>Licensed Plumbing Inspector/Code Enforcement Officer/Ongoing</p> <p>Town/Planning Board/2003</p> <p>Town/Planning Board/2003</p> <p>Town/Planning Board/2003</p> <p>Town/Planning Board/2003</p> <p>Town/Planning Board/2003</p>
<p>3. <u>Forest Resources</u>. Encourage the wise use of forest lands.</p>	<p>A. <u>Tree Growth Land</u>. Negotiate with owners of land in Tree Growth, with the object of working out voluntary arrangements for permanent conservation easements to protect as much of this treed area as possible.</p>	<p>Selectmen/Planning Board/Ongoing</p>

Policies	Strategies	Responsibility/Date
	B. <u>Shoreland Zoning</u> . Continue to regulate timber harvesting through the Town's Shoreland Zoning Ordinance.	Code Enforcement Officer/ Planning Board/Ongoing
4. <u>Deer Yards</u> . Encourage the retention of deer yards.	A. <u>Deer Yard Protection</u> . Negotiate on a voluntary basis with owners of land making up the island's deer yards, with the object of guiding future development of these lands so as to retain as much as possible their capability to shelter deer.	Planning Board/2005
5. <u>Scenic Areas and Vistas</u> . Protect scenic areas and vistas to the maximum extent possible.	A. <u>Voluntary Scenic Agreements</u> . Open discussions with the owners of the land on the sites designated as scenic resources in the Inventory and Analysis section of this plan, with the object of working out voluntary agreements to protect these views. B. <u>Subdivision/Site Plan Scenic Requirements</u> . Include in the Subdivision Ordinance and in a site plan review ordinance a requirement that sites designated as scenic resources in the inventory and analysis section of this plan be protected to the maximum extent possible as land is developed.	Planning Board/2005 Town/Planning Board/2003
6. <u>Route 144</u> . Protect the rural character of Route 144.	A. <u>Subdivision Development</u> . Amend the Subdivision Ordinance to require that all new residential subdivisions along Route 144 or within its viewing area are developed in a manner which preserves open space, aesthetic character, and scenic values.	Town/Planning Board/2003
7. <u>Historic and Archaeological Resources</u> . Preserve Westport's historical and archaeological resources.	A. <u>Public Awareness</u> . Encourage public awareness and support for preservation of Westport's historic and archeological resources. B. <u>Availability of Information</u> . Direct the Conservation Committee to work with state agencies to ensure that complete information on the presence and significance of historic and archeological sites on Westport Island is held by the town and is made known to the site property owners and, if appropriate, to other concerned citizens.	Planning Board/2005 Selectmen/2003

Policies	Strategies	Responsibility/Date
	C. <u>Shell Heaps of Significance</u> . Request information from the Maine Historic Preservation Commission concerning the locations on Westport of shell heaps of archeological significance so that the Planning Board may check to see that any proposed subdivision, development or commercial use does not risk damage to such a site.	Selectmen/2003
8. <u>Gravel/Mineral Resources</u> . Manage and control quarrying, mining, and borrow pits for commercial purposes.	A. <u>Site Plan Review Requirements</u> . Include in a site plan review ordinance a requirement that quarrying, mining and borrow pits be subject to review in accordance with specific performance standards.	Town/Planning Board/2003
9. <u>Wildlife/Fisheries/Other Critical Habitat</u> . Protect wildlife, fisheries, and wildlife habitat to the maximum extent possible.	<p>A. <u>Shoreland Zoning</u>. Continue to administer and enforce the Town's Shoreland Zoning Ordinance.</p> <p>B. <u>Subdivision/Site Plan Wildlife Requirements</u>. Amend the Subdivision Ordinance and adopt a site plan review ordinance to include standards providing for the protection of wildlife areas while protecting the property rights of the applicant.</p> <p>C. <u>Development Review Assistance</u>. Request review assistance from the Maine Department of Inland Fisheries and Wildlife when development proposals would impact resources identified by the Department including deer yards, seal haul-outs and waterfowl and wading bird habitat.</p>	<p>Code Enforcement Officer/ Planning Board/Ongoing</p> <p>Town/Planning Board/2003</p> <p>Planning Board/Ongoing</p>

PUBLIC FACILITIES/TRANSPORTATION

Goals:

1. Plan for, finance and develop an efficient system of public facilities to accommodate growth and development.
2. Plan for and support improvements to the Town's transportation system.

Policies	Strategies	Responsibility/Date
1. <u>Solid Waste</u> . Provide an efficient system of solid waste disposal.	A. <u>Transfer Station</u> . Continue to provide for the solid waste disposal needs of Westport residents through the Wiscasset transfer station.	Town/Ongoing
2. <u>Library</u> . Support library services for the residents of Westport.	A. <u>Wiscasset Library</u> . Continue to support the Wiscasset library so that its facilities remain available to the residents of Westport.	Town/Ongoing
3. <u>Emergency Services</u> . Ensure that the residents of Westport receive high quality emergency response services.	A. <u>Fire Protection</u> . Continue to support the Westport fire department and review, on a five-year basis, the Town's fire fighting capabilities in light of changing population levels and financial constraints, and increase budgetary support if necessary.	Town/Fire Department/2006
	B. <u>Rescue</u> . Continue to rely upon Wiscasset for rescue services.	Town/Ongoing
	C. <u>Police Protection</u> . Continue to rely upon the Lincoln County Sheriff's Department for local police protection.	Town/Ongoing
4. <u>Transportation</u> . Provide for cost effective maintenance of the Town's road system and take steps to involve the Town in any regional transportation initiatives affecting the Town of Westport.	A. <u>Reserve Fund</u> . Establish a reserve fund for a 10-year paving program sufficient to maintain the paved roads in the community.	Town/2002
	B. <u>Route 144</u> . Monitor any changes to Route 144 between the bridge and Route 1, and encourage the Maine Department of Transportation to consult with and involve Westport officials in any changes affecting Westport.	Planning Board/Selectmen/Ongoing

Policies	Strategies	Responsibility/Date
	C. <u>Rail</u> . Monitor the potential for rail service, and encourage the Maine Department of Transportation to consult with and involve Westport officials in any changes affecting Westport.	
5. <u>School System</u> . Ensure that students from Westport receive a cost effective, quality education.	A. Continue to encourage School Union #48 to work with the Wiscasset School System to contain costs and to allow tuition towns a say in the administration of the school system.	School Committee/Ongoing
	B. Continue to explore other educational arrangements for the education of Westport children.	School Committee/Ongoing

LAND USE

Goals:

1. Provide for orderly growth and development in appropriate areas of the community;
2. Protect the Town's rural character, making efficient use of public services and preventing development sprawl;
3. Protect historic landmarks and resources.

Westport is a residential community situated on a salt-water island that is approximately 13 miles long by one mile wide at the widest point. Located on the lower Sheepscot River, the island creates a unique environment distinguished by its seclusion (being over five miles from Route One), limited accessibility (a single bridge over the Back River), and a limited public road system.

Westport's predominant asset is its rural, residential character. The aforementioned isolation, the absence of an urban/village center, and the central corridor of relatively undeveloped land, allows Westport residents to live close enough to share in social settings, but far enough from each other to provide personal privacy. Our usual granite topography, clean air, absence of congestion, serene quietude, and the pristine Sheepscot River offers Westport residents a rich nature-experience that inspires and enriches life.

Our maritime heritage, our magnificent vistas of the Sheepscot as well as our marine and wildlife habitat define Westport. Our character is also marked by neighborliness, the Westport Community Association, historic churches, small-scale local government, volunteer emergency services, historic landmarks, families that trace their heritage back through multiple generations on the island and a feeling of pride in being a unique island community. The residential development on Westport has not despoiled the natural environment yet. Much of the island remains undeveloped and almost all is still in private hands. Historic structures, significant archaeological and anthropological sites have been protected for the appreciation of future generations.

As we move forward in the struggle to manage the growth and sprawl that threaten Lincoln County and the Mid-Coast region, Westport must work to preserve its most precious natural asset, its rural, scenic character. Westport must also manage its future with close attention to the available fresh water. In recent years, salt water intrusion has been an increasing problem as new wells were drilled. The additional drawdown on the fresh water has permitted salt water to infiltrate at higher levels causing wells to sour. Therefore, it is essential that Westport manage its future within the natural constraints posed by the granite foundation of the island. That is, limited water supply and limited septic capacity.

Policies	Strategies	Responsibility/Date
	<p>C. <u>Rural Designation Review</u>. Review the appropriateness of the rural area designation when the Comprehensive Plan is periodically updated as required by the State's Comprehensive Planning and Land Use Regulation Act.</p> <p>D. <u>Public Facility Expenditures</u>. Do not plan for public expenditures to create new capacity for roadways, waste treatment facilities, water supply systems or other facilities that would stimulate growth and development.</p> <p>E. <u>Developable Areas</u>. Amend the subdivision ordinance, and adopt a site plan review ordinance, to direct development, by means of standards, away from areas with severe development limitations and to areas that may be more suitable for development based on considerations of soils, ground water, topography and other natural resources.</p>	<p>Planning Board/2011</p> <p>Selectmen/Ongoing</p> <p>Town/Planning Board/2003</p>
<p>2. <u>Growth Policies</u>.</p> <ul style="list-style-type: none"> Encourage growth in areas that do not have ground water quantity/quality problems, or soils not suitable for septic disposal. Encourage growth near existing major roads. 	<p>A. <u>Site Plan Review Ordinance</u>. Prepare and adopt an ordinance to require review and approval of all new commercial, non-residential development.</p> <ul style="list-style-type: none"> Include standards for preservation of the landscape, parking lot size and location, access to the site, erosion and sedimentation control, open space preservation, surface water drainage, topographic and architectural compatibility, building height, setbacks, ground water protection, sewage disposal, natural screening from roads, advertising, outdoor storage areas, lighting, emergency vehicle access, and solid and liquid waste disposal. Require that the scale and intensity of building development be consistent with the existing character of the community. Require the preservation of open space and protection of sensitive natural resources, shorelands, scenic areas, historic resources and landmarks, and the character of the major roadway. 	<p>Town/Planning Board/2003</p>

Policies	Strategies	Responsibility/Date
	<p>B. <u>Subdivision Ordinance</u>. Implement a revised subdivision ordinance consistent with State enabling legislation and the Comprehensive Plan.</p> <p>C. <u>Traffic Access</u>. Amend Subdivision Standards and Procedures to include standards for safe entrances into new developments, including adequate site distances and sufficient clearance and turn-around areas for emergency vehicles.</p> <p>D. <u>Curvilinear Streets</u>. Amend Subdivision Standards and Procedures to require that streets in major (more than 5 lots) subdivisions be laid out in curving lines to the extent reasonably possible, to avoid a grid pattern of development.</p> <p>E. <u>Multi-Family Housing</u>. Retain the existing ordinance permitting construction or location of single-family dwellings and duplexes, but amend it to prohibit multi-family units with three or more units.</p> <p>F. <u>Two-Plan Requirement</u>. Amend Subdivision Standards and Procedures to require that outside the shoreland zone, developers of residential subdivisions submit two subdivision plans at the sketch plan stage; a conventional subdivision plan, showing the parcel cut up into lots, and a clustered/open space plan, showing houses clustered on one part of the property, with the remaining property preserved as open space.</p> <ul style="list-style-type: none"> • Road Frontage: Discourage plans which merely show houses lining the road with the land in back preserved as open space; encourage plans which provide a common entrance serving more than one dwelling. 	<p>Town/Planning Board/2003</p> <p>Town/Planning Board/2003</p> <p>Town/Planning Board/2003</p> <p>Town/Planning Board/2003</p> <p>Town/Planning Board/2003</p>

Policies	Strategies	Responsibility/Date
	<ul style="list-style-type: none"> Open Space: Authorize the Planning Board to select the plan which best preserves open space; authorize the Planning Board to require that open space include significant forest land, trails and wildlife habitat, where applicable. Lot Standards: Amend Town ordinances to allow lot size/frontage requirements to be reduced for cluster developments. Require that the net residential unit density not exceed that allowed for traditional single family units. 	
3. <u>Rural Character Policies</u> . Maintain the rural character of the island as the community grows.	<p>A. <u>Tree Cover</u>. Amend the subdivision ordinance, and adopt a site plan review ordinance, to encourage development that is consistent with the existing landscape and tree removal that does not exceed the minimum necessary to accommodate development.</p> <p>B. <u>Open Space Plan</u>. Develop an open space plan to identify and preserve significant parcels of land and view corridors that are important.</p> <p>C. <u>Land Trusts</u>. Encourage landowners to place land in trusts that restrict development and/or promote conservation, or similarly prohibit development in exchange for favorable property tax treatment.</p> <p>D. <u>Funding Mechanism</u>. Explore funding mechanisms such as a land transfer tax or a small municipal appropriation or other mechanism to provide public funding for the acquisition of open space land.</p> <p>E. <u>Rivers</u>. Include provisions in the subdivision and site plan review ordinances to preserve Westport's view of, respect for, and access to the Sheepscot River and Back River, especially as land is developed.</p> <p>F. <u>Island Access</u>. Oppose and prohibit by ordinance additional means of road/bridge access to the island (this does not apply to municipal landings).</p>	<p>Town/Planning Board/2003</p> <p>Planning Board/2005</p> <p>Planning Board/2005</p> <p>Selectmen/Planning Board/2006</p> <p>Town/Planning Board/2003</p> <p>Selectmen/Town Meeting/2003 and Ongoing</p>

APPENDIX 1

WESTPORT QUESTIONNAIRE

WESTPORT COMPREHENSIVE PLAN QUESTIONNAIRE**1.0 LOCATION—WHERE DO YOU LIVE**Check all that apply

- 1.1 On Main Rd (Rte 144 to south end) ()
 1.2 North of Town Office ()
 1.3 South of Town Office ()
 1.4 East of Rte 144 ()
 1.5 West of Rte. 144 ()
 1.6 Shore Frontage ()
 1.7 Town Road ()
 1.8 Private Road ()

2.0 Demographic InformationIf year round resident, how many years? - check one

- 2.1 Less than 1 ()
 2.2 1 - 5 ()
 2.3 6 - 10 ()
 2.4 11 - 20 ()
 2.5 Over 20 years ()

If seasonal resident, how many years? - check one

- 2.2.1 Less than 1 ()
 2.2.2 1 - 5 ()
 2.2.3 6 - 10 ()
 2.2.4 11 - 20 ()
 2.2.5 over 20 years ()

2.3 Occupation Check the one that best describes your occupation.

- 2.3.1 Farming, forestry ()
 2.3.2 Commercial Fishing ()
 2.3.3 Construction ()
 2.3.4 Retired ()
 2.3.5 Homemaker ()
 2.3.6 Manufacturing ()
 2.3.7 Business, (wholesale, retail) ()
 2.3.8 Professional ()
 2.3.9 Education ()
 2.3.10 Other ()

2.4 Where do you Work

- 2.4.1 On Island ()
 2.4.2 Within 25 miles of Westport ()
 2.4.3 Farther than 25 miles ()

2.5 Own property or rent? (other than your residence)

Own () Rent ()

3. **What three things do you most value** about living on Westport Island?

3.1 _____

3.2 _____

3.3 _____

4. **What are the three biggest disadvantages** of living on Westport.

4.1 _____

4.2 _____

4.3 _____

5. **Town Services** - What priorities should the town address.
1 is highest priority, 5 is least priority

- 5.1 Fire Protection 1() 2() 3() 4() 5()
 5.2 Police Protection 1() 2() 3() 4() 5()
 5.3 Ordinance Enforcement 1() 2() 3() 4() 5()
 5.4 Ambulance Service 1() 2() 3() 4() 5()
 5.5 Other (specify) _____

6. Future Needs of Westport.Should the town take steps to provide for:
1 is highest priority, 5 is least priority

- 6.1 Open Space 1() 2() 3() 4() 5()
 6.2 Public Access to the shore 1() 2() 3() 4() 5()
 6.3 Wetland Protection 1() 2() 3() 4() 5()
 6.4 Wildlife Sanctuary 1() 2() 3() 4() 5()
 6.5 Historic Sites 1() 2() 3() 4() 5()
 6.6 Recreation Facilities 1() 2() 3() 4() 5()
 6.7 Other - specify _____ 1() 2() 3() 4() 5()

7. **Development** How should the town deal with the following types of development?

- | | Encourage | Limit | Stop |
|----------------------------------|-----------|-------|------|
| 7.1 Single family dwellings | () | () | () |
| 7.2 Two family dwellings | () | () | () |
| 7.3 Seasonal dwelling | () | () | () |
| 7.4 Individual mobile homes | () | () | () |
| 7.5 Mobile home parks | () | () | () |
| 7.6 Condominiums | () | () | () |
| 7.7 Apartments more than 3 units | () | () | () |
| 7.8 Motels | () | () | () |
| 7.9 Restaurants | () | () | () |
| 8 Commercial fisheries | () | () | () |
| 8.1 Agriculture | () | () | () |
| 8.2 Tourism | () | () | () |
| 8.3 Cluster housing | () | () | () |
| 8.4 Retail businesses | () | () | () |
| 8.5 Manufacturing | () | () | () |

9 **Techniques for limiting development.** If we wish to limit development on Westport, which of these methods (used in other towns) should we use?
Rank order the options from most (1) to least desirable.

- 9.1 Minimum lot size based on septic and water suitability ()
 9.2 A site review process for all non residential land use ()
 9.3 Limit building permits to an annual maximum ()
 9.4 Establish town-wide zoning ordinance ()
 9.5 Establish subdivision regulation ()
 9.6 Require lots for sale pass minimum acceptable standards for septic and water ()

10 Comments

Please include below comments or issues you would like considered for the Westport Comprehensive Plan.

WESTPORT COMPREHENSIVE PLAN 2001 QUESTIONNAIRE RESULTS

1.0 Location of Residence (if reported)

	# Responses	% of total
1.1 on Main Rd.	48	2
1.2 North of Town Office	65	33
1.3 South of Town Office	78	40
1.4 East of Rte. 144	76	39
1.5 West of Rte. 144	40	20
1.6 Shore Frontage	116	59
1.7 Town Road	74	38
1.8 Private Road	76	39

2.0 Demographic Information

2.1 *If year round resident*

	# Responses	% of 189 responses
2.1.1 < 1 year	7	4
2.1.2 1-5 years	22	12
2.1.3 6- years	20	11
2.1.4 11-20 years	37	20
2.1.5 > 20 years	<u>37</u>	<u>20</u>
Totals	123	65

2.2 *If seasonal resident*

2.2.1 < 1 year	3	2
2.2.2 1-5 years	12	6
2.2.3 6-10 years	8	4
2.2.4 11-20 years	13	7
2.2.5 > 20 years	<u>30</u>	<u>16</u>
Totals	66	35

2.3 *Occupation*

	# Responses	% of 229 responses
2.3.1 Farming, forestry	3	1.3
2.3.2 Commercial fishing	5	2
2.3.3 Construction	16	7
2.3.4 Retired	79	35
2.3.5 Homemaker	9	4
2.3.6 Manufacturing	5	2
2.3.7 Business	16	7
2.3.8 Professional	49	21
2.3.9 Education	21	9
2.3.10 Other	<u>26</u>	11
Total	229	

2.4	<i>Place of work</i>		
		# Responses	% of 127 responses
2.4.1	On island	20	16
2.4.2	Within 25 miles	56	44
2.4.3	Farther than 25 miles	<u>51</u>	40
	Total	127	

2.5	<i>Own/rent</i>		
		# Responses	% of 146 responses
2.5.1	Own	143	98
2.5.2	Rent	<u>3</u>	2
	Total	146	

3.0 Value of Westport Living

		# Responses	% of Total # (548)
3.1	Rural Nature (rural, quiet, peaceful, forest & wildlife, private, secluded, few people, little commercial)	273	50
3.2	Setting (beauty, coastal, marine, island living)	129	24
3.3	People (neighbors, family, community, limited govt.)	78	14

4.0 Disadvantages of Westport living

	12 most frequent	# Responses	% of total (341)
4.1	None (or left blank)	64	19
4.2	Remote (distant from shopping, etc.	59	17
4.3	Taxes vs. Lack of services	30	9
4.4	Roads – condition	24	7
4.5	Changing character & development	23	7
4.6	Traffic speed on main road	18	5
4.7	Rte. 1 traffic	15	4
4.8	Bypass possibility	13	4
4.9	Maine Yankee	11	3
4.10	Lack of community activities	10	3
4.11	Lack of community participation	9	3
4.12	Lack of Town water and sewer	9	3

There are 24 more categories <3%

5.0 Town Services - priorities

	# of 1 & 2 responses	% of total 1&2 responses
5.1 Fire Protection	143	38
5.2 Police Protection	57	15
5.3 Ordinance Enforcement	67	18
5.4 Ambulance Service	112	30

	# of 1 & 2-5	relative %
5.1 Fire Protection	132	42
5.2 Police Protection	34	11
5.3 Ordinance Enforcement	48	15
5.4 Ambulance Service	104	33
5.5 Other (1 item with 9 responses for road) (rest with 3 or less responses)	9	2

6.0 Future Westport Needs

	# rating as 1 or 2	% of total responses
6.1 Open space	120	61
6.2 Access to shore	73	38
6.3 Wetland protection	118	60
6.4 Wildlife sanctuary	108	55
6.5 Historic sites	67	33
6.6 Recreation facilities	48	24
6.7 Other	20	10

7.0 Development

	Encourage	Limit	Stop
7.1 Single-family dwellings	116	64	3
7.2 Two family dwellings	33	100	50
7.3 Seasonal dwellings	88	81	10
7.4 Ind. Mobile homes	21	83	70
7.5 Mobile home parks	7	21	155
7.6 Condominiums	12	46	125
7.7 Apts. More than 3 units	9	35	139
7.8 Motels	11	44	130
7.9 Restaurants	51	86	51
7.10 Commercial fisheries	74	73	30
7.11 Agriculture	114	55	7
7.12 Tourism	47	93	41
7.13 Cluster housing	31	46	105
7.14 Retail business	38	93	49
7.15 Manufacturing	13	72	97

Rank (most desirable □ least

50% or more “Encourage and/or Limit”

1. Single family dwelling
2. Agriculture
3. Seasonal dwelling
4. Commercial fisheries
5. Tourism
6. Restaurants
7. Two family dwellings
8. Retail business
9. Individual mobile homes

50% of more “Stop”

10. Manufacturing
11. Cluster housing
12. Condominiums
13. Motels
14. Apts. more than 3 units
15. Mobile home parks

8.0 Techniques for Limiting Development

	1	2	3	4	5	6	1&2 -6	1&2 (5&6)
8.1 Minimum lot size based on septic & water suitability	78	29	18	15	11	9	98	87
8.2 Site review process for non-residential use	59	21	25	26	9	17	63	54
8.3 Limit building permits to an annual maximum	35	17	17	10	19	50	2	-17
8.4 Establish town-wide zoning ordinance	67	22	19	12	19	13	76	57
8.5 Establish subdivision regulations	64	18	18	16	26	19	68	42
8.6 Require lots for sale pass minimum acceptable standards for septic & water	76	24	17	14	14	16	84	70

Rank 1 & 2 – 6 1&2 – (5 & 6)

- | | | |
|----|----|----|
| 1. | 1. | 1. |
| 2. | 5. | 4. |
| 3. | 6. | 6. |
| 4. | 3. | 3. |
| 5. | 4. | 5. |
| 6. | 2. | 2. |

Less than 50% rank as 1 to 4

APPENDIX 2

AQUIFER STUDY

Westport Island

Aquifer Delineation and Soil Carrying Capacity

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Introduction

The Town of Westport Island is a unique community located south of Wiscasset in Lincoln County. This study focuses on Westport Island proper and does not include the smaller islands. The Sheepscot River flows to the east and the Back River flows to the west of Westport Island. Edgecomb, Boothbay and Boothbay Harbor lie to the east of the island.

Residents and businesses of Westport Island rely entirely on ground water resources as the sole drinking water source and method for treatment of septic system wastewater. While there are federal and state laws that theoretically protect ground water, resource management is best performed at the local level. Understanding the importance of this limited resource, Westport Island retained the services of Stratex, LLC, (Stratex) to evaluate hydrogeologic conditions on Westport Island as they pertain to ground water aquifers and the capability of the soil to treat wastewater (carrying capacity). The objective of this study is to develop measures to protect ground water resources.

Background

Westport Island is in the process of revising the 1992 Comprehensive Plan. This study was developed to guide the Comprehensive Plan revisions in the areas of ground water resource protection. During the summer of 2001, the Town distributed a well/water survey to about 540 residents. Approximately 300 residents responded to the questionnaire, enabling the compilation of 273 well records in the Town.

According to the U.S. Census (April 2000), the population on Westport Island in April 2000 totaled 745 up from a 1990 population of 663.

Aquifer Data Compilation

Bedrock Hydrogeology

Residents of Westport Island obtain their ground water from two different geologic sources that include surface soils and bedrock. Ground water occurs in the saturated zone of soil and rock where the upper surface of ground water is called the water table. Water infiltrates the ground at different rates depending on several factors that include soil texture, vegetative cover, ground slope, and moisture conditions in soil. Water that infiltrates the soil and rock and is added to the saturated zone is called recharge. The section on Soil Carrying Capacity below contains additional information on the recharge capabilities of different soil types.

Ground water flows through and is stored in the saturated zone in open spaces in rock and soil. The origin, number and total volume of open spaces in geologic materials (i.e., sand and gravel, clay, rock) can vary significantly. Sand and gravel far exceeds rock in terms of storage and flow potential.

While crystalline bedrock is, by itself, nearly impermeable and does not allow ground water flow or storage, geologic processes change solid rock into a network of small open spaces known more specifically as fractures, joints, dikes, faults and bands of varying rock composition or rock "fabric." Bedrock aquifers occur under certain hydrologic criteria. As described by the Maine Geological Survey (Caswell, 1987), "Bedrock aquifers occur wherever the crystalline rock is fractured, sufficiently saturated, and can be recharged by precipitation that percolates through the overlying sediments."

Bedrock fractures enable ground water flow and storage to varying degrees depending on the orientation, interconnectedness and width of the openings. Three types of fractures significantly affect ground water flow in bedrock as follows:

- ❖ Small scale discontinuities within a rock mass including partings, foliations, and laminations especially in the schists and gneisses enhance ground water flow in individual rock formations.
- ❖ Joints and fractures which cut within and across formations enhance flow on a larger scale.
- ❖ Faults and intrusive contacts, which are often large-scale features, can provide primary flow conduits strongly influencing ground water movement.

Foliation or the parallel alignment of platy minerals usually coincides with the north-northeast directions of ridge and valley topography alignment along most of mid-coast Maine. Ground water modeling and field verification by Gerber and Rand (1980) found that aquifer transmissivity (amount of water that can be transmitted through the aquifer) was 5 to 10 times greater along the direction of the rock foliation than perpendicular to it for a metamorphic rock unit in Wiscasset, Maine. Foliation probably has the strongest influence on ground water flow in the metamorphic rocks in Westport Island.

Faults are mapped at three locations on Westport Island (Hussey, 2000) as shown on Figure 5, Bedrock Geology. There are two high angle faults located along the west shore at Squam Creek and across from Little Oak Island as well as a thrust fault along the east shore near Fowle Cove. Major faults can constitute important bedrock aquifers if the structural deformation caused by the fault movement was sufficiently intense to create a zone of bedrock crushing and fracturing in and adjacent to the plane of fault slippage, resulting in a zone of high fracture porosity. There is a high potential for the occurrence of landward salt water migration in areas where faults intersect the ocean.

It is likely on Westport Island that the fractured rock is strongly anisotropic whereby the transmissivity parallel to foliation planes is higher than the transmissivity perpendicular to the foliation planes.

These characteristics of bedrock hydrogeology were evaluated along with well survey information in the delineation of bedrock aquifer protection zones described in the sections that follow.

Well Records

Records of water supply wells provide useful historic data regarding the hydrologic characteristics of ground water on Westport Island. In the preparation of this report, historic well information served as an important factor in the delineation of bedrock aquifer protection zones. Bedrock aquifer identification and delineation consisted of several steps starting with the compilation of drilled and dug well records from the Town survey questionnaires.

Stratex received paper copies of the questionnaires from the Selectmen and entered each record onto an electronic spreadsheet in Microsoft Excel format. Each well was assigned a well number for tabulation and mapping purposes. Residents having more than one well were assigned a separate unique well number for each individual well. Well numbers span from 1 to 273.

The Maine Geological Survey (MGS) was an additional source of information on bedrock (drilled) wells. MGS well information is available for studies of this nature due to the enactment of legislation in 1987 that requires well drillers to submit information about new wells to MGS. Stratex requested well data from MGS in an electronic format that could be translated into the spreadsheet containing the well survey data. From MGS we received a total of 61 locatable well records for the Town of Westport Island (e.g. wells having a map and lot number).

We identified a total of 30 duplicate wells (i.e., wells appearing in both the MGS information and the surveys) through a comparison of common map and lot numbers. Where duplicate well yield and depth information existed, we relied on the MGS well data. We retained the survey well numbers (spanning from 1 to 273) for duplicate wells.

There were a total of 31 wells in the MGS data that were new to the data compilation (i.e., not included in the Westport Island well surveys). To identify these 31 new MGS wells, we used a numbering system starting with 500. Figure 2 shows the distribution of bedrock wells in the Town of Westport Island that resulted from the compilation of Westport Island survey and MGS data for bedrock wells. Bedrock wells account for approximately 77% of the Town's water supply. There is a lack of data on dug well yields (only 3 records of dug well yield) and there are no high yield sand and gravel aquifers mapped in the Town. Dug wells are unlikely to sustain a community water supply. Therefore, our focus has been on the bedrock aquifer potential. The table below contains summary statistics for the bedrock well data.

Well Data Summary Statistics

Summary Statistic	Yield (gpm)	Depth (feet)	Soil Thickness (feet)
minimum	0	60	0
maximum	75	700	29
median	5	200	4
mean	9	218	6
standard deviation	12	99	6

Well Mapping

This evaluation relied on the spatial mapping of wells from the tax map and lot information provided by the Westport Island survey and the MGS data. Well mapping work was performed on two levels depending on the yield of the well. More detail was given to the location of wells with yields equal to or greater than 10 gallons per minute. These high yield wells (≥ 10 gallons per minute) were located on the tax maps by Mr. Ben Crehore. Mr. Crehore communicated with residents and performed field checks where necessary to locate the higher yield wells by hand on the copies of the tax maps. Lower yielding wells (< 10 gallons per minute) were located by placing the well approximately in the center of the lot. While this well location method is consistent with the intent, scale and scope of this study, some wells on larger lots may require adjustment to refine their placement relative to other map features such as roads.

Aquifer Yield

Well yield in this study represents the well driller's estimate of the amount of water that can be pumped from the ground for a short duration of an hour or two. Long term yields are usually half (1/2) or less of the driller's rating. Well yields vary significantly in Maine from dry or 0 gallons per minute to very high yields of 300 to 500 gallons per minute. Information on the quantity of water a well can yield is a key factor in identifying potential high yield bedrock aquifers.

The Westport Island survey solicited information on well yield. This information was supplemented with the data obtained from the Maine Geological Survey. Table 1 contains a list of all bedrock yields compiled for this study. Figure 6 shows the spatial distribution of yields for wells with available data. As indicated in the summary statistics on page 3, the median yield of bedrock wells in Westport Island was 5 gallons per minute which is typical for coastal Maine. The maximum well yield reported in Westport Island was 75 gallons per minute.

Soil Thickness

In addition to the well yield, the Maine Geological Survey also provided information on the thickness of overburden (soil thickness) at certain wells. Soil thickness along with soil type provides information on the recharge potential of the soil or overburden which in turn provides useful information on the potential of the bedrock aquifer as a water supply.

Figure 3 shows the thickness of soil at well locations based on information from MGS. The points mapped represent wells that were locatable (e.g., have a map and lot number) and had corresponding overburden thickness. Based on these data, the average thickness of soils at wells on Westport Island is 6.2 feet which is typical for the coastal mid-Maine setting where soils are typically very thin.

Casing length is also provided in Table 1. Well casing is typically a 6-inch diameter pipe driven through the soil into bedrock. There are several functions that well casing performs such as: keeping the soil from caving into the borehole during drilling, minimizing the amount of sediment entering the well during water supply use and sealing the well from potential surface runoff which can impair drinking water quality.

Linear Features

Topographic lineaments are straight or gently-curved depressions or topographic breaks in the ground surface that can reflect trends or zones of weakness in the underlying bedrock. These zones of weakness generally indicate areas of high fracture porosity. Areas of high fracture porosity can constitute a potential for increased ground water yield. It is therefore, advantageous to identify topographic lineaments when investigating potential high yield bedrock aquifers.

Topographic lineaments that cross the coast into the ocean can indicate areas of potential salt water intrusion. Due to an increase in water withdrawal potential along fractures that make up the linear feature, it is possible for domestic wells located up to 200 feet inland to pull salt water from the ocean.

Linear features in Westport Island were evaluated as a means for identifying areas of relatively high bedrock transmissivity. Maps prepared in 1985 by Robert G. Gerber, Inc., for the Maine Geological Survey served as the basis for the evaluation of linear features. Figure 6 contains the linear features for Westport Island from these maps. Linear features on this map are classified according to their scale of imagery on which they were identified.

- ❖ "First order" features were observed on small scale (1:250,000 to 1:1,000,000) imagery and typically represent the principal features of the landscape. These features are regional in nature.
- ❖ "Second order," observed at scales of 1:80,000 to 1:130,000, show less controlling influences of the landscape.
- ❖ "Third order" features are identified at scales of 1:20,000 to 1:40,000 and represent control on local topography and vegetation.

In addition to the imagery used to prepare the published maps, linear features were also ranked according to their relative strength (strong, moderate, weak) of presence as observed by the imagery. Line color, widths and types are varied to represent the different linear features on Figure 6.

Aquifer Delineation

The Town of Westport Island relies entirely on ground water resources as the sole drinking water source. Federal and state laws theoretically protect ground water resources, however protection at that level typically focuses on impacts from large lot subdivisions or impacts to other natural resources such as wetlands. State regulations, therefore, fall short of protecting ground water resources from impacts resulting from single lot development. Given the strong reliance on ground water and due to the potential for gaps in resource protection, Towns like Westport Island need to consider resource management at the local level. The first phase in protecting this important natural resource is to perform an inventory of potential aquifers within the Town.

Since no significant sand and gravel aquifers have been found within the Town, the focus here is on the bedrock aquifers.

The capacity of bedrock to store and transmit water are their most important hydraulic properties with respect to ground water as a water supply source. Highly productive bedrock aquifers must exhibit three qualities: water must be retrievable at a sufficient rates; the rate must be sustainable over a long period of time; and, the water quality must be good (e.g., not affected by saltwater intrusion). A well's ability to sustain a given pumping rate is related to the amount of recharge to the bedrock aquifer. Storage is dependent on the rock's porosity which can be described by features such as fractures, faults, and foliation. Water retrievability depends on bedrock transmissivity or the ability of an aquifer to transmit water. A high-yield bedrock aquifer occurs where rock is well fractured over a large area such that the precipitation recharge can be gathered by the pumping well.

Mapping of bedrock type, linear features, soil thickness and well yield contributed in step-wise fashion to the identification of areas having a high potential as a bedrock aquifer. First, linear features were evaluated as possible zones of higher yields from the bedrock. Areas of intersecting linears and high fracture density can constitute areas of increased ground water yields.

The second step involved overlaying the water well yield data onto the linear features as shown on Figure 6. While linear features alone suggest potential, the union of high yield wells with intersecting linear features provides a higher confidence in bedrock aquifer delineation.

Step three included an evaluation of soil thickness, soil types, and local physiography (e.g., topography, proximity to shore, local surface water features, etc.) to evaluate whether the bedrock aquifers could sustain sufficient yields of good quality on a long-term basis. The highest recharge potential is associated with thick, saturated sand and gravel deposits; the lowest recharge potential occurs within areas of thin soils or areas covered by thick clay-silt soils.

Figure 7 shows the potential high yield bedrock aquifer protection zones resulting from the analysis. Within each of the protection areas delineated there are two undefined subareas representing the recharge zones and the well location zones. Uplands (e.g., higher land within the delineated boundary, topographically) represent bedrock aquifer recharge zones. Aquifer recharge zones replenish the ground water in bedrock aquifers. Topographic lows within the aquifer boundaries constitute areas amenable to the location of high yield wells for ground water withdrawal. Under heavy pumping a discharge zone near a low-lying stream may become a recharge zone where surface water infiltration is induced.

It is important to keep in mind that this first level inventory of potential high yield bedrock aquifers and recharge zones was performed in a town-wide sense and is, therefore, regional in nature. On a more local level, water flow may be complicated by anisotropic and topographic considerations that are not evident on the scale of maps used. It is possible to expand on work performed in this report on a more detailed level through field reconnaissance mapping, aerial photo interpretation and the development of a computerized ground water flow model for each aquifer delineated.

Soil Carrying Capacity

There are many threats to ground water quality that are associated with residential development including increased surface water runoff and decreased ground water recharge, as well as the improper disposal of household cleaners, petroleum products, and paint residues. The primary threat to water quality from residential development, however, is ground water contamination from septic systems. Contamination from septic systems comes from several primary sources: elevated nitrate-nitrogen concentrations, and bacterial and virus contamination.

Of these two potential contamination sources, nitrate-nitrogen (NO_3) is considered to be the most limiting contaminant in residential sewage. The term "limiting" refers to permissible residential density (e.g., minimum lot size) required to protect ground water resources as described in more detail below. NO_3 is discharged into leach fields from septic tanks in concentrations that range from 30 to 70 mg/l on average. About one-half of the nitrate-nitrogen is denitrified in the soil above the water table, but once nitrate-nitrogen reaches the water table, it is usually only attenuated by dilution with other ground water.

Nitrate-nitrogen is dangerous to young children and can cause death in concentrations as low as 20 mg/l. It causes methemoglobinemia, or "blue-baby syndrome." The federal and state drinking water standards (MCL or "Maximum Contaminant Level") for nitrate-nitrogen in potable water are set at 10 mg/l. Studies also indicate that long-term exposure to nitrates in drinking water may cause cancer and may contribute to hypertension in adults.

There are three main land use control mechanisms in Maine which, among other methods, protect ground water resources. These mechanisms include the Site Location of Development Statute, the State Subdivision Statute, and local municipal zoning.

The Site Location of Development Statute addresses ground water quality through the "no adverse effect" standard in the following section:

Title 38, Article 6, § 484.3. No adverse effect on the natural environment. The developer has made adequate provision for fitting the development harmoniously into the existing natural environment and that the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities.

Under this statute, the Maine Department of Environmental Protection currently imposes a standard that concentrations of nitrate-nitrogen in ground water at the boundary of a project regulated by the law must not exceed 10 mg/l NO_3 .

The second land use control mechanism for protecting ground water, the State Subdivision Law, specifies that a subdivision will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of ground water. To implement ground water protection locally through this law, town subdivision ordinances should define "adverse impact" to be an exceedance (or some fraction thereof) of a state of Maine MCL ("Maximum Contaminant

Level”) or MEG (“Maximum Exposure Guideline”) at any well within the subdivision or at the boundary of the subdivision.

Local zoning is the third mechanism for protecting ground water resources in Maine. This mechanism allows municipalities to set minimum residential lot sizes to provide for the protection of ground water resources.

Local zoning is important because it is the only method that protects water quality against nitrate-nitrogen contamination from developments such as individually developed single family residential dwellings that are exempt from the Site and Subdivision Laws. Many, if not most, of the lots historically developed in Westport Island were exempt from the Site and Subdivision Laws. With a lack of state regulation of individual single family residential developments, it is important for Westport Island to use zoning to protect ground water resources from wastewater contamination.

Soil carrying capacity analysis provides a method to evaluate the ability of the land to treat residential wastewater, thereby minimizing the potential for ground water quality contamination from septic systems. This type of analysis uses nitrate-nitrogen loading from septic systems as a contaminant on which to base minimum allowable residential lot size as a function of the carrying capacity of the soil.

Soil maps prepared by the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS), formerly the Soil Conservation Service or SCS, comprised the basis of the soil carrying capacity analysis performed for this report. Soils in general can be evaluated using either the Maine Geological Survey surficial geology maps, or the NRCS soil surveys. We relied on the NRCS soil surveys because the NRCS classification system focuses on physical soil characteristics within the top 40 inches of soil, a zone within which septic systems function. The NRCS soils are also more focused on characteristics that directly affect the recharge potential of the soils. There are, however, some localized differences in the mapped soils between the NRCS soil types compared with the geologic classifications. We noticed a difference in physical characteristics of soils identified in the two mapping systems for Westport Island in our review of published soil information. To reconcile the differences would require field mapping and aerial photo interpretation which are beyond the scope of this project.

We compiled a list of NRCS soil types present in the Town, organizing them by their drainage characteristics and assigning recharge rates based on the NRCS soil descriptions and our experience evaluating recharge rates for soils in the state of Maine. Table 2 contains the list of NRCS soils present in the Town as well as the geologic grouping of six soil types and recharge rates that Stratex, LLC, assigned for this study. The recharge rates are based on an average annual rainfall of 46.6 inches which was recorded at the weather station located in Newcastle, Maine, (World Climate, 2001). Recharge rates for the Town range from 1.32 gallons per minute per acre (gpm/acre) for sand and gravel to 0 gpm/acre for peat deposits (the peat deposits in Town are located in ground water discharge areas, rather than recharge areas).

We used the following analytical method to calculate minimum single family lot densities recommended to protect water quality:

$$A = \frac{qs \times Cs}{RR \times (Cn - Cb)}$$

where:

- A = recommended residential density in acres per dwelling unit;
 Cn = limiting concentration of nitrate-nitrogen in ground water (equal to 10 mg/l for our calculations);
 Cb = background concentration of nitrate-nitrogen in the uncontaminated ground water (assumed equal to 1 mg/l);
 Cs = concentration of nitrate-nitrogen reaching the water table from septic discharge (assumed to be 40 mg/l);
 qs = average septic discharge rate (250 gallons per day per dwelling for 3 to 5 people = 0.17 gallons per minute);
 RR = rate of natural ground water recharge in gallons per minute per acre.

Table 3 contains the recommended densities for each soil type based on recharge rates. Figure 4 shows the distribution of recharge rates for the soils in Table 3. The results of this analysis are summarized below:

For the carrying capacity calculations in this study, we have assumed that dilution occurs only from mixing with ground water. Surface water dilution is not included in the calculations. The calculations include an analysis of drought conditions which our experience has shown can reduce the annual recharge to about 60 % of recharge. This drought factor and the general variable nature of ground water quality lead some Towns to set a maximum incremental impact from septic systems to 5 mg/l of nitrate-nitrogen or half the MCL. For the general purpose of establishing minimum lot sizes, we recommend using the MCL standard (10 mg/l of nitrate-nitrogen) under a drought recharge rate as shown in the table below. However, the Town may want to adopt a more conservative standard for subdivision review.

Soil Carrying Capacity Analysis

Geologic Soil Type	Average Natural Recharge Rate gpm/acre	Drought Recharge Rate gpm/acre	Drought A Allowable Acres per Dwelling	Drought 1/A Allowable Dwellings per Acre
sand and gravel	1.32	0.79	1.0	1.0
thin sand till	0.66	0.40	1.9	0.5
thick silty till	0.40	0.24	3.2	0.3
exposed rock and glaciomarine silt	0.26	0.16	4.8	0.2
glaciomarine clay-silt	0.12	0.07	* 5.0	* 0.2
peat deposits	0.00	0.00	0.0	0.0

* See discussion below regarding denitrification potential of clay-silt soils.

Under drought conditions and using a limiting concentration equal to the MCL for nitrate-nitrogen (10 mg/l) the recommended lot size for developments on sand and gravel (the soil type shown in blue on Figure 4) is 1.0 acre. In contrast, lots on glaciomarine clay-silt (shown in orange on Figure 4) should be much larger. Dwelling units are not recommended on land where peat deposits are prevalent. Peat deposits are wetland soils on which no septic systems or dwellings should be allowed.

In addition to lot size, we also recommend implementing separation distances between wells and septic systems of at least 200 feet for protection against viruses. In other words, a protection radius of 200 feet around a well will protect against problems relating to water supply contamination from viruses. This recommendation comes from studies showing that harmful viruses can survive up to 200 days in ground water and that typical rates of movement in both sand and gravel and bedrock are about one foot per day in ground water.

In this report we have assumed that glaciomarine clay-silt soils are not only limiting in their ability to treat residential wastewater, but they also have limitations relating to other site engineering issues such as slope stability, drainage and siltation potential. It is important to note that ongoing research suggests clays may have the capability of denitrifying wastewater more effectively than previously assumed. Low soil permeability causes saturation under the septic system, causing anaerobic conditions that are conducive to denitrification.

However, other engineering issues indicated above should limit residential development on clay soils, suggesting that it is important to provide larger lot sizes on clay soils that are comparable to those indicated in Table 3. For this reason, we maintain that the lot sizes recommended for clay soils protect surface and ground water quality as well as approximately incorporating engineering concerns such as slope stability, site drainage and siltation, and attendant contamination of surface water with suspended solids and phosphorus.

Conclusions

Despite activities at the state and federal levels, there are substantial reasons why local governments should develop their own ground water protection strategy. The cost to replace contaminated wells in difficult terrain as found in Westport Island may reach \$100,000 per dwelling for a small community system, as found in the Town of Plymouth.

The work performed in this study serves two purposes: 1) Bedrock aquifer delineation provides a first level inventory of valuable ground water resources that the Town can include in planning for natural resource protection; and, 2) Soil Carrying Capacity provides a analytical tool that the Town can use in evaluating lot sizes with a goal of protecting ground water resources from wastewater contamination.

It is important to recognize that any alteration in the land from its natural state will cause a change in ground water quality and quantity. However, preventing any degradation is not a realistic goal. The goals must be in balance with other needs in the Town such as economic development. Stratex, I.I.C., proposes the following goals for ground water resource protection in general in Westport Island:

Preserve Quantity

To minimize unnecessary withdrawal from and maximize recharge to the ground water aquifer such that ground water tables are not significantly lowered and inland migration of salt water is kept at bay.

Preserve Quality

To protect ground water quality so that it will meet the EPA Federal Drinking Water Standards and the State of Maine Maximum Exposure Guidelines and to consider restoring ground water quality where it is now inferior to those standards.

There are several objectives that work toward the realization of these goals. While some of the following objectives lie well outside the scope of this project, it is helpful to review the information Stratex, LLC, presents for additional areas in which to perform technical investigations as a basis for land planning. The following list of objectives may also be useful in the comprehensive plan update process.

Preserve Quantity

- ❖ Minimize recharge reductions and enhance recharge where possible (lot sizes over 2.5 acres produce negligible incremental runoff and therefore negligible loss of recharge);
- ❖ Coordinate storm water management with ground water management;
- ❖ Avoid water table lowering thereby reducing the need for deeper wells (particularly important near the shoreline where a one-foot reduction in the water table raises the saltwater interface 40 feet);
- ❖ Stay within the bedrock aquifer safe yield;
- ❖ Develop a data base on ground water elevations and monitor long-term trends;
- ❖ Provide public education on ground water resource protection.

Preserve Quality

- ❖ Prevent degradation of ground water quality;
 - 200-foot setback between wells and shoreline to prevent saltwater intrusion;
 - 200-foot setback between septic systems and downgradient (downhill) wells to protect against viral contamination;
- ❖ Limit land use activities in areas of bedrock aquifer protection zones (e.g., no chemical or petroleum storage permitted);
- ❖ Utilize recommended lot sizing based on soil recharge capability to minimize nitrate-nitrogen contamination from residential wastewater;
- ❖ Control housing and commercial densities commensurate with available recharge so that upon full build-out to the permitted density, ground water quality can meet Federal and State Standards;
- ❖ Control residential subdivisions and commercial developments so that ground water impacts to adjacent properties do not result in exceeding one-half of the difference

- between the ambient ground water quality and the Federal or State drinking water standards, or alternatively, setting an impact limit of one-half the MCL or MEG;
- ❖ Control all types of waste disposal;
 - ❖ Control salt water intrusion;
 - ❖ Develop an emergency response plan for accidental spills or hazardous releases;
 - ❖ Manage non-point source pollution such as those associated with agricultural practices, road de icing, well abandonment and material stockpiles;
 - ❖ Where feasible, develop a remedial action plan for improving water quality where it is now contaminated;
 - ❖ Develop a long-term ground water quality monitoring plan;
 - ❖ Provide public education on preserving and improving ground water quality.

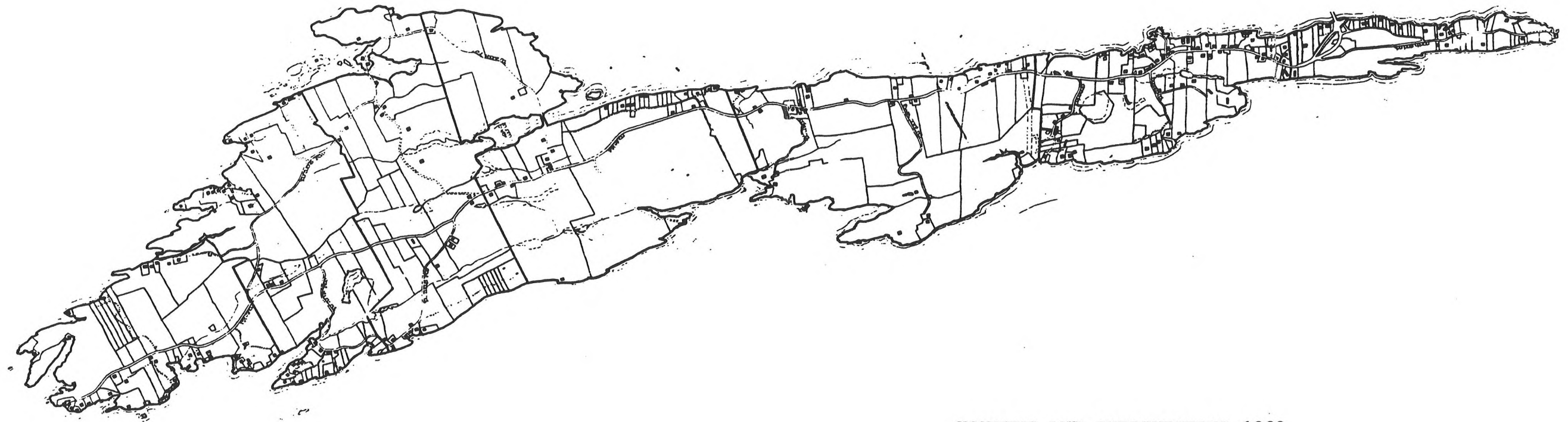
It has been our pleasure working with the Selectmen during the compilation and analysis for this report.

Closure

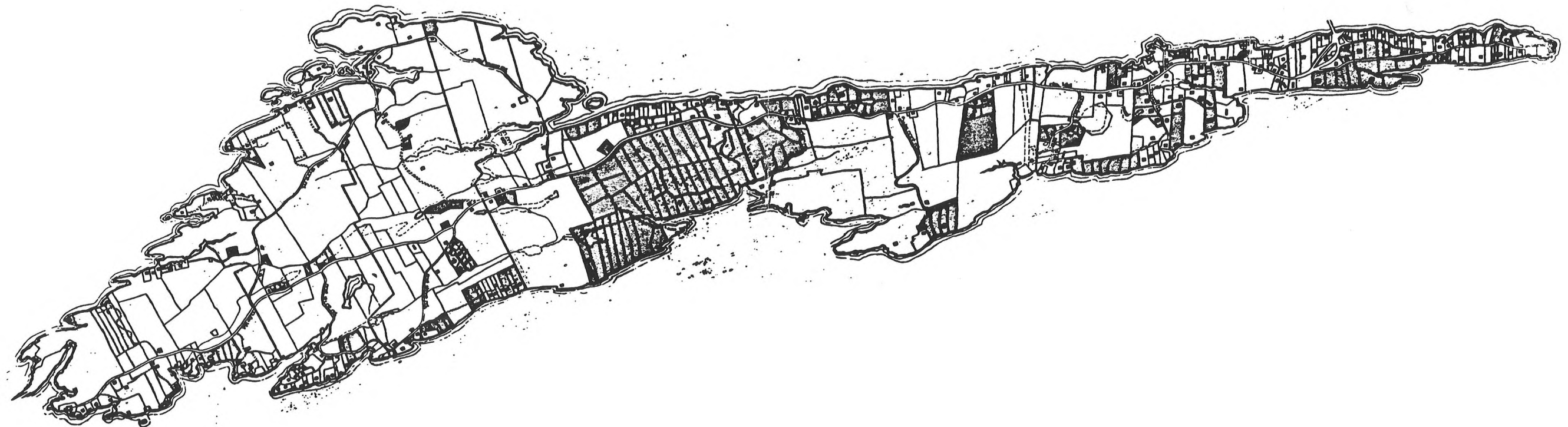
The work of Stratex, LLC, should be understood in the context in which it has been performed. Stratex has estimated likely values for engineering, and hydrogeologic parameters based on limited data and information from published sources. This work is based on data at discrete points and inferences regarding conditions between those points. Those inferences are based on Stratex's geologic judgment. Soil and geologic conditions may change over relatively short distances. These changes could affect the conclusions in ways Stratex cannot foresee. Stratex has also relied on data collected by others. If their work is not accurate, it may alter the analyses and conclusions.

This report was prepared for the exclusive use of Stratex's client for the specific application of assisting with updating the Westport Island Comprehensive Plan through the mapping studies. Stratex has based this work on its understanding of the requests made by the client. No other warranty, expressed or implied, is made. Assumptions, measurements, and data used for the investigation are stated herein; conditions other than those stated may alter the conclusions.

HOUSING AND LOTS 1974



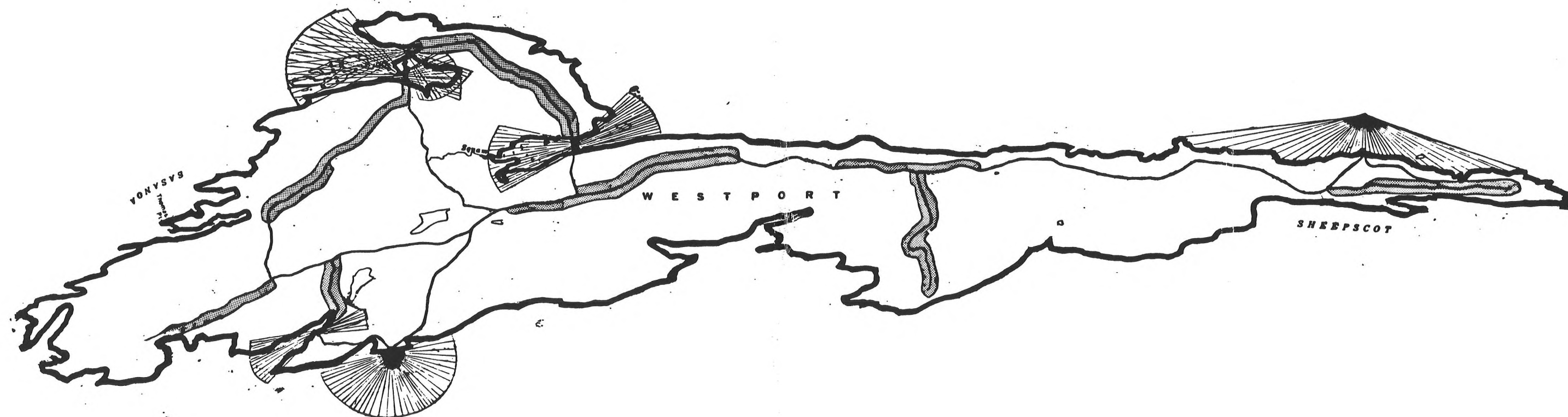
HOUSING AND SUBDIVISIONS 1988



SOIL SUITABILITY
FOR SEPTIC

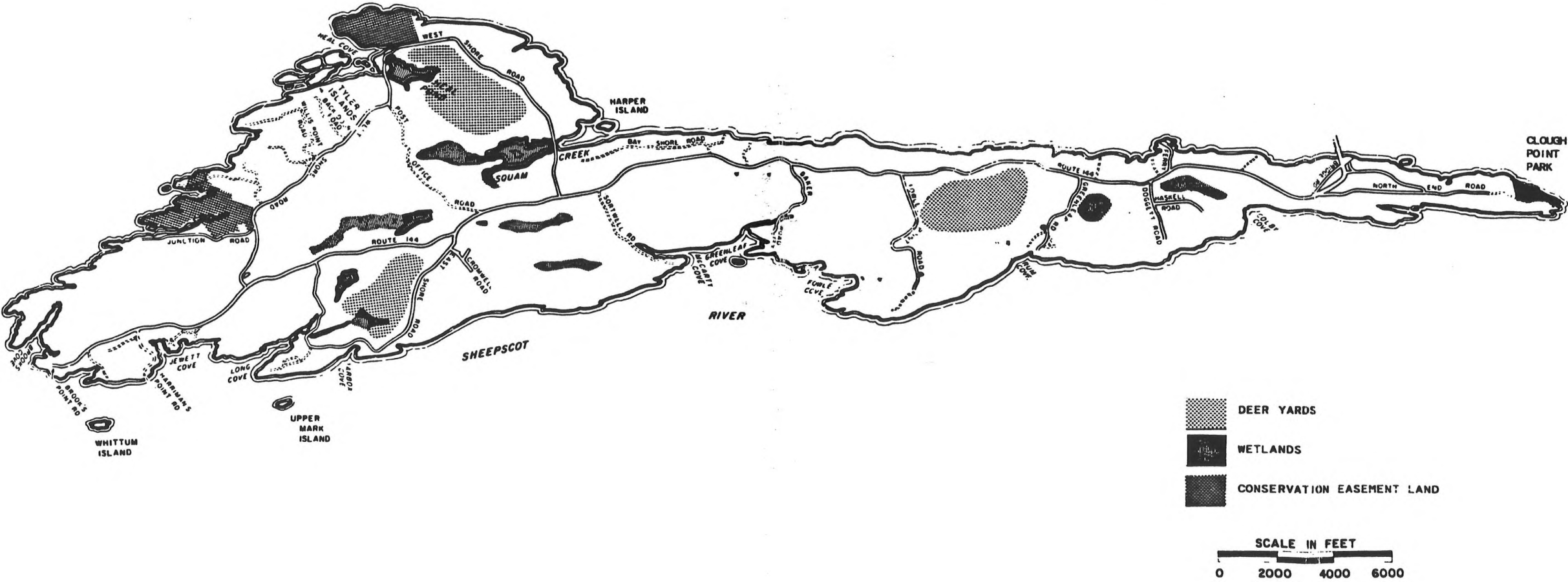


HATCHED AREAS - SUITABLE FOR SEPTIC
BLACK AREAS - UNSUITABLE FOR SEPTIC
CLEAR AREAS - SITE REVIEW REQUIRED



FAN AREAS - SCENIC VIEWS
HATCHED AREAS - MATURE TREES

DEER YARDS, WETLANDS AND
LAND IN CONSERVATION EASEMENT





MATCH
LINE

Explanation
+20 soil thickness in feet

Base map compiled by Wright-Pierce,
October, 2001, from data provided
by the Maine Office of GIS as USGS
1:24,000 topo quad maps of Westport
and Boothbay Harbor, Maine.

Coordinate system: UTM zone 19 north
Datum: NAD 83

Contour interval 10 feet.

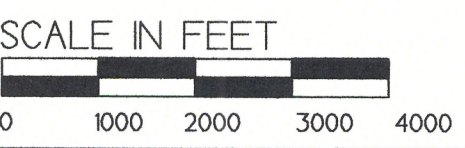


FIGURE 3B
SOIL THICKNESS
WESTPORT ISLAND, MAINE

PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001



Explanation

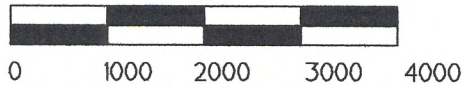
+20 soil thickness in feet

Base map compiled by Wright-Pierce,
October, 2001, from data provided
by the Maine Office of GIS as USGS
1:24,000 topo quad maps of Westport
and Boothbay Harbor, Maine.

Coordinate system: UTM Zone 19 north
Datum: NAD 83

Contour Interval 10 feet.

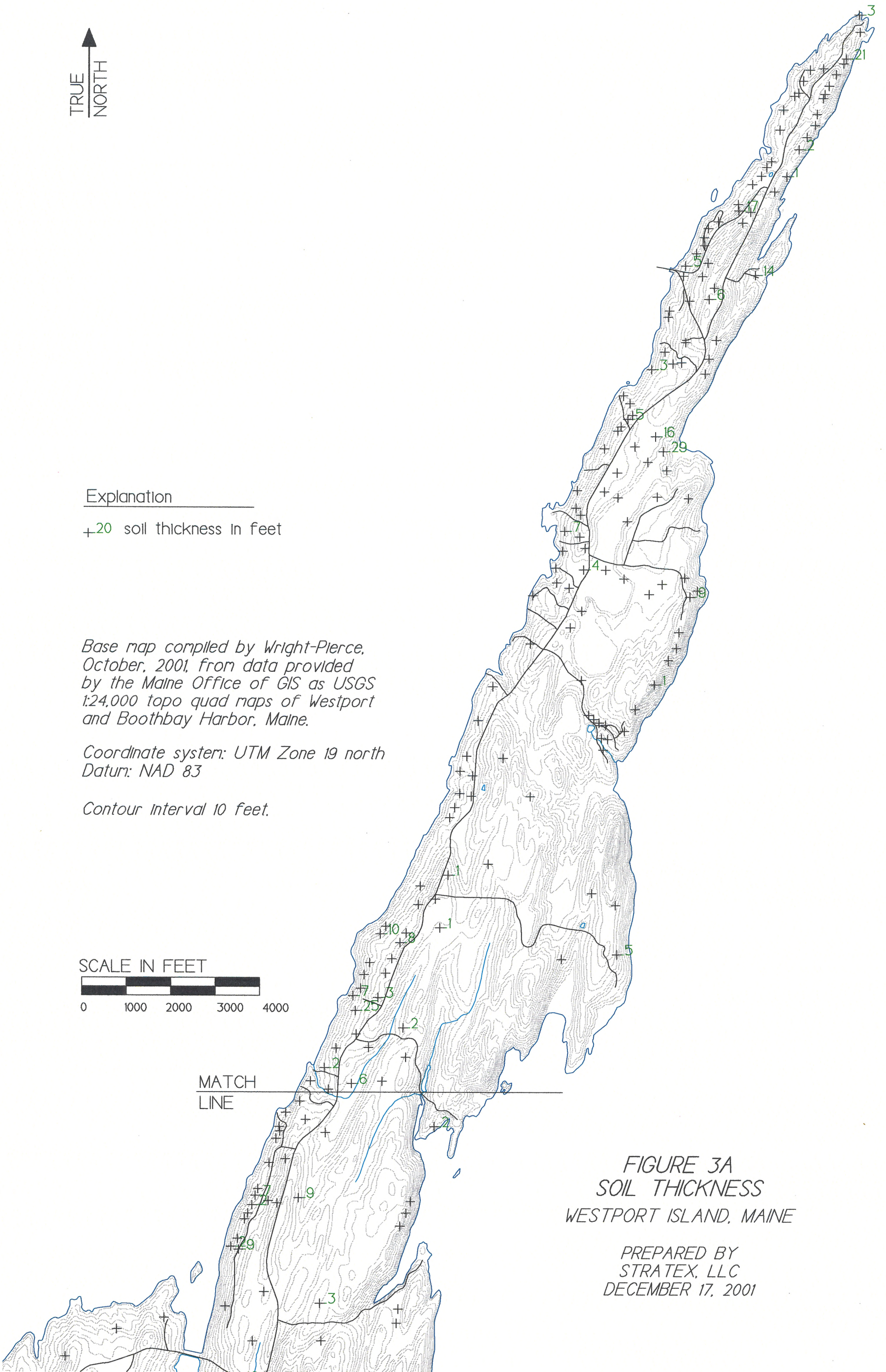
SCALE IN FEET



MATCH
LINE

FIGURE 3A
SOIL THICKNESS
WESTPORT ISLAND, MAINE

PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001





MATCH
LINE

Explanation

+34 bedrock well location
and number

Base map compiled by Wright-Pierce,
October, 2001, from data provided
by the Maine Office of GIS as USGS
1:24,000 topo quad maps of Westport
and Boothbay Harbor, Maine.

Coordinate system: UTM zone 19 north
Datum: NAD 83

Contour interval 10 feet.

SCALE IN FEET



0 1000 2000 3000 4000

FIGURE 2B
BEDROCK WELLS
WESTPORT ISLAND, MAINE

PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001



Explanation

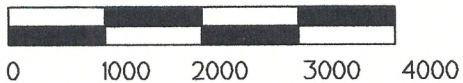
+34 bedrock well location
and number

Base map compiled by Wright-Pierce,
October, 2001, from data provided
by the Maine Office of GIS as USGS
1:24,000 topo quad maps of Westport
and Boothbay Harbor, Maine.

Coordinate system: UTM Zone 19 north
Datum: NAD 83

Contour interval 10 feet.

SCALE IN FEET



MATCH
LINE



FIGURE 2A
BEDROCK WELLS
WESTPORT ISLAND, MAINE

PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001



Soil Recharge (gpm/acre)

- 1.32 sand and gravel
- 0.66 thin sandy till
- 0.40 thick silty till
- 0.26 exposed bedrock and glaciomarine silt
- 0.12 glacial marine clay-silt
- 0.00 peat deposits

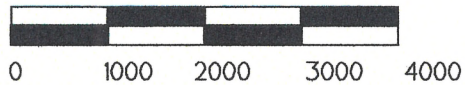
Soil recharge delineation based on interpretation of Soil Conservation Service Soil Survey by Stratex, LLC

Base map compiled by Wright-Pierce, October, 2001, from data provided by the Maine Office of GIS as USGS 1:24,000 topo quad maps of Westport and Boothbay Harbor, Maine.

*Coordinate system: UTM Zone 19 north
Datum: NAD 83*

Contour interval 10 feet.

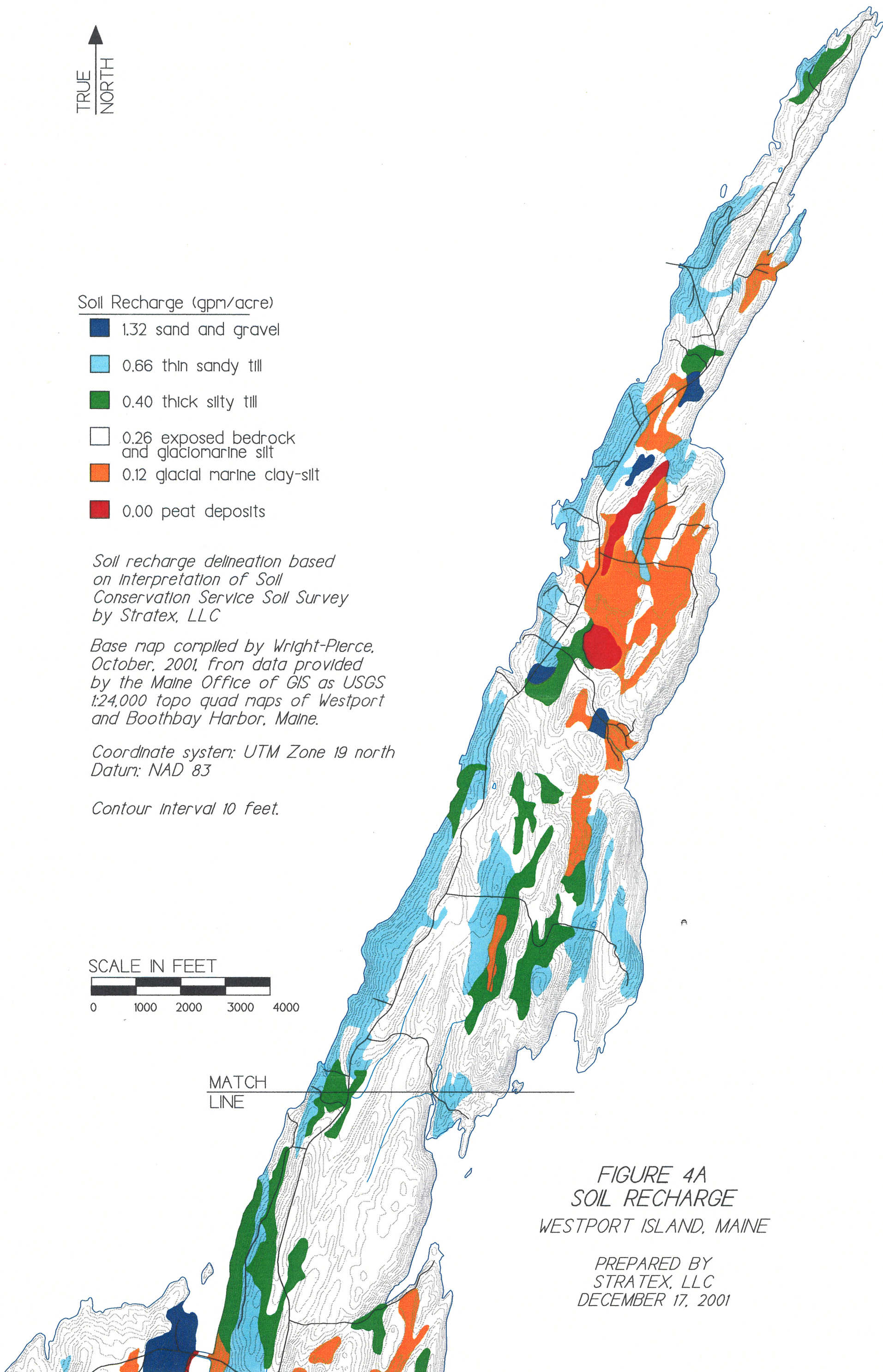
SCALE IN FEET



MATCH
LINE

FIGURE 4A
SOIL RECHARGE
WESTPORT ISLAND, MAINE

PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001





MATCH
LINE

Soil Recharge (gpn/acre)

- 1.32 sand and gravel
- 0.66 thin sandy till
- 0.40 thick silty till
- 0.26 exposed bedrock and glaciomarine silt
- 0.12 glacial marine clay-silt
- 0.00 peat deposits

Soil recharge delineation based on interpretation of Soil Conservation Service Soil Survey by Stratex, LLC

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*Coordinate system: UTM zone 19 north
Datum: NAD 83*

Contour interval 10 feet.

SCALE IN FEET

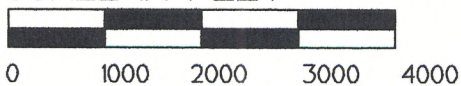







FIGURE 4B
SOIL RECHARGE
WESTPORT ISLAND, MAINE

PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001



Explanation - Bedrock Geology

-  Ocea Cape Elizabeth Formation
quartz-plagioclase-biotite schist
-  Ocea Cape Elizabeth Formation
with amphibolite in places
-  SOb Bucksport Formation
quartz-plagioclase-biotite-hornblende
granofels and gneiss
-  DSoI Oak Island Granite Gneiss
-  Dsg Granite

*Bedrock geology based on map prepared
by the Maine Geological Survey, Open-File
No. 00-148, 2000.*

*Base map compiled by Wright-Pierce,
October, 2001, from data provided
by the Maine Office of GIS as USGS
1:24,000 topo quad maps of Westport
and Boothbay Harbor, Maine.*

*Coordinate system: UTM Zone 19 north
Datum: NAD 83*

Contour interval 10 feet.

SCALE IN FEET



MATCH
LINE

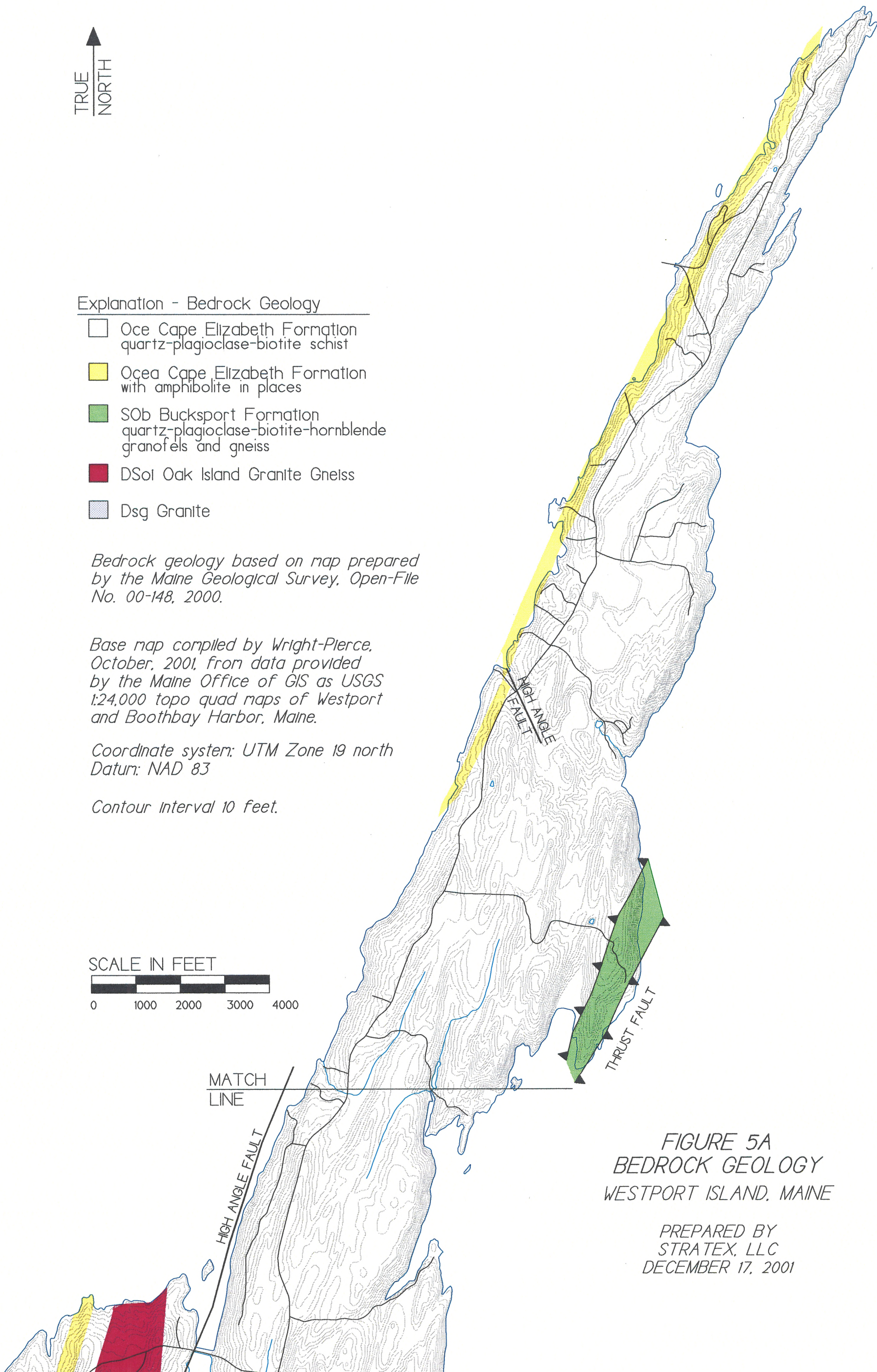
HIGH ANGLE FAULT

HIGH ANGLE
FAULT

THRUST FAULT

FIGURE 5A
BEDROCK GEOLOGY
WESTPORT ISLAND, MAINE

PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001










MATCH
LINE

HIGH ANGLE FAULT

Explanation - Bedrock Geology

-  Ocea Cape Elizabeth Formation
quartz-plagioclase-biotite schist
-  Ocea Cape Elizabeth Formation
with amphibolite in places
-  SOb Bucksport Formation
quartz-plagioclase-biotite-hornblende
granofels and gneiss
-  DSoI Oak Island Granite Gneiss
-  Dsg Granite

Bedrock geology based on map prepared
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1:24,000 topo quad maps of Westport
and Boothbay Harbor, Maine.

Coordinate system: UTM zone 19 north
Datum: NAD 83

Contour interval 10 feet.

SCALE IN FEET



0 1000 2000 3000 4000

FIGURE 5B
BEDROCK GEOLOGY
WESTPORT ISLAND, MAINE

PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001



Explanation



bedrock aquifer protection
zones (based on delineation
by Stratex, LLC)

*Base map compiled by Wright-Pierce,
October, 2001, from data provided
by the Maine Office of GIS as USGS
1:24,000 topo quad maps of Westport
and Boothbay Harbor, Maine.*

*Coordinate system: UTM Zone 19 north
Datum: NAD 83*

Contour interval 10 feet.

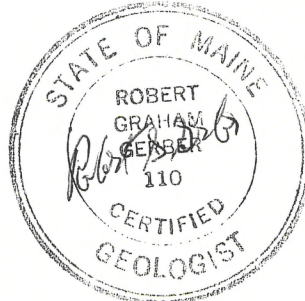
SCALE IN FEET



MATCH
LINE

FIGURE 7A
BEDROCK AQUIFER
PROTECTION ZONES
WESTPORT ISLAND, MAINE


PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001





MATCH
LINE

Explanation

-  bedrock aquifer protection zones (based on delineation by Stratex, LLC)

Base map compiled by Wright-Pierce, October, 2001, from data provided by the Maine Office of GIS as USGS 1:24,000 topo quad maps of Westport and Boothbay Harbor, Maine.

Coordinate system: UTM zone 19 north
Datum: NAD 83

Contour interval 10 feet.

SCALE IN FEET

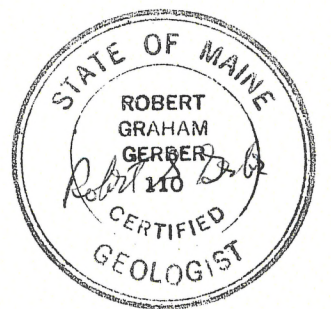
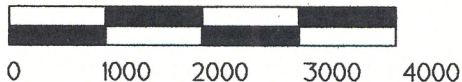


FIGURE 7B
BEDROCK AQUIFER
PROTECTION ZONES
WESTPORT ISLAND, MAINE

PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001

Explanation - Well Yields (gpm)

- 0.5 - 1.9
- ⊖ 2.0 - 9.0
- ⊕ 10 - 19
- 20 - 49
- 50 - 75

Linear Features

- 1st order strong
- - 1st order moderate
- 1st order weak
- 2nd order strong
- - 2nd order moderate
- 2nd order weak
- 3rd order strong
- - 3rd order moderate
- 3rd order weak

Well yields compiled from Town survey results and information from the Maine Geologic Survey, November 2001.

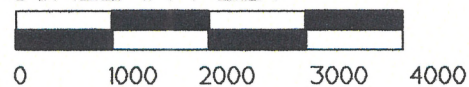
Lineaments compiled from map of Potential Zones of High Ground Water Transmissivity in the Boothbay Harbor and Westport Quadrangles, Maine (Maine Geological Survey Open-File No. 85-89e&h).

Base map compiled by Wright-Pierce, October, 2001, from data provided by the Maine Office of GIS as USGS 1:24,000 topo quad maps of Westport and Boothbay Harbor, Maine.

Coordinate system: UTM Zone 19 north
Datum: NAD 83

Contour interval 10 feet.

SCALE IN FEET



MATCH
LINE

TRUE
NORTH

FIGURE 6A
LINEAMENTS
WESTPORT ISLAND, MAINE

PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001



Explanation - Well Yields (gpm)

- 0.5 - 1.9
- ⊖ 2.0 - 9.0
- ⊕ 10 - 19
- 20 - 49
- 50 - 75

Linear Features

- 1st order strong
- - - 1st order moderate
- 1st order weak
- 2nd order strong
- - - 2nd order moderate
- 2nd order weak
- 3rd order strong
- - - 3rd order moderate
- 3rd order weak

Well yields compiled from Town survey results and information from the Maine Geological Survey, November 2001.

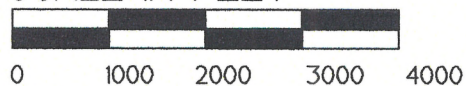
Lineaments compiled from map of Potential Zones of High Ground Water Transmissivity in the Boothbay Harbor and Westport Quadrangles, Maine (Maine Geological Survey Open-File No. 85-89e&h).

Base map compiled by Wright-Pierce, October, 2001, from data provided by the Maine Office of GIS as USGS 1:24,000 topo quad maps of Westport and Boothbay Harbor, Maine.

Coordinate system: UTM zone 19 north
Datum: NAD 83

Contour interval 10 feet.

SCALE IN FEET



MATCH
LINE

FIGURE 6B
LINEAMENTS
WESTPORT ISLAND, MAINE

PREPARED BY
STRATEX, LLC
DECEMBER 17, 2001

