Town of Long Island Comprehensive Plan 1995 Plan Summary

The process of developing a Comprehensive Plan was initiated by the Selectmen of the Town of Long Island in conformance with the requirements of the Comprehensive Planning and Land Use Regulation Act (30-A.M.R.S.A. Section 4326) soon after the incorporation in 1993 of this newest town in the State of Maine. The original purpose of the Growth Management Act was to force communities to appraise their municipal situations and to give them a tool with which to check unregulated growth. This was a burning concern in the mid and late 80's. A secondary but no less important purpose was to force communities to articulate their condition and "to reach local agreement on how (your) town should look and function in the future." (P.1, Comprehensive Planning)

This latter purpose is the one more pertinent to our situation, yet the first is not at the moment irrelevant, for we are looking at a change which could produce significant growth, the development of the Phoenix property.

A committee was formed including L. Morrill Burke, Chair; Christine McDuffie, Vice Chair; Barbara Biaisdell, Shirley Conner, Lorraine Doughty, Bob Jones, Michael Lingley, Kim MacVane, Linda Papkee, Ruth Peterson, Donald Reilly, and James Wilber. It was quickly agreed that the widest possible input from all segments of the community would make this plan the most reflective of community sentiment. A comprehensive planning survey was developed to try to find out what we most value about our community, what directions we want the Town of Long Island to take, and what we most fear and hope for the future of Long Island. This survey was sent to all resident and property owner families. Response to the survey was very strong, with 180 surveys completed and returned. Survey results were painstakingly entered onto a computer by island volunteers and analyzed with the assistance of Karen Martin of the Greater Portland Council of Governments. Those survey responses dominated the design and content of the Comprehensive Plan.

We have modeled our report to conform with specifics set forth by the Department of Economic and Community Development; but the model, or format, has not proven entirely satisfactory. It has been rather like fitting an off-the rack suit to a body which needs a custom tailor. The fact is that we are not like any of the communities we have studied nor like the paradigm implied by the Growth Management Act.

Two changes define our situation. One is, of course, our new found independence. The second is the imminent transformation of what has been for nearly fifty years the dead center of this island (the Phoenix property) into usable space for recreation and for new housing. We are, in short, in the process of being reborn. Metamorphosed. We may pretend that we are just going through a few small changes, and that pretension may be a necessary constraint on those imaginations which tend to be

overactive; but we also may stand in some danger if we fail to see that the Long Island of 2,000 A.D is very apt to be a completely different Long Island than the one we knew in even 1990. It is becoming increasingly difficult to distinguish clearly between the constants and the variables; but a report must pretend to identify these and freeze them in a moment of time, like an annual report for a corporation.

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We have been governed by the survey which expressed the will of our citizens. Our preferences on, let's say, one subject, that of growth were clear. We do not want any. Too late or too little. The best we can do is manage what growth is forced upon us. We Long Islanders appreciate the natural beauty and rural seclusion of our island and care deeply about our personal and family ties here. Seasonal and year round residents cooperatively invest large amounts of time, energy, and emotion in keeping this a viable community for our children and grandchildren to enjoy. We don't like high properly taxes, population growth and the inconvenience of our boat schedule. We fear development and too many people, and we hope to maintain Long Island's beauty and rural character. We understand that our island water supply is finite and vulnerable. We must protect both the quality and the quantity of this resource, and we must pursue affordable remediation in those areas already contaminated. Our lobstering and fishing heritage dominates the economic life of this island, and we want to protect its future. This plan is intended to reflect these views and priorities so strongly held by our citizens.

In the most general way we hope this report will give the Selectmen and the Planning Board the presumptive assumptions to manage this little isle.

Copies of the draft plan were provided to the Long Island community in May 1994, and a Public Meeting was held on June 4, 1994 in order to allow public participation in revisions, particularly of the policy sections, prior to the development of the draft which then was reviewed by Francine Rudoff of the Maine Department of Economic and Community Development. Further changes were made in response to her recommendations and these final changes have been presented to the Town of Long Island Selectmen and Planning Board for review. This Comprehensive Plan will be presented to the Town of Long Island to be considered for approval and adoption by the voters at the Town of Long Island Annual Town Meeting on May 6, 1995.

The Town of Long Island Comprehensive Plan 1995 is hereby submitted to the Maine Department of Economic and Community Development for approval.

Town of Long Island Comprehensive Plan

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Town of Long Island Comprehensive Plan

A History of Long Island

Over time, Long Island has shown many faces to the world: a remote self-sufficient fishing and farming community in the 1700's and 1800's; a summer playground for Portlanders in the late 1800's until World War I; site of a major Navy installation during World War II and into the 1950's; and the proposed site of a super tanker port in the 1960's and early 1970's. Today Long Island is a community of 900 people struggling to remain viable in the economic uncertainties of the 1990's. About two hundred of those 900 people live year round on the island. Long Island is now one of 13 islands in Maine still supporting a year-round community. At the turn of the century, Maine had 300 such island communities.

Long Ago

Clam shell heaps still contain bones of a species of giant beaver long since extinct, so we know they were among our early inhabitants. There is archaeological evidence that the Red Paint people were on Long Island (known as Smith's Island long ago), and we know that Native Americans were on our shores. Some lived here year-round, others only in the warm months.

John Smith, that intrepid explorer and speculator, recorded a visit to Long Island on a map dated 1600 in the British Museum. Quite clearly the French visited the island, perhaps under duress, for they named the harbor facing seaside, Havre de Grace.

The first white settler was John Sears from Boston in 1640. Very little is known of his goals, his activities, or the results. Between 1703 and 1706, the ownership of the island passed to a John Smith of Boston, and the island was named Smith Island. He had planned to settle, but whether it was the climate, the remoteness, or conflict with a native population that prevented it, history does not show.

The Eighteenth Century

Ezekiel Cushing, in the 1730's, acquired the island by trading a large tract of mainland property (now the heart of Portland) for the barren island. Although he did not live here, he established his brother, Ignatius, and family on the island, beginning a permanent settlement. In his will, Ezekiel divided the island among his many sons and daughters. Many of today's residents (year-round and seasonal) are direct descendants of these Cushings.

The Nineteenth Century

The first census ever taken on Long Island showed 146 residents, the largest population in the bay in 1830. By 1880, that number had grown to 252, with Peaks Island having 370. Early records contain names that are still with us: Bickford, Cushing, Doughty, Dyer, Gomez, Griffin, Horr, Johnson, Littlejohn, MacVane, Rich, Wallace, Woodbury. In their day the island was, of necessity, self-sustaining. The arable fields and pastures and wells and abandoned cellar holes can still be found in the thickets of alder and raspberry, and old stone walls mark off property lines and livestock enclosures. It is not now altogether comforting to remember that in the early days a fisherman did not have to steam two days off shore for a catch. The contiguous waters were swarming with fish and lobster.

Traditionally, farming and fishing have been the mainstay of the year-round population. At one time, every able-bodied male from 8-80 followed the call of the sea. In the 1800's the Doughty family, a common island name today, was recognized expert in the sword-fishing industry. In 1908, out of a year-round population of 260 adults, over 70 men were listed as fishermen.

Turn of the Century Development

Long Island suffered a limited real estate boom during the late 1890's and early 1900's. Large sections of the island were subdivided into very small lots with many streets and avenues laid out with geometric precision. Many of the lots on the west end and east end and along stretches of the north side were built on. The size of these lots, all non-conforming according to present standards, have contributed to some of the contamination problems which are described in the ground water section of this report.

Originally visitors sailed to the island. The excursion was risky. There were several known incidents of families lost and drowned in sudden squalls. In 1864, however, regular steamboat service was begun, and the island changed forever. By the turn of the century, Long Island had three large hotels accommodating 300-400 people, and several smaller guest houses and rooming houses. These hotels provided two dances weekly, bowling alleys, and fine restaurants. The business district claimed three grocery stores, an ice cream parlor and confectionery, a fish market, a barber shop and a pool room. There were three wharves for passengers and one for freight alone. Portland built the first city street on the island in 1897. A boardwalk, four feet wide, lined with gas lamps, bordered the street from the business district and continued for two miles toward the east end of the island.

During this period around the turn of the century, the islands were being touted as health resorts and idyllic retreats. Large steamers from Boston and New York brought vacationers in droves. Large summer hotels were a big attraction; there were dozens

of boarding houses; and most families had a room or two to accommodate the influx of visitors, many from Canada.

At this time Long Island's real claim to fame was its summer clambakes. People came by the hundreds to eat clams, lobster, corn, potatoes, eggs, bread, and pickles, cooked outside over fires that consumed cords of firewood. They were served outside in big fields or in the pavilion built for that purpose. The most famous was the celebration of Portland's Centennial when over 2000 people ate 500 bushels of clams cooked over 16 cords of firewood!

Fires and a Decline

The island's prosperity was dealt a cruel blow on the eve of World War I when fire broke out late on June 29, 1914 in the newly restored and luxuriously-decorated Granite Spring Hotel. There were no human casualties, but on the following morning gusty winds fanned the fire and destroyed the hotel, Ponce's wharf, and most of the adjacent business district. The bake shop, the barber shop, popcorn stands, fish market, restaurant, and boarding house were burned to the ground just as the summer season was starting. The Granite Spring Hotel was never rebuilt and only a much smaller array of stores arose from the ashes. Another hotel, the Dirigo House, was demolished in the early 1940's to make way for the Navy refueling depot for the Atlantic fleet. But the halcyon days for the islands was ended in the twenties with the coming of the automobile, and only now are these islands moving back towards prosperity, brought on ironically by the automobile itself. They are once again a place where one can "get away".

World War II Navy Refueling Depot

The most dramatic change to the island was the building of the Navy Refueling Depot to supply the North Atlantic destroyer fleet during World War II. Islanders' property was taken by eminent domain, and the construction process involved destroying nearly 90 homes and cottages, although a few were removed and relocated to other island sites. Part of the center of the island was blasted for the underground oil storage tanks with the stone rip-rap being deposited along the northwestern shore. In all the military took about one third of the 900 acre island. The reinforced concrete tanks were poured in place and equipped with all of the machinery that could pump them empty of fuel. To dock the huge warships, wharves were built; and the generator building, fire station, administration and barracks buildings were constructed.

From this invasion the island has never completely recovered. Like the immense German gun emplacements along the Normandy shore, the tanks are in place, and concrete with age cures to a hardness surpassing rock.

These two facts of our history - the many small lots created by the land speculators of the late 19th century and the Navy Oil Depot are the loci of most of our land use problems as the rest of the report will make clear.

In February 1969 the whole facility was sold to King Resources, a Denver corporation. They intended to build a super tanker depot by using the Stepping Stones, small rock ledges off the north easterly shore of the island which are adjacent to deep water in Luckse Sound, and transshipping the oil across the island to the tanks, thence across the bay to a refinery projected for an inland site. During the acquisition of the tank farm and pumping facility, agents for King bought up all the land, even small parcels, that were offered for sale, and often at prices that no one even dreamed of. A small group mounted a powerful protest to what was feared would be the future destruction of their island environment and lifestyle. Although there was some oil storage use of the property between 1974 and 1981 under the ownership of King Resources, delays in the approval process for their elaborate expansion plans moved them into a time of changing world oil economies, and the King Resources Corporation eventually failed, filed for bankruptcy, and the subsequent reorganization was renamed Phoenix Resources.

It is important to add here that during the period of King Resources' ambitious plans, the City of Portland's interests were almost entirely behind King Resources which some felt demonstrated their indifference to the welfare of the island. Lingering sentiments from this short but intense period of conflict were part of the fabric of the relations between Long Island and Portland. Phoenix Resources came in as a caretaker operation and has proved to be an exemplary neighbor. They have made a number of attempts to sell the facility, but the potential liability attached to the tanks proved too great a risk for even well-heeled investors.

Recent Real Estate Development

In recent years Phoenix has divested itself of large and small parcels of its land holdings (separate from the tank farm) by selling them to Northland Corporation, a Newton, Massachusetts based real estate developer. A large tract on the southwest end of the island known as Jerry Point or Mount Hunger was subdivided into large lots, and three houses, all expensive by Long Island standards, were built. Large lots were also sold on the back shore, and many interior parcels of land were sold to abutters and other local property owners. Two separate tracts of land were donated by Northland to the Long Island Civic Association to be used for recreation purposes by the people of the island. One is the very beautiful double horseshoe Fowler's Beach with its swampy backland which is located on the western end of the island facing Peaks Island, and the second is a nine acre interior parcel which is used as the island baseball field. Now Phoenix wishes to divest themselves of the rest of their holdings, and negotiations are underway with the Town of Long Island and with the same Northland Corporation. Again the sticking point is the tanks. If a way can be found to

immolate them and the Town of Long Island from liability, Northland will purchase the property and subdivide it, allowing the town to acquire valuable and necessary buildings and land, and the tank farm will be neutered.

Incorporation of the Town of Long Island

In June of 1991 the City of Portland published a new property revaluation reflecting the real estate boom of the 1980's which had disproportionately affected island real estate values. This resulted in island property tax increases which doubled and tripled property owner's tax bills. While the level of municipal services was dramatically different between the island and the mainland, investigation showed that while something like a village corporation might bring more local control to the island, establishing a village corporation could not result in a lowering of taxes that would reflect the lower level of services. Some island residents publicly worried that they could not afford to stay on the island, and Long Island's existence as a year round island community seemed threatened.

The Long Island Civic Association set up an ad hoc committee to look at what could be done. After evaluating other options (including doing nothing) the Town of Long Island Research Committee, under the leadership of Mark Greene, focused on the concept of incorporating as a separate island town with a town meeting form of government. There was wide participation from residents and property owners, both year round and seasonal, in the massive work of this committee.

In addition to extracting details from the City of Portland's budget to gain an understanding of the costs of municipal services on Long Island, the research group looked to the functioning of other similarly sized towns throughout Maine, and particularly studied other island towns. These communities were seen to be meeting their own needs with economy and effectiveness and with much lower tax rates. Long Island grew to appreciate how much was already being done on our island by committed community members who had, for example, developed an exemplary volunteer fire department, trained Emergency Medical Technician volunteers, and created our own island library.

"An Act to Allow Certain Islands to Separate from Portland" was filed with the 115th Maine Legislature in the fall of 1991. Originally including other Portland islands, its sponsor, Rep. Anne Rand, eventually decided that only Long Island was ready to vote whether to become a town. Preparing for the legislative process involved nearly every member of the community. Meetings filled island calendars, and mileage climbed on mainland cars traveling to Augusta where a constant vigil was maintained to monitor the bill's progress until it passed and was signed by the governor on April 3, 1992.

People on the island continued to work and plan and research how to make a small town viable and whether to do so would be in the best interest of one of the few remaining year round Maine island communities. Negotiations and the arbitration process defined the details of the separation from the City of Portland, and every aspect of what this step would mean for Long Island was discussed over and over again. While straw polls had repeatedly indicated strong support for creating an independent town, not everybody on the island was in favor of taking this step, and debate was lively. Finally, on November 3, 1992 residents voted 129 to 44 in favor of incorporating a new Town of Long Island.

Three selectmen and three school committee members were elected at the first town meeting and set to work at once to develop the structures and budget which would, with the approval of the town meeting, allow the town to begin functioning on July 1, 1993. Volunteers started out paying for the expenses of the town by designing and selling t-shirts and accepting donations. After incorporation, property owners voluntarily prepaid more than \$50,000 in taxes to give the town working capital before property taxes came due in September.

More than two years into the operation of the town, the budget is on target; the school is exceeding its already high standards; roads are well and thoroughly plowed; the solid waste transfer station is a source of pride, no longer embarrassment; the Sheriff's Department's police coverage is an improvement; the volunteer fire department and EMT service are vigorous and strong; and the float has stayed in the water beside the wharf giving any-tide winter access to the island for the first time in memory. Things are going well in the Town of Long Island.

Conclusion

That we are an island subject to dangerous oceans and winds and uncertain crossings is something we have lived with from the beginning. And those may be the factors which account for a long and well established character trait in the islanders: we are suspicious of development as progress. Long Islanders accept limitations. As the survey quoted at the end of the report shows, Long Islanders think we already have affordable housing through our own efforts; we don't want subsidized housing, or cluster housing, or trailer parks, or hotels, or boatels. The lure of big prosperity doesn't catch many fish on this island. We are modestly circumstanced and want to stay that way. But we are fiercely independent, willing and very able to take on the responsibilities of governing ourselves, providing our own services, and protecting this very small place which we care so much about.

Town of Long Island Comprehensive Plan

Population

The following are locally generated figures created after doing a windshield survey with the cooperation of the Town of Long Island Volunteer Fire Department and others in the community who have detailed knowledge of who stays on the island year round. Our island community is small enough that population statistics are common knowledge, and residents can be counted relatively easily. This information has community endorsement.

Our population 10 years ago was 172. Our population today is 180 people1. We have not experienced a great change. Dramatic growth in numbers is not expected.

Total Winter Population - 180

Age breakdown

| Preschool | 10 | (05.56%) |
|-----------|----|----------|
| 5-17 | 33 | (18.33%) |
| 18-44 | 56 | (31.11%) |
| 45-64 | 45 | (25.00%) |
| 65+ | 36 | (20.00%) |

Tenure of winter households

| Same as 10 years ago | 43 | (53.75%) |
|---------------------------------|----|----------|
| Returned, retired, or converted | 22 | (27.50%) |
| New household (marriage, etc.) | 6 | (07.50%) |
| New to the community in | | • |
| the last 10 years | 9 | (11.25%) |

Occupancy

| Single Occupancy | 26 |
|---------------------|----|
| Double occupancy | 31 |
| 3 or more occupants | 23 |

Total households 80
Average household size 2.25 persons

¹ These figures do not correspond to official census figures because a slightly different set of criteria was used. 1990 Census shows 215 total population.

The ability to make a living in the Town of Long Island is fundamental to the continued existence of our year round community, a fact, which we do not take lightly. Philip Conkling of the Island Institute cites the grim statistic that of more than 300 year round Maine island communities in existence at the turn of the century, only 14 remain. The defining criteria for year round community status is an island school because lack of a school reflects lack of children. With no school, few families with children find it possible to stay on an island; the population cannot renew itself; and the year round community dies out. It becomes a summer island. As Conkling's figures point out, year round Maine islands are an endangered species.

Attracting and keeping young people on Long Island must be a priority if we are to survive. Youthful vigor and abilities are required here more than in most communities because ours is a more demanding setting. Our town must provide the kinds of services which will support the needs of young families. The well known quality of our school is a source of pride among our residents and property owners and reflects the level of community support it has traditionally enjoyed. Our school is valued because its excellence holds families here and attracts more, but families must have the wherewithal to support the decision to live here.

Population Policy

Inasmuch as the citizens of Long Island have expressed a desire for minimum growth, it shall be the policy of the Town of Long Island to neither actively discourage nor actively encourage population growth with the exception that the Town shall attempt to provide services which make it possible and desirable for young families to locate and remain here.

Population Policy Implementation Strategy

- 1. Population is considered to be stable, neither growing nor shrinking, at this time. Periodic review of population levels should be made so that the town can respond as necessary to either increasing or declining population trends.
- 2. The Town is encouraged to continue its current commitment to the quality of our school and community services.

Town of Long Island Comprehensive Plan

Economy

Employment that gives predictable and secure year round income to families and other households is one of Long Island's biggest challenges.

Constraints of the Island Setting

The Town of Long Island is a rural isolated island. We are 4.5 miles out from the mainland which is three quarters of an hour away if you take the ferry. Living here requires a real commitment of time and a positive upbeat island psyche. While our population seems not to have grown appreciably in the last six years, there have been thirty new homes built in these same six years. Nine of these are year round homes: four for fisherman, four for retirees, and one for a professional whose business is elsewhere.

This latter case, combined with certain other new inhabitants, may mark a new direction for population growth. With the advent of the personal computer, the Fax machine, and the incipient development of the information highway, professional people could locate on our Island and do their business comfortably while still enjoying a rural and safe setting, one that is only forty-five minutes from Portland and an hour from an airport.

But what has to be borne in mind is that this forty-five minutes is merely the steaming time of the island ferry. The inconvenience lies with the schedule. In the winter that ferry leaves the island only five times a day and arrives five times a day. You cannot leave the island after 7:15PM nor before 6:50AM. And, although it has not happened often in recent years, the weather could interdict passage all together.

The limitations of living here and commuting particularly in the winter, are severe, as onerous as living in Connecticut and commuting to New York City without those pecuniary rewards or that market place. For these same reasons Long Island is limited in its attraction for business.

A wholesale lobster trading concern operates here from about May to November. There is some cottage industry, but we do not expect a significant upturn in job opportunities. Employment and labor characteristics are typical of small island towns. We have limited public transportation. The costs of importing materials from the mainland are significant which makes Long Island unattractive to large scale commercial development. There is no municipal water supply and very limited waste disposal. Road plowing and maintenance are very adequate, but there are modest

municipal services. The source of considerable community pride, our fire and EMT services are all volunteer.

The weather is a factor as limiting to island growth as is the cost of transportation. Physical characteristics and difficulties of access place limitations on development, and growth is likely to be limited to residential building, although small entrepreneurial and cottage industry is expected to grow moderately. Such small scale industry seems to suit Long Islanders just fine.

Employment

The mainstay of the community is lobstering and fishing. Contrary to all expectations, the lobster harvest for the past few years has been good; but the ground fishing, dragging, gill netting, and hand lining has been in a slow to rapid state of decline and presently will be shut down almost entirely. There are fishermen here, but not many fish to be caught. A number of our very able fishermen now spend a long winter season fishing Alaskan waters. The depletion of the Gulf of Maine fishery is a catastrophe which will have long term implications for life on Long Island and its fishing heritage.

Most Long Islanders prefer to work on the island or on local waters. There is seasonal and/or part time employment at the restaurant, the store, the post office, the town hall, and snow plowing, trash removal, and various other small enterprises. Self employment includes carpentry, day care, storekeeping, hairdressing, driving taxi, lawn care, and home improvement jobs. Catering and floral arrangement businesses are supported by those who rent the local VFW hall for weddings, company outings, and other functions. People do other odd jobs in the winter to supplement incomes. Commuters are employed on the mainland in nursing, teaching, engineering, bookkeeping, banking, child care, secretarial positions, and a variety of other employment.

The general store is open only 12 hours a week in the winter months. The small winter population makes any business activity during that season more a thoughtful accommodation for the residents than a productive enterprise. During the summer months, demand supports its opening 12 hours a day with a half dozen additional workers. A seasonal restaurant opens around Memorial Day and closes around Columbus Day. A Bed & Breakfast was opened in the summer of 1994. A seasonal lobster pound operates from July to September.

We have a seasonal gift shop run by volunteers for the benefit of the Methodist Church. Volunteerism is a highly developed avocation on Long Island with every dime spent by the town, civic, church, veteran, library, and school groups supplemented by many hours of donated effort.

Also mentioned should be the off-island workers. Carpenters, contractors, sternmen, the school superintendent and some of the school's specialists, and other workers come from the mainland to do their work here. There are also those who live and work at least for periods of time on the waters within the territory of the Town of Long Island such as Russian pogeymen and the crew on the military supply vessels which anchor in our town waters for much of the summer. They seem to have little impact on the economy (but the bartering between the islanders and the crew of the Russian pogey boats adds entertainment to late summer).

Seasonal Residents

Seasonal residents have a great impact on the financial status here, representing 75% of the tax base. They employ many for various odd jobs, home related services, fishing, and sternman positions. Seasonal residents are also part of the Long Island work force. They make jobs for island residents, but they are also among the workers on the island - in the Spar, the store, as lobstermen, sternmen, electricians, appliance repair persons, lawn mowers, babysitters, house cleaners, and painters. On Long Island summer people and year round residents have created and enjoyed a deep friendship and spirit of cooperation and a sense of common cause for the fate and conditions of the island.

However, in recent years there has been a change in the constitution of the summer people. A frequent wait is, "I looked at all those people on the 10 o'clock boat and didn't recognize a face." The substance behind such a remark is that we are receiving a great many more short term renters, partly because so many other vacation spots are spoiled or too crowded and partly because a number of our dwellings, purchased at the height of the real estate boom of the 1980's, are burdened with heavy mortgages that need servicing by rental income. Recent tax increases have caused some longtime property owners to rent their homes for several weeks each summer to meet those new expenses.

Tourists and Day-trippers

The store, restaurant, gift shop, and lobster pound benefit from tourists and day-trippers who visit our island, arriving for the most part on the ferries of the Casco Bay Island Transit District. Growth in the number of day-trippers to our beaches is apparent despite the difficulties and expenses of parking in the city and the increased boat fares. Contrary to the law of supply and demand which says that the greater the demand the lower the price, boat fares, like ski tow tickets, go up in price during the peak season. This reversal makes the winter fares lower and helps the winter residents. But the fares have no influence on the winds or the seas or the temperatures and these, stinging and capricious, discourage many.

Economic Policy

It shall be the policy of the Town of Long Island to nurture cottage industries (among those which seem appropriate are small bed and breakfast establishments) and small scale entrepreneurial efforts in the areas of town which are zoned for business and to support the lobstering and fishing activities which have traditionally been the backbone of the town's economy.

It shall be the policy of the Town of Long Island that all businesses conform to state and federal sewage and waste water treatment standards and that the costs shall be born by those businesses.

Economic Policy Implementation Strategy

- 1. The Selectmen will continue to be sensitive to and encourage opportunities for small scale entrepreneurial businesses, cottage industries, and marine related activities which are seen as compatible with the values of our community and which do not put at risk our fragile island and its surrounding marine environment.
- 2. Our Code Enforcement Officer shall be given the support necessary to effectively monitor the environmental safety of present and future development.

Town of Long Island Comprehensive Plan

Ground Water

Public Opinion - An overwhelming majority (91%) of people responding to the questionnaires done in the fall of 1993 by the Town of Long Island Comprehensive Planning Committee felt that protecting Long Island's drinking water is very important to them. The results of this section were so strong that the entire results of Section 5 - Protecting the quality and managing the quantity of our aquifer and coastal waters - are quoted here:

a. How important to you is protecting Long Island's drinking water?

164 (91%) - very important 12 - modérately important

2 - not important 1 - no opinion

I - did not answer

 Wastes from septic systems can contaminate ground water. Would you support larger and smaller lot sizes based on the differing abilities of soils on various parts of Long

Island to accommodate waste water?

134(74%) - yes

21 - no

21 - no opinion

4 - did not

answer

c. Are you willing to forgo the right to build on small pieces of land to protect our ground water?

> 152(84%) - yes 11 - no 13- no opinion 4 - did not

d. Are you willing to limit changes (additions, new bathrooms, etc.) to your properties in order to protect our ground water?

> 127(71%) - yes 32-`no

17-no opinion

4 - did not

answer

answer

e. Would you like to see the town:

63- Vigorously require all septic systems to

conform to code

64- Require periodic maintenance/inspection of

existing systems

100 - attempt to encourage intermediate improvements

in inadequate existing systems

41 - Pay attention only to new construction

0 - Ignore contamination of ground water

2 The complete survey results are included as Addendum A at the end of this report.

"The Gerber Report"

As we think about developing policies to protect our water supply, we can benefit from the extensive work that has already been done. In 1986 the City of Portland commissioned a study of the ground water of all of the inhabited islands then within the city. The Long Island Civic Association made a valuable contribution to that study by conducting a well sampling survey which tested 104 of the wells on Long Island, and the resulting data was folded into the final "City of Portland Island Ground Water Management Study". Because of that significant sampling of Long Island wells, Robert Gerber, author of what has become known as the "The Gerber Report", says that Long Island "has about as good a data base as any community" in regard to their water resources.

The following is a summary of information pertinent to Long Island extracted from the "City of Portland Island Ground Water Management Study". It is quoted directly from the report but leaves out references to the other Portland Islands, and replaces references to the "City of Portland" as the governing body with the 'Town of Long Island". This report gives important background for the kind of policy decisions the people of this town will have to make to protect our ground water.

Ground Water Occurrence and Movement

All ground water on the island originates from rain and snow that falls on the land surface of the island. While most of this precipitation is lost because of surface run- off, evaporation, or use by vegetation, a small portion becomes "ground water" when it seeps into the ground to saturate the soil and fill narrow cracks in the underlying bedrock or ledge. Once in the soil or ledge, the ground water generally moves downhill and either discharges to a local wetland or stream, or travels all the way to the ocean to discharge near the shoreline. Water is in turn evaporated from the ocean (or other more distant areas) then returned to the land surface in the form of rain or snow.

When a saturated body of soil or ledge has sufficiently open and interconnecting voids or cracks to yield a quantity of water to wells at a cost that people are willing to pay to obtain ground water, that body is defined as an "aquifer". As a well draws water, the aquifer is recharged by the continued infiltration of water from soil and/or bedrock above and to the sides of the well. Wells that are pumped faster than the natural recharge rate of the aquifer will go dry or, in coastal areas, will pull ocean (salt) water into the aquifer.3

^{3.} extracted from the "City of Portland Island Ground Water Management Study" prepared by Robert G. Gerber, Inc., Consulting Civil Engineers and Geologists, 17 West St., Freeport, ME 04032, August 1986

There are two separate, but interconnected types of aguifers on the islands: a.)those in the soil, or "surficial" deposits; and b.) those in the ledge, or "bedrock". Except in those areas where there is no soil cover over ledge, precipitation or snow melt must infiltrate and travel vertically downward through the soil before it can pass into the bedrock. In gravel soils, most precipitation can enter the soil immediately, although almost half the annual precipitation is captured by plants or lost again to evaporation. In clay soils, as little as 5% of precipitation is able to infiltrate the soil and pass through to the underlying bedrock. Where sand or gravel deposits have sufficient saturated thickness (preferably greater than 10') and where a dug well can collect ground water originating as rainfall over a minimum of about 5 acres of land, then a dug well can supply a single family house with sufficient water for domestic use. However, in most cases on the island dug wells are not feasible and homeowners must rely on drilled bedrock wells for their water supply.

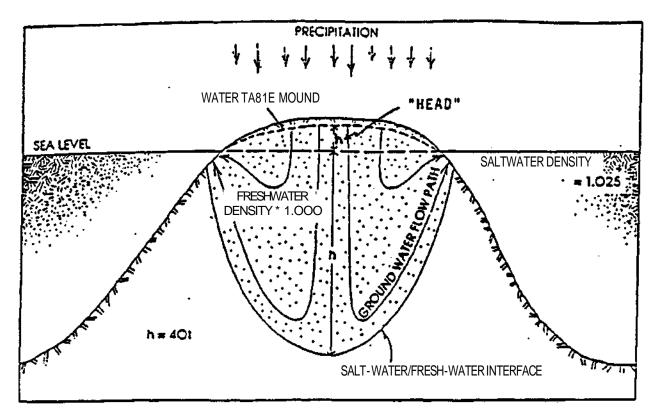
Bedrock aquifers in Casco Bay absorb water into cracks or "fractures" on the higher parts of the island. On the average, about 8% of the precipitation falling on the island moves through the fractures to become ground water flow in the bedrock aguifer. These fractures may be very narrow (50 microns wide) openings in the rock along the planes of the ancient sedimentary layers in the rock (which may now be tilted to a nearly vertical attitude), or may be cracks resulting from rock breakage during the rock flexure that has taken place during the several hundred million years that the rock has been formed, and then moved around on the earth's surface. As shown in Figure D-34, ground water entering the rock at the highest point of the island flows nearly straight down, deep into the earth before turning sideways, then upwards to discharge at the saltwater interface. Ground water entering the rock near the edge of the island stays shallow and will discharge just above or below the high tide line.

Salt water intrusion is a problem of particular concern. Salt water corrodes plumbing fixtures, is unhealthy to drink, and is very expensive to treat to make it fit to drink. Fresh water in the form of ground water, because it has a lower density than salt water, will float on top of salt water. A thick zone of brackish ground water occurs near the salt water interface as shown in Figure D-3, due to mixing caused

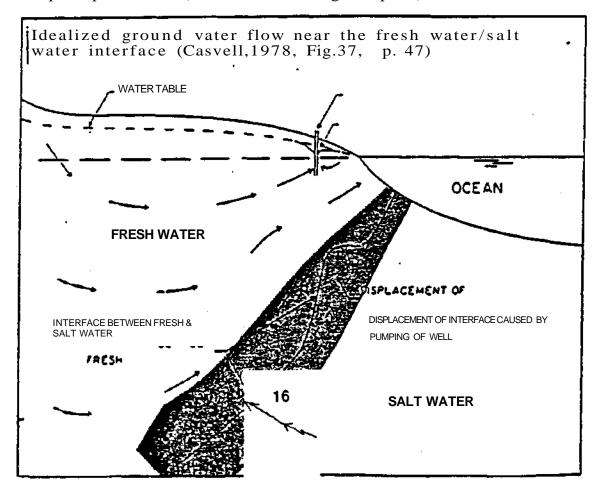
5- extracted from the "City of Portland Island Ground Water Management Study" prepared by Robert G. Gerber, Inc., Consulting Civil Engineers and Geologists, 17 West St., Freeport, ME 04032, August 1986

⁴ See page 16





Schematic cross section of an oceanic island shoving lens of fresh water. The water table mound is maintained by precipitation. (Casvell, 1978, Fig. 36, p.46)



by tidal fluctuations and by ground water moving along the saltwater interface. Theoretical salt water interface is located about 40 times the depth below Mean Sea Level as the surface of the ground water is elevated above Mean Sea Level. Therefore, the saltwater interface is very deep under the center of an island where the surface of the ground water may be close to, say, 80' above Mean Sea Level. However, the closer to the shoreline, the shallower the saltwater interface becomes. As shown on the bottom of Figure D-3, when a well is being pumped and draws down the ground water surface, salt water is displaced upward towards the well.

Study Findings

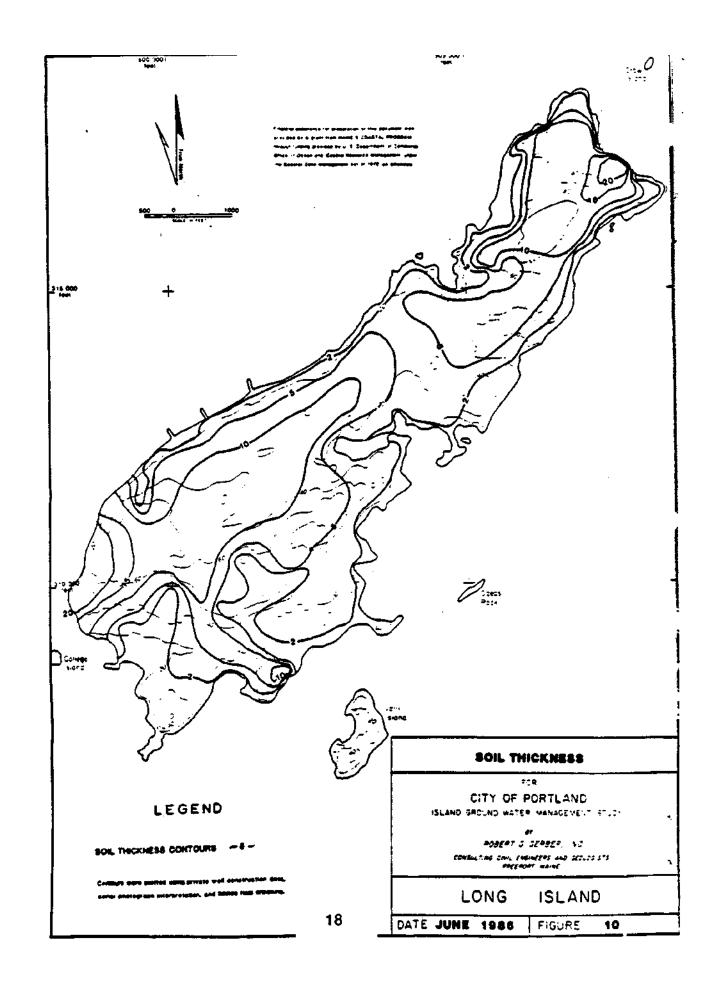
The geology of the island is fundamental to the understanding of ground water occurrence and movement. We have developed geologic maps of both the soils and the bedrock. The soils are subdivided by their origin and texture, since these factors most closely affect the ability of their precipitation to infiltrate the soil and also the speed with which ground water is transmitted from one point to another. Based on our experience, laboratory measurements of the properties of similar soils, and knowledge gained from other computer simulations having good calibration, we have assigned average precipitation infiltration rates to each soil group which are used to estimate recharge to the soils and to estimate the amount of dilution that precipitation will provide to any contaminants leaked to the ground water.

The principal soils on the island include: a) a thick silty, stony soil called "glacial till", which was laid under the last continental ice sheet 13,000 to 20,000 years ago; b) thin stony, sandy soil developed from water washing through glacial till; c) a stratified sand or gravelly sand deposited by melt water streams flowing off the glaciers 13,000 years ago; and d) interbedded fine sand, silt, and clay deposited 13,000 years ago when the ocean was 250' higher than at present. The stratified sands and gravels make the best surficial aquifers; the tills are intermediate in favorability; and the clay-silts are least productive.

Based on our field mapping and the water supply questionnaire results, we have prepared maps showing the thickness of the soil deposits on the islands ⁶. Dug wells would only be reliable where soils are relatively thick (say 10' or greater). Soils are typically less than 5'7

7- extracted from the "City of Portland Island Ground Water Management Study" prepared by Robert G. Gerber, Inc., Consulting Civil Engineers and Geologists, 17 West St., Freeport, ME 04032, August 1986

⁶ Soil Thickness map is on page 18.



thick except in large areas on the northern and southern portion of Long Island. Because of the relatively thin soils, the surficial aquifers are only of minor importance to the island as a water source. On a map called "Special Features Map"⁸, we have shown the locations of sites in surficial deposits where above- average thickness and coarse texture favor developing wells in the surficial deposits.

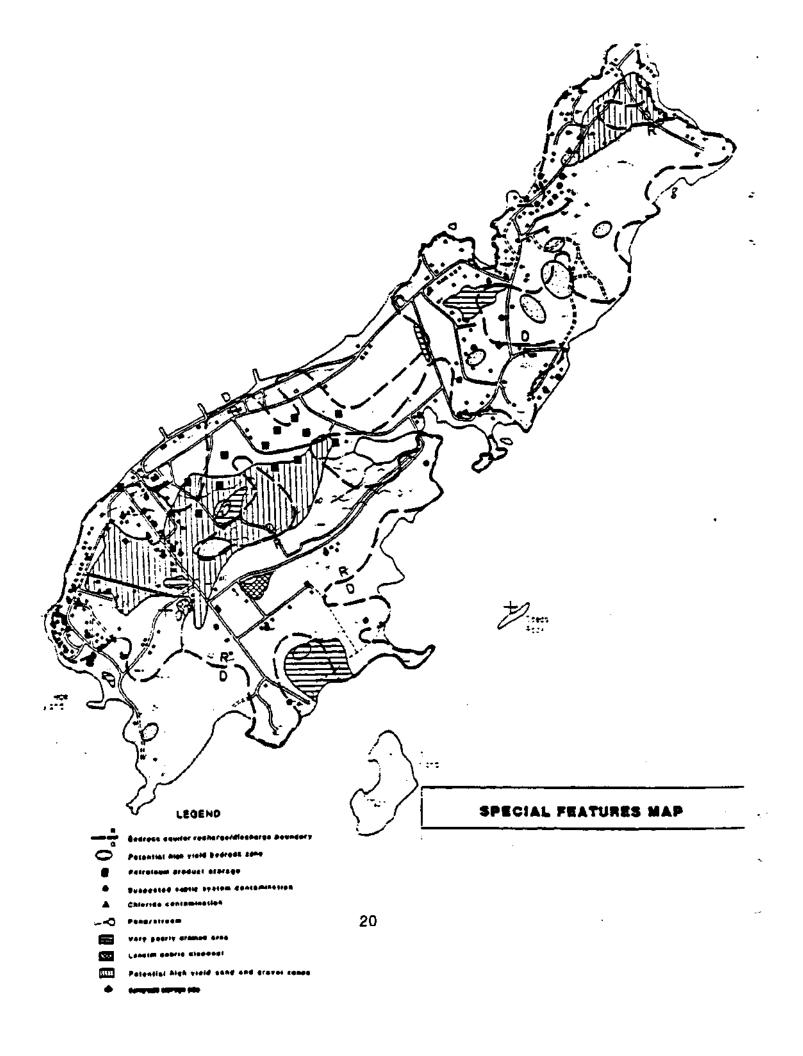
The bedrock geology of the islands is complex, but begari more than 500 million years ago when sediments were being deposited into a sea while nearby volcanoes were erupting. These sediments and volcanic materials were deposited initially in a relatively flat-lying position, layer upon layer. However, later movements of the earth's crust involving continental plate movement and mountain building episodes "cooked" the sediments (thus changing the mineralogy) and tilted the layers so that what were flat laying beds are now almost vertical. The strains that accompanied all of this earth movement created the fractures in the rock that transmit the ground water.

The bedrock aquifers were divided according to different bedrock types, which are differentiated by origin and the different minerals that make up the rock. Based on data we obtained from the Long Island well survey, it appears that at least one rock type, the Cape Elizabeth Formation, produces wells that produce more water when pumped (called yield and expressed in gallons per minute) than other rock types. In addition, we have found that certain rock types naturally produce more iron and manganese (which will stain laundry and sinks and may also smell like sulfur) than other rock types.

After measuring the orientations of hundreds of fractures in the rock, we concluded that ground water movement is favored along the sheet-like layering in the rock that is now tilted almost vertically. The orientation of these many fine laminations, if one were to stand over the rock and look down at a horizontal exposure displaying the tilted layers, is northeast- southwest along the long axes of the islands. There are short, relatively widely spaced, fractures that are oriented nearly vertically and trend northwest- southeast, perpendicular to the rock layering. However, we believe that these do not conduct water so readily as the high density of fracture planes between the layers. We estimate that about 10 times as much water may move along the layers as across the layers, all other factors being equal.9

^{8 -} Special Features map is on page 20.

^{9 -} Extracted from the "City of Portland Island Ground Water Management Study" prepared by Robert G. Gerber, Inc., Consulting Civil Engineers and Geologists, 17 **West** St., Freeport, ME 04032, August 1986



There are narrow, linear zones in the rock that may vary from 1 to 100 feet wide, that may have above-average ability to transmit water. In addition to direct observation of these zones on the shoreline (the rock may be so fractured that it looks like soil). The presence of these zones can also often be detected by interpretation of aerial photographs, satellite imagery, and an airborne radar technique. We have used these types of photographs to identify the bedrock zones that may produce high yield wells. Where two or more of these narrow zones cross, there is a particularly good chance that the rock is sufficiently fractured to produce many gallons per minute. Bedrock well yields in excess of 10 gallons per minute are considered "high yield". We have identified these linear zones on the bedrock geology mapio and shown localized areas where these zones intersect on the "Special Features Map"n although these zones may be capable of producing many gallons per minute, caution must be used since sustained pumping at high rates may produce salt water intrusion.

Typical bedrock well yield on Long Island is about 5 gpm, which is about average for the coast of Maine. Typical bedrock well depth on the islands is about 100', whereas 175' is average for the coast as a whole.

Ground water quality is known in some detail for Long Island. In 1985, 104 of the wells on the island were tested more-orless simultaneously for common health- and esthetic-related water quality parameters. The Long Island water quality results found that almost half the wells tested had some coliform bacteria, and over 1/3 of the wells had nitratenitrogen concentrations significantly above what would be typical of uncontaminated ground water. On the "Special Features" map we have identified sections of Long Island where subsurface sewage disposal systems are suspected of contaminating wells. In addition, we have identified other known or potential sources of contamination such as large petroleum storage tanks and landfills. It is important to note that there are very few cases of reported salt water intrusion in the island wells. Some local chloride contamination may be due to road salting or sand/salt storage.

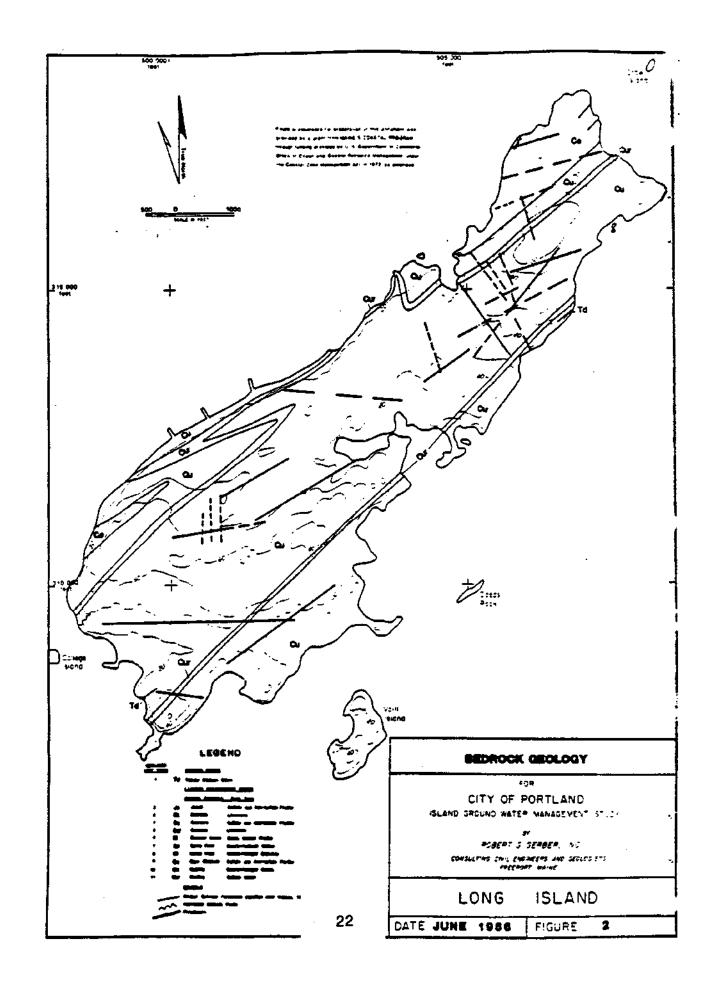
It would rarely take longer than 5 years for a particle of water to move from the highest point in the bedrock aquifer to discharge in the ocean. If a contaminant is introduced at a steady rate into the aquifer, it

¹⁰ Bedrock Geology map is on page 22.

¹¹ Special Features map is on page 20.

¹² ibid

¹³⁻ extracted from the "City of Portland Island Ground Water Management Study" prepared by Robert G. Gerber, Inc., Consulting Civil Engineers and Geologists, 17 West St., Freeport, ME 04032, August 1986

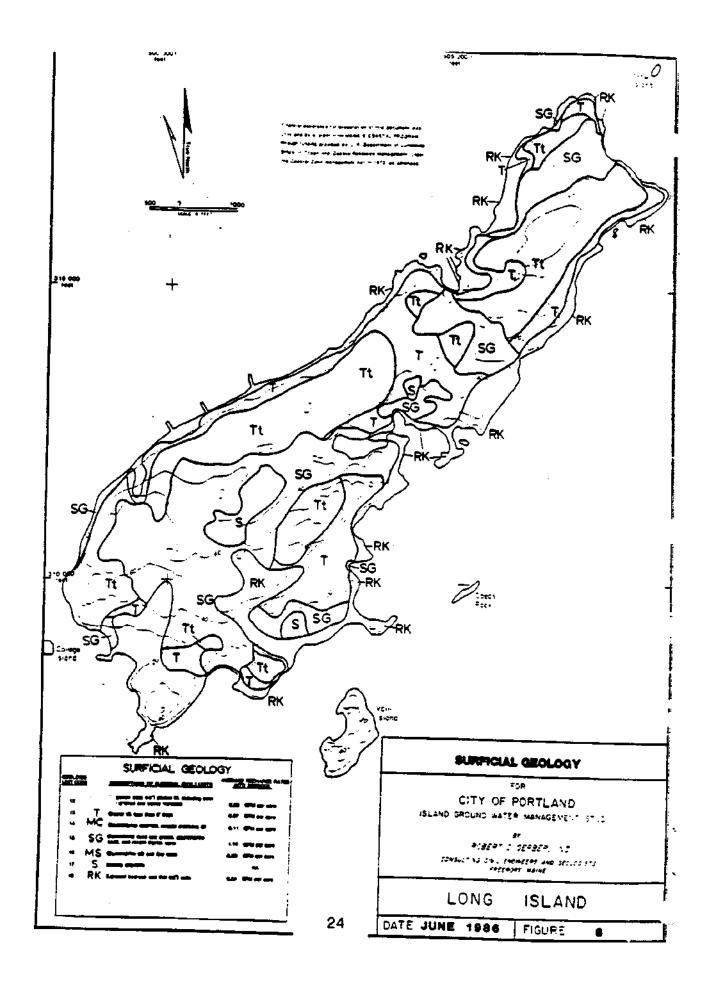


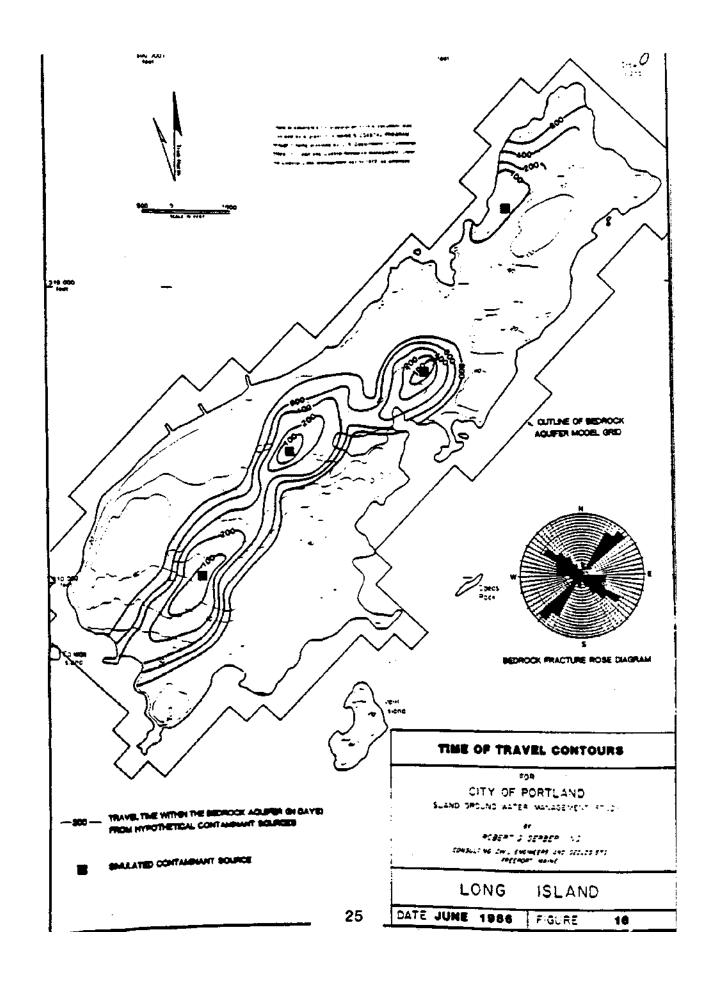
eventually attains a steady-state (constant) concentration at each point in the aquifer. Concentrations would be higher in the source area and decrease with distance from the source. About 63% of the final steady state concentration would be obtained in the first year near the source of the contamination. Therefore, contaminants can spread rapidly in the bedrock aquifer.

Summary

There is a modest ground water resource available, primarily in the bedrock aquifers on Long Island that will supply sufficient water to support an overall density of about 1 dwelling unit per acre. The water quality is affected by naturally-occurring iron and manganese and by localized problems associated with subsurface sewage disposal systems. A ground water management plan has been recommended which, if implemented, should correct some of the current problems, and preserve sufficient ground water of drinking water quality to serve future generations.

- extracted from the "City of Portland Island Ground Water Management Study" prepared by Robert G. Gerber, Inc., Consulting Civil Engineers and Geologists, 17 West St., Freeport, ME 04032, August 1986





Ground Water Contamination

It would seem from a review of The Gerber Report that the most dramatic finding for the Town of Long Island is the extent of the contamination of existing wells on Long Island where "almost half of the wells tested had some coliform bacteria, and over 1/3 of the wells had nitrate- nitrogen concentrations significantly above what would be typical of uncontaminated ground water". Not surprisingly the location of these contaminated wells, as they are plotted on the "Special Features Map", is more likely to be in those areas of the island which have been densely developed with homes sited on lots which are significantly undersized by today's standards. Many of these undersized lots were laid out at the turn of the century when there was not the awareness that there is today that one property owner's failed or inadequate septic system can contaminate not only his own well but also the water supplies of many close neighbors and have the potential for serious health consequences.

Household water use patterns have changed over the years with the replacement of the rope- and- bucket- at- the- well with hand pumps which have in turn been replaced by electric water pumps. As the labor went out of the process, there has been freer use of the water resource exposing more water to contaminants.

Many island privies, though not all, have long since been replaced with a variety of "upgraded" systems of indoor toilets, most of which are flushed with water. Septic systems to deal with the effluent from toilets and of gray water have often been of the "out of sight out of mind" variety, and official plumbing inspections have in the past been almost exclusively limited to new home construction.

Ground Water Agenda

Residents and property owners of the Town of Long Island have expressed a commitment to protecting Long Island's aquifer, and there is strong support for taking the very difficult steps which can eventually lead to a reversal of contamination where that has already occurred. The challenge is to develop fair and practical ordinances which can and will be enforced to preserve quantity and restore the ground water to a quality equal to or better than the Safe Drinking Water Standards.

Ground Water Policy

It shall be the policy of the Town of Long Island to adopt the goals of the "City of Portland Island Ground Water Management Study" (The Gerber Report) which are in line with both State and Federal policy with respect to ground water management.

These goals are:

I. PRESERVE QUANTITY « Preserve the recharge rate to the island

aquifers to the extent practical such that ground water tables are not significantly lowered and saltwater intrusion does not occur to either existing or future well sites.

II. <u>PRESERVEQUALITY - -</u> Protect ground water quality so that it will meet the State of Maine Primary Drinking Water Standards. Where the quality is presently inferior to those Standards, the goal is to restore the ground water to a quality equal to or better than the Safe Drinking Water Standards.

Furthermore, it shall be the intention of the Town of Long Island to work toward the objectives which The Gerber Report outlines to describe how those goals should be met. The following is the text from the Gerber Report:

/ <u>PRESERVE QUANTITY</u>

Minimize loss of recharge and augment, if possible. This must largely be accomplished through zoning densities and development impact review under site plan review. We recommend that no development be allowed to create a ground water drawdown of over 10' beyond the limits of the property on which the development is located.

Do not exceed the safe yield of the aquifers. The recharge to the bedrock aquifer is limited - it will supply only enough water to support an average overall island density of about 1 dwelling unit per acre.

The existing zoning system generally accomplishes this density balance except for the grandfathered lot size provisions, densities for the island business zone, and the IR-3 zone [no IR-3 zone has yet been located on Long Island]. Consideration should be given to adjust these densities in light of a one-dwelling-per-acre goal.

Develop a long- term monitoring program that will continue to collect well data and will monitor long- term trends in ground water elevations. A monitoring program is essential to the success of any management program. We suggest the well data now be required as pan of the building permit application. Further, we recommend that at least quarterly water level readings be taken in wells at strategic places around the island. Some monitoring wells will have to be installed as pan of this program.

Provide education to island residents and island visitors concerning the need to conserve water, reduce demand, and preserve and enhance recharge. We envision that a pamphlet would be produced for wide distribution to the island property owners.

II. PRESERVE QUALITY

Prevent ground water degradation to the extent possible by setting appropriate zoning policy that will not result in ground water contamination, and by strictly controlling the impacts of developments through subdivision and site plan reviews. In addition, we recommend that periodic inspection of subsurface sewage disposal systems take place to look for malfunctions. Furthermore, we recommend that there be an ordinance requiring that whenever a dwelling or business changes ownership that if the building disposes of sewage through a subsurface system, that a Licensed Site Evaluator be retained to

inspect the system and if it is found to be malfunctioning, then the new owner will not be allowed to occupy the building until the system is upgraded according to the Plumbing Code. Eventually, existing substandard subsurface sewage disposal systems should be replaced with modern systems designed to conform with the Plumbing Code.

We recommend discouraging "overboard discharges", even if treated, not only because of potential impacts on marine life, but also because water taken from the ground is not returned to the ground. When overboard sewage discharges are permitted, we recommend that the minimum lot size be increased by 50%.

Zoning policy should be set such that if an entire island is developed to its maximum permitted density, that ground water quality will still meet Safe Drinking Water Standards.

Control the effects of developments, such that any discharge to ground waters (including "non-point source" effects) will not result in ground water quality leaving the site's property exceeding one-half of the difference between the quality of the ground water entering the property and the Safe Drinking Water Limits for the applicable physical, chemical, and biological standards. This will insure that no one developer uses all of the ground water's capacity to treat and dilute contaminants, and it also allows room for error in measuring background quality and in predicting the ground water impact.

Control the storage and disposal of materials that can affect ground water quality by generally restricting them to bedrock aquifer "discharge areas" or by requiring extra precautions.

Develop an emergency response plan for reacting to accidental chemical or petroleum spills by training key island residents and giving them the equipment and mainland support necessary to react properly.

Control non-point sources of contamination such as resource mining, petroleum storage tanks, road de-icing chemicals, agricultural practices, and abandoned wells. We make a number of recommendations for dealing with each of these potential contaminant sources, including a suggestion that there be periodic inspection of all petroleum tanks on the island.

Develop a remedial action plan for improving ground water quality where it is presently contaminated. We have documented that certain areas of Long Island have ground water tainted by subsurface sewage disposal systems. Some of the systems that are causing the problems may be antiquated and malfunctioning. There is money available through the DEP to solve localized sewage disposal problems. Furthermore, the Town may have 10 establish a low interest loan program to assist island property owners in upgrading their systems, which is an expensive process on the islands.

Develop a long-term ground water quality monitoring plan. As with the "PRESERVE QUALITY" monitoring objective, it will be important to monitor ground water quality trends over the long-term to measure progress on the plan.

Develop a public education plan. We envision that information on how the property owner can affect his ground water quality will be part of the suggested brochure we discussed under the "PRESERVE QUANTITY" goal.

Because of this community's concern for the integrity of its ground water, it is the policy of the Town of Long Island to prohibit any industrial or other uses which involve hazardous materials, chemicals or anything which would contaminate the aquifer.

It is the policy of the Town of Long Island that the developer of any large project shall be required to do a hydrogeological study.

It is the policy of the Town of Long Island that the clean-up of the tanks on the Phoenix Resources property comply with all state and federal standards.

Ground water Policy Implementation Strategy

- 1. Education. It is felt that education of our community is the first step which can and should be taken to encourage a better understanding of the public health issues which exist in relation to our ground water. The Comprehensive Planning Committee should proceed with an educational effort specifically focused on making our residents, property owners, and visitors aware of the need to both conserve and protect Long Island's ground water.
- 2. Monitoring. So that we may be aware of the current and changing status of the island's water resource, the Town should authorize a ground water monitoring program to collect well data and monitor ground water elevations and quality and to update the information collected by the Long Island Civic Association's well sampling survey done in 1986.
- 3. Financial Assistance. Solutions to the problems existing and potential, particularly on the grandfathered undersized lots, will be difficult and verylikely expensive. The Selectmen should investigate any grants, loans, andother financial assistance which might be available to private homeowners to enable them to upgrade their water and septic systems and to remediate those which are currently a source of contamination.
- 4. The Code Enforcement Officer will be given full support of the Townin enforcing the codes and ordinances which protect our ground water.
- 5. The Selectmen and the Code Enforcement Officer will work with the full support of the Town to see that the clean- up of the tanks on the Phoenix Resources property comply with all state and federal standards.

Town of Long Island Comprehensive Plan

Ground Water Additional Resources Available at Town Hall

Mylar copies of the series of Long Island maps which were included in the "City of Portland Island Ground Water Management Study" prepared by Robert G. Gerber, Inc., Consulting Civil Engineers and Geologists, 17 West St., Freeport, ME 04032 in August 1986 are on file at the Town of Long Island Town Hall. These maps are very large (approximately 3X4 feet) and therefore very much more readable than those in the printed report. The material on which they are printed is semi-transparent so that details from underlying maps can be seen through successive layers.

The following subjects are on separate mylar sheets:

Long Island

Unlabeled (shows location of structures and roads)

Bedrock Geology Figure #2 (in The Gerber Report)

Surface Geology Figure #6

Soil Thickness Map Figure #10

Water Source Index Figure #13

Time of Travel Contours Figure #16

Potentiometric Surface Map Figure #20

Special Features Map Figure #24

Because the process used to reproduce them makes them light sensitive (the print will vanish if left exposed to light for a long period), they need to be carefully stored in light blocking tubes, and exposed to light only when in use.

Other Significant or Critical Natural Resources

Water

According to the Comprehensive Plan Survey results, an overwhelming majority (91%) of Long Island's residents and property owners consider protecting Long Island's drinking water "very important", only 12 thought it was "moderately important", and no one said it was "not important". The City of Portland commissioned a study of the ground water of all the islands that were then part of the city: Peaks, Cushings, Little Diamond, Great Diamond, Long, and Cliff Island. Of those islands only Long and Cliff are not served with municipal water by the Portland Water District. Because of its citizens' interest in learning more about the island water resource and ways to protect it. Long Island participated in that study to a higher extent than did any of the other islands. The Long Island Civic Association sponsored a well survey which tested 104 of the island wells for common health and esthetic conditions. This material was incorporated in the part of the report which deals with Long Island. The "City of Portland Island Ground Water Management Study" was published in 1986 by Robert G. Gerber, Inc., Consulting Engineers and Geologists. Known as "The Gerber Report", it has been very useful to the town and has thoroughly covered the problems facing us. A separate Ground Water section which summarizes the Long Island content of this report is included in this Comprehensive Plan.

Beaches

Andrews Beach (known locally as South Beach)

Andrews Beach is the one state owned beach on Long Island. It is by far the largest beach on the island. There are no facilities associated with the beach with the exception of a single privy sited well behind the dunes about midway along the stretch of beach. In the early years of the state's ownership of this beach there was a uniformed state employee who patrolled the beach, seeing that rules were observed and litter was cleared away. Due to lack of funds, the state no longer hires anyone to do this. The town has great concern about the maintenance of the beach and its one toilet facility. In addition to the use it gets from Long Island residents, there are many others who come to enjoy Andrews Beach. School groups use this beach as a field trip site, usually in June. In the height of the summer season there may be as many as 200 private day trippers arriving on the Casco Bay Island Transit District ferries bound for a day on this beach. Private boats also anchor off its shore and disembark their passengers onto the beach.

The problems of litter, large groups of strangers on our small island, unauthorized night camping and illegal fires must continually be addressed. A letter has now been developed to be given to all persons inquiring about group excursions to this beach aboard any of the CBITD ferries. This letter advises people who are considering coming to this beach about its isolated location and lack of access to services, and it also outlines certain policies (no overnight camping, visitors must carry out their own litter, etc.) that the state is promoting. The state also plans to install a permanent sign designating the location of the toilet facility and another which describes the beach use policies at the entrance to the beach. It is hoped that the state and the town can continue to work cooperatively to address these issues.

Fowler's Beach

A second beach is accessible to the public on Long Island. That is Fowler's Beach on the West End of the island facing Peaks Island. This beach and its backlands are owned by the Long Island Civic Association, a non-profit and tax-exempt island organization, and is protected by a conservation easement preventing any development of this beach in the future. The easement is held by Oceanside Conservation Trust, a land trust in Casco Bay.

The Long Island Civic Association and a legion of volunteers have done extensive work on the beach to prevent erosion. They have enlisted the labor of children from the Long Island Elementary School and older students to plant dune grass under the supervision of the Soil and Water Conservation Service. With the approval of the Department of Environmental Protection a snow fence has been installed to protect that planting and to aid in the accretion of additional layers of sand to the dune's structure. An extension of the DEP permit has been applied for to permit the snow fence to continue onto property belonging to an abutting private landowner who shares an interest in restoration of the dune system. Rosa rugosas (often called beach roses) have also been planted along both sides of the roadway to help stabilize the dunes. In the future it is hoped that these rose bushes with their prickly thorns will grow large enough to concentrate foot traffic into defined paths which will not disturb the dune grass plantings. Fowler's Beach tends to be used mostly by islanders. The beach is generally litter free and of low maintenance.

Wetlands

Wetlands, in addition to being important natural habitat, offer recreational activities such as hiking, bird watching, and skating. Long Island has four types of wetlands.

Wooded Wetlands contain wildflowers and sugar maples, birds, etc.

Coastal Wetlands have flora such as sea roses and red maples.

Marshes have sugar maples, red maples and cranberry bogs.

Pond Wetlands Long Island has a large fresh water pond used for skating in the winter months by island families. In the spring and fall the pond is host to many migratory birds. The citizens of the town take pleasure in watching the bird population come and go. The National Resources Protection Act will insure the future health of the wetlands.

Edible Resources

Picking native island berries is one of the most popular recreational activities on Long Island. In the survey done by the Comprehensive Planning Committee, berry picking came in second only to walking as the outdoor activity most important to those who answered the survey. Blueberries, both high bush and low bush are plentiful. There are many raspberry and blackberry bushes. In the fall, cranberries may be harvested to a lesser extent. For those willing to search, there are the tiny, but intensely delicious, wild strawberries. It is also possible to pick wild apples and grapes.

Commercial Use of Natural Resources

The making and marketing of Christmas wreaths by one individual is a cottage industry on the island. The wreaths are made of native fir or spruce boughs and are mailed to customers all over the country. During the summer months wreaths are also made of dried flowers, herbs, and other plant material.

Although no island residents are known to participate in this, there are individuals who come to Long Island and harvest sea lavender in such quantities that it is likely that there is a commercial utilization of what they take away.

Scenic Vistas

Identified as important scenic vistas on Long Island are Fowler's Beach, South Beach and the end of Beach Avenue which faces Marsh (Vaill) Island, Harbor de Grace, Cleaves' Landing, and the right of way to the flat rocks at the east end of Long Island.

Current Protective Zoning

There are three zones which offer recognition and protection for these special features of our landscape. They are the Recreation and Open Space Zone on the

state-owned Andrews Beach and Little Chebeague Island; Resource Protection Zone on Vaill Island, Obeds Rock and the Stepping Stones; and the Shoreline Protection Zone which extends 250 feet from the normal high water mark and from the upland edge of wetland vegetation. It is the general feeling that these zones offer reasonable protection to identified critical natural resources.

Policy Relating to Other Significant or Critical Natural Resources

- While we are proud that this town has beaches which are accessible to the public, because of the lack of facilities and our concern about the overuse of sensitive natural areas, it shall be the policy of the Town of Long Island not to advertise or promote excessive use of these resources.
- 2. The Town of Long Island will cooperate with the State of Maine to monitor and protect those islands and Andrews Beach which are owned by the State.
- 3. It is the policy of the Town of Long Island to look into the feasibility of dredging or somehow controlling the vegetative growth of the fresh water pond so that it will continue to be a resource for recreation and a water source for the fire department.

Other Significant or Critical Natural Resources Policy Implementation Strategy

- 1. No action is required.
- 2. The Town will continue to cooperate with the State of Maine to monitor and protect those islands within the town boundaries and Andrews Beach which are owned by the State
- 3. The Planning Board will initiate some research relating to maintaining the fresh water pond.

Natural Resources Listing

Fresh water pond Stand of red maples 3 large sandy beaches

Home Business

Sea lavender

Christmas wreaths

Dried wildflowers

Herbs

Shellcraft

Sea glass

Edible Resources

Wild strawberries

Blackberries

Blueberries

Black raspberries

Red raspberries

Chokecherries

Wild apples

Wild grapes

Cranberries

Mushrooms

Sea sweet peas

Rose hips

Marine Resources - Edible Use

Clams

Mussels

Scallops

Lobsters

Sea urchins

Shrimp

Fish - Pollack

Mackerel

Bluefish

Marine Resources - Commercial Use

Seaweed

Sea moss

Kelp

Starfish

Agriculture and Forestry

There is no commercial agriculture per se, although there are many small family vegetable and flower gardens. At one time the island was self sustaining, but those days have long since passed.

There are stands of harvestable timber on the island. Most of it is on private property, although a quick survey revealed merchandizable hardwoods on a piece of town land. There was maple, birch, and some oak. There were also significant stands of spruce. It is recognized that tree growth would be improved if selected harvesting could occur, but the difficulties of getting the logs off the island or of bringing a saw mill rig onto the island seem formidable. Yet it is something we may find the time and energy to do. If the lumber could be ripped up and stacked on the island and kept for our use, it might be an attractive venture.

There is one eleven acre parcel which qualifies under the Tree Growth Tax criteria.

The town has developed no policies relating to agriculture and forestry.

Agriculture and Forestry Policy

Because of the negligible potential for either commercial agriculture or commercial forestry, the town has developed no policies relating to agriculture and forestry.

Agriculture and Forestry Policy Implementation Strategy

No action is required.

Marine Resources

The fisherman is a hunter and it is one of the ironies of the hunter's life that the resource upon which he depends he can not own or in any significant way control. The lobsters which provide such an excellent living for Long Island lobstermen move in waters within the territory of of the island but do not belong to the island. There are no riparian rights as there are in many streams in Europe. An unwritten law only enforceable illegally may keep Cliff Islanders fishing in Cliff Island waters and Long Islanders fishing in Long Island waters; but such practices are the result of long standing courtesies and have no legal standing. Herring catchers go where the herring school and when they were running Lubec fishermen could be found in Long Island waters. Big boats from wherever drag for scallops right off our shores, New Bedford pogie boats ply their trade in town waters, and urchin divers harvest their crop from our ledges.

The protection of the ocean waters which surround the islands of the town and nurture their marine produce is as critical as is the protection of our ground water. From these ocean waters we derive most of our community's income and much of our pleasure. Should they become fouled there is little on this island which would be unaffected.

Clams and mussels being stationary and harvestable at low tide can be claimed and the takers licensed, but our clam flats have been closed for years. There are no restrictions on the taking of mussels except when there is an outbreak of red-tide.

The town lays claim to an anchorage within its territorial waters and is moving to regulate its use by large vessels. The waters in question are also prime lobstering grounds and a big vessel at anchor uses long anchor chains which sweep the bottom as the ship responds to wind and tide and thus smash traps and tangle lines. It is helpful to have warning of the arrival and departure schedule of such vessels so that our lobstermen can take precautions to reduce their risk. We seek policy governing these matters and perhaps indemnification for destruction.

Marine Resources Policy

1. The 35 Long Island residents who are employed full time in lobstering and fishing represent fully 26% of the adult population of the town. 21 more people come to Long Island seasonally and are then employed full time in lobstering and fishing. Others are employed part time and still more have jobs related to the fishing industry such as those employed at Casco Bay Lobster which brokers fuel, lobsters, and bait. Our marine resources have been central to the economic life of this community for

generations. It is therefore the policy of the Town of Long Island to encourage and protect traditional fishing and lobstering activities.

- 2. It is the policy of the Town of Long Island to cooperate with state, regional, and federal efforts to protect the quality of the waters surrounding Long Island.
- 3. It is the policy of the Town of Long Island to work the Department of Marine Resources and others to identify areas of mussel beds and clam flats which could, with the assistance of volunteer monitors, be developed for recreational or commercial harvesting.

Marine Resources Policy Implementation Strategy

- 1. Traditional water dependent uses will continue to be recognized in the zoning ordinances of the Town of Long Island.
- 2. The Code Enforcement Officer will be supported in the enforcement of existing and proposed town ordinances and regulations affecting marine water quality.
- 3. The Harbormaster will be encouraged to pursue with the help of the Department of Marine Resources and others remediation of our clam and mussel beds so that they may be used for recreational or commercial harvesting.

Historic and Archaeological Resources

Background Information

Historic and archeological sites on Long Island evidence the Red Paint People, the early settlers, and, less happily, the two World Wars.

We have a documented dig site showing the Red Paint people as early inhabitants. There are two ice house foundations and dams remaining from earlier periods; three cemeteries; the first one-room school foundation; World War II gun emplacements; an observation tower; and the fuel tank farm from the refueling depot for the North Atlantic Fleet during World War II. Two of the buildings associated with the military use of the island during World War II are currently leased by the Town of Long Island from Phoenix Resources for use as the fire station and the town hall. Vacant buildings from this military complex are deteriorating, some beyond repair, but others would have potential for reuse if structural intervention comes soon.

Historic and Archaeological Resource Policy

- 1. The Town of Long Island shall identify important historical and archaeological sites on a tax map and make an effort to maintain public awareness of their historic and archaeological importance.
- The Town of Long Island should require all applicants seeking to develop within or adjacent to identified sites to submit detailed environmental and archaeological assessments regarding adverse impact on these areas.
- 3. It is the policy of the Town of Long Island to continue the process of recording the oral history of Long Island.

Historic and Archaeological Resources Policy Implementation Strategy

1. The Comprehensive Planning Committee will assist in encouraging a volunteer committee to identify important historical and archaeological sites and to record the oral history of Long Island.

2. The Town will consider revising the zoning ordinance to require the identification of important historical and archaeological sites and to require all applicants seeking to develop within or adjacent to identified sites to submit detailed environmental and archaeological assessments regarding adverse impact on these areas.

Land Use Patterns

Existing Land Use

The Town of Long Island consists of Long Island, the largest portion of Little Chebeague Island, Cow Island, Vaill Island (which is locally known as Marsh Island), Overset Island, College Island, Crow Island, and a few other rocks and ledges exposed at high tide. Only Long Island within the territory of the Town of Long Island has any inhabitants, year round, seasonal or otherwise.

Little Chebeague Island, currently a Resource Protection Zone with Shoreland Protection Zone where applicable, is owned by the State of Maine, and its Department of Parks and Recreation (Contact: Herb Hartman) has oversight. There are a few derelict skeletons of buildings on Little Chebeague. None of these could be lived in. The thick vegetation, including a vigorous crop of poison ivy, and the voracious population of wood ticks restrict most recreational use to its sandy shores. A small section of its northern corner is within the boundaries of the Town of Cumberland.

Cow Island, zoned IR-1 and Shoreland Protection Zone, is privately owned. There are remnants of military structures on Cow Island which attract people in small boats who come to explore them. Periodically there are campers seen on the bluffs of that island, and occasionally boisterous parties have required the attention of law enforcement. There are no habitable structures on Cow Island.

Vail Island (known locally as Marsh Island), entirely in Resource Protection Zone, is owned by the State of Maine and comes under the purview of the Department of Inland Fisheries and Wildlife (Contact: Fred Herley). It, too, is covered with poison ivy, but a small beach often attracts a boat or two on summer days.

Overset Island, zoned IR-1 with Shoreland Protection Zoning, is a very small island with low scrubby growth. It is attached to the southern tip of Long Island by a strip of rock rubble at all but high tide. It is privately owned.

College Island, zoned Resource Protection, is a tiny seaguil nesting site owned by Central Maine Power. Their Land Management Department (Contact: Jane Sturk) oversees that ownership.

Crow Island (near Great Diamond Island) which has some vegetation, is owned by the United States Government and is zoned Resource Protection.

Other named outcroppings in the waters of the Town of Long Island are the Stepping

Stones and Obeds Rock which are ledges and are zoned Resource Protection.

On Long Island, except for the Phoenix property, the land use patterns have been established by cultural and geographic givens. It is clear from the positioning of old cellar holes that the early settlers built on the sea or south side of the island although their properties might stretch in bands across the island. The south side is warmer in the winter and cooler in the summer, but except for Harbor de Grace and the south beaches in calm weather, the south side would have been, and is, difficult of access. Furthermore much of the south side is rocky and precipitous even if sheltered from the bone-biting north and northwest winter winds which make the north side of the island so unfriendly in the cold season.

Later during the 19th and early 20th centuries the development took place on the east end, the west end, and along the northern shore with the cottages cheek by jowl. It was a era of social pretentiousness and environmental rapacity from which we are still trying to recover.

The taste of our day tends to be eclectic but leans more to building in what wilderness is available. If city life demands a rabbit warren life-style, rural life begs for as much open space - lawn and woods - as may be afforded. The island has its inviolable open spaces on the waters and the sense of confinement, except by the island itself, is not oppressive.

Land use consists primarily of seasonal and year round residential areas, two small areas zoned for business, undeveloped forests, beaches, and the former World War II era fuel tank farm owned by Phoenix Resources. Public recreational land on Long Island includes a state-owned beach on the south side of the island and a tennis court near the school owned by the Town. Quasi public land includes Fowler's Beach and a ball field owned by the Long Island Civic Association. There is a conservation easement held by Oceanside Conservation Trust on the Fowler's Beach property. This will prevent any future development of this beach. About six acres of the island are presently used for business purposes. Of the two areas designated currently as business zones the one at Doughty's landing is the site of a nascent boat yard, and the one near the ferry landing has one general store, the post office, a restaurant, a business establishment, and a lobster dealer.

Land Distribution

| Present Residential Use | 33% |
|----------------------------|-----|
| Owned by nearby homeowners | 10% |
| Town owned properties | 4% |
| Public and Quasi Public | 6% |
| Business Use | 1% |
| Phoenix property | 24% |
| Other vacant land | 22% |

Current Zoning

The Town of Long Island started operating when it incorporated in July 1993 with zoning ordinances that had been developed when it was part of the City of Portland. The ordinance structure of the City of Portland was adopted wholesale by the town meeting as a method of providing continuity for the transition period after independence. In general and for start up purposes these ordinances were adequate, but in places they were applied with a broad brush from a distance and do not everywhere cover adequately the particular terrain. A first review of the entire body of ordinances has been accomplished with the intent to discard those rules which were irrelevant to our small island community. The revised ordinances reduced the original volume by 2/3 when they were adopted at the Annual Town Meeting on May 21, 1994. The expectation is that we will look at the ordinances and make more detailed changes in an ongoing process of later reviews. The island zoning ordinances were specifically developed with the Portland islands in mind and provide a good foundation from which to make future modifications¹⁴.

Zones currently applied are:

IR-1 Island Residential Zone 1

IR-2 Island Residential Zone 2

I-B Island Business

R-OS Recreation and Open Space Zone

RPZ Resource Protection Zone SPZ Shoreland Protection Zone

Implementation

Ordinances are one thing, actual site and building inspection quite another, and on this score we inherit a dubious legacy; for inspection and licensing seems to have been ineffective in dealing with preexisting situations, notwithstanding the sometimes voluminous piles of official paper. The Town of Long Island has taken steps to reverse this trend by appointing a dedicated Code Enforcement Officer. We recognize that official and community support for his efforts is as essential as are good ordinances.

The Gerber Report states "that almost half the wells tested had some coliform bacteria, and over 1/3 of the wells had nitrate-nitrogen concentrations significantly above what would be typical of uncontaminated ground water." We, the inhabitants of the island, are ourselves the source for such pollution, but no official effort has been launched to make us change our ways and protect our neighbors.

¹⁴ Town of Long Island Zoning Map is attached as Addendum B and is available for viewing at Town Hall.

Cleaning up the contamination we have inherited is going to be a long, slow (and probably very expensive) process. Politically it may be divisive for healthy sections of the island may be called upon to help pay for the rehabilitation of polluted sections. Without new technology or less draconian standards, certain areas may prove altogether too expensive to make clean, and people may have to drink bottled water or, as our English forefathers did, beer.

Zoning, like speed limits, will in the long run effect human practice, but must at a certain point conform to necessity if necessity can be recognized. In general the island recognizes the limiting factors of potable water and the difficulties of of waste disposal, but within these limiting factors, buildings, given modern capabilities, may be designed and built in form and places that previous generations would not have considered.

Future Land Use

Phoenix Property

The disposition of the Phoenix property will permanently affect the future of the natural and social character of Long Island. The property is about 180 acres and represents the largest mass of undeveloped land on the island. It was a former U S Naval fuel tank farm developed during World War II as a fueling station serving the North Atlantic Fleet. It includes about 5000 feet of shoreline on the northern edge, 1000 feet of which is unaltered and pristine. The other 4000 feet was altered, filled with the rock debris from the excavation of the underground oil storage tanks, and some of it was paved to accept the construction of buildings and to accommodate the traffic incidental to the piers for the fueling of the minesweepers, submarines, and battleships of that era.

Clean-up and long term safety of this site, which was used for petroleum storage, so that it poses no contamination threat to the island's drinking water supply has been a continuing concern for this community. There are monitoring wells which are checked regularly (a process being watched closely by the Town of Long Island)

The Fuel Tank Farm is currently in the process of being environmentally "closed" under the review and direction of the Maine Department of Environmental Protection (Division of Oil and Hazardous Waste Facilities Regulation) and the United States Government (Army Corps of Engineers).

Northland Corporation of Newton, Massachusetts, the same entity which subdivided and sold other Phoenix land in the 1980's, has a purchase and sale agreement for this land with Phoenix Resources. Northland has proposed a development plan which has met with Town of Long Island Planning Board approval, subject to conditions relating primarily to resolution of issues having to do with the tank farm. Included in the conditions is the town's receipt of a Certificate of Closure from the DEP prior to the

Recording of the Approved Subdivision Plan. The plan as proposed and approved creates 27 house lots; includes a provision to make land available to the State of Maine to build a new state ferry wharf; makes available some land and buildings to the Town of Long Island; and sets aside the balance of the land (including the tank farm and the freshwater pond) as conservation land. Public sentiment for conservation is very strong on Long Island, but proper cleanup and closing of the former oil storage facilities is of serious concern. The Town of Long Island is being offered the title to about 120 acres of the property with a conservation easement to permanently preserve the land in it's natural, open, and scenic character. Of particular sensitivity is an 8.5 acre freshwater pond on the eastern portion of the property which is registered by the State of Maine as a fresh water wetland. About 31 acres of meadowlands sit over the actual underground storage tanks, which were buried to disguise their placement. The major portion of the property is spruce and hardwood forest. It is expected that this will create a significant new opportunity for recreational use by the general public.

Regardless of the destiny of any particular development plan, the future of the Phoenix property is certain to have significant impact on the whole island. The residential development as proposed by Northland and approved by our Planning Board has been deemed compatible with the existing Town of Long Island zoning ordinance. All the residential lots proposed comply with, and some significantly exceed, the minimum lot size of the IR-1 Zone. There will be deed restrictions preventing future division of these lots. When built, the 27 new homes will be fewer than half the number of residential structures which had occupied this same tract of land before the Navy appropriated the land for World War II related uses. In addition to the potential for 27 new residences, there are several structures which the Town may want to acquire if they can find sufficient use for them. Other structures may be sold to private entities or demolished and removed. There is the option reserved within the proposed conservation easement to permit the reuse of the underground tanks once they have been cleaned for "the storage of water for fire fighting or other human needs" and for "environmentally sound marine related uses, such as but not limited to aquaculture". Within this parcel are areas sensitive to disturbance, areas with potential for recreational use, for business and public use, and areas to preserve for wildlife.

Other Undeveloped Areas

There are hydrological and geological limitations to future housing development on Long Island even though there is considerable undeveloped land. Overriding constraints on the future development of Long Island are the availability of an adequate supply of potable drinking water and land suitable for septic disposal.. These resources are fragile and finite. Added to these constraints are the state wetlands setbacks and the mandatory shoreline zoning.

There are plans underway to build three houses on a 19 acre parcel on the back shore toward the east end. The road is being constructed. These three owners anticipate building in about five years.

Other undeveloped land on the island totals about 40 acres and is owned by about fifty different families. Much of this land is owned by nearby homeowners. Lot sizes range from generous to significantly undersized "grandfathered" lots. Much of this acreage has not been tested to see if it is suitable for building and some lots may not even be accessible. Many landowners here are very sensitive to the importance of open land and keeping Long Island a special place. Many feel their small isolated lots are precious and cling to the hope that they can one day build on them.

Relocation of the Wharf

With both state and federal funds in hand, the Maine Department of Transportation is in the planning stages for the construction of a new wharf to replace our present ferry landing at Ponce's Landing. Under discussion for a number of years has been its proposed location, and it now seems likely that a new site will be chosen on what is now Phoenix Resources property near the new Town Hall. Although not far removed from the present wharf site, the proposed new location is attractive because it offers opportunities for parking away from residential areas, elimination of the inclined approach, and relief of congestion in the business area. This is an unusual opportunity for our town to give some thought to the overall design of what in all practical senses is the front door to our island. Appropriate reuse of the existing vacant structures, possible designation of public outdoor spaces, consideration of traffic flow issues, location of parking areas, pedestrian safety, landscaping, freight and passenger shelter, and the design of the wharf itself are some of the items which merit community attention.

Land Use Policy

- 1. Current Town of Long Island zoning locates rural areas: Island Residential Zone 1 (IR-1) where minimum lots sizes are 60,000 sq. ft.; and more developed areas: Island Residential Zone 2 (IR-2) where minimum lot sizes are 20,000, and an Island Business Zone (I-B) where business can locate and which can accommodate a modest growth in keeping with the citizens' desire to retain our rural character. Additional protections are afforded our more sensitive areas through our Recreation and Open Space Zone (R-OS), Resource Protection Zone (RPZ) and Shoreland Protection Zone (SPZ). While it is felt that current zoning provides good safeguards for this town it is the policy of the Town of Long Island to continue to review, refine and focus our zoning ordinances to make them as strong and efficient as possible in their protection of Long Island.
- 2. It is the policy of the Town of Long Island to vigorously enforce our codes and

ordinances.

3. It is the policy of the Town of Long Island to carefully consider hydrological and geological limitations to future development.

Land Use Policy Implementation Strategy

- 1. The Planning Board will be responsible for a continuing review of our zoning ordinances to make them as strong and efficient as possible in their protection of Long Island.
- 2. If the Town Meeting accepts ownership of the 120 acres of conservation land, the Town should place that property in a Recreation and Open Space Zone to reflect its permanently protected status.
- 3. The Code Enforcement Officer shall be supported in his efforts to vigorously enforce our codes and ordinances.

Housing

A very thorough housing inventory on Long Island was accomplished by Linda Papkee in the fall of 1993 by using real estate tax maps, records of the volunteer fire department, and walking through all neighborhoods.

Present Housing on Long Island Includes:

| | Number | Housing Units |
|-------------------------------|--------|-------------------------|
| Single family frame dwellings | 308 | 308 |
| Two-family frame dwellings | 4 | 8 |
| Three-family frame dwellings | 1 | 3 |
| Mobile homes | 3 | 3 |
| Total housing units | | 322 |
| In winter use | 80 | |
| Seasonal use only | 242 | |
| • | | |
| Winterized dwelling | 115 | (70% of which are used) |
| Non-winterized dwelling | 207 | |
| 41.4.00 | 40 | |
| Under 20 years old | 42 | |
| Over 20 years old | 280 | |
| For sale | | |
| Winterized | 9 | |
| Non-winterized | 7 | |
| | • | |
| Rentals | | |
| Winterized | 14 | |
| Non-winterized | 41 | |
| Managet | | |
| Vacant | £ | |
| Winterized | 5 | |
| Non-winterized | 20 | |

Existing Housing

Almost all frame dwellings are free standing single family homes. There are only five exceptions. House lots range in size from 1,750 to 598,688 square feet. Valuations for property tax purposes range from \$22,800 to \$356,000. Homes are served by private wells and private septic systems. There is no municipal water supply serving Long Island (contrary to the information on the 1990 Census Report), and all septic systems are private.

Recent Development

One subdivision, done by Northland in the 1980's at Jerry's Point, involved 8 very large lots with deed restrictions which do not allow further division of those lots. The three houses built so far are large and expensive, quite atypical of the island standard, and do not reflect the average values on Long Island.

Although many homes have been built in the last ten years (30 homes in the last 6 years alone), most of these are not immediately visible from the road, and therefore do not greatly diminish the rural appearance of the community. 74 people thought this rate of growth was "too fast", and 62 felt it was "just right", while 14 thought it "too slow". Questions of water and sewage disposal may limit future housing development even though there is sufficient undeveloped land. The strongest response to any of the questions on the Comprehensive Plan Questionnaire was to the question: "Should Long Island take steps to retain its rural character?" The answers were: 160-yes, 2-no, 3-no opinion.

Affordable Housing

The high cost of constructing a proper septic system and drilling a well inhibits the building of new low cost homes. Some seasonal cottages have been, and are being, converted for winter use. Because many of the conversions have been accomplished by the homeowners themselves over a period of years with frugally purchased materials and using their own labor, the process of renovation has made them quite "affordable".

Perhaps for this reason, on Long Island it is generally felt that there is a sufficient supply of relatively affordable housing. 127 (71%) of the Comprehensive Plan Questionnaire respondents answered "no" to the question: "Do you think Long Island needs more low cost housing?" (compared to 22 who answered "yes"), and 149 (83%) did not think the town should appropriate tax money for low cost housing. Compared to the costs of transportation which are built into an island life style, it may not be housing costs which most merit scrutiny on the subject of affordability.

Housing Policy

It is the policy of the Town of Long Island to treat manufactured housing the same as stick built housing.

Housing Policy Implementation Strategy

No Action Required

Transportation

Transportation between Long Island and the Mainland

Transportation to Long Island must be accomplished by boat, there being very few instances of helicopter transportation and no landing field for airplanes. There is year round passenger ferry service provided by the Casco Bay Island Transit District (often referred to as Casco Bay Lines), a non-profit quasi-governmental operation with a Board of Directors which includes representatives elected from the Casco Bay Islands which it serves. Private boats are used by some residents, particularly fishermen. A water taxi service operates to Long Island from the mainland and other islands from April through November. Goods and materials are transported on the ferry vessels, on private boats, and by barge.

Necessary to any transportation between the mainland and Long Island is a shoreside staging area for barges, launching area for boats, and wharf and dock space accessible at any tide, in any season, and hopefully in any weather. All of these facilities must be available both on the mainland and on Long Island. Because most people must get to these departure points in a land vehicle, parking is also essential at each of these sites.

Transportation on Long Island

There exists on Long Island 9.2 miles of public roads, .89 miles of military roads, and 1.56 miles of private roads. The speed limit on the entire island is 20 miles per hour. More households than in the past have one or more vehicles on Long Island, although a few people, particularly those who live near Ponce's Landing, get along with shank's mare and bicycles. Walking is the the favorite island outdoor recreation with 92% of the survey respondents listing it. In the spring there is an influx of vehicles belonging to summer residents, and many of these leave the island in the fall. The following have been registered by the Town of Long Island:

On April 1, 1994 there were 119 registered vehicles:

68 cars 47 trucks 4 mopeds

In the Comprehensive Plan Questionnaire, not a single respondent wanted more

vehicles, and 87% wanted the same or less. Islanders were happy with the number of bicycles (67, which is 37%, wanted more), but indicated that they (51%) hoped that the number of bicycle tourists would remain the same or fewer (23%) rather than escalating. 115 people (64%) listed bicycling as one of the outdoor recreations which was important to them.

Vehicles on Long Island are required to be registered, but there is an exemption from the requirement that vehicles pass inspection. There is no inspection station on Long Island, nor is there a garage which services mechanical problems. Residents usually develop a certain level of mechanical skill which is supplemented by those among us who have higher levels of skill. Often the cars brought to the island are well used before they arrive, and deteriorate rapidly in the environment of salt air. Because they are so unusual, new or even old but rust-free vehicles attract attention. Junk cars are a perennial problem here as they are on every island. Volunteers have in recent years organized junk car removal efforts which attempt to keep up with the annual crop.

Getting vehicles from the mainland onto the island is not easy. There is no regularly scheduled car ferry. To bring a car to the island requires a specially scheduled barge trip coordinated with 5 or 6 other participants to make it reasonably priced.

Alternatively, and depending on the tide, a single car can be transported on one of the Casco Bay Island Transit District ferries. The cost is \$40 per vehicle one way between mid-September and mid-May, and \$63.35 in the summer. We don't commute with our cars as is done on some other islands. Even so, more access for mainland vehicles was desired by only 30 (17%) of the Comprehensive Plan questionnaire respondents. 79% wanted the same or less access for mainland vehicles. 75% wanted the same or fewer mopeds; and motorcycles and ATV's are very unpopular. 71% wanted fewer motorcycles, and 64% wanted fewer ATV's. The number of golf carts used for transportation on Long Island is minimal, but because they are fuel efficient, quiet and slow moving, they are more acceptable with only 17% of those responding to the survey wanting fewer of them.

Concern about the mingling of bundle-and-baby-carrying pedestrians with moving vehicles on our deteriorating too-narrow wharf is reflected in the survey by the opinion of 61% that all vehicles should be banned from the wharf at the time of the arrival of the boats.

Even though many islanders wanted to curb the traffic of vehicles and bicycles, 53% of the islanders expressed a desire for more frequent boat service, and 63% showed a desire for year round water taxi service. Islanders were emphatic about not wanting a daily car ferry service; a tiny minority of 12 (less than 7%) wanted that. A transfer bridge such as is now on Peaks Island where it facilitates loading vehicles at any tide was rejected by 61%. Only 4 respondents thought a bridge to the mainland worth having.

With the possibility of a new ferry wharf location, a new parking lot was approved by

77% of the islanders. The existence of a parking lot should eliminate part of the onstreet parking along Island Avenue near the present ferry landing. This, in turn, would affect the ease with which the fire department could maneuver their trucks when responding to a call. In the last few years the island has had traffic signs installed for parking and safety reasons.

The island is enjoying a new C.B.I.T.D. (Casco Bay Lines) ferry boat, the Maquoit II, which was put into service in February 1995. Islanders have had a voice in its design, and are pleased to have a vessel with the capacity to off-load freight more easily and one which can accommodate handicapped passengers with its elevator. Notwithstanding these facility and service improvements, the islanders still hope to maintain the rural character, the reasonable solitude, the natural beauty, and the coveted slow pace of island life.

Transportation Policy

- 1. It is the policy of the Town of Long Island that roads be built so that they won't require high maintenance by the town, that their construction promote a very slow vehicular speed, and that their design take into consideration the needs of pedestrians and bicyclers.
- 2. It shall be the policy of the Town of Long Island to advocate for convenient passenger ferry service to Long Island from the Casco Bay Island Transit District.
- 3. It is the policy of the Town of Long Island to an authorize the development and maintenance of a staging area for barges, a launching area for boats, and wharf and dock space accessible at any tide, in any season, and hopefully in any weather.

Transportation Policy Implementation Strategy

- 1. The Selectmen will consider future maintenance issues, the desirability of very slow vehicular speed, and will take into consideration the needs of pedestrians and bicyclers in making road construction decisions.
- 2. The Selectmen or their designees will maintain effective communication with the Casco Bay Island Transit District relating to passenger ferry service to Long Island.
- 3. The Planning Board will encourage the development and maintenance of a staging area for barges, a launching area for boats, and wharf and dock space accessible at any tide, in any season, and hopefully in any weather.

Recreation and Open Space

Waters

Much of Long Island's recreation and open space exists because of its location in the middle of Casco Bay, the waters of which provide the setting for a good deal of our recreation and pleasure, in addition to our business and livelihood. Our watery surrounds provide vistas which change with every season, every cloud, and every footstep. Our open space extends from here to Portugal. These waters are home to our number one cash crop, lobsters, and provide sport for our many ardent recreational fishermen.

Beaches

Long Island has the distinction of having some of the most beautiful beaches of any island in Maine. The largest is owned by the State of Maine and is fully open for use by the general public. This is both a blessing and a curse as it attracts numbers of pleasure seekers during the summer months to a location which has the barest amenities. The State Department of Parks and Recreation has located one privy behind the dunes, but many are unaware of its location and so relieve themselves wherever they can find a little privacy which creates an aesthetic and health issue. Efforts at a more cooperative relationship with the State in dealing with such issues have been initiated by the Town of Long Island and the Long Island Civic Association. The use of the beach and the occasional beach bonfire is of concern to our volunteer fire department and emergency rescue squad.

A second beach is owned by the Long Island Civic Association which has taken steps to permanently protect it with a conservation easement deeded to Oceanside Conservation Trust, a land trust in Casco Bay which monitors the restrictions voluntarily placed on its use by L.I.C.A. Efforts have been made to protect its dune structure with the planting of beach grass, rosa rugosa, and the installation of snow fencing.

Several other privately owned beaches are used by abutting landowners and neighbors.

Other Islands

Owned by the State of Maine, Little Chebeague Island is part of the Town of Long Island, and used for recreation by boaters throughout the summer season. Vaill (or Marsh) Island gets some recreational use by boaters. It is also owned by the State of

Maine, and like Little Chebeague, and our state owned beach on Long Island gets no staffing or other oversight from the State.

Cow Island, although privately owned, is also an island used frequently for recreation by boating visitors.

Island Recreations

The Long Island Civic Association owns a nine acre parcel in the inland section of the west end of the island which is used for baseball games during the season. The field is rough and grass is cut by volunteers. Players are all ages and abilities, but we have some genuine talent, and there is the occasional claim of a ball being hit clear to Peaks Island.

In addition to the waters, the beaches, and other islands, Long Islanders enjoy a long list of simple pleasures. On our Comprehensive Plan survey they listed in declining order of preference the following outdoor recreations as being most important:

Walking
Swimming
Berry picking
Bicycling
Boating
Sunbathing
Fishing
Picnicking
Sailing
Tennis
Cross-country skiing
Jogging
Skating

Neighborliness is a fine art on Long Island, and visiting is probably one of the most enjoyed indoor recreations. We have wonderful pot luck suppers for fund raisers for the school, the churches, the VFW, or just for fun. Community auctions, craft fairs, bridge groups, bean suppers, cabarets, pancake breakfasts, hors d'oeuvre sales, and endless volunteer projects for the school, churches, VFW, library, fire department, rescue squad, town, beach, and the ballfield, all bring us together. To name a just few of the island projects accomplished in the recent past by unpaid community members: training sessions for the fire department volunteers and for the Emergency Medical Technicians, and work parties to plant beach roses, paint the school, set up a waste transfer station, renovate the town hall, strengthen the town float, beautify the waiting shed, not to mention the mountains of work involved in creating the new Town of Long Island and getting it off the ground. For the most part we like each other on Long Island, and it doesn't take much to get us working and playing together.

Off Island Recreations

Mainland and regional recreational opportunities are attractions, but the limitations of our ferry schedules are the glass against which we press our noses, especially in the winter months. It often requires the hospitality of friends and relatives, or the price of a hotel room, to make mainland activities accessible. Our community has made great efforts of volunteered hours and rearrangments of school schedules over the years to see that our children have the opportunity to take swimming lessons at the Portland Y.M.C.A.

Recreation and Open Space Policy

It is the policy of the Town of Long Island to maintain the tennis court and the small playground at the school and to encourage volunteer community recreation opportunities.

Recreation and Open Space Policy Implementation Strategy

- 1. The Town should continue to maintain the tennis court and the small playground at the school
- 2. The Recreation Committee should continue to support a variety of recreational programs.
- 3. Since walking is the priority recreation identified by 92% of Long Island residents in the Comprehensive Plan survey, the Town should pursue opportunities to develop walking trails and to enhance the safety of pedestrians on public ways.

Public Facilities

The term "public facilities" refers to municipal buildings such as the town hall and fire station and other facilities such as sewer and public water supply.

Potential Acquisitions

There are very few public facilities on Long Island. The Town Hall is not owned by the town. It is a former military building and part of the Phoenix property. Phoenix never, to our knowledge, made use of it during their ownership. It was a vacant structure when arrangements for its lease for a nominal amount were made with Phoenix, and the building was rehabilitated by a cadre of volunteers into a very serviceable town hall prior to our incorporation as a new town on July 1st, 1993.

The building used by the Long Island Volunteer Fire Department is another structure within the Phoenix property. It, too, has been leased for a nominal amount and has been renovated to meet the fire department's needs by island volunteers with money raised with bottle collections, dances and fund drives on the island.

Both buildings would be offered to the Town of Long Island as part of Northland's subdivision proposal. It is likely that voters at the Town Meeting in May 1995 will make the decision whether the Town accepts ownership of these structures.

Town Owned Structures

The real property owned by the City of Portland at the time of the Incorporation of the Town of Long Island became the property of the town. There is a small house, actually the former fire barn, on Beach Avenue which had been renovated by Portland Police for their summer officer and is now used to house the Cumberland County Sheriff's deputy who patrols Long Island in the summer. There is a modest tar paper covered structure used by public works as a garage.

A two classroom school built in 1944-45 shelters the Long Island Elementary School which has at the moment 18 students in the Early Kindergarten through fifth grades. A similar number of older students commute by ferry to King Middle School and Portland High School where their tuition is paid by the town.

Sewer and Water Supply

There is no public sewer or public water supply on Long Island.

Public Facilities Policy

It is the policy of the Town of Long Island that the town will not build a sewage treatment plant.

Public Facilities Policy Implementation Strategy

No action is required.

Fiscal Capacity Comprehensive Master Plan for Capital Spending

Capital Spending Needs

From time to time expenditures arise which cannot be comfortably expensed from a single year's municipal budget: road maintenance, fire engines, a new roof for the school or a new salt shed, as examples. Projects such as these may be funded by one of three mechanisms: raise taxes, borrow, or pay from savings. Raising taxes creates a difficult situation for tax payers in that the taxes each year jump around with little warning of substantial increases and decreases. Borrowing even with the favorable interest rates afforded municipalities always creates an unproductive interest expense and a burden on the future. Setting aside money each year for future needs so that capital improvement projects can be funded in whole or in part by money from savings is the least painful and most productive mechanism.

Separation Debt

The terms of the arbitration which settled the final issues of the separation of the Town of Long Island from the City of Portland included a requirement that the Town pay to the City of Portland our share of the City's then outstanding debt. In the first year this debt will amount to some \$140,000 and will decrease in unequal amounts over 20 years, with a larger decrease after the 10 years as the "fixed" portion of the debt is paid off. In the beginning the repayment of this debt adds a little less than \$5.00 per thousand to the annual tax rate of the Town of Long Island. The town's payment declines over the next nineteen years, with a significant drop occurring in about 9 years. A portion of the annual decrease in this expenditure might be available to be reallocated to the Capitol Spending Reserve Fund.

Capitol Improvement Projects

To the extent that the Town of Long Island continues to pay its debt obligations to the City of Portland our ability to provide new services will be restrained, and Long Island will have very little money to allocate to public facilities and services "to accommodate anticipated growth and economic development". The fact is we do not anticipate or wish (as the survey makes clear) growth or development, at least not in any way that

requires public expenditures.

Being an island we can not expand beyond the littoral boundaries (the water is an open space forever inviolable). Most of the shore which is easily accessible has already been built upon. Some more difficult sections are now being developed, but slowly and to accommodate single dwellings, and these houses make no demands on the public purse for they build their own roads, septic systems and drill their own wells. What surplus we may have will, perforce, be spent "to protect the environment and health, safety, and welfare of the public"

As specific capitol improvement projects are identified there should be documentation of the actual costs of the project, from planning to completion. Once the projects are identified and the costs projected, the capitol project fund should be established and funded with moneys from any one or combination of the three funding mechanisms.

Capitol Spending Reserve Fund

The first year's budget of the Town of Long Island created a Capital Spending Reserve Fund. Moneys in this fund can be made available for funding of specific capital improvement projects when the voters of Long Island, at a duly called town meeting, vote to transfer moneys from the Capitol Spending Reserve Fund to a fund for specific identified projects.

The Town of Long Island Finance Committee has identified the following capitol projects for the second through 10th years of the town:

| Road Paving | \$53,000 |
|-------------------|----------------|
| Salt Shed | \$35,000 |
| Dump Truck | \$30,000 |
| Backhoe | \$40,000 |
| Dump Capping | \$25,000 |
| Waste Oil Furnace | <u>\$5.000</u> |
| | \$188,000 |

Fiscal Capacity Policy

It shall be the policy of the Town of Long Island to promote long range fiscal planning and avoid unnecessary increases in property taxes.

Fiscal Capacity Policy Implementation Strategy

- 1. The Selectman shall continue to require the Budget Committee to develop a Capital Improvements Program (CIP) that would be revised annually. The CIP would be an advisory document which would summarize planned major capital expenditures in the Town of Long Island over a ten year period. The final vote to authorize such expenditures will be made at town meeting.
- 2. The Town should continue its Capital Spending Reserve Fund to receive budgeted money which can be made available for funding of specific capital improvement projects when the voters of Long Island, at a duly called town meeting, vote to transfer moneys from the Capitol Spending Reserve Fund to a fund for specific identified projects.

