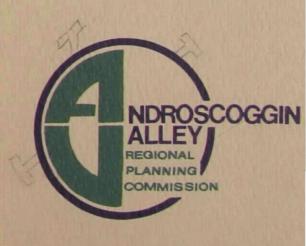
LEWISTON · AUBURN
LITTLE ANDROSCOGGIN RIVER
SECTION 208
WATER QUALITY PROGRAM

# MANAGEMENT PLAN ADDENDUM AND ENVIRONMENTAL IMPACT STATEMENT





## FINAL ENVIRONMENTAL IMPACT STATEMENT

on the

## FINAL 208 WASTE TREATMENT MANAGEMENT PLAN

for the

## ANDROSCOGGIN VALLEY REGIONAL PLANNING COMMISSION

April 1978

#### Prepared By:

Androscoggin Valley Regional Planning Commission 70 Court Street Auburn, MAINE 04210

> U. S. Environmental Protection Agency Region I J.F.K. Federal Building Boston, Massachusetts 02203

> > Responsible Officials:

William R. Adams, Jr.

Regional Administrator

EPĂ - Region I

Barbara A. Bartlett, Chairman Androscoggin Valley Regional

Plannning Commission

## TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	. i
SUMMARY OF SUBPLANS	. 1
PLAN COMMENTS	. 14
FINAL RECOMMENDATIONS	. 68
APPENDIX A	•
APPENDIX B	•
APPENDIX C	•
APPENDIX D	•

#### INTRODUCTION

In June 1977, the Androscoggin Valley Regional Planning Commission published a draft Management Plan and Environmental Impact Assessment on the 208 Water Quality Program. The Plan was revised based on E.P.A., D.E.P. and local comment and reprinted in September 1977. Public workshops were held in the Norway and Lewiston areas on October 19 and 20,1977 respectively. The notice that the Environmental Assessment was available for comment was printed in the Federal Register on November 3, 1977, and a 45-day public comment period began. As a résult of the workshops and written comments received during the comment period, this document was compiled.



#### SUMMARY OF SUBPLANS

#### Introduction

The plan included eleven technical subplans and an assessment of surface water quality. The subplans contained the methodology used, the technical findings, an assessment of management alternatives, and the selected alternative(s) rewritten as a recommendation(s).

The eleven subplans and the Surface Water Quality Assessment were summarized for the public workshop and comment process. Summaries are included here, and final recommendations for each technical area can be found in Section IV of this document.

#### Surface Water Quality Assessment

The major problem of the Little Androscoggin River is the 6.3 mile Class D segment which stretches from South Paris to Oxford. The 7 Q 10 low flow causes this segment to be Water Quality Limited.

The second greatest problem on the Little Androscoggin is the discharge of storm and sanitary wastes from the Town of Mechanic Falls. Designs and plans for a Sewage Treatment Plant are presently being modified and construction should begin as soon as monies are available.

The remainder of the pollution problems are non-point in nature; however, these affect primarily the small tributaries and are small in nature compared to the point sources in the Little Androscoggin.

The following table is a summary of information for those river segments and tributaries not presently meeting swimmable-fishable standards, which is met by or corresponds to B-2 classification by Maine standards.

#### Agriculture Subplan

Agriculture in the 208 area, based on studies to date, has not been shown to be a major non-point source of pollution. This premises is based on the fact that although 65% of the cropland in the area needs some additional treatment to control erosion, neither the extent

Table 1
SURFACE WATERS OF 208 STUDY AREA NOT MEETING SWIMMABLE-FISHABLE STANDARDS

Segment/Tributary	Assigned Classification	Water Quality Problems	Recommendation to Achieve B-2 (Swimmable-Fishable)	Expected Date To Achieve B-2
Bird Brook (Norway)	c	None apparent	Scheduled for reinvestigation and possible reclassification by D.E.P.	
Davis Brook (Poland)	С	None apparent	Scheduled for reinvestigation and possible reclassification by D.E.P.	
Little Androscoggin main stem, .25 miles below W. Paris to con- fluence with Andrews Brook.	c	Effluent limited; sanitary discharge at W. Paris.	This segment is out of the 208 area and should be investigated.	
Little Androscoggin main stem, S. Paris to Oxford	D	Water quality limited; Chromium Content	Verify Chromium transport mechanism or source and refine treatment plant operations and data on this segment.	
Little Androscoggin main stem, Oxford to confluence with Andro- scoggin River at Aubus		Effluent limited; Untreated storm and sanitary dis- charge at Mechanic Falls	Construct planned treatment plant at Mechanic Falls.	When facility is at design efficiency.
Thompson Lake Outlet (Oxford)	c 	Effluent limited; Industrial and sanitary discharge	Treatment plant constructed 1976 on line spring 1977 - segment should be checked for reclassification and possible waste load allocation.	
Pennesseewassee Lake Outlet (Norway)	С	None apparent	Scheduled for reinvestigation and possible reclassification by D.E.P	
Unnamed Brook Auburn 1.3 miles East of Minot Village	C		This stream could not be found and will probably be dropped from classification register.	Not applicable
No Name Brook (Lewiston)	c	Effluent limited, Sewage lagoon dis- charge	Upgrade lagoons or divert sawerage to Lawiston- Auburn treatment plant.	B-2 can be met when discharge eliminated
Logan Brook (Auburn)	С	Presently part of storm sewer	Will probably be dropped from classification register.	Not applicable
Penley Brook (Auburn)	c	Presently part of storm sewer	Will probably be dropped from classification register.	Not applicable
Sabattus River	c	Effluent Limited; Storm and sanitary discharge at Sabattus	Construct treatment facility or interceptor to Lewiston- Auburn treatment plant.	After construction of one or the other of the recommendations

nor the magnitude of the problem associated with this percentage is great enough to warrant it being termed a major problem. The total cropland acres needing treatment is only about 1,000 and the measured range of loss in excess of the established tolerable limit was only 3 to 18 tons/acre/year.

The Policy Advisory Committee, however, did decide to select a managment recommendation that they felt would best address the situation, if in the future agriculture was ascertained to be a major problem. This was done primarily because of knowledge that the 208 area may be seeing a great increase in grain corn production in the next few years. Dependent upon the ability of the existing voluntary programs to hold down the magnitude of the problem, a regulatory program may be warranted in the future. In this light, the following management recommendation was chosen:

The State with S.C.S. assistance should establish a regulatory program in the Department of Environmental Protection to control major agricultural non-point sources.

In addition to the Policy Committee's management recommendation, there were several other recommendations that have risen during the course of the program. They are:

More cost-share funding (ACP) should be made available for dispersement in the 208 area to allow greater participation in the existing voluntary programs.

The \$2,500 ACP cost-share limit should remain, but special funding for major practices should be made available for dispersement through the A.S.C.S. County Committeemen.

### Forestry Subplan

The Forestry Subplan describes the study methods and findings of the "Survey of Forest Operations and Potential Impact on Water Quality". The study was a cooperative effort between the A.V.R.P.C. and the Maine Bureau of Forestry.

The major findings of the study can be summarized as follows:

1. One forest harvest site out of seventeen in the 208 area had significant erosion problems;

- 2. Spring harvest operations had the greatest erosion potential because of runoff over thawing soils;
- The susceptibility of a site to erosion is primarily related to the slope of a site and its soils;
- The care with which an operator worked a site can have a significant influence on erosion of the site; and.
- 5. The transportation phase of harvesting, primarily the operation of skidders, is the most significant impact on the site.

The primary water pollutant associated with forest harvesting is sediment, which consists of soil particles and organic matter from the forest floor. Skidder trails on steep slopes, where surface organic matter is removed and soil exposed, are the primary sources of sediment.

Based on the limited survey in the ten town area, it is not recommended that a regulatory program specific only to this 208 area be established to control forest operations. However, if a statewide regulatory program is to be implemented, it should be based on a forest management or harvest plan for sensitive sites, for example on steep slopes draining into a lake. This would control problems sufficiently in the 208 area.

#### Construction Subplan

The Construction Subplan describes the major sources of construction associated pollutants as being: (1) sediment, (2) stormwater, (3) solid wastes, and (4) petroleum products. Construction in the 208 area ranges from the building of a single family house in a rural area to large shopping centers and industrial sites. There are state laws which control major construction, such as the Site Location of Development Act, which includes projects covering 20 acres or structures greater than 60,000 square feet. Municipal controls on construction are primarily concerned with subdivision review. The subplan includes a projection of population and required dwelling units by 1995 for each 208 town. The urban areas of Lewiston and Auburn will have a greater number of dwelling units per acre than the rural towns. Urban multi-family housing generally involves disturbance of larger land areas than rural housing construction, and has the potential, because of scale, to generate greater levels of sediment.

Also projected are the commercial and industrial acres which could potentially be developed during the 20 year planning period, 1975-1995. The greatest development is expected in Lewiston, followed by Auburn, and then Oxford.

The construction activities in the 208 towns not covered by specific erosion and sediment controls under state or municipal ordinances are:

- individual lot owners filling relatively large areas;
- commercial or industrial projects which are not over 20 acres or with an effected area of 60,000 square feet and which are not interpreted to be subdivisions;
- 3. gravel or borrow pits less than five acres in size;
- 4. construction of public and private roads other than State Aid Roads;
- 5. maintenance of public and private roads, particularly shoulders, side-slopes and roadside ditches; and,
- 6. most municipal projects.

The Policy Committee recommended that:

- 1. 208 towns without sufficient controls should voluntarily adopt ordinances regulating construction;
- 2. a statewide sediment and erosion control law, if adopted, should included a regulatory program to control construction related sediment and erosion problems for subdivisions and commercial and industrial developments of a certain size; and,
- any adivsory program to control sediment and erosion should be conducted through the local Soil Conservation Districts.

In order to immediately implement the first recommendation, the 208 staff drafted a model Sediment and Erosion Control Ordinance, a Site Plan Review Ordinance and Subdivision Regulations.

## Miscellaneous Sources Subplan

In addition to the major in-place and activity related non-point sources of pollution discussed individually in other subplans, there are a variety of other potential sources that merit discussion and management recommendations in an overall water quality plan. Although these other sources may not have the potential for areawide or catastrophic impact, they can and periodically are, the causes of significant site specific problems.

Preliminary assessments conducted by individuals employed under CETA (Comprehensive Employment Training Act) pointed out that the following were activities or sources that may have the potential to give rise to non-point pollution, but at this time were not great enough in number or severity of impact to warrant in-depth, detailed investigations.

- 1. Roadside ditches
- 2. Snow dumps
- 3. Road salt storage and application
- 4. Pesticide use and container disposal
- 5. Petroleum products storage
- 6. Mining and extraction procedures

This assumption of lesser impact, based on an areawide approach, was discussed with the 208 Technical Advisory Committee and there was concensus that this was the case for the most part. The following investigation procedure was recommended:

- 1. Rather than using limited resources to ascertain the actual extent of various problems, instead, assess the literature and consult area professionals for known problems associated with various sources or activities.
- 2. Use the broad based information developed through this type of investigation to develop mangement recommendations that are in line with findings of specific technical studies conducted primarily for other reasons.
- Deal with site specific problems as encountered in other 208 investigative efforts. (i.e. pesticide container disposal in the agricultural study, or salt leachate in ground water study).

The basic reasoning behind this type of approach is that great amounts of time and money can be spent attempting to ascertain the extent of salt leaching from a storage pile and result in no definite findings. However, it is known that uncovered salt does leach into the ground, and it is also known that the aquifer-esker systems of the 208 area are very porous. Therefore, management recommendations to protect water quality are:

- 1. Place salt piles on concrete pads and under cover,
- 2. Do not locate salt storage piles on eskers

These types of recommendations are reasonable and in line with the E.P.A. directive of ascertaining "Best Management Practices", while still addressing the problem categories with the emphasis required, given their frequency of occurrence and their known potential for impact in the A.V.R.P.C. 208 area.

## Solid Waste Subplan

The popular method for solid waste disposal in the 208 area has been open dump burning. Due to State compliance (Title 38, M.R.S.A., Chapters 4 and 13) with Federal law, this practice has been ordered to cease, primarily for air pollution abatement. For this reason, municipalities must begin landfilling or find some other disposal alternative. The state laws established Air Quality Standards and sanitary landfill site location requirements. The Air Emission Regulations, of which the standards are a part, also provided for a variance from the provisions until September 1, 1977, for towns over 1,000 people and indefinitely for towns under 1,000 people unless they are found to be in violation of the Air Quality Standards. This variance provision conflicts with E.P.A. regulations and the federal law. As it presently exists, those granted open burning variances may continue; but they must also be landfilling, which requires daily soil covering of refuse and/or ash.

The most popular and usually the least expensive method of meeting requirements as stated in these laws is to develop a sanitary landfill. However, due to the geologic nature of the 208 area, particularly the aquifer-aquifer recharge areas and other factors such as population patterns and land availability, this alternative, in most cases, will not solve the problems of waste disposal and pollution abatement for the long-term.

Sanitary landfills, for the short-term, will continue to be the most cost-effective method for certain individual towns. However, due to the volumes of solid waste being generated and the physical limitations of much of the area, new technologies and cooperative agreements between towns and private industries should be explored. Such technologies as shredding, with or without materials recovery, can greatly prolong the life of existing landfills. Incineration, with or without heat recovery, is also a means of reduction that merits investigation either by itself or in connection with shredding. This technology exists at a level to make steps such as these, not only feasible, but economically and environmentally desirable, given a sufficient volume of waste generation.

These disposal methods, shredding and incineration to be located at Lewiston and Auburn, respectively, should be evaluated by area municipalities to see if these would be cost-effective alternatives under contract or agreement. This is important due to the fact that presently six of the ten 208 towns should be looking for new disposal sites. Four of these six towns presently have disposal sites located on aquifer-aquifer recharge areas.

## Sludge and Septage Subplan

The subplan reviews state law and inventories existing and proposed sludge and septage disposal methods.

In the area, all septage is being disposed at sewage treatment facilities with the Lewiston-Auburn and Norway facilities accepting volumes in excess of 400,000 gallons per year. Both facilities serve numerous towns outside of the planning area. Septage has caused problems at the Norway facility and may cause problems at the Lewiston-Auburn facility in the future. For these reasons, it is recommended that Norway restrict its septage receiving to improve operations It may be necessary for Lewiston-Auburn to restrict septage receiving in the future. Some towns will be forced to use land disposal methods; Oxford, Poland, and Minot should consider a common disposal system.

Sludge generated in the planning area is applied to the land for disposal. Sludge can be either buried (landfilled) or land spread. Compliance with the Maine Guidelines is adequate to protect the environment using either disposal technique. The majority of sludge in the area is and will continue to be buried. Paris buries a sludge containing chromium; after extensive study, no environmental degradation has been attributed to the operation. Lewiston-Auburn also landfills their sludge; the treatment authority is in the process of developing a new site. Minor environmental degradation from the existing site will be minimized upon its closing. Lisbon closed a sludge landfill and is developing a land spreading site. Norway and Mechanic Falls are planning land spreading systems.

#### Ground Water/Drinking Water Subplan

As a portion of the 208 Water Quality Program, the A.V.R.P.C. entered into a cooperative study with the Water Resources Division of the United States Geological Survey to evaluate the ground water resources of the ten town area. The components of this study included a geologic reconnaissance to delineate aquifers and aquifer recharge areas, a test drilling program to evaluate the stratigraphy of selected areas, periodic sampling of the chemical characteristics of ground water from selected locations, hydrologic analyses of selected areas,

technical assistance to municipalities in siting, designing, and developing new water supplies, and assistance to municipalities in evaluating the various methods that may be employed to protect the quality of ground water for use now and in the future.

The Towns of Paris, Norway, Oxford, Lisbon and Sabattus now draw their public water supplies from ground water sources, and the Town of Mechanic Falls is investigating the feasibility of developing a ground water source. Although the quality of ground water in the area is generally very good, poor land use practices, such as salt storage and solid waste disposal on or near aquifers, has caused degradation of significant quantities of ground water, often at locations ideal for municipal use.

As a portion of the 208 program, a model "Aquifer Protection Ordinance " was prepared for use by municipalities wishing to take steps toward preserving ground water quality.

The specific recommendations of the 208 program concerning ground water and drinking water protection were:

- 1. Drinking water protection should be achieved through implementation of specific aquifer/watershed protection ordinances, which would zone certain critical aquifer recharge and production areas/surface watershed(s) identified for each community. The Towns of Sabattus, Lisbon, Paris, Norway, Oxford, and Poland should enact protection ordinances and seek interlocal cooperation with neighboring communities in protecting the area's aquifers. These towns should make every effort to relocate solid waste disposal sites that are located on or near productive aquifers.
- 2. State legislation should be developed to allow a community to zone or regulate activities that would occur on aquifers or in watersheds in the absence of a townwide zoning ordinance.
- 3. State and Federal legislation impacting ground water quality has developed in a piece-meal fashion and therefore does not offer a comprehensive, logical vehicle for ground water protection. Therefore, the Federal Government should enact comprehensive ground water regulations that form an integrated legal framework within which state and local governments can research and enact comprehensive ground water protection programs.

#### Residential On-Site Sewage Disposal Subplan

The subplan reviews the various techniques used to dispose of sewage for residences not connected to sewer systems. Direct untreated discharges to surface waters in the area were found to have minimal impact. However, malfunctioning subsurface disposal systems (septic systems) cause significant problems in some areas. Most serious are areas in Oxford and Poland where septic systems could cause degradation of regional aquifers which are being used as municipal water supplies. Also of priority concern are areas in Norway, Oxford, Poland and Auburn where septic systems could cause degradation of lake water quality. There are also areas in virtually all municipalities where localized health hazards have resulted from malfunctioning systems.

Code Enforcement is the primary method of improving this situation. A local educational program and adoption of a subsurface disposal ordinance would also help alleviate the existing problems. Sewer extensions are recommended in some areas, and federal and state assistance for severe problem areas is recommended. This funding would be included in the Federal Construction Grants program which is used to construct sewage treatment facilities throughout the country.

#### Public Sewer Systems Subplan

The subplan inventories and reviews the sewer systems and sewage treatment facilities in the planning area. The subplan projected areas of future sewer extensions and flows from the extensions. It also determined the need for treatment facilities in the area.

Sabattus, Mechanic Falls, and the Randall Road area of Lewiston require major facility construction. The Norway facility requires substantial renovation. In addition, the Lisbon and Lewiston-Auburn facilities could exceed their design capacities prior to the end of their design life. Infiltration uses substantial capacity in all sewage treatment facilities in the area. Decreasing infiltration rates through a systematic sewer rehabilitation program will generally increase facility capacities substantially.

The subplan recommended sewer rehabilitation programs to increase plant capacities and extend design lives through the planning period for Norway and Lisbon. A similar program may be necessary in Lewiston-Auburn and is planned in Mechanic Falls. The subplan recommended that the state determine a Waste Load Allocation and Chromium balance for the Little Androscoggin River in Paris and Norway and that the adequacy of the Paris treatment facility be determined through technical assistance from the E.P.A. and D.E.P.

#### Industrial Waste Treatment Subplan

The subplan inventories industrial and commercial discharges to surface waters and to publicly owned sewage treatment facilities. Also included is an inventory of commercial and industrial establishments using non-discharge disposal methods, such as land application or non-discharge lagoons.

All industries producing significant quantities of wastewater have treatment plants or are discharging to public treatment facilities. Water quality sampling and treatment facility records maintained by D.E.P. indicate all direct discharges are meeting license requirements. Three industrial discharges to public treatment facilities do not meet the pretreatment criteria or contract requirements. Hillcrest Foods, which discharges to the joint Lewiston-Auburn treatment facility, has installed a pretreatment facility; however, the grease and oil concentrations still exceed the pretreatment requirements of the Lewiston-Auburn treatment facility. The industry is modifying the system to obtain better removals. The other two industries, U.S. Gypsum in Lisbon and A.C. Lawrence Tannery Co. in Paris, have contracts with the publicly owned treatment facilities specifying the quantity and quality of the industrial dischargers. The Lisbon and Paris treatment facilities were designed to accept the industrial discharges from the aforementioned industries.

The discharge from U.S. Gypsum contains higher solids concentrations than specified in the contract. The Lisbon sewage treatment facility was not designed to accept the high solids concentrations and therefore has difficulty treating the U.S. Gypsum waste. U.S. Gypsum is considering two alternatives to correct the problem: an industrial treatment facility with a direct discharge or a pretreatment facility to meet the contract requirements.

The discharge from the A.C. Lawrence Tannery contained large solid particles and the pH varied greatly. The tannery has installed pretreatment screens and modified operations to bring pH variations within the limits of the contract. It is still questionable whether the tannery waste meets the quality specifications of the contract. The 208 plan has recommended a study of the treatment facility which would include an analysis of the tannery waste characteristics.

The industrial-public treatment facility contracts have been replaced with pretreatment requirements and an industrial cost recovery system. The subplan recommended that the state and federal pretreatment requirements be reflected in local sewer use ordinances and that the ordinances be enforced at the local level. The subplan further recommended that licensing and enforcement for direct discharges remain at the federal and state level.

#### Land Use Management Subplan

One of the most comprehensive elements of the 208 plan is the Land Use Management Subplan. Because of the extensive material covered in this subplan, it was necessary to divide it into five parts. The following is an outline of the highlights of each part.

Part I: Existing state and local land use management controls. This part described and listed those existing state and municipal land use laws, ordinances, codes, regulations, and plans which provide the legal framework for the implementation of the subplan.

<u>Part II</u>: Assessment of existing land use controls and the need for additional controls to implement the 208 plan. Contained within this part are recommendations for the following:

- 1. a statewide sediment and erosion control law:
- enabling legislation that would provide towns with the legal authority to regulate the land use activities within a watershed in the absence of a townwide zoning ordinance; and,
- 3. enabling legislation which would provide towns with the legal authority to control land use activities over identified (mapped) aquifer and aquifer recharge areas (mostly wetlands) in the absence of a townwide zoning ordinance.

<u>Part III</u>: 208 Model Land Use Ordinances. This part is the heart of the subplan. The following is a listing of the model ordinances and regulations and the municipalities for which adoption is recommended.

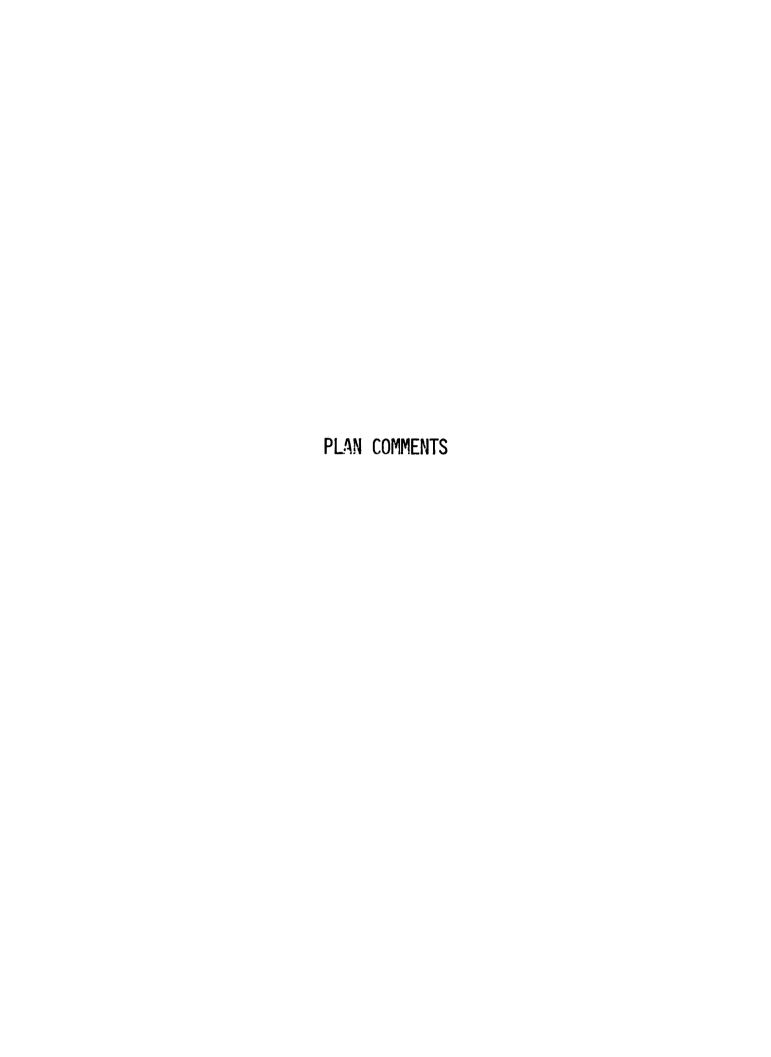
Aquifer Protection Ordinance: Norway, Paris, Oxford, Poland, Sabattus and Lisbon; Water Protection Regulations: Towns within the Sabattus Pond, Taylor Pond, Tripp Pond, Lake Auburn, Thompson Lake, and Lake Pennesseewassee watersheds; Subdivision Regulations: Sabattus and Minot (both have already adopted them), Norway (revise present regulations) and Mechanic Falls; Site Plan Review Ordinance: Norway, Paris, Oxford, Poland, Minot, Sabattus and Lisbon (amendment to zoning ordinance); Sediment and Erosion Control Ordinance: subdivision regulations of the Towns of Mechanic Falls, Sabattus, Poland, Minot and Lisbon contain sediment and erosion control provisions; Residential On-Site Sewage Disposal Ordinance: Norway, Oxford, Poland and Lisbon; Sewer Use Ordinance: Towns or sanitary districts intending to construct a sewage treatment plant or sewer lines, this includes the Towns of Mechanic Falls and Sabattus; Code Enforcement Officer: Oxford, Poland, Sabattus and Lisbon upgrade their code enforcement programs, either individually or through cooperating with one or more neighboring towns.

Part IV: Alternative Growth Management Control Policies and Techniques. This part addresses the growth issue and discusses five alternatives towns may adopt in order to regulate local growth. These include:

- constraint planning which prevents development on fragile lands such as floodplains;
- cluster and planned unit planning techniques which provide for the arrangement of building lots so that only the good land is built upon and the fragile land is left in open space;
- 3. timing of development or phase in growth based upon the extension of municipal services such as sewer, water, roads, etc., into the more rural areas of a town:
- 4. limiting the number of building permits issued by a town per year; and,
- 5. building moratoriums.

Part V: 208 Municipal Mapping Program. This part describes the maps that have been prepared for each 208 town and how they can be used to prepare and administer a zoning ordinance. The mapping series includes the following: base, topography, land cover, surficial geology, sewers, fragile areas, land use controls, tax composite (property parcel). Each map was prepared at a scale of l"=1,000'.

The Land Use Management Subplan has been written and formatted in such a manner that it can be used as a handbook for municipal officials.



#### PLAN COMMENTS

#### Public Participation

Public participation was a major component of the planning process from the start of the grant period. The Public Participation Subplan of the plan described the process and summarized the comments received prior to compilation of the draft plan. Appendix A presents these comments and summarizes the public participation activity for the entire planning period. It also presents typical radio announcements and newspaper articles for the planning period.

After the draft plan was published the staff met with the municipalities and sanitary districts in the planning area. Comments received during these meetings and those received from E.P.A. and D.E.P. were incorporated into the plan published in September.

#### Workshops

The two workshops were held to give citizens the opportunity to have input into the final product of the 208 process. The first workshop was held on October 19, 1977, at the Oxford Hills High School in Paris, Maine; and was attended by 31 people. The second workshop was held on October 20, 1977 at the Multi-Purpose Center, Lewiston, Maine; and was attended by 20 people.

The workshops were announced by newspapers and a radio station in the area, see Appendix B, Meeting Announcements. The A.V.R.P.C. 208 program also distributed a one page flyer on the meetings, see Appendix C, Meeting Flyer. In order to provide a digest of the lengthy 208 Plan a 33 page summary was prepared which provided the previous subplan summaries and identified specific recommendations for federal, state and local governments. The recommendations were formated similar to the final recommendations presented in Section IV of this document.

Even prior to the two Public Workshops, meetings were held in Norway, Paris, Oxford, Mechanic Falls and Lisbon at the request of town officials. These meetings were designed to discuss how the recommendations of the 208 plan would affect these respective communities. These meetings were generally attended by ten to twenty people including members of the Board of Selectmen, Planning Board, and Conservation Commissions and the general public.

These meetings were conducted by 208 staff and were formulated around discussion of the recommendations in each subplan, particularly as they affected the specific town, and also a discussion of the implementation components contained in Section VIII of the 208 plan, Table 2, 208 Implementation Accomplishments and Priorities. These pre-workshop meetings served to generate discussion on each town's specific water quality problems and implementation strategies; however, the meetings may also have reduced attendance at the two public workshops.

The workshop sessions were opened by introductory remarks by the A.V.R.P.C. Chairman, and then a slide presentation was used to discuss the 208 planning process. After this general presentation, five round table discussions were simultaneously conducted by 208 staff covering several supplians at each table. The general public attended table discussions in which they had the most interest. The first discussion groups lasted one hour, a brief intermission was held and then a second round table discussion was held for 45 minutes, thus providing the public opportunities to participate in discussions of several subplans. Notes

were taken on the various questions, concerns and statements of the public at the workshop sessions. A summary of the issues and concerns raised by the public at the two workshops follows the listings of the participants in the workshops in Tables 2 and 3.

Some selected newspaper articles on the public workshops are included in Appendix D - Newspaper Coverage of Workshops.

#### TABLE 2

#### ATTENDANCE AT 208 PUBLIC WORKSHOP

#### October 19, 1977

Bob Mendoza - E.P.A. Alan Prysunka - D.E.P. Bob Nunan - D.E.P. Paul Fuller - A.V.R.P.C. Chairman Paul Brown - Paris (Town Manager) Joseph Barrett - Paris Anna Henderson - Lewiston Daily Sun Tom Clifford - Paris (Chairman PUD) Earle Tarr, Jr., - (208 PAC Chairman, and Superintent Sewerage District) V.J. Cooper - Paris Francis Anderson - Paris (Chief Operator, Paris Treatment Facility) Henry Wiley - Norway Crystal Trundy - Lewiston Daily Sun James Wyman, Norway (Superintendent Water District) Vernon McFarlin - Paris Howard Charles - Hebron (State Bureau of Forestry) William Diehl - Mechanic Falls Clarence Tyner - Oxford Planning Board L.R. Brewer - Paris Suzanne Drip - Norway J. Daniel Morse - Paris (Superintendent PUD) Mike Wagner - Oxford (Superintendent Water District) Eugene Coburn - Oxford Robert Butters - Norway (Operator, Norway Treatment Facility & Plumbing Inspector) John Lonley - Norway

John Lonley - Norway Chandler Briggs - Paris Robert Littlefield - Farmington Claire Matulci - Paris Carlton Field - Paris

#### TABLE 3

#### ATTENDANCE AT 208 PUBLIC WORKSHOP

October 20, 1977

Edward Woo - E.P.A. Bob Mendoza - E.P.A. Bob Nunan - D.E.P. Paul Fuller - A.V.R.P.C. Chairman A.E. Tucker - Livermore Falls James Lamb - Poland Selectmen Gore Flyn - Lewiston - (Planning Department) Lawrence Caldwell - Turner Charles Varney - Turner Charles Riley - Sabattus (Planning Board) Leo Curran - Sabattus (Planning Board) Myron Eames - Lewiston (Head, Sewer Division) Mrs. Paul Fuller - Rumford John Barnett - Auburn (Planning Department) Earle Tarr, Jr., - Auburn (Sewerage District) Al Sorkin - Sabattus Darryl Brown - Livermore Falls Mr. Eddie Dostie - Greene (Sabattus Lake Association) Mrs. Eddie Dostie - Greene Heather McCarthy - Lewiston Sun Ara Goss - Poland

#### SURFACE WATER QUALITY ASSESSMENT

#### LEWISTON AREA WORKSHOP

<u>Concern</u> : Lake Classification System

Citizens Participating: Mr. Eddie Dostie

Summary: Mr. Dostie was interested to determine what the new lakes classifications of A and B meant for the 208 area and specifically Sabattus Lake. The staff explained that the Lake Stress Quality classification which D.E.P. used to identify eutrohpic lakes was dropped and all lakes were classified as either Great Ponds A and Great Ponds B. The staff reviewed the Great Ponds A and Great Ponds B criteria presented in the Surface Water Quality Assessment.

Effect on EIS: (pages VI-6 to VI-14) There is no effect.

#### AGRICULTURE SUBPLAN

#### LEWISTON AREA WORKSHOP

Concern : Federal funding to correct agricultural pollu-

tion sources.

Citizens Participating: Mr. Lawrence Caldwell, Mr. Charles Varney and

Mr. Leo Curran

Summary: Mr. Caldwell noted that federal funding is needed to eliminate the some of the pollution sources from agriculture such as manure storage. The staff noted that the Department of Agriculture does provide funding through the Agricultural Conservation Program of A.S.C.S. However, the amount of funds available to each farmer is limited and only supplies a minor portion of the total funds needed for each project. The staff noted the need for a funding program for the major pollution control projects and noted the current development of such a program in U.S.D.A.

Effect on EIS: (pages VII A-16 to A-17) The participants agreed with the Selected Alternatives.

#### FORESTRY SUBPLAN

#### NORWAY AREA WORKSHOP

Concern : Regulation of Forestry

Citizen Participating: Mr. Howard Charles and Mr. L. R. Brewer

<u>Summary</u>: Mr. Charles was interested to know if the 208 program recommended a regulatory program for forestry operations. The staff noted that the Forestry Sybplan pointed out that sedimentation of surface waters in the 208 area was not a major concern, and that a limited regulatory program requiring a forest harvest plan for sensitive sites would be sufficient in the 208 area.

Participants were concerned that regulation might discourage management of small woodlots. The staff noted that this was a possibility, and therefore non-point source legislation and regulations should try to exempt small private woodlot owners, particularly those woodlot owners who are doing weekend harvesting of firewood or small operators on their own property. Requiring logging operators to be licensed could take the burden off of the woodland owner. Operators could be trained as to water quality protection and better forest management practices as a part of their license renewal.

Participants noted that controls would be difficult to enforce because people would avoid getting permits, particularly for small operations. Mr. Charles noted that if Service Foresters were to enforce regulations it could damage their working relationship with landowners desiring technical assistance.

Effect on EIS: (page VII B-24) Selected alternatives should not be changed.

#### CONSTRUCTION SUBPLAN

#### LEWISTON AREA WORKSHOP

Concern : Sediment and Eroson Control

Citizens Participating: Mr. Gore Flynn and Mr. John Barnett

<u>Summary</u>: Mr. Flynn noted that Lewiston had difficulty enforcing all ordinances which exist in the city. He felt that the permit procedure was complicated and that the city could not add a Sediment and Erosion Control Ordinance at this time. Participants noted that sedimentation and erosion could be addressed through zoning and subdivision ordinances.

Participants noted that developers currently use erosion control practices where they are economical to implement.

Effect on EIS: (page VII L-27 and pages VIII-15 to VIII-20) No changes are required.

#### MISCELLANEOUS SOURCES SUBPLAN

#### NORWAY AREA WORKSHOP

**Concern** : Petroleum Storage

Citizens Participating: Al Prysunka

Summary: Mr. Prysunka commented that, although the plan addressed petroleum storage and made recommendations, severity of the problem was not well documented in any 208 documents. The staff responded that data would be obtained but felt that petroleum storage was not a significant problem in the area since regulations required containment facilities for major storage facilities. The staff noted that a waste oil recycling facility in the Norway area increased operations after the plan was completed and noted that the staff will assist involved municipalities in controlling problems related to the facility.

Effect on EIS: (page VII d-17) The recommendation on petroleum Products Storage should not be changed.

#### SLUDGE AND SEPTAGE SUBPLAN

#### NORWAY AREA WORKSHOP

Concern : Septage Disposal

<u>Summary</u>: See Public Sewer Systems Comment on this topic for Norway.

Effect on EIS: (page VII F-18 to F-19) Selected Alternatives should not be changed.

Concern : Sludge disposal at Pioneer Plastics and General

Electric

Citizens Participating: Mrs. Claire Matulci and Mr. Clarence Tyner

<u>Summary</u>: Participants were concerned that the sludge from these industries might contain toxics and wanted to be assured the sludges were being disposed properly.

The staff responded by noting that there was no information on these sludges at the time the report was published.

Effect on EIS: (page VII F-7) Pioneer Plastics does not generate sludge. General Electric disposes sludge in an area landfill.

Concern : Toxic Substances in Sludge

Citizens Participating: Mrs. Claire Matulci

<u>Summary</u>: Mrs. Matulci inquired about the amount of toxic substances in various sludges produced in the area and was particularly concerned about Robinson Manufacturing Company's sludge.

Staff respone was that the table in the Sludge Subplan was thought to be an accurate representation of the toxic sludges in the area. It was noted that Robinson Manufacturing could produce a sludge with heavy metals because of the chemical dyes used at the mill. However, no sludge had been wasted at the facility since it came on line in the spring of 1977. Participants noted that Robinson Manufacturing did not have an approved sludge disposal site.

Mrs. Matulci suggested that the D.E.P. should develop special guidelines for toxic sludges and industrial sludges.

The staff noted that the existing guidelines considered heavy metal concentrations and that D.E.P. required other toxic sludges to be landfilled.

Effect on EIS: ( page VII F-24) Alternatives selected should not be changed.

-23-

Concern : Heavy Metal content of Septage

<u>Summary</u>: Participants were concerned about the land application of septage which has been shown to have high heavy metal concentrations in many studies.

#### LEWISTON AREA WORKSHOP

<u>Concern</u> : Industrial Sludge Disposal

Citizens Participating: Mr. Myron Eames and Mr. Alvin Sorkin

<u>Summary</u>: Mr. Eames questioned what methods were used for industrial sludge disposal. Incineration of these sludges was discussed as not being cost effective in this area as shown in two studies, one in Paris and the other in Lewiston-Auburn.

Participants wanted to know what Pioneer Plastics, General Electric and Robinson Manufacturing did with their sludge. Mr. Sorkin noted changes which needed to be made to the sludge data on Maine Electronics.

<u>Effect on EIS</u>: (page VII F-7) Maine Electronics - amount of sludge is 25 cubic yards per year; sludge has a solids content of 10%. Pioneer Plastics and General Electric are summarized in this section under the Norway workshop.

#### GROUND WATER/DRINKING WATER SUBPLAN

#### NORWAY AREA WORKSHOP

<u>Concern</u> : Aquifer Protection

Citizens Participating: Mr. James Wyman, Mr. Paul Brown, Mr. J. David Morse

and Mr. Michael Wagner.

Summary: Mr. Morse commented that local control of aquifers may not protect these valuable resources sufficiently. Participants generally agreed that Federal and/or State controls to prevent pollution of major aquifers is probably the best method. Thus equal protective measures would be imposed over the entire aquifer rather than each municipality having varying degrees of control and also varying control methods. Participants also felt that enforcement of controls would be better with state involvement.

Effect on EIS: (page VII G-41) Selected Alternatives should not be changed.

Concern : 208 Ground Water Monitoring

Citizens Participating: Mr. James Wyman, Mr. Paul Brown, Mr. David Morse,

Mr. Michael Wagner, Mrs. Claire Matulci and

Mr. Vernon McFerland

Summary: Mr. Wagner and Mr. Brown noted the valuable information obtianed from the 208 Ground Water Studies. Participants thought that the program should be continued through whatever funding is available. Participants felt that water supplies would be an increasing concern in the planning area and that information should be compiled on a continuing basis.

Effect on EIS: (page VIII-15 to VIII-20, page G-31'and page VIII-G 41) If more planning funds become available, then the ground water program should proceed with projects listed on page G-31. Also projects in Table II on pages VIII-15 to VIII-20 should be implemented with third year implementation funds and municipal money.

Concern : Priority scheduling in Table 2 of Implementa-

tion Strategy

Citizens Participating: Mr. Paul Brown

Summary: Mr. Brown noted that many of the priorities noted in Table 2 on page VIII 15 to VIII 20 could not be implemented by the scheduled date because of federal, state, and local funding problems. The town meeting process was noted as one of the major problems in meeting the schedule. Participants noted that many ordinances and projects requiring local funding must be brought to the town meeting process several times before favorably received.

Effect on EIS: (page VIII-15 to VIII-20) The priority schedule is only a goal and should not be changed.

#### ON-SITE RESIDENTIAL SEWAGE DISPOSAL

#### NORWAY AREA WORKSHOP

Concern : Septic Tank Pumping Schedule

Citizens Participating: Mr. Francis Anderson

<u>Summary</u>: Mr. Anderson was concerned that the arbitrary five year pumping requirement in the "On-Site Residential Sewage Disposal Ordinance" was unnecessary and that the interval should be based on the number of individuals using the system and the size of the tank.

Staff agreed that a flexible schedule as stated would be better but noted that it would be much more difficult to control administratively.

Effect on EIS: (page VII L-31) The ordinance should not be changed. If a municipality has an effective code enforcement program, the model ordinances could be modified for the municipality to relate the pumping schedule to septic tank usage.

#### PUBLIC SEWER SYSTEMS SUBPLAN

#### NOREAY AREA WORKSHOP

Concern : Septage receiving at the Norway Treatment

Facility

Citizens Participating: Mr. Robert Butters (operator Norway Treatment

Facility)

Summary: Mr. Butters was concerned with the recommendation in the subplan that the Norway Treatment Facility should receive septage from Norway residents only (VII I-64). Mr. Butters felt that the ll towns currently sending septage to Norway would not find suitable land disposal sites and therefore would discharge the septage directly to surface waters or on land where it could contaminate ground water.

Other participants were concerned that town officials would be reluctant to purchase land for land spreading because land spreading was not acceptable to the general public. They also felt that enforcement of proper septage disposal on land was inadequate.

Mr. Butters then suggested that Norway should charge for septage receiving from surrounding towns and use the money to finance an adequate pretreatment facility. The staff indicated that the facility up-grading being done with federal construction grants money might allow Norway to receive septage from several towns.

Participants then briefly discussed an alternative in the Sludge and Septage Subplan on the possibility of constructing a centralized septage treatment facility. There was concern that land could not be obtained for centralized disposal and also that transportation costs would be high and therefore discourage pumping.

Participants concluded the discussion by suggesting that all treatment facilities should have septage receiving facilities so that septage loads could be spread but to many facilities. No participants favored land spreading.

Effect on EIS: (page VII I-64) Norway should receive septage from Norway residents and can also receive septage from Buckfield, Woodstock and Sweden, since these towns contribute only 3,000 gallons per year. During the months when the ground is frozen, the Norway facility should be used by other towns: Bridgton. Harrison, Greenwood, Waterford, West Paris, Otisfield and Oxford. As other treatment facilities are comstructed in the area and a waste load allocation is completed on the Little Androscoggin River, the towns allowed to use the Norway facility after renovation should be further assessed.

Concern : Paris Sewage Treatment Facility

Citizens Participating: Mr. Francis Anderson (operator of treatment

facility) Mr. Thomas Clifford (Chairman PUD)

Mrs. Claire Matulci (citizen)

<u>Summary</u>: After a brief review of the history of sewage treatment in the Paris area, Claire Matulci expressed concern that the plant was not operating properly. Mr. Anderson stated that his sampling as well as D.E.P. sampling indicated the design removals were being exceeded.

Staff suggested that the recommendation for a Waste Load Allocation be implemented as soon as possible.

Mrs. Matulci stated that the recommendation that E.P.A. conduct a study of the facility be implemented as soon as possible.

Participants generally agreed the water quality in the Little Androscoggin had improved significantly since the treatment facility came on-line.

Participants concluded that the Waste Load Allocation and a chromium balance should be conducted and then the facility should be studied.

Effect on EIS: (page VII I-91) Selected alternatives should not be changed.

#### LEWISTON AREA WORKSHOP

Concern : Infiltration-Inflow

Citizens Participating: Mr. Myron Eames (Head of Lewiston Sewer Division)

<u>Summary</u>: Mr. Eames was concerned with the large amounts of inflow inflitration (I/I) entering many of the sewer systems in the area. Specifically he was interested to know if any federal or state funds might become available for I/I work.

The staff noted that I/I studies are now funded as part of the 201 planning stage and that the E.P.A. and D.E.P. participates in separating areas where it is more economical to do so than treat the I/I.

Participants discussed the effects that I/I has on treatment plants and subsequently on weirs. Participants noted that inflow probably affects receiving waters but also noted that most receiving waters in Maine are not used for body-contact. Infiltration uses plant capacity and increases operational costs.

Mr. Eames was also concerned with the costs of separating sewers. He noted the costs were high and that generally quoted costs do not include the house service costs for which individuals must pay. Participants also noted the difficulty of k-eping cellar and roof drains out of the new sanitary sewer unless a complete storm sewer is installed.

<u>Effect on EIS</u>: (page VII I-126) Selected alternatives should not be changed.

## <u>Concern</u> : Facility Implementation

Summary: Participants noted that the plan identifies many areas which require federal funding for implementation and further study. They noted the need to continue and possibly increase construction grant funding.

Participants noted Sabattus Pond as an example where construction grants funding is not enough to correct all pollution problems. Sabattus has had a facility plan done to determine the best method of treating the pollution in the village area which is impacting the Sabattus River and the ground water. However, funding has been available to study and formulate a plan to eliminate pollution of the lake from cottages and agricultural land in the watershed.

The staff noted the non-designated 208 funds were not sufficient to address all the problems. It is necessary to study agricultural sources as well as on-site sewage disposal of residences surrounding the pond. Funding of controls would come through U.S.D.A. (ACP funding) for agricultural problems and the E.P.A. construction grant process for the on-site disposal problems. Without a designated 208 agency in the area, no funding would be available for a detailed and coordinated planning process or for coordinated implementation process.

The staff suggested that in these areas possibly the 201 facility plan concept could be expanded to at least account for a coodinated planning process. The state D.E.P. would then become the lead agency with the cooperation of all affected municipalities.

Effect on EIS: (VI-56) The recommendation to fund further planning through the 208 process should not be changed. However, funding of major planning activities in non-designated areas must occur.

#### LAND USE SUBPLAN

#### NORWAY AREA WORKSHOP

<u>Concern</u> : Aquifer Protection

Citizens Participating: William Diehl and Robert Littlefield

Summary: The participants felt that the federal and/or state should enact aquifer or ground water protection legislation.

<u>Effect on EIS</u>: (pages VII G-41) The recommendation on state enabling legislation should be modified to reflect the need for more comprehensive legislation.

#### LEWISTON AREA WORKSHOP

<u>Concern</u> : Aquifer Protection

Citizens Participating: Charles Varney, Leo Curran, Charles Riley and

James Lamb

<u>Summary</u>: Mr. Riley noted that drinking water sources needed protection. Participants felt that the local Aquifer Protection Ordinance was a viable option. The staff noted that townwide zoning might be needed to have the Aquifer Protection Ordinance remain at the local level.

<u>Effect on EIS</u>: (pages VII G-41) Participants agreed with the selected alternatives.

Concern : Subdivision Regulations

Citizens Participating: Leo Curran, Charles Riley, William Diehl and

James Lamb

<u>Summary</u>: The participants noted that local subdivision regulations were needed in most communities to "put teeth" in the preformance quidelines contained in the state law.

Effect on EIS: (page VII L-20 to L-23) No changes should be made.

Concern : Site Plan Review Ordinance

Citizens Participating: Leo Curran, Charles Riley and James Lamb

Summary: The need of a Site Plan Review Ordinance was discussed. Participants noted it should be used to: (1) provide for local review of industiral, commercial, institutional and residential development proposals in the absence of a townwide zoning ordinance; and, (2) provide for review of those development proposals which do not meet the size requirements of Site Location Act, but which would still have significant impact upon the environment and municipal services.

Effect on EIS: (pages VII L-23 to L-26) No changes should be made.

<u>Concern</u> : Sediment and Erosion Control

Citizens Participating: Leo Curran, James Lamb, Darryl Brown and

Charles Varney

<u>Summary</u>: Mr. Brown noted that the model ordinances did not include standards for erosion control on steep slopes. The comment will be addressed under third year funding since the model ordinances cannot be revised at this time.

Effect on EIS: (pages VII L-27 to L-30) No changes should be made; however slopes need to be addressed in any further redrafting of the sediment and erosion controls in third year.

<u>Concern</u> : Residential On-Site Sewage Disposal

Citizens Participating: Charles Varney, James Lamb, Charles Riley

and Leo Curran

Summary: Mr. Varney noted that the ordinance would have little chance of adoption through the town meeting process. Mr. Riley noted that enforcement would be a major problem of such an ordinance.

Effect on EIS: (pages VII L-30 to L-33) No changes should be made.

<u>Concern</u>: Shoreland Zoning

Citizens Participating: Charles Varney

<u>Summary</u>: Mr. Varney noted that shoreland zoning should encompass the same areas as the local ordinance on the Flood Hazard Building Permit System. The staff noted that although not addressed in the plan, the commission was considering this in other activities.

Effect on EIS: No changes should be made.

Concern : Growth Control

<u>Citizens Participating</u>: Charles Riley, Charles Varney and James Lamb

Summary: Participants felt that the towns in the region would soon be facing the growth control issue and were pleased that the growth issue had been addressed in the 208 plan. Participants felt the building permit limitation system was most applicable and acceptable to the towns in the region.

Effect on EIS: (pages VII L-44 to L-87) No changes should be

### **IMPLEMENTATION STRATEGY**

### NORWAY AREA WORKSHOP

<u>Concern</u> : Municipal Approval

Citizens Participating: Mr. L. R. Brewer and Mr. Paul Brown

Summary: Mr. Brown and Mr. Brewer were concerned about the effects on a town should it disapprove the plan or should the town meeting not approve separate implementation categories. The staff responded that E.P.A. and state sanctions on a municipality that did not approve the plan would probably depend on the reasons the plan was not approved. for example, if it could be shown that the plan recommendations were reasonable, then a town's refusal to adopt the plan could result in sanctions by E.P.A. such as withholding of facility construction funds, or other federal funds.

The staff also noted that the town meetings refusal to adopt one element of the plan does not mean that the town has failed to implement the plan and automatically will be subject to federal or state sanctions. The town meetings may not approve ordinances and other elements in the year scheduled but may then approve them in the next year. Because priorities can and will change over time, it is recognized that some plan recommendations may become out-dated and need more study.

Mr. Borwn then noted that the implementation schedule was very restrictive and could not be met. Mr. Brown recommended the dates be dropped.

The staff noted that the dates were project in June of 1977 and that third year technical assistance funds were expected in the fall of 1977. The lack of funding through October will force most of the 1978 dates to be moved into 1979.

<u>Effect on EIS</u>: (page VIII-15 to VIII-20) It appears that the priority scheduling in Table 2 should be revised before it is agreed upon as milestone dates.

## Written Comments

Written comments received by the Commission and through the Environmental Protection Agency are presented with responses.



# United States Department of the Interior

### OFFICE OF THE SECRETARY

Northeast Region 15 State Street Boston, Massachusetts 02109

December 15, 1977

U. S. Environmental Protection Agency Environmental Policy Coordination Office John F. Kennedy Federal Building, Room 2203 Boston, Massachusetts 02203

Attention: Mr. Robert E. Mendoza

#### Gentlemen:

The Department of the Interior has reviewed the management plan and environmental impact assessment for the Lewiston-Auburn Little Androscoggin River Section 208 Water Quality Program as requested in your letter of October 10, 1977.

The document's treatment of subjects of concern to us is generally adequate. The following specific comments are provided:

Section VII G - In light of the complex and diverse nature of the area's numerous spatially distinct aquifers we believe a thorough study of these aquifers will be necessary for successful implementation of the plan.

Two systems of units seem to be confused in referring to transmissivity (or transmissibility). In the second line of the last paragraph on page VII G-29 and in lines 10 and 11 of the second paragraph on page VII G-30, the units should be gallons per day per foot, not gallons per day per square foot.

Sincerely yours,

William Patterson-

Regional Environmental Officer

DEC 23 1277

## RESPONSE TO DEPARTMENT OF INTERIOR

Section VII G- Re: Aguifers

The staff concurs that further studies of the areas aquifers are very necessary; however, sufficient data exists as a result of U.S.G.S. and 208 studies to provide base data for the decision maker to carry out the intent of the plan.

On page VII G-29 and VII G-30 your comment is correct. The units for transmissivity should be gallons per day per feet, not gallons per day per square foot.

NOTE: On page VII G-30, line  $18 - 32,522 \text{ ft}^3/\text{day}$  should be  $32,522 \text{ ft}^2/\text{day}$ 

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: December 7, 1977

Androscoggin Valley Regional Planning Commission SUBJECT:

Waste Treatment Management Plan

FROM:

Solid Waste Program

Dennis Huebner, Chief June Hulm

TO: Walter Newman, Chief Water Quality Branch Water Programs Division

> The Solid Waste Program has reviewed the subject plan according to the procedures given us at the 208 plan approval meeting held by your office. Our comments are limited to whether or not the plan is consistent with state and federal law. We have also contacted our counterparts in the state solid waste programs to ensure that they are involved in the states review process. It is the responsibility of the Water Quality Branch to ensure that the subject document satisfied the Project Control Plan.

> In September 1975, this office distributed to each 208 agency solid waste management guidance for 208 plans and a suggested minimum level of study (see attachment). Both the guidance and the minimum level of study identified areas and outputs compatible with the objectives of the Section 208 Areawide Waste Treatment Management Program. In general this report satisfied most of the suggested outputs of these documents. However, no surface or subsurface monitoring around any disposal site was initiated therefore, their affect on the environment is unknown.

The following are our specific comments concerning major issues:

- Page VII E-2 The discussion on this page and subsequent pages would lead one to believe that the impact of a dump and landfill is similar. This is not true. A sanitary landfill can be sited to minimize impact on the environment; a dump does not.
- Page VII E-6 A sanitary landfill is not a short term solution. No matter what we do in the future in terms of technology, there will always be residue or unprocessible waste that must be disposed of on land via sanitary landfill.
- 3. Page VII E-11 Returnable Bottle Legislation will not significantly reduce the volume of waste to be disposed.

4. Page VII E-13 - On Page VII E-8 the report indicated that many of the existing open burning dumps are located in aquifer recharge areas. No monitoring has been initiated. On Page VII E-13 the report recommends that these sites continue to be used (no mention is made of compliance with State air or solid waste regs). The recommendations on the following page do not indicate the need for monitoring or compliance with Federal/State regs. The logic of this presentation needs to be reassessed.

### RESPONSE TO E.P.A. SOLID WASTE PROGRAM

Second paragraph: Re: subsurface monitoring

Having experience with both wells and surface waters in close proximity to open dumps in the planning area, the staff determined that water monitoring near the dumps was impractical. Of the \$339,000 grant it was felt that over \$100,000 might be necessary to locate leachate plumes. The staff worked with several localities and other agencies to determine leachate problems of immediate concern. Through D.E.P. Solid Waste Division and municipal action test wells have been or are being placed at the Paris and Sabattus dumps. Results were not available for inclusion in the 208 document.

### Re: Dump vs Landfill

Response: On page VII E-2 and subsequent pages, it is stated that solid waste disposed in landfills can produce leachate. This is a valid statement. A dump or landfill can be sited to reduce potential impacts; the landfill can be operated so as to further minimize impacts. However, if not properly sited and operated, landfills can produce leachate which can then have serious environmental effects. The document recommends siting in accordance with the state regulations which attempt to minimize impacts.

### Re: Short-term Solution

Response: The plan indicates that landfilling of raw refuse is probably the most cost-effective solution in the short term. However, as land becomes scarce, other methods of waste disposal such as shredding prior to landfilling or incineration with ash landfill will become more feasible. Recommendation 3 on page VII E-14 realize the need to set aside some land for future landfills as there will always be a need.

Re: Returnable Bottle Legislation

Response: Up to 5 percent of the refuse is recyclable glass.

Re: Open Burning Dumps

Response: Federal law prohibits open burning while state law requires that solid waste be landfilled in accordance with D.E.P. regulations. Municipalities are well aware of these requirements as stated on page VII E-4. Page VII E-13 indicates municipalities should convert existing open burning dumps to landfills while other sites and other alternatives are being assessed. The document is primarily concerned with relocating landfills and dumps to prevent leachate from contaminating aquifers. Although the state regulations allow conversion of an old dump to a landfill, the landfill will not necessarily protect the underlying ground water as the soil structure requirements for these changes are greatly relaxed over new siting requirements.

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: November 11, 1977

SUBJECT: Androscoggin Valley 208 RPC - Management Plan and Environmental Impact
Assessment

FROM: Clara Chow, Sanitary Engineer

10: Ed Woo, Water Quality Branch

After reviewing this management plan and environmental impact assessment, it is rewarding to see that changes in the present copy reflect some of the comments made on the first draft with regards to water supply. One important comment from the first draft dealt with the lack of inventory data in the 208 report. This, I understand, is currently being tabulated, but due to the time schedule of these reports, that information will not appear in the management plan. Even so, there should be some reference to the fact that this data is available and will be utilized for future management and protection programs of the water supply resources. Consider for example problems 1 and 2 on page VII G-37; they state the lack of hydrological knowledge of the aquifers and the increasing demand by municipalities for water supplies derived from groundwater. It is obvious that these two problems are related and that solutions for both are necessary. The Comprehensive Hydrologic Studies under Proposed Future Programs solves the first problem and the inventory data will help to solve the second one. Therefore, under Proposed Future Programs, it is recommended that there should also be a continuous monitoring of population consumptions and demands. This data could then be used to update the management plans and the protection measures to assure that the availability of the drinking water is abreast with the demands.

On page VII G-38, there is a list of alternatives for drinking water/ groundwater protection. One means of drinking water protection which should be investigated is conservation. Realistically, conservation should not be taken as an absolute solution, but it is on the other hand a useful compliment to any of the other alternatives.

Alternative 5 on page VII G-40 concerning the Safe Drinking Water Act must again be revised in light of the latest development. Maine's primary enforcement authority was effective as of October 1, 1977.

As far as the Environmental Impact Assessment aspect of this report, the discussion section (p. VII G-34 to G-36) is not as indepth as it should be. During the presentation given by A.V.R.P.C. in August 1977, several critical problems, such as storage of road salts and sludge and solid waste disposals, were cited as potential contaminants of groundwater. The 208 plan notes these major technical findings also, but if this report is to be an impact assessment as well, a more extensive evaluation of these contaminants with respect to their affects on existing and potential water supply resources should be delineated. Any impact statement requires slightly more than a notation of the problem.

### RESPONSE TO E.P.A. WATER RESOURCES

Re: Estimates of Water Needs

Response: The commission is in the process of projecting future needs for the entire region. The projections for theplanning area will be done as part of the third year implementation program since it will be necessary to have these projections to support the aquifer (drinking water) protection measures being considered by eight of the ten towns. As part of the commission's future work plan the statistics on water usage will be kept current.

Re: Aquifer Identification and Hydrology

Response: Some work will be done in conjunction with the municipalities and some work will be done with the third year funds. However, subsequent 208 planning funds would be most helpful in obtaining this information.

Re: Conservation

Response: Conservation should be considered as a viable alternative as decribed. However, conservation does not significantly affect the described alternatives.

Re: Maine's Primary Enforcement Authority of Safe Drinking Water Act.

Response: This fact does not affect the alternative assessment.

Re: EIS

Response: Road slat storage, sludge, and solid waste were discussed in detail in the Misscellaneous, Sludge and Septage and Solid Waste Subplans respectively. Therefore, information was only summarized in the Ground Water/Drinking Water Subplan.



## STATE OF MAINE DEPARTMENT OF HUMAN SERVICES AUGUSTA, MAINE 04333

o Court Stra November 17, 19 RECEIVED ZT 1977

U. S. Environmental Protection Agency Environmental Policy Coordination Office John F. Kennedy Federal Building Room 2203 Boston, Massachusetts 02203

Attention: Robert E. Mendoza

Subject: Draft, Environmental Impact Statement for the Androscoggin

Valley Regional Planning Commission, Water Quality Management

Plan

Dear Mr. Mendoza:

This office is in receipt of your letter dated October 10, 1977, with the accompanying subject report. The following constructive critism, pertaining to subsurface disposal, is offered for your consideration.

- Page HE 9, third line from bottom, "Leach field sizes are indicated to read 400 to 2400 square feet". Apparently the 2400 is a typographical error and should read 1400 square
- Page H-13, Third line from top, "THE SOIL SCIENTIST" then designs .....". We would point out that this term should be SOIL EVALUATOR rather than Soil Scientist.
- 3. H-13, Center of page, "The Local Plumbing Inspector (LPI) LICENSED BY THE STATE and is EMPLOYED by each municipality to issue permits .....". It should be noted that the Local Plumbing Inspector is certified, not licensed, by the State and he is appointed by each municipality to issue permits. An LPI is appointed after passing a written examination to indicate that he has a basic knowledge of the plumbing code.
- 4. Page H-13, Last Paragraph, "Malfunctioning systems are not well defined in the code: ......... We direct your attention to Section 2.10, CODE ENFORCEMENT, page 10 of the Maine State Plumbing Code for your consideration. A copy of the Code is enclosed.
- 5. Page H-14, Paragraph 1, The statement is made "In some areas, roadside ditches APPEARED to contain septic material; .....". We would suggest that this is a strong statement to make based on an assumption. What substantiating documentation is available?

- U. S. Environmental Protection Agency Page 2. November 17, 1977
  - 6. Page H-14, Paragraph 2, Subsection 21, the statement is made, "Septic system leachate is a major source of coliform bacteria in ground water and is the only identifiable source in these areas where wells were found contaminated with coliform". We would suggest that this statement presents a grossly distorted focus of the actual condition of the well water in this particular 208 region. A strong statement is being based on an assumption that the coliform content of the well water is a result of malfunctioning disposal fields, which may not be correct. For a report of this type and the potential repercussions, these facts should be documented.
  - 7. Page H-14, Paragraph #3, The statement is made, "In some cases septic systems were the only possible source". Again, this statement is made based on an assumption; not based on fact. One may certainly derive an erroneous conclusion after reading this particular page.
  - 8. Page H-15, Second paragraph The state is made, "A column also presents SUSPECTED REASONS FOR MALFUNCTIONS:" We would point out that it is very dangerous for a professional group or association to indicate suspect reasons without having more documentation then has been presented thus far.
  - 9. Page H-16, Second paragraph, This paragraph pertains to the problems of conversion units from seasonal to year-round dwellings and possible cause of malfunctions. It should be pointed out that the Maine legislature passed a conversion statute during 1977 which became effective approximately October 24, 1977. No reference is made to this Bill in this draft a copy is attached, for your consideration.
  - 10. Page H-16, Third paragraph, Statements are made indicating that the suspected reasons for malfunctions and possible methods of correction are identified. In reference to Tables OS2 and OS3, it may not be rational to make the quantity of assumptions which have been identified thus far.
  - 11. Table on Page H-30, Second paragraph, Reference is made that Table OS4 summarizes the well sample records for 1971 to 1975 as reviewed at the Department of Human Services. Several statements on Page H-30 and H-32 have resulted in erroneous and misleading conclusions in subsequent paragraphs. A statement is made in the second paragraph of Page H-30 referring to "Significant coliform bacteria levels". A discussion with Mr. Fergus Lea of AVRPC dated November 14, 1977 revealed that significant coliform level is considered any quantity in excess of 1 colony per 100 millimeters of sample. It should be remembered that any water sample in excess of l colony is considered unsatisfactory but not necessarily significant. Furthermore, the statement is made in the same paragraph: "26% of all wells sampled were found to be contaminated". This statement is based on the erroneous assumption that all water samples in excess of l colony of coliform were contaminated. This is not necessarily so and in fact very likely is not so due to the fact that shallow water supplies, springs and well points are included in this sample.

The third paragraph of this page indicates, "Most of the wells found with coliform bacteria PROBABLY resulted from nearby malfunctioning septic systems". Presumably this statement is based on the assumption that all coliform resulted due to existing malfunctioning systems. Although not written as a statement of fact, this sentence certainly can very easily be misconstrued.

The fourth paragraph of this page indicates, "If the well samples sent to the Department of Human Services are representative, then over 2000 dwellings in the Planning Area have subsurface disposal problems." It appears that the 2000 figure was determined based on 26% of 9000 existing dwellings in the AVRPC. There are several unclear and misleading statements on this particular page. However, this statement may be one of the more serious misrepresentations. It certainly does not reflect well on the State of Maine or the AVRPC and can misconstrue the entire situation of subsurface disposal systems. In the same paragraph as above the statement is made that subsurface disposal systems are a severe problem in the planning area. We would point out that very little documentation has been provided and most of the conclusions have been based on erroneous assumptions. Enclosed with this letter is a memo dated August 29, 1977 sent to Mr. Rupert Jennings, Department of Environmental Protection, who is coordinating the work with the various Regional Planning Commissions in Maine. You will note that Item #5 and 6 specifically refer to the subject of coliform bacteria as it relates to subsurface disposal systems.

- 12. Page H-34, First paragraph, indicates that the average cost of a new system is approximately \$2500. This value seems somewhat inflated in our experience. We would suggest that the average cost would be approximately \$1500 to \$1800. It is noted that the installation of a discharge system costs between \$3000 and \$5000. This value seems somewhat inflated but we do not have any definite figures to present.
- 13. Page H-34, Last sentence on this page, the statement is made that septic system malfunctions have degraded Taylor Pond and caused grownwater degradation in the area of Northern Oxford. This office is not aware of adequate documentation to substantiate this statement.
- 14. Page H-37, First paragraph, The statement is made, "Enforcement of the State plumbing code, especially as relating to malfunctioning systems, is a major problem in the planning area". Enforcement has been a problem in the past and certainly has not been resolved to date. We would point out, however, that very significant improvements have been noted since 1974.
- 15. Page H-37, Reference to the only question on this page regarding the inspecting of regular maintenance of septic tanks be established through state or local authorities. This question has not been answered by the Regional Plan-

- U. S. Environmental Protection Agency Page 4. November 17, 1977
  - ning Commission; neither has it been pointed out that a bill was introduced in 1977 legislature to provide money for an inspection of septic tanks. This Bill was soundly defeated.
  - 16. Page H-37, Last paragraph, "Municipal officials and policy committee has expressed the need for increased enforcement of all ordinances". We would point out that a bill has been on the books for approximately 20 years mandating that the municipal officials have the authority for enforcing the code. Furthermore, the bill was modified during 1977, allowing a ten-year pay back should the municipal officials deem it necessary to replace an individuals disposal field. It has been the intent of the legislature and this office policy that municipal officials have the prime responsibility to enforce the plumbing code.
  - 17. Page H-39. First sentence. "A cost effective program of plumbing code, inspection and enforcement could be established in the Department of Human Services". We would point out that prior to 1974 the State had four State Plumbing Inspectors who were responsible for inspection of complaints and initiating court action. The experience of our office is that while these individuals were available the municipal officials depended on the State officials to determine any problem and to initiate legal action. Therefore, nothing, or very little, was done unless the State initiated the action. The four specific positions were eliminated in 1974. regional inspectors are available throughout the State who do perform inspections of malfunctioning systems and assist municipalities in legal procedures when desired. However, the prime responsibility lies with the municipality to perform the inspection and initiate the legal proceedings. Since 1974 a considerably increased interest has been expressed by municipalities and the effectiveness at the various courts has been much improved.
  - 18. Page H-39, Center of Page, The statement is made..."Municipal officials have noted communication problems between the Department of Human Services and the local level". We have no documentation that a communication problem exists. We are in very frequent communication with Plumbing Inspectors, municipal officials and representatives of Regional Planning Commissions, plus other individuals for Code or legal interpretations and assistance. We would certainly appreciate obtaining any available information to clarify this situation or to correct any existing problem.
  - 19. Page H-39, Enclosed box at bottom of page, This particular section is addressed in the seasonal conversion bill which should be included in this draft since it does have considerable impact around all lakes.
  - 20. Page H-40, Box at top of page, Pertaining to maintenance ordinance Although the legislature would not accept a State

- mandated maintenance ordinance, a municipality may by ordinance, adopt regulations more strict than the minimum State Plumbing Code. We would suggest that the Planning Commission persuade any municipality to adopt such ordinances if so desired.
- 21. Page H-41, First sentence, A statement is made, "At the beginning of the planning process, few citizens realized the extent of the subsurface disposal problems". This statement should be clarified to indicate just how serious this problem may be and substantiating documentation should be provided.
- 22. Page H-41, The first paragraph indicates that citizen involvement is necessary to implement local ordinances and for proper enforcement. It also indicates that a major educational tool would be state-wide effort sponsored by the Department of Environmental Protection and/or the Department of Human Services; possibly with the services of the AVRPC. We would point out that the Department of Human Services has been conducting seminars since the Spring of 1974 in order to train or better educate municipal plumbing inspectors, soil evaluators, public officials, representatives of the Regional Planning Commissions and the general public.
- 23. Page H-41, Second paragraph, A statement is made, "Other 208 agencies in Maine have identified subsurface disposal as a problem in their areas. (There is a footnote #6 which refers to the Greater Portland Council of Governments and Southern Kennebec Valley Regional Planning Commission.) We would suggest that the AVRPC indicate the actual degree of problem which other Regional Planning Commissions indicated. purported that two other agencies in Maine have identified subsurface disposal as a problem in their areas; although the degree of problem is not identified. We would point out that Greater Portland Council of Governments has indicated that a problem exists although the degree of accuracy and documentation has not been provided. Southern Kennebec Valley Regional Commission has done a very comprehensive evaluation of this problem through the Cobbossee Watershed District. Should you have any questions, we would suggest that you contact Mr. Thomas Gordon, Executive Director, Cobbossee Watershed District, 15 High Street, Winthrop, Maine 04343. Mr. Gordon has performed an extensive survey for potential causes of lake eutrofication in this area. It is our impression he has determined that malfunctioning disposal fields are a relatively minor problem compared to other sources of nutrient addition to the lakes. He feels that the issue of disposal systems is more of a management issue and health oriented issue rather than a general overall problem, as implied by AVRPC.
- 24. Page H-43, Item 7, Reference is made that the AVRPC should conduct semi-annual workshops on the plumbing code. It is our concern that the AVRPC, or other regional planning commissions, may not have individuals on their staffs qualified to interpret the Maine State Plumbing Code, as indicated by the frequent requests in our office from the various Planning Commissions on interpretation. If the Planning Commissions hire qualified additional staff, an

- U. S. Environmental Protection Agency Page 6. November 17. 1977 additional layer of bureaucracy will result.
  - 25. Page H-45 Second paragraph, The statement is made that an average system in the planning area costs approximately \$2500. As has been indicated previously, this appears to be inflated by approximately \$1000.
  - 26. Page H-46, The statement is made, "Rehabilitation for installation of systems at cottages owned by people from out-of-state could be disregarded since seasonal dwellings are not as significant a problem; ....". This particular statement should be clarified since it could be misinterpretated several different ways.

It is a major concern of this office that many erroneous assumptions and conclusions have been drawn or inferred in the section entitled: "Residential on-site sewage disposal subplan". This office is concerned that those not familiar with the results throughout the State and the AVRPC area may draw a conclusion that the State of Maine is essentially an open cesspool. Whereas, in all truthfulness, since the initiation of the soil evaluation program dated July, 1974, this office has witnessed a most significant improvement in the quality of disposal systems installed, the dependability of life witnessed and improvement in code enforcement of the plumbing code.

If we may be of assistance to clarify any questions or add additional documentation, please feel free to contact this office, at your convenience. A copy of the Maine State Plumbing Code is enclosed for your consideration. We trust that the above constructive criticism will assist the E.P.A. and AVRPC to hopefully eliminate any misconceptions and make this report more valuable in the future.

Very truly yours,
Engene Morean

Eugene Moreau, P.E.

Waste Water & Plumbing Control Division of Health Engineering

EM/mo

cc: AVRPC, 34 Court St., Auburn, Maine 04210 Attn: Craig Tenbrock Al Corson, DEP

Encs.

## RESPONSE TO DEPARTMENT OF HUMAN SERVICES

Re: Leachfields Sizes (1)

Response: The 2,400 square feet should be 1,400 square feet.

Re: Soil Scientist (2)

Response: "Soil Scientist" is an incorrect term and should read "Site Evaluator"

Re: LPI's (3)

Response: The LPI is certified by the state not licensed as the plan stated. The LPI is also "appointed" by the municipal officials.

Re: Malfunctioning Systems (4)

Response: The second paragraph of this section states, "Malfunctioning private sewage disposal systems, including septic tanks, cesspools, ..., and the like, have become a menance to the health and general welfare of the citizens of this State, and are declared to be a nuisance". LPI's and Department of Human Services personnel use their past experience and water sample analysis to determine malfunctions.

Re: Roadside Ditches (5)
Well Water (6)
Sampling Data (7)

Response: Comments 5, 6, and 7 refer to methods used to detect areas of malfunctioning septic systems. In light of the comments the wording appears to be misleading. Pages 14, 15, and Tables OS2 and OS3 locate problem areas or potential problem areas.

All areas reported as known problem areas were identified by Local Plumbing Inspectors, Code Enforcement Officers, or their immediate supervisors. Three methods were used to confirm the reported areas. These methods included:

- Visual inventories of areas. If leachate was suspected in roadside drainage ditches it was traced back to surfacing effluent above leachfields.
- 2. Well records were used to identify areas where housing density and soil conditions probably resulted in coliform migration into ground water from septic system leachfields.

3. Water samples were used in conjunction with agriculture erosion studies (SEDEL) to determine if pollution was eminating from shoreline development or agriculture practices. In cases noted in this subplan, the contaminants were traced to shoreline development.

It should be noted that the most widely used detection method was the visual inventory of effluent above leachfields. Other methods only detected one area each. The information was carefully reviewed by LPI's, the staff geologist and the staff engineer. The statements contained in the detection methods were not made to identify the degree of pollution. For instance, the statement on "Septic System leachate being a major source of coliform bacteria in ground water..." was true for the one identified area but was not true of the region in general.

Re: Suspect Reasons for Malfunctioning (8)

Response: It should be noted that for years state, federal and local dollars have been spent to extend sewers and private water lines and build treatment facilities in areas where documentation of exact problems is sketchy at the very best. Limited data and professional opinions of engineers, soil scientists and plumbing inspectors led to the identification of these areas. It is important to note these areas to create an awareness of the problems.

Re: Conversion of Seasonal Dwellings (9)

Response: The bulk of the plan was written prior to enactment of this legislation. This legislation controls one of the primary concerns in this area.

Re: Suspected reasons for malfunctions (10)

Response: The reasons were formulated for the general area identified as having significant malfunctions. It was a logical extension of the professional knowledge obtained for each area. The staff geologist and environmental engineer worked closely with LPI's and soil scientists in the area to formulate this information which is considered necessary for this report. The staff agrees that positive documentation is desirable; however, budget limitations did not allow a detailed survey of each problem area.

Re: Well Samples (11)

Response: The staff realized that one coliform colony per 100 milliters does not necessarily constitute a health hazard. Whether the level of coliform is "significant" or "unsatisfactory" is a matter of semantics. The sentence that "most wells found with coliform bacteria probably resulted from nearby malfunctioning septic systems" was based on some correlation of data between well samples and previously cited problem areas. As presented the information is misleading and should be disregarded.

Re: Cost of Systems (12)

Response: The costs were compiled by surveying local contractors and sales personnel.

Re: Taylor Pond and Northern Oxford (13)

Response: U.S.G.S. samples, the SEDEL study conducted by S.C.S., and other lake monitoring indicates that coliform contamination as well as high nutrient concentrations in the pond are a result of shoreline development. Malfunctioning systems, possible direct discharges and shoreline erosion are the contributing factors. The LPI for Auburn confirmed that there are numerous malfunctioning septic systems in the area. Well records indicate ground water degradation in Northern Oxford; the LPI and a Professional Engineer confirm that the coliform bacteria are probably entering the ground water through septic system leachfields.

Re: Enforcement (14)

Response: It should be noted that little difficulty with systems properly installed under the Plumbing Code since 1974 was noted. The subplan should have contained a statement of support for the existing State Plumbing Code and should have emphasized improvements since 1974. However, improved enforcement is still needed.

Re: State Inspection (15)

Response: It is for these reasons that a septic system maintenance procedure at the local level was selected. Therefore local municipalities can determine the need on a local level.

Re: Enforcement (16)

Response: Even though local officials have the responsibility under state law to enforce the Code, they expressed difficulties with the system. They noted that his problem is often a result of the local political climate. The staff suggested that a uniform system of inspection may eliminate some of the local politics. It is hoped that the 10 year pay back system recently enacted will help this situation.

Re: Inspection at the State Level (14)

Response: The staff agrees with this assessment and the local officials felt the present system to be viable if more emphasis is placed on code enforcement at the local level.

Re: Communication (18)

Response: As the department realizes municipal - state communication problems is a sensitive subject. The staff noted that there was some willingness on the part of local officials to discuss these problems, but no documentation was provided at the municipal level. Regional planning commission sponsored workshops involving Plumbing Inspectors and other local officials and Health Engineering representatives might help to create a better climate for information exchanges and improve any communication gap.

Re: Seasonal Conversion (19)

Response: The comment is correct and is addressed under <u>Conversion</u> of <u>Seasonal Dwellings</u>. (Comment 9)

Re: Maintenance Ordinance (20)

Response: The staff is working with several municipalities to adopt such an ordinance which must also be approved by Health Engineering.

Re: Extent of Problems (21)

Response: The subplan should state that few citizens realized the number and complexity of subsurface disposal problems. As a result of the 208 process, however, local officials and citizens have become better informed about problems in their areas and also about the complexity of septic system operation. Local officials now realize that systems must be properly designed and installed and also realize the necessity of adequate enforcement to prevent future problems.

Re: Education (22)

Response: The staff has attended some Health Engineering seminars. The reference to public education in the subplan is geared to education of the general public through the use of news media.

Re: Problems in Other Areas (23)

Response: In the context used it is not necessary to detail the extent of the problem. A.V.R.P.C. has not reviewed the work of other 208 agencies sufficiently to make a judgement on its technical quality. Since there are other agencies identifying a problem, regardless of the degree, it seemed reasonable to consider a statewide educational effort.

Re: Workshops (24)

Response: Workshops would be sponsored by A.V.R.P.C. with input from full-time LPI and Code Enforcement Officers, certified Site Evaluators professional engineers and health Engineering personnel if the Department wishes to participate.

Re: Cost (25)

Response: This was addressed under <u>Cost of Systems</u>

Re: Seasonal Dwellings

Response: This statement is poorly supported and should not have been made. It was based on the fact that reasonably adequate septic systems should not fail since there are substantial resting periods between periods of use. However, there are seasonal dwellings with extremely poor systems or no system.

A.V.R.P.C. realizes the concerns of the Department of Human Services, Division of Health Engineering. The staff and Policy Advisory Committee feel that, with the exception of the regional well data on coliform bacteria, the findings and conclusions are not unwarranted and that the recommendations will lead to significant improvement in the water quality of the region. The Department comments of Augusta 19, 1977, which were made on the initial draft document follow. The comments were not received in time to respond to them before the plan was printed.

## Department of Human Services

STATE HOUSE, AUGUSTA, MAINE

		Dute August 29, 1977
To	Rupert Jennings, Department of Environment Protection	
From	Eugene Moreau, Division of Health Engineering	
Subje	ect 208 program draft from Androscoggin Valley Regional Plan	nning Commission

This office is in receipt of your letter dated August 11, 1977 with a copy of Androscoggin Valley's sub plan for on-site sewage disposal. The following comments are submitted for your consideration:

- 1. Page No. H-1 The fifth sentence indicates, "It is evident that both industries and individual residences probably have discharged their waste directly to surface waters for many years". We would point out that this statement is contradictory. The first portion indicates that it is evident, however; the center portion indicates probably.
- 2. Page No. H-10 The fourth line should indicate that septic tanks vary in size from 750 to 1200 gallons for single family dwellings. Page No. H-10 No. 3 indicates that inadequate maintenance is a major problem with septic systems. We feel this should be inadequate maintenance and improper use is a major problem ----
- 3. Page No. H-10 The fifth line in the last paragraph indicates that the worst condition is a seasonal high ground water table surrounding the leach field. The same paragraph also indicates "in leach fields that are undersized for the soil conditions, the liquid wastes can add sufficient moisture to the soil to hinder treatment". It is our understanding a disposal field which is significantly undersized will develop a thick black bacteria MAT which substantially acts as a barrier to reduce or prevent the flow of water into the soil. The net result is a malfunctioning system because most of the sewage can only pass in an upward direction to the surface of the ground.
- 4. Page H-13 The statement is made that percolation test could be done during any season of the year. This is incorrect. Percolation tests can not be conducted when the ground is frozen.
- 5. Page No. H-14 Subparagraph No. 2 The statement is made "Septic system leachate is a major source of coliform bacteria in ground water and is the only identifiable source in many areas where wells were found contaminated with coliforms. This is a very strong statement to make without furnishing adequate documentation. Coliform bacteria comes from a variety of natural organic sources such as decayed leaves and vegetation. This is a common source of coliform bacteria in improperly constructed dug wells.
- 6. Page NO. H-J4 ~ Subparagraph No. 3 The last sentence indicated "In some cases septic systems were the only possible source". We would suggest that the sentence should read the only obvious source rather than possible source. For example manmade pollution is not an instantaneous fact but consists of materials being deposited into the body of water over a period of time. We also point out that natural naturification occurs simply from rainfall or from decaying vegetation.

7. Page No. H-35 Reference is again made to enforcement of the plumbing code. We concur with this statement. We are finding that in more and more towns it is becoming politically expedient to enforce the plumbing code. Perhaps the regional planning commissions at their various meetings could encourage additional enforcement by the municipalities.

It may be well to indicate that an 80,000 square foot lot is now desirable both for very sandy soil texture and for a silt soil texture, as well as pointed out that the sandy texture is not nearly as efficient in removing nitrogen ions as the silt texture. We are also uncertain whether reference is being made to stronger emphasis the plumbing code enforcement, by a state agency or with present municipal or regional system.

We trust that these comments will be accepted in a vain of constructive criticism and are of some assistance to you. Also enclosed is  $\alpha$  copy of Senate Bill No. 430 submitted by the State of California this year which may be of some interest to DEP and Androscoggin Valley.

If we may be of any additional assistance please feel free to contact this office.

EM

## STATE OF MAINE

## DEPARTMENT OF TRANSPORTATION

TRANSPORTATION BUILDING AUGUSTA, MAINE

04333



ROGER L. MALLAR

Commissioner

289-3131 Bill Reed.

December 8, 1977



U.S. Environmental Protection Agency Environmental Policy Coordination Office John F. Kennedy Federal Building - Room 2203 , 02203 Boston, MA

Attention: Robert E. Mendoza

Dear Mr. Mendoza:

Thank you for sending us a copy of the "Draft Environmental Impact Assessment on the Draft 208 Waste Treatment Management Plan for the Androscoggin Valley Regional Planning Commission". Following are some comments for your consideration that are related to MDOT activities:

- (1) It might be appropriate to mention somewhere in the Construction Subplan (VII C) that MDOT does have detailed standards and specifications regarding erosion control and pit rehabilitation associated with its federally aided construction projects.
- (2) Regarding the discussion of salt storage on page VII D-2; it might be of interest to note that it is MDOT policy to store salt on concrete pads under cover (e.g., salt sheds) and to locate such salt piles so as to minimize the likelihood of contaminating groundwater.
- (3) Page VII D-6 contains a recommendation to hold "cooperative workshops". On page VII D-12 there is a recommendation for MDOT to "expand its road salt usage training programs to the local level" by means of these workshops. Finally, on pages VII-28,29 there are recommendations for MDOT to expand its training programs and to coordinate workshops. I think the idea to hold workshops is a good one. I would caution, however, that while MDOT could be a participant in them, funding and personnel constraints would prevent us from taking a more active role (such as actually sponsoring and conducting workshops).
- (4) Regarding the discussion of road salt on pages VII D-9, 10, I believe the principal potential health hazard is due to the sodium ion, not the chloride. Chloride ions may impart a disagreeable taste to drinking water at high concentrations and may be indicators of contamination of wells but are not themselves usually thought of as health hazards. Another point that should be brought out in this discussion is that Dr. Hutchinson's work concerned farm

- (4) (continued) ponds close to highways (average distance 36 feet), not natural, larger bodies of water at varying distances. There should also be some mention of Dr. Hutchinson's findings regarding salt levels in Maine rivers. Also on page VII D-9, there is a statement indicating that examples of salt storage pile leachate have been discussed previously in this document but I could not find them.
- (5) The examples of well contaminations allegedly due to MDOT road salt storage and application and the accompanying discussion (pages VII G-23,25, 35) appear oversimplified and contain debatable conclusions. Malcom W. Meserve (Supervisor, Well Claims, MDOT, Augusta 289-2616) is quite familiar with these examples and I strongly urge you to contact him regarding them. Given my own limited understanding of these situations, it appears that there are errors of both statement and omission in the text which should be corrected.

Again, thank you for the opportunity to review and comment on this document. I appreciate the difficulty of your task and hope that at least some of these comments prove helpful. Please don't hesitate to contact me if you have any questions or want further information.

Sincerely.

MAINE DEPARTMENT OF TRANSPORTATION

Bureau of Planning

William Reid, Jr.

Director

Environmental Services

WR:pb

cc: Craig Tenbrock, AVRPC

R. Coleman, MDOT

M. Rissel, MDOT

M. Meserve, MDOT

G. Picher, MDOT

G-23 Contaminated By Salt Pile
AN 988
G-25 Rd. Salt in Norumy Well-

G-35 FERN St. SAH PIR & G/W

### RESPONSE TO MAINE DEPARTMENT OF TRANSPORTATION

Re: Mining

Response: This should have been noted in the section on Mining and Extraction Procedures.

Re: Salt Storage

Response: The page sited is part of the introduction. MDOT policy on salt storage should be noted in the Road Salt Storage and Application section on pages VII D-8 to D-12.

Re: Workshops

Response: A.V.R.P.C. plans to fund some workshops for these purposes with third year implementation funds. The workshop participation would constitute expansion of training programs for this planning area.

Re: Health Problems

Response: The subplan is in error on page VII D-9. Sodium is indeed the health hazard rather than chloride.

Dr. Hutchinson's work only related to small farm ponds close to highways. The examples of leachate are cited in the Ground Water/Drinking Water Subplan on pages VII G-23, G-25 and G-35. The statement should have referred to that subplan.

Re: Contaminated Wells

This comment was discussed with Makolm W. Meserve, Supervisory of the Maine Department of Transportation in a telephone conversation on January 10, 1978. The discussion centered on the three areas of salt contaminated ground water discussed in the plan namely, the area of the old Sabattus town well, the area of the Norway town well, and the area between Lake Auburn and the MDOT salt storage area in South Turner. As a result of this discussion, Mr. Meserve does not disagree with the discussions presented in the plan.

## PARIS UTILITY DISTRICT

**TELEPHONE 743-6251** 

SOUTH PARIS, MAINE 04281

November 16, 1977

Mr. Paul Brown Town Manager South Paris, Maine 04281

Dear Paul;

It was the decision of the Board of Trustees to make the following recommendation on the 208 Water Quality Plan.

The Trustees of the Paris Utility District would like to recommend that the State or Federal Agencies make all aquifer protection regulations.

Would you please place this recommendation on file?

Sincerely,

J. Doniel morse

J. Daniel Morse Superintendent

jp

cc: Androscoggin Valley

Regional Planning Commission

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## RESPONSE TO PARIS UTILITY DISTRICT

Re: Aquifer Protection

Response: As a result of the public workshops and other written comments, the aquifer protection through state legislation is being recommended.

LINDA S. DYER Chairman

THOMAS U. GORDON Executive Director

### COBBOSSEE WATERSHED DISTRICT

15 High Street
Winthrop, Maine 04364
Telephone (207) 377-2234
November 28, 1977

Robert J. Thompson Androscoggin Valley Regional Planning Commission 70 Court Street Auburn, Maine 04210



Dear Bob:

I have read the AVRPC 208 plan with great interest. Having gone through the process with SKVRPC, I can appreciate the time and effort that went into assembling it. I was particularly impressed with the community service priorities methodology and the policies and goals statements; it is unfortunate that the time constraints of the 208 program did not allow us to compare approaches more carefully, since we could have certainly benefitted from some of your work.

My concerns about the plan are, of course, with agriculture and sewage disposal. I recognize the limitations imposed by the availability of comprehensive water quality monitoring (the "program limitations" spoken of on page VII A-7) and would hope that a more intensive look at manure practices in lake watersheds will be a priority for any future DEP/AVRPC studies. On subsurface sewage disposal, I must object strongly to the use of coliform in water samples from wells as an indication of septic system failures. There are a multitude of potential coliform sources other than septic systems, and inadequate documentation of sources should rule out the well water samples as a valid source of data on septic system problems. Finally, I am concerned about the cost estimates of non-sewered alternatives in the public sewerage subplan. I would suggest that a site analyst or engineer involved in the day-to-day design of septic systems would have a better feel for these costs than consultants whose primary interests are in design of treatment plants and interceptor sewers. Overall, however, I think your plan is well-done and we will refer to it in our own future water quality programs.

I strongly support continuation of the 208 effort to identify restoration alternatives for Sabattus. Although our staff time is limited, we are close to Sabattus and will try to provide any information on our project and methodologies that might be useful to you. I hope we can explore this further when the Sabattus planning effort is approved.

Again, thanks for the copy of the plan. Let us know if we can provide any help.

Sincerely,

Ton

Thomas U. Gordon Executive Director

# RESPONSE TO COBBOSSEE WATERSHED DISTRICT

Re: Coliform as an Indicator

Response: The well water data should not have been presented in the format on pages VII H-30, H-31 and H-32 in the Residential On-Site Sewage Disposal Subplan.

## Effect on Plan/EIS

As workshop and written comments were considered, it became necessary to amend some statements and recommendations found in the subplans of the 208 plan. The following is a list of the subplans with the necessary addended information.

It should be noted that no comments reflected adversely on any policy decisions. Therefore, recommendation amendments were minor in nature and are shown in the Final Recommendation Section of this document.

Agriculture, Forestry, and Construction Subplans

In addition to comments received by other agencies, the staff noted that the Culver Amendment to Section 208 of P.L. 92-500 created a need for increased emphasis on Best Management Practices for Agricultural Pollution. The interim 208 document "Non-Point Source Control Technologies and Cost Effectiveness" contained a list and description of BMP's for agriculture, forestry and construction. Reference is made to this document to identify BMP's within the planning area.

## Miscellaneous Sources Subplan

The Petroleum Products Storage section on page VII D-17 can be supported by the following information and data. In addition to the D.E.P. discharge prohibitions, federal and state laws and regulations address petroleum products storage and product spillage. The E.P.A. requires Spill Prevention Control and Countermeasure (SPCC) plans for all facilities storing more than 660 gallons of oil in a single container/1,320 gallons in multiple containers above ground or 42,000 gallons underground. In addition, the Department of Public Safety has standards for construction and equipment installation at all facilities handling flammable liquids, (Title 25, M.R.S.A. 317 §2441).

There are approximately 30 fuel oil distributors in the planning area. Most distributors, all of which use above ground storage facilities, operate facilities of between 1,000 and 5,000 gallons in size. There are two substantially larger facilities, one located on Route 196 in Lewiston and the other on Route 202 in Auburn. Both major facilities have dikes and other spill controls as required by the Department of Public Safety.

In addition, numerous industries store petroleum products for their use. Most industrial storage ranges from 50 to 2,000 gallons.

State law requires that all oil spills affecting waters of the state be reported to D.E.P. at their toll-free oil spill number (1-800-482-0777). A list of reported spills over 5 gallons is presented herein. It is believed there are numerous small (less than 50 gallons) spills in the area which are not reported. It is suspected that most spills are isolated instances and therefore, do not result in fishkills, drinking water contamination or other readily detectable environmental damage. It is also suspected that few small storage facilities comply with the E.P.A's SPCC requirement at this time.

## REPORTED OIL SPILLS DURING PLANNING PERIOD

<u>Place</u>	Date	Amount/Type/Source (gal)	Recovery
T-M Oil, Auburn	1/8/76	200/#2/truck	Contained on ground
Pioneer Plastics Corp., Auburn	1/21/76	50-100/#6/tank	Entered Little Andro- scoggin River.
Bates Manufacturing Lewiston	3/3/76	1000/#6/tank	Contained on ground
Merril Transport Co., Paris	2/23/77	300/Gasoline/truck	Entered Paris Sewage _ Treatment Facility
Max Miller, Inc. Lisbon Falls	4/7/77	Unknown/#6/tank	Entered Androscoggin River
Webster Rubber Co. Sabattus	5/21/77	Unknown/#6/tank	Entered Sabattus River
Gus Cote Bulk Plant, Lewiston	7/7/77	830/#2/truck	Entered LAWPCF
Max Miller Co, (Juliet Mill) Lisbon	10/3/77	10/#6/tank	Entered Sabattus River

## Sludge and Septage Subplan

Table SS2 contains several errors. The Maine Electronics sludge figures should read "amount of sludge = 25 cubic yards per year and solids 10%". The table should note that "Pioneer Plastics' pretreatment process does not produce a sludge". General Electric should be included as "type of treatment: physical-chemical; amount of sludge = < 25 cubic yards per year; solids content = 10%; land disposal control = heavy metals; disposal method = landfill".

### Ground Water/Drinking Water Subplan

Alternative five on page G-40 of the subplan should now note that "Maine has primary enforcement authority for the Safe Drinking Water Act".

On page VII G-29 and G-30 the units for transmissivity should be gallons per foot per day. On page G-30 the units for the draw down of 32,522 should be square feet per day.

Recommendations are changed as in the final recommendations section (Section IV) of this document to reflect the need for comprehensive state legislation on aquifer protection rather than only enabling legislation.

Residential On-Site Sewage Disposal Subplan

On page VII H-9 the sentence on leachfield sizes should denote the large size leachfield as "1400 square feet" not 2,400 square feet.

On page H-13 the the soil scientist reference in the first paragraph should be "Soil Evaluator".

On the same page the last paragraph should read that Local Plumbing Inspectors are "certified" not licensed by the state.

On pages H-30, H-31 and H-32 "the regional well data on coliform contamination of wells should not be considered as documentation of the effects of malfunctioning septic systems on ground water. The information should be deleted from the subplan".

On page H-37 the first paragraph should "emphasize that the new code (since 1974) and increased enforcement since 1974 has eliminated numerous health and environmental hazards." However, enforcement activities could be increased further and thereby eliminate more hazards.

It should be noted that the recommendation on page H-39 has been implemented through state legislation.

On page H-46 the statement that seasonal dwellings owned by people from out-of-state are not as significant a problem as year-round dwellings should be modified. Generally septic systems function better when allowed periods of rest. Systems at seasonal dwellings owned by people from out-of-state generally have rest periods and even if somewhat underdesigned or poorly maintained may function adequately. No accounting was made for these dwellings which have direct discharges or severely inadequate systems".

# Public Sewer Systems Subplan

The recommendation on septage receiving at Norway (page VII I-64) should be changed to read as in the Primary Implementation Actions portion of Section IV of this document.



# Federal, State, and Local Recommendations

The 208 plan presented recommendations to federal, state, and local levels of government. Implementation of recommendations at all levels would significantly improve water quality in the planning area and would also prevent any significant degradation in surface waters and ground waters in the area.

However, it is realized that implementation of state and federal government recommendations may not have the effect of significantly improving or protecting water quality in other areas of the state or country. Therefore, the state and federal agencies must consider the recommendations along with those make by other planning agencies and then formulate a strategy which will assist all areas to the maximum extent possible. Therefore, these recommendations should be considered as general recommendations to be considered by state and federal agencies.

Implementation Priorities, which are generally dependent on local actions, were presented in Table 2 of the Implementation Strategy of the 208 plan. The priority actions for each municipality were supplemented by general recommendations to local governments. A municipality may use these general recommendations as guidelines to plan activities which were not considered priority water quality concerns and therefore were not assessed sepcifically for that municipality. Also municipalities bordering the planning area can consider these recommendations since the 208 program as well as other agency programs indicate that many of the communities in the Androscoggin Valley have similar problems.

The general recommendations presented by subplan follow.

# Surface Water Quality Assessment

#### Federal Recommendations

Fund the A.V.R.P.C. 208 program for a third year with monies eligible for continued investigation and planning as well as implementation. It will be difficult to obtain implementation without continued technical assistance, therefore the data base needs continual update and expansion due to the dynamic relationships between land use and water quality.

# State Recommendations

Establish a schedule for checking small streams and river segments recommended for reclassification.

Conduct a new waste load allocation for 6.3 mile Class D segment of Little Androscoggin.

Investigate Thompson Lake Outlet in relation to Robinson Manufacturing Treatment Plant discharge to ascertain whether or not a waste load allocation is needed.

Continue and expand D.E.P. Lake Division support of lay monitoring programs on Great Ponds. This is a valuable program not only from expanded surveillance but also public education and awareness.

Provide to the A.V.R.P.C. 208 program the sampling program presented in Table 5 and Map 3 in Section VI.

Assist the A.V.R.P.C. and Lake Associations in detailed lake programs to help alleviate existing and/or potential problems.

Delete from classification register Unnamed Brook, Auburn 1.3 miles East of Minot Village, because the brook could not be found.

Delete Logan and Penley Brooks (Auburn) from the classification register as they are presently part of the storm sewer system.

## Local Recommendations

Strict enforcement of local and state plumbing codes by local plumbing inspectors.

Modify existing ordinances or adopt additional ones to ensure protection of surface waters.

# Agriculture Subplan

### Federal Recommendations

The S.C.S. and A.S.C.S. should increase information and education efforts to maintain and/or increase voluntary participation in existing programs. Sufficient funding of the agencies would be necessary to be able to provide this service.

More cost-share funding (ACP) should be made available for dispersement in the 208 area to allow greater participation in the existing voluntary programs.

The \$2,500 ACP cost-share limit should remain, but special funding for major practices should be made available for dispersement through the A.S.C.S. County Committeemen.

The problem of manure storage and usage in relation to the areas lakes and streams warrants further study due to program limitations during the first two years. This necessitates that third year funds be eligible for continued planning and investigation and not solely implementation.

## State Recommendations

The State with S.C.S. assistance should establish a regulatory program in the Department of Environmental Protection to control major agricultural non-point sources.

A working relationship should be established between the A.S.C.S. County Committeemen, the R.P.C.'s and the Department of Environmental Protection to allow for information exchanges to facilitate the alleviation of priority problems.

# Forestry Subplan

## State Recommendations

Forestry operations were not found to be a significant problem; however if found to be a significant sourceon a statewide basis then operations of a particular size, type, or on sensitive slopes or soils should be required to have approved operations plans certified by the State through the Service Foresters of the State Bureau of Forestry.

# Construction Subplan

#### State Recommendations

A statewide sediment and erosion control law, if adopted, should include a D.E.P. or state administered regulatory program to control construction related sediment and erosion problems for subdivisions and commercial and industrial developments over a certain size.

## Local Recommendations

Existing controls are sufficient in some 208 area communities and others should voluntarily develop ordinances to control erosion through assistance of the 208 continuing planning process.

Any advisory program to control sediment and erosion should be conducted through the local Soil Conservation Districts.

# Miscellaneous Sources Subplan

# Roadside Ditches

### State Recommendations

Cooperative workshops for road superintendents and crews should be held throughout the 208 area by MDOT, SCS and the A.V.R.P.C. for the purposes of discussing: road drainage; ditch maintenance; salt storage and usage; and road construction and surface maintenance.

#### Local Recommendations

Re-evaluate ditch and culvert effectiveness by looking at both ditch design and culvert size and location. This is to minimize velocity and volume of flow wherever possible.

Do not conduct ditch and road shoulder maintenance in the late Fall which will leave exposed soil during Spring runoff.

Revegetate exposed ditches after clean-out or other maintenance.

"Punch" holes in frozen snowbanks during late Winter to allow melt waters or Spring runoff an exit off the road and shoulder surface. This should be done especially for steep sections of road.

Identify all storm sewer inlets by marking the road. This will allow their quick location during Spring runoff when drainage may become a problem due to their concealment by frozen snowbanks. This practice is gaining wide use in the 208 area.

Institute sand reclamation programs in the early Spring to recover sands used on winter roads. In sewered areas, this is an essential practice and has become quite popularized in the Lewiston-Auburn area through the solicitation of home and shop owner participation in sidewalk and curb clean-up.

# Snow Dumps

#### State Recommendations

Further study is needed to ascertain the level of impact of snow dumping. This should be carried out cooperatively between the D.E.P. and the A.V.R.P.C.

# Road Salt Storage and Application

# Federal Recommendations

If third year 208 monies are eligible for continued planning, the salt contamination of the old Sabattus town well should be studied for possible renovation procedures.

#### State Recommendations

The MDOT should expand its road salt usage training programs to the local level. This could be done cooperatively through workshops held for a variety of reasons.

#### Local Recommendations

Place salt piles on concrete pads and under cover.

Do not locate salt storage piles on eskers.

Have effective sediment and erosion control facilities for salt-sand mixture piles.

# Pesticide Use and Container Disposal

# State Recommendations

Establish monitoring stations in small tributary streams adjacent to major pesticide users to determine the level of impact. This type of program should be developed jointly between the A.V.R.P.C., D.E.P. and the U.S.D.A. The state should play a leadership role in this type of program.

# Petroleum Products Storage

## State Recommendations

The state D.E.P. should closely monitor all petroleum product storage within Shoreland Zones. Site specific problems may require spill or leakage and/ or containment facilities.

The D.E.P. should establish a periodic investigation program to evaluate the adequacy or suitability of in-ground storage facilities. Such a program would renew permits contingent upon certification of the tightness of the facility.

### Local Recommendations

Prohibit petroleum product storage on the aquiferesker system as outlined in the A.V.R.P.C. 208 Model Aquifer Protection Ordinance.

# Mining and Extraction Procedures

# State and Local Recommendations

Closely monitor and/or expressly prohibit sepcific uses of abandoned sites that may cause degradation of ground water resources. This may be achieved through additional provisions added to the original State Site Plan Review Permit or through a locally adopted Site Plan Review Ordinance, if a municipality has one. This ordinance is designed to meet conditions not met by the state ordinance.

Encourage rehabilitation of existing sites not covered by State law.

# Solid Waste Subplan

# State Recommendations

Seek waste volume reduction legislation, either locally or at higher levels. This is an obvious route for the D.E.P. Solid Wastes Division under the Resource Conservation and Recovery Act.

A master file or map should be kept of all residual disposal sites so that they may be properly evaluated as a physical constraint in future planning. This filing would be best kept at the regional or state level. The county registry of deeds may be the logical place.

### Local Recommendations

The Towns of Norway, Paris, Oxford and Sabattus have solid waste disposal sites located on aquifer-aquifer recharge areas and should be relocated. A short-term cost-effective solution, such as a sanitary landfill should be evaluated while also exploring the possibilities for employing new technologies for disposal, either individually or on a regional basis.

The feasibility of planned operations in Lewiston (shredder) and Auburn (incinerator) are presently being considered by 208 area municipalities to see if these would be cost-effective alternatives under contract or agreement.

Set aside available lands for either future landfills, as there will always be a need for some fill, or for future collection and transfer stations.

# Sludge and Septage

#### Federal Recommendations

Septage treatment facilities should be considered for inclusion on the State Facility Priority List for matched Federal, State, and Local funding. The same construction grants process should be utilized for planning, design, and construction.

Study the removal of toxic substances from sludge to make it acceptable for use on agricultural land or for other uses.

### State Recommendations

The Maine Guidelines for Septic Tank Sludge Disposal on Land should be changed to require larger areas for septage disposal on well drained soils. Areas approximately twice that now required should be sufficient. The Maine Guidelines are otherwise suitable to protect surface waters and ground water and therefore minimize environmental impact of septage disposal techniques.

Compliance with the Maine Guidelines for sludge disposal is adequate to prevent ground water and surface water contamination. Therefore disposal methods should comply with the guidelines. Specific exceptions, such as the Paris sludge disposal site, may occur and should be approved based on significant scientific data.

Pursue new legislation encouraging sludge use and disposal alternatives while continuing present disposal methods.

Implement a public education program on sludge as a resource.

# Local Recommendations

Municipalities with sewage treatment facilities should use disposal into the facility if septage receiving does not affect facility operations or effluent quality.

Municipalities should contact surrounding municipalities to determine the possibility of cooperative agreements to use existing facilities or develop new sites.

# Ground Water/Drinking Water Subplan

## Federal Recommendations

State and Federal legislation impacting ground water quality has developed in a piece-meal fashion and therefore does not offer a comprehensive, logical vehicle for ground water protection. Therefore, the Federal Government should enact comprehensive ground water regulations that form an integrated legal framework within which state and local governments can research and enact comprehensive ground water protection programs.

#### State Recommendations

State legislation, including enabling legislation, should be developed to regulate activities that occur on aquifers or in watersheds and would allow municipalities to zone aquifers and watersheds.

#### Local Recommendations

Drinking water protection should be achieved through implementation of specific aquifer/watershed protection ordinances, which would zone certain critical aquifer recharge and production areas / surface watershed(s) identified for each community. The Towns of Sabattus, Lisbon, Paris, Norway, Oxford, and Poland should enact aquifer protection ordinances and seek interlocal cooperation with neighboring communities in protecting the areas' aquifers. These towns should make every effort to relocate solid waste disposal sites that are located on or near productive aquifers.

Residential On-Site Sewage Disposal Subplan

### Federal Recommendations

Federal Construction Grants funding should be extended to include publicly controlled individual on-site disposal systems when such systems are the best alternative for sewage disposal problems.

# State Recommendations

The state tax incentive program and the revolving loan fund should be considered. However, the results of improved educational and code enforcement programs over the next three years could eliminate the need for increased incentives.

Small cluster systems should be funded concurrently with the larger systems on the State Facility Priority List through a set-aside funding program.

### Local Recommendations

Municipalities with severe problem areas should implement a tax rebate program to encourage septic tank pumping.

An educational program on subsurface disposal should be implemented by the local municipalities. A.V.R.P.C. should provide technical information to municipal officials and should assist officials in adapting the program to the municipal needs.

Local code enforcement officers should inspect septic systems and issue certificates of compliance when seasonal dwellings are converted to year round residences.

A local septic tank maintenance ordinance should be developed which places responsibility for maintenance on the individual. Unknown discharges should be licensed to insure that clusters of discharges do not degrade water quality and that health hazards are not created.

# Public Sewer Systems

#### Federal Recommendations

The federal government should fund the construction grants program for a sustained period (4 to 10 years) at the same level each year.

#### State Recommendations

Small systems should be funded concurrently with the larger systems through a set-aside funding program. COMMENT: If the federal regulations change to allow federal funding of publicly controlled individual onsite systems, as recommended in the Residential On-Site Disposal Subplan, then more drastic changes in funding procedures should be considered.

State should retain regulatory authority for all point sources of pollution. A regional or local authority should have a formalized advisory review and comment process.

State retain authority for licensing discharges but provide for a review and comment by a local or regional body such as the regional planning commission or the affected municipality/special district. COMMENT: Consideration should be given to issuing the discharge license at the time the facility plan is completed. Thus, design would be based on the legal discharge limitations. The concepts of Best Practical Treatment and Best Available Treatment set the design goals; however, definite discharge limitations would allow treatment methods to not only meet the BPT and BAT regulations but would insure that discharges are compatible with the quality of the receiving water.

Waste load allocations should be established by D.E.P. and enforced through the D.E.P. licensing system with the waste loads of each source specified in the license relative to the load allocation for the Water Quality Limited Segment.

On the Water Quality Limited Segment of the Little Androscoggin River, the waste load allocation and methods of achievement should be re-examined every 3 years upon license renewal.

The discharge limitations (the waste load allocation) in the discharge license/permits should be based on assimilation capacity of the river for flows down to to the 7 Q 10. Higher pollution loading during high river flows should be allowed. Pollution loading should then decrease with flow and assimilative capacity. A permanent flow gaging station should be installed at Paris; the Paris Utility District and D.E.P. should have access to the station. The Paris Utility District should have the responsibility of implementing the reduced pollution load procedures or other chosen alternative by informing the various groups involved. D.E.P. should then have the enforcement responsibilities.

Municipalities should be required by state law to contact adjacent municipalities to determine interest and feasibility of joint/cooperative efforts and the appropriate state funding agency should be notified, but the problem solving should only be voluntarily implemented by municipalities.

The State should enact legislation to enable D.E.P. to establish a funding program for infiltration analysis work. The program could be funded with a small amount of the federal construction grants money or could be funded through legislative action. If State money is used, it should be in the form of a loan. To receive money, documentation in treatment facility records or a facility plan should exist. Rehabilitation work should be funded locally until facility needs on the State Facility Priority List are met. Then rehabilitation work can be added to the eligible projects for construction grants funding.

The state should continue present funding methods. As facility projects which eliminate more serious problems are funded over the next 2 or 3 years, D.E.P. should place collector systems projects on the Step I Facility Priority List. Collector sewers should only be funded in areas with environmental or health problems; needs should be well documented with water quality sampling and <a href="State Plumbing Code enforcement records">State Plumbing Code enforcement records</a>. When the water quality problems appear as serious as the other projects on the list, then the state law should be changed and collection system projects should be funded concurrently with other projects.

The current system of municipal and industrial selfmonitoring and reports to the E.P.A. and state should continue. The state should also continue their routine monitoring program.

### Local Recommendations

The current system of municipal and industrial selfmonitoring and reports to the E.P.A. and state should continue.

Facility loading should be kept at or below capacity by municipal control of sewer extensions and by minimizing infiltration from existing sewers. The municipality should be placed on the State Facility Priority List for funding at the end of the treatment facility's design life.

# Industrial Waste Treatment

#### State Recommendations

The State should retain regulatory authority for all point sources of pollution.

The state should retain authority for licensing discharges.

The state should provide for a formalized review and comment process by affected local authorities and/or regional bodies.

The current system of industrial self-monitoring and reports to the E.P.A. and D.E.P. should continue. The D.E.P. should continue their routine monitoring program to check self-monitoring reports.

Title 38, M.R.S.A., Chapter 3 should be extended to include inspection and enforcement procedures for industrial and commercial non-discharge lagoons and land application systems. D.E.P. should have responsibility for the inspection and enforcement system. Establishments should be required to keep records of waste flows, waste characteristics, operational problems, and rainfall.

# Local Recommendations

Local Sewer Use Ordinances should be revised to include or references all federal and state pretreatment requirements. Industrial self-monitoring should be required with the municipality or sanitary district conducting checks to determine if dischargers to municipal systems are meeting requirements.

Industries should be required to monitor flows continuously and waste characteristics at least weekly.

# Plan Implementation

# Management Agencies

Since the impact of recommendations to state and federal agencies should be considered for other areas, the Implementation Priorities for the 208 plan focus on actions which must be taken within the planning area to improve and protect water quality. The priorities are dependent on actions which must be taken by local governments in the planning area. Therefore, the muninipalities and sanitary districts in the planning area are the designated management agencies. Concurrence letters from these agencies follow.

In addition, other agencies have financial and technical assistance responsibilities. Most notably, the Soil and Water Conservation Districts, the Agricultural Stabilization and Conservation Service and the State Bureau of Forestry will undertake project prioritization and financing and technical assistance responsibilities in the planning area. Local governments will also require financial and technical assistance from other agencies including the Maine Department of Transportation, the Maine Department of Human Services and the Androscoggin Valley Regional Planning Commission. Existing federal and state laws provide program and funding authorizations for the necessary assistance. Letters from these agencies follow those from the locally designated management agencies.



# CITY OF AUBURN, MAINE

"MAINE'S CITY OF OPPORTUNITY"

45 SPRING STREET · AUBURN, MAINE 04210

JACK O. SMITH

November 21, 1977

Mr. John Jaworski, Executive Director Androscoggin Valley Regional Planning Commission 70 Court Street Auburn, Maine 04210

Dear Mr. Jaworski:

I am pleased to inform you that the City of Auburn endorsed in concept the Water Quality Management Plan prepared by the Androscoggin Valley Regional Planning Commission. We will continue to participate in the implementation of the Plan's recommendations.

Sincerely

Jack O. Smith

Mayor

/rm



# AUBURN SEWERAGE DISTRICT

268 COURT STREET

AUBURN. -- MAINE 04210

January 16, 1978

Androscoggin Valley Regional Planning Commission 70 Court Street Auburn, Maine 04210

Re: Lewiston-Auburn Little Androscoggin River Section 208 Water Quality Program Management Plan and Environmental Impact Assessment

# Gentlemen:

The subject plan has been reviewed by this office and meets with our approval.

Very truly yours,

Auburn Sewerage District

Earle A. Tarr, Jr.

Superintendent

EAT/1h



ILLIAN L. CARON Mayor

# City of Lewiston Maine

Office of the Mayor CITY BUILDING

TEL. 207 784-2951

ZIP CODE 04240

November 23, 1977

Mr. John Jaworski Executive Director Androscoggin Valley Regional Planning Commission 70 Court Street Auburn, Maine 04210

Dear Mr. Jaworski:

After receiving favorable recommendations from the City Planning Board and Public Works Board, the Board of Mayor and Aldermen of the City of Lewiston voted at its meeting on November 22, 1977 to adopt the Section 208, Water Quality Management Plan, prepared by the Androscoggin Valley Regional Planning Commission.

The City of Lewiston feels that this cooperative effort between the ten towns, your agency, and the Environmental Protection Agency of the United States, is an important step in our continuing effort to restore and maintain water quality in our general area.

Very truly yours,

Lillian L. Caron

Mayor





# Town of Minot, Maine

INCORPORATED FEB. 10, 1802



12 December 77

Androscoggin Valley Regional Planning Commission

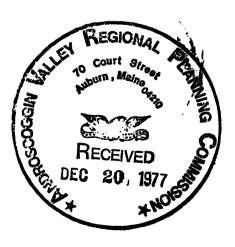
The Town of Minot endorses the concepts of the 208 Water Quality program and would like to continue in the planning process.

The Town would reserve the right to further discussion and a vote of the Townspeople would be required before any action could be taken on any specific items. While very little in the way of specific recommendations remain for the Town, there are several general ideas that could have an impact on Minot and should be further examined before any changes to existing laws or regulations are attempted.

Sincerely, Board of Selectmen

alma S. Palmer
Town Clerk

Town of Minot





# STATE OF MAINE DEPARTMENT OF CONSERVATION AUGUSTA, MAINE 04333



22 March 1978

RICHARD E BARRINGER COMMISSIONER

Mr. John J. Jaworski Executive Director Androscoggin Valley RPC 70 Court Street Auburn, Maine 04210

Dear John:

I have reviewed the Forestry Sub Plan of the Androscoggin Valley Section 208 Water Quality Program Management Plan and am in general agreement.

The only portion that I am in the least uncomfortable with is the last sentence, VII B-1. This refers to possible occurrances on land owned by the large paper companies which is not the subject of this Sub Plan, but is being considered by the Land Use Regulation Commission.

On VII B-23, there is a reference to sensitive slopes. (1st sentence alternative 3). As data is developed, it becomes increasingly apparent that Soils Association is as important a factor as is slope in susceptibility to erosion.

Generally, I feel that this is a good effort and I recommend its acceptance.

Sincerely,

Kenneth H. Hendren PLANNING FORESTER

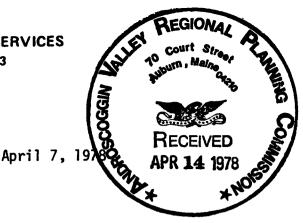
cc: Al Prysunka - DEP

/dmw





# STATE OF MAINE **DEPARTMENT OF HUMAN SERVICES** AUGUSTA, MAINE 04333



Mr. Allen Prysunka Department of Environmental Protection State House Augusta, Maine 04333

Subject: Management Plan and Environmental Impact Assessment received

from Androscoggin Valley Regional Planning Commission

Dear Mr. Prysunka:

This office has reviewed the subject "208" plan. We feel we can basically support the submitted plan provided the supplement received March 31, 1978, entitled, "Response to Department of Human Services", is enclosed.

This office is concerned about possible interpretation of a statement made on Page VII, H-39, which states: "Municipal officials have noted communication problems between the Department of Human Services and the local level." A response from the Regional Planning Commission indicates that the Department realizes municipal-state communication problems are a sensitive subject. We would again emphasize that no documentation of a communication problem has been shown. We are very concerned about proper public relations due to the service oriented function of this program and are in very frequent communication with Plumbing Inspectors, Municipal Officials and many other individuals. Furthermore, we are concerned that several statements such as one made on Page VII, H-41 indicating that other 208 agencies in Maine have identified subsurface disposal as a problem in their area and specifically referred to the Greater Portland Council of Governments and Southern Kennebec Valley Regional Planning Commissions. We concur that pockets of malfunctioning areas are certainly evident throughout the State. However, we are concerned that these statements may be misinterpreted to mean that malfunctioning subsurface systems are a greater significant problem then may actually exist. We would emphasize that a most significant improvement in the life expectancy of subsurface wastewater disposal systems has been observed since implementation of the new Maine State Plumbing Code, effective July 1, 1974, compared to those systems installed prior to that time.

Very truly yours,

aene

Eugene Moreau, P.E.

Waste Water & Plumbing Control Division of Health Engineering

morean

ettled in 1628 Incorporated June 22, 1799

# TOWN OF LISBON

Town Office

Box 8

Lisbon Falls, Maine 04252

# "Maine's Most Industrialized Town" Lisbon, Lisbon Center and Lisbon Falls

November 7, 1977

Androscoggin Valley Regional Planning Commission 70 Court Street Auburn, Maine 04210

Att: John Jarwoski, Executive Director, A.V.R.P.C.

Dear Mr. Jarwoski:

The Lisbon Board of Selectmen wish to go on record as adopting the Section 208 Water Quality Management Plan prepared by the Androscoggin Valley Regional Planning Commission, and will continue to participate in the implementation of the Plan's Recommendations.

Very truly yours,

Lisbon Board of Selectmen

H. Kenzeth Cappendolak

RBF:ph





November 8, 1977

Craig Ten-Broeck
208 Project Director
Androscoggin Valley Regional Planning Comm.
70 Court St.
Auburn, Me. 04210

Dear Mr. Ten-Broeck;

In response of your letter of November 1, at a regular meeting of the Town Council last evening; it was agreed to adopt the concept of the Section 208 Water quality Management Plan prepared by the A.V. R. P. C., and will continue to participate in the implementation of the Plan's recommendations subject to Town meeting approval.



Respectfully,

Røger Keough,

Chairman, Town Council

# MECHANIC FALLS SANITARY DISTRICT

POST OFFICE BOX 47
MECHANIC FALLS, MAINE 04256

TRUSTEES

CHAIRMAN Ronald H. Smith

SUPERINTENDENT LEON F. JONES

Arthur E .Grady

KRIMERIPOK HERITANK Lula M

Lula M. Bryant

Ivan R. Fifield

TREASURER

Edward R. Heath

December 29, 1977

Androscoggin Valley Regional Planning Commission ATTN: Mr. Fergus Lee Center Street Auburn, Maine 04210

Gentlemen:

The Mechanice Falls Sanitary District at a regular meeting on December 20, 1977, the following action was taken, "Upon motion duly made it was unanimously voted to approve the AVRPC Section 208, Water Quality Program in concept but reserve the privilege to make adjustments in accordance with our local needs and requirements."

Sincerely.

Superintendent

RECEIVED

JAN 4 1978

Jown of Norwal Regional Court Structure Manager's OFFICE

TOWN MANAGER'S OFFICE

THE PROPERTY OF THE PHONE 207 74.6651

Norway, Maine 04268
June 22, 1977

Mr. Craig W. Ten Broeck 208 Project Director 70 Court Street, Auburn, Maine 04210

Dear Craig:

The Norway Board of Selectmen have reviewed the Androscoggin Valley Regional Planning Commission's Publication Section 208 Areawide, Waste Treatment Management Plan as pertains to Norway and the Little Androscoggin River and are in agreement with the plan except for the projected Sewer Service areas.

Most all of the recommendations outlined in the plan were covered by the Facilities Plan crafted in 1974 and completed in April 1975 by Wright, Pierce, Barnes & Wyman Engineers of Topsham, Maine.

If we can be of further assistance in this matter, do not hesitate to call.

Very truly yours,

Larry Todd Town Manager

LT:s



November 16, 1977

A.V.R.P.C. 70 Court St. Auburn, Maine 04210

We, the undersigned, being responsible Officials of the Town of Oxford, do adopt the Section 208 Water Quality Management Plan prepared by the Androscoggin Valley Regional Planning Commission. and will continue to participate in the implementation of the Plan's recommendation with the understanding when it involves enactment of specific ordinance on specific dates that the items will be on the town warrant, but we cannot guarantee the outcome as we cannot forecast how the town will vote.

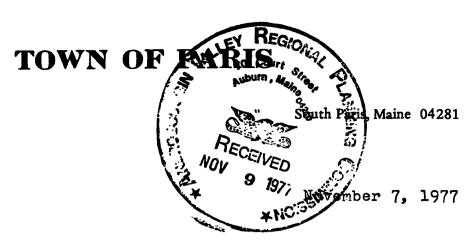
Sincerely.

Evan Thurlow, William A. Luge

William A. Frye,

Selectmen





Mr. John Jaworski Executive Director A.V.R.P.C. 70 Court Street Auburn, Maine 04210

Re your letter to Larry Brewer of 9/20/77

Dear John,

As we wrote you on 10/4/77 we are answering your letter regarding the adoption of the 208 Plan. We requested input from the Paris Utility District, Planning Board, Conservation Commission and citizens.

As we understand once final approval is made by E.P.A. the 208 Plan will become the working document used in the determination of facility needs, funding, regulatory action and future water quality planning by the E.P.A. and the Maine Department of Environmental Protection. Then implementation is the next step and the town will continue to participate in this.

We certainly can endorse the goals, policies and technical findings contained in the Plan. Where we have trouble accepting the plan is when it involves enactment of specific ordinances on specific dates by the town legislative body. Certainly we will put the items on the town warrant, however we can't forcast how the town meeting will vote.

Sincerely,

Joe Barrett

- Melle Les and

Chairman of Board of Selectmen

# PARIS UTILITY DISTRICT

**TELEPHONE 743-6251** 

SOUTH PARIS, MAINE 04281

December 23, 1977

Androscoggin Valley Regional Planning Commission 70 Court Street Auburn, Maine 04210

Attention: Mr. John J. Jaworski

Dear Mr. Jaworski;

The Trustees of the Paris Utility District would approve the 208 Water Quality Program with the following recommendation.

The Board of Trustees of the Paris Utility District recommend that all aquifer protection regulations be made by State or Federal Agencies.

Would you please include the above recommendation for the 208 Water Quality Program's Advisory Committee to review?

Sincerely,

Thomas L. Clyford
Thomas L. Clifford

Chairman of Board of Trustees

jp



# TOWN OF POLAND

BOX 38 - POLAND, MAINE - 04273



November 15, 1977

May & Bennett Dra o Sfrss

John Jaworski, Executive Director Androscoggin Valley Regional Planning Commission 70 Court Street Auburn, Maine 04210

Dear Mr. Jaworski:

As the duly elected Selectmen of the Town of Poland we do adopt the Section 208 Water Quality Management Plan prepared by the Androscoggin Valley Regional Planning Commission, and will continue to participate in the implementation of the Plan's recommendations.

Selectmen of Poland





# TOWN of SABATTUS

Selectmen's Office
Tel. Sabattus, 207 - 375 - 4331

MAIN STREET

SABATTUS MAINE 04280

September 23, 1977

Mr. Craig Ten Broeck Andy Valley Regional Planning Committee 70 Court Street Auburn, Maine 04210

Dear Craig:

We apologize for the delay in our response to your question on the 208 Process.

A considerable amount of time has been spent on this project and we wish to thank all committee members involved.

As spokesman for the three member board of Selectmen, we wish to approve the 208 Draft Environmental Impact Assessment.

Sincerely.

Horace Atwood

Chairman of the Board of Selectmen

race I atwood

Town of Sabattus





March 2, 1978

Androscoggin Valley R.P.C. John J. Jaworksi, Executive Director 70 Court Street Auburn, ME 04210

Dear Mr. Jaworski:

The trustees of the Sabattus Sanitary District have reviewed the pertinent portions of the 208 Water Quality Management Plan and are in agreement with the plan.

The trustees will work with the planning agency to implement actions to improve the sewerage facilities in the Town of Sabattus.

Sincerely,

Alvin B. Sorkin, Chairman Sabattus Sanitary District

alin B. Solsi

ABS:jev



# UNITED STATES DEPARTMENT OF AGRICULTURE

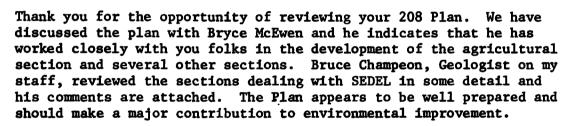
SOIL CONSERVATION SERVICE

USDA Office Building, University of Maine, Orono, Maine 04473

Craig TenBroeck 208 Project Director 70 Court Street Auburn, Maine 04210

Dear Craig:

SUBJECT: INTERA - 208



AUG 4 1977

We look forward to working through the Androscoggin Valley Soil and Water Conservation District in assisting you in the implementation of this Plan.

Sincerely,

Warwick M. Tinsley, Jr.

State Conservationist





# UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE USDA Office Building, Orono, Maine 04473

March 29, 1978

Androscoggin Valley Regional Planning Commission ATTN: Mr. John Jaworski 70 Court Street Auburn, Maine 04210

Dear Mr. Jaworski:

We have reviewed your draft, Environmental Impact Statement, paying particular attention to the sections pertinent to non-point source pollution as it relates to agriculture.

We concur with your assessment of the major issues. We agree that a regulatory program is not the way to handle agricultural pollution problems under Section 208. In our opinion the best way to address these problems would be to:

- A Increase funding of existing cost-sharing programs.
- B Increase personnel in both SCS and ASCS in order to be able to handle the job adequately.
- C Raise the maximum cost-share limit \$2500, especially for certain high cost practices related directly to these problems.

In view of the above comments, we unhesitatingly endorse this plan and consider it a giant stride in the right direction.

Arthur G. Carroll, SED

For The Maine State ASC Committee

cc: Al Prysunka





# UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE

Oxford County ASC Committee 1 Main Street South Paris, ME 04281

March 27, 1978

Androscoggin Valley Regional Planning Commission Robert Thompson, 208 Water Quality Planner 70 Court Street Auburn, ME 04210

Dear Mr. Thompson:

At their meeting held on March 23, the county committee reviewed and discussed the A.V.R.P.C. 208 Water Quality Management Plan.

At this time the committee endorsed the plan.

Cordially yours,

County Executive Director





# UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE

1 Great Falls Plaza Auburn, Maine 04210

March 1, 1977

TO: Androscoggin Valley Regional Planning Commission

REFERENCE: 208 Water Quality Planning Program

un Thursday, February 17, 1977 I reviewed with the Androscoggin-Sagadahoc County Committees your technical memorandum regarding 208 water quality planning. Both committees commented that a great deal of time and effort have been made on your part in preparing this document.

Their first concern, as I'm sure is yours, was how the defined non-point source problems will be funded and corrected. Many references are made to the Agricultural Conservation Program as a possible funding source. It is the committees strong feeling that this approach is both unrealistic and impractical. For in excess of 40 years of existence ACP has on a continuing basis solved the conservation and pollution problems as you have defined. Our problem is that the funding of ACP does not allow us to solve half of the problems that still exist.

It should be noted that the committees feel we are all working together toward the same goal. As you more accurately define individual water quality problems, the committees have indicated that they will consider them for a possible solution thru ACP.

FOR THE ANDROSCOGGIN-SAGADAHOC COUNTY CONTITUES.

Toivo A. Merikanto

County Executive Director



# The Androscoggin Valley Soil Conservation District

AMAINIMENT AUBURN -:- MAINE 04210 1 Great Falls Plaza

March 22, 1978

Mr John Jaworski, Executive Director Androscoggin Valley Regional Planning Commission 70 Court St. Auburn, Maine 04210

Dear John:

The Androscoggin Valley Soil and Water Conservation District is pleased to have the opportunity of reviewing your 208 Plan. We recognize our responsibilities in the implementation of this plan as a designated management agency and designated to supply technical assistance in the implementation of best management. Our concern is whether the District will have sufficient funding to carry out all of the technical assistance needed to implement this plan.

The District supports the concept and intent of the 208 Water Quality Management Plan and accepts its responsibility to the extent of its budget limitations.

Sincerely.

Chairman: Board of Supervisors Andrescoggin Valley Soil & Water

Conservation District





# Oxford County Soil and Water Conservation District

Main Street - South Paris, Maine 04281 - Telephone: (207) 743-2114



March 14, 1978

Mr. John Jaworski Executive Director A.V.R.P.C. 70 Court Street Auburn, ME Oh210

Dear Mr. Jaworski:

The Supervisors of the Oxford County Soil and Water Conservation District have reviewed the 208 Plan. It is the decision of the Supervisors to endorse the implementation of the goals and policies of this Plan.

Sincerely,

Horris Conant Conant

Chairman



#### STATE OF MAINE

# DEPARTMENT OF TRANSPORTATION

TRANSPORTATION BUILDING

AUGUSTA, MAINE

04333



ROGER L. MALLAR

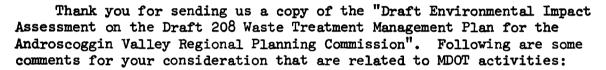
Commissioner

December 8, 1977

U.S. Environmental Protection Agency Environmental Policy Coordination Office John F. Kennedy Federal Building - Room 2203 Boston, MA 02203

Attention: Robert E. Mendoza

Dear Mr. Mendoza:



- (1) It might be appropriate to mention somewhere in the Construction Subplan (VII C) that MDOT does have detailed standards and specifications regarding erosion control and pit rehabilitation associated with its federally aided construction projects.
- (2) Regarding the discussion of salt storage on page VII D-2, it might be of interest to note that it is MDOT policy to store salt on concrete pads under cover (e.g., salt sheds) and to locate such salt piles so as to minimize the likelihood of contaminating groundwater.
- (3) Page VII D-6 contains a recommendation to hold "cooperative workshops". On page VII D-12 there is a recommendation for MDOT to "expand its road salt usage training programs to the local level" by means of these workshops. Finally, on pages VII-28,29 there are recommendations for MDOT to expand its training programs and to coordinate workshops. I think the idea to hold workshops is a good one. I would caution, however, that while MDOT could be a participant in them, funding and personnel constraints would prevent us from taking a more active role (such as actually sponsoring and conducting workshops).
- (4) Regarding the discussion of road salt on pages VII D-9, 10, I believe the principal potential health hazard is due to the sodium ion, not the chloride. Chloride ions may impart a disagreeable taste to drinking water at high concentrations and may be indicators of contamination of wells but are not themselves usually thought of as health hazards. Another point that should be brought out in this discussion is that Dr. Hutchinson's work concerned farm

(next page)

- (4) (continued) ponds close to highways (average distance 36 feet), not natural, larger bodies of water at varying distances. There should also be some mention of Dr. Hutchinson's findings regarding salt levels in Maine rivers. Also on page VII D-9, there is a statement indicating that examples of salt storage pile leachate have been discussed previously in this document but I could not find them.
- (5) The examples of well contaminations allegedly due to MDOT road salt storage and application and the accompanying discussion (pages VII G-23,25, 35) appear oversimplified and contain debatable conclusions. Malcom W. Meserve (Supervisor, Well Claims, MDOT, Augusta 289-2616) is quite familiar with these examples and I strongly urge you to contact him regarding them. Given my own limited understanding of these situations, it appears that there are errors of both statement and omission in the text which should be corrected.

Again, thank you for the opportunity to review and comment on this document. I appreciate the difficulty of your task and hope that at least some of these comments prove helpful. Please don't hesitate to contact me if you have any questions or want further information.

Sincerely,

MAINE DEPARTMENT OF TRANSPORTATION

Bureau of Planning

William Reid, Jr.

Director

Environmental Services

WR:pb

cc: Craig Tenbroek, AVRPC

R. Coleman, MDOT

M. Rissel, MDOT

M. Meserve, MDOT

G. Picher, MDOT

# Implementation Priorities

A list of priority implementation activities is presented for each municipality. Based on comments and program scheduling, priorities have been modified from the initial document (Table 2, Implementation Strategy) and are presented in Table 4 of this document. Table 4 summarizes the particular implementation activity required for each municipality to improve or protect water quality for each subplan category. The shaded blocks indicate the activities which have already been implemented. Implementation target dates are presented for the Implementation Priority activities identified in the plan and in the following narrative. Activities without dates in Table 4 are not considered priority water quality concerns.

# PRIDRITY IMPLEMENTATION ACTIONS

# TABLE IV

			·						HOLL IN	
MUNICIPALITY	AGRICULTURE	FORESTRY	CONSTRUCTION	SOLID WASTE	SLUDGE AND SEPTAGE	GROUNDWATER PRINKING WATER	RESIDENTIAL ON-	PUBLIC SEWER SYSTEM	INDUSTRIAL WASTE	URBAN STORM
AUBURN	NO RETION REQUIRED	NO RECUIRED	INCREASED CODE ENFORCEMENT.	PROCEED WITH THE	PROCEED WITH LANDFILL DEVELOP TRIAL LAND SPREADING SITE.	EXPAND WATERSHED PROTECTION TO REPLACENT TOWNS.	*IMPROVE CODE ENFORCEMENT.	*EXTEND SEWERS TO TRYLOR POND CARRIER COURT AND POLAND ROAD DREAS	NO ACTION REQUIRED	INCREASED CODE EMPORCEMENT. SEWER SYSTEM MAINTRINANCE. CONDUCT FACILITY PLAN.
LEWISTON	NO RETION REQUIRED	NO BCTION REQUIRED	INCREASED CODE ENFORCEMENT.	*BEVELOPED SHREDDER RING LANDFUL.	PROCEED WITH LANDFILL DEVELOP TRIAL LAND SPRENDING SITE	EXPRIND WATERSHED PROTECTION TO ROJACENT TOWNS. STUDY RITERNATE DRINKING WATER SOURCES	IMPROVE CODE ENFORCEMENT.	EXTEND SEWERS TO SABSTIUS ST, SWITZERLAND ROAD, AND COLLEGE STREET PARENS. ABANDON RANDALL ROAD LABOONS.	NO ACTION REQUIRED.	INCRERSED CODE EMPORCEMENT - SEWER SYSTEM MAINTRINANCE - CONDUCT FACILITY PLAN.
LISB0N	NO RCTION REQUIRED	NO PCTION REQUIRED	*AMENO SUBDIVISION REGULATIONS TO INCLUDE SEDIMENT AND EROSION CONTROL	ASSESS NEW SITE US LEWISTON S SHREDDER.	*FIND SUITABLE SLUDGE DISPOSAL SITE.	PROTECTION.	*IMPROVE CODE ENFORCEMENT. (SITE REVIEW)	CONTINUE SEWER SEPARATION, AND REHABILITATION.  100 SITE PLAN REVIEW TO ZONING ORDINANCE.	*NEGOTIATE WITH U.S. GYPSUM PLANT ON PRETREATMENT.	CONTINUE SEWER SEPARATION AND REHABILITATION. SEDIMENT - EROSION CONTROLS.
MECHANIC Falls	NO ACTION REQUIRED	NO REGUIRED	*POOPT SUBDIVISION REQUIRTIONS WHICH INCLUDE SEDIMENT RNO EROSION CONTROL	*ASSESS OPTIONS OF NEW SITES VS. AUBURN INCINERATOR.	*CONSTRUCT SEPTINGE RECEIVING STATION BY TREATMENT FROLLITY. *FIND LAND DISPOSAL SITE FOR SLUDGE	FIND NEW DRINKING WATER SOURCE.	IMPROVE CODE ENFORCEMENT.	*CONSTRUCT SEWAGE TREATMENT FROLUTY. PROSPY COMPREHENSIVE PLAN.	*ROOPT SEWER USE ORDINANCE.	PLAN AND IMPLEMENT SEWER MINITAINANCE REHABILITATION PAGGRAM. *SEDIMENT - EROSION CONTROLS.
MINOT	NO ACTION REQUIRED	CONSIDER CONTROLS ON SENSITIVE SITES.	*ROUTEO SUBDIVISION *REGULTIVOME TO INCLUDE SEDIMENT FIND REGISTAL CONTROL *SITE REVIEW).	*PARTICIPATE IN AUBURN INCINERATOR.	*HSSESS SEPTRGE DISPOSAL ALTERNATIVES.	NO ACTION REGUIRED.	*IMPROVE CODE ENFORCEMENT. *ROOPT SITE PLRN REVIEW ORDINANCE. *PDOPT COMPREHENSIVE PLRN.	NOT RPPLICABLE	NO ACTION REQUIRED.	NOT RPPLICABLE
NORWAY	NO ACTION REQUIRED	• CONSIDER CONTROLS ON SENSITIVE SITES.	*PAMEND SUBDIVISION REQUESTION TO HICLURE SEDIMENT HAD RECOVERED SOMETHER. SHOW SERVICE OF THE PROPERTY OF THE	FIND NEW DISPOSAL SITE TO REMOVE LANDFILL FROM AQUIFER.	• REDUCE TOWNS USE OF LAGOOMS FOR SEPTAGE DISPOSAL. • FIND LAND DISPOSAL • SITE FOR SLUDGE.	• EMRCT ROUIFER PROTECTION.	IMPROVE CODE ENTORCEMENT EDUCATION PROGRAM. ROUTS SITE PLAN REVIEW ORDINANCE.	•RENOVATE LAGOONS •REOFT COMPREHENSIVE PLAN	-ENRCTED SEWER USE ORDINANCE	CONDUCT INFLOW FINELTSIS PASSED REPREPAREMENTATION PROGRAM
OXFORD	NO ACTION REQUIRED	*CONSIDER CONTROLS ON SENSITIVE SITES	*INCLUDE EROSION AND SEDIMENT CONTROLS IN APPLICABLE ORDINANCES, (ESTE, BRANKW)	FIND NEW DISPOSAL SITE TO REMOVE LANDFILL FROM AGUIFER	*ASSESS SEPTAGE DISPOSAL RITERNATIVES.	• ENRCT POUIFER PROTECTION, • POOPT COMPREHENSIVE PLAN.	IMPROVE CODE ENFORCEMENT EDUCATION FROGRAM ADDITION SITE DISCOUNT OR DINBACE ASITE RANK REVIEW)	NON STRUCTURAL SOLUTION (SEE OTHER CATEGORIES). AROUT SITE PLAN REVIEW OROJNANCE.	+MONITOR ROBINSON MANUFACTURING EFFLUENT AND SLUDGE SITE	NO RETION REQUIRED
PARIS	NO ACTION REQUIRED	. CONSIDER CONTROLS ON SENSITIVE SITES.	*ROOPT SITE PLAN REVIEW ORDINANCE.	*CONVERTED DUMP TO SANITARY LAND- FUL.  *CONTINUE TO ASSESS OFTIONS TO REMOVE A LANDFILL FROM ROUTER.	•FIND LONG TERM SLUDGE SITE.	*EMACT PROUPER PROTECTION *(SITE PLAN REVIEW)	*MPROVE CODE ENFORCEMENT: •(SITE REVIEW).	DETERMINE FACILITY ADEQUACY:	•MONITOR DISCHARGE FROM & C LAWRENCE TRANERY	STUDY SEWAGE TREATMENT FACILITY BYPASS
POLAND	NO RETION REQUIRED	NO RCTION REQUIRED	*AMENO SUBDIVISION REGULATIONS TO INCLUDE SEGMENT AND EROSION CONTROL. *(SITE REVIEW).	PASSESS OPTIONS OF LANOFILL VS BUBURN INCINERATOR.	*ASSESS SEPTAGE DISPOSAL ALTERNATIVES.	*ENACT AQUIFER PROTECTION. ** **PROPERTY OF SITE PLAN REVIEW ORDINANCE OR ZONING ORDINANCE.	IMPROVE CODE ENFORCEMENT.  EDUCATION PROGRAME  (SITE REVIEW).  ADOPT ON-SITE DISPOSAL ORDINANCES	NOT APPLICABLE.	• MONITOR THE POLAND SPRING INN.	NOT RPPLICABLE
SABATTUS	NO ACTION REQUIRED	NO ACTION REQUIRED	*RODPTED GUEDINISION RESULTITIONS TO INCLUDE SEGMENT HIPD EROSION CONTROL (SITE REVIEW)	*ASSESS OPTION OF NEW LANDFILL SITE VS REGIONAL PARTICIPATION.	CONTINUE TO USE LEWISTON - AUBURN POLLUTION CONTROL FACILITY	ENACT AGUIFER PROTECTION. AGOPT ZONING OR SITE PLAN REVIEW	IMPROVE CODE ENFORCEMENT. • EDUCATION PROGRAM. • (SITE REVIEW). • BOOPT ON- SITE DISPOSAL ORDINANCE.	• COMPLETE FACILITY PLAN • ROOPT ZONING ' ORDINANCE ' S	PLAN SEWER SYSTEM TO ACCEPT DISCHARGE FROM WEBSTER RUBBER COMPANY -SEWER USE ORDINANCE	NO RCTION REQUIRED

# Auburn

Construction

Increased Code Enforcement activity to minimize water quality effects of

erosion during construction.

Solid Waste

Development of the incinerator.

Sludge and Septage

Dispose of Auburn's septage at the LAWPCF. (The LAWPCF can continue to accept septage from surrounding municipalities until effluent quality is

adversely affected.)

Development of a sludge disposal site for the LAWPCF. Land spreading should be evaluated and a trial plot operated to determine heavy metal build-up in soil and vegetation. Consider areawide sludge disposal with Mechanic Falls

and Lisbon.

Ground Water/Drinking Water

Extend watershed protection to other municipalities in the watershed.

On-Site Residential Sewage Disposal

Increased Code Enforcement activity in areas designated as problem areas.

Develop a medium intensity education program as outlined in the subplan on page VII H-43.

Public Sewer System

Extend sewers along the east and south shores of Taylor Pond. Such extensions should eliminate health hazards and improve water quality. (The limited technical data and documentation concerning problems on the west shore needs to be carefully considered in evaluating the cost-effectiveness of extending sewers to the northwestern shore of the pond especially with the assumption that such an extension would significantly improve water quality.)

#### Auburn cont.

Public Sewer System cont.

Current state laws and local ordinances controlling land use should be strictly enforced and supplemented to protect wetlands adjacent to Taylor Pond.

Extend sewers in the Carrier Court and Poland Road areas.

#### Lewiston

Construction

Increased Code Enforcement activity to minimize water quality effects of erosion during construction.

Sludge and Septage

Dispose of Lewiston's septage at the LAWPCF. (The LAWPCF can continue to accept septage from surrounding municipalities until effluent quality is adversely affected.

Development of a sludge disposal site for the LAWPCF. Land spreading should be evaluated and a trial plot operated to determine heavy metal build-up in soil and vegetation. Consider areawide sludge disposal with Mechanic Falls and Lisbon.

Ground Water/Drinking Water

Assess new sources of drinking water.

On-Site Residential Sewage Disposal

Increased Code Enforcement activity in areas designated as problem areas.

Develop a medium intensity education program as outlined in the subplan on page VII H-43.

Public Sewer Systems

Close the Randall Road Lagoons and pump sewage to the Hart Brook Interceptor for treatment at the Lewiston-Auburn Water Pollution Control Facility. The project is on the State Facility Priority List for matching state (15%) and federal (75%) funds. If the Regional Solution to the Sabattus Facility Plan is implemented, then the two projects should be funded concurrently. The funding priority should be equal to that of Sabattus.

#### Lewiston cont.

Public Sewer Systems cont.

Pump sewage from the five dwellings in the Switzerland Road area to St. Patrick Avenue for treatment at the Lewiston-Auburn Water Pollution Control Facility. The project should be considered for federal and state funding. If federal and state assistance is not available, it will be to Lewiston's advantage to locally fund the project as development of the Switzerland Road area is expected during the planning period.

Extend sewers in the College Street and Sabattus Road areas.

# Lisbon

Construction

Include Sediment and Erosion Control provisions in the Zoning Ordinance to minimize water quality effects during construction.

Include a Site Plan Review provision in the Zoning Ordinance to minimize sediment and erosion from developments. (This will help control urban storm runoff.)

Increased Code Enforcement activity to ensure adequate enforcement of these controls.

Solid Waste

Assess continuous operation of the new landfill site against development of a transfer station and use of Lewiston's shredder with seasonal landfill of shredded waste.

Sludge and Septage

Continue to dispose its residents' septage at the treatment facility.

Continue to develop the sludge disposal site on land near the Solid Waste Site and attempt to find agricultural and silvicultural uses for excess amounts. Consider areawide sludge disposal.

# Lisbon cont.

Ground Water/Drinking Water

Include Aquifer Protection in the

Zoning Ordinance.

On-Site Residential Sewage

Disposal

Develop a full-time Code Enforcement

program.

Develop a medium intensity education program as outlined in the subplan

on page VII H-43

Public Sewer System

Continue to finance the sewer separation-rehabilitation program until it is completed as scheduled.

Sewer extensions should be made only when capacity is available at the

treatment facility.

Industrial Waste

Continue to negotiate with U.S. Gypsum to formulate a pretreatment strategy to keep hydraulic and suspended solids

loading within design limits.

# Mechanic Falls

Construction

Adopt Subdivision Regulations which include Sediment and Erosion Controls.

Solid Waste

Assess the new landfill site against participation in the Auburn incinerator.

Sludge and Septage

Construct a septage receiving station at the treatment facility. (Use the LAWPCF for septage disposal in the interim.)

Evaluate an areawide solution for the land disposal of sludge. Minot, Poland, and Oxford could use a joint site for the disposal of septage and sludge. Another solution could involve the

LAWPCF and Lisbon.

Ground Water/Drinking Water

Find and develop a new water supply.

# Mechanic Falls cont.

On-Site Residential Sewage

Disposal

Develop a Code Enforcement program. Consider a cooperative program with

Minot, Poland and Oxford.

Develop a medium intensity education program as outlined in the subplan on

page VII H-43.

Public Sewer Systems

Construct a sewage treatment facility.

Develop a sewer system rehabilitation

program.

# Minot

Forestry

Consider controls of sensitive sites.

Construction

Include Sediment and Erosion Controls in a Site Plan Review Ordinance.

Solid Waste

Participate in the Auburn incinerator.

Sludge and Septage

Consider developing a land disposal site with Poland and Oxford and possibly Mechanic Falls. In the interim continue to use the LAWPCF which would also be used permanently during

winter months.

On-Site Residential Sewage

Disposal

Develop a Code Enforcement Program. Consider a cooperative program with Mechanic Falls, Oxford and Poland.

Develop a medium intensity education program as outlined in the subplan on

page VII H-43.

# Norway

Forestry

Consider controls of sensitive sites.

Solid Waste

Develop a new disposal site to remove

landfill from aquifer.

Sludge and Septage

Accept septage from Norway, Buckfield, Woodstock, and Sweden permanently. During winter months accept septage from Bridgton, Harrison, Greenwood, Waterford, West Paris, Ottisfield, Oxford and Hebron.

# Norway cont.

Sludge and Septage cont. Devel

Develop a sludge disposal site for lagoon dredgings.

Ground Water/Drinking Water

Adopt local aquifer protection con-

trols.

On-Site Residential Sewage

Disposal

Develop a Code Enforcement program. Consider a cooperative program with Paris. Develop an education program.

Public Sewer Systems

Renovate sewage treatment lagoons in accordance with the 201 Facility Plan and subplan recommendations on pages

VII I-60 to VII I-68.

# **Oxford**

Forestry Consider controls of sensitive sites.

Construction

Include Sediment and Erosion Cóntrol provisions in any additional applicable ordinances which are adopted

by the town.

Solid Waste

Develop new solid waste site to remove

landfill from aquifer.

Sludge and Septage

Evaluate an cooperative septage disposal solution with Poland, Minot and possibly Mechanic Falls. Dispose septage at Norway during winter

months.

Ground Water/Drinking Water

Adopt aquifer protection controls.

On-Site Residential Sewage

Disposal

Develop a Code Enforcement Program. Consider a cooperative program with Mechanic Falls, Minot and Poland.

Develop an education program. Adopt on-site sewage disposal ordinance.

Public Sewer Systems

Implement a non-structural control plan consisting of a zoning ordinance with an aquifer protection zone, a minimum lot size as currently exists, and an educational program. Improved Code Enforcement is also necessary.

# Oxford cont.

Industrial Waste

Assist Robinson Manufacturing in finding a suitable sludge disposal

site.

# <u>Paris</u>

Forestry

Consider controls of sensitive sites.

Construction

Include Sediment and Erosion Control in a Site Plan Review Ordinance.

Solid Waste

Assess alternatives to continued operation of the landfill which is located

on the aquifer.

Sludge and Septage

Accept Paris' septage at the treatment

facility.

Develop a long-term sludge disposal site in accordance with the Environmental Impact Statement currently

being completed.

Ground Water/Drinking Water

Enact aquifer protection controls.

On-Site Residential Sewage

Disposal

Develop Code Enforcement program. Consider a cooperative program with

Norway.

Public Sewer Systems

Determine adequacy of the Paris treat-

ment facility.

Extend sewers in Paris Hill area and along Route 119 and the Buckfield

Road.

Conduct infiltration and inflow work

in problem areas (High Street).

Industrial Waste

Monitor discharge from A.C. Lawrence Tannery to determine compliance with

the contract.

# Poland Poland

Construction

Amend Subdivision Regulations to include Sediment and Erosion Controls to minimize water quality effects

during construction.

# Poland cont.

Solid Waste Assess a new landfill site against

participation in the Auburn incinera-

tion project.

Sludge and Septage Consider developing a land disposal

site with Oxford, Minot and possibly Mechanic Falls. In the interim, continue to use the LAWPCF which should also be used during winter months after a land site is developed.

Ground Water/Drinking Water Enact aguifer protection controls.

On-Site Residential Sewage Increase Code Enforcement. Consider a cooperative program with Minot.

a cooperative program with Minot, Oxford, and Mechanic Falls.

Develop a high intensity education program as outlined in the subplan

on pages VII H-43.

Enact the On-Site Sewage Disposal

Ordinance.

#### Sabattus

Solid Waste Assess continuous operation of new

landfill site against participation in a regional solution with Lewiston

or Auburn.

Sludge and Septage Continue to dispose septage at the

LAWPCF.

Ground Water/Drinking Water Enact aquifer protection controls.

On-Site Residential Sewage

Disposal

Improve code enforcement. Consider

a cooperative program with Wales and Greene. Develop a high intensity

education program.

Public Sewer Systems Complete 201 Facility Plan and imple-

ment recommended solution.

Industrial Waste Plan sewer system to accept waste

from Webster Rubber Company.

# Environmental Impact

The impacts of the recommendations from each subplan on each municipality are summarized in a set of tables in this section.

Each municipality is presented in a separate table; impact categories are listed at the right side of the table and the subplans are presented at the top. The impact each subplan has on the category is summarized by one word and the letter "S or "M". "S" indicates a significant impact and "M" indiactes a minimal impact. It should be noted that some subplans impact entire municipalities while other subplans are site specific.

The Implementation Priority Activities are further assessed in a brief narrative which follows the tables.

IMPACT			IMPACT O	F SUBPLAN	ACTIONS ON	: AUBURN				
CATEGORIES	AGRICULTURE	FORESTRY	CONSTRUCTION	SOLID WASTE	SLUDGE/SEPTAGE	DRINKING WATER	ON-SITE SEWAGE	PUBLIC SEWERS	INDUSTRIAL	STORM RUNOFF
CLASSIFICATION SWIMMARLE / FISHARLE SPOND QUALITY DRINKING WATER ROUIFER SOTHER GROUNDWATER FLOOD POTENTIAL			PROTECT M PROTECT M PROTECT M DECREASE M	PROTECT S		PROTECT M PROTECT M PROTECT M	PROTECT M	PROTECT S PROTECT M PROTECT S PROTECT S		PROTECT M  DECREASE M
NUTRE EXORION				PROTECT M RESTRICT M DECREASE M	RESTRICT M		RESTRICT M	INCREASE S DECREASE S INCREASE S INCREASE S		
GAQUATIC HABITAT SWILDLIFE HABITAT SPARE SPECIES			PROTECT M	DECREASE M	DECREASE M	PROTECT MI PROTECT MI		DECREASE 8		INCREASE M
 CAPITAL COSTS O. AND M. COSTS RESIDENTIAL DEVELOPMENT SPESIDENTIAL DEV. COSTS COMMERCIAL /INDUSTRIAL			INCREASE M	INCRERSE S INCRERSE S RESTRICT M	INCREASE M INCREASE M RESTRICT M		INCREASE M	INCREASE S INCREASE M INCREASE S INCREASE M		
DEVELOPMENT COMMIND. DEV. COSTS ECONOMIC BRSE INFRASTRUCTURE VALUE			increase m	INCREASE M INCREASE M INCREASE S				INCREASE M DECREASE M INCREASE M INCREASE S		
SREETY AND WELFARE SRECRERTION STUPPLY OF HOUSING				INCREASE M	INCREASE M	increase m decrease m	INCREASE M	INCREASE 5		INCRERSE M
MASS TRANSIT STRAFFIC GENERGY USE GENERGY USE GENERGY USE GENERGY GENE				INCREASE	INCREASE M INCREASE M INCREASE M INCREASE M			INCRERSE M DECRERSE M		

NOTES:

	<del> </del>	IMPACT C	F SUBPLAN						
RERICULTURE	FORESTRY	CONSTRUCTION	SOLID WASTE	SLUDGE/SEPTAG	DRINKING WATER	ON-SITE SEWAGE	PUBLIC SEWERS	INDUSTRIAL	STORM RUNOFF
		PROTECT M PROTECT M PROTECT M DECREASE M	PROTECT S		PROTECT M PROTECT M PROTECT M	PROTECT M PROTECT M	PROTECT S		PROTECT M  DECREASE M
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IMPACT			IMPACT (	OF SUBPLAN	ACTIONS ON	: LIZBON	<del>!</del>				
CATEGORIES	AGRICULTURE	FORESTRY	CONSTRUCTION	SOLID WASTE	SLUDGESSEPTAGE	DRINKING WATER	ON-SITE SEWAGE	PUBLIC SEWERS	INDUSTRIAL	STORM RUNOFF	
CLRSSIFICATION SUMMABLE / FISHABLE SPOND QUALITY DRINKING WATER-ROUIFER OTHER GROUNDWATER FLOOD POTENTIAL			PROTECT M PROTECT M  DECREASE M	INCREASE S PROTECT S PROTECT S	PROTECT M	PROTECT 5	PROTECT M PROTECT M PROTECT - M PROTECT S PROTECT M			IMPROVE  DECREASE	
EROSION ETUSES VALUE			DECREASE S PROTECT M RESTRICT M INCREASE M	RESTRICT N	A RESTRICT M		PROTECT M RESTRICT M INCREASE M	INCREASE M INCREASE M INCREASE M	INCREASE M	INCREASE INCREASE INCREASE	
S AQUATIC HABITAT S WILDLIFE HABITAT S PARE SPECIES			PROTECT M		PROTECT M DECREASE M			PROTECT S	PROTECT S	PROTECT.	
CRPITAL COSTS O, RND M. COSTS RESIDENTIAL DEVELOPMENT ECOMMERCIAL JINDUSTRIAL DEVELOT SENT COMMINIO E 1. COSTS SCONOMIC BASE INFRASTRUCTURE VALUE			INCREASE M RESTRICT M INCREASE M RESTRICT M INCREASE M	INCREASE S RESTRICTS	INCREASE S INCREASE M RESTRICT M	INCREASE S RESTRICT M  RESTRICT S INCREASE M	INCREASE 1 INCREASE M	INCREASE S INCREASE M RESTRICT S RESTRICT M	INCREASE S INCREASE S INCREASE M	INCREASE INCREASE RESTRICT RESTRICT	
SAFETY AND MELFARE SECREPTION			INCREASE M RESTRICT M	INCREASE N	1 INCRERSE M	INCREASE S	INCREASE M		INCREASE M		
MASS TRANSIT STRAFFIC SENERGY USE FIRE GUALITY JOTHER STRAFFICES GOTHER			INCREASE M	INCRERSE N INCRERSE N DECRERSE N	1			INCREASE M		INCREASE	

IMPACT			IMPACT O	F SUBPLAN	ACTIONS ON	: MECHAN	C FALLS			
CATEGORIES	<del>ac</del> riculture	FORESTRY	CONSTRUCTION	SOLID WASTE	SLUDGE/SEPTACE	DRINKING WATER	ON-SITE SEWINGE	PUBLIC SEWERS	INDUSTRIAL	STORM RUNOFF
CLASSIFICATION SUIMMABLE / FISHABLE SPOND QUALITY DRINKING WATER DOWFER			PROTECT M PROTECT M	PROTECT M	PROTECT 1 PROTECT 1	PROTECT M	PROTECT M PROTECT M PROTECT M	IMPROVE S PROTECT S	PROTECT M PROTECT M	PROTECT PROTECT
SOTHER CROUNDWINTER FLOOD POTENTIAL			DECREASE M	PROTECT 5	PROTECT 1	PROJECT IN	PROTECT M	PROTECT M	PROTECT M	
ENOSION SWETLENDS EUSES VALUE			DECREASE S PROTECT M RESTRICT M INCREASE M	RESTRICT M	PROTECT 1 RESTRICT 1 DECREASE 1	INCREASE 5	PROTECT M RESTRICT M INCREASE M	INCREASE S		INCREASE N
GROUNTIC HARITAT Sunduff Haritat Spare species			PROTECT M	PROTECT M DECREASE M	PROTECT 1. DECREASE 1			INCREASE S	PROTECT M	INCRERSE 4
CRPITRI. COSTS O. NNO M. COSTS RESIDENTIAL DEVELOPMENT PRESIDENTIAL DEV. COSTS COMMERCIAL JIHOUSTRIAL			RESTRICT M		INCRERSE S INCRERSE S		INCREASE S INCREASE M	INCREASE S INCREASE M		INCREASE STATEMENT OF THE PROPERTY OF THE PROP
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SERVETY AND MELFARE SPECKERTION OF HOUSING			INCREASE M	INCREASE S	INCREASE S	INCREASE S		INCREASE S INCREASE M INCREASE 3	INCREASE S	INCREASE
MASS TRANSIT STRAFFIC SEMERGY USE ENR GUALITY HESTHETICS GOTHER			INCREASE M	INCREASE 1 INCREASE 5	INCREASE 5	UNKNOWN		INCREASE 5		
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IMPACT	ļ		IMPACT O		ACTIONS ON	: MINOT				
CATEGORIES	AGRICULTURE	FORESTRY	CONSTRUCTION	SOLID WASTE 2	SLUDGE/SEPTAGE	DRINKING WATER	ON-SITE SEWAGE	PUBLIC SEWERS	INDUSTRIAL	STORM RUNOFF
CLRSSIFICATION SWIMMABLE/FISHABLE POND QUALITY			PROTECT M PROTECT M	PROTECT M	PROTECT M PROTECT M		PROTECT M PROTECT M PROTECT M			
EDAINKING WATER-AQUIFER  SOTHER GROUNDWATER  FLOOD POTENTIAL		DECREASE M	DECREASE M	PROTECT M	PROTECT M		PROTECT M			
EBOSION EDISION ENDIS		PROTECT M RESTRICT M	DECREASE S PROTECT M RESTRICT M INCREASE M	PROTECT M RESTRICT M	RESTRICT 1		PROTECT M RESTRICT M INCREASE M			
SAQUATIC HABITAT SWILDLIFE HABITAT SPARE SPECIES		PROTECT M PROTECT M	PROTECT M	PROTECT M DECREASE M	PROTECT M					
CAPITAL COSTS O. AND IM. COSTS RESIDENTIAL DEVELOPMENT PRESIDENTIAL DEVELOPMENT			INCREASE M RESTRICT M INCREASE M	INCREASE S INCREASE S	INCREASE 1		INCREASE S			
E COMMERCIAL SHOUSTRIAL DEVELOPMENT COMMINIO DEV. COSTS ECONOMIC BASE INFRASTRUCTURE VALUE		INCREASE M	RESTRICT M INCREASE M	INCREASE 5			RESTRICT M INCRERSE M			
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2-SEE AUBURN SOUD WASTE RESESSMENT.

IMPACT			IMPACT (	F SUBPLAN	ACTIONS ON	: NORWAY				
CATEGORIES	RGRICULTURE	FORESTRY	CONSTRUCTION	SOLID WASTE	SLUDGE/SEPTAGE	DRINKING WATER	ON-SITE SEWINGE	PUBLIC SEWERS	INDUSTRIAL	STORM RUNOFF
CLASSIFICATION SUIMMABLE / FISHABLE SPOND QUALITY DRINKING WATER AQUIFER SOTHER GROUNDWATER FLOOD POTENTIAL		PROTECT M PROTECT M 	PROTECT M PROTECT M	PROTECT S PROTECT S PROTECT M	PROTECT M	PROTECT S	PROTECT M PROTECT M PROTECT M PROTECT M PROTECT M	IMPROVE S PROTECT M	PROTECT M PROTECT M PROTECT M	PROTECT S
EROSION EWETLENDS EUSES UNELLENDS		DECREASE M	DECREASE S PROTECT M RESTRICT M	DECRERSE M PROTECT M RESTRICT M DECRERSE M		PROTECT M RESTRICT M INCREASE M	DECREASE M PROTECT M RESTRICT M INCREASE M	INCREASE M		INCREASE M
SAGUATIC HABITAT Swildlife Habitat Spare Species		PROTECT M PROTECT M	PROTECT M	PROTECT M	PROTECT 5		:	PROTECT M	PROTECT M	PROTECT M
CRPITAL COSTS O. AND IM. COSTS RESIDENTIAL DEVELOPMEN SECONMERCIAL FINDUSTRIAL DEVELOPMENT OCUMNISTRIAL ECONOMIC BASE INFRASTRUCTURE VALUE		INCREASE M		INCREASE S INCREASE S RESTRICT		RESTRICT M INCREASE M- RESTRICT M	Increase 3 Restrict M Increase M Restrict M Increase M	INCREASE M INCREASE M INCREASE M INCREASE M INCREASE M	DECREASE S RESTRICT M INCREASE M RESTRICT M INCREASE S INCREASE M	INCREASE M INCREASE M INCREASE M INCREASE M INCREASE M INCREASE M
SUPPLY OF HOUSING		INCREASE M	INCREASE M		INCRERSE M	INCREASE S		INCREASE S	INCREASE M	INCREASE M
MASS TRANSIT STRAFFIC GENERGY: USE ENIR GUNLITY INESTHETICS GOTHER		INCRERSE M	INCREASE M	INCREASE S INCREASE M INCREASE 5				DECRERSE M INCRERSE M		
NOTES: 1- CODE E	NEODCEMENT CO	ST'S								

NOTES: 1-CODE ENFORCEMENT COSTS.

IMPACT			IMPACT C	F SUBPLAN	actions on	: OXFORD				
CATEGORIES	AGRICULTURE	FORESTRY	CONSTRUCTION	SOLID WASTE	SLUDGE/SEPTACE	DRINKING WATER	ON-SITE SEWAGE	PUBLIC SEWERS	INDUSTRIAL	STORM RUNOFF
CLASSIFICATION SUIMMABLE / FISHABLE SPOND QUALITY DRINKING WIRTER-DQUIFER STHER GROUNDWATER FLOOD POTENTIAL		PROTECT M	PROTECT M PROTECT M  DECREASE M	PROTECT S PROTECT S PROTECT M	PROTECT 1 PROTECT 1 PROTECT 1 PROTECT 1	PROTECT M PROTECT 5	PROTECT M PROTECT M PROTECT M PROTECT M PROTECT S	SEE OTHER SUB-PLANS		
NUTRE  PROSION  ENOZION		PROTECT M RESTRICT M	PROTECT M RESTRICT M	DECREASE M PROTECT M RESTRICT M DECREASE M	PROTECT 1 RESTRICT 1 DECRERSE 1	RESTRICT S	DECREASE M PROTECT S RESTRICT M INCREASE M	SEE OTHER SUB-PLANS		
S AQUATIC HABITAT S UNLOLIFE HABITAT S RARE SPECIES		PROTECT M PROTECT M	PROTECT M	PROTECT M PROTECT M	PROTECT 1		PROTECT M	SEE OTHER SUB-PLANS		
CRPITAL COSTS O. AND M. COSTS RESIDENTIAL DEVELOPMENT SCOMMERCIAL JINDUSTRIAL OEVELOPMENT SCOMMINO. DEV. COSTS COMMINO. DEV. COSTS INFRASTRUCTURE VALUE		INCREASE M	INCRERSE M RESTRICT M INCRERSE M RESTRICT M INCRERSE M	INCREASE S INCREASE S RESTRICT M	INCRERSE 1 DECREASE 1 RESTRICT 1 DECRERSE 1	RESTRICT MINCRERSE MINCRERSE MINCRERSE MINCRERSE MINCRERSE	INCREASE 2 RESTRICT M INCREASE M RESTRICT M INCREASE M INCREASE M INCREASE M	SEE OTHER SUB-PLANS		
SRFETY AND WELFARE SRECREATION SSUPPLY OF HOUSING		INCREASE M	INCREASE M RESTRICT M	INCREASE S	INCREASE 1	INCREASE S	Increase s Increase m Decrease m	SEE OTHER SUB-PLRNS		
MRSS TRANSIT STRAFFIC SENERGY USE RING GUALITY GRESTHETICS GOTHER		INCRERSE M	INCREASE M	INCREASE S INCREASE M INCREASE S				SEE OTHER SU8-PLANS		

NOTES: 1-EXTENT DEPENDS ON ALTERNATIVE CHOSEN.
2-CODE ENFORCEMENT COSTS.

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IMPACT			IMPACT 0	L SORNIAN	ACTIONS ON					
CATEGORIES	AGRICULTURE	FORESTRY	CONSTRUCTION	SOLID WASTELD	SLUDGE/SEPTAGE	DRINKING WATER	ON-SITE SEWAGE	PUBLIC SEWERS	INDUSTRIAL	STORM RUNOF
CLASSIFICATION SUMMABLE / FISURGLE SPOND QUALITY DRIMMING WATER-DOWNER SOTHER GROUNDWATER FLOOD POTENTIAL			PROTECT M PROTECT M  DECREPSE M	PROTECT M	PROTECT 2 PROTECT 2 PROTECT S PROTECT S	PROTECT 5	PROTECT M PROTECT M PROTECT M PROTECT M	PROTECT S		
SECTION SECTIO			DECREASE S PROTECT M RESTRICT M INCREASE M	DECRERSE M PROTECT M	RESTRICT M	PROTECT S RESTRICT S INCREASE M	PROTECT M RESTRICT M INCRERSE M	INCREASE MI		
AQUATIC HABITAT SMUDLIFE HABITAT BRARE SPECIES			PROTECT M	PROTECT M	PROTECT M			PROTECT M		
CRPITAL COSTS O. RIND M. COSTS RESIDENTIAL DEVELOPMENT PESIDENTIAL DEV. COSTS COMMERCIAL JINDUSTRIAL DEVELOPMENT COMMINION DEV. COSTS ECONOMIC BASE INFRASTRUCTURE VALUE			INCRERSE M RESTRICT M INCREASE M RESTRICT M INCREASE M	INCREASE S	INCREPSE 2.	INCREASE 3 RESTRICT M INCREASE M RESTRICT M INCREASE M INCREASE M INCREASE M	INCREASE M	INCREASE M		
SUPPLY OF HOUSING			INCREASE M RESTRICT M		INCREASE 5	INCREASE 5	INCREASE M	INCREASE M		
MRSS TRANSIT STRAFFIC GENERGY USE BARR GURLITY TRESTHETICS LIOTHER			INCREASE M	INCREASE S	INCRERSE M INCRERSE M INCRERSE M					

IMPACT CATEGORIES			TWING! 0	F SUBPLAN	ACTIONS ON : POLAND					
	AGRICULTURE	FORESTRY	CONSTRUCTION	SOLID WASTE	SLUDGE/SEPTAGE	DRINKING WATER	ON-SITE SEWAGE	PUBLIC SEWERS	INDUSTRIAL	STORM RUNOFF
CLASSIFICATION SWIMMABLE / FISHABLE FOND QUALITY DRINKING WATER AQUIFER OTHER GROUNDWATER FLOOD POTENTIAL			PROTECT M PROTECT M  DECREPSE M	PROTECT M PROTECT S	PROTECT 1 PROTECT 1 PROTECT 1 PROTECT 1	PROTECT M PROTECT S	PROTECT M PROTECT M PROTECT M PROTECT M PROTECT S			
EDOSION EDOSION VIALUE			RESTRICT M	RESTRICT M	PROTECT 1	RESTRICT S	DECREASE M PROTECT S RESTRICT M INCREASE M			
GAQUATIC HABITAT SWILDLIFE HABITAT GRARE SPECIES			PROTECT M	PROTECT M DECREPSE M	PROTECT 1		PROTECT M			
CAPITAL COSTS O. AND M. COSTS RESIDENTIAL DEVELOPMENT RESIDENTIAL DEV. COSTS COMMERCIAL / INDUSTRIAL COMM/IND. DEV. COSTS COMM/IND. DEV. COSTS INFRASTRUCTURE VALUE			INCREASE M RESTRICT M INCREASE M RESTRICT M INCREASE M	INCREASE S INCREASE S RESTRICT M	INCREASE 1 DECREASE 1	INCREASE 2 RESTRICT M INCREASE M RESTRICT S INCREASE M INCREASE M INCREASE M	INCREASE 2 RESTRICT M INCREASE M RESTRICT M INCREASE M INCREASE M INCREASE M			
SECREPTION WELFARE SUPPLY OF HOUSING			INCREASE M RESTRICT M	INCREASE S	INCREASE 1	INCREASE S	INCREASE S INCREASE M DECREASE M			
MASS TRANSIT STRAFFIC STRAFFIC SENERCY USE SENER GUALITY SEASTHETICS SOTHER			INCRERSE M	INCREASE 1 INCREASE 3						

NOTES: 1-EXTENT DEPENDS ON RITERNATIVE CHOSEN. 2-CODE ENFORCEMENT COSTS

IMPACT CATEGORIES	IMPACT OF SUBPLAN ACTIONS ON : SABATTUS										
	AGRICULTURE	FORESTRY	CONSTRUCTION	SOLID WASTE	SLUDGESEPTACE	DRINKING WATER	ON-SITE SEWAGE	PUBLIC SEWERS	INDUSTRIAL	STORM RUNOFF	
CLASSIFICATION SUIMMABLE/FISHABLE SOUND QUALITY DRINKING WATER-RQUIFER SOTHER GROUNDWATER FLOOD POTENTIAL			PROTECT M PROTECT M  DECREASE M	PROTECT S		PROTECT S	PROTECT M PROTECT M PROTECT M	IMPROVE 5 PROTECT M PROTECT M PROTECT S	IMPROVE M		
NUTRE ENORION			RESTRICT M	PROTECT M RESTRICT M DECREASE M		RESTRICT 5	PROTECT 5 RESTRICT M	INCREASE M PROTECT M INCREASE M INCREASE M			
SACURITIC HABITAT SUILOLIFE HABITAT SPARE SPECIES			PROTECT M	PROTECT M DECREASE M			PROTECT M	PROTECT M	PROTECT M		
CRPITAL COSTS O. RND M. COSTS RESIDENTIAL DEVELOPMEN PRESIDENTIAL DEV. COSTS COMMERCIAL JINDUSTRIA DEVELOPMENT COMMITTIAL DEV. COSTS LI ECONOMIC BASE INFRASTRUCTURE VALUE			INCREASE M RESTRICT M INCREASE M RESTRICT M INCREASE M	1		RESTRICT M INCRERSE RESTRICT S INCREASE M	RESTRICT M INCREASE M  RESTRICT M INCREASE M INCREASE M	INCREASE S INCREASE M INCREASE M INCREASE M DECREASE M	INCREASE M INCREASE M RESTRICT M INCREASE M RESTRICT M INCREASE S INCREASE M		
SECRETY AND MELFARE SECRETION SUPPLY OF HOUSING			increase m restrict m	INCREASE S		INCREASE 5	INCREASE M	INCREASE 5 INCREASE M INCREASE M	increase m		
MASS TRANSIT STRAFFIC SENERGY USE EMR GUALITY TRESTHETICS TOTHER			INCREASE M	INCREASE 1 INCREASE 5				INCREASE M			

2-CODE ENFORCEMENT COSTS

#### Solid Waste - Incinerator/Ashfill

# Impacts

- 1. Dump will be replaced; therefore ground water quality at dump will stabilize.
- Siting, design, and operation procedures at new ashfill will minimize ground water contamination.
- 3. Agricultural useage in ashfill area will not be affected.
- 4. Air pollution control equipment on incinerator will maintain air quality.

# Conclusions

- 1. Increased capital and operation and maintenance costs are offset by energy and land conservation and by protecting ground water quality in Auburn and possibly other towns which may use the incinerator. (NOTE: Elimination of the dump in Poland will protect a potential public drinking water source).
- 2. See OPPORTUNITIES FOR REGIONAL WASTE MANAGEMENT by Arthur D. Little, Inc. for further assessment and costs.
- The incinerator and ashfill will be further assessed during the design phases.

Sludge and Septage Subplan - Landfill

# **Impacts**

- 1. New landfill site will improve the quality of ground water and surface runoff at the old site in Lewiston.
- 2. Design and operation procedures will minimize ground water contamination at new site in Auburn.
- 3. Agricultural useage in area will not be affected.
- The landfill will require the long term commitment of land.

- 1. Landfill will require the smallest capital investment of all alternatives and also will have smallest operation and maintenance costs.
- 2. The economics of land spreading are unknown. More land would be required initially. Site life cannot be determined due to zinc concentrations in sludge.
- 3. The landfill will be further assessed during design and D.E.P. Site Location review.

# Impacts

- 1. The high quality of Lewiston's and Auburn's drinking water supply will be further protected.
- 2. A few industrial land uses in the watershed in Minot and Turner will be prohibited.
- 3. Development costs in the watershed in Minot and Turner will increase slightly because of some restrictions and increased code enforcement.
- 4. Minot and Turner require large lot sizes so development density will not be affected.

# Conclusions

- 1. The minimal increase in restrictions in the extended watershed zone will provide added protection for the residents of Lewiston and Auburn.
- 2. Improved watershed protection could prevent a large capital expenditure for a water treatment facility in the future.

Public Sewer Systems - Sewer Extensions

# **Impacts**

- 1. The Taylor Pond sewer extension should improve the poor water quality of Taylor Pond.
- Increased development pressures will cause increased erosion and could cause the loss of aquatic and wildlife habitat as wetlands are filled around Taylor Pond.
- 3. Sewer extensions in the Poland Road area and the Carrier Court area should protect ground water and eliminate health hazards in these areas.
- 4. Land values and therefore development costs will increase in all areas.
- 5. Development densities will increase creating areas close to the employment centers. The cost of providing services and the cost of transportation will be minimized.

- Land use controls in the Taylor Pond area should not be changed. Controls should be strictly enforced.
- 2. The capital costs of sewer extensions in these three areas appear justified.

# Solid Waste Subplan - Shredder/Landfill

# Impacts

- The landfill operation will minimize leachate entering a small stream which was piped through the old dump. It will also minimize ground water contamination.
- 2. Site life will be twice that of the conventional fill.
- 3. Resource recovery technologies will be more easily implemented in the future.

# Conclusions

- 1. The substantial capital investment allows water and land conservation and will prevent site location in the immediate future.
- 2. Costs and effects are fully presented in "Solid Waste Management", a report compiled by the City of Lewiston.

Sludge and Septage Subplan

See Auburn under the Sludge and Septage Subplan.

Ground Water/Drinking Water Subplan

See Auburn under the Ground Water/Drinking Water Subplan.

Public Sewer Systems Subplan - Abandon Randall Road Lagoons

# Impacts

- 1. Abandonment of the lagoons will improve the water quality in No Name Pond Brook and allow it to meet Class B-2.
- 2. Sewers will be extended in the area of Sabattus Street and No Name Pond. Current ground water contamination and health hazards resulting from septic system malfunctions in the area will be eliminated.

- The substantial capital investment to abandon the lagoons and pump sewage to the LAWPCF will improve water quality and add significant developable area to the City of Lewiston.
- 2. This alternative appears to require the least cost of all alternatives for upgrading sewage collection and treatment in the area.

Construction Subplan - Sediment and Erosion Controls

# Impacts

1. Sedimentation in the many small drainages will be prevented.

# Conclusions

1. The small costs of sediment and erosion control during construction will maintain the relatively good quality of small drainages in the town and will insure the drainages are effective in the removal of storm runoff.

Solid Waste - New Disposal Site

# Impacts

- 1. Closure of the old dump site will improve ground water and surface water quality in the area.
- 2. Encroachment on a wetland will cease and wildlife and aquatic habitat will improve.
- 3. Operation and design of the new site will minimize ground water contamination.

# Conclusions

- 1. Relocation for at least a 20 year period.
- 2. The substantial capital investment will be a significant deterant to successful relocation of the site. Alternatives to minimize costs must be carefully evaluated.

Ground Water/Drinking Water Subplan - Aquifer Protection

# <u>Impacts</u>

- 1. The high quality ground water which is the town's drinking water source will be protected.
- 2. Waste disposal practices and a few industrial uses will be limited in the overlay zone.
- 3. Residential development density will decrease in some areas of the overlay zone.

- 1. The slight limitations on development within the overlay zone are a reasonable trade off for protection of the water supply.
- 2. Protection will prevent future capital expenditures to replace or treat the current supply and will enhance economic development potential in the town.

Public Sewer Systems/Urban Storm Runoff Subplans - Sewer Rehabilitation

# Impacts

- 1. Removal of infiltration and some storm water will improve treatment facility effluent quality and will add needed capacity.
- 2. Combined sewer overflow frequency will be lowered and neighborhood flooding will be minimized.
- 3. Implementation of the Construction Subplan recommendations will supplement this action.

- 1. Continuance of the rehabilitation program is necessary for the sewage treatment facility to continually meet effluent standards.
- 2. Sewer rehabilitation will help to minimize combined sewer overflows at the least possible cost.

#### MECHANIC FALLS

Construction Subplan - Sediment and Erosion Control

# **Impacts**

- 1. Sedimentation in the wetlands and drainages in the town will be prevented and wildlife and aquatic life protected.
- Construction costs will increase slightly.

# Conclusions

 The slightly increased construction costs will not affect the development in the area. The valuable wetlands will be protected and drainages will affectively transport storm runoff.

Sludge and Septage Subplan - Sludge Site and Septage Receiving Facility

# **Impacts**

- Land spreading of sludge appears to be the lowest cost alternative. This method will allow the continued annual use of a site. Thereby minimizing long term land requirements.
- Construction of a small septage receiving facility at the sewage treatment facility should encourage septic system pumping by residents not connected to the sewer system. Therefore, ground water quality in several areas should improve.
- 3. The septage facility should not affect effluent quality as septage will be accepted from only one or two small towns (i.e. Mechanic Falls and Poland). The facility will be large enough to hold septage during low flow periods.

- 1. The sludge disposal method and site will be assessed by D.E.P. under the Site Location Act.
- 2. Land disposal of septage is not viewed favorably. The facility is a reasonable alternative to eliminate a possible land disposal site and thereby will encourage septic system pumping.

Ground Water/Drinking Water Subplan - Develop New Water Supply

# Impacts

- 1. An improved water supply will reduce treatment costs and make compliance with the Safe Drinking Water Act much easier.
- 2. An improved supply will also allow increased economic development which should help to increase the economic base and revitalize the town. Thus, necessary improvements to the sewer system and solid waste facility will be more likely to occur.

# Conclusion

 The development of a new water supply will be further assessed as to cost and impact in a water utility study which will be undertaken by the town.

Public Sewer Systems/Industrial Waste/Urban Storm Runoff Subplans - Treatment Facility, Sewer Use Ordinance and Sewer Rehabilitation

# **Impacts**

- The facility construction will eliminate the discharge of raw sewage to the Little Androscoggin River and allow its quality to be improved.
- 2. Sewer rehabilitation will allow improved treatment efficiencies at the treatment facility and will be a low cost control measure for the combined sewer overflows.
- The construction and rehabiliation should increase the development potential of the town. Increased development should have minimal environmental impacts due to existing land use controls.
- 4. The Sewer Use Ordinance will insure treatment plant efficiencies are maintained and receiving water quality is protected.

#### Conclusions

1. Impacts are further assessed in the Step I, 201 Facility Plan for Mechanic Falls.

#### MINOT

Construction Subplan - Sediment and Erosion Controls

# Impacts

1. Sediment and Erosion controls added to the Subdivision Regulations will minimize sedimentation in Bog Brook and other streams during construction of subdivisions. Thus the high quality streams in Minot will be protected from degradation.

#### Conclusion

 The slight cost of the controls during construction will protect the water quality of the natural drainages.

On-Site Residential Sewage Disposal Subplan - Site Plan Review Ordinance

# <u>Impacts</u>

- 1. The ground waters and surface streams of Minot will be protected from degradation by adverse land uses.
- 2. Development costs will increase slightly but the amount of development should not be affected.
- 3. The ordinance will also help control sediment entering streams from construction projects.

# Conclusion

1. The Site Plan Review Ordinance will allow the Planning Board to review many of the smaller type commercial and industrial developments which might find Minot attractive. The Planning Board will be able to review the developments to insure adequate sewage disposal as well as adequate sediment and erosion controls, surface drainage, and aesthetics.

#### **NORWAY**

Construction and On-Site Residential Sewage Disposal - Subdivision Ordinance Site Plan Review Ordinance

# **Impacts**

- 1. Pond and stream quality will be protected from sedimentation caused by construction related erosion. The two ordinances will insure control of most developments.
- 2. Ground water and surface waters will be protected from inadequate sewage disposal in most developments.

# Conclusions

 The slight increased cost of development resulting from these extra controls will not inhibit development and will provide needed protection especially for the generally high quality surface waters in the town.

Public Sewer Systems/Industrial Waste/Urban Storm Runoff Subplans - Renovate Lagoons and Sewage System

# <u>Impacts</u>

- Lagoon renovation will increase effluent quality and help increase the water quality of the Water Quality Limited Segment of the Little Androscoggin River.
- Sewer system rehabiliation will increase effluent quality and help to minimize urban storm water impacts on the Little Androscoggin River.
- 3. Sewer system renovation may also create extra capacity in the treatment facility. This could prevent treatment facility expansion during the next 20 years.
- 4. The Sewer Use Ordinance will insure lagoon efficiencies are maintained and therefore prevent further degradation of the Little Androscoggin River.

- 1. The lagoon renovation is the least cost alternative to upgrade the Norway sewage effluent to the required state and federal standards.
- 2. A long term sewer renovation program will minimize the costs of controlling storm runoff from Norway's village area.

Ground Water/Drinking Water Subplan - Aquifer Protection

# Impacts

1. Aquifer protection will improve and or protect ground water quality in the aquifer and aquifer recharge areas.

2. Industrial land uses will be slightly restricted

in the aquifer protection zone.

3. The town will enact townwide zoning in order to enact the aquifer protection controls.

4. Zoning may restrict certain land uses and may increase development costs. It will also provide controls over erosion and subsurface disposal.

# Conclusions

1. Increased land use controls are necessary to protect drinking water sources in the town in which there are two high yield wells supplying the villages of Norway and Oxford. Oxford may possibly develop another well within the next five years.

2. The high quality ground water in the aquifer is

the towns most important resource.

3. Zoning will enhance the utilization of the resource and will not hinder further economic development in the area.

On-Site Residential Sewage Disposal/Public Sewer Systems Subplan - Zoning Ordinance, Site Plan Review Ordinance, On-Site Disposal Education and Ordinance.

# <u>Impacts</u>

1. Zoning will restrict both commercial/industrial and residential development to land most suitable for these uses. Specifically the ordinance will place development where waste disposal from the particular use will not contaminate ground water.

2. The Site Plan Review will protect ground water by providing increased control of on-site sewage dis-

posal systems.

 Sedimentation in wetlands and drainages will be prevented and thus wildlife and aquatic life will

be protected.

4. The on-site disposal education program and ordinance will improve maintenance of septic systems and therefore improve ground water quality.

- The implementation of these programs will help prevent the need of a sewage collection and treatment system in Oxford.
- 2. The restrictions on development will not significantly affect the rate or type of development in the town.
- 3. The cost of development restrictions is considerably less than the four million dollars which would be required to construct a sewer system and treatment facility.

#### **PARIS**

Solid Waste Subplan - Construct Sanitary Landfill

#### **Impact**

- A sanitary landfill operation at the old dump site will help prevent leachate from contaminating high quality ground water in the underlying aquifer.
- 2. However, expansion of the dumping facility, even if operated as a landfill, beyond the old dump site could produce leachate which could contaminate the aquifer and limit well field expansion or contaminate existing wells.

#### Conclusions

1. The town officials, after carefully considering the situation, decided to develop a landfill at the existing site and fund a series of test wells around the dump and landfill to detect contamination and determine the exact direction of ground water movement.

Ground Water/Drinking Water and Construction Subplans - Site Plan Review Ordinance

#### <u>Impacts</u>

- 1. The Site Plan Review Ordinance will control development which can occur in aquifer and aquifer recharge areas and will therefore prevent pollution of groundwater in the aquifer.
- 2. Controls will limit a few types of industrial and waste disposal activities which can occur on the aguifer or recharge areas.

#### Conclusions

- Protection of the aquifer will protect the health of Norway and Paris residents and prevent future capital investments to treat water supplies.
- Protection of this regional resource will increase the attractiveness of the area for most industrial/ commercial and residential development.

Sludge and Septage Subplan - Choose Sludge Disposal Site

#### Impacts

- 1. Location of the sludge site at the old A.C. Lawrence site could contaminate the aquifer which is Norway and Oxford's drinking water supply.
- 2. Location of the site at Ryerson Hill could contaminate ground water and a high quality stream.

#### Conclusions

- 1. An EIS is being conducted specifically for the sludge disposal in Paris.
- 2. Landfill of sludge is the only economical solution.

Construction Subplan - Zoning or Site Plan Review Ordinance

#### Impacts

1. Sedimentation will be prevented in the numerous wetlands, streams, and ponds.

2. Development will be directed onto soils most suitable for the particular use. Ground water and surface water degradation will be prevented.

3. Development costs will increase slightly.

#### Conclusion

 Protection of the wetlands, high quality streams, and ponds is necessary to the continued economic stability of the town.

Solid Waste Subplan - Auburn's Incinerator vs New Landfill Site

#### Impacts

1. The current dump site is located in an aquifer recharge area and could contaminate this high quality potential drinking water supply.

#### Conclusion

1. The economics and environmental impacts of a new site in Poland must be compared with the regional incinerator.

Ground Water/Drinking Water Subplan - Aguifer Protection

#### Impacts

- 1. Aquifer protection through townwide zoning will protect this resource.
- 2. Development will be directed into areas so that goods and services can be more economically provided.
- 3. Some industrial development and waste disposal practices will be limited in the aquifer zone.

#### Conclusions

- Restrictions on land use will not affect the growth rate and will not substantially increase development costs.
- 2. Protection of the ground water resource will increase the economic potential of the area.

#### **SABATTUS**

Ground Water/Drinking Water and Construction Subplans Aquifer Protection, Site Plan Review

#### Impacts

- 1. The high quality water in the aquifer will be maintained for existing and potential public and industrial uses.
- 2. A few industrial uses will be restricted from the aquifer.
- 3. Zoning will restrict the location of various land uses and may improve ground water, pond, and stream water quality also.
- 4. Sedimentation in wetlands and streams will be prevented.

#### Conclusions

- 1. The Site Plan Review Ordinance will allow the town to control land uses which may adversely affect the water quality of the aquifer.
- 2. This ordinance will be an interim protective measure until zoning with an aquifer overlay zone can be implemented.
- 3. The protection will prevent large future expenditures to develop a new water supply.

Public Sewer Systems/Industrial Waste Subplans - Sewage Treatment Facility

#### Impacts

1. Implementation of the findings of the 201 facilities plan will improve ground water quality and the water quality in Sabattus Pond and the Sabattus River.

#### Conclusion

1. An Environmental Assessment will be conducted as part of the 201 facility plan.

# APPENDIX A PUBLIC PARTICIPATION SUMMARY

### ISSUES AND COMMENTS RECEIVED FROM THE PUBLIC

During the planning process, staff met with municipal officials and other public interest groups. The following is a summary of their comments categorized by subplan.

Comments made by:

Comment

#### Public Sewer Subplan

- Mechanic Falls Municipal Officials Norway Municipal Officials
- upgrading of present wastewater treatment plants and alleviation of the delays in the federal funding of treatment facilities
- Sabattus Lake Association Tripp Pond Lake Association
- need for Environmental Protection Agency (E.P.A.) to review its facility construction grants program and allow for smaller or cluster waste disposal systems in rural areas where there are too few households to warrant the investment in a large municipal treatment plant

#### Residential On-Site Sewage Disposal

- Oxford Municipal Officials
- malfunctioning septic tanks and leachfields caused by irregular maintenance or pumping
- Sabattus Lake Association Tripp Pond Lake Association Congress of Lake Associations
- controlling increased surface water pollution problems caused by malfunctioning septic systems as a result of the conversion of seasonal dwellings into year-round dwellings
- Sabattus Lake Association Tripp Pond Lake Association
- encouraging use of alternative waste disposal systems in seasonal dwellings, such as, incinerator toilets, chemical toilets, and others
- Oxford Municipal Officials 208 Technical Advisory Committee
- there is a need for a public information program to promote the need for regular septic tank pumping

#### Sludge, Septage and Solid Waste

Lisbon Municipal Officials
Mechanic Falls Municipal Officials
Paris Citizens
Auburn Citizens

 there is a lack of acceptable land disposal sites for sludge from sewage treatment plants and for septage generated by septic tank pumping

Auburn Municipal Officials Lewiston Municipal Officials  need for new solid waste disposal methods because there are insufficient solid waste disposal sites

- new technologies must be utilized to dispose of solid waste

Sabattus Municipal Officials

 agricultural spreading of chicken manure on the land is a problem in some lakes watersheds

#### Ground Water/Drinking Water Subplan

Paris	Municipal	Officials
0xford	Municipal	Officials
Lisbon	Municipal	Officials

 there is a need to protect ground water drinking supply sources through controlling the land uses over aquifers and aquifer recharge areas

Auburn Municipal Officials

 protection of surface water bodies which are drinking water supply sources or are used for recreational purposes by controlling the land use activities within the watershed.

Mechanic Falls Municipal Officials

 new ground water drinking supply sources will need to be found as demand for water service increases

#### Construction Subplan

Lisbon Municipal Officials
Mechanic Falls Municipal Officials

 erosion and sediment runoff from construction sites is not adequately controlled

A.V.R.P.C.

 poorly designed subdivisions and multi-family development projects can cause land use and water quality problems

A.V.R.P.C.

 there is a need for better site planning for industiral and commercial development

### Land Use Management Subplan

Sabattus Municipal Officials Poland Municipal Officials Norway Municipal Officials Fish and Game Association		lack of full-time qualified person- nel to enforce municipal codes, ordinances and regulations, (especially the Plumbing Code and Shoreland Zoning Ordinances,) is a problem in all municipalities
Paris Municipal Officials	-	there is a need for improved monitoring of subdivision developments in order to determine if the subdivisions are being developed in conformance with the approved plan
Paris Municipal Officials	-	there is a need for zoning ordinances to control spiralling growth
Sabattus Municipal Officials Minot Municipal Officials Mechanic Falls Municipal Officials	-	there is a need for local subdivision regulations to provide for procedural guidelines for reviewing subdivision plans
Paris Municipal Officials Norway Municipal Officials Poland Municipal Officials	-	there is a need for site plan review ordinances to deal with major industrial, commercial and residential developments
Oxford Municipal Officials	-	there is a need for local subsurface disposal ordinances to deal with mal- functioning septic systems because of lack of regular pumping
Poland Municipal Officials	-	there is a need for codification of existing municipal ordinances, codes and regulations
A.V.R.P.C.	-	community growth problems related to the extension of sewer and water lines and the suitability of soils for septic disposal systems
Lisbon Municipal Officials	-	controlling growth through limiting the number of building permits issued for single-family and multi-family dwelling units

### SUMMARY OF LISTING OF THE 208 PUBLIC PARTICIPATION EFFORT BETWEEN AUGUST 1, 1975 AND MAY 1, 1977

Involved Towns/Agencies/Groups	Meetings 1	Technical Assistance <sup>2</sup>	Newspaper Articles 3
Norway	8	12	8
Paris	12	1 <u>9</u>	29
Oxford	14	2	3
Minot	8		
Mechanic Falls	11	17	6
Poland	7	9	Ĭ
Auburn	9	12	i
Lewiston	11	4	
Sabattus	9	19	11
Lisbon	10	10	2
Subtotal	99	104	61
Utility Districts	6	9	
208 Policy Advisory Committee	25		15
Special Advisory Committee	20	6	5
Federal and State Agencies	43		10
Public Workshops	6		3
TOTAL	199	119	94

This represents the number of meetings that were either attended or sponsored by the 208 staff concerning the 208 planning program. Most of the meetings that were held with the towns were with the Planning Boards.

This number represents the different occasions in which technical assistance was provided by the 208 staff. The types of technical assistance that was provided ranged from on-site analysis of solid waste and sludge disposal sites to consultations on the interpretation of Maine's various planning and land use laws. Also, technical assistance was usually provided at planning board meetings.

This represents the number of different newspaper articles in which the 208 Areawide Water Quality Planning Program was highlighted or in which a name of a 208 staff member was mentioned in relationship to a particular 208 town, special interest group or special local project.

## SUMMARY OF LISTING OF THE 208 PUBLIC PARTICIPATION EFFORT BETWEEN MAY 1, 1977 AND DECEMBER 31, 1977

Involved Towns/Agencies/Groups	Meetings 1	Technical Assistance <sup>2</sup>	Newspaper Articles <sup>3</sup>
TOTAL AUGUST 1, 1975 & MAY 1, 1977	199	119	94
Norway	5	2	10
Paris	10	3	6
0xford	6		Ĭ
Minot	Ī	1	
Mechanic Falls	10	5	7
Poland		3	j
Auburn	1	3 3	4
Lewiston	5		
Sabattus	13	<b>4</b> 9	5
Lisbon	6	7	1
Subtotal	57	37	35
Utility Districts		5	
208 Policy Advisory Committee	1		1
Special Advisory Committee	1		
Federal and State Agencies	14	3	
Public Workshops	3		5
TOTAL	76	45	41
PROGRAM TOTAL	275	164	135

This represents the number of meetings that were either attended or sponsored by the 208 staff concerning the 208 planning program. Most of the meetings that were held with the towns were with the Planning Boards.

This number represents the different occasions in which technical assistance was provided by the 208 staff. The types of technical assistance that was provided ranged from on-site analysis of solid waste and sludge disposal sites to consultations on the interpretation of Maine's various planning and land use laws. Also technical assistance was usually provided at planning board meetings.

This represents the number of different newspaper articles in which the 208 Areawide Water Quality Planning Program was highlighted or in which a name of a 208 staff member was mentioned in relationship to a particular 208 town, special interest group or special local project.

# Proper Maintenance Can Help to Prevent Messy, Dangerous Problem

Sewage disposal. To those who live in major cities where there are public waste collection systems, a discussion of what to do with waste material may be unimportant. But for those who, live in rural areas, a discussion of what to do with their

sewerage and how to keep their particular system functioning can be very important, according to Water Quality Planner Fergus Lea of the Androscoggin Valley Regional Planning Association.

Sewage admittedly is not a pleasant topic to talk about, but it can become an even more unpleasant one when, because of a lack of proper maintenance, s system begins to function inproperly.

"When septic systems function improperly," says Lea, "serious health and water

quality problems can result."
One of the problems that can arise from an improperly maintained system is a failure in the leach field. This, Lea says, can result in the surfacing of "offensive effluent (treated or partially treated wastewater) and/or the contamination of ground and nearby surface

Lack of maintenance heads Lea's list of reasons why septic systems fail, though the planner cites four other reasons as well

Under maintenance, Lea says

the most important procedure is "the periodic removal of sludge and seum from the tank, commonly called pumping."

The reason tanks need periodic pumping, Lea says, is because the biological decomposition occuring in the tank is incomplete and results in a buildup of solid waste material. These solids do not stay in the septic tank but are passed on to the leach field where they are deposited and clog the field.

"The solids form slime layers on the surfaces where the leach field contacts the natural soil," says Lea, "and this slime layer or clogging does not allow the effluent to be absorbed and treated properly in the natural soil."

This condition worsens, according to Lea, as more water enters the leach field either from the house or from a high groundwater table.

Plumbing problems, in the form of backup of toilets, can occur as well as surfacing effluent or groundwater contamination.

Seasonal high water table is the second reason for septic failures.

What happens in this instance, according to Lea, is the water table rises and floods the leach field so that it cannot drain. Contamination of groundwater may also result from a high groundwater table in the disposal area.

While the contamination of groundwater doesn't seem like a serious problem, it can be, because along with this contamination can come the contamination of wells and surface waters.

Improper construction techniques can also result in a septic failure, according to Lea.

The major construction problems do not usually occur in the tank but in the construction of the leach field. These problems are the compacting of the leach field area by heavy machinery during its construction, and the construction of adjacent structures which change the drainage characteristics of the soil from what was noted during the preconstructionsoil evaluation.

Smearing of natural soils on the surface of the bed can also reduce the capacity of the leach field.

All construction problems, says Lea, are aggravated by high soil moisture content.

"Crushing of shallow drain tiles by heavy equipment, over compaction of the leach field

during backfilling or improper backfill so that ponding of surface water occurs on top of the leach field, are all things to watch out for," says Lea.

An inadequately designed septic system can result in a number of problems. What usually happens in these cases is the family increases and the load on the system increases, often going beyond the capacity of the field as it was originally designed.

A dishwasher, Lea adds, if only used once a day to do all the family dishes, does not significantly affect water usage.

Installation of the system in unsuitable soils is the final reason Lea cites for failures in systems.

Many systems in the AVRPC area, says Lea, were designed prior to the new plumbing code (1974) and consequently are constructed in soils that are incapable of handling the amount of waste that is discharged.

Having discussed some of the problems that can arise and the reasons they do, Lea has suggested some ways to prevent these problems.

Better maintenance is the first preventive measure. Tanks, according to Lea, should be pumped every three to five years. He qualifies this statement by saying that small

tanks, less than 1,000 gallons, used by three or more people with a clothes washer should be pumped every three years, while tanks of 1,000 gallons or more, used by four or fewer family members may be pumped every five years.

Better construction controls is another preventive measure suggested by Lea. Being at the site when the local plumbing inspector performs his inspection is one way to learn more about your system, he

Reducing water usage in the home can help prevent problems as can sewering the area, which, he notes, is a very expensive process.

In the event that a system should malfunction, surfacing effluent can cause a scrious problem when pets and children come in contact with the bacteria, either through direct contact or through rodents who are carrying it.

If an improperly function sewer system contaminates a well, viral 'and other bacteriological diseases can result, including an infant's disease, methemoglobenemea, a critical disease where the infant's blood will not maintain an adequate oxygen level.

The effluent can also enter lakes where diseases may be contracted by bathers.

## Lakes, Ground Water to Be **Primary Section 208 Focus**

**By JEAN STREETER** 

Shying away from making any direct policy decisions because of a need for more study on several issues, members of the AVRPC Section 208 Policy Committee hope soon to be able to formulate an approach for implementing a plan to combat the water quality problems of the ten town area.

What was decided Wednesday night, however, was to focus most of the work on studying ground water and the quality of lake water as opposed to in-vestigating agriculture and forestry as non-point pollutants which was not identified by AVRPC staff member Craig Ten Broeck as one of the major

problem areas...

It was also voted to focus most of the project on broad-based as regulatory agency for specific violations.

Briefing members on the Section 208 program, Ten Broeck outlined approaches to determine the nature and extent of water quality problems and presented related policy questions to be considered as the program develops.

Water quality data was collected in 19 stations last year through the Department of Environmental Protection, he explained and AVRPC staff members will collect water quality data for approximately 22 stations in 1976 through the DEP, The Little Androscoggin River, Sabattus River and Sabattus Lake will be included in the scattered focus as well as

problems, as opposed to acting Sprague Mill, Leeds Junction and Topsham Bridge.

Ten Broeck also stated that cooperative study with the State Bureau of Forestry on logging operations in the ten towns is included in the approach as well as work with the Soil Conservation Service in assessing agriculturally related nonpoint pollution problems.

AVRPC members will work

with the Oxford office and Bryce McEwin of the Androscoggin
Soil and Water Conservation
District in assessing agriculturally related non-point

pollution problems.

Public input as to local perception of the priority water quality problem areas was stressed by Ten Broeck and Executive Director John Jaworski.

Field investigations to focus on specific problems affecting priority resources, for example the impact of dumps on ground water quality, also will be conducted.

Ten Broeck indicated that efforts with in-place sources, or fixed resources be approached by land use controls rather than setting up performance standards.

While board members were in sympathy with Ten Broack's suggestion that such in-place non-point sources such as dumps, salt piles, sludge sites, areas of failing septic tanks, use of pesticides and construction activities might be focused on as first priorities, no final decision was made on identifying what would receive the most attention.

It was agreed, however, that local governments should look at problems with an eye to the future while analyzing their effectiveness with respect to existing regulations.

Jaworski explained that towns with ideas for water quality projects could approach the DEP to become eligible for matching federal grant monies.

While some support was expressed for the inter-local agreement, or bordering towns working together on zoning. there was no decision as to how the management and implementation arrangements for the plan be carried out.

Reports on the Carroll Taylor contract for the town of Sabattus, which has already begun, and the Dale Caruthers contract for Oxford were also

given at the meeting.

#### RADIO AND T.V. ANNOUNCEMENTS

Nine area radio stations and two television stations broadcasted the following announcements as a public service.

# RIPROSCOGGIA WRLLEY Regional Planning Commission\_

70 Court Street, Auburn, Maine 04210

783-9186

Tel. (207) 784-0151

October 4, 1977

Mr. Steven Rogers WOXO Radio Station Box 72 Norway, ME 04268

Dear Mr. Rogers:

I would appreciate it if you would air one of the following two alternative announcements either as a public service announcement or as a news item. This information is of particular interest to municipal officials, special interest groups and individual citizens who are concerned with improving the quality of the surface waters and ground waters in Androscoggin, Oxford and Franklin Counties.

- 1. The Androscoggin Valley Regional Planning Commission, Auburn, Maine, will be holding two public workshops on the 208 Water Quality Plan that has been developed over a two year planning period. The workshops will be held on Wednesday, October 19, 1977, at 6:45 p.m. at the Oxford Hills High School in South Paris and on Thursday, October 20, 1977, at 6:45 p.m. at the Lewiston Multi-Purpose Center. The sessions will provide the public with the opportunity to learn more about the 208 process and to comment on the major findings, policy recommendations and implementation strategies contained in the 208 Plan. For further information call A.V.R.P.C. at 783-9186.
- 2. The 208 Areawide Water Quality Program, which the Androscoggin Valley Regional Planning Commission, Auburn, Maine has been conducting for the past two years is in its final stages. The major findings, policy recommendations and implementation strategies for improving surface and ground water quality have been incorporated into a 208 Water Quality Plan. Two workshops will be held for the public to learn more about the 208 Plan and to comment on the plan. The first workshop will be held on Wednesday, October 19, 1977, at 6:45 p.m. at the Oxford Hills High School in South Paris. The second workshop will be held on Thursday, October 20, 1977, at 6:45 p.m. at the Lewiston Multi-Purpose Center. For more information call A.V.R.P.C at 783-9186.

Mr. Steven Rogers Page 2 October 4, 1977

If your station's News Department would like to do a special feature either on the 208 Water Quality Plan or the public workshops, please feel free to contact me.

Your assistance in publicizing the 208 Water Quality Plan and the workshops on the plan will be greatly appreciated.

Sincerely, Craig VI. Den Brock

Craig W. Ten Broeck Planning Director

CTB:jev

Enclosure

### APPENDIX B

MEETING ANNOUNCEMENTS

## **AVRPC Sets** "208" Water Workshops

The Androscoggin Valley Regional Planning Commission will be looking for public input into its 208 Water Quality Plan at two workshops to be held next week

The first workshop has been scheduled for Wednesday, Oct. 19, at Oxford Hills High School. The second will be held Thursday, Oct. 20, in Lewiston at the Multi-Purpose Center on Birch Street.

The agendas for both sessions will be the same and both will commence at 6:45 p.m.

AVRPC Chairman Paul Fuller will deliver the introductory remarks which will be followed by a summary and slide show presentation of the 208 program by project director Craig Ten-Broeck.

From 7:45 to 8:45 the first workshop session will be held with all staff present. A 15-

inute intermission will follow with the second workshop set for 9 p.m. 109:45.

A summary of the contents of the workshop session will bepresented by all staff from 9:45 to 10:15 and then until 10:45 will be a question and answer period.

Ten-Brocck will offer closing comments at 10:45 p.m.

## Water Quality Workshop Set Tonight

SOUTH PARIS - The first of two workshops to Regional Planning Comhelp area residents learn mission, which has been more about the 208 Water conducting the program for Quality Programs will be the past two years, will held tonight beginning at present the plan which in-7:45 at Oxford Hills High corporates the major fin-School.

Tne Androscoggin Valley dings, policy recom-

mendations and implementation strategies.

The program takes in a 10town area including Auburn, Lewiston, Lisbon, Mechanics Falls, Minot, Norway, Oxford, Paris, Poland and Sabattus.

APPENDIX C
MEETING FLYER

## 

Tel. (207) 783-9186

September 28, 1977

The Androscoggin Valley Regional Planning Commission has prepared a 208 Water Quality Plan in accordance with Public Law 92-500, The Federal Water Pollution Control Act Amendments of 1972. This plan, for the A.V.R.P.C. Ten Town 208 Area, which includes Auburn, Lewiston, Lisbon, Mechanic Falls, Minot, Norway, Oxford, Paris, Poland and Sabattus, deals with a wide range of subject categories as they pertain to surface and ground water quality.

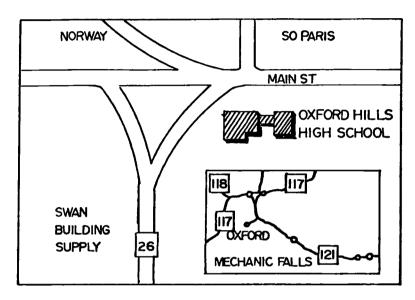
Summaries of program recommendations and complete plans are available for review at town offices and at the A.V.R.P.C.

Two meetings have been scheduled to discuss program findings and recommendations, they are October 19, 1977, at Oxford Hills High School, S. Paris and October 20, 1977, at Lewiston Multi-Purpose Center. The following agenda will be used for both meetings.

#### **AGENDA**

Time	Session	Speaker
6:45	Introductory Remarks	Paul Fuller, Chairman A.V.R.P.C.
7:15	Summary and Slide Show of 208 Planning Process	Craig W. Ten Broeck Project Director
7:45	First Workshop	All Staff
8:45	Intermission	
9:00	Second Workshop	All Staff
9:45	Summary Comments on Workshops Sessions	All Staff
10:15	Questions and Answers	All Staff
10:45	Closing Comments	Craig W. Ten Broeck Project Director

# AVRPC. 208 WORKSHOPS



TIME: 6:45PM

DATE: OCT. 19, 1977

PLACE: SO. PARIS AT

OXFORD HILLS HIGH

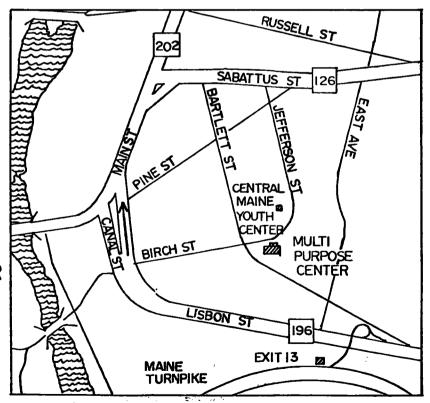
SCHOOL LIBRARY

TIME: 6:45 PM

DATE: OCT. 20,1977

PLACE: LEWISTON

MULTI PURPOSE CENTER



### APPENDIX D

NEWSPAPER COVERAGE OF WORKSHOPS

# Workshop Session Held on

By ANNA HENDERSON

PARIS — A workshop designed to provide the public the opportunity to learn about the 208 Water Quality Management Plan and the Environmental Impact Assessment was held at Oxford Hills High School, Wednesday evening.

The workshop provided the public an opportunity to comment on the program and offer input for the final preparation for the 208 plan, which is expected to be completed in November. After the final plan is reviewed and approved by the Androscoggin Valley Regional Planning Commission, it will be submitted to Governor James Longley for his approval. The plan will be forwarded to the Region One Environmental Protection Agency administrator in Boston for his adoption.

The 10 towns that have been involved in the plan are Norway, Paris, Oxford, Minot, Mechanic Falls, Poland, Auburn, Lewiston,

Lisbon and Sabattus.

The 208 Water Quality Plan was funded by a grant from the United States Environmental Protection Agency under Section 208 of the Federal Water Pollution Control Act

amendments of 1972.

The session was opened by Craig Ten-Broeck, project director. He introduced Paul Fuller, chairman of the AVRPC board of directors, who in turn greeted those present and explained what the 208 Water Quality Program meant. Fuller pointed out that the important thing about the program was that if the plan was approved, there were additional funds for its continuation. Fuller introduced the chairman of the 208 Policy Committee, Earl Tarr of Auburn, director of that city's water district.

The problems with the major wal.r shedraround the Androscoggin River were explained by Ten Broeck, who noted that there was a six-mile area surrounding the river between Paris and Oxford covering that contained the lowest water quality in the state

of Maine.

Various aspects of overflow, ground water, erosion and water shed, showing there is a need for sewage treatment, were explained by Ten Broeck. He also explained that there are 20 water sampling stations in the area.

Colored slides assisted in explaining the

program, revealing local dumps, flooded areas and sewage leachate. Following the slide presentation the AVARPC staff members conducted a series of workshop sessions on the various subplans connected with the 208 plan.

Form Group
The implementation, strategy, forestry and construction session was under the direction of TenBroeck. Howard Charles, Hebron, of the Maine Forestry Service, Joline Vachon, Ten Broeck's administrative assistant, Robert Nunan, Augusta, 208 coordinator for AVRPC, DEP, and Lawrence Brewer, Paris selectman, sat in with TenBroeck and learned that he did not think that the problems in Paris were that severe. TenBroeck also pointed out that there was no present nonpoint legislation that would be used providing local action is not taken by the municipal officials. TenBroeck further explained that

there had never been a major situation that he could recall that had been reversed.

Brewer put in his bid for comments from the public for their ideas of 208 program.

Fergus Lea, AVRPC water quality engineer, directed the workshop on residential on-site sewage disposal. Sludge, septic, public sewer systems and industrial waste treatment were some of the subjects discussed. Comments seemed to be aimed to the area's sewage treatment plants. Memthe area's sewage treatment plants. Members of the Paris Utility District who sat at this table were Tom Clifford, chairman of the PUD directors; Walter Gray, clerk; a former PUD director, Chandler Briggs; and Francis Anderson, superintendent of the Paris Sewage Treatment plant. Others included Vernon McFarlin, Paris Conservation Commission; Robert Butters, town of Norway sewage disposal. Clarence Tyner. Oxford sewage disposal: Clarence Tyner. Oxford Planning Board; Claire Matolcsy, Paris; Fergus Lea and Les Stevens, AVRPC

Fergus Lea and Les Stevens, AVRPC
Surface Water
Bob Thompson, AVRPC water quality
planner, discussed surface water quality
assessment, agriculture, solid waste and
other sources including roadside ditches,
snow dumps, road salt storage, application, pesticides, petroleum storage and mining. Gil Arsenault, AVRPC research developer, and Robert Littlefield, Farmington planning assistant, discussed surplus water quality concerns with Thompson.

Rodney Lynch, AVRPC community planner

and public participation coordinator, led a discussion on land use management. This area covered existing controls, proposed legislation, the 208 ordinances, growth management and the municipal mapping

A group also sat down with John Attig, AVRPC geologist, and members of the Norway and Paris water districts joined in a discussion concerning the ground water, drinking water and solid waste problems. Paris Utility District's water field and its location near the Paris solid waste disposal area became the controversial issue in this session. Paul Brown, Paris town manager, and Danny Morse, PUD superintendent, offered their ideas as to how this particular problem should be handled. The PUD feels that the dumping area should be moved and the town manager stated that the town should not go to this expense if it is not necessary. The dumping area is "grandfathered" back to its earlier existance at its present location. Break Then Reform

Following the first workshop session light refreshments were served and the groups

A team of seven CETA employes assisted the 208 staff in contacting the federal, state and local agencies to provide the information on agriculture, pesticide uses, construction activities, septic tank problems, sludge disposal, solid waste sites, road salt storage and the application of this salt and its contamination of domestic wells.

The 208 staff expanded the background information through its efforts and cooperative studies. These studies included a sediment delivery study with the United States Soil Conservation Service, the survey of forest harvesting operations and its impact on water quality with the Maine Bureau of Forestry and the ground water study with the United States geological study. Consultant studies included the waste treatment facilities with Oxford and Sabattus and a combined sewer overflow study for Lewiston and Auburn. A table for the surface water of the 208 study area gave the names of several areas that do not meet the swimmable and fishing standards.

The review of the agriculture subplan has not shown that there is any major source of pollution, based on studies that show that this source of pollution does not show a major nonpoint factor. Special funding is recommended for participation in the existing program.

The major findings of the forestry program study were summarized, showing that there were significant erosion problems, caused mainly by the spring harvest of the forests, with the transportation phase the most

significant.

Some of the major sources of construction associated pollutants are caused from sediment, storm water, solid waste and petroleum products.
Construction Subplan

The construction subplan involves disturbances of larger land areas than the rural housing construction and has the potential, because of scale, to generate greater levels of sediment. It was especially recommended by the 208 plan that road salt piles should be placed on concrete pads and under cover, among other ideas. The popular method for solid waste disposal

in the 208 area has been the open burning dumps but now all must turn to other suggested methods it was learned. Four of the towns in the 208 area have disposal sites located on aquifers and aquifer recharge areas. State laws and existing inventories of sludge and septic disposal methods must comply pretty much to the new guidelines, the

208 plan states.

As a portion of the 208 Water Quality Program, AVRPC entered into a co-operation study with the water resources decision of the United States Geological Survey to evaluate the ground water resources of the 10-town area. The towns of Paris, Norway, Oxford, Lisbon and Sabattus now draw their public water supplies from ground water sources and the town of Mechanic Falls is investigating the idea of developing a ground water supply. The ground water in the area is good. However, poor land practices such as salt storage and solid waste disposals near aquifers have caused a significant degradation of larger quantities of ground water, often on locations that would be ideal for municipal use.

The 208 program has prepared "Aquifer Protection Ordinances" to be used by the municipalities wishing to take steps toward

## 208 Water Quality Program



In Conference

preserving ground water quality. These recommendations provide suggestions to zone certain critical aquifer recharge and production areas, including the relocating of solid waste disposal sites that are located on or near productive aquifers. It is recommended by the 208 program that federal and state legislation should be enacted to provide for zoning regulations and comprehensive ground water protection programs,

ground water protection programs,
Reviews Show
Reviews of the various techniques of sewage disposal systems proved that the malfunctioning of septic systems in part of the 10-town areas, especially Poland and Oxford, could cause a degradation of the regional aquifers which are in use as municipal water supplies. Some priority concerns are in the areas of Norway, Oxford, Poland and Auburn, where septic systems could degrade the area lake waters. There are certain areas in all of the municipalities where there are health hazards that have resulted from malfunctioning of these systems. The samples of the wells show that possibly up to 25 percent of all private drinking water sources are contaminated. Code enforcement regulations and sewer extensions are recommended for some of the areas by the 208 program. suggesting that there is federal and state funding available to take care of these problems.

Recommendations were made in the 208 plan for some of the areas to provide for major sewer rehabilitation programs, especially in Sabattus, Mechanic Falls and some areas in Lewiston. It was also pointed out that the facility in Norway needed renovation and that Lewiston-Auburn facilities could some times exceed their capacities. This same problem is under study in Mechanic Falls. A recommendation is to be

made to the state to determine the waste load allocation and chromium balance for the Little Androscoggin River in the Paris and Norway area and that the Paris Sewage Treatment Plant be optimized through technical assistance from the EPA and DEP.

Meet Requirements

The 208 report stated that all of the industries in the 10-town area producing significant quantities of discharges are discharging into public treatment facilities and are meeting their licensing requirements. The 208 program did offer several recommendations for requirements, cost recovery, licensing and enforcement at the federal and state levels.

One of the most comprehensive elements of the 208 plan is the land use management subplan which recommends the use of the existing state and local land use management controls; the need for additional controls to implement the 208 plan, especially to provide the towns with legal authority. Several model ordinances were suggested for adoption by these area towns, which is to be a part of the 208 Water Quality Plan. Growth management control policies and techniques are addressed with alternatives that the towns may adopt to regulate local growth,

Municipal maps have been prepared for each of the 208 towns and recommendations are offered for their use in preparing and administering zoning ordinances. The land management subplan has compiled a book that can be used as a handbook for municipal officials.

Ten Broeck requested that he public should make an effort to make known their thoughts concerning the 208 Water Quality Program to their town officials. Ten Broeck said that he would need a letter from each town by the end of October or the first of November, informing him as to whether or not the 208 plan was endorsed. Ten Broeck said that the plan has already been approved by Norway, but that Oxford and Paris are looking for public input to make their decisions.

The draft environmental impact statement on the draft 208 waste treatment management plan for the Androscoggin Valley Regional Planning Commission was made available to those who want a copy. This manual provides all the information gathered during the study. This book was financed by a grant from the EPA, funded by provisions made by Section 208 of the Federal Water Pollution Control Act Ammendments of 1972.

Robert Mendoza, who is in charge of the environmental impact assessment from Region One of the Environmental Protection Agency of Boston, was present at the meeting to offer his input. Several officials from the DEP, the State Forestry Service and several staff members, directors and commissioners from AVRPC were available to assist in conducting the workshop and to answer questions. Those attending the workshop were mostly from the local water and sewer districts



WORKSHOP SESSION — The 208 Water Quality Program was the topic of a workshop session held in South Paris on Wednesday night. Discussing surface water, quality assessment, agriculture and miscellaneous sources were, left

to right, Bob Thompson, AVRPC staff member; Gil Arsenault, research developer for AVRPC; and Robert Littlefield, Farmington planning assistant. (Photo by Henderson)

# Water quality hearing Advertiser Democrat 10/15/7) AVRPC wants public's view

SOUTH PARIS - The Androscoggin Valley Regional Planning Commission (AVRPC) is holding a workshop for area residents next Wednesday. Sludge and sewer systems plans and recommendations will be discussed.

The workshop will air the summary of a two-year study conducted by AVRPC in area 208 to determine water quality. The recommendations include goals and deadlines.

The workshop is being held so that AVRPC representatives may note the public's opinion of present sewer systems, aludge disposal sites, purity of ground drinking water and industrial waste, to name just a few. Recommendations on these subjects could have enormous impact on the Androscoggin Valley and specifically Norway-South Paris area, town officials agree.

They feel, therefore, as does AVRPC, that public attendance at the workshop is extremely important "The workshops are designed to provide the public with the opportunity to learn more about the 208 process and to comment on the recommendations of the Water Quality Plan, AVRPC states. "Public participation has been a major concern of the 208 program and must continue to be if the program is to be successfully implemented. For this reason, it is extremely important that municipal officials, representatives of special interest groups and the general public attend these workshop sessions.'

Vernon McFarland, chairman of the South Paris Action Research Committee (SPARC) echoed AVRPC last week when he urged all SPARC members and the public to attend the workshops. Discussion will include the past controversial Paris sludge and sewage

treatment plant, he noted. "We have an obligation to ourselves to attend the meeting," he said.

The workshop will begin at 6-45 p.m. next Wednesday in the Oxford Hills High School Library. With one coffee and refreshment break, it is scheduled to last until 10.45 p.m.

Each issue will be introduced by AVRPC according to a printed schedule available to the public at town offices. The problem will be assessed and identified, the technical findings will be aired along with issues, alternatives and recommendations. The workshop will end with a half-hour questionand-answer period between AVRPC representatives, representatives from the state Department of Environmenta Protection, and the public

For more information, call the Norway or South Paris town offices.



FINAL WORKSHOP - The Androscoggin Valley Regional Planning Commission held its final public hearing-workshop on the 208 Water Quality Program Thursday night at the Lewiston Multi-Purpose Center. The plan contains technical help suggestions for such problems as zoning, sewerage disposal both public and

private, ground and surface water protection, for the 10-town area including Lewiston, Auburn, Sabattus, Lisbon, Mechanic Falls, Poland, Minot, Norway, Paris, and Oxford. (Staff Photo by Simokaitis)

# AVRPC Completes Workshop LDS Phase of 208 Water Quality

Another step in the Androscoggin Valley Regional Planning Commission's 208 Water Quality Program was completed Thursday night as the AVRPC held its final public hearing-workshop on the program at the Multi-Purpose Center in Lewiston.

The Lewiston workshop was the second this week, with the first held Wednesday night

at Oxford Hills High School.

Group discussions were held on the 12 technical subplans, including agriculture, forestry, construction, miscellaneous sources, solid waste, sludge and setpage, groundwater and drinking water, residential on-site scwage disposal, public seware systems, industrial waste treatment, land use management and specific implementations actions.

The AVRPC staff has worked to provide a technical plan for helping towns in the designated area of Auburn, Lewiston, Minot, Mechanic Falls, Poland, Norway, South Paris, Lisbon, Sabattus and Oxford to cope with water quality related problems.

In the area of agriculture, it was noted, the Maine Department of Environmental Protection will be asking Governor Longley to be allowed to introduce a piece of legislation concerning conservation plans for farmers during the next session.

The legislation would reportedly require a farmer to draw up a conservation plan for his farming operation, have it approved and abide by it.

Several persons expressed concern over the cost to the farmer of preparing such a plan, and it was noted that the preparation and compliance with the proposed regulation would be subject to funding aid available to the farmer, so as to lessen the economic impact.

The importance of protecting aquifers

which are subsurface water supplies was stressed. The program includes suggestions for protective zoning of aquifers, particularly not allowing solid waste disposal sites to locate on top of or near productive aquifers.

The Little Androscoggin River, a section of which has a Class D rating, making it one of the two worst in the state, was a major concern of the program. The AVRPC staff has suggested a study of Paris Treatment Facility and the A. C. Lawrence Tannery wastes, which a synopsis of the program indicates are still questionable with respect to meeting the quality specifications of the contract

Sewage disposal problems in Mechanic Falls, it was noted, are also causing problems for the Little Androscoggin. Some 36 or so private homes in that town are piping raw sewage into the Little Androscoggin.

The situation there, the AVRPC indicated, will be improving as funds are obtained.

The AVRPC has also devised a set of model zoning ordinances for towns where no or little zoning exists.

Rules and regulations whether new or existing, it was stressed, are useless unless they are enforced. Code enforcement was considered one of the most important elements in a successful program implementation.

Several of the towns in the 10-town area lack code enforcement.

Before the program can be approved by the commission it must be approved by all 10 towns. At present, only Norway and Sabattus have written letters of approval. After commission approval, the program goes to the governor for his approval and then on the Federal Environmental Protection Agency for implementation if approved.