

August 25, 1995

To: The Pennsylvania House Committee
on Environmental Resources and Energy

From: John L. Styk
PO Box 147
Buck Hill Falls, PA 18323

Re: Comments on Wetland Issues and Legislation

Committee Members,

I would like to offer some comments on General Permit 15 (GP-15) Residential Dwellings in Wetlands. I am opposed to GP-15 as proposed. My suggestions are as follows:

A special regulation area should be created for Monroe, Carbon, Pike, Wayne, Lackawanna, and Susquehanna Counties. Within this area, these conditions should be adhered to:

- * 0.1 acre fill maximum
- * Fill to contain only house, driveway, and utilities
- * Only individuals who purchased lots prior to October 1984 would be eligible - 1984 Headwaters (Fed) Jurisdiction
- * All fills will have suitable material, no construction debris or toxic materials
- * No on-lot septic system on or in fills; only central sewage
- * Fills would not be permitted in exceptional value watersheds

As a sewage enforcement officer (#2379) who does consulting, I am opposed to any on-lot septic in or on these fills. The rate of failure is high, where permitted now by the Department; what can be expected in wetlands? Attached is Item 1 regarding fill proposals which was sent to me in 1990. This document contains recommended conditions and items to be considered.

I believe the basic answer to our problem with wetlands is responsible growth. One good method is called Open Space Development. This method designs development wherever possible around Natural Features such as wetlands. It preserves the resource and keeps the developer or single home owner out of the permitting system, which would be economically beneficial to them. A good example showing avoidance of wetlands areas is Item 2 (attached) taken from "Designing Open Space Subdivisions", by Randall Arendt.

Unfortunately many individuals purchased properties after October 4, 1984 in wetlands. This is referred to as a bad business decision. When people purchase property, or any other item, there are no guarantees. Property owners must accept full responsibility for their ignorance.

Other Wetland Issues:

The Army Corps of Engineers 1987 Wetlands Delineation Manual is a scientific document tested and proven in the field. To change criteria in this manual is not warranted. In my opinion, this is bad science.

Classifying wetlands by size is not good science; it is political. Good science and poor politics do not mix. Bigger is not always better.

In my part of the watershed which contains high quality and exceptional value streams, many of our small wetlands under 5 acres have functions that are as important as our big wetlands. Especially in our headwater areas where our clear, cold, macroinvertebrate-abundant, fish-spawning, flora-dependent tributaries begin.

Each watershed and subwatershed can only function properly if it's totally intact. The wetlands within these watersheds whether headwaters, riparian, or lower elevation wetlands, contribute to the overall watershed function if kept intact. They were not meant to be dredged, filled or sustain any other impacts, but as it so often happens with humans, impacts have occurred. To keep moving in this direction will only mean impacts to humans themselves.

Wetland replacement should be done by purchasing wetlands for protection and restoring old wetland sites to which they once were. Finding areas that were not wetlands and trying to develop wetlands at these sites is a losing proposition.

The wetlands in the above mentioned six county region are an essential component to our quality of life. we depend on these wetlands to act as storage areas for flood waters, releasing these waters in a more reasonable manner than if they were lakes, ponds or not there at all. Our wetlands remove sediments and other pollutants through the aquatic vegetation they produce. They can act as ground water recharge areas, replenishing our very important water supplies to our wells. A great deal of these recharge areas have already been impacted by development in the wrong areas. Groundwater discharge is another important function of our wetlands. In this area they contribute source water for the Delaware and Lehigh Rivers which serve as water supply to over 2 million people down stream of us. All of these function along with the values from hunting, fishing, camping, and other types of recreation contribute a great deal to the economic base of the region.

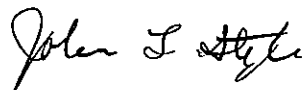
Our wetlands help produce and maintain high quality waters for a clean environment and a productive economy. They provide valuable habitat for flora and fauna of a diverse nature.

Wetlands were not introduced into our ecosystems by accident. They are here for a propose. Before putting into motion a new set of untested regulations, to benefit a few, let's look at the Big Picture with the Health, Safety and Welfare of the general public in mind.

We all live down stream!

I would like to thank the Committee for giving me this opportunity to present these comments.

Sincerely,



John L. Styk

ITEM #1

Bureau of Water Quality Management
Wilkes-Barre Regional Office
90 East Union Street - 2nd Floor
Wilkes-Barre, PA 18701-3296
(717) 826-5415

December 3, 1990

Mr. John Styk
P.O. Box 147
Buckhill Falls, PA 18323

RE: Fill Proposals
Barrett Township, Monroe County

Dear Mr. Styk:

The Department has received your request for information regarding on-lot subsurface sewage disposal systems placed in or on fill.

There are two fill options. The first option is allowed under Chapter 73.12(b). This section of the regulation allows systems to be constructed on or in fill if the following conditions are met:

1. The fill consists of clean mineral soil.
2. Fill has been in place for 4 years or greater.
3. After the 4-year period, soil testing consisting of soil profile excavation(s) and percolation tests must be conducted and the site determined to be suitable for an on-lot subsurface sewage disposal system.

The sewage enforcement officer (S.E.O.) of the municipality in which the property is located should be notified when the fill is placed so the date is recorded. This should avoid confusion as to when the 4-year period has been fulfilled.

The second option is much more complicated and involved. This option entitled "Controlled Fill" involves a shorter time (one freeze-thaw and wet-dry cycle) between placement of the fill and the soil testing and limits the depth of the fill to 12". Since controlled fill is not addressed in the regulations, it is considered an experimental system. Therefore, controlled fill can only be proposed on existing lots with a back-up system and the Department will limit the number of controlled fill projects. The Department is interested in single installations under varied soil and site conditions for data gathering purposes.

The Department may reject proposals on sites having soil characteristics similar to other sites already accepted. A qualified soil scientist must evaluate and supervise the controlled fill project; however, if you plan to fill a property and wait four years the services of a professional soil scientist is not required, but the following items are some of the items that should be considered:

1. The isolation distances listed in Chapter 73.13 should be considered when identifying the area to be filled.
2. The slope and size of the area must be considered. Refer to Chapter 73 for guidelines. For example, the area of the fill must be adequate in size to allow construction of the absorption area as well as the berms if a sand mound system would be required.
3. The fill should be clean mineral soil not containing fragipan or mottled material.
4. The vegetation should be cut and removed at the surface.
5. The large surface rock should be removed from the area.
6. The area should be chisel plowed before placement of the fill.
7. Vehicle traffic over the area should be avoided as much as possible before and after the area is filled. If a vehicle is required, light-weight and tracked vehicles should be used.
8. The soil should not be compacted when being placed.
9. The filled area should be seeded with a good cover to prevent erosion.
10. Surface water should be diverted around the area.
11. If the area to be filled is in or near a "wetland" then the Army Corps of Engineers (Corps) and the PA Department of Environmental Resources, Division of Waterways and Storm Water Management must be contacted before any site work is started. A wetland is defined as an area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

Mr. John Styk

-3-

December 3, 1990

When a property is filled, there is no guarantee that the property, when retested, will be acceptable for a system. The guidelines for controlled fill proposals, Chapter 73 Regulations, a list of professional soil scientists, and the regulatory contacts for wetlands are enclosed for your reference. If you have any questions regarding the above-mentioned items, please feel free to contact me at the above-listed address or telephone number.

Sincerely,

Darryl I. Fritz
Soil Scientist

Enclosures

DIF:jar

cc: M. Brogan
File

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D: 11/30/90
T: 12/3/90

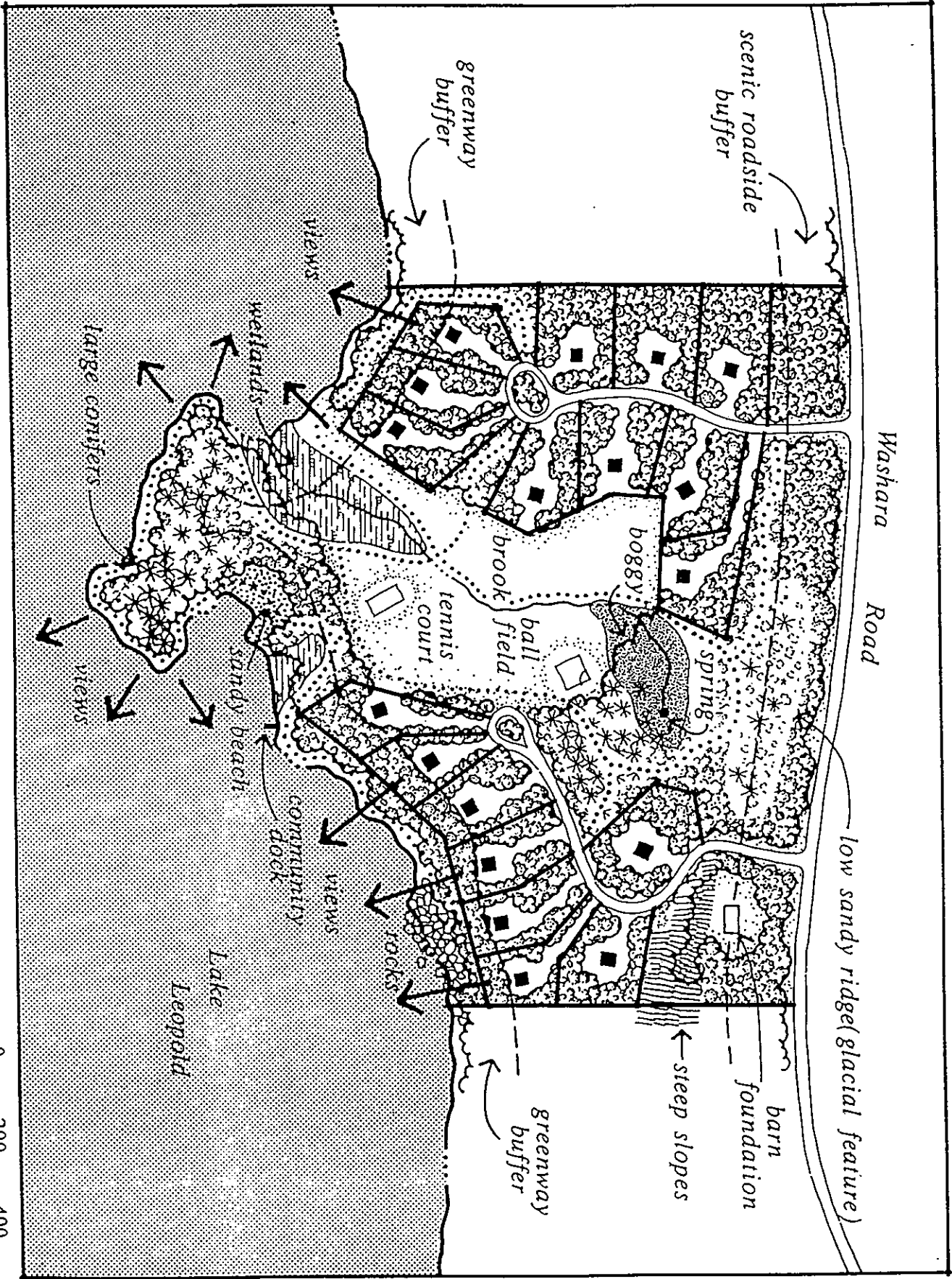
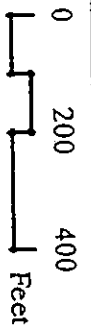


Fig. 7.5.9 Site E: Drawing in the Lot Lines



John L. Styk

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ALTERNATIVE FUTURES FOR MONROE COUNTY, PENNSYLVANIA

pg. 40 Sewer Service

pg 11-12 Geologic Landscape

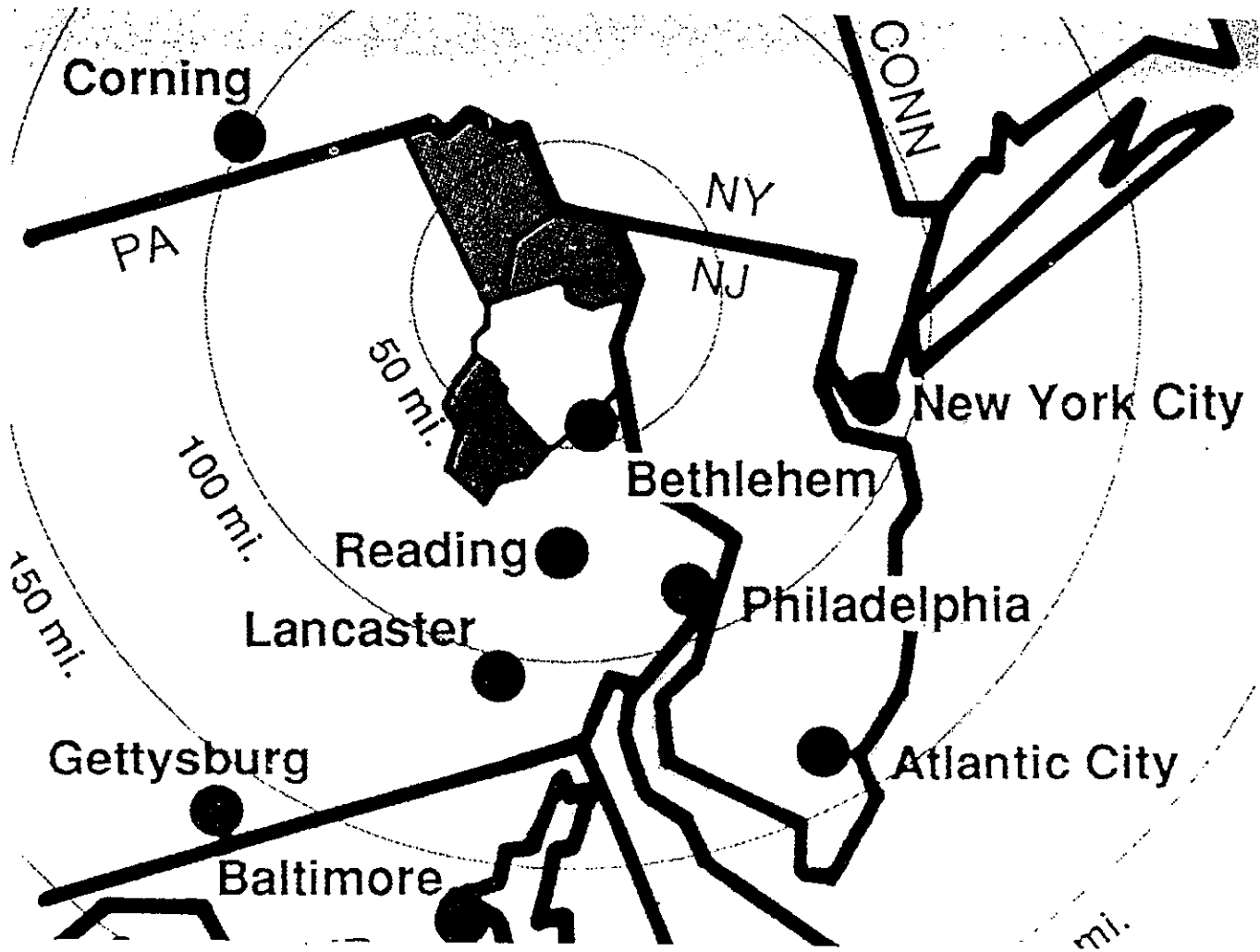


HARVARD UNIVERSITY
GRADUATE SCHOOL OF DESIGN

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INTRODUCTION

This report describes an investigation into future landscape planning alternatives for Monroe County, Pennsylvania [1]. It was prepared by students of the Graduate School of Design at Harvard University. We thank the County and the several sources who supported this study. The experience has greatly improved our understanding of the relationships between people and their landscape. This report summarizes the analyses and proposals described in the presentation and exhibition made by the studio in December 1993. It offers an understanding and synthesis of the County's most pressing landscape and planning issues and a range of alternatives for its future.



1. MONROE COUNTY, PENNSYLVANIA

EVALUATION

IS THE LANDSCAPE WORKING WELL?

GEOLOGIC LANDSCAPE

Monroe County has been shaped by glaciers. They have left their mark in the land forms of the Pocono Plateau and gouged out valleys. Evidence of this natural process is also seen in the County's wetlands and unique bogs, its open water, and its soils. These have afforded Monroe County both an environment capable of supporting a wide array of plant and animal species and a high quality of life—as expressed by good drinking water, diverse scenic quality, and substantial outdoor recreational opportunities.



14. SURFACE WATER QUALITY

As with all of Monroe County's natural resources, water quality has a direct relationship to the local economy: water related recreational activities such as fishing, swimming, and boating are all dependent on the continued maintenance of high quality lakes, streams, and wetlands [14]. The quality of surface water is dependent on stream bank vegetation which absorbs pollutants which would otherwise be carried into the water systems through run-off and erosion. Because of this, an ample vegetated buffer zone is needed around all lakes, streams, and wetlands to successfully manage surface water quality. In most cases, this buffer zone is regulated by the Commonwealth, but its management can become ineffective in the face of overuse or development.

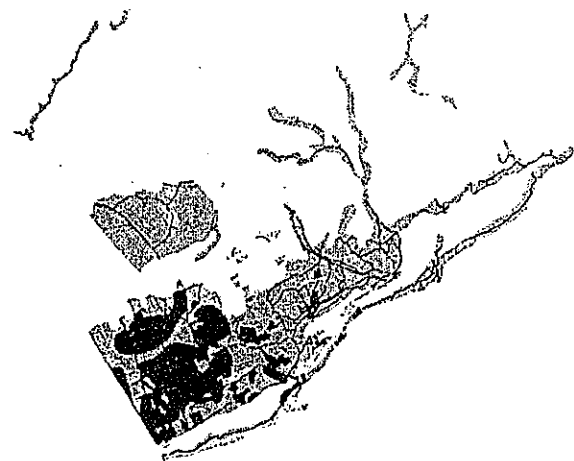


Because most of the County's drinking water is supplied by underground wells, it is important to actively protect the quality of the ground water supply [15]. Once contaminated water enters an underground aquifer it is easily transported across a large area. Although the County's ground water quality is currently rated high, it is extremely vulnerable to contamination in areas of development that are neither constructed on septic soils nor sewerred. There is already much of this development in Monroe County.



15. SOILS: GROUND WATER QUALITY

The south-western zone of Monroe County has sizable areas of active agricultural soil with very high productivity [16]. Crops such as corn, potatoes, and Christmas trees are still grown, although there is the risk that they will be displaced by the trend of suburban development. These agricultural areas contribute to the local economy in two ways: directly by the crops they produce, and indirectly by attracting tourists to their landscapes.



16. PRODUCTIVE AGRICULTURAL SOILS

On the summary map evaluating the Geologic Landscape, the darker shades of blue represent the areas that are most sensitive to impact [17]. Not surprisingly, the most sensitive geologic sites are in the agricultural regions of the southwest.

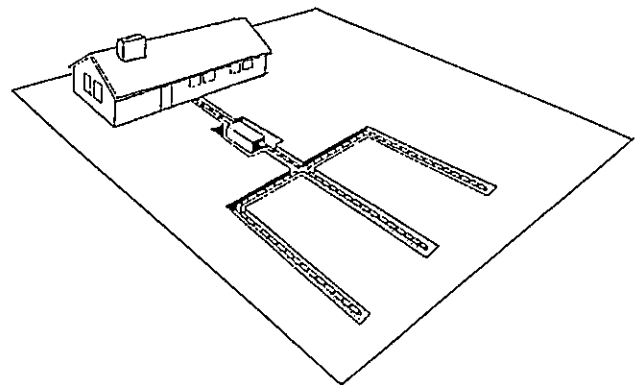
SEWER SERVICE

The majority of Monroe County has soils that are not suitable to absorb septic discharge.

The four Boroughs provide central sewerage treatment, while in the majority of Townships, individual residential septic tanks are used [45]. Sometimes these are constructed above grade on "sand mounds" because of inappropriate soil conditions. Several Townships have plans for upgrading their capacities with new sewage treatment plants [48].

If development continues to outpace infrastructure investments, the absorption capacities of the soil may eventually be exceeded, resulting in contaminated subterranean aquifers. This should be of great concern because, as stated earlier, most of the drinking water consumed in Monroe County comes from underground wells.

New development should be linked either to a central sewer system or to an alternative technology system. In general, central sewers, like those in Mount Pocono and Stroudsburg, can process large amounts of waste water quickly and efficiently. These systems do, however, require a large capital outlay for pipes and a treatment facility, and subsequently require professional staff. Alternative technology systems which use artificial greenhouses and constructed wetlands are less expensive to install, but they require more time to process waste water, and cannot normally handle commercial and industrial discharge [47]. In preparing the Alternative Futures, sewer service was considered to be a major factor in shaping the future of Monroe County.



46. DIAGRAM OF SEPTIC SYSTEMS



47. EXAMPLE OF ALTERNATIVE TECHNOLOGY SEWAGE SYSTEM

