

Environmental Review Team Report

# Zaist Property

Montville, Connecticut



EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.

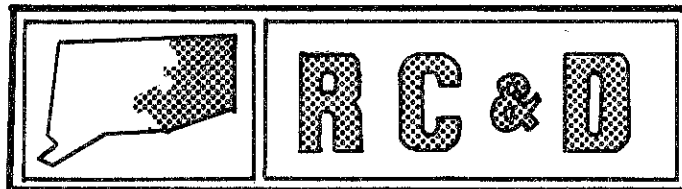


Environmental Review Team  
Report

on

Zaist Property  
Montville, Connecticut

August 1980

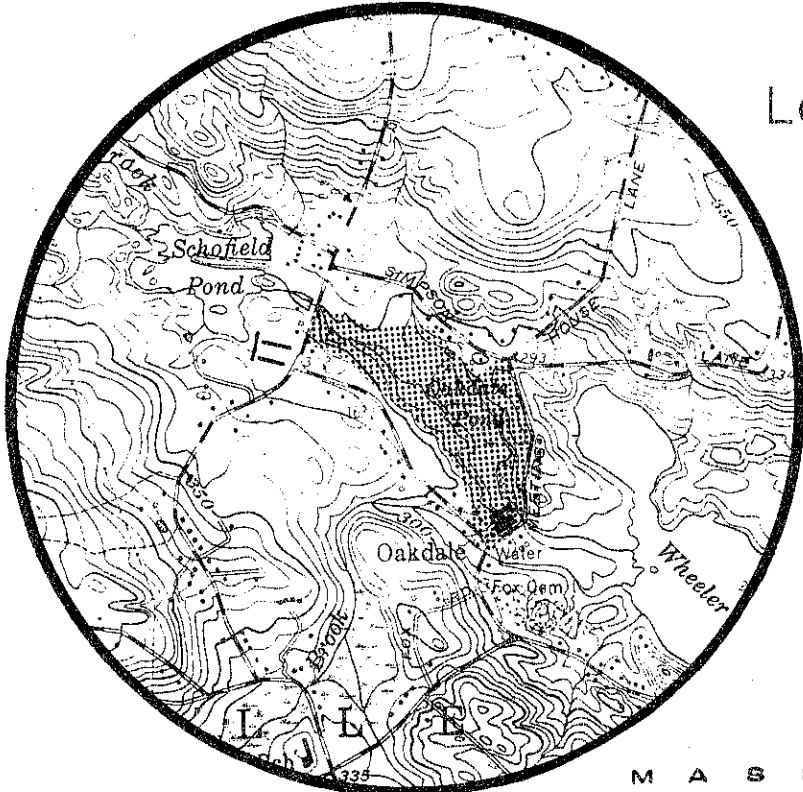


eastern connecticut resource conservation & development area

environmental review team  
139 boswell avenue  
norwich, connecticut 06360

# Location of Study Site

ZAIST PROPERTY  
MONTVILLE, CONNECTICUT



EASTERN CONNECTICUT  
RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

ENVIRONMENTAL REVIEW TEAM REPORT  
ON  
ZAIST PROPERTY  
MONTVILLE, CONNECTICUT

This report is an outgrowth of a request from the Montville Recreation Commission to the New London County Soil and Water Conservation District (S&WCD). The S&WCD referred this request to the Eastern Connecticut Resource, Conservation and Development (RC&D) Area Executive Committee for their consideration and approval. The request was approved and the measure was reviewed by the Eastern Connecticut Environmental Review Team (ERT).

The soils of the site were mapped by a soil scientist from the United States Department of Agriculture, Soil Conservation Service (SCS). Reproductions of the soil survey map, a table of soils limitations for certain land uses and a topographic map showing property boundaries were distributed to all Team members prior to their review of the site.

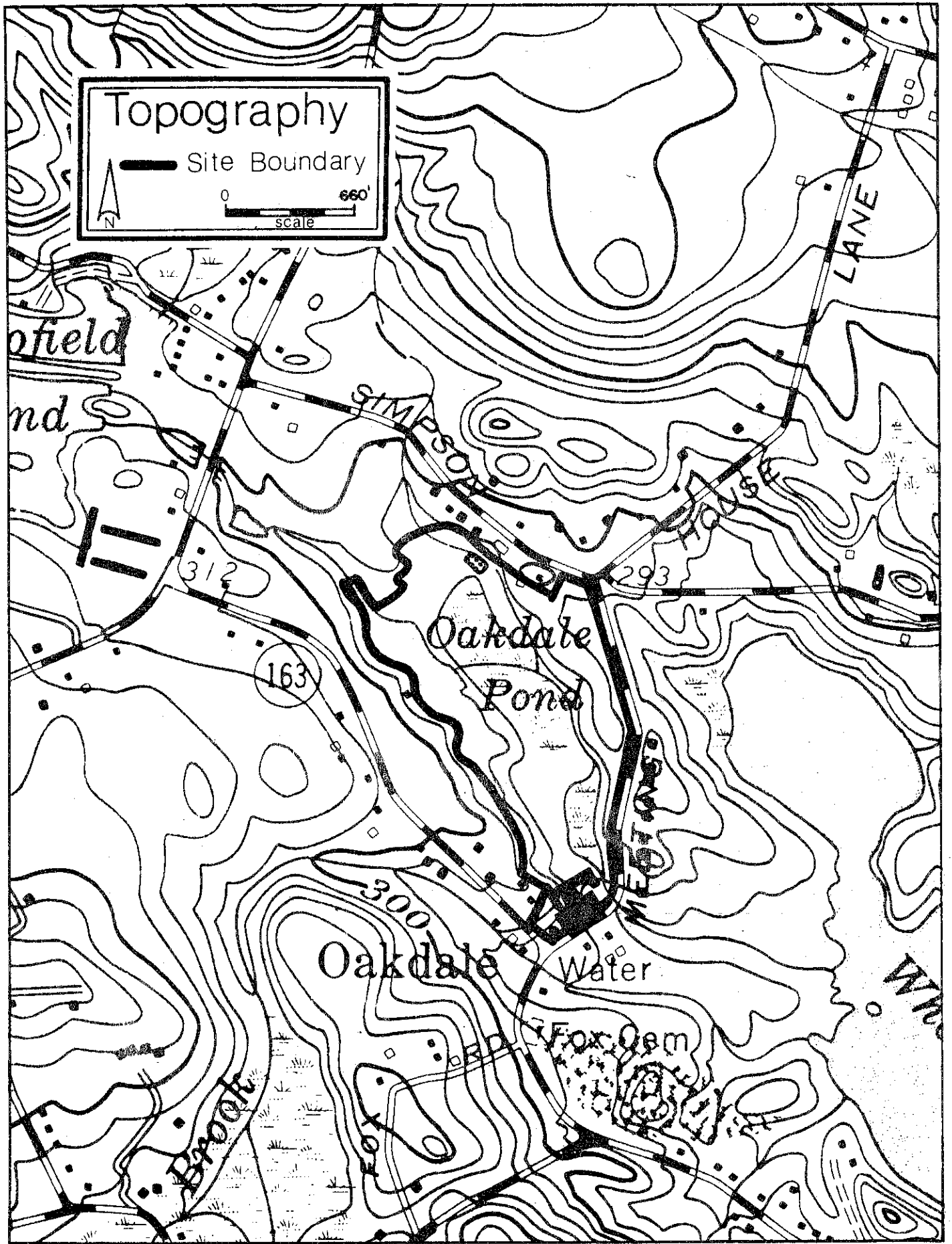
The ERT that field-checked the site consisted of the following personnel: Gary Domian, District Conservationist, SCS; Rob Rocks, Forester, Connecticut Department of Environmental Protection (DEP); Michael Zizka, Geologist, DEP; Andy Petracco, Recreation Specialist, DEP; Tom Seidel, Regional Planner, South-eastern Connecticut Regional Planning Agency; and Jeanne Shelburn, ERT Coordinator, Eastern Connecticut RC&D Area.

The Team met and field checked the site on Thursday, May 29, 1980. Reports from each contributing Team member were sent to the ERT Coordinator for review and summarization for the final report.

This report is not meant to compete with private consultants. As requested by the Town, this report, which identifies the existing resource base of the Zaist Property, shall constitute the environmental assessment portion of the Town's open space application for Federal Department of the Interior, Heritage Conservation and Recreation Service funds to assist in the acquisition of this property.

The Eastern Connecticut RC&D Area Committee hopes that this report will be of value and assistance in making any decisions regarding this particular site.

If you require any additional information, please contact: Ms. Jeanne Shelburn, Environmental Review Team Coordinator, Eastern Connecticut RC&D Area, 139 Boswell Avenue, Norwich, Connecticut, 889-2324.



## DESCRIPTION OF THE PROPOSAL

The town of Montville is applying for a Heritage Conservation and Recreation Service grant to aid in the purchase of the Zaist property for recreational use. The 36<sup>1</sup>/<sub>2</sub> acre tract is located on Meetinghouse Lane, near its intersection with Route 163. The site has several large areas of wetland soils near Oakdale Pond, as well as associated streams feeding and draining from the pond area. Oakdale Pond is one of the man-made mill ponds on the Oxoboxo River. The property is generally wooded, except for a developed area near the intersection of Meetinghouse Lane and Route 163. Several roads and parking areas have been developed near Oakdale Pond by the present landowner. The pond itself has recently been "mucked-out" and reconstructed.

If purchased, the town intends to use the area for a town swimming facility, picnicking area, nature study and camping. This site is in close proximity to a developed town park, "Camp Oakdale", and would provide extensions of facilities offered there, as well as different types of recreational experiences.

Under the Connecticut "208" program a consultant has been selected to assess the feasibility of removing accumulated sludges in five impoundments on the lower reach of the Oxoboxo River. The Regional Planning Agency will assess the recreational potential of these impoundments. The Zaist proposal should have no affect on this effort.

## DESCRIPTION OF THE ENVIRONMENT

### PRESENT/PAST LAND USES

A portion of the site had been used for development of a textile mill. Currently the site is unused and undeveloped although some grading has occurred and access roads have been constructed. Surrounding land uses are undeveloped and residential. The area is zoned residentially at three acres per unit.

### SOCIO-ECONOMIC CONDITIONS

The area is centrally located in Montville and is adjacent to Town's Camp Oakdale recreation facilities. Current population of the Town is estimated to be 16,800 and is expected to reach 18,350 in 1990 and 19,560 in 2000. The site could help meet the Town's future needs for fishing, picnicking, hiking, camping and ice skating facilities.

### EXISTING TRANSPORTATION ROUTES

Access to the proposed area would be from Route 163 or Meetinghouse Lane. No problems are indicated in this area in the Regional Transportation Plan and no improvements are scheduled for the area. Access could be by auto, walking, or bicycle.

## TOPOGRAPHIC FEATURES

The central and largest portion of the site is fairly flat and contains a high percentage of wetland soils. The pond on the property is separated from the wetlands by a long, low berm of sand and gravel. Southeast of the pond and south of the principal wetland areas, excavation and grading of the existing sand and gravel deposits has produced approximately one dry, level acre in the vicinity of the mill ruins. The gravel access road to the pond passes over this level area. Near the southwestern portion of the site boundary, the graded section rises to a low ridge, then drops sharply into the channel of the pond's southern outlet stream. A hummocky terrain of gravelly deposits lies between the access road and the swamp, east of the pond's outlet.

In the northeastern section of the property, the land rises steeply from the wetland and the pond's secondary outlet stream to another gravel ridge. The maximum relief on the site, approximately 20 feet, is found in this area. The ridge drops off steeply again on the northeastern side. The relatively flat top of the ridge is narrow (generally less than 30 feet in width).

## SURFACE/SUBSURFACE GEOLOGIC CHARACTERISTICS

The Zaist property is located within the Montville topographic quadrangle. A bedrock geologic map (Map GQ-609) and a surficial geologic map (GQ-148) of that quadrangle have been prepared by Richard Goldsmith and published by the U.S. Geological Survey.

The surficial geology of the site is made up of two major units: stratified drift and swamp sediments. Stratified drift consists of rock materials that were transported and deposited by pre-existing glacial meltwaters. On this site, the stratified drift is primarily sand and cobble gravel. The swamp sediments on the property consist of silt, sand, and organic matter (partly decayed plant material) that were deposited in flat areas of stagnant or slowly moving water northeast of the pond and north of the mill ruins. These sediments are probably less than 10 feet thick; they overlie stratified drift.

No bedrock was observed on the site. U.S.G.S. Map GQ-609 interprets the bedrock underlying the site as an orange-pink, gray, or locally red, medium-grained to coarse-grained gneissic biotite granite. The rock is composed of approximately equal amounts of quartz, microcline, and oligoclase, and small amounts of biotite, iron oxides, muscovite, garnet, and sillimanite. The rock has potential value as rip-rap or rough-construction building stone, but it is not believed to have any economically important mineral concentrations.

## SOILS

On the Zaist property, the soils range from being poorly drained to excessively drained. Poorly drained soils occupy nearly level flood plains located in the north central portion of the property. Moderately well drained soils occupy nearly level flood plains that are located in the center of the property and extend southeast toward Meetinghouse Lane. The well-drained soils occupy gently sloping stream terraces along the southwest border of the property. Excessively well-drained soils occupy steeply sloping and moderately steep sloping stream terraces that are located



above the floodplains. Oakdale Pond is located in the northwest corner of the Zaist property and drains southeast into Wheeler Pond.

Limerick silt loam, sandy subsoil variant, indicated on the map by the Symbol 023, occupies the area on the eastern side of Oakdale Pond, and a portion of the area through which the pond water is outletted toward Wheeler Pond. Limerick soils are nearly level, poorly drained soils on flood plains. They formed in recent silty alluvial sediments less than 40 inches thick over sands and gravels. The Limerick soils have moderate permeability, are subject to flooding and have a high water table at, or near the surface, 7 to 9 months of the year.

After the water is outletted, it runs in a southeast course through Podunk fine, sandy loam. The mapping symbol for Podunk is 816. This soil consists of nearly level, moderately well-drained soils on flood plains. They formed in recent alluvial sediments. Podunk soils have moderately rapid or rapid permeability and are subject to brief but common flooding, and have a seasonal high water table at 18 to 24 inches.

Raypol silt loam, mapping Symbol 464, occupies an area to the north of the drainage course mentioned above. An intermittent stream runs south through the Raypol soil and joins the watercourse flowing from Oakdale Pond. The Raypol soil consists of nearly level, poorly drained soils on stream terraces and outwash plains. They formed in silty deposits, less than 40 inches thick, over sand and gravel. Raypol soils have moderate permeability in the surface layer and subsoil, rapid or very rapid permeability in the substratum, and a high water table at, or near the surface 7 to 9 months of the year.

The outwash plains in the northwest corner of the property are occupied by Tisbury silt loam, indicated by mapping Symbol 45A. Tisbury soils have slopes that range from 0 to 5 percent, are moderately well-drained, and formed in silt-mantled glacial outwash. They have moderate permeability in the substratum and a seasonal high water table at 18 to 24 inches. The stream from Schofield Pond runs through this area into Oakdale Pond.

Haven silt loam, mapping Symbol 63B, is located along the southwest border of the property. Haven soils occupy gently sloping, well-drained outwash plains. They formed in water sorted, loamy material, over stratified outwash. Haven soils have moderate permeability in the surface layer and subsoil, and very rapid permeability in the substratum.

Above the stream terraces and flood plains are steeply sloping and moderately steeply sloping soils that occupy outwash plains. This excessively drained soil is Hinkley, gravelly sandy loam, indicated on the map by 60C and 60D. The slope range of this soil is 3 to 15 percent and 15 to 35 percent respectively. Hinkley soils formed in water sorted outwash, and have rapid and very rapid permeability.

Mapped in the southwest corner of the property is ML2, soils that have been disturbed and replaced with gravel fill for use as a parking lot and roadway. It is not possible to make statements on the soils origin, drainage, water table, or permeability because the soil has been disturbed from its natural state.

The limitations to most uses on this site relate to depth of seasonal high water table, flooding, steepness of slope and droughtiness.

Natural trails in the area are limited by wetness in the poorly drained soils and by steepness of slope. Trails can be routed around steep slopes. Excessive wetness will limit trails through the wetlands. Short spurs from a main trail offer access to wetlands by a simple boardwalk that leads to a small observation area. In the winter and wet spring months the boardwalk can be removed.

Sanitary facilities can be tied into a sewer line that runs along Route 163. This will overcome any limitations that soils on the property present for installing septic systems.

Steeply sloping land and excessive wetness will limit the location of active recreational areas. These limitations are difficult and expensive to overcome. The soils are best suited for general outdoor recreational use such as nature trails, picnic areas, and wetland nature study areas.

With some improvements, Oakdale Pond can be made suitable for recreational uses such as swimming, boating, and fishing by sealing the dam to prevent any seepage that may occur. Regrading the dam to 3 to 1 slopes, spreading top soil, applying lime and fertilizer, and establishing a permanent vegetative cover will stabilize the soil on the dam and prevent it from eroding into the pond. Control weeds or mow for desirable plant growth and appearance.

#### WATER RESOURCES

The pond on the site (Oakdale Pond) is one of several water bodies that is fed by Oxoboxo Brook, a major watercourse in the Town of Montville. The surface area of the pond is approximately four acres and the depth, according to a local resident, averages between six and seven feet. The drainage area of the pond is about six square miles.

Connecticut Water Resources Bulletin No. 15 provides a graphical method for estimating low flow rates at ungaged sites on streams in southeastern Connecticut. By this method, the 2-year, 30-day low flow into the pond (a flow rate which recurs on an average of once every two years and which is not exceeded for 30 consecutive days) is estimated to be 1,575,000 gallons per day (gpd); the 10-year, 7-day low flow is estimated to be 882,000 (gpd); the 10-year, 3-day low flow is estimated to be 756,000 (gpd).

The Connecticut Department of Health Services uses the following formula to determine the maximum daily swimmer capacity of an outdoor pond:

$$N = \frac{F + (V/180)}{1000}$$

Where N is the maximum allowable number of swimmers per day, F is the inflow to the pond in gallons per day, the V is the volume of the pond in gallons. According to this formula, the pond could support about 1620 swimmers daily during the 2-year, 30-day low flow; 930 swimmers daily during a 10-year, 7-day low flow; and 805 swimmers daily during a 10-year, 3-day low flow. These figures, however, all assume that sufficient beach area exists, that the quality of water in the pond and in the inflow stream is initially adequate for swimming, and that any other health and safety requirements for swimming would be met.

The stratified drift deposits in the valley of Oxoboxo Brook near the surrounding Oakdale Pond are designated in Connecticut Water Resources Bulletin No. 15 as favorable for large-scale withdrawals of groundwater. The deposits are estimated to be capable of supplying an average of 3.3 million gallons per day for a year, exceeded 7 years out of 10. The coarse nature of the stratified drift around Oakdale Pond itself makes the site seem favorable for the establishment of a public water-supply well, again assuming an initially adequate groundwater quality. Maintenance of the quality of the surface waters would also be important, since induced infiltration may draw part of those waters into a high-yielding well.

No problems should be encountered in establishing a well for drinking water purposes for the site itself. As stated above, the stratified drift deposits have the potential for large-scale supplies. It is unlikely that recreational users will require more than a modest yield (2-5 gallons per minute). For this reason, both the stratified drift and the underlying bedrock may prove to be adequate water sources. Bedrock wells surveyed in the lower Thames River and southeastern coastal river basins commonly provided small but reliable yields of groundwater. Approximately 90 percent of those wells supplied at least 3 gpm.

## VEGETATION

Vegetation types typical of the site are as follows:

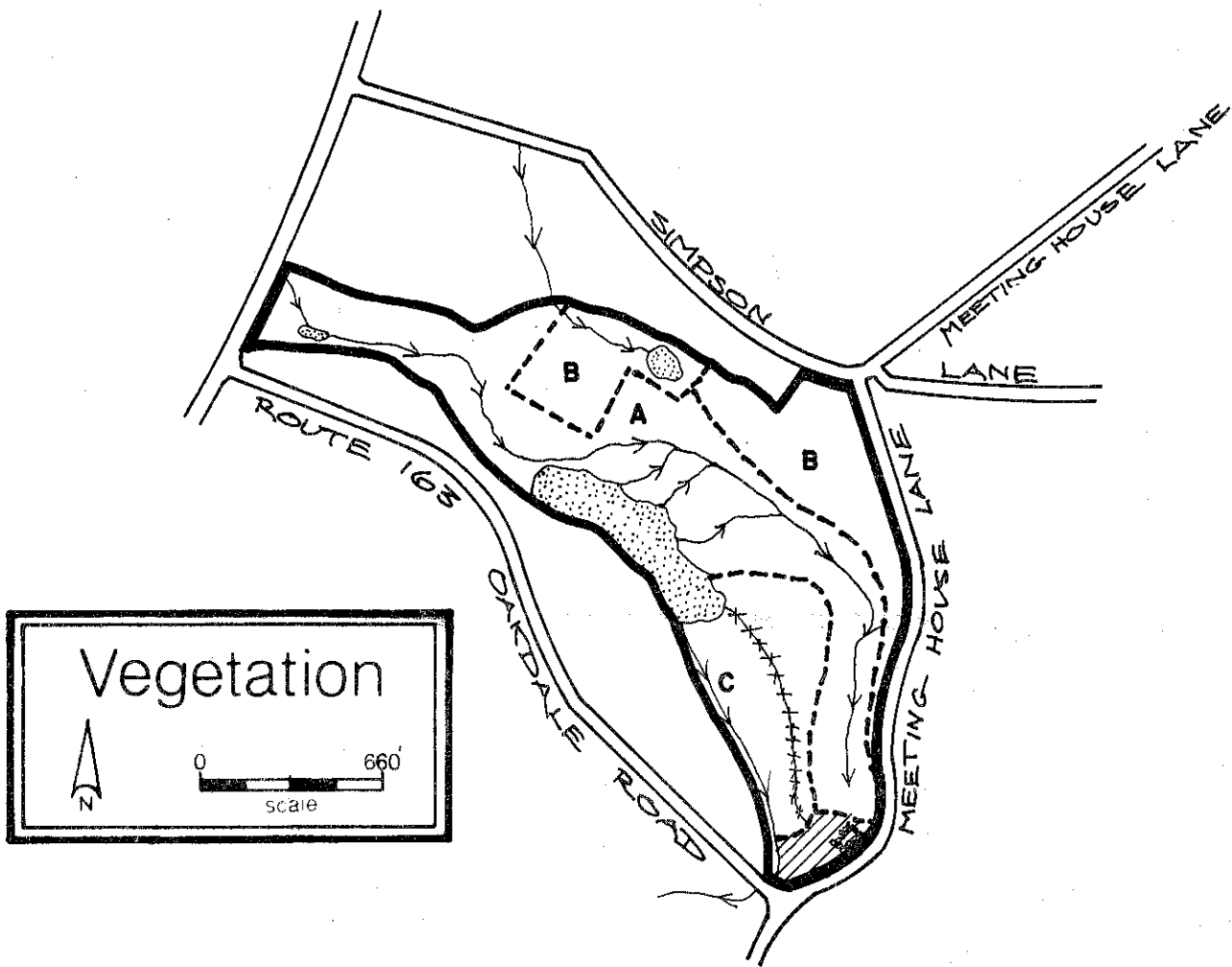
Type A. (Hardwood Swamp) - This 19<sup>±</sup> acre hardwood swamp is over stocked with medium quality pole-size red maple with occasional white ash, black gum, black birch, yellow birch and red oak. The understory is dominated by spice bush and sweet pepper bush with scattered patches of speckled alder, leather leaf, swamp loosestrife, swamp rose and gray stemmed dogwood, where openings in the canopy allow ample sunlight to reach them. Ground cover vegetation is made up of skunk cabbage, tall meadow-rue, wild violets, false hellebore, Solomon's seal, false Solomon's seal, wild geranium, Jack-in-the-pulpit, cinnamon fern, sensitive fern and sedges.

Type B. (Mixed Hardwoods) - High quality pole to sawtimber-size red oak, white oak, black oak, mockernut hickory, shagbark hickory, red maple and occasional American beech are present in this fully-stocked stand. Hardwood tree seedlings, witch hazel, American hornbeam, tartarian honeysuckle, maple leaved viburnum and dense patches of mountain laurel are present in this stand's understory. Ground cover species observed in this stand include Canada Mayflower, Solomon's seal, poison ivy, Virginia creeper, periwinkle, blue phlox, common cinquefoil, grasses, bracken fern, Christmas fern, New York fern, royal fern and huckleberry.





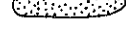
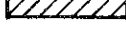
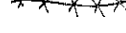
Type C. (Open Field) - Four acres of open field are present on this tract. The vegetation present in this area is dominated by grasses, clover, common cinquefoil, poison ivy and goldenrod. Staghorn sumac and hardwood tree seedlings are becoming established around the edges of this field.

## PROBABLE FUTURE ENVIRONMENT

If the project is not initiated the site will probably be sold and developed



LEGEND

-  Roads
-  Property Boundary
-  Vegetation Type Boundary
-  Stream
-  Pond
-  Gravel
-  Gravel Road

VEGETATION TYPE DESCRIPTIONS\*

- TYPE A. Hardwood Swamp, 19-acres, Over-stocked, pole size.
- TYPE B. Mixed Hardwoods, 14-acres, Fully-stocked, pole to sawtimber size.
- TYPE C. Open Fields, 4-acres.

\* Seedling size = trees less than 1 inch in diameter at 4 1/2 feet above the ground (d.b.h.)  
 Sapling size = trees 1 to 5 inches in d.b.h.  
 Pole size = trees 5 to 11 inches in d.b.h.  
 Sawtimber size = trees 11 inches and greater in d.b.h.

residentially. Since the location is in a stream valley portions of the site might also be mined for sand and gravel.

## ENVIRONMENTAL IMPACT

### EFFECT ON LAND USE

Except for the southeast corner, the site is physically separated and buffered from surrounding residential uses. The effect on these residential uses should be minimal.

### EFFECT ON SOCIO-ECONOMIC CONDITIONS

This proposal should have no appreciable effect on socio-economic conditions within the town. A slight increase in taxes may be necessary to maintain the park, however, this could be eliminated by establishing an entrance fee for park users.

### EFFECT ON TRANSPORTATION ROUTES

Proximity to the existing recreation area could promote access by walking or bicycle. Trails could be developed to tie the existing area to the proposed new area. Energy conservation would be promoted since residents driving to the area could utilize both facilities.

### EFFECT ON WATER RESOURCES

Usage of the parcel for recreation should have little or no effect on ground-water quality. This statement assumes, however, that any subsurface sewage disposal facilities would be properly designed and installed, particularly in view of the high transmissibility of the gravelly overburden.

If the pond is used for swimming, its water quality may be expected to decrease to some extent. However, the relatively high capacity of the pond for swimmers (see Water Resources section of this report) suggests that any decrease in quality would be both mild and temporary. Any deterioration would depend upon both the flow rate and the magnitude of the pond's usage; i.e. the most noticeable effects would occur during unusually low flow periods and times of maximum use. These events would tend to concur during a very hot, dry summer season. If a water quality problem did occur, it could reduce the capability of the local stratified drift aquifer for providing groundwater of acceptable quality (surface water may flow into nearby groundwater wells by induced infiltration).

### EFFECT ON VEGETATION

The clearing of vegetation for the development of the town's swimming facility and parking areas on this parcel was completed prior to the ERT field investigation.

The impact on surrounding vegetation of this development was minimal. The addition of topsoil, fine grading and establishment of sod to prevent erosion in these areas will have little if any negative impact. The clearing operation along the pond and near the wetland areas (hardwood swamp) may, however, increase the already high potential for windthrow in the adjacent hardwood swamp area. The trees in the hardwood swamp area are shallow rooted and not securely anchored. The potential for windthrow is increased when openings, like these, are made which allow wind to pass through rather than over these stands.

Establishment of the proposed picnic areas in the mixed hardwood stand should have only slight impact on vegetation. Removal of some vegetation to open up picnic areas to allow increased sunlight and air flow in, will be necessary. Clearing operations should remove some understory vegetation, along with the dead and damaged trees in the area.

Large, healthy, high vigor trees should be retained for their shade and aesthetic value. Trees that are to be removed should be marked, to avoid removal of desired trees.

Later, some loss of vegetation may come about through soil compaction, direct trampling, mechanical root injury and vandalism in the picnic areas.

Such vegetation losses will reduce the aesthetic quality of these areas and potentially cause accelerated erosion in the more steeply sloped areas. These disturbances may also cause accelerated mortality of low vigor unhealthy trees. Dead and dying trees in or near the picnic area may be hazardous to people using these areas.

#### IRREVERSIBLE COMMITMENTS OF RESOURCES

No serious and unavoidable adverse effects on, or irreversible commitments of, geologic or hydrologic resources are involved in this proposal.

#### MITIGATING MEASURES

Careful planning and wise layout of the proposed picnic sites is essential to minimize potential problems. Picnic sites should be located in areas that are relatively flat, yet still afford good drainage. Establishment of picnic sites on well-drained soils which remain firm when wet and are not excessively dusty when dry is desirable.

The picnic areas and the trails leading to them should be well defined and clearly marked. This practice should help to limit extensive soil compaction, root injury and trampling of herbaceous vegetation outside the picnic areas.

Soil compaction may be reduced by spreading wood chips several inches deep along heavily used foot trails and picnic sites. As wood chips rot they lose their effectiveness and should be replaced. Wood chips are also used as kindling for camp fires at picnic sites. Crushed stone or cinders spread over these areas also reduce soil compaction and are more permanent than wood chips, however, they are usually more costly.

Eventual loss of some trees caused by soil compaction, even with the addition of wood chips, crushed stone or cinders, is unavoidable. As these trees die they should be removed to prevent a possible hazard.

To ensure a continued quality experience it is extremely important that provisions for maintenance of the swimming facility, parking areas and picnic areas are made prior to completion of the project.

The trees in the hardwood swamp area are declining in health and vigor as a result of their crowded condition. Although it is usually not feasible from an economic standpoint to practice timber management in these areas, light thinnings from time to time can benefit and improve vegetation stability. Thinnings in this stand which remove approximately one quarter of the volume will reduce competition between residual trees, allowing them to respond by increased crown and root development, without substantially increasing windthrow potentials. As the higher quality trees and desired species (such as white ash, red oak, and yellow birch) are favored and become healthy, the entire stand becomes more stable. To avoid environmental damage, thinnings should be limited to areas that can be reached without crossing streams. They should also be implemented during the winter months when the ground is frozen or the summer months when the ground is dry. A thinning in this stand which removes one quarter of the volume will produce between three and five cords of fuelwood per acre. A publicly employed service forester or consulting forester could be contacted to help mark the trees to be removed for this thinning, if it is desired. They could also mark the trees to be removed to open up the picnic areas.

## RECREATION POTENTIAL

The Town of Montville is seeking H.C.R.S. funding for acquisition of a 36<sup>±</sup> acre parcel of land. Oakdale Pond, a man-made 3-acre pond, is located on the property. It has recently been cleaned out and channeled. The dike which dams up the pond's outflow may need to have a clay sealer applied to make it impermeable. Loose gravel and rock comprises most of the dam. Additionally, the application of topsoil to the dam is recommended to provide a growing medium for grass which will stabilize the slopes and enhance the dam's appearance and resistance to foot traffic wear. Trees should not be allowed to grow on the dam because their roots will weaken the dam's integrity. Where slopes permit, periodic mowing of the dam will eliminate the growth of brush and trees and strengthen the turf. Soil Conservation Service recommendations on pond construction and maintenance can provide information needed regarding dam construction and erosion control.

Another prominent feature on the site is the remains of an old factory complex located along its southern portion and adjacent to Meetinghouse Lane. The building shells are basically all that remain but these appear reasonably sound due to the use of solid stone and mortar construction. The smaller building may be useful as a combination utility and equipment storage facility after reconstruction. A workshop area and concession could possibly become components of this building. Toilets would have to be located closer to the pond since this is where the heaviest public use is anticipated.

The larger building would be very expensive to reconstruct to a usable state. It may be more economical to demolish this building than to consider it for use.

It could lend itself to use as a roller skating rink or town public works garage though neither of these seem to be current needs. A roller skating rink would be impractical as a town run or subcontracted operation because of location and high anticipated operating costs.

The area lying between the building and the pond has been graded and would lend itself to use as a parking area with some additional work. The grading work extends to the pond's southeast side where the bulk of recreation activity would logically be centered and where parking would be needed. An island of woodland surrounded by this rough graded road to the pond would be suitable for the development of picnic sites after some selective thinning of trees. The proximity of the pond and available parking space makes this a convenient arrangement for picnicking use.

Because of limited access to other sections of the lake, the southeast portion of the pond would most probably be the easiest to develop for swimming and the launching of boats. An aerator could possibly be used to enhance water quality to a level which enables continued swimming use.

Small sail and row boats only should be permitted to use the pond. The small size of the pond and the possibility that swimming may be incorporated, should preclude the use of any motor boats. The rental of canoe and/or paddle boats from a concessionaire might be an additional possibility. Since the small pond size would impose limitations on the number of boats which could be permitted on it at any one time, economic practicality may dictate that boat rental be linked to a food concession operation.

A separate parking area for a few car/boat trailer combinations may be desirable to install near the boat launch area, even though most boat use is anticipated to be of the car top variety.

Fish were noted in the pond. Fishing is yet another anticipated activity. If swimming, boating, and fishing are all carried out on the pond, the small pond size may dictate that shoreline fishing be limited to the pond's northern half. Heavy fishing use may necessitate the start of a stocking program to permit continued fishing. Ice skating could, conceivably, be one more activity provided by the pond. The climate of the area makes this a relatively minor consideration, however.

Camping is an activity for which the property is not ideally suited. The area which lends itself to camping is near the proposed picnic area, close to the southeast section of the pond. It is normally preferable to segregate camping from day use areas such as those where picnicking and swimming are provided. If the town feels a particular need to accommodate camping, however, this area of woods lying east of the proposed picnic area and road encircling it, may be suitable for establishment of camp spurs directly off this road. Comparatively little depth exists for the location of these campsites between the road and stream to the east because of the limitations imposed by slope. It may be possible to spot 6-10 sites, however. A tent camping area might also be a possibility on the ridgeline just west of Meetinghouse Lane. Access to this area may be gained via an old woods road. The narrowness of the ridgetop imposes limitations here as well, on the size and number of campsites possible, along with a problem concerning the potential for vehicle turnaround. For this reason, any camping considered should probably be of the tenting variety and provided on a walk-in basis.



The other portion of the tract not being proposed for active recreational pursuits may, by careful route selection, lend itself to foot path and nature trail installation with use on a seasonal basis. Wetness is the primary limiting factor relating to usability of the northern part of the tract. Within the constraints imposed by wetland soils, the possibility of installing a corduroy pathway through part of the wetland should be investigated. This would provide increased possibilities for observations of wetland flora and fauna and contrasting habitats.

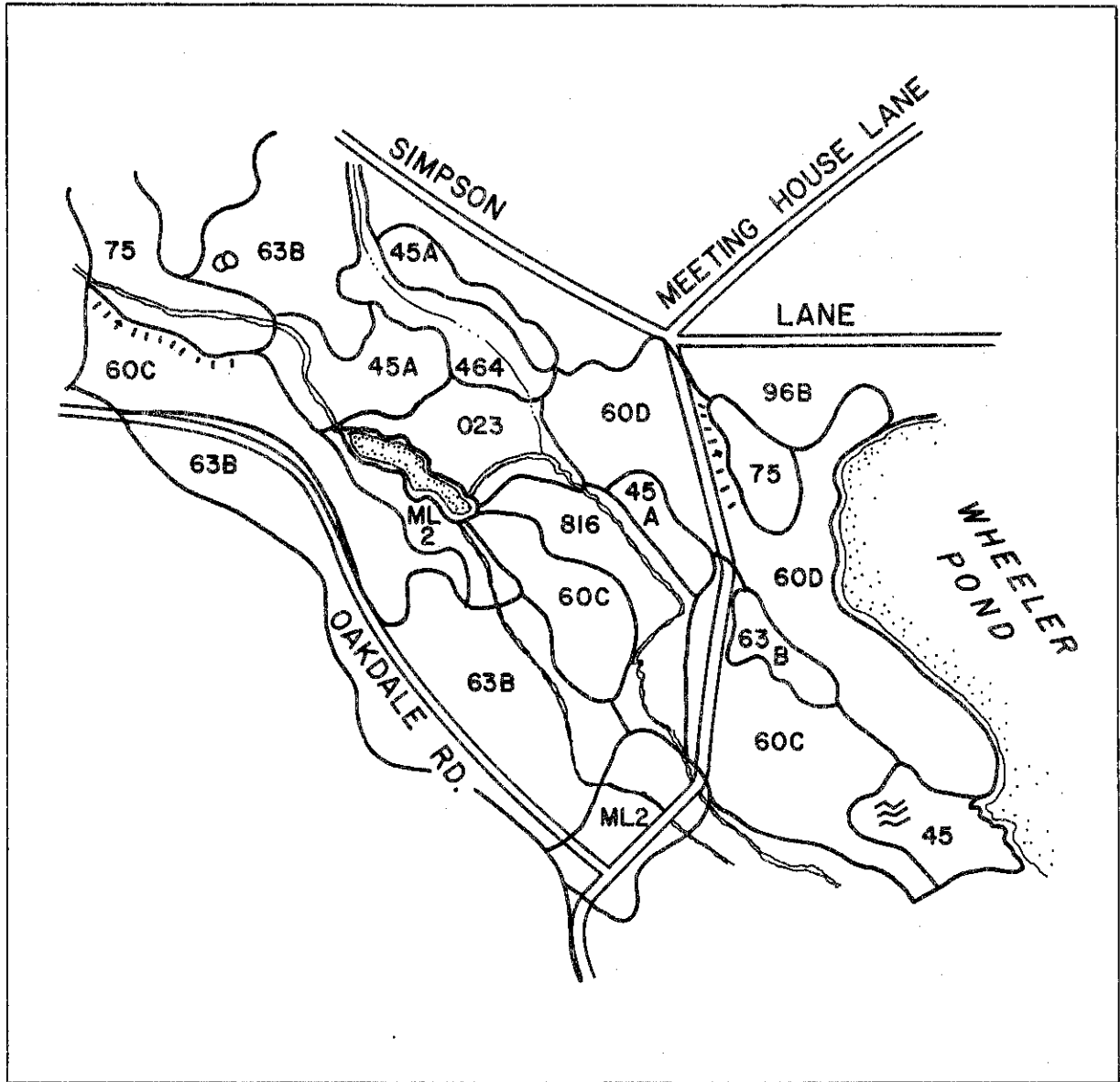
The acquisition of additional land to the northeast of the present tract and lying along Route 163 near Simpson Lane would greatly enhance the possibilities for installing camping sites and trails. Ownership in this area would also provide a close tie-in to the town owned facility along Simpson Lane.



# Appendix

**Soils**

0 660'  
SCALE



ZAIST PROPERTY  
MONTVILLE, CONNECTICUT

PROPORTIONAL EXTENT OF SOILS AND THEIR LIMITATIONS FOR CERTAIN LAND USES

Soil Series	Soil Symbol	Approx. Acres	Percent of Acres	Principal Limiting Factor	Urban Use Limitations*			
					On-Site Sewage	Picnic Areas	Play-grounds	Paths and Trails
Haven	63B			Slope	1	1	2	1
Hinckley	60C			Too sandy, slope	2	2	3	2
Hinckley	60D			Slope	3	3	3	2
Limerick**	023			Wetness floods	3	3	3	3
Podunk**	816			Floods	3	2	2	2
Raypo1**	464			Wetness	3	3	3	3
Tisbury	45A			Wetness	3	1	2	1
Udorthents	ML2			Limitations determined on-site.				

Limitations: 1= slight, 2=moderate, 3=severe.

\*\* Regulated Wetland Soil Under P.A. 155.

## SOIL INTERPRETATIONS FOR URBAN USES

The ratings of the soils for elements of community and recreational development uses consist of three degrees of "limitations:" slight or no limitations; moderate limitations; and severe limitations. In the interpretive scheme various physical properties are weighed before judging their relative severity of limitations.

The user is cautioned that the suitability ratings, degree of limitations and other interpretations are based on the typical soil in each mapping unit. At any given point the actual conditions may differ from the information presented here because of the inclusion of other soils which were impractical to map separately at the scale of mapping used. On-site investigations are suggested where the proposed soil use involves heavy loads, deep excavations, or high cost. Limitations, even though severe, do not always preclude the use of land for development. If economics permit greater expenditures for land development and the intended land use is consistent with the objectives of local or regional development, many soils and sites with difficult problems can be used.

### Slight Limitations

Areas rated as slight have relatively few limitations in terms of soil suitability for a particular use. The degree of suitability is such that a minimum of time or cost would be needed to overcome relatively minor soil limitations.

### Moderate Limitations

In areas rated moderate, it is relatively more difficult and more costly to correct the natural limitations of the soil for certain uses than for soils rated as having slight limitations.

### Severe Limitations

Areas designated as having severe limitations would require more extensive and more costly measures than soils rated with moderate limitations in order to overcome natural soil limitations. The soil may have more than one limiting characteristic causing it to be rated severe.

# About the Team

The Eastern Connecticut Environmental Review Team (ERT) is a group of professionals in environmental fields drawn together from a variety of federal, state, and regional agencies. Specialists on the Team include geologists, biologists, foresters, climatologists, soil scientists, landscape architects, archeologists, recreation specialists, engineers and planners. The ERT operates with state funding under the supervision of the Eastern Connecticut Resource Conservation and Development (RC&D) Area.

The Team is available as a public service at no cost to Connecticut towns.

## PURPOSE OF THE TEAM

The Environmental Review Team is available to help towns and developers in the review of sites proposed for major land use activities. To date, the ERT has been involved in reviewing a wide range of projects including subdivisions, sanitary landfills, commercial and industrial developments, sand and gravel operations, elderly housing, recreation/open space projects, watershed studies and resource inventories.

Reviews are conducted in the interest of providing information and analysis that will assist towns and developers in environmentally sound decision-making. This is done through identifying the natural resource base of the project site and highlighting opportunities and limitations for the proposed land use.

## REQUESTING A REVIEW

Environmental reviews may be requested by the chief elected officials of a municipality or the chairman of town commissions such as planning and zoning, conservation, inland wetlands, parks and recreation or economic development. Requests should be directed to the Chairman of your local Soil and Water Conservation District. This request letter should include a summary of the proposed project, a location map of the project site, written permission from the landowner allowing the Team to enter the property for purposes of review, and a statement identifying the specific areas of concern the Team should address. When this request is approved by the local Soil and Water Conservation District and the Eastern Connecticut RC&D Executive Council, the Team will undertake the review on a priority basis.

For additional information regarding the Environmental Review Team, please contact Jeanne Shelburn (889-2324), Environmental Review Team Coordinator, Eastern Connecticut RC&D Area, 139 Boswell Avenue, Norwich, Connecticut 06360.

