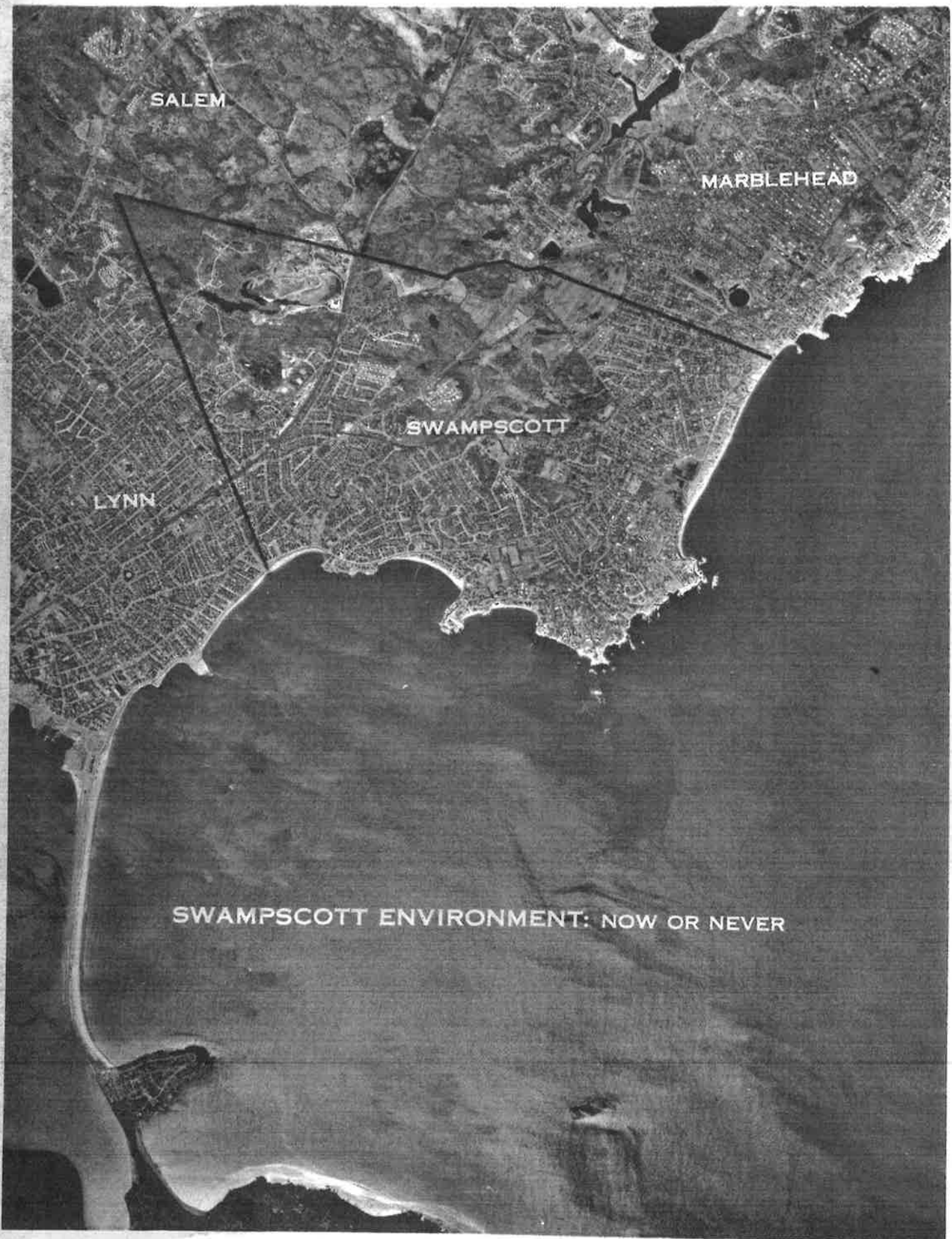


McClennan





The Town of Swampscott

# Conservation Commission

Eliza Thomson Administration Building

Swampscott, Massachusetts 01907

January 30, 1970

## PREFACE

To our fellow Townspeople:

You have an environmental choice: It is now or never.

And, because this choice must be made within a rigid time schedule the crisis of the environment becomes more intense. Since we have so little time remaining - perhaps ten years at the outside - we dare not fail.

Compare the Swampscott you knew ten years ago with the Swampscott you live in today. Surely you can see the difference. The insidious influences of our urban surroundings have changed our town and inevitably, the quality of our lives, and the lives of our children. Consider that carefully. Most carefully.

And then consider this plan with equal care. We are a group of volunteers who serve as your Conservation Commission; the pages following contain our recommendations.

You have to make the choice. Yet consider for a minute how far-reaching your decision will be. At stake is the quality of your life, the quality of your children's life, the quality of your grandchildren's life. We cannot avoid this responsibility, everyone's descendants are heirs to the decision you make. There are no second chances.

Choose wisely. The time is now.

Sincerely,

Conservation Commission

# SWAMPSCOTT ENVIRONMENT: Now or Never

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## Acknowledgments

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Massachusetts Area Planning Council  
Mrs. Ernest Weiss  
Mrs. Robert Powers  
Erland Townsend, P.E.  
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Department of Natural Resources:  
Office of the Commissioner  
Division of Conservation Services  
Division of Forests and Parks  
Division of Water Resources  
Public Access Board

Department of Commerce and Development:  
Bureau of Planning Assistance

Department of Agriculture

Department of Public Works

Metropolitan Area Planning Council

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Bradford and Weed, Engineers

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Essex Conservation District

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Mass. Association of Conservation Commissions

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Massachusetts Audubon Society

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Swampscott Engineering Department

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U.S. Department of the Interior

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U.S. Department of Agriculture

\*

## Introduction

SWAMPSCOTT ENVIRONMENT: Now or Never is the result of some eighteen months of work which involved local, state, and federal governments. In addition, countless individuals and private conservation organizations contributed valuable advice, encouragement, and support.

We believe this plan satisfies both the planning provisions contained in the Conservation Act and required by the Commonwealth. These provisions charge Conservation Commissions with the responsibility for natural resources and watershed resources and the planning relating to them.

Several methods of planning were investigated at the beginning of the project. There is no value to listing here each of the alternatives weighed; suffice it to say that each method has its proponents, and that each alternative, as in any area of human endeavor, contains value judgements which influence direction.

State and Federal Governments provide model plans and guidelines for commissions to follow. We have followed the models and guidelines of the Federal Government, for the most part, because they are sound open space planning methods. Deviations from the federal models were few and occurred only to accommodate specific Massachusetts goals.

Thus, criteria established by higher levels of government have been used. The criteria established by outside, disinterested, competent agencies were free from local prejudices of land use conceptions. The net result is objectivity. It is most desirable.

The planning method used embraced excellence, diversity, and relevance. Diversity and relevance are necessary to attain excellence.

In outline form, the planning structure employed a lay citizen's group to provide the major information required for an open space plan. Their work was supplemented with the advice of experts in the field of natural resources and planning as a means of quality control. Upon completion of the work of the citizen's group, the draft plan was submitted to ten individuals not previously involved with the project. They served as a planning reagent. And their advice was incorporated into the Program. At the same time, the Massachusetts Area Planning Council reviewed the draft plan and made timely suggestions for improvement, which were adopted.

The planning method was provided by the U.S. Departments of Interior and Housing and Urban Development. Briefly, there are three stages to this plan.

The first stage, inventory, is twofold. It provides social data and natural resources data. The social aspects contain history, sociology, and the economy of the Town. All are

necessary to obtain a relevance of open space to the townspeople. Further, this information partially indicates the needs of the Town with regard to open space. It is also used in conjunction with the land inventory, the second part of the first stage.

The land inventory takes stock of the remaining natural resources, identifies their characteristics, and evaluates their potential for development or conservation. A standard used by the Soil Conservation Service was used for analysis in a slightly modified form. This part of the inventory also indicates actual use of open space (i.e. coasting or hiking in the Tedesco area) which in itself is valuable for determining open space needs.

The next stage is the policy aspect. It is difficult to quantify open space needs into an acre per thousand of population figure. But a more detailed discussion of this is contained in the Program. At this point, all information collected is evaluated and translated into policy. By application of policy to the natural resource inventory, the open space system takes form and meaning.

While acknowledgements are provided elsewhere, special thanks are in order for the Conservation Master Plan Committee. The Board of Selectmen appointed this citizen group to provide the diversity necessary to good planning. Their efforts were constructive and inspiring. And all their recommendations are contained in the Program. It is largely their creation.

Thanks are required for the assistance of the Hon. Arthur W. Brownell, Commissioner of Natural Resources. Commissioner Brownell helped the Conservation Master Plan Committee by providing the advice so essential to quality control in conservation planning. At the time, he was Director of the Division of Conservation Services of the Department of Natural Resources. There is no doubt that his expertise was most beneficial.

The Massachusetts Area Planning Council also contributed to the project. The advice on planning techniques was invaluable.

Further, the Hon. Robert G. Davidson, Executive Director of the Council, agreed to review and criticize draft three of the Program. This service proved most helpful and the Program is better for it.

It was determined at the outset that excellence would be the goal in the planning process. The Swampscott Conservation Commission believes it has attained its goal within the limits of its financial resources.

## CHAPTER I

### THE TOWN: HISTORY, TOWNSPEOPLE, ECONOMY



Fisherman's Beach and "Lincoln House" ca. 1900  
Photo courtesy of Robert Benson

## Introduction

The first step in open space planning is the collection of data about the town. This chapter contains information of the historical highlights of Swampscott, population trends and projections, age composition, income levels, and occupation groups.

Further, there is a unified profile of the economic base with implications for future expansion. A brief sketch of the cost of operating local government is included, as well as a discussion of reality in the economics of open space acquisition. The economics of open space is one of the least understood aspects of conservation.

This information serves partly to chart the direction that open space proposals might take by relating social information to environmental backgrounds. Thus, social information focuses on the needs of the people and the social needs identified point the way an open space plan should follow. While the social information is important, it is not the sole criterion of the plan.

## History

The name Swampscott is of Indian origin. It is composed of two separate words: Ompsk, which means "a standing rock", and Musqui, which means "red". In addition, scholars say there was a local affix "ut" which made the name Musqui - ompsk - ut, or translated, "at the red rock". The English gradually transformed M'squomskut to Squamskut, Swamscot, Swampscot and, finally, Swampscott.

Francis Ingalls was the first settler. A tanner from Salem, he was born in England in 1601. He was given permission to settle the Town in 1629. He was 28 years old.

Ingalls built a log cabin at what is now the corner of Burrill and New Ocean Street. In 1632 he built the first tannery in the colony by Humphrey Brook, which ran by his home.

New England's Prospect, written in 1634 by William Wood, said that Swampscott (sic), the domain of Sachem Poquanum, included about 1400 acres. This is about the area the General Court granted to John Humphrey in 1632. He was the first deputy governor of the Massachusetts Bay Colony, a leader of the Dorchester Company, patentee of the Bay Colony, and a close friend of Governor John Winthrop. Humphrey was also treasurer of the colony and was a member of the committee named by the General Court to "take order for a college... Harvard."

Humphrey returned to England in 1641 after selling his Swampscott land to Lady Deborah Moody of Salem. In 1649 Daniel King of Lynn bought it from her. Later the Burrill family bought part of it.

Swampscott, like other New England small coastal towns was a thriving fishing village. Yet, unlike the other towns, Swampscott pioneered in the industry. In 1808 Ebenezer Thorndike invented the lobster trap and thus started an entirely new phase of the fishing industry.

In the area of boat design, Swampscott also ranks as a leader. The sailing vessel Jane, according to the best historical evidence, was designed by Swampscott fisherman. Jane was one of the fastest sail boats in the colony. Similarly, the smaller fishing dory - Swampscott Dory - gained wide recognition for its sea worthiness.

In 1826 the town's fishing fleet numbered six vessels. The local name for boats was jigger, although elsewhere they were called chebacco boats. The most famous fishing boat was the Dove, which is the boat on the Town Seal.

Other vessels worth noting are the Hope and Fox. Hope towed a whale to a beach in 1828. Tents were set up on the beach, and the mouth of the whale was opened so people could walk inside. Reportedly crowds came to the beach every day and, gradually, as a result of the incident, the beach was called Whale Beach. Fox achieved fame as the local highliner, or boat which consistently caught the largest amount of fish.

Swampscott was a part of Lynn until May 21, 1852, when by act of the General Court it was incorporated as a town with about four miles of shoreline and several large hills of about 180 feet elevation. At that time the Humphrey grant was increased by 653 acres from the City of Lynn. Fifteen years later sixty-eight acres from the City of Salem were added, making the total area 1951 acres or 3.07 square miles.

When the news that Governor George S. Boutwell had signed the incorporation papers reached the town, flags were hung out, bells rang, artillery was fired, and a large fireworks display was scheduled for the evening. The celebration lasted for several days.

Swampscott remained a quiet village for a number of years after incorporation. The town directory for 1856 gives the occupations of 360 residents: 75 were shoemakers, working in small shops in the upper part of town; 80 farmers in the Beach Bluff area; 200 fishermen or workers in related industries, like boat building, drying cod to make dunfish, processing cod-liver oil, making sou-westerns. Some dozen large estates comprised most of the town. And population was about 1,335 persons.

Possibly the largest single factor which contributed to the growth of the town was the development of the transportation network of railroads and highways.

On August 27, 1838, at 10:30 A.M., the first passenger train passed through town. Stages were used extensively also. In 1873 the Swampscott Branch Railroad was completed, and it

ran to Marblehead through Beach Bluff. Steam cars were used on the early railroads.

Horse cars were used on the Lynn and Boston Horse Railroad, which started operations about 1881. The lines of this railroad were on Essex Street. In 1884 the lines were extended into Marblehead.

It is interesting to note that it took about thirty minutes to travel from Swampscott to Boston by rail in 1873, and now nearly a hundred years later, it takes twenty minutes to reach Boston by rail from Swampscott Station.

Nevertheless, the transportation growth improved the Town's accessibility, and it gradually developed into a resort town. A number of famous hotels and inns were established, and the fame of Swampscott's beautiful coastline and rural appearance spread.

Some of the famous hotels were: the Taft, located on Phillips Point which is now Galloupes Point. Reportedly, the Taft was later renamed Ocean House, according to local historians. It burned at an uncertain date, and another hotel was established on Whales Beach and named New Ocean House. The New Ocean House burned in 1969. However, there is another story which says the Whales Beach site is the only place a Hotel called Ocean House was located, and, that after a fire, the New Ocean House was erected in its place.

The Hotel Preston, located at the Marblehead end of Phillips Beach, was a charming place. Another was the Lincoln House, located on Lincoln House Point at the end of Fishermans Beach off Puritan Road. The Hotel Bellevue, located near Bellevue Road, was considered to be a fine hotel.

The Deer Cove Inn, located in the vicinity of Deer Cove Road, was supposed to be one of the better Inns in the area. At the end of Whales Beach, the Little Annawam was located where the Eismann family lives. Tourists were also drawn to Town by Mrs. Larkin's Boarding House, where the Ionic Club now is.

Without a doubt, Swampscott had a bustling tourist industry, and many famous persons have been associated with the Town. For example, Governor Gaston once had a cottage on Woodbine Avenue which the New Ocean House purchased and named after him. Boston's Mayor Hart frequently came to town.

Mary Baker Eddy, the founder of Christian Science, once lived in Town. Her house is on Paradise Road near the Humphrey House which is dated 1634.

Elihu Thomson, the famous electrical engineer and one of the founders of General Electric, built his home on Monument Avenue in 1889.

Frederic Law Olmstead, the landscape architect, designed the Monument Avenue area with its green mall and curving streets, all of which give the Town its impressive entrance.

President Calvin Coolidge stayed at White Court, an estate on Littles Point, during the summer of 1925.

Yet, gradually the Town's importance as a resort failed. Tourism could have been sustained as a major industry, but indifference by the Town to the matters which draw tourists - open space, scenic beauty, shops, well-defined historical sites - caused a steady decline in the tourist business.

The community today is perhaps the typical urban bedroom for the core city, since it is surrounded by the huge urban areas of Boston, Revere, Lynn, Salem and Beverly.

### People

The population of Swampscott has been gradually increasing over the years. The greatest increase came between 1950 and 1955. Tabular Summary A describes population trends and projections as developed by the Massachusetts Area Planning Council and the consulting firm of Clinton, Bogert Associates.

TABULAR SUMMARY A  
PROJECTED POPULATION AND DENSITY

<u>Year</u>	<u>Population</u>	<u>Density</u>	<u>% of Change</u>
1950	11,580	3,860	----
1955	13,070	4,357	12.9
1960	13,294	4,431	2.0
1965	13,995	4,665	5.3
1975	16,500	5,500	17.9
1990	19,600	6,534	18.8
2000	21,000	7,000	7.2
2010	23,000	7,667	9.5

According to the 1950 census, the Boston Standard Metropolitan Statistical Area (SMSA) had a population density of 2,442 persons per square mile. Swampscott's population density in 1950 was 3,860. By 1960 the Town's density had reached 4,330 as compared to 2,626 for SMSA. Density of the Town in 1965 is 4,665 as compared with an SMSA density of 2,636.

Age composition of the 1960 Swampscott population compares favorable with the SMSA. However, Tabular Summary B shows age composition of the 1965 population. These later figures are more useful. Source is the State Census of 1965.

TABULAR SUMMARY B  
AGE COMPOSITION OF  
1965 POPULATION

<u>Age</u>	<u>Number</u>	<u>% of Whole</u>
Under 5	1230	8.9
6 to 19	3617	25.8
20 to 29	1403	10.0
30 to 39	1424	10.0
40 to 49	1952	14.0
50 to 59	1953	14.0
60 and over	2416	17.3
TOTALS	13995	100.0

Swampscott has a higher proportion of elderly residents than the SMSA. Residents over 65 account for about 14% of the Town population, while 11% of the SMSA population is over 65 years of age.

Recognizing early retirement trends, the 60 and over age group is considered to be either retired or semi-retired for the purposes of this plan. Since it comprises 17.3% of the 1965 population, this is the second largest group and it has more leisure time than any other age group. As medical science progresses, the numbers of this group will grow.

Regarding family income, there is a significant difference between SMSA and Swampscott. About 34.7% of all Swampscott families earned over \$10,000 annually compared to 21.3% of the total families in the SMSA. Tabular Summary C shows incomes of Swampscott and SMSA families. Source is the 1960 U.S. Census.

TABULAR SUMMARY C  
INCOME LEVEL OF  
1960 POPULATION

<u>Income</u>	<u>Swampscott</u>	<u>SMSA</u>
Under 3,000	8.2%	11.0%
\$3,000 to \$5,999	22.4	30.7
\$6,000 to \$9,999	34.7	37.0
\$10,000 and over	34.7	21.3
Total Median Income	\$7,967.00	\$6,687.00

Income has risen steadily since 1960. And it is expected that the 1970 Census will show substantially higher family income in Swampscott. This conclusion is based on analysis of occupation groups of the Town and the high level of education residents have reached.

Seventy per cent of the 1960 population had a high school education or more as compared with only 53.4 per cent of SMSA population. This is a factor in the higher income level of the Town and is also shown in the occupation groups. Tabular Summary D shows occupation groups of the 1960 population. Source is the 1960 U.S. Census. The group classifications have been condensed.

TABULAR SUMMARY D  
1960 OCCUPATION GROUPS  
Per Cent of whole in:

<u>Groups</u>	<u>Swampscott</u>	<u>SMSA</u>
Business, Professional	63.6%	49.7%
Crafts, Trades	21.4	31.2
Labor, Service Workers	7.3	12.5
Not Reported	7.7	6.6
TOTAL	100.0%	100.0%

Thus it can be seen that the economic growth of the past decade has directly benefited some 84% of the townspeople in business, the professions, crafts, trades, and unions.

It is also important to note that leisure time has been increasing at a steady rate in the past decade. Thus the need arises to provide not only more opportunities for leisure activity, but a greater diversity of opportunity as well, to satisfy the demands of an increasing population.

#### The Local Economy

As might be expected from the education, income, and occupation profiles, housing of Swampscott is comparatively good. In 1960, over 70 per cent of the Town's population lived in single family dwellings. About 95 per cent of the dwellings were reported in sound condition, compared to 88 per cent for SMSA housing. On the other hand, dilapidated and deteriorating structures respectively account for about 0.6 and 4.5 per cent of total town housing units.

Swampscott's position as an urban bedroom for the core city is reflected in the local economy and the types of work available in it. According to the Massachusetts Department of Commerce and Development (DCD), the most prominent employment categories are those which provide services or goods to the residential population. Further, DCD says there is a strong seasonal cycle of employment with the high point occurring in the summer. But, this has been modified since the New Ocean House Hotel burned in 1969.

In 1966, 188 firms reported to the Massachusetts Division of Employment Security a total November employment of 1,376 persons and a total annual payroll of \$5,639,000.00.

Employment by manufacturing industry is of some importance in Town. According to the Division of Employment Security there were seven (7) manufacturing firms reported in 1966. Their total annual payroll was reported as \$1,065,000. Total employment in November 1966 was 141 persons. The most important manufacturing industry represented is concrete, gypsum, and plaster products.

Regarding wholesale and retail trade in 1966, nine (9) wholesale firms employed 22 persons with an annual payroll of \$130,000. Forty-eight retail firms employed 612 persons in November 1966 and had an annual payroll of \$2,146,000. Employment level in the service industry of Swampscott rises to a higher level in the summer than is shown by the November 1966 figures.

The following table shows the profile of employment and payrolls of Swampscott firms. Source is the Division of Employment Security and the Department of Commerce and Development. The 1966 figures are based on the revised Standard Industrial Classification Code--1957. Thus they are not comparable to tabulations made prior to 1958.

TABULAR SUMMARY E  
EMPLOYMENT AND PAYROLLS

Industry	No. of Firms	1966 Annual Payroll	Nov. 1966 Employees
Agriculture and Mining	16	\$ 203,000	47
Construction	33	806,000	141
Manufacturing	7	1,065,000	141
Trans., Comm., and Util.	8	178,000	54
Whsle. & Retail Trade	57	2,276,000	634
Fin., Ins., & Real Est.	17	204,000	32
Service Ind.	50	207,000	327

According to the economic base information, Swampscott is neither industrially oriented nor a major wholesale-retail center. Yet, there remains about 200 acres of undeveloped land zoned for business in the Vinnin Square area and in Upper Swampscott. Thus, the future will certainly see expansion of the economic base.

However, in present circumstances, most residents are employed outside of Town, particularly Boston, Rt. 128, Lynn, and other employment centers. Transportation is therefore important.

Regarding transportation and circulation characteristics, Swampscott participates in the extensive transportation network leading to Boston. Freight and passenger service is provided by the Boston and Maine Railroad. The Massachusetts Bay Transportation Authority provides bus service. In addition Swampscott has favorable proximity to Logan Airport.

Principal highways serving Swampscott include Rts. 1A, 114, 129, and the Town is less than 5 miles east of Interstate 95 and about 10 miles from Rt. 128. In addition, an I-95 connector will extend into Vinnin Square.

Regarding local government cost, the Finance Committee report of January 1969 shows budgetary items totaling some \$5 million with other special projects totaling about \$2 million. The borrowing capacity of the Town on January 1, 1969 was about \$5.8 million. Total assessed valuation for the Town during November 1969 reached \$104,992,783.00 according to the office of the Board of Assessors.

### Economic Effects of Open Space

Following is Chapter VII of the book Challenge of the Land: Open Space Preservation at the Local Level by Charles E. Little. It is one of the best analyses of open space economics that can be found.

#### Chapter VII Economic Effects

The facts are pretty much in: preserved open space is the biggest land bargain since the King of England whacked up the eastern seaboard and gave it away to his friends three centuries ago.

These facts have to do with both negative and positive values based on two theorems: municipal costs increase with density, and municipal revenues increase with amenity. In both cases, open space can be the controlling factor.

A kind of "pop" suburban tax theory for conservationists was formally unveiled twelve years ago in a letter to the editor of the Lexington Massachusetts Minute Man (April 19, 1956). The author of the letter, Mr. Ronald B. Greeley, at the time on the faculty of the Department of City and Regional Planning at MIT and a private planning consultant, probably had no idea how widely he would be quoted, or that for a large segment of the public he would become a prophet of what is now not so whimsically called the "new municipal math"--the truism that public service costs in suburbia increase faster than property tax income as vacant land is subdivided into single family developments.

Neo-bourbons and other exclusionist types have joined conservationists in a solid front of apologists for saving open space on the principle that it would save money. Mr. Greeley might admit to being a conservationist. The other labels should not be hung on him, a fact that becomes apparent only when his argument is reproduced whole, as it is here:

To the Editor:

There seems to be widespread concern about Lexington's rate of growth. I submit below the crude outlines of a process for retaining such growth I wish the Planning Board would consider seriously. Perhaps they already have; or perhaps they will wish to appoint a special committee to study the matter. Most people come to Lexington because they like, among other things, its "rural atmosphere," its open lands and freedom from urban character. Most people who are now here are concerned about the rate at which that openness is disappearing. Such controls as 30,000 sq. ft. zoning obviously will not preserve the openness which we cherish.

Suppose the Town should decide to buy up, within the next few years, something like 2,000 acres of undeveloped land in the Town (the total area of the Town is about 10,000 acres), selecting the areas which are least accessible, least easy to service, least desirable for residence. What would be the result?

First, it would cost money--possibly a million dollars. However, unless the Town was forced to pay exorbitant prices for the land, the total cost, spread over a twenty year period, should not exceed \$75,000 per year, including loss of tax income from the raw land. Second, we would derive significant financial savings. Judging from post war experiences, each new home pays on the order of \$400 per year in taxes. If we assume that such homes average only 1 to 1 1/2 school children per family, then the cost of schooling alone is equal to, or exceeds, the taxes paid during the first 15 or 20 years of the dwelling's existence. Thus the costs of school construction, sewers, drainage, street maintenance, and even some health and welfare expenses must all be met by the Town as a whole rather than by taxes on the individual properties concerned. Thus, the net cost of servicing these new homes, if they are built, would add up to far more than the \$75,000 per year which the Town might have to spend to avoid this cost.

Third, we would lose out to the extent of denying ourselves the addition of many new friends and neighbors such as those who have recently come to Town; and we might open ourselves up to the criticism of being "snobbish" or selfish. On the other hand, in the long run there may be two factors which will offset these arguments. The open spaces may, in their way, become just as great assets in the total Metropolitan area as such large open spaces as Middlesex Falls, Blue Hills and Breakheart Reservations are already proving to be. And the existence of such open spaces may, in the future, make it appear desirable to allow some residential areas in the Town to develop at somewhat higher densities, and thus more efficiently. If this proves to be the case, we could eventually absorb the rate and in a more economical and desirable pattern. If not, then we will be fortunate enough to have acted before it was too late.

Fourth, we would be guaranteeing the future existence of real open spaces throughout the Town--open spaces which need not be maintained (except for fire protection), but which would count significantly, as far as amenity, appearance, and casual use are concerned; and which would count significantly, I believe in maintaining sound property values in nearby residential areas. If a generation hence, we find such land not to be an asset in public ownership, the chances are overwhelming that it could be disposed of at a profit. Personally I doubt if we would be willing to dispose of it at any price in the future.

If I interpret citizen attitudes correctly, a procedure of buying up open space reserves would obtain for nearly all of us the very pattern of development in the Town which we want most. And at the same time, for an initial expenditure of a million dollars (the cost of one school), we would have a very good chance of making a new profit (through reduction in Town expenses) of at least a quarter million dollars a year.

Roland B. Greeley

Although Lexington did not take Mr. Greeley up on his plan, he initiated a whole new way people could approach open space vis-a-v the tax base. For example, the Princeton Township Citizens Advisory Committee on Open Space (later made a commission) came out in 1962 with a proposal adding some significant detail to the economic theory of open space preservation.

Of greatest value to those outside Princeton, but nevertheless interested in its thinking, is an appendix containing some expert testimony on economics. It was here that Lyle Fitch, former Chief Administrator of the City of New York and now President of the Institute of Public Administration, gave Princeton officials and civic leaders some hard data to chew on. The service cost of new housing, Fitch estimated, would "be about \$1,005 per household, requiring a dwelling and lot assessed at about \$53,000" to break even on the tax base. The point hardly needs nailing down, for few communities can anticipate subdivision activity that will uniformly produce that kind of residential ratable.

The numbers produced by Greeley and Fitch merely quantify in a very particular way what is already known about the economics of development. As Fitch puts it, "The more densely settled an urban area, generally speaking, the lower will be the average value of each dwelling unit. The lower the dwelling unit value, the less its capacity to support public services. The cost of public services in urban residential communities, however, tends to increase with population density. Hence, greater densities tend to be accompanied by higher service costs per household, and lower value and taxable capacity per dwelling unit."

That this tendency is not irreversible is the whole point that Greeley and Fitch were trying to make. The agent of reversal is open space. "There are cases," says Fitch, "where it will be financially advantageous to acquire land to preclude its residential development." And he has provided a somewhat whimsical formula for officials to follow in deciding between open space and subdivision:

$$I_a = \frac{C_s - (L_a t + L_f i)}{t}$$

$I_a$  is the "point of indifference," the point at which the municipal coffers would be in the same shape whether a piece of land were developed or not.  $C_s$  is the cost of providing public services to the household, from which is subtracted  $L_a$ , any decrease in assessment because of, say, an open space easement, times  $t$ , the tax rate and  $L_f$ , the amount required to implement an open space policy involving purchase of fee or easement, times  $i$ , the interest rate on borrowed money for implementation. All of this is divided by  $t$ , the tax rate.

Fitch doesn't really expect anyone to work this out. He summarizes thus: "The township stands to gain by acquiring vacant lots of development rights thereto, rather than allowing them to be developed for residence, whenever (1) the cost of supplying public services to the prospective new household exceeds (2) the amount of real estate tax sacrificed by foregoing private development of the lots, plus (3) interest on the rights thereto."

Actually, all that is needed to apply the "new municipal math" is a sharp pencil and an understanding of what it really costs to provide municipal services to new subdivisions. In Closter, New Jersey a controversy arose in 1965 over the acquisition of seven open space parcels totaling some 80 acres. According to an account in the Gergen Evening Record, Mayor James E. Carson applied a Fitch-like formula this way: If the land had not been acquired, 80 acres would accommodate 160 houses. The houses, if constructed, would produce about 200 children to be educated at an average cost of \$720 for each pupil or a total cost per year of \$144,000. Additional garbage collection would cost about \$4,000 annually, additional police patrolling \$6,000, additional fire hydrants, lighting and other services, \$2,000. for a total of \$156,000 per year in services.

Carson estimated the tax revenue to be \$100,000 a year; therefore the community's net annual loss would be \$56,000. The total cost of the property in Closter was estimated to be around half a million dollars. The borough has applied to State and Federal authorities for aid, some of which they have received. But even if they had to go it alone, the payout point would be something like a decade, after which the land would be pure profit, or nearly so if Closter stuck to its plan of limited recreation development

Perhaps the most famous example, possibly because of its presumed flabbergasting effect, was the cost study done in Lloyd Harbor, New York. When Robert Moses announced his intention to purchase the 1,426-acre Marshall Field Estate (now Caumsett State Park), area residents predictably enough complained about the land going off the tax rolls.

Responsive to the public mood, the village board hired a firm of planning consultants to assess exactly what the damage would be, and, yes, it would be significant--an increase of \$2.58 per hundred, nearly 20% (from \$14.33 to \$16.91). But that was only a part of what the planners were asked to figure out. Assuming the land would eventually be developed, they set up a statistical model based on two-acre plots containing houses worth \$35,000. In this case, said the planners to the dismay of some, the tax rate would go to \$21.64, an increase nearly three times greater.

In spite of the persuasiveness of such statistics, it's important to understand their limitations. "Conservation is not contraception," said the late Hugh Pomeroy. The argument probably should not be used as an excuse for open space preservation but as a defense against the critics of acquisition. "I'm in favor of open space," they always say, "but we can't afford to remove the land from the tax rolls." That's the argument that doesn't wash, for 95% of the time, which is the incidence of vacant land zoned for single family residential purposes in the New York region, the greater loss to the community would be in not taking the land off the tax rolls.

A far more exciting phenomenon is the positive economic results of open space preservation. It is a phenomenon thoroughly understood by those who have the most to gain by it--the housing developers. What they know for a fact can serve equally well as an operating theory for a municipality concerned with the quality of its ratables.

Says Carl Norcross in his excellent study, Open Space Communities in the Market Place, if a developer "creates an outstanding environment, saves the trees, has a good street pattern, and then adds a pool and a modest recreation area, he might easily get \$500 or \$1,000 more per house than he would for the same house in an ordinary subdivision." This is, of course, a \$500 or \$1,000 that shows up on the tax rolls too. Norcross continues: "Proof that developers who tried open space and better land planning believe in them, is that in their next developments they have gone even farther to provide more open space, more recreation and better community facilities." If, as William H. Whyte has said, "Good aesthetics make good economics," that means they'll make a pretty good tax base too.

According to the American Society of Planning Officials (Newsletter, 1963, p. 92), it is common practice throughout the United States for FHA appraisers to place a higher valuation on houselots if the development contains a park or if it is adjacent to or near a public park. Moreover, according to the National Association of Home Builders (in Home Builders' Manual for Land Development, 1968), "Today's home buyer is looking for features beyond the confines of the house and lot. Proximity to school, park and community recreation is high on his list of looked-for items.

"This statement," continues the NAHB, "may not impress the newcomer in the building and subdivision field who has not experienced the keen competition of a buyer's market. The experienced developer, however, knows that the presence of these features enhances desirability, which is translated directly into buyer demand and sales value. In the vicinity of park and recreation areas, enhanced values of building sites up to 15 to 20%, with a high level of sustained value over the years, are not uncommon experiences." (Emphasis added.)

According to Dr. Kenneth D. Daane, who made these citations in an excellent study, The Economic Implications of the Regional Parks System in Maricopa County (Arizona State University, 1964 \$1.75), "Public recreational facilities have significant effects upon the surrounding land and property values. In many cases the development of park facilities has increased the values of surrounding reality to the point where the increase in tax revenue more than paid for the cost of the parks."

In a discussion of the economic effects of golf courses, Urban Land Institute Research Analyst G.H. Crabtree Jr. points out that these facilities confer town benefits. "The municipality gains substantial tax receipts from the surrounding property and has a spacious open green area in its jurisdiction."

In the city of Prescott, Arizona, Crabtree reports, the city built a golf course on land valued at \$25 an acre. After that, city officials turned around and sold adjacent land to subdividers for an average of \$2,277 per acre. "It is anticipated that the development of this land will add over \$3,000,000 to the city's taxable values in the next ten years," according to city officials.

So confident of the value of large amounts of open space in a master plan, Wallace-McHarg, Philadelphia planners, showed a significant difference in development value in a comparison of optimum development versus a forecast of development patterns if present trends continued in the Green Spring and Worthington Valleys outside Baltimore. In their Plan for the Valleys, calling for preservation of 3,000 acres of meadowland they state: "It has been calculated that uncontrolled residential growth develops approximately \$33.5 million (in land value) by 1980, and Optimum Land Use residential development produces \$40.5 million in the same period. The additional \$7 million resulting from conservation would be adequate to pay in excess of \$2,300 per acre for title to the 3,000 acres exempted from development."

What Wallace-McHarg projected and what Norcross observed in his study of developments throughout the country was a tangible improvement in property values because of open space. "Open space communities," states Norcross, attract well-educated families, with better than average jobs and with middle or upper incomes...A by-product of their education is an appreciation of an environment that will provide a better place in which their children can grow up.

An important by-product appreciated by many officials and civic leaders, is the direct effect of preserved open space on surrounding assessments.

To the people who wish to encourage open space preservation, these kinds of facts are tantalizing and they have been accumulating over the years. One of the most quoted is a before-and-after study undertaken by the Union County, New Jersey, Park Commission covering the period 1922 to 1939. The Commission reported a 631.7 per cent increase in the assessed valuation of properties within a quarter mile of their Warinanco Park, while assessments in the city as a whole (Elizabeth, New Jersey) averaged a 256.7 per cent increase.

Certainly if property value increases like this could be projected for any proposed park purpose, the people who come to town hall to militate against acquisition plans on economic grounds could have their arguments easily swept away. A more recent example can be found in Woodmere, New York, where Nassau County Assessor Horace Kramer has ruled that the 30- and 40-year old houses adjacent to a golf course in this Long Island community are not eligible for reduction in assessment because of their age. "If these houses weren't in their present location," he says, "they would be entitled to a substantial reduction in assessment."

According to Kramer, this is perhaps the most important effect of open space--the maintenance and improvement of values over the long pull. "In Nassau we have the opportunity to preserve residential values by preserving open space. This increases the property tax yield which is the major source of revenue for local government."

It would obviously be a major breakthrough if a formula could project the effect of preserved open space with some accuracy. This way, pay-out points could be anticipated for a project that might, say, clear a blighted area for a park, counting an increasing assessments of surrounding properties to pay off the investment. According to Harold Van Cott, Supervisor of Recreation for Essex County, New Jersey, this has happened in a way in the Brookdale Park area in Bloomfield and Montclair. The park was constructed during the Thirties in an area which had at least partially been blighted and could have deteriorated further. Van Cott believes that the park construction changed the direction of development.

Presuming that the most dramatic kind of persuasion is a good statistic, many open space advocates have embarked on a search for a method which could uncover this elusive economic grail. How much real estate value is added by open space, and under what circumstances?

The closest anybody has come so far is found in a study undertaken by Robert L. Wonder for the Coro Foundation in San Francisco. The project got started in 1961 when William Penn Mott Jr., then Superintendent of Parks for Oakland, California, sent a letter to the Foundation stating the "need for concrete evidence to indicate that parks are good business and that the purchase of park lands for future use is good business for a city." One can be almost certain that Mott had suffered, as almost all park executives suffer, from simplistic economic arguments against parks. Robert Wonder arrived at the Coro Foundation as a 1964-65 intern in public affairs, and took up William Penn Mott's challenge.

Because so many things besides open space affect property values, Wonder searched out two parks in Oakland whose neighborhoods were more or less unaffected by wayward influences. A freeway, for example, might exert such an economic impact that the lesser effect of open space on land values would be virtually immeasurable. He then established "tiers" reflecting given distances from the park boundaries. The first tier were those blocks adjacent to the park; the second tier, one block away and the third tier, two blocks away. If the parks had an influence on surrounding values, it would be proved, Wonder surmised, if these values decreased the further they were away from the park boundary.

Thereupon he looked up the assessments, block by block, to see if he was right. For one of the parks, Clinton, Wonder found that the mean assessment adjacent to the park was \$3,416 and a block or two away considerably less. For tier two it was \$2,300 and for tier three \$2,335. Encouraged, he hurried to records covering the San Antonio Park neighborhood to make the same measurement. Here he found that the mean assessment was \$1,489 for adjacent blocks and for two and three blocks away \$940 and \$1,006 respectively. Although these were two kinds of neighborhoods, Clinton Park with relatively high assessments and San Antonio Park with relatively low ones, the parks themselves did seem to affect the relative value of nearby properties. In the Clinton Park area, assessments were some 50% higher and in the San Antonio Park area 48% higher than other properties not so closely situated. That the per cent differences are so similar may be coincidental or may not.

But Robert Wonder had only begun to make his case. For the second area--San Antonio Park--he selected a control neighborhood which was the same as the "study" neighborhood in nearly every respect except that it didn't have San Antonio Park, or any park for that matter.

He divided the control area into three tiers, just like the San Antonio Park area, except that tier one was fronting on other houses rather than a park. Here, he found much smaller differences in the mean valuation of each tier, and of course no pattern. One tier was \$876, another \$932, and another \$1,195, the greatest difference being 24%, and the overall value of the control area significantly less than the overall value of the San Antonio Park neighborhood.

With typical academic caution Wonder observes: "Because of the time limitations and the smallness of the sample it would be inappropriate to unequivocally state that this survey is conclusive in demonstrating that the presence of a park has an exacting influence on adjacent surrounding properties."

Then, throwing caution to the winds, he concludes, "Yet, the survey does just that. Even with the smallness of the sampling and considering the randomness of the sample, this report demonstrates that parks do hold the value of their surrounding lands." He adds that based on a small amount of opinion research he did in park neighborhoods, "not only do parks influence assessed valuations, they also have an affect on how residents perceive their new neighborhoods and, consequently, a pride in the area is fostered by the presence of a park."

So far, two economic aspects of open space preservation have been dealt with: first, the penalties of not preserving open space in terms of the preserved alternative land-use, a single family housing development with two or three children per household to educate at somewhere between \$500 and \$1,000 per year each, and second, the positive values to open space that reflect themselves in assessments of surrounding property, if not in the municipality as a whole, stemming from the value added by the amenity.

Another value is that which simply accrues because a tract is in an open space use, rather than in spite of it. This income can be either direct, as in the case of recreational fees, or indirect because of taxable values. One case illustrating the former is the improbable "Ski Bowl" in Brookhaven, Long Island, where 70 acres of land was turned over to the town via a density zoning scheme. Brookhaven is a town whose land area is bigger than most counties; its overall area is roughly the size of Nassau. Because it is big, Brookhaven officials can be forgiven for thinking big. The Ski Bowl was one such idea. Through the use of their "cash in lieu of" fund, collected from developers over the years who did not or could not make a contribution of land for recreational purposes, they were able to pay for construction. The project was not quite that simple; it involved a complex series of leases and the use of concessionaires. But the slopes and tows were built and a handsome ski lodge with snack bar and indoor recreation areas was constructed. How much does it cost to run the operation? Nothing. In fact, it makes money.

While certain open space uses are taxable, their taxation can often discourage the use itself, as the State of New Jersey found out when confronted with the massive pull-out of farmers in the Fifties and Sixties. Still, there are some resource uses that can and should remain viable economic assets. Outside of farming, other taxable open spaces might include forest lands for far-out areas, and closer in--on Long Island especially--marshland and shallow baybottom. Resource specialists have for years maintained that the most valuable land for food production is the estuarine marsh, comparing favorably with the most productive areas of the country's midland grain belt. When shell-fishing is involved, some interesting statistics emerge. Anthony Taormina, a biologist with the New York State Conservation Department, estimates that an acre of shell-fish rich baybottom on Long Island ought to be capitalized at no less than \$4,200, based on a 5% factor since the resource is renewable year in and year out. With a good deal of justification, Taormina wonders why in the world people want to dredge these areas to convert baybottom to housing sites when doing so destroys such a valuable resource as the fancy-priced Long Island Bay scallop. The financial losses are additive: loss of a "cash crop," of amenity value to the community (most people would rather look out on a marsh than on the backyard of somebody else's house), the cost-revenue-formula-loss that obtains when vacant land is converted to single family housing. If you take Taormina's loss of \$4,200, add to it a reduction of value of, say 10% in surrounding assessments for houses that no longer look out over a marsh, add to this the net loss of tax revenue, subtracted from service requirements of two or three new houses, it makes some kind of total that indicates that a large amount of money has simply disappeared.

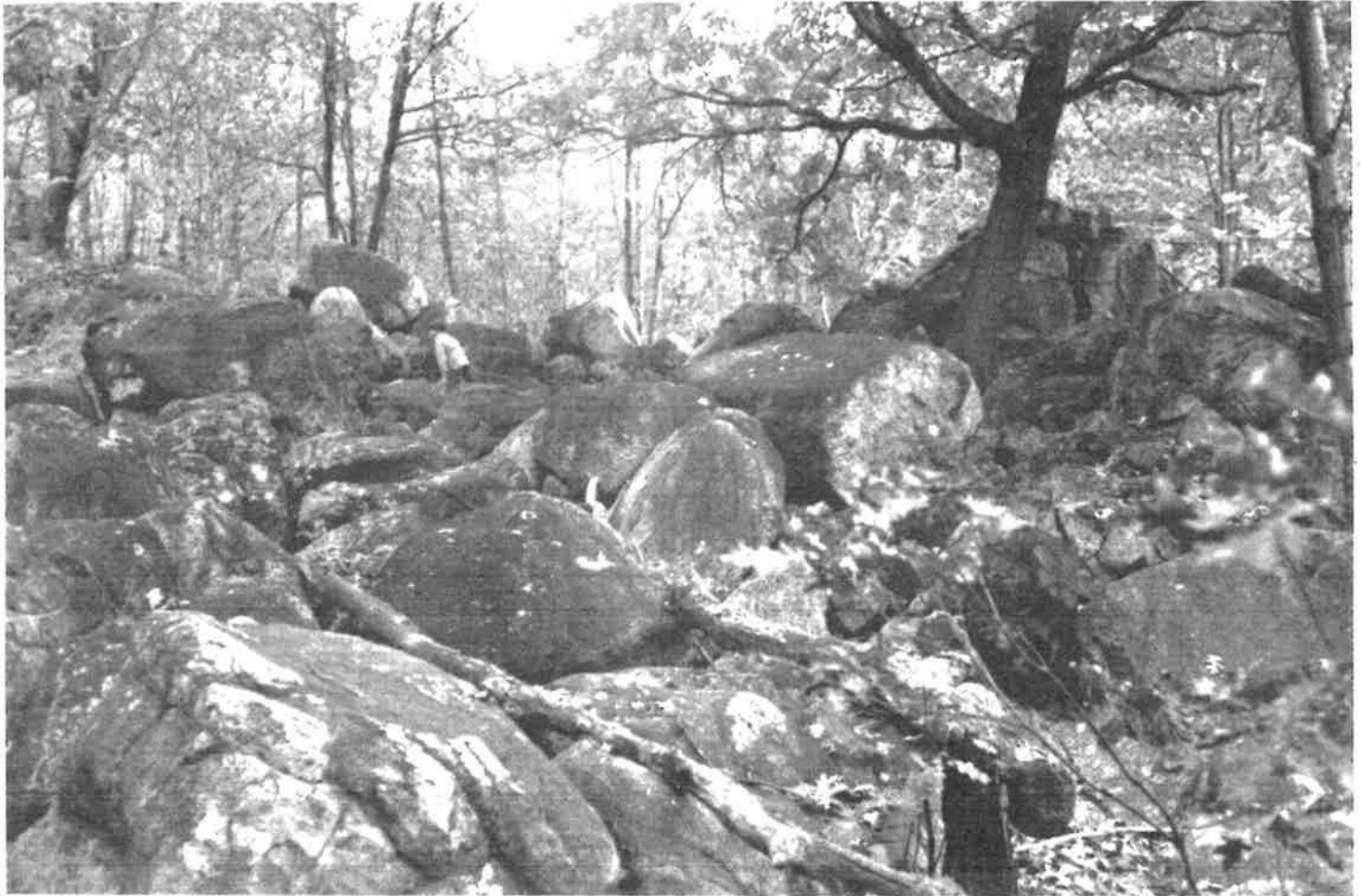
The point need not be belabored. "Open space produces municipal income negatively--by costing less to service. It produces it positively by adding value to adjacent properties. It can produce income directly through user fees, or because a desirable open space use is also taxable.

The purpose of acquiring or encouraging the preservation of open space may not be a financial one, but acquisition is nearly always susceptible to financial justification. Indeed, there is so much evidence that open space pays off handsomely for the typical suburban community, that the objectors should be saddled with the burden of proof rather than the proponents. They are the ones caught with their tax rolls down.

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## CHAPTER II

## THE LAND: AN INVENTORY AND ANALYSIS



Terminal Maraine adjacent to Harold A. King Town Forest and part of the proposed additional acquisition. An example of land which is rated as marginal development by application of standard used on this plan. The Maraine is commonly known as a glacial boulder field.

## Introduction

This section provides a general summary of the inventory and analysis of the remaining natural resources of Swampscott and an inventory of existing public land.

During the Summer, Fall and Winter of 1968, the inventory was taken by members of the planning committee and the Conservation Commission. The five (5) inventory objectives were: 1) inspect all remaining open space and describe its characteristics including vegetation, soil, water table, grades, ledge, and so on; 2) evaluate the development potential; 3) identify actual use of the open space on a seasonal basis regardless of zoning; 4) identify landforms which channel development by reason of its physical characteristics; 5) identify man-made barriers which obstruct pedestrian travel and thereby give form to regions, or neighborhoods, of the Town. Only the more important aspects of the inventory are given here.

After completion of the inventory, the next step was a comprehensive analysis of the findings. From this summary of inventory results was prepared for this plan.

## Evaluation of Land

For the purpose of this plan certain inventory standards were established to classify land and its potential for development. It is not the desire of the Conservation Commission to press for acquisition of prime land. The standard for the marginal development classification is based upon information supplied by the Soil Conservation Service of the U. S. Department of Agriculture. The standard follows:

1. Shallow soil with high frequency of ledge outcroppings or bedrock within four feet of the surface.
2. Extreme surface stoniness.
3. Extremely high water table for 6 months or more of the year.
4. Slopes rising from a plain with more than a 25% grade.
5. Hills with more than a 25% grade which are spaced closely together.
6. Remoteness from municipal services.

Another aspect of marginal land is that its development is very costly and the consequent increase in municipal services is staggering and forms a continuing drain on municipal revenue. Thus public acquisition of selected land is sound economics because it helps to stabilize service demands on local government.

## General Topography

Swampscott has approximately one-third of its land area open. Depending on the location, the land is rolling meadow and wooded areas, the more traditional New England scene. Also in some places there are lush fresh water meadows. However, some land has been stripped and mined for gravel. Areas have been filled and are flat and barren. In addition, there are forests with steep cliffs and rocky areas, as well as glacial boulder fields.

Taking an aerial view, the town's land formation is scattered hills particularly in the Western parts of town. But in the Northeast area of town, the land is more level and slopes eastward to the shores of Massachusetts Bay. Several of the larger hills in the northwest and central areas of town command sweeping views of the countryside.

## Man-Made Barriers

The town is divided into four regions by three major roads which constitute effective pedestrian barriers. Essex Street, which runs east to west from Lynn to the Loring Hills area of Salem; Paradise Road, a four lane highway, roughly parallels Essex Street and approximately cuts the town in half since it starts at New Ocean Street and runs east to Vinnin Square; Humphrey Street is Route 129, and runs along the coast and forks at Atlantic Avenue and runs into Marblehead.

Two other artificial barriers of consequence are the Portland Division of the Boston and Maine, which parallels Essex Street, and the abandoned Marblehead branch of the B & M. Also, the proposed 1-95 connector will be part of the Vinnin Square area and link the three major highways in town.

These major man-made barriers played a role in planning as they provided easy reference to regions of the Town.

## Natural Barriers

During the inventory of natural resources, five wetlands were identified and judged to be of importance.

## Region I

By far the most precious opportunity for ecological planning is in Region I. This forest, in the Northwest corner of town bounded by Salem on the North and Lynn on the West, is approximately 40% fresh water wetland, with at least a dozen small streams and springs feeding a major stream which seems to drain into Glenmere Pond in Lynn.

There are four major wetlands in Region I. The first is located on the Salem-Swampscott border and is adjacent to a small pond the Conservation Commission now holds. This wetland abounds with wildlife and is a major factor in the protection of the watershed which both drains and irrigates the forest. The fact that it has not been developed is due to the lack of services in this remote and isolated corner of town. This wetland is also a part of a major watershed in Salem.

The second major wetland in Region I extends from Salem into Swampscott in the general area of the end of Nichols Street, and southerly from there along Sampson Avenue and Foster Road to Lynn and into Glenmere Pond.

The wetland is partially owned by the Conservation Commission, but about 60% of the total wetland is privately owned. It should be strongly emphasized that the entire wetland must be saved to maintain the water resources of the Harold King Town Forest. Without this sponge-like area to retain water for the forest several dry seasons would have a disastrous effect.

The third wetland is adjacent to the quarry of the Lynn Sand and Stone Company. It is an important drainage system for this highland area of town. This watershed seems also to be a factor in the waterlevel maintenance of Foster Pond.

The fourth wetland in this area runs around Foster Pond in the undeveloped areas, except for one place on the easterly end where where extensive land fill operations have occurred. This wetland on the northerly side of the pond is a major factor in drainage from the general highland area of Windsor. The same holds for the wetland on the south border of the pond since it is a factor of drainage in the Foster Road vicinity.

Both wetlands play a part in the water system which fills Foster Pond and keeps it from stagnating.

#### Regions II, III, and IV

There are four major wetlands in this area which are most important to watershed protection; since they are all connected they are considered as a unit here.

The first water resource is Hawthorne Brook. It has its origin in the wetland area near the Swampscott Cemetary and Loring Hills area of Salem, extends in an easterly direction under Essex Street, into a swamp on the Sunbeam Driving Range and then flows easterly under Paradise Road into Tedesco Country Club Golf Course and from there it is partially culverted until it discharges on Phillips Beach near the Marblehead boundary on Atlantic Avenue.

The second water resource is an intricate one which roughly follows the abandoned Boston and Maine Railroad, Marblehead branch, as far as Salem Street, and has many small brooks which feed into it.

The major areas which drain into this linear wetland are generally the Mountwood Road area on the easterly side where there is a large wetland, and, on the opposite or southerly side of the railbed in the general vicinity of Forest Avenue where there is a small pond on the west side of Banks Terrace.

Further along the railbed in an easterly direction and in the general vicinity of the Shaw Junior High there are two watersheds off Forest Avenue.

The first small brook which discharges into the major watercourse comes from the general vicinity of Lexington Circle, the second is a watershed bounded by Walnut, Sargent and Forest Avenues. The watershed is partially owned by the School Committee and it is the water supply for Muskrat Pond adjacent to the railbed on school land.

Still further east there are several small ponds on the Tedesco land created mostly by the filling necessary to make the railbed.

This linear drainage system ends in a fresh water marsh and small pond near the abandoned Phillips Beach depot. This third water resource is generally in the vicinity of the corner of Salem Street and Humphrey Street. It is believed that this drains into Palmer Pond through a culvert system the town installed in the 1930's.

The fourth water resource encompasses the Palmer Pond area. As mentioned above, Palmer Pond receives water from Region III. It also serves the watershed known as Little Point. There is underway construction of a drainage system from Little Point to Palmer Pond.

Palmer Pond is a great pond of the Commonwealth, but the legislature acted favorably on a Conservation Commission petition and directed the Department of Public Works to deed the pond to Swampscott with appropriate restrictions to maintain its legal status.

This pond is a major factor in the watershed resources of the Town, as well as other factors mentioned else where in this plan.

## Inventory Analysis

Following completion of the inventory an analysis of the data was made. Following is a summary of the field work.

1. Most importantly, there are solid justifications for action on an open space system in town by acquiring the marginal land recommended.
2. There is a wide variety of resources remaining in the town's open areas. Some 1,400 acres are developed, less than 600 acres are open space.
3. The Northwest region of the town from the railroad to the corner of town bounded by Lynn and Salem has an abundance of natural resources.
4. The region of town bordered by the railroad and Paradise Road - New Ocean Street has only few remaining resources. While these resources are of high quality, the town has seen fit to zone the entire area for commerce.
5. The region of town between Paradise Road - New Ocean Street and Humphrey Street has several fine opportunities for resource action.
6. The region from Humphrey Street to the coast has few opportunities for resource action except in the Palmer Pond area.
7. There are opportunities for water impoundments in two areas to more properly use the town's watershed resources.
8. Many liesure activites are now supported by private land. 85% of those outdoor activities catalogued occured on privately owned open space. Development of this land would destroy the area's usefulness for people.
9. Some areas have been destroyed, and there is mounting pressure for unwise development of our remaining natural resources.

The informal uses open space served were catalogued and used as one of the major determinants in formulating open space policy. There is no more accurate method of determining the needs of people than by actually surveying outdoor activities.

From the information gathered, the role of the park system was also considered. The parks are mainly devoted to formal recreation and competitive team sports. Their importance cannot be emphasized enough. Similar evaluation was made of other public land.

The role of natural and man-made barriers was also considered. Such barriers are useful for defining neighborhoods when pedestrian travel is obstructed by them. With a neighborhood, or a region, thus defined, it is easy to evaluate open space needs.

Natural barriers seem to be of value for similar reasons, however, they also channel growth. This function of shaping urban growth is most desirable and can only be assured by acquisition. For technology has developed to the degree where landscape offers only temporary resistance to development.

### Informal Uses

The Summer, Fall, and Winter of 1968 once again underscored the human need for open space. Casual use of remaining open space was apparent throughout the Town.

Following are the principal demands remaining open space and bodies of water now satisfy: Swimming, sightseeing, picknicking, fishing, bicycling, boating, nature walks, camping, horseback riding, hiking, skiing and other snow sports, ice skating for pleasure, hockey games, and ice fishing.

Without exception, about 85% of all uses of open space occurred on private land. This cannot be emphasized too strongly.

Many, many persons now depend on privately owned open space for their outdoor needs. Private land will eventually be developed and the people will lose the opportunity for some peaceful leisure activity.

### Inventory of Public Land

Following is an inventory of public land in Swampscott. While not all of the land is used for open space, it is relevant because it serves as a guide to show land requirements for municipal government.

<u>DEPARTMENT</u>	<u>ACRES</u>	<u>TOTAL</u>
<u>Board of Selectmen</u>		
Town Hall	3.1	3.1
<u>Board of Public Works</u>		
<u>Park Division</u>		
Abbott Park	2.1	
Austin Playground		
Blaney Beach		
Reservation	0.4	
Jackson Park	24.5	
Phillips Park	15.0	
Winsor Park	0.2	
Monument Mall	2.2	
Puritan Road	0.1	
Superior Street	0.1	
Unnamed Park	0.8	
Total Parks		45.4
Cemetery Division	30.5	30.5
<u>Water Division</u>		
Stand Pipe	1.3	
Water Shop	0.8	
Paradise Road	4.0	
Total		6.5

<u>DEPARTMENT</u>	<u>ACRES</u>	<u>TOTAL</u>
Highway Division		
Garage	2.3	2.3
Sewer Division		
Pumping Station	0.9	
Miscellaneous	0.5	
Total		1.4
Other Miscellaneous	0.6	0.6
Waste Disposal Committee	2.7	2.7
Fire and Police		
Burrill Street	0.6	
Phillips Avenue	0.3	
Old Fire Station	0.3	
Total		1.2
Housing Authority	4.1	4.1
School Committee		
Alice Shaw Jr.High	14.5	
Hadley School	1.9	
Machon School	2.1	
Stanley School	6.0	
Clark School	1.0	
Total Schools		26.5
Historical Committee	0.2	0.2
Conservation Commission		
Harold A. King		
Town Forest	21.5	
Palmer Pond	16.0	
Total		<u>37.5</u>
Total Public Land		158.0

**CHAPTER III**  
**URBANIZATION: PAST, PRESENT, FUTURE**

# FIRST MAP OF LYNN AND SWAMPSCOTT

Surveyed, drawn and published by ALONZO LEWIS (Author of the History of Lynn) in

1820.

REPUBLICED BY JOHN L. ROBINSON, FEBRUARY, 1872,

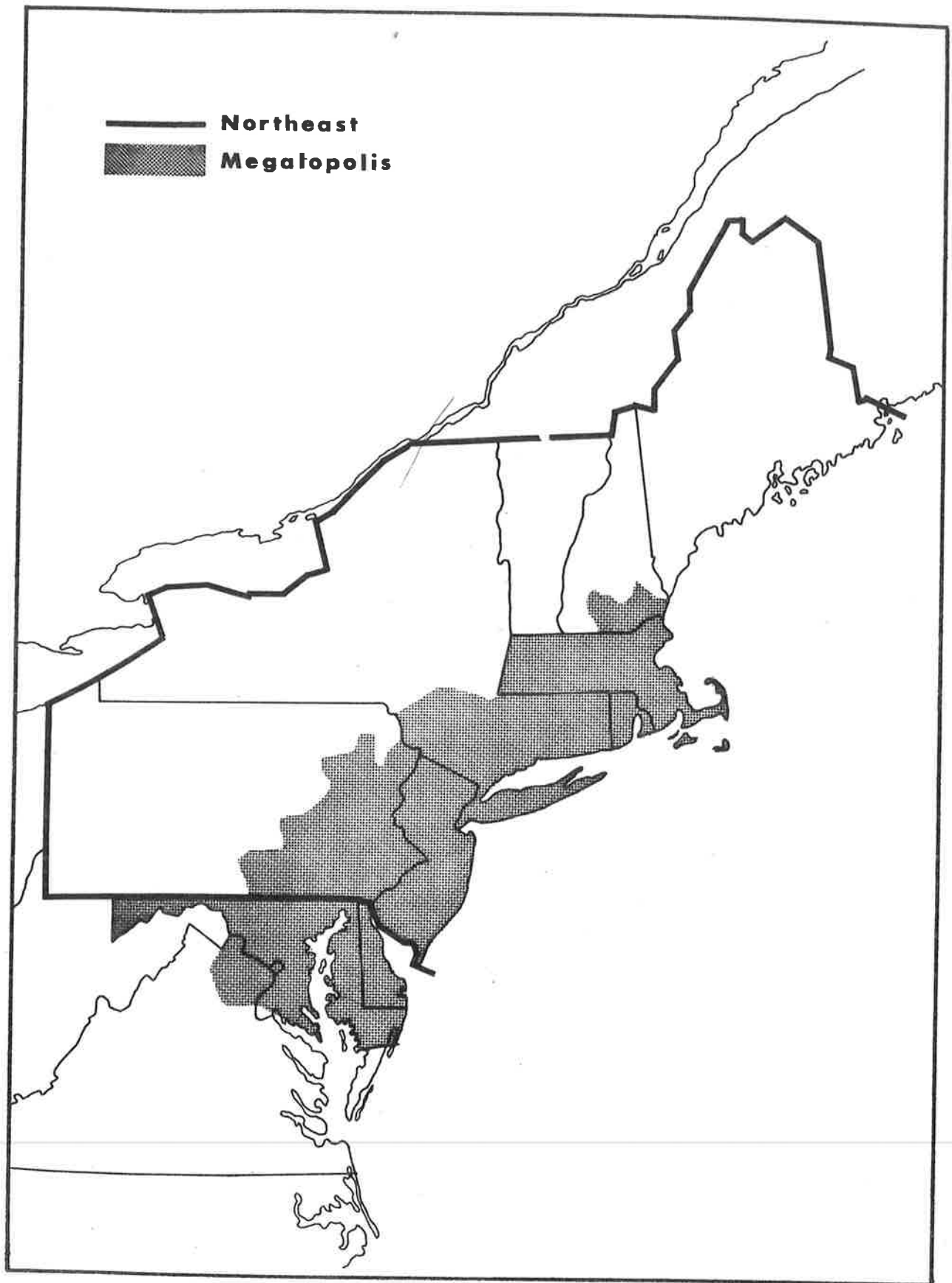
showing the location of the first settlers of Lynn, over 200 Years ago, and the territory now covered by the towns of

## SAUGUS, SWAMPSCOTT, NAHANT, AND THE CITY OF LYNN.



Armstrong & Co lith Boston

6 8 East from Washington



Source: *Massachusetts Outdoor Recreation Plan 1966*

## Introduction

This chapter surveys in summary the history which has shaped the contemporary physical appearance of Swampscott. It also implies that development will continue to flow in a meaningless slurb over the landscape unless an open space plan is implemented.

It is not enough to know where the open space is. A workable plan must attempt to anticipate where development will flow in the future and which areas are under the most pressure. With this knowledge an action time-table can be drawn to implement the plan.

## Urbanization: Past, Present, Future

Massachusetts is in the Eastern megalopolis which runs from Washington, D. C., to New Hampshire. Swampscott is located about 11 miles North of Boston in the heart of the Metropolitan area. The Town is surrounded by the secondary cities of Revere, Chelsea, Lynn, Salem and Beverly. Urban pressures on the town are intense.

In its early days, Swampscott was more fortunate. A fishing community with some limited farming, its developed area was characteristic of coastal fishing town: clusters of homes scattered along the coast. This linear development trait continued until the turn of the century, although population demands on land increased and development began to move inland. Still, though, huge tracts of land remained open.

Meanwhile population and other pressures developed in the core city of Boston and its nearby metropolitan regions. Ultimately, these pressures burst into the suburban areas as the demand for open land increased. Thus, the huge estates in Town were gradually developed.

Another urbanization factor was the improvement of transportation: railroads, highways, and cars. People could live miles away from the city and travel to work every day with ease.

The irony of this is that the flight to the suburbs was principally to escape the environmental conditions of the metropolitan area. The suburbs offered woods, fields, and brooks--a good place to live. But, in this rush to the suburbs, similar environmental conditions were created by uncontrolled suburban development. The woods, fields, and brooks that attracted the city dwellers were destroyed by the new demands for housing and other forms of growth which accompanied the migration from the city.

As the break-up of the large estates continued, the town's character gradually transformed from suburban to urban. About the only physical difference between Swampscott and a core city today is that the town is developed closer to the ground.

The economics of land use in the urban areas is such that land is forced into development.

Historical lack of zoning by-laws prior to 1949 are directly responsible for a population density which is nearly double the SMSA. Since developers regularly propose new subdivisions as well as apartment house complexes, there is sufficient reason to believe the town's population density will continue to mount unabated unless this plan is implemented.

Today, developed areas constitute an aggregate of roughly 70% of the total land area of Swampscott. Thus, while some 1,400 acres have been developed, less than 600 acres remain open. Most development in town is typical of the urban areas - poorly planned and sprawling.

Urbanization is influenced to a degree by both man-made and natural features of the landscape. Thus the flat land which is easy to reach is developed first, and the remote rocky land and wetland is by-passed. But only temporarily.

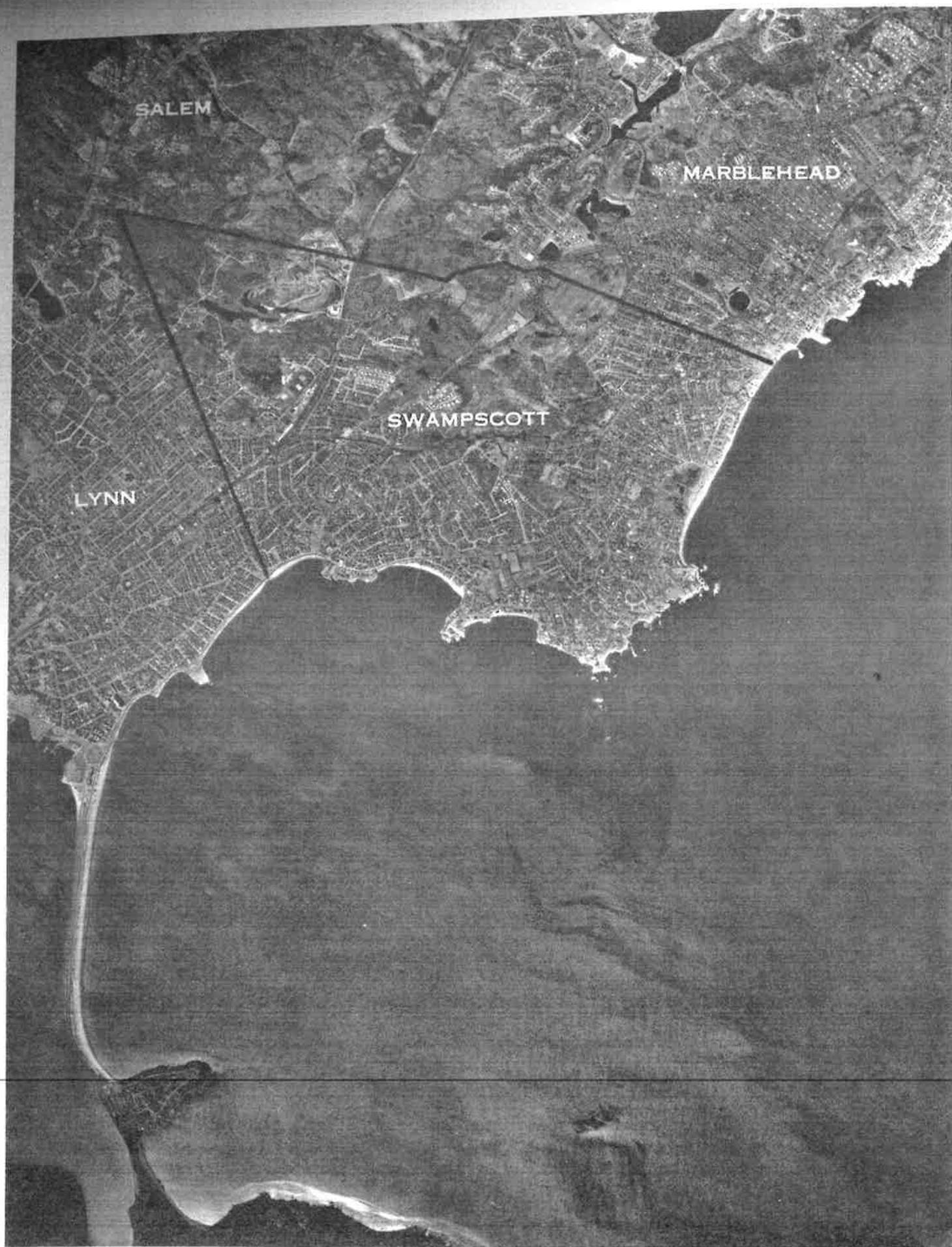
Essex Street, Paradise Road, Humphrey Street, and the Boston and Maine Railroad are all examples of man-made features which influence development and constitute pedestrian barriers as well. On the other hand, the abandoned Boston and Maine Railroad which runs through Town into Marblehead offers an example of a beneficial man-made barrier.

Swampscott has an opportunity to set aside selected open space of priceless value; it is evenly distributed throughout Town.

And it should be strongly emphasized that existing public open space does not meet the outdoor needs of the present population. According to the open space inventory, over 85% of the outdoor activities reported were supported by privately owned open space. Thus, without commitment to a meaningful open space program, the townspeople will lose the outdoor opportunities they now enjoy.

In Swampscott, the urban pressure from the surrounding area is intense. It will not let up. In time, perhaps ten years, all woodland and wetland that remains will be consumed by development.

The time for a program of land acquisition is NOW.



AERIAL PHOTOGRAPH OF THE TOWN OF SWAMPSCOTT TAKEN IN 1945

1945

CHAPTER IV  
NATURAL RESOURCE POLICY



Wetlands  
Courtesy Massachusetts Audubon Society

## Introduction

It is not feasible, or desirable, to quantify open space needs into an acres per thousand of population figure. However, some authorities have suggested that about 20% of a community's land area should be devoted to open space. However, in some cases, it is possible that this figure would be inadequate.

Yet, general goals, rather than standards, seem more desirable for open space planning. For example, the information of Chapter I yields the need for a trail system. This has been translated into a goal. Next, once a brook, or another type of natural drainage system, has been identified in Chapter II, it is not a difficult process to arrive at the conclusion that its natural drainage function should be protected. Thus, evaluation of Chapter I yields basic needs which become goals, and those goals are applied to the natural resource inventory; the net result is that the town trails should follow the natural drainage systems. This in turn brings in a policy of multiple-use, and so on. Implied of course is an understanding of ecology.

Following are summaries of the natural resource policy of the plan.

## Water Resources

Swamps, brooks, streams, rivers and ponds along with their perimeters are a priority in this plan. All wetlands and water related areas have an ecological value that cannot be disregarded. They tame floods, keep rivers flowing in mid-summer, restore water to underground reservoirs and hold the water table where it should be.

Wetlands are nothing more than giant sponges made of muck and specialized plants which can absorb 16 to 18 times their weight in water. One acre of wetland is capable of absorbing and holding 300,000 gallons of water. The water is soaked up fast and released slowly. This slow release factor gives some of the stored water a chance to sink deep into the ground where it can replenish ground water supplies and keep springs bubbling.

The wetlands reduce the potentially damaging physical impact of storm water against the upland and developed areas. The sponge qualities mentioned above serve as a buffer which absorbs the waters and their wave shock.

There is no substitute for wetlands in sedimentation control. They serve as a settling and filtering basin, collecting silt and organic material as well as other chemical pollutants from upland runoff. Wetland prevent direct deposit of these raw materials into water courses.

Regarding the anti-pollution function of wetlands, they serve as a biological and chemical oxidation basin where materials described in the preceding paragraph are oxidized and metabolized (composed, decomposed, and digested) while being converted to nutrients. The oxidation process uses great quantities of oxygen.

And the living wetland produces oxygen in quantites by photosynthesis. Through the marsh's oxidation, respiration, and metabolic processes, organic matter (including possible pollutants) is used naturally in the production of nutrients, returned to the food chain, and used by other forms of life. Removal of the wetlands from the ecosystem by filling or dredging negates the anti-pollution function of wetlands.

Ecologists are discovering that wetlands play an essential role in the life cycles of fish and wildlife. Wetlands provide food and habitat essential for breeding, nesting, resting, feeding grounds and cover to escape predators.

Education and research are served by wetlands. They provide excellent areas for environmental classrooms for schools.

Moreover, wetlands are an asset to excellent physical planning in a given area by providing buffer zones between different land uses.

Swamps, ponds, and their banks have an irreplaceable value for any number of reasons including trail systems, impoundment areas, and the familiar leisure-time activities inherent in conservation areas.

It is difficult to establish absolute cost-benefit ratios between the natural functions of wetlands mentioned above and the exploitation by mining, dredging, and filling for whatever purpose. But the natural functions of preserved wetlands continue at no direct engineering, administrative or maintenance cost to a municipality. Yet the destruction of wetlands surely results in untold direct and indirect expenses.

Ten acres of wetland will hold 3,000,000 gallons of water in a one-foot rise. Destroy the wetland and the water still must flow somewhere: intelligent land use and flood control are therefore related.

How much is it worth to the town, in tax dollars, to avoid the necessity of expensive public works projects to dispose of 3,000,000 gallons of storm water runoff? It is a question worth pondering.

A goal of this plan is the protection of all major wetlands through direct acquisition or conservation easements.

### Leisure Activities

People have certain needs which can only be fulfilled through intelligent resource recommendations and practices. Accordingly this plan has taken due regard of the positive experience such leading conservation groups as Massachusetts

Audubon and the Trustees of Reservations have had with multiple-use of land.

Multiple-use is also essential for economic reasons in the urban areas where land is not so plentiful and consequently has to have more than one purpose to justify the expense. Then too it is important to realize that the state forests and preserves are now experiencing heavy use and that this use will increase as population increases, further diminishing the supply of open space.

The townspeople have demonstrated a need for swimming, walking for pleasure, sightseeing, picnicking, fishing, bicycling, nature walks, camping, houseback riding, skiing and other snow sports, ice skating for pleasure, hockey games, and ice fishing. It would be most regrettable if these needs were not provided for.

According to the inventory, 85% of these outdoor activities occurred on private land. Thus while a diversity of natural environment now exists for leisure activities, increasing population, increasing leisure time, and the usual depletion of natural resources all dictate that action be taken now before remaining open space is developed.

It should be emphasized that the Town does not provide even a reasonable amount of leisure activity areas for the adults and the elderly in town. The park system is devoted primarily to the under 20 age group. The need for one of the basic amenities of life - some pleasant, peaceful, and relaxing activity - has been given a priority attention in this plan.

The opportunity for a broad choice in the use of natural resources is an important determinant both in selection and priority. For example, a wetland that has potential for impoundment to create a waterfowl area, provide for leisure activities, and flood control, obviously enjoys a higher priority than a wetland without such use potential. Moreover, selected areas with different landforms, vegetation, and other natural characteristics will attract and hold a large selection of wildlife species enhancing the value to students and natural scientists.

### Open Space

It seems appropriate to attempt a definition of open space. While it is an elusive term, The Massachusetts Area Planning Council has come as close as anyone to the definition. The following passage is taken from Open Space and Recreation Program for Metropolitan Boston, Volume 4, Massachusetts Open Space Law, Chapter 1, Introduction: The Power of Government To Control Open Space Land, p.7, published by the Council in 1969.

"The term 'open space' does not describe a particular type or use of land. It is simply a predominantly vacant land or water area of sufficient size, utility or beauty that its presence is a public benefit. Further definition is fruitless until one identifies the

problem to be solved or the value to be preserved. Open space is both a wilderness and a backyard; it can be either publicly or privately owned, rural or urban. The Charles River Basin is open space, as are the landscaped buffers along highways, the village greens and the town forests, all of which add to the character of the community...

"Open space can provide for public recreation and enjoyment, can relieve congestion, can limit or channel the extensions of the metropolis, can protect the public water supply and preserve the ground water table, can conserve agricultural, forest, marine, or other natural resources, can moderate floods and their damage, can enhance the value of a home and of surrounding property, can limit the level of air pollution in an area, can give form and dimension to a town or a metropolitan area, can preserve a desired link between the nation's urban present and rural tradition, can be educational, and can, simply, be beautiful..."

"The very desire to preserve such spaces is a response to the social phenomena of an increasing population and expanding metropolitan areas that have changed and will continue to change the quality of life in the region and the state..."

During inventory and analysis of the open space investigation four major regions of the town were identified and differentiated based on zoning, land forms, physical barriers like wetland and major roads, and to some extent, vegetation including woodland. It is utterly impossible to draw a line between the regions, except by major physical barriers which obstruct pedestrian travel.

Another important consideration was the use the land was now serving, that is, to the extent that the owners allowed the public to use it, this plan recognized that there was a demand for a given use, (i.e. sledding and skiing in the Tedesco area) which reflected needs otherwise not provided for. Thus a factor of the plan was the informal use the different areas supported.

An objective of this plan is to guarantee neighborhood natural resources within easy walking distance of everyone, partly in response to demonstrated needs. Some of the densely populated areas of town will have to rely on adjacent conservation areas; it is simply too late for conservation in some parts of town.

### Environmental Classrooms

This plan takes particular note of the happy relationship the Swampscott Conservation Commission and the Swampscott Public Schools have had with natural science education at Muskrat Pond. One of the first Commission projects, this environmental classroom has been a source of inspiration to both students and faculty. In addition, it continues to be an asset to the neighborhood.

A new concern for such outdoor laboratories is apparent throughout metropolitan Boston. Many schools have regionalized to provide larger facilities and more properly teach the environmental issues in the details of ecology, biology, and botany, to name a few. Excellent opportunities exist, and they should be seized.

Environmental education is essentially concerned with showing man's position in the natural world, how he affects it and how it affects him--both economically and socially. Traditional science courses in elementary and secondary schools have been limited to physics, chemistry, and biological identification and classification. However, with the new emphasis on ecology, progressive educators are broadening the framework of these courses. Ecology, the interrelationship and interdependence of all living things, deserves more attention in the Swampscott Public Schools.

In order to make intelligent judgements concerning environmental affairs--land use, air, water, land, and noise pollutions, to name a few--people need a better understanding of the results of changes made by man in the natural world.

For example, hydrological and biological studies have shown how dredging, filling, and pollution of waters has upset the natural balance between living organisms and their environment. These areas are critical as nesting grounds and food sources for several types of wildlife. Many of these wildlife species are food for man and the basis of important recreational industries.

It is also known that wetlands serve as sponge areas during periods of excessive rainfall, and the water is released slowly during dry periods.

But because the effects of ecological imbalance are subtle and slow in appearance, they are difficult to demonstrate in immediate perspective. Yet, flooding and droughts have been caused by the filling and dredging of wetlands.

Environmental education has two broad aims. First, the education of pupils to four basic concepts: the diversity of things in nature; the interrelationship of things in nature; the ways in which things in nature adapt or do not adapt to environmental conditions; and the inevitability of change. Second, the education is designed to help each child develop a real awareness of the natural environment; this can only be learned in the outdoors; it is important for pupils to see different environments under natural conditions.

Board walks through wetlands can be installed to demonstrate their value for drainage, wildlife, and natural beauty. Another example of a lesson in an environmental classroom is how a forest can help to diminish air pollution by the process of photosynthesis which absorbs gases from the air.

Such areas are inexpensive to develop and require only carefully designed trail systems and small wooden markers.

This plan recommends acquisition of natural areas adjacent to schools for environmental classrooms.

### Wildlife Sanctuaries

Wildlife habitat should be systematically identified and preserved. An index of the natural resources within the area should be made including cover and water availability. With this, and a knowledge of indigenous species, a program should be formulated.

Particular attention should be given to directing the trail systems away from the areas. In addition, it may be wise to introduce certain species such as barberry bushes around the sanctuary perimeter to assure habitat privacy, and resting areas.

Research on the optimum environment for different species should be made and appropriate management programs introduced, where necessary. Particular attention must be paid to ecological structures. Massachusetts Audubon, the Department of Natural Resources, and the Essex Conservation District have programs to help in wildlife management through technical assistance.

### Town Trails

Trail systems through the town should connect all areas and increase accessibility for nature study, walking, biking, and other use. Such a system should follow streams and brooks, and in some areas should be directed away from an important environment for wildlife. Parts of the system ought to include board walks, particularly in environmental classrooms.

Fine opportunities now exist for establishing a linear trail system within the town. A well defined and recognized system of town trails and paths will serve numbers of residents and provide rest and relaxation which cannot be measured in investment terms, but will surely outweigh them. Such trails can serve different types of transportation including foot, bicycle, skis, snow shoe and others. But each use has its own requirements which can sometimes conflict with other uses.

For the purpose of this plan it is recommended that pedestrian travel be given priority. Bridle paths should receive careful study.

### Shade Trees, Scenic Areas, Roadways, and Greenbelt

Swampscott is fortunate to have most of its roads lined with shade trees. They are attractive and maintain a vestige of Swampscott's suburban days during the 20's and 30's. It is extremely important that shade trees be well cared for and that a continuing planting program be maintained. While certain flowering trees and other tailored species have been experimented with, it is recommended in this plan that all shade trees be

of a species that will, in its natural growth, form an arch over the road and sidewalk.

Several locations have sweeping views of the surrounding countryside. These outlooks should be acquired and the view corridor preserved through negative easements, zoning by-law controls and other methods. Small sitting areas and picnic areas should be incorporated into several sites to further enhance the sightseeing experience.

One of the recognized tools in proper planning within urban areas is the greenbelt. While it varies in form and substance depending on location, Swampscott has an opportunity to establish a greenbelt along the Lynn and Salem borders.

This plan recognized that urban sprawl must be directed and channelled in a number of ways. Greenbelts, in addition to their virtues of forming urban growth, also replenish oxygen in the air and remove certain pollutants through the process of photosynthesis.

### Beautification of Areas

This plan contemplates a beautification program for certain areas of town.

Particular reference is made to the Vinnin Square shopping area, the business district of Humphrey Street, and reclamation of the railroad right-of-way that runs into Marblehead.

It is generally recognized that such beautification projects in the urban areas are necessary to give a sense of community pride and identity as well as to check blight.

Specific needs are for buffer zones between incomparable land uses, particularly along Paradise Road. The entire shopping center complex should be enclosed by a greenbelt implemented through a cooperative effort of landowners and the town. Other programs might include landscaped parking lots similar to the one installed by A & P of Nantucket; improved sign controls; an important street planting program; and rebuilding the sidewalks with brick pavement and installing colonial style lights.

### Regional Conservation

Natural resources do not respect municipal boundaries. Nor do they remain undeveloped in one community any more than they do in another. Thus because important resources are shared by Salem and Swampscott, it is recommended that a series of conferences on conservation be initiated to develop an effective regional program.

To cite one example, Swampscott and Salem share a fresh water meadow which is included in this plan. In terms of water resources alone, it is imperative that the whole meadow be preserved because it is a major water supply for the forest.

Without this water supply the trees and vegetation may not thrive as well as they do now. And if natural vegetation is diminished, it means a loss of wildlife habitat which could disrupt the whole forest ecology. The end result might be an overabundance of pests, which would diminish the desirability of the area.

Another reason for regionalization is that it provides larger buffer zones, in this case, between the City of Salem and the Town of Swampscott. Urban growth is thus channelled by constructive means.

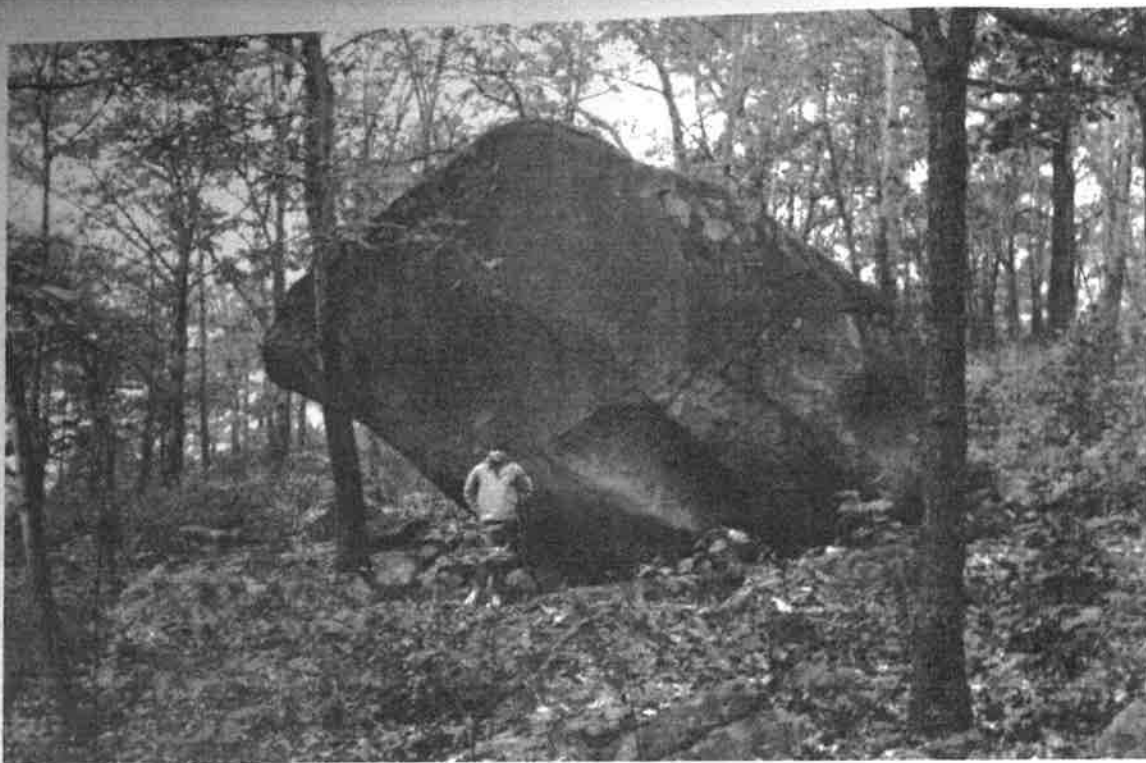
Joint conservation programs can be drawn by comparing each other's program, and designing a priority table for mutual action.

A regional conservation conference should be convened by the Conservation Commission of Swampscott and Salem.

#### Water Frontage

Our four miles of frontage on the ocean, and on all brooks and ponds are of major importance, and, insofar as possible, should be placed and preserved in public ownership so that these irreplaceable assets may be enjoyed by future generations.

**CHAPTER V**  
**OPEN SPACE PROPOSALS**



Two views of the different geology of the proposed Harold A. King Town Forest. Above shows a glacial erratic which is over 20 feet high. Below shows a view of the woodland with its extremely rocky surface. The perimeter of the existing King Forest to be acquired is represented well by these photos, taken in the Fall of 1969 during an Open Space Walk. Courtesy of Robert Benson



## Introduction

Following are summary proposals of the plan. It is essential that a comprehensive plan be developed for each area as it is presented to the town. A comprehensive plan will crystalize the proposal thereby enabling the townspeople to make an intelligent judgement based on all information. However, the summary presented here is adequate to give an understanding of the plan.

Recommendations are given for seven (7) broad areas based on all factors of the planning process. While some areas have been omitted within a few neighborhoods, those with outstanding characteristics and potential to outweigh investment have been carefully selected and analysed on their individual merits and relationship to the town. These recommendations comprise minimum open space needs of the Town for the year 2010.

No dwellings are to be acquired through this plan.

### 1. Harold A. King Town Forest

The Conservation Commission owns about 22 acres of forest in the Northwest corner of Town. There is no access except over private land.

The band of forest around the Town land has a huge variety of vegetation, geological formations, and varied wildlife habitat.

It is an area that seems to be an anachronism within the urban atmosphere of Swampscott. This second-growth woodland lends itself to a wide variety of uses and for that reason should be preserved as it is.

There are at least three large wetlands which support considerable wildlife. Priority attention should be given to these areas, and appropriate measures taken to assure habitat preservation.

Water impoundment opportunity is present. And the plan recommends utilization of some wetland to its highest advantage in this respect. Specifically, an impoundment to create a lake is contemplated. In addition several islands might remain after water impoundment and with shape and nature such that they would be of value to waterfowl. The lake should be stocked with bass and other fish for year around fishing. Ice skating is also possible.

At selected areas along the shore of the lake rest areas and picnic spots can be provided. There is also an opportunity to provide a landing place for canoes. It should be emphasized that the town's above average population of retired residents ought to be provided opportunity to use this magnificent forest.

In sum there is an excellent opportunity to set aside a rural atmosphere in the urban setting of Swampscott. The recommended acquisition is about 30 acres; access from Nichols Street. Priority is high.

## 2. Foster Pond

This plan recommends the remainder of the perimeter of Foster Pond be preserved in its natural state. The pond is presently about half developed on both sides, with the east end subjected to extensive filling operations.

During the course of the study it was discovered that a critical lack of assured swimming opportunity existed in the general area; commonly known as Upper Swampscott. There was, furthermore, a desire expressed by residents that this pond be set aside for conservation and use by the immediate neighborhood.

The perimeter of the pond now in its natural state is quite attractive and offers an opportunity for a few rest areas and picnic spots. The easterly end which is filled should be graded and sand placed on it for use of bathers. Reforestation to restore the rural setting of this area is necessary.

The pond itself should be stocked with bass and other fish to provide year'round fishing. Ice skating is also possible.

Recommended acquisition is approximately 30 acres including a connector trail to Jackson Park. While priority is high, acquisition might proceed on a schedule such that the entire area will be preserved when the nearby Lynn Sand and Stone quarry is exhausted, probably within ten years. Yet, as the land becomes available, it must be purchased.

## 3. Poquannum Reservation

This area is central to Swampscott and incorporates all provisions of the plan. It is an exciting reservation, which is comprised of a section of the abandoned Boston and Maine railbed, a portion of the Tedesco property which is not used, and the adjacent estate.

For the most part the area is typical New England countryside. Rolling hills, ledge cliffs, numerous small ponds, and groves of pine, sumac, and hardwood are interspersed throughout. There is an extensive system of drainage also incorporated into this area. There are several scenic outlooks also.

This plan recommends the preservation of this area as it is. Trails are already adequately defined by the usage the area receives from persons who frequent the area. Likewise picnic areas are to be located in many of the existing groves. Once again, it is emphasized that senior citizens ought to be provided access to the town's natural resources.

It is further recommended that existing uses of this area be continued. Winter sports are now accommodated, as an example, and this desirable activity should be allowed to continue.

There is an excellent potential to support a natural history day camp facility which in form and substance would be similar to those of Massachusetts Audubon on certain of its lands. An in-depth study of this is being made to establish several approaches to the objective.

Several fine opportunities exist for small water impoundments which can be stocked with fish. Areas for environmental classrooms exist.

In sum, the value of this area is in its central location and its capacity to incorporate all recommendations of this plan while preserving it in its natural state. It should be noted that the technical advice of the Essex Conservation District and the Massachusetts Audubon Society as well as the Department of Natural Resources, is available.

Recommended acquisition is approximately 110 acres. Ten year priority. Careful study of additional adjacent land acquisition should be made.

#### 4. Stanley School Area

An area of second growth hard and soft woods surrounds the Stanley School and offers an opportunity to make an excellent addition to the science department of the public schools as an environmental classroom.

Varied habitat exists in the area and a system of trails can be incorporated. Limited neighborhood use in this densely populated area is desirable, especially since there is a small pond, which, however, has been neglected and needs some work.

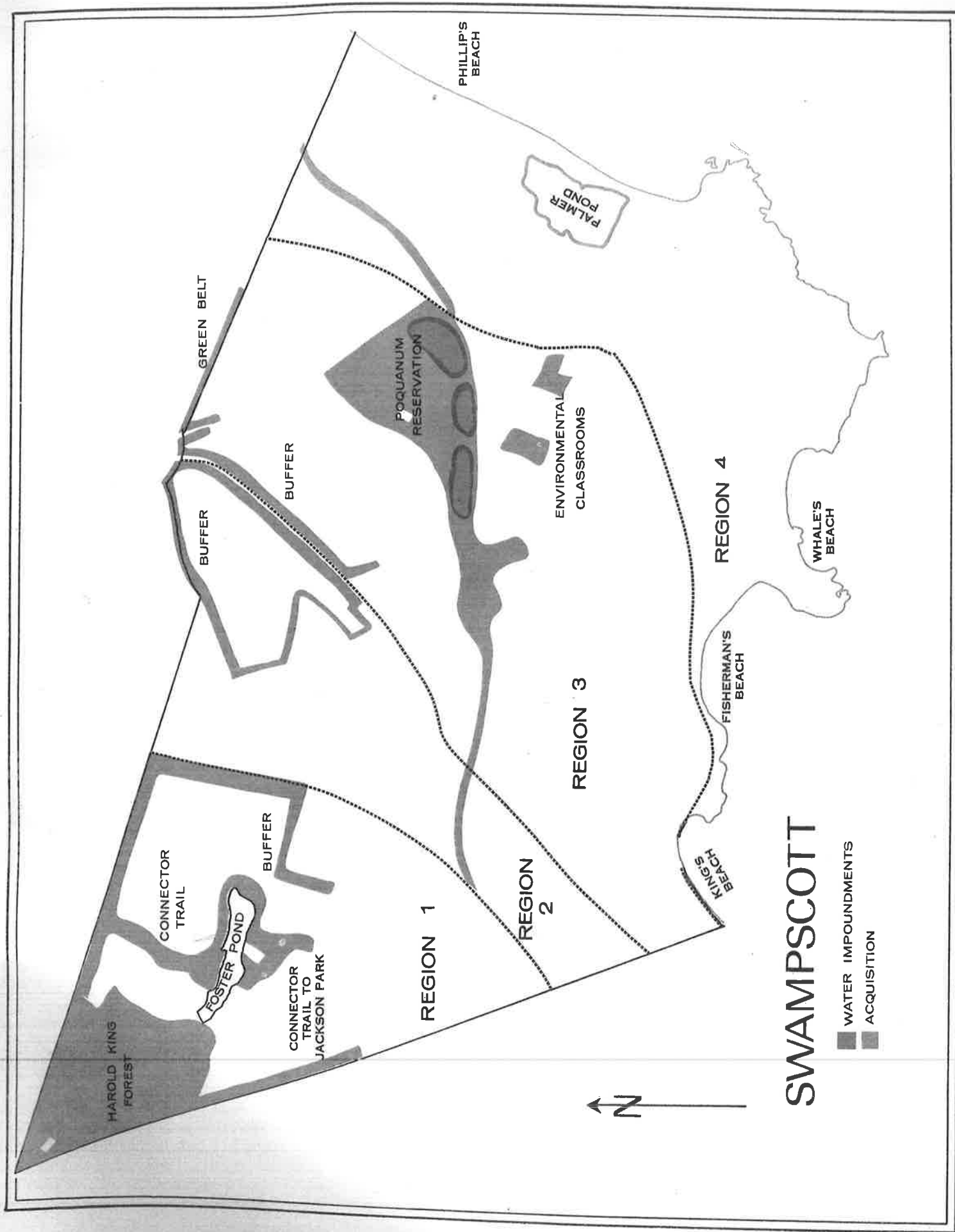
Recommended acquisition is 10 acres.

#### 5. Palmer Pond

This plan recommends that a band of natural land around most of Palmer Pond be acquired through acquisition. The pond is presently owned by the Conservation Commission to the high water mark. It is a scenic landmark in this fine residential area and can be preserved only by the acquisition of the perimeter.

#### 6. Greenbelt

An opportunity exists along the Lynn and Salem borders to establish a fine greenbelt of varied habitat with scenic outlooks. This plan recommends that this wooded area with its fresh water meadows and streams be incorporated into the trail system.



Outstanding places for rest areas, hiking, walking, nature study, and various other forms of leisure activities exist. There is habitat of value to migratory wildlife.

The urban pressures seem most intense at the borders, and this provision will help stop urbanization and maintain community identity.

Recommended acquisition is approximately 15 acres including conservation easements, and other controls. Harold King Forest can be considered part of the Greenbelt system.

#### 7. Buffer Zone

There is a critical need to establish adequate buffer zones between inconsistent land uses. This is particularly evident in the Paradise Road area where a fine residential area butts against business zoning. It is recommended that a buffer be established along the border of the B-3 zoning district - soon.

This buffer should be extended along both Paradise Road and Essex Street in a Northeast direction so as to enclose this business area with a green strip. Plantings of trees are imperative.

Similar recommendations are made for the Vinnin Square Shopping Center. Plantings along Paradise Road, combined with realistic traffic stacking lanes to increase safety, are important.

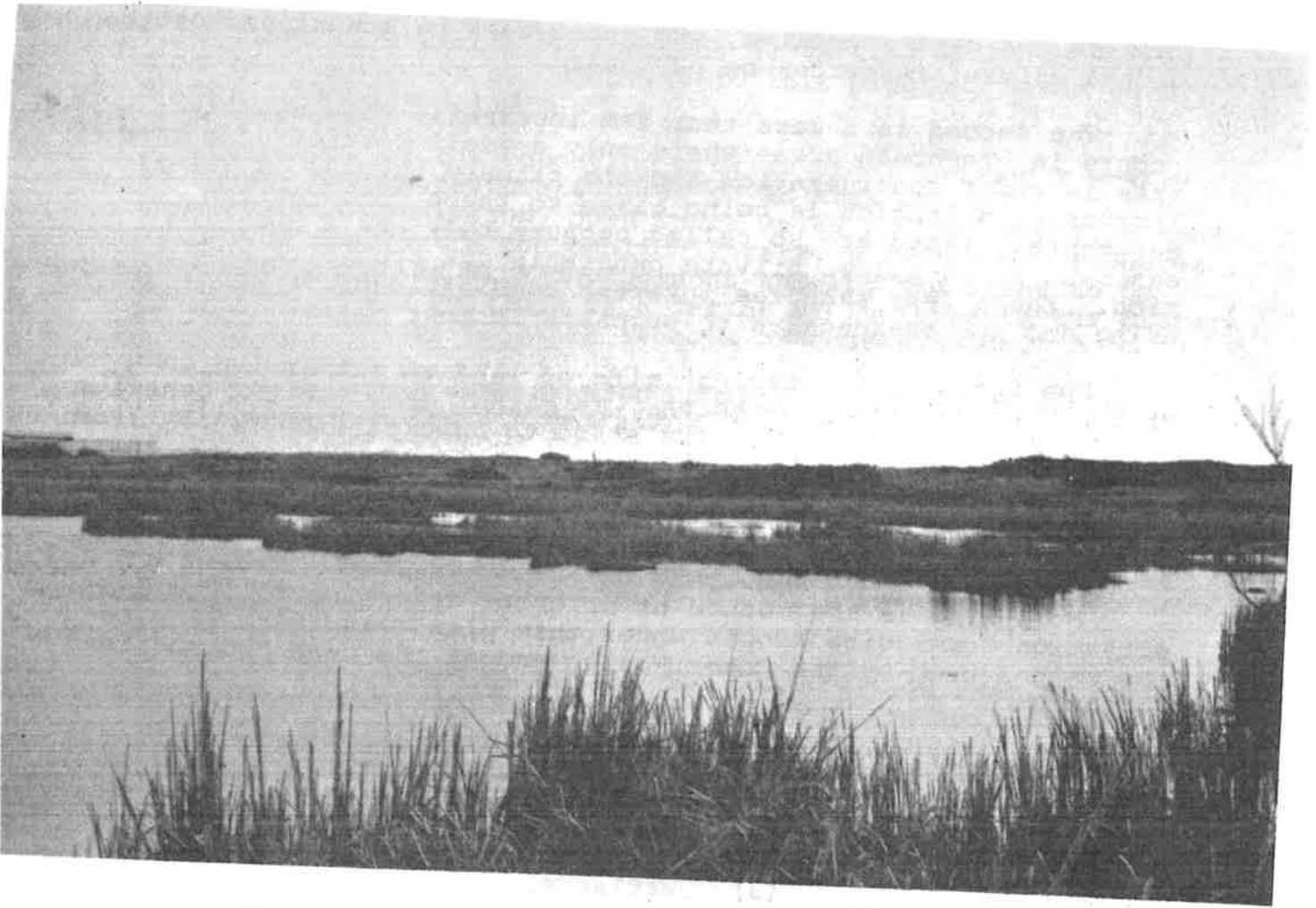
Scenic easements along Danvers Road should be acquired to preserve the character of the area. And this form of buffer should be continued around the perimeter of this industrial area in which Lynn Sand and Stone conducts its operations.

For the purpose of creating the buffer zones it is recommended that negative easements be obtained from the owners involved by gift or purchase. This will allow a cooperative effort between the Town and the business community.

#### 8. Water Frontage

It is the policy of this plan that the Town's priceless natural resource in its coastline should be available for use by the townspeople. In some areas, conservation easements may be used, however, in other areas it will be necessary to acquire the fee in the coastal land. All coastal conservation projects will, of course, seek to preserve the beaches in their simple, natural beauty for generations to come.

CHAPTER VI  
APPENDIX



Palmer Pond  
Courtesy of Robert Benson

### Acquisition Methods

There are three methods which can be used in implementing this plan. It is recommended that consideration be equal to all three in each instance, but that the long term public benefit be given top consideration.

The first is acquisition of the fee in any land or water. This is the most effective, and guarantees permanent dedication of the natural resources so purchased.

The second is a less than fee interest. This usually occurs in greenbelt areas where only a small portion of a land area is under consideration and the primary purpose is visual. Increasing attention is being given to these conservation easements. These are so called because they are a negative easement which allows private ownership but prohibits construction. These less than fee interest acquisitions are worth using and are inexpensive to purchase in most cases.

The third is an outright gift of land to either the town or the Conservation Commission. In either case the tax benefits are such that potential donors stand to benefit financially from such generosity. Appropriate guarantees to assure proper care and preservation are only found through conservation gifts.

### Priority Determinants

Following is the method of priority determination the Conservation Commission adopts under this plan. It is similar to the method used by the Commonwealth and at the Cape Cod National Seashore.

- |                   |  |
|-------------------|--|
| <u>Priority A</u> | (1) Unimproved land threatened by development or nonconforming uses. |
|                   | (2) Bona-fide hardship cases.  |
|                   | (3) Wetlands, streams  |
|                   | (4) Unimproved uplands offered for sale.                             |
|                   | (5) Unimproved property needed for development purposes.             |
| <u>Priority B</u> | (1) Improved property offered for sale.                              |
|                   | (2) Unimproved uplands adjacent to large blocks already acquired.    |
|                   | (3) Unimproved uplands not in Priority A or B (2).                   |

### public Education

One of the most certain conclusions is that the public needs to be educated about conservation--particularly as it relates to a town.

The creation of a sub-committee of the commission whose sole responsibility is to conduct a broad and meaningful public education program is an important step forward.

There were strong indications during the planning process that the town would be receptive to this program, based on a survey of selected areas.

Elements of the education program might include a weekly newspaper column, feature stories on an area or activity of the Conservation Commission, open space walks in the forest, a conservation display in the public library, a series of brochures about conservation with photographs showing the areas to be preserved. Also possible is a series of lectures in the library on ecology, botany or other aspects of conservation.

The Westwood Conservation Commission has successfully introduced conservation education into the adult education program of the Westwood Public Schools. That might be another alternative worth trying in Swampscott.

A slide show should be assembled and shown to the different civic organizations in town also.

### Conservation Fund

This plan recommends that the Conservation fund be treated as an integral of implementation, and that acquisition cost estimates for a ten year schedule be developed and a portion of the total cost be credited to the fund annually.

Of course, this is nothing more than a concept of saving money to buy something in the future. It's just as valid for a town as it is for a family budget.

### Federal and Massachusetts Assistance Programs

A number of excellent financial assistance programs are available for use in the implementation of this proposal. There is no earthly reason why the town should not use these programs.

Conservation is expensive. It is so because of the decades of indifference to the environment. While the town could finance this plan through local revenue, the weight of the evidence suggests the use of these programs.

Following is a selected list of federal and state conservation programs. Source is the Massachusetts Outdoor Recreation Plan 1966.

1. Programs Primarily for Land Areas

1. Fifty per cent of the cost of acquisition and development of land for recreation, conservation, or other public uses which conform to the comprehensive plan of that locality. This includes purchase and clearance of land in built-up areas for such open space needs as parks, squares and playgrounds (P.L. 89-117, Housing and Urban Development Act: open space land program).
2. Certain federal surplus lands are available to state and local governments through the General Services Administration at less than their fair market value.
3. Seventy-five per cent of the cost of removal of junkyards and billboards along federally assisted highways. Reduction of highway construction aid by 10 per cent occurs if billboard controls are not provided. Under this Act, billboards will be controlled within 660 feet of highways and junkyards within 1,000 feet: "Junkyards" include auto graveyards and garbage dumps, as well as junkyards themselves (P.L. 89-285, Highway Beautification Act).
4. Two-thirds to 75 per cent of the cost of specific projects for neighborhood centers such as community or youth centers and other public buildings which provide recreation and other services to the neighborhood. Emphasis is placed upon projects which are so located as to be of special benefit to low income families (Section 703 of the Housing and Urban Development Act).
5. One-half of the cost of comprehensively planned urban beautification and improvement projects dealing with open space and other public lands (up to 90 per cent of cost is available for demonstration projects). Programs can include park improvements, street landscaping, tree planting, or improving squares and commons. These programs must be in addition to the average previous expenditures for such activities within the locality (Urban Beautification and Improvement Program, Section 706 of the Housing and Urban Development Act).
6. Fifty to 100 per cent of the costs for development of model supplementary educational centers, programs and services (P.L. 89-10, The Elementary and Secondary Education Act).
7. Small Business Administration loans (up to \$350,000) for private recreation developments.

8. Job Corps and VISTA volunteer programs provide Federal funds for education, work experience and vocational training in conservation camps and training centers (Titles I and VI of the Economic Opportunity Act, P.L. 88-452). Personnel can be available for State or local conservation activities.
9. Up to 75 per cent of the cost of recreation and other leisure time facilities for the elderly (P.L. 89-73, Older Americans Act).
10. One-half of the cost of soil studies conducted by the Soil Conservation Service of the U. S. Department of Agriculture. These studies include preparation of complete reports, including land capability maps indicating sewerage areas, areas suitable for residential, commercial and industrial use, and wildlife areas.
11. Up to 50 per cent of the cost of programs for music, drama, writing and other arts. These programs can form an integral part of recreation plans (P.L. 89-209, the National Foundation on Arts and Humanities Act).

## II. Programs for Land and Water Areas

1. Fifty per cent of the cost of planning, acquisition and development of public outdoor recreation areas. The Land and Water Conservation Fund Act (P.L. 88-578) provides for urgently needed public outdoor recreation areas and facilities. The program became effective January 1, 1965 and will continue for twenty-five years, thus providing a continuing source of revenue. To be eligible for these funds, proposed projects must be in accord with the comprehensive state-wide outdoor recreation plan.
2. Cost sharing and payments to landowners for converting agricultural land to recreation, wildlife and open land (P.L. 89-321, Food and Agriculture Act).
3. One-half of the cost of land, easements and rights-of-way for reservoir and other watershed areas to be managed by State and local governments for public recreation. Includes sanitary and other facility construction (P.L. 566, Small Water Shed Program).
4. Loans may be made to local governments for public facility construction when private financing is not available on reasonable terms (Public Facility Loan Program).

### III. Programs Primarily for Water Areas

1. One-half of the cost of developing comprehensive water (and related land) resources plans (P.L. 89-90, Water Resources Planning Act). This act also provides for a water resources council composed of Secretaries of Interior, Agriculture, Army, HEW, and Chairman of the Federal Power Commission to study water supply adequacy, and it authorizes river basin commissions for coordinated study and planning.
2. Reimbursement, cost sharing, and co-ordination of recreation, and fish and wildlife planning and management by nonfederal agencies in Federal Water projects (P.L. 89-72, Water Projects Recreation Act).
3. Seventy per cent of the cost (exclusive of land costs) or restoring and protecting shore parks and conservation areas (Rivers and Harbors Act).
4. Detailed flood plain information developed and provided by Corps of Engineers to serve as a basis for flood plain zoning in municipalities (P.L. 89-645).
5. Corps of Engineers reservoir construction and operation program.
6. The Bureau of Sport Fisheries and Wildlife will provide several species of warm water fish to establish self-perpetuating populations in farm fish ponds in order to provide recreational fishing and stimulate tourist activity (Fish and Wildlife Coordination Act of 1934).
7. Biological examination of fresh water lakes, ponds and streams used for sport fishing and specific recommendations based upon the conditions found. One or more species of fish from national fish hatcheries may be planted (Fish and Wildlife Coordination Act of 1934).
8. Grants and loans for 90 per cent of the costs of reclamation projects. The local 10 per cent may be in money materials, labor and lands. These projects include multi-purpose dams for recreation facilities (P.L. 84-520).

### IV. Massachusetts Assistance Programs

1. Self-Help Conservation Program of the Department of Natural Resources provides reimbursement of 50 per cent of the cost of conservation projects.
2. The Division of Conservation Services of the Department of Natural Resources provides advisory service to towns in all aspects of open space matters.
3. Essex Conservation District provides technical and engineering services to commissions.
4. Conservation Services Center of the Massachusetts Audubon Society provides technical and educational assistance.

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