

COMPREHENSIVE PLAN
for
THE TOWN OF PITTSTON, MAINE

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PITTSTON COMPREHENSIVE PLAN

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INTRODUCTION

There are several reasons why this report is necessary.

Initially a comprehensive plan was required to be prepared prior to or concurrent with mandatory shoreland zoning. This ordinance must be adopted by June 30, 1974, or the state will do it for us. This essentially means that if we zone our shoreline, enforcement of the code will be by citizens of Pittston; if we don't, control will be in Augusta.

The last few years have shown a large population increase in Pittston, resulting in new house construction and many mobile homes. This report will bear heavily on the importance of the house lot to be able to supply water, dispose of septic waste, and provide a safe and functional environment. While the vast majority of new homes are in the medium price range and of commendable construction, it is also true that some of our citizens are inhabiting dwellings which range from humble to wretched. It is the intention of this report to be a resource of information which will be helpful to both individuals and the town as a political body to provide a satisfactory living environment. At this time Pittston has no effective building code.

Perhaps it is a symptom of town government to be the target of much criticism; however, in looking at it, it will be shown

to be economical and capable of improvement if there is knowledge and participation by its citizens. Several articles in this report are directed to this end.

The Maine Legislature has empowered the municipalities to regulate land use and require standards of home construction. With the exception of shoreland zoning this is the prerogative of the citizens to ignore or act upon. This compilation, while termed a comprehensive plan, consists mainly of background information from which direction may be taken. The Planning Board will be attentive to the response evoked by this report and will attempt to prepare appropriate ordinances if this is the will of the people of our town.

Carl Mayhew

HISTORY

The present towns of Pittston, West Gardiner, Gardiner and Randolph were at one time a part of the Plantation of Gardinertown, named for Dr. Sylvester Gardiner who had received large tracts of land from the English Crown and was instrumental in their settlement.

Early in the American Revolution an expedition was prepared to attempt to capture the British held city of Quebec guarding the mouth of the strategic St. Lawrence River in Canada. The force of 1100 men, under the command of Col. Benedict Arnold, debarked from transports September 21 to 23, 1775 to transfer to smaller bateaux for the trip up the Kennebec River and beyond. Major Reuben Colburn had prepared 220 of these boats, no doubt in haste and from green lumber. The resultant leaky crafts added to the difficulties of the journey. Descendents of Colburn living in town today say that payment was never made. Plans are being made to celebrate the 200th anniversary of this historic event with a reenactment and other events. This could for a brief period put Pittston on the map.

In 1779 this territory, then a part of Lincoln County, was incorporated into the Town of Pittston, so named for the Honorable John Pitt who introduced the bill for its incorporation into the Massachusetts legislature. Made at that time was a district of the State of Massachusetts, not achieving statehood until 1820. If Dr. Gardiner had not been out of favor due to his Tory leanings during the Revolution, the new town might have continued to bear his name. The first Pittston town meeting was held at a tavern kept by Henry Smith on the east bank of the Kennebec River

in a community known as Smithtown. At that time a ferry ran from there to Gardiner.

In 1799 Kennebec County was incorporated as the sixth county in the District of Maine. In 1803 came the first division of Pittston, when all the territory on the west side of the river became the Town of Gardiner. For the next 84 years Pittston, including what is now Randolph, remained intact. Then, in 1887, a disagreement between the residents of the town resulted in the setting off of the area north of Togus Stream to be incorporated as the Town of Randolph. The boundaries of Pittston then became what they are today: Dresden to the south, Alna and Whitefield to the east, Chelsea and Randolph to the north and the Kennebec River at the western line.

The earliest industries in Pittston were lumbering, fishing and agriculture, with saw and grist mills springing up along the streams. There was shipbuilding on the river and many of the young men were seafarers, some becoming masters of vessels and later retiring to farms in Pittston. Other industries recorded are a potash factory in North Pittston, a pail factory and a box factory in East Pittston and later, in that same community, a sleigh and carriage factory. There was at one time a tannery on Nehumkeag Stream.

Shortly before 1826 the brig "Orion" of Gardiner picked up a load of floating ice in the Kennebec and sold the cargo in Baltimore for \$700. This first recorded commercial shipment of Kennebec ice heralded the beginning of the ice age in Pittston and for the rest of the century the cutting, storing and shipping

of ice was the town's biggest industry. Vast icehouses were built all along the river from Chelsea to Woolwich, at least eight being in the town of Pittston. Today all that remains of this era are some overgrown wharves and pilings, still visible from the west side of the river. Pollution and modern technology brought an end to the Kennebec ice industry. The old warehouses fell into disrepair and either burned or were torn down. The buildings which housed the ice workers, their teams and equipment suffered the same fate or were moved to other locations. There are few reminders of the great industry which rose and vanished within less than seventy-five years. The last ice for shipment was cut on the river around 1917 and the last major shipments were made two years later from Randolph. Pittston then returned to agriculture and lumbering which since that time have been the main industries of the town. Some of the residents still earn their living from one or the other, but increasingly, Pittston is becoming a suburban community whose residents find employment in nearby urban centers or at the U.S. Veterans' Hospital at Togus.

TOWN GOVERNMENT

On February 4, 1779, the Massachusetts Bay Legislature granted a charter, naming the new town Pittston in honor of John Pitt, the man who introduced the Resolution Bill to the Legislature.

The first town meeting was held at Henry Smith's home, or tavern as it was known. Rumor has it that the house or its foundation still can be seen in Smithtown. The minutes of the first town meeting were lost many years ago but it is known that the first selectmen were Nathaniel Berry, Henry Smith, and Benjamin Colburn.

The town boundaries then included what is now known as Gardiner, West Gardiner, Randolph, and Pittston. In 1803, the land on the west of the Kennebec River was set off and named Gardiner.

Pittston has always had the selectmen/town meeting form of government. With changing times some of the minor officers -- hog reevers, pound keepers, and fence viewers have vanished. Voting also has changed from the paper ballot to the Australian Secret Ballot System with nomination papers which was introduced in 1938. The day was changed to Saturday so more people could vote. The town meeting form of government, whatever its deficiencies, is simple, affordable, and directly responsive to the needs of the citizenry.

In order to keep up-dated, we should consider the following: elect one selectman each year and let them choose their own chairman. At present we could conceivably have a whole new board

with no one experienced in town matters, which grow more complex with every legislature.

The assessors may be assisted or possibly eliminated by State Taxing Districts which are under consideration in the present legislature. Good tax maps should be given consideration, for if the assessing districts are created they will be a must. The town lists the taxes people pay on real and personal property but without supporting detail as to the amount of land or number of buildings involved, and personal tax doesn't state whether the levy is on a mule team or an earth mover.

The budget committee could well be a body elected by regular ballot. An elected member would be more interested in town affairs and would familiarize himself with the problems at hand. Too often our citizens go to town meeting with little or no advance information on matters to be voted on, and find the budget committee members in much the same quandary. Revenue-sharing places additional responsibility on sound recommendations from the budget committee.

We believe our form of government is best for us at this time. It does get difficult to get good citizens to take the selectmen berths. The job is 24 hours a day and can be quite time-consuming. The First Selectman should have a job which enables him to contact businesses that are open in the regular working days. Another factor is the lack of understanding of some of the citizens of the tasks of the selectmen and the old saying "You are damned if you do and damned if you don't" is quite appropriate. The term "Long-suffering" may well have been coined by a selectman, but a good one will earn more than his salt and will scoff at the idea of quitting.

THE TOWN MEETING AND REPORT

Annually the municipal officers publish a compilation of the business of the town for the preceeding year. This includes appropriations and expenditures for all services provided by the town for the preceeding year, a list of taxpayers with the amounts of their real, personal taxes, received or uncollected.

The warrant is published in the report. This is the agenda for the annual town meeting held on a Saturday in March at the gymnasium of the elementary school. At this time the voters select a moderator to preside over the meeting, elect town officers by secret ballot, and conduct the business of the town for the ensuing year. Considered will be rate of compensation for town officials, amounts to be spent on various municipal services and obligations ranging from highway maintenance to cemetery care. Ordinances such as prohibition of burning dumps, roaming dogs and junk cars may be included in the warrant at the request of citizens and with the concurrence of the selectmen, or may be mandated by petition of over 10% of the number of voters who participated in the previous gubernatorial election.

The articles of the warrant are individually discussed with a majority vote deciding their fate.

It is a credit to the town that the inhabitants turn out in sizeable numbers and actively participate in their local government. Indeed it is a unique privilege to have the opportunity as citizens and taxpayers to voice their feelings on how the town is run.

Carl Mayhew

PITTSTON POPULATION

10 Year Periods

<u>Year</u>	<u>Population</u>
1890	1,281 (1st year of present town boundaries)
1900	1,177
1910	954
1920	816
1930	893
1940	1,114
1950	1,258
1960	1,311
1970	1,613

No estimates for 1972

TRANSPORTATION

Highways are very important when considering the management of the Town of Pittston. Excluding the expense of SAD 11, the costs of constructing and maintaining the roads of the town are roughly equivalent to the total of all other town expenses.

Total length of all highways and roads in the town is 51.95 miles, according to information furnished by the State of Maine Department of Transportation. Generally, these highways and roads run in a north to south or an east to west direction. Many of the town roads are relatively short dead-end roads, some of which were originally through-roads, of which parts were abandoned as the agricultural and lumbering business of the townspeople decreased.

From the information supplied by the State of Maine Department of Transportation, we have the lengths of Highways and roads in Pittston by classifications as follows:

Non Federal Aid State Highways	4.94 miles
Federal Aid Secondary State Highways	6.21 "
State Aid	13.12 "
Town Roads	26.10 "
Private Ways	<u>1.58</u> "
Total	51.95 Miles

The Non Federal Aid State Highway is Route 126.

The Federal Aid Secondary State Highway is Route 27.

The State Aid Highways are Route 194, the Kelley Road, the Nash Road, and the Smithtown Road.

The private ways are the Dump Road, Williams Pit Road, and the Road to Joyce Pond.

All other roads in Pittston are Town Roads.

These various types of highways may be described as follows:

The Federal Aid Highway system overlaps the State Highways and consist of an adequate system of connected main highways. The Federal Aid Secondary system consists of feeder roads to the Federal Aid Primary system and is composed of farm-to-market roads, rural mail routes, public school bus routes, and other feeder roads. The town is not responsible for maintenance.

State Highways are an integrated system of main routes. State Aid Highways usually serve as feeders to the State Highway system and are a joint State and Town responsibility. Construction is financed on the unit system, with each \$1.00 spent by the town being matched by approximately \$1.20 from the State. The matching amount from the State is based on the State's valuation of the town and may vary over two year periods.

Maintenance follows no single pattern, with Route 126 and the Smithtown Road being maintained by the State. Route 194, Kelley Road, and the Nash Road are maintained by the Town with some re-imbusement from the State.

Town Roads are the basic responsibility of the Town with reconstruction money (allocated from the State Gas Tax) up to \$9,000 per mile available from the State. Maintenance is by the Town.

Private ways, as the name implies, are constructed and maintained by individuals with no responsibility to the town.

With twenty-five separate town roads in Pittston, it is exceedingly difficult to spend the town road construction and maintenance money in areas where it will do the most good for the most people. It seems advisable to have a long range plan based on a study of traffic use, population, school bus and U.S. mail requirements, fire protection, etc., so that the limited funds of the town can be wisely and fairly allocated.

A second study covering the hazards inherent in our present town roads and bridges is advisable as there appears to be a substantial number. The two discussed the most are:

1. The intersection at the Blodgett and Kelley Roads.
2. The bridge over Palmer Brook on the Blinn Hill Road.

With school bus service to SAD 11 and increased traffic, these hazards become much more potential than they have been in past years.

Due to the change in the locations in which the inhabitants of the town work, from farming and lumbering within the town limits to work locations outside the town, many of the town roads were abandoned in past years. Now with the general increase in population, there is an increasing influx of new residents who wish to live in a quiet rural area with good schools and a large amount of personal freedom.

This increase in new residents will cause many of these abandoned roads to be re-opened. Knowing that the total tax

revenue from some of the present dead-end roads does not meet the expense of maintaining and plowing of these roads, the financial hazard of these abandoned roads to the town is apparent.

It seems advisable to review the abandoned roads in town to determine which have been legally discontinued. With the results of this study, future expansion of the town could be encouraged in a way to minimize the financial burden on the town.

Developers would know which roads were legally discontinued. Those abandoned roads that would be an extremely heavy financial burden to the town to re-open could be legally discontinued.

EDUCATION

Much of the schooling in early times was done by parents, neighbors and the preacher. The young had to learn by doing - shooting game, tilling the soil, building cabins, making clothing from wool, flax, and animal skins. There was no great application for more learning than being able to read, write and figure.

As times progressed the school master appeared. He went from house to house teaching the children who wanted to learn, and his pay was what he would take and what the people had to give.

It was difficult to travel at this time, so the town was broken down into districts. Each district had an agent who hired the teacher and looked after the school. There was a school committee overseeing all the districts. The teacher was someone who could keep order and know more than the pupils being taught. The school year was quite short, and the pupils could be from beginners up to young men and women of high school age.

In 1835 Pittston had 16 school districts and raised \$720.00 for them. This was in keeping with the wages of those times when a laborer on the highway was paid \$1.00 a day and the same for his oxen. Cattle, hogs and sheep ran at large, and dogs were not taxed.

As times changed, animals were required to be contained by fences and dogs were taxed to keep the dog population in bounds. The school system was also revised. The agent was changed to a town superintendent, with the school committee remaining. The

funds. Our local school tax is determined by the State tax assessor. He derives his information from the amounts people pay for purchases of land and homes in town.

As other towns improve their schools the pressure may ease on Pittston, but there is the distinct possibility that Pittston's increased valuation will have the unfortunate effect of increasing the percentage share of the S.A.D. #11 budget. This problem will be compounded by any loss of major taxable units in other S.A.D. towns, such as the recent loss of a paper mill in Gardiner.

Max Moulton

HOUSING

Pittston residents are pretty well scattered throughout the town. It is one of the region's rural areas near enough to employment centers to serve as a bedroom community. According to best estimates, it grew most rapidly in recent years, during the sixties. Population grew at a rate of twenty-three percent, with housing growing at twenty percent.

Most of the housing units in town are year-round. Only about 5% are seasonal dwellings. Four-hundred forty of the year-round structures were occupied at the time of the 1970 census. There are now well over 125 mobile homes in town.

At the 1970 census time, twenty-two percent of all the occupied houses in town completely lacked some sort of plumbing facilities. Eleven percent are overcrowded, more than one person per room. At that time twenty-three percent were considered sub-standard.

Renters occupied 10% of the town housing structures, with nearly 20% of those houses lacking some plumbing facilities and 15% being overcrowded. It is interesting to note that rental levels are higher for lower income people.

Dan Warren

PUBLIC WATER SUPPLY

In the early days when every farmhouse had their few head of cattle, chickens and horses, and other sundry stock, they all had one thing in common, a need for water. If you found a good clear running spring you usually had no problem. Abundant springs were rather rare, usually being way out in the woods or in the pasture, they were little use to most people. Therefore most farmers relied on brooks and hand dug, rock lined wells. These all provided a good source of water, but had one comeback, most all wells went dry in the summer, leaving cattle and households without water.

Today very little has changed in Pittston. For a while hand dug wells were replaced with concrete lined wells, which were little better than their forerunners. Though usually a backhoe was used to put them in, the only thing that increased was the cost. They still did not make water stay any longer in the hot summers.

Pittston has no public water supply of its own, as most other towns do. To the contrary each house has their own water system if they can afford the cost of an artesian well, usually dug down to the bedrock anywhere from 50' to as far as 400' or further. With submersable pumps, water is made available with maximum of ease and little worry unless the pump breaks down, or the well goes dry. Either of the two can and do happen occasionally.

There is one section of town which is served by public water, that of the City of Gardiner. The main line comes from across the river and through Randolph. This "water main serves homes and the Elementary School. Expansion plans are not being considered at this time.

Dan Warren

FIRE PROTECTION

Fire protection for Pittston is provided by two volunteer fire companies, the Jack's Hill Volunteer Fire Department, located near the junction of Routes 27 and 126, and the East Pittston Volunteer Fire Department with its' station in Pittston Village.

With the possible exception of tax assessing, there is no municipal service which evokes as much discussion from the citizenry. Dispassionate examination of our fire departments will reveal a selfless effort on the part of members of the community to protect the lives and property of the townfolk.

Rural firefighting with volunteer crews has many problems. The basic units are a group of firetrucks, ranging in age from old to genuine antiques, replaced as limited funds and opportunity make feasible. Fire hydrant service is located in a very small portion of town, limited to the area of the school, hence as much water as possible must be kept sufficiently heated to prevent the water from freezing.

Fire calls are received on the "Red Network", a system of simultaneously ringing telephones in several private residences; from these home calls are made to firemen who are directed to the site of the fire, drivers having been dispatched with the firetrucks. Manpower at night and on weekends is usually adequate, however, during working hours, there are few men in town creating a very real problem. Small fires, e.g., grass, chimney, car, can be handled by a man or two. Residence, barn or forest fires will need additional men and equipment which is readily available on

rather informal mutual aid agreements with neighboring communities, Randolph, Gardiner, Dresden, Chelsea, and Whitefield.

The concept of volunteers providing as crucial a service as fire protection has come under scrutiny. Individuals seem to have less free time to offer. Work demands drain the town of men during the day. Purchase and maintenance of equipment place an extra burden on a small segment of the community. Examination of funding is therefore in order.

The town contributes \$1700 (1973) to each department. The remaining funds are raised by beano, suppers, raffles, and such services as burning fields, filling wells and swimming pools (2), and pumping flooded cellars. Members also pay for privilege of membership in the companies (\$1.00).

Several changes in the interest of efficiency have been suggested. One is some sort of joining of the two companies, either as a single corporation, or under the guidance of one chief. The concept of a single firehouse with superior equipment has been offered. Assumption by the town of the responsibility for fire protection has been suggested. This would result in greatly increased costs to the taxpayer as volunteer efforts would be reduced, but might give greater control by the town over operations and particularly the selection of chief(s). Utilization of Revenue Sharing funds may be a way of updating some of the equipment. Consideration by the Planning Board of communications between the departments of adjacent towns, of movement of trucks, of overlap or lack of coverage should be made.

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In summary, our fire protection on the volunteer basis is probably the most economical to the taxpayer. The overriding questions are the will and ability of a few to provide this service to the town.

Carl Mayhew

The Warden Service of the Department of Inland Fish and Game answers all animal complaints ranging from poaching deer to a skunk in a cellar. A car-deer accident is handled by a game warden if the amount of damage is under \$200.00. If over this amount, the State Police must be notified. Snowmobile accidents are investigated by the State Police especially if a fatality is involved. Wardens are specialists in forest search and rescue, hence they have the responsibility for lost children, hunters, and downed aircraft.

Wardens of the Maine Department of Sea and Shore Fisheries may patrol the tidal waters of Pittston. Their concern might be litter, pollution, or fishing violations, i.e., too many smelts.

Drownings might be responded to by the State Police, the warden service, or the sheriffs department.

Carl Mayhew

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HEALTH SERVICES

The Town of Pittston does not have any health facilities of its own, but is fortunate to have excellent facilities available nearby. There are seven physicians in the Gardiner Area including a surgeon and an ophthalmologist. Gardiner also has three dentists and one optometrist. Augusta has many physicians and dentists with specialists in almost every area of medicine and dentistry.

There are several hospitals within easy traveling distance. Gardiner General Hospital is small but provides excellent care for general medical and surgical problems. It has very good laboratory and X-ray facilities and an emergency room. It does not provide any obstetrical department. Augusta General Hospital is handy and provides services for all areas of medicine. It also has many outpatient clinics and an X-ray therapy unit. The Togus Veterans Administration Center is nearby and provides Veterans with medical and surgical treatment as well as having a large Mental Health and Behavior Science Unit. Augusta also has a Mental Health Hospital with both in and out patient services.

The Regional Medical Program provides a visiting nurse for home nursing, also physical and occupational therapy at home. The Public Health Nurse schedules well Baby Clinics and the preschool child inoculation clinics which are usually held in Gardiner. They also provide health screening programs, follow up of the premature baby, tuberculoses, and venereal disease of women. They are now working on a genetic disease program and

will be doing follow up on these children which are reported to Public Health Service. The SAD 11 school nurse has charge of the school age inoculation program and refers the medical problems found in the school age child to the proper agency. The State also offers the Homemaker Services to eligible aged and infirmed individuals who qualify for this aid.

Ambulance service for the town is supplied by Ace Ambulance, a privately owned concern in Hallowell.

Pittston has one nursing home and Gardiner has three nursing homes.

There are two pharmacies in Gardiner.

Rosalie Roth

SEWERAGE

Pittston, being a rural community presently dependent on a private septic tank system, would not at first glance appear to require a sewerage collection and treatment system for several decades. However, a close study of conditions indicates that this may not be true.

These conditions are:

1. The route 126 area, just east of Route 27, presently has a problem with ground surface seepage of sewerage and with odor on hot summer days.
2. The Smittown area is presently a concentrated built-up area, including a trailer park. The additional influx of families into this area could develop a problem within a few years.
3. The areas of North Pittston, East Pittston, and the Bailey Hill area on Route 27, are developing fast and in the next ten or so years could develop problems.
4. Increasing the problems resulting from a congested septic tank system is the low percolation of the clay type soils which are found in nearly all areas of Pittston.

The best defense for the people of Pittston against a serious sewerage contamination problem with resulting ground, surface seepage, odor, contamination of private drinking water supplies and depreciation in value of their real estate, is to realize that house lots must be greatly increased in size. Necessary steps should be taken to see that house lots, adequate in size, are mandatory. For those congested areas which already have a sewerage contamination problem, or are fast approaching a problem, a collection and treatment system appears to be the only alternative.

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The program now planned by Gardiner, Randolph, and Farmingdale, which will also pick-up the sewerage of the SAD 11 Pittston School, furnishes us with information concerning such a collection system. It is estimated that the proposed 1974 construction costs of the collection, pumping, and treatment system will be 90% funded by Federal and State funds, leaving 10% of the cost to be paid by the towns. This funding extends only to the mains of the collection system; laterals and individual house connections are not included.

The system, as planned, is designed with sufficient capacity to accommodate the estimated growth of the three communities for the next thirty years. Due to this ample capacity, residences along its route, in the Route 126 area of Pittston, would probably be allowed to tie into its main. However, any line extended easterly along Route 126 would probably be considered a lateral, and as a lateral would not be covered by Federal and State funding.

Whether or not a program to obtain such funding could be set up in the future is not known at this time. If such a program could be arranged, some type of organization or district would probably be required to arrange financing, for that part of the costs which would not be covered by Federal and State funding, and to operate and maintain the system, including the collection of user's fees.

Steven Mank

SOLID WASTE DISPOSAL

The Town of Pittston presently uses the "landfill" operation of E.C. Barry and Son, which is located about one half of a mile from the Cedar Grove Road, westerly toward the Kennebec River. This site is also used by several surrounding towns, including the city of Gardiner, serving an approximate total of 16,000 people.

The location of this site makes it very undesirable, as it has severe water pollution problems. The waste is dumped, or pushed into or right to the shore of Givings Brook. All water running through the fill must leach into the brook, thence directly into the Kennebec River. This problem, plus the failure to cover the operation properly, provide a decent unloading area, and litter along the highway, makes for a very undesirable situation.

There has been talk of a small site owned and operated by the Town.

The town is a member of the Southern Kennebec Valley Regional Planning Commission. A member of our local planning board has been attending the meetings on solid waste disposal. They have made progress towards a regional disposal area, but many problems still need to be ironed out before it becomes a reality.

Charles Roth

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BUSINESS AND COMMERCE

COMMERCIAL ENTERPRISES IN PITTSTON FALL GENERALLY INTO TWO CATEGORIES:

1. Businesses Whose Markets or Customers are Principally Outside the Town.

Lumbering	Gravel Pits
Tree Farming	Building Contractor
Poultry	General Contractor
Cattle Raising (part-time)	Floor Covering Contractor
Antique Dealers	Utility Transmission Lines
Commercial Dump	Building Contractors

2. Local Business Serving Area Residents or Transients.

General Stores/ Gasoline Station(3)
Roadside Food Stands
Butchering Services
Painting Contractor
Auto Repair Garages (5)
Welding Shops (2)
Private Sawmills
Chain Saw Dealer (2)
Mobile Home Parks (3)
Mobile Home Sales (1)
Real Estate Brokers
Nursing Home
Rubbish Cartage Service
Rug and Upholstery Cleaning Service
Snow Vehicle and Motorcycle Sales (2)

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RECREATION

No subject under discussion during the preparation of this plan has met with wider diversity of opinion by planning board members than recreation. Suffice it to say that recreation is what one does after toil (Webster). To list all the activities of Pittstonites would be far beyond the scope of this presentation.

It would seem reasonable to point out areas which in the future might be influenced by community action.

As to organized youth recreational activities in town, one can only comment upon their lack. There are few if any scout groups, no athletic organization or facilities, no public swimming pool or area. Dances are rarely held although the gymnasium at the grammar school could be utilized. In fairness it must be said that these may be quite readily available in nearby communities.

Hunting, fishing, and snowmobiling are popular sports which require a rapport between landowners and the public. We are blessed with a population distribution which leaves many acres relatively underutilized and suitable for public use. Abuse of property and posting could stifle a valuable asset. The snowmobile clubs are to be especially congratulated for their educational and public relations work.

Of tremendous importance and frequently overlooked are the things which may be done in the immediate environs of one's home. An observing drive through town will reveal the many hours which may be spent around the home. Examples are a lawn, shrubs,

shade trees, gardens, fruit trees, dog houses, hen and duck pens, children's play equipment. Our play activities often require shelter as a garage, workshop or tool shed. Recreation vehicles as boats, snow machines, campers, require room for storage if not better protection against the elements.

The point here is that to enjoy the life style which is familiar and important to so many of us, it is necessary to have a certain amount of land area around one's home. Minimal lot sizes may diminish the possibilities of home recreation. While this might not bother some, it will reduce the resale value of a small lot and tend to alter the rural-suburban character of this town.

Carl Mayhew

PHYSICAL RESOURCES

This report provides a brief description of the physical characteristics of the Town of Pittston. These include topography, drainage, surface materials and geology. There are also a few comments on the water quality and availability.

Pittston, located in the south-east corner of Kennebec County, is a rectangular shaped town along the east bank of the Kennebec River. It has an average length of 7 miles, in a north and south direction, and averages 4.6 miles in width, east to west, with an area of 32.2 square miles.

Neighboring towns are Dresden and Alna on the south, Whitefield on the east, and Randolph and Chelsea on the north. On the west are Richmond and South Gardiner, with the Kennebec River separating them from Pittston.

The three largest water areas in Pittston are the Kennebec River, Eastern River, and Nehumkeag Pond. Elevations of the town vary from tide water on the Kennebec River to 540 feet (approximately) at Beech Hill.

Pittston is located in an area of Maine thickly underlain by blue-gray marine clay and unsorted granular material (sand, gravel, boulders, etc.). Except on ridge tops and along the Kennebec River shore, very little bedrock is exposed. Drainage is classed as fair to poor, with many high land swamps and seeps. There are only two major water courses in the township - Eastern River and Togus Stream. A control divide, running northeast-southwest cuts the Town into two drainage basins. Nehumkeag Pond lies along the divide as part of the highland swamp area.

Ground and artesian water sources are plentiful, especially along the Kennebec Esker Ridge System, and in the upland gravel areas in the east side of the Town.

The topography is of gentle relief, with a maximum elevation of 520 feet at Beech and minimum of 10 feet at the Kennebec Shore.

Topography and Relief

Pittston may be divided on a north-south line through the middle of the Town, cutting Nehumkeag Pond. The eastern side has an average elevation of 150' with a few 200' hills in the bluff area of the south. The bluffs form a plateau representing an old river plain surface, with several west flowing streams cutting them. East of the main divide there are two high ridges, Beech Hill and Blinn Hill, at elevations of 540' and 450'. Blinn Hill is underlain by the resistant "cooked up" edge of the Elna granite. When it was emplaced as a hot liquid the granite heated and toughened the surrounding volcanic feldspar-rich rocks. Between these two highlands flows the Eastern River, in line with a down fold natural valley in the volcanic rocks. The relief in the eastern section is quite rugged, caused by irregularities in the bedrock surface. Except in the 1 1/2 mile wide valley of the Eastern River the cover of sand, silt and clay is thin. These hills stood up as islands or shallows when the ocean covered the Town.

Robert Doyle

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Drainage

Because of the irregularities of the topography and the random stream pattern, the drainage of the Town is quite poor. Several heights of land, crosscutting the Town (see drainage map), have not allowed for a major flushing of surface and upper water table water. Major swamp areas attest to this poor flushing. The center of the Town, at Nehumkeag Pond is covered by a large swamp, and the land west of Elinn Hill, mostly flat and at elevation of 160', is also poorly drained. The water holding character of surface deposits also hinders good flushing.

The southeast quadrant of the Town in the high bluff area is the driest and best drained part of the Town. From a development viewpoint the southwest is most desirable for future planning and construction. The high well-drained portion of Elinn Hill is another development potential area which should be considered.

Bedrock Geology

The solid rock surface of the Town consists of a variety of rock types, including several granite type bodies. Much of the area is underlain by meta-sediments, that is, sandstone, shale and limestone which have been altered through heat and pressure deep in the crust to form new kinds of rock. These rocks, called schists, gneisses and marbles, have been mapped by geologists. The geologic map shows the distribution of each type from a general information standpoint. All these units, excepting the marbles, are similar in terms of strength, fracturing and consistancy.

The various rock types, once flat lying like layers of a layer cake have been folded and squeezed together like an accordion. All the beds or layers are standing on end. The rock units and beds all trend northeast-southwest.

Most of the units are well fractured, with cracks generally at steep ($+60^{\circ}$) angles. The fractures run east-west and northeast-southwest. There are no visible openings in these fractures at surface, but water does pass along them providing the "plumbing" for artesian water. The rocks are quite tight and only along the fractures do we get significant water.

Two of the units are significant to development. They are Unit 2 and Unit 3 in the north part of the Town. Unit 2 is a mixture of several minerals, including a limey suite called calc-silicate minerals. These minerals are altered limestone chips and cause a hardness to water from wells drilled in the unit. Unit 4 has some calcareous (limey) material but in lower percentages than in Unit 2, making water hardness less of a problem.

Unit 3, a thin 200-500 foot wide band of very rusty slate and sandstone is a serious problem to water quality in the Town. The unit passes through the most populated area, just south of the Randolph line. Many artesian wells have been unfortunately drilled directly into the Unit 3 with consequent problems of continuous iron contamination. In addition, all surface wells, in the gravels, especially along the Kennebec shore, have contamination from the sand and gravel derived from the weathering of the Unit 3 surface. This rusty quality of the surface materials may be seen on Route 27 south of Logus Stream.

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Surficial Geology

Surficial deposits are defined as the unconsolidated materials which lie above the bedrock ledge. In Pittston, much of the Town is underlain by a thick, 20'-50', cover of sand, fine gravel, silt (fine sand and mud) and at depth near the bedrock surface, a tough mud and pebble layer of hardpan-called till.

Generally underlying the sand and silt material there is a layer of blue-gray clay. The clay occurs mostly in the river and stream valleys and in low places near Nehumkeag Pond. This clay is of marine origin, left on today's land surface during a time 10,000 years ago when much of coastal Maine was covered by the ocean.

Both the sand-silt unit, and the low land clay deposits offer little chance for flowing groundwater. There is some flowing groundwater at the horizontal contact between the sand and clay layers. Both layers are generally saturated with water but the contained water does not flow freely because of the tight fine-grained nature of the materials. Where the clay layer is exposed at surface, a highly saturated water zone 10' down is usually encountered. In these low areas, foundation holes and deep road cuts have great difficulty with the 'soupy' mud.

Along the east bank of the Kennebec River and in a few places in the western part of the Town (#2 type on surficial map) there are several esker deposits. These are generally elongate, north-south ridges which are the remains of ice rivers flowing through the glacier 20,000 years ago. The ridges near Smith Town Road are such examples. These esker deposits are

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extremely important both as a source of water and for sand and gravel. All of the gravel quarried in the Augusta-Richmond area comes from the Kennebec esker system and from a few outwash fan deposits in the interior. The gravels of the Eastern River, high-elongate ridges and bluffs are another principal source of construction material.

Summary

The Town of Pittston lies in the area of the Eastern Kennebec River Drainage Basin. Surface materials are randomly distributed but generally fall into two categories; sand and gravel along the river valleys and south flowing streams; with silt-sand and marine clay in the rest of the Town.

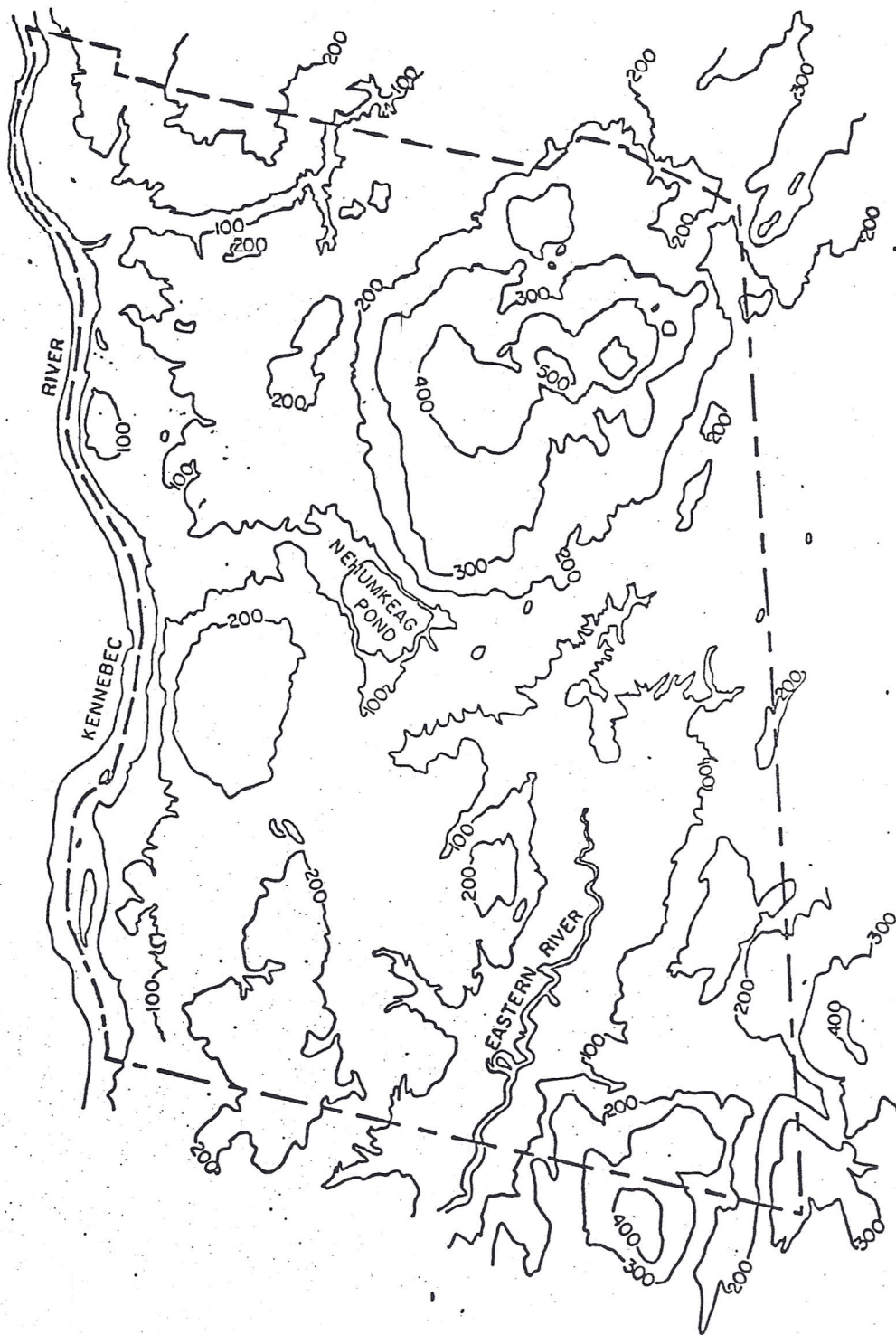
Drainage, complicated by several divides, is not good, resulting in concentrations of swamp areas especially along the Nehumkeag Divide. Clay lies in the lowlands and creates special foundation problems.

Bedrock material is not a problem except causing rust and carbonate contribution to the water quality in the northern part of the Town.

Excepting the gravel deposits coming from the Kennebec and Eastern Rivers, there are no economic mineral prospects in the Town.

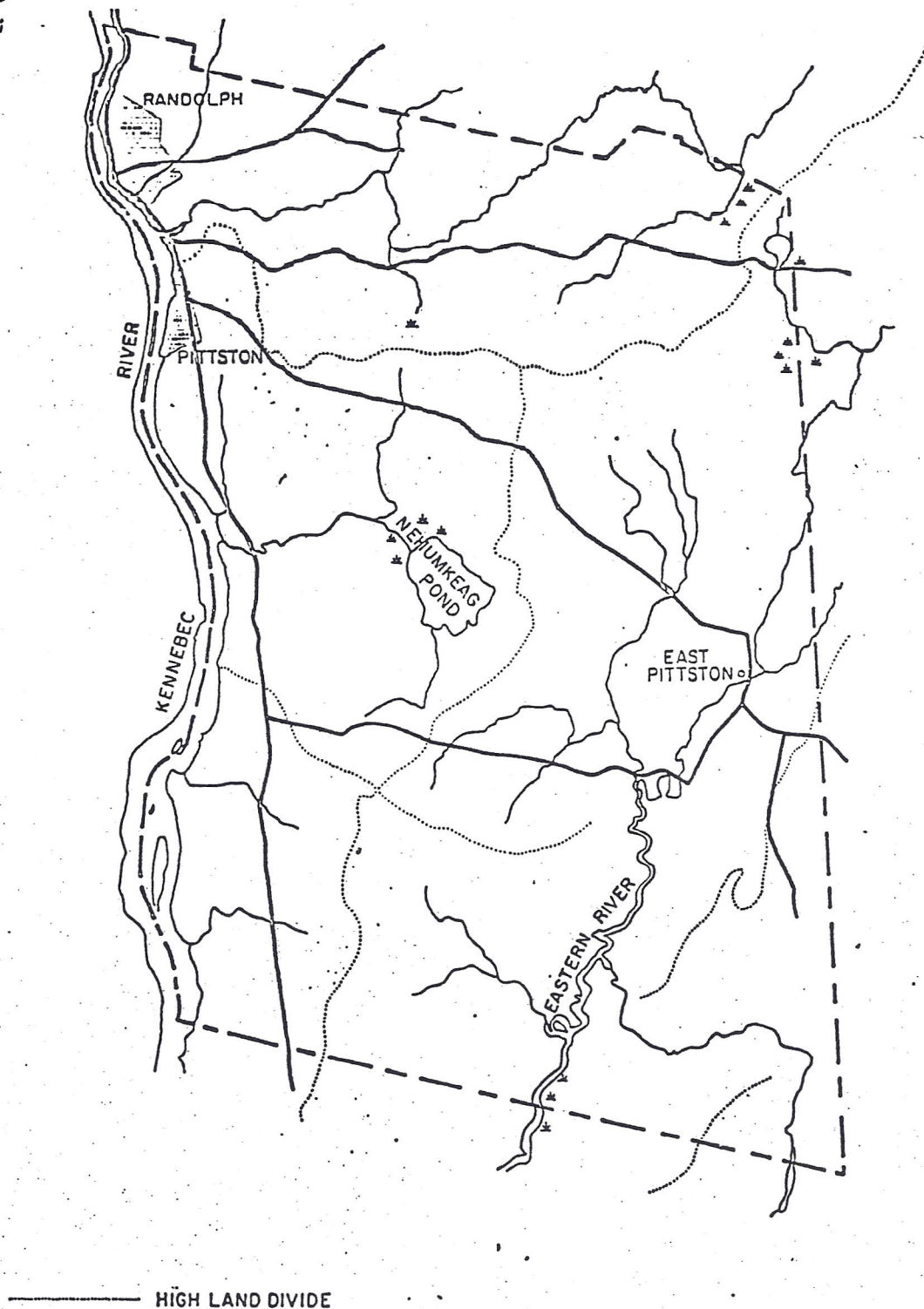
Future Town planning should consider the physical resource evaluation. A more detailed and comprehensive study is possible as new developments are planned and more information becomes necessary.

Robert Doyle

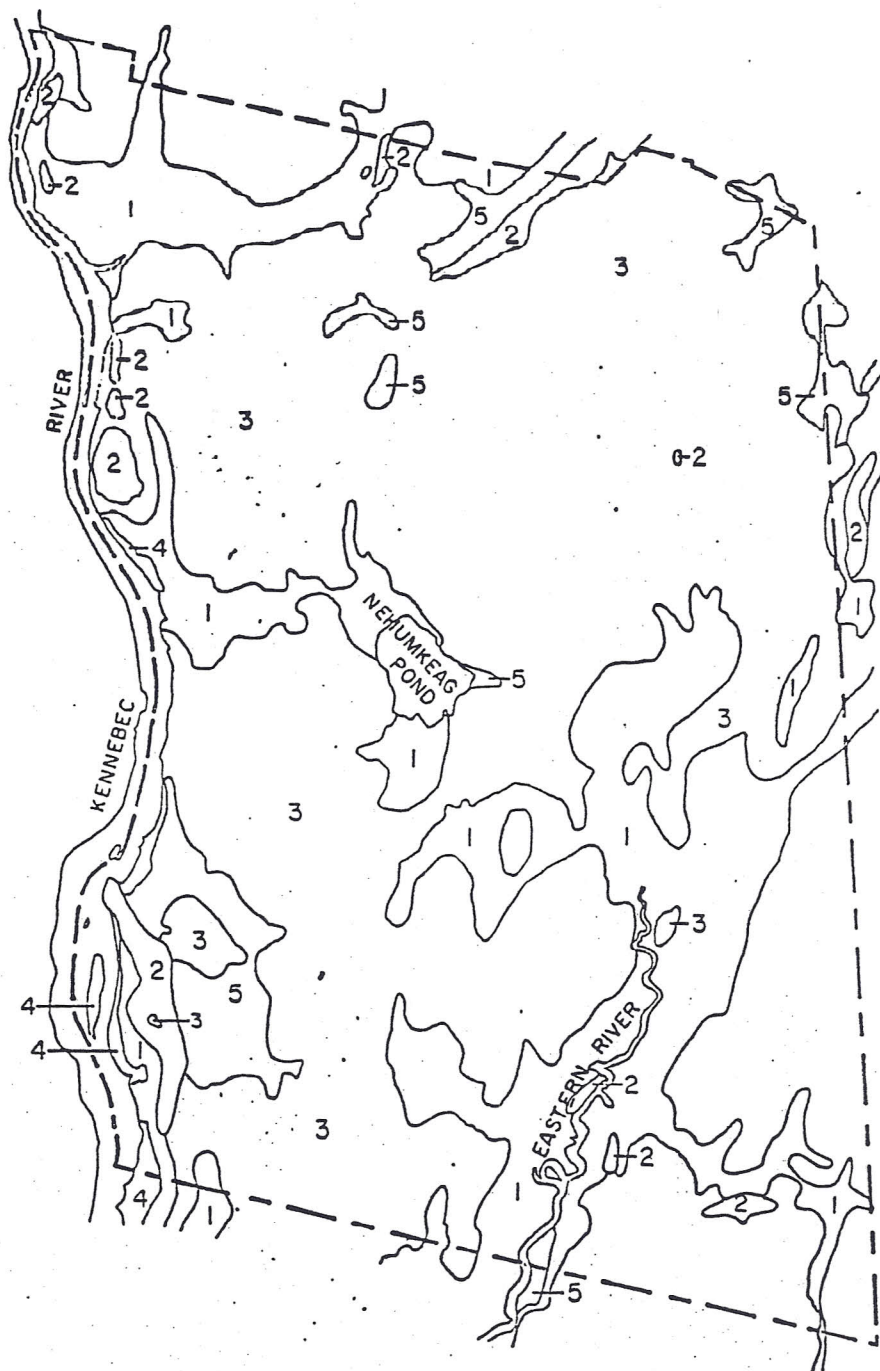


TOWN OF PITTSTON
PLANNING BASE

TOPOGRAPHY
SCALE 1" = 1 MILE



TOWN OF PITTSION
PLANNING BASE
DRAINAGE PATTERNS
SCALE 1" = 1 MILE



1. BLUE - GRAY MARINE CLAY

2. MIXED SAND, GRAVEL, SILT AND BOULDERS; ALSO BEDROCK ON RIDGE TOPS.

3. SAND AND SILTY SAND OUTWASH, TILL DEPOSITS.

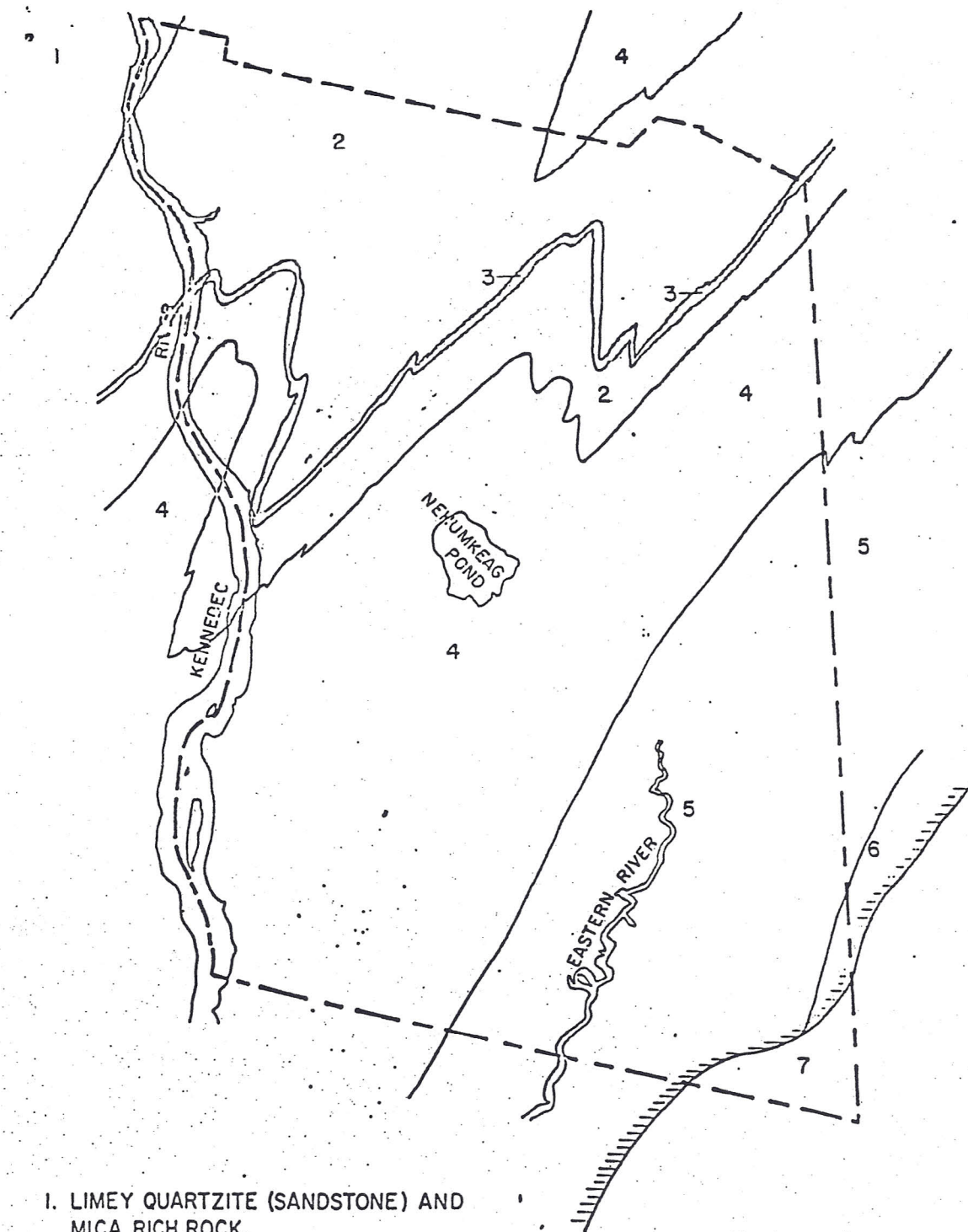
4. FLOOD PLAIN, SAND, SILT AND GRAVEL.

5. SWAMP DEPOSITS, ORIGINAL MATTER; SOME FINE SEDIMENTS.

TOWN OF PITTSTON
PLANNING BASE

SURFICIAL GEOLOGY
SCALE 1" = 1 MILE

Source: U.S.G.S. Groundwater Study, 1959



1. LIMEY QUARTZITE (SANDSTONE) AND MICA RICH ROCK.
2. BANDED MICA, QUARTZ, FELSPAR ROCK
3. IRON - SULPHIDE, MICA RICH ROCK, RUSTY WEATHERING
4. ALTERED GREEN, GRAY, PURPLE VOLCANIC ROCKS
5. DARK COLORED, IRON RICH VOLCANIC ROCKS
6. THICK BEDDED QUARTZITE AND WHITE MICA RICH ROCK
7. GRAY - BROWN COARSE GRAINED GRANITE

**TOWN OF PITTSTON
PLANNING BASE**

BEDROCK GEOLOGY

SCALE 1 MILE

1 .5 0 1 2 mi.

GROUNDWATER RESOURCES

OF PITTSTON, MAINE

Introduction

Groundwater, now and for the foreseeable future, is the most common source of potable water in the town of Pittston, and therefore should be considered a valuable resource. As with any physical resource, knowledge of its various properties and characteristics is essential for its proper use. In fact, however, little published information is available concerning groundwater conditions in Pittston.* Only a few general statements can be made at this time.

Groundwater Sources

Groundwater is continuously derived from precipitation that infiltrates the earth's surface and migrates slowly downward into porous subsurface materials. At some depth below the ground surface, the minute voids and cracks in the porous materials are filled with this water derived from the atmosphere. The upper surface of the saturated zone is called the water table. It extends downward from the water table to depths of at least 600 feet into bedrock.

Dug wells penetrate unconsolidated surficial materials to a depth usually only several feet below the water table. Water flows into the well from the unconsolidated materials. In contrast, drilled wells case off the unconsolidated materials and obtain water from one or more water-bearing fractures intersected by the borehole. Recent studies by the Maine Bureau of Geology show that the frequency of water-bearing fracture intersections in drilled wells is very small; nearly half of the drilled wells intersect only one such fracture. Only a few percent intersect more than two water-bearing fractures.

The penetration depth of drilled wells into bedrock is highly variable, but most wells are less than 200 feet into bedrock. Work in several coastal counties of Maine shows that

*Prescott, Glenn C., Jr., 1968, Maine Basic-Data Report No. 4, Ground-Water Series, Lower Kennebec River Basin Area: U. S. Geol. Survey.

Prescott, Glenn C., Jr., 1969, Ground-Water Favorability Areas and Surficial Geology of the Lower Kennebec River Basin, Maine: U. S. Geol. Survey, Hydrologic Investigations Atlas HA-337.

80% of the drilled wells yield two or more gallons per minute, but only 30% yield ten or more gallons per minute.

Drilled wells depend upon the intersection of water-bearing fractures, yet the locations of such fractures in either the horizontal or vertical sense is unknown and very difficult to predict. Therefore, it is difficult scientifically to select the site of a proposed drilled well. Work on this perplexing problem is in progress. Small areas of expected higher than normal well yield have been identified, but the reasons for such anomalies have yet to be discovered. Similarly, small areas of less than normal yield have been identified.

Successful dug wells are more easily located than are drilled wells because they penetrate water-bearing materials that can often be seen at the surface and therefore mapped. Dug wells in gravel and sand deposits yield more water than do most dug wells in clay deposits. The yield of till deposits, which cover more than half of Pittston, normally lies somewhere between that of the very permeable sand and gravel deposits, and the nearly impermeable clay deposits. The surficial geologic map included in the comprehensive plan shows the areal extent of these typical materials. The thickness of these deposits is unknown, as is the depth to the water table, but the surficial map can be used as a guide to locating a successful dug well.

Springs are natural points of groundwater discharge, even though some have been dug out and stoned, tiled, or cemented up to concentrate and protect the supply. Water discharging from a spring may be derived from permeable unconsolidated sources, or from water-bearing fractures in bedrock. Springs flowing from loose materials occur at a point where the water table intersects the ground surface. Springs issuing from bedrock are similar, except that rather than a water table, it usually is a potentiometric surface that intersects the land surface. (The static water level in most bedrock wells also reflects a potentiometric surface. Where this surface lies above the ground, drilled wells flow.)

Groundwater Quality

The quality of groundwater to be expected from the various sources is known only in very general terms, and there are likely to be numerous exceptions to the rule. Groundwater from dug wells and springs in overburden tends to be less mineralized than that from drilled wells. The difference is

caused not so much by variation in the composition of the earth materials, but by the length of time groundwater is in contact with the materials. Water drawn from a dug well may have been in contact with the overburden materials for only a few hours or weeks, while water from a deep drilled well may have been in contact with bedrock for several months or years. The longer the time of contact, the greater the concentration of dissolved minerals.

Water quality of dug wells and springs is much more susceptible to contamination by near-surface sources. Contaminants from animal and human wastes, chemical sprays, and road salts readily travel downward to the water table through permeable unconsolidated overburden. Downward movement of contaminants through bedrock, which has so few water-transmitting fractures, is much impeded, but can ultimately occur.

W. B. Caswell
Bureau of Geology

SALT CONTAMINATION OF WELLS

The following is a report submitted by the State of Maine Department of Transportation Well Claims Unit, prepared and furnished by Malcolm W. Meserve, Supervisor, regarding the policy and procedure of the Department:

The Department of Transportation has a Well Claims Unit which is an integral part of the Right of Way Division. This unit was created as a result of the One-Hundred and Second Legislature enacting a statute which authorizes the Department of Transportation to assist property owners who feel that their private water supplies have been damaged as a result of either highway construction or highway maintenance.

The Department has a policy and procedure in the handling of such claims as well as some suggestions to property owners in hopes of preventing damage to the water supplies.

It is not a written law, however, it is the general feeling by personnel of the Department to locate any new well - either dug or drilled - seventy-five feet (75') from the centerline of the highway, and at a higher elevation than the septic tank, and drainage field.

The Department also recommends that all drilled wells be sealed with either a Butler-Larkin Three (3) Cup Seal with Drive Shoe or a Jaswell Seal. We require wells drilled under contract for the State to have the casing twenty (20') feet into bedrock with the aforementioned seal affixed to the bottom of the well casing.

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It is common knowledge that different types of soil have a different reaction to water holding capacity - hence the necessity of "Percolation Tests". However, the primary concern of the Department of Transportation is to locate the wells back away from the traveled way as well as to keep away from the highway drainage system.

The Statute Sec. 652, Title 23, M.R.S.A. is very clear in that no liability can be assigned to the Department of Transportation for pollution other than Chloride (salt) which is a result of our winter maintenance program. An exception to this rule may occur in the event that the Department of Transportation is found to be liable for pollution to a private water supply as a result of construction or reconstruction.

I feel that care should be taken in locating the well by keeping two things in mind, (1) Sewerage system and (2) Highway drainage system.

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KENNEBEC VALLEY SOIL CONSERVATION

The Kennebec Valley Soil Conservation Service has provided the town with a map depicting soil types with their varying degrees of suitability for disposal of septic waste (sewage). This is on display at the town office with an accompanying key to the color code.

David Chase .

FORESTRY

Agriculture and early logging practices have had a definite impact on the present forest resource of Pittston. At one time, agriculture was extremely important to the economy of this area. Much of the land was cleared for crops or pasture. Farms varied in size but nearly all had some wooded acreage to provide for lumber and fuel needs for farm use. As agricultural use lost importance, fields and pastures were abandoned and gradually reverted back to forest growth. Today, Pittston is approximately 75% forested.

Present day ownerships of land (forest) range from only a few acres to several hundreds. Most of this land falls into the category of miscellaneous private ownership. A very small percentage of the total land area is owned by forest industry. There are no certified Tree Farms in Pittston. Commercially valuable tree species commonly found in this area include white pine, eastern hemlock, balsam fir, red oak, white birch, and soft maple.

Over the years, Pittston has been logged rather heavily, the emphasis on sawtimber and pulpwood. Markets for both logs and pulpwood are readily available. Early logging was done primarily in old-growth stands of timber. More recently, extensive logging has been done on old farm land grown back to trees. Today, there is very little old-growth timber remaining and much of the harvesting is being done in areas of third, fourth, even fifth-growth. Destructive logging practices of the past have resulted in many timber stands of low volumes



of merchantable species and very poor quality. The general trend is toward smaller dimension, lower grade products. According to the most recent U.S. Forest Service survey (timber), the present annual rate of removal (harvest) of commercially valuable species now exceeds the annual growth.

Because of the influence of agriculture many years ago, there are many abandoned fields reverting back to forest growth. Many of these areas are inadequately stocked with desirable tree species to produce valuable timber crops for future years. Since 1956, approximately 350 acres have been planted to trees. Additional acreages of these poorly stocked areas should be re-forested by tree planting.

Forest fire protection in Pittston remains at an adequate level. Forest insect and disease problems pose no immediate threat at this time. However, there is much room for improvement in scientific management of the forest resource as a whole. In recent years there has been very little cultural work for improving young stands of forest trees to improve their quality for future value. Timber harvesting by more scientific methods should be better regulated by private ownerships to promote better forest growth.

In years to come, Pittston's forest lands will probably come into more demand for purposes other than wood production. Forest recreation in the form of hiking, hunting, snowmobiling, etc., will require more multiple-use management. Growing populations will require more space for housing. Increasing property values will no doubt change present usage to other

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priorities. Despite these facts, Pittston's forest lands will continue to be an important economic factor. However, greater emphasis should be placed on improving the forest, rather than depletion, for its continued importance.

David G. Schaible
Maine Forest Service, Wiscasset

FISH AND GAME

The Town of Pittston has access to, or has within its boundaries, many waterways. Its western boundary is the Kennebec River, one of the largest tidal waters in the state. The Eastern River, also a tidal river, runs through the south easterly section of town, the tidal flow being to a point approximately one quarter mile north of where it crosses the Kelley Road. Nehumkeag Pond, a small but picturesque pond surrounded almost completely by woods, lies approximately in the center of town. Another small picturesque body of water is Joyce Pond in the northeast corner of the Town, a part of which lies in Whitefield.

Pollution has done much harm to the Kennebec River, but it has runs of smelts and alewives, as does the Eastern River. Nehumkeag Pond has excellent bass and pickeral fishing, while Joyce Pond has good pickeral and white perch fishing. The upper reaches of the Eastern River, and many of its tributaries, still have native "square tail trout". All of the rivers and ponds mentioned have very good waterfowl hunting.

The Town of Pittston, being 75% woods, has some excellent hunting grounds. Whitetail deer inhabit all parts of town, however, the number has been on the decline due to increased hunting, possession of more of their range for building, and free roaming dogs.

A good flight of woodcock goes through the town most every fall. We have good rabbit covers, and the king of game birds, the partridge, seems to hold its own.

Renewed interest in trapping has become evident. The past few years, the price of raw fur has increased from a near disastrous low, to a point where it is again attractive to quite a few people. Our woodlands and fields harbor many types of fur bearing animals, among them fisher, fox, weasel, raccoon, and skunk. Our rivers, streams, and ponds have muskrat, beaver, mink, and a few otter.

The policy of most good trappers is to take some and leave some. This insures a future supply, does away with over population of some species, thereby keeping down mange, rabies, etc.

Our aim and goal in this field, is to maintain a balance where nature and wild life can survive our continual inroads upon their environment, to prevent further pollution of our ponds, streams, and rivers, and to make sure our grandchildren can catch fish in the waters and jump wild deer in our forest.

Charles Roth

TIDAL AND ANADROMOUS FISHES

Pittston has roughly 5.5 miles of river frontage on the Kennebec River. Major subdrainages in the area include Kimball Brook and other headwaters of the Eastern River, Morton Brook, Stony Meadow Brook and Togus Stream.

The main Kennebec River has considerable potential for production of eels and anadromous species such as shad, alewives, and smelts. Immature smelts, alewives and shad utilize shoreline areas where they actively feed during their downstream movement to the ocean.

Kimball Brook and other headwater streams of the Eastern River provides the major smelt spawning areas of that river system. Togus Stream contains a small population of Atlantic salmon as well as alewives, eels and smelts. Fish passage facilities at Togus Pond could generate an alewife fishery of 300,000 pounds with annual value of \$12,000. Development of this area would be contingent on providing for selective escapement of alewives to prevent undesirable species from entering Togus Pond.

Morton Brook and Nehumkeag Pond support a small population of alewives which, under proper management, could be expanded to a commercial harvest of 70,000 pounds valued at \$2,800 annually.

Areas bordering the above drainages should be protected to the extent that development does not adversely affect water quality in the streams. Development activities should conform to the Soil Suitability Guides established by the Maine Soil

and Water Conservation Commission. Soil survey maps can be secured from them along with the guides. It lists the soil types in your area and the guides tell whether the area is suitable for buildings, septic tanks, etc.

Provided by the State of Maine Department of Sea and Shore Fisheries, the preceeding report was prepared and submitted by Lewis N. Flagg, Marine Resources Scientist.

CONCLUSIONS

Although the list may be far from complete, the foregoing suggests these conclusions:

I. The geographical positioning of Pittston, its form of government, and its lack of municipal services and utilities will tend to keep it a residential town for at least the next two to three decades. The character of the town will tend to be perpetuated by Pittston's modest tax base, making speculative spending to attract business enterprises a virtual impossibility. The population density of about 50 people per square mile contributes to the excessive cost of town or volunteer services such as highway maintenance, plowing, sanding, and fire protection.

II. If the character of the town does remain residential as expected there will be six major concerns which we will all share as residents, voters, and tax-payers:

- A. Solid waste disposal.
- B. Adequate separation of drinking water supplies from septic tank systems in a soil system not well suited to leeching and percolation, which translates into lot size.
- C. Increased school and town service costs without a compensating rise in tax revenue.
- D. Building construction which will
 - 1. minimize electrical and other fire hazards
 - 2.
 - 3. provide appearance not depreciating to neighborhood
 - 4. provide healthful and habitable living space

- E. Adoption of shoreland zoning to utilize local knowledge and keep regulation in the town.
- F. Maintaining standards which will attract a responsible citizenry and put Pittston in the best possible position
 - 1. to provide the tax base urgently needed by a sprawling rural community and
 - 2. to put ourselves in the best position to benefit by recent legislation which gives some relief from property taxes as the primary tax revenue source and provides for bigger injections of State and Federal money under a standard formula.

What kind of a town do we want to become? Maybe no change at all is what we'd like most, but even that goal can be described as a PLAN. If there is no PLAN, it is the nature of events that things will seek their lowest level. None of us wants that.

REMEMBER: IF YOU DON'T KNOW WHERE YOU'RE GOING, ANY ROAD WILL TAKE YOU THERE.

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