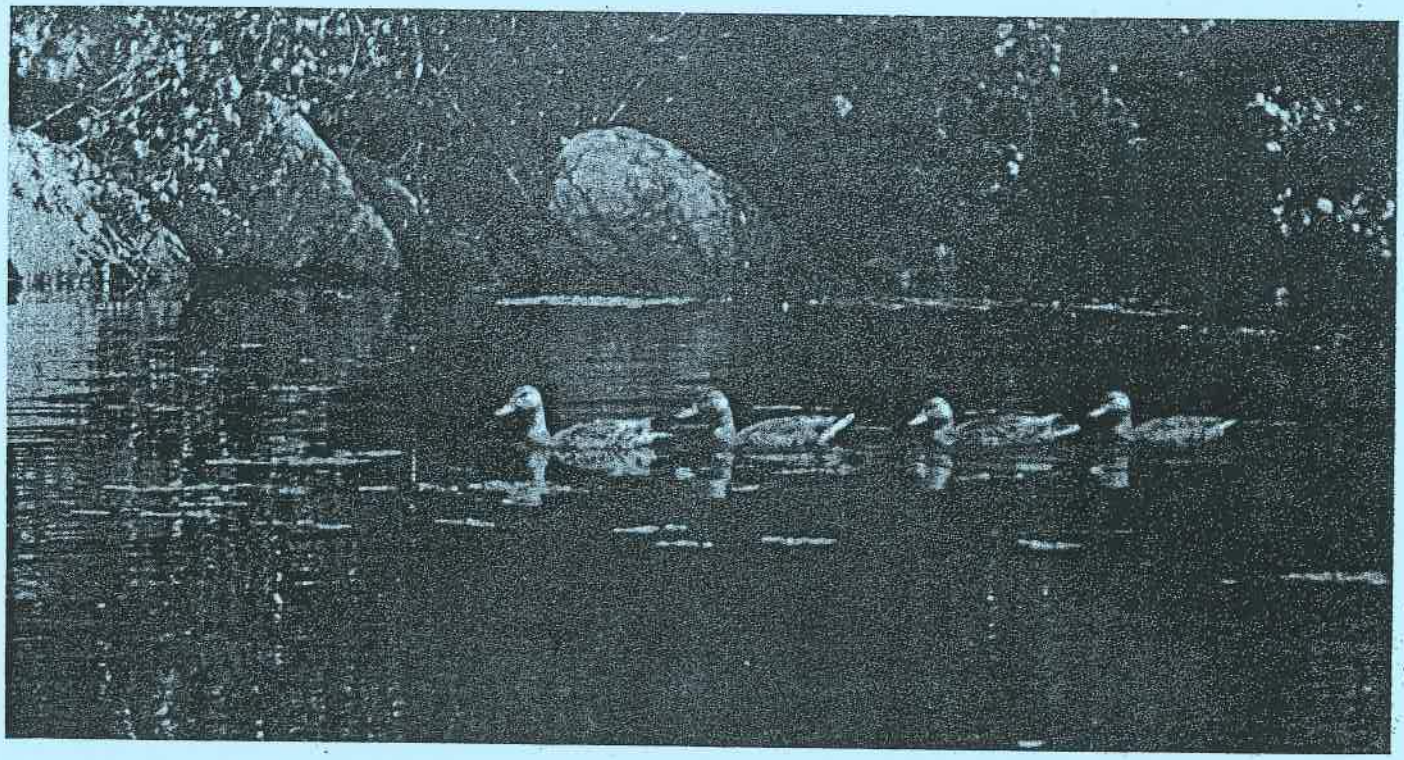
TOWN OF THOMPSON

Inland Wetland Inventory



PREPARED BY:
NORTHEASTERN CONNECTICUT REGIONAL PLANNING AGENCY SUMMER 1980

SPRING 1980

NORTHEASTERN CONNECTICUT REGIONAL PLANNING AGENCY

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Detailed soils mapping, which provided the basis for the Thompson Inland Wetlands map accompanying this report, was financed in part with federal funds from the Environmental Protection Agency under grant number P-001-10-801.

TOWN OF THOMPSON
WETLANDS INVENTORY

T A B L E O F C O N T E N T S

INTRODUCTION

In recent years freshwater wetlands have become widely recognized as units of landscape of special importance for surface water, groundwater, wildlife ecology, water pollution, and land use planning. Their character as wetlands pose special problems for development, farming or other uses.

In light of regulations which have been established to ensure that these valuable wetlands are protected, it is incumbent upon members of the Inland Wetlands Commission to make intelligent decisions based upon all available information. This decision-making process is facilitated if specific criteria can be used which will allow comparisons and assessments of wetlands' value and utility.

The purpose of this report is to provide this information in a concise, working guide which can be consulted whenever a determination of the effects of a land use change in or near a wetland is desired.

This report contains two major sections plus an accompanying wetlands map for the Town of Thompson. Section One is an identification of criteria to consider when making a land use decision regarding a wetland. Section Two presents specific information regarding wetlands present in Thompson, as well as an identification of ten especially noteworthy wetlands and their locations based upon a field review conducted by the University of Connecticut Natural Resources Center.

The Inland Wetlands Act for Connecticut requires that wetlands be designated by soil types rather than by vegetative cover. In compliance with this regulation, the accompanying wetlands map was prepared as an overlay to the Town of Thompson composite detailed soils map. (The composite detailed soils map was prepared by NECRPA from Soil Conservation Service soils mapping field sheets.) Field review was conducted in areas identified as wetlands to further classify these wetlands by vegetative cover and depth of water table.

Field review by Commission members of wetland areas under consideration for land use changes and application of the criteria contained herein will enable members to objectively and intelligently assess the potential impacts of such changes on the valuable wetlands.

I. GUIDE FOR EVALUATION OF INLAND WETLANDS

A. Water Supply

1. Concerns:

a. Well water supply (subsurface) - A large number of wetlands are underlain by valuable productive groundwater supplies. A primary use of this water is for private and public wells for drinking water. Deterioration of groundwater quality may result from urbanization in the vicinity of groundwater recharge areas. By-products of man's activities which may cause groundwater deterioration include domestic sewage, animal wastes, chemical fertilizers, pesticides, synthetic detergents, and road salts. Also, if a wetland is drained by channelization, ditches, or tile drains, the water table is lowered. Drainage reduces the amount of groundwater available in storage and may reduce yield from shallow dug wells.

b. Surface water - Wetlands and water courses have a valuable influence on the quantity and quality of surface water which supplies large portions of the population with clean water for recreational, domestic and industrial use. One of the most valuable functions of wetlands for surface water is protection of and increase in water quality. Wetlands and watercourses act on pollutants in three general ways: wetlands prevent pollutants from reaching watercourses as a result of a vegetation buffer; watercourses dilute pollutants; and certain organisms in wetlands use pollutants in cleansing the system.

2. Factors Influencing Importance of Function:

a. Well water supply (subsurface) - Aquifers underlying wetlands can be identified through use of U.S. Geological Survey aquifer maps. Measures should be taken to minimize pollutants discharged over or upstream of an aquifer. (The Regional Planning Agency can provide these maps at Town scale for Thompson.)

b. Surface water - A wetland's ability to prevent some pollutants from reaching streams and lakes is determined primarily by the following factors:

1. Slope. Steeper slopes produce faster runoff than gentle slopes, thereby allowing sediment and accompanying pollutants from surrounding land uses to reach streams and lakes more rapidly.
2. Surrounding land use. The more developed an area and the closer to the wetland area, the more likely the possibility that pollutants will reach the wetland or watercourse.
3. Vegetative cover. Removal of vegetation around a wetland area causes increased runoff, earlier and more rapid snowmelt, and resultant decreased water quality.
4. Size. In general, the larger the wetland area, the greater its capacity to trap or renovate undesirable material in water flowing through it.
5. Volume. A wetland with a large quantity of standing water in relation to that moving through it in a given period will

have a greater capacity to trap sediment and will provide a longer period for natural renovative processes to act.

6. Micro-organisms. The presence of large numbers of micro-organisms such as bacteria and fungi in a wetland enhances a wetland's ability to function as a miniature waste treatment plant.
7. Vegetation. Submerged aquatic plants are able to increase the dissolved oxygen content of the water, thereby allowing survival of more aquatic life.

B. Flood Control

1. Concerns:

a. Hazard to life and property in floodprone areas - By building, filling and diking, man may eliminate much of a floodplain's natural storage capacity, resulting in higher flood stages upstream as well as downstream. New structures may endanger both themselves and already existing structures.

b. Reduced flood storage capacity resulting from fill or channelization - Wetlands and floodplains permit floodwaters to spread out, providing temporary storage without severe increase in stage height. They spread the release of a given volume of floodwater over a longer time, thus reducing the peak flow rate that the downstream channel must handle. Natural vegetation and meandering streams slow the passage of flood waters through actual physical resistance. Filling a wetland or channelizing an associated watercourse will negate its function of flood storage and potentially increase flood flows downstream.

2. Factors Influencing Importance of Function:

The primary determinants of a wetland's flood storage function for a given storm are:

a. Topography. A broad, flat storage area with a constricted outlet may provide a significant storage capacity. Meandering streams or rivers, associated wetland soils, and swamps or marshes all slow floodwaters and may decrease peak flows significantly.
b. Area. The area of a wetland's surface storage in relation to the area of the drainage basin above it, is a major factor in determining the ability of the wetland to reduce a given flood flow. Thus a wetland with a relatively small drainage basin may effectively buffer storm runoff, while a wetland of the same size and topography with a larger drainage basin may not significantly affect the larger flood flow passing through it.
c. Position. The closer the wetland is to the area to be protected, the more drainage area it can control, and the more important it may be in protecting the threatened area.

C. Erosion and Sedimentation Control

1. Concerns:

a. Water pollution - Erosion from land surfaces following the removal of vegetative cover, and resultant sediment reaching watercourses and water bodies, has several detrimental effects on water: (1) reduces dissolved oxygen; (2) may carry added nutrients which cause algal blooms; (3) may inhibit photosynthesis, reducing input of oxygen; and (4) inhibits aquatic life. Inland wetlands serve as sediment traps. Surface runoff flowing through these areas will be slowed by both the flat slopes and the vegetative cover, allowing sediment to settle out before it reaches watercourses or water bodies.

b. Siltation of reservoirs, storm drains - Excessive sediment loads reduce the useful life of reservoirs, as they are slowly filled by sediment. Sedimentation also reduces storm sewer and drainage channel capacities; filling of channels with sediment can result in increased flooding. Wetlands perform as described above to inhibit this sedimentation.

2. Factors Influencing Importance of Functions:

The following factors should be considered to ensure a minimal amount of sedimentation:

1. Removal of vegetative cover. The greater the removal of vegetative cover, the more erosion and sedimentation will occur.
2. Erosion and sedimentation control measures. Model regulations are available from the regional planning agency, and various control measures are available from the Soil Conservation Service. These should be utilized to offset the effects of development adjacent to wetlands.
3. Wetland location relative to sediment source. The greater the slope of the adjacent land, the wider an area of vegetated buffer strip should be required.
4. Volume of water in wetland relative to flow through it. The longer sediment-laden water stands, the more sediment will settle out of the water.

D. Fish and Wildlife Habitat

1. Concerns:

Preservation of diversity of flora and fauna - Freshwater wetlands constitute the principal habitat for waterfowl such as ducks, geese, and swans; and for fur-bearing animals such as mink, muskrat, otter, and beaver, and for fish. Other game species, including deer, rabbits, grouse, quail, pheasant, and turkeys also use wetlands, as do marsh birds and songbirds. The basic needs of water, food and cover are supplied to the wildlife. Impaired water quality through human activity or destruction of a wetland area will seriously disrupt the wetland functions.

2. Factors Influencing Importance of Function:

The most important factor in evaluating wetlands as wildlife habitat is vegetative cover. Wildlife diversity is directly related to plant life diversity. In addition to life form, wetland suitability for wildlife habitat is influenced by the following factors:

a. Number of wetland classes. The greater the number of wetland classes that are present in a wetland, the greater the diversity of wildlife habitat types. (See section on Thompson Wetlands Identification.)

b. Dominant wetland class. The dominant class in the wetland is important chiefly because of its relationship to production of desired species (waterfowl, marsh and wading birds). A rating system for wildlife habitat value can be based, among other criteria, upon the dominant class. Some classes, such as shallow marshes and wooded swamps, allow greater diversity of wildlife than other, such as fresh meadows and open water. Seasonally flooded flats are of outstanding value to waterfowl, shore birds, and marsh birds during migration.

c. Vegetative life form interspersion. "Interspersion" is a term used to describe the degree of mixing of vegetative types or of vegetation and water within a given area. The more irregular the distribution of plant types, the better the interspersion. The greater the length of "edge" between two vegetative types the greater will be the abundance of wildlife. The total length of edge is more important than wetland size for wildlife productivity; however, the number of kinds of edge influences wildlife diversity.

d. Percentage cover. The relative proportions of cover and water or between cover and open water along a shoreline are important for wildlife productivity. For example, wetlands with more than 95% cover (vegetation), or more than 95% open water are usually less valuable than wetlands with more equal proportions of each.

e. Wetland site type. The topographical location of the wetland in "upland" or "bottomland" influences the diversity and abundance of wildlife. Higher productivity of bottomland wetlands results from longer retention of surface water and higher nutrient levels than upland wetlands. Vegetation is usually less diverse in upland wetlands, resulting in less wildlife diversity.

f. Size. In general, the larger the wetland size the greater the vegetative and wildlife productivity and diversity. However, the importance of size changes with the wetland class and with the wetland's scarcity in the geographic area under consideration.

g. Surrounding habitat type. Many wildlife species use surrounding uplands as well as wetlands for habitat; therefore, the kind of vegetation and land use adjacent to a wetland affects its wildlife value. Adjacent intensive recreational, residential, commercial and industrial uses can reduce wildlife habitat value.

h. Juxtaposition. A wetland located near other wetlands (especially of different classes) or connected to other wetlands by a stream is more valuable for wildlife habitat than an isolated wetland, since the wildlife can use more than one wetland to satisfy their needs.

E. Unique Areas

1. Concerns:

Preservation of rare species; disruption of food chain; introduction of predators - Unique natural areas are defined as having some natural phenomenon which is rare, unique, especially well developed, especially productive, relatively undisturbed, especially typical, traditionally used by a special interest group, or has been the object of scientific study in the past. Many of these unique wetland areas are distinguished by their fragility - they are easily harmed and often unable to recover from disturbance or the effects of overuse. Land use changes, for example, may easily introduce undesirable plant or animal species or pollutants to the area which may alter or destroy the area's unique quality.

2. Factors Influencing Importance of Function:

The presence of rare or endangered species or unusual plant communities are definite indications of a unique area. The wetlands agency should be familiar with the identified unique areas (see section on Thompson Wetlands Identification) and agency members should be alert to identifying additional areas themselves. The outstanding characteristics of unique wetland areas gives them such importance that they should generally not be altered in any way.

F. Recreation: Water-based and Non-water-based

1. Concerns:

Protection of suitable recreational wetlands:

a. Water-based recreation - The demand for water-based recreation in Connecticut vastly exceeds the supply. The highest priority freshwater recreation needs are for swimming, boating, fishing and hunting areas in close proximity (less than ½ hour travel time) to urbanized areas.
b. Non-water-based recreation - Camping, picnicking, hiking, and nature walking do not require water but are greatly enhanced by the delight of seeing and hearing water.

2. Factors Influencing Importance of Function:

a. Water-based recreation. The most significant factors for determining a stream's or lake's value for water-based recreation are:
   1. Water quality. Some uses of land within the watershed may introduce pollutants that are harmful for swimming or for fish habitat. Upland erosion can cause sufficient turbidity to prohibit swimming; and by increasing sedimentation, can shorten the life of a lake and alter stream bottom fish habitat. Low streamflow rates may be accompanied by an increase in concentration of pollutants and of stream temperatures that are incompatible to fish species sought by recreational fishermen.
   2. Accessibility to users. The travel time for the user population to the recreation site affects the site's value. If the traveling time to a swimming area is 2 hours, it is less valuable to the

user than if it were within ½ hour.

3. Size. The size of a river or lake is important in determining its adequacy to meet existing and anticipated demand for its use.
4. Relative scarcity. If a swimming, boating, fishing or hunting area is the only one or one of a few available within a specified travel time, its function increases greatly in value. Similarly, an area providing multiple water-related recreation uses may be more valuable than one of limited use.

b. Non-water-based recreation. The factors significant in determining a wetland's importance for non-water-based recreation are similar to those for water sports with the addition of diversity of water bodies, land forms, and vegetation.

1. Accessibility. Accessibility to potential users is equally important as for water sports; however, a wider variety of age and interest groups will be attracted to the area.
2. Diversity. Diversity of wetland and watercourse types, of vegetation, and of land forms or topography creates a variety of opportunities for recreational enjoyment. Ponds, lakes, marshes and swamps in close proximity attract many species of wildlife not found in heavily wooded areas, for example.
3. Size. The size of the water body or wetland is less important for non-water-based recreation than for water-based recreation, while the size of the entire surrounding recreation area accessible to users is more important.
4. Relative scarcity. Any unique or outstanding scenic or historic features on the site contribute particularly to non-water-based recreational value.
5. Water quality. The water quality of wetlands must be sufficient to support a variety of plant and animal life. Visual evidence of pollution or odors will reduce the value of the area for recreational use.

G. Scenic and Historic Value

1. Concerns:

Community aesthetics and cultural tradition - Wetlands can provide some of the most attractive visual aspects in a community. Areas which provide visual diversity and contrast, or historic sites which are often adjacent to streams, contribute to the value of a community's open space.

2. Factors Influencing Importance of Function:

The wetland variables that provide visual diversity and contrast are the natural resource factors of topography, land use and wetland type, and the cultural attributes of quality, historic interest and accessibility.

1. Topography. The presence of landform contrasts and diversity of landform types (hills, terraces, cliffs) contributes to scenic values. Differing landform types can afford the viewer a variety of vantage points. Scenic values of a wetland are enhanced by the distance, width and depth of the view.

2. Land use. The surrounding land use can provide a contrast to the wetland, thereby increasing its scenic value. An undisturbed shrub swamp bordering a carefully mowed lawn in an industrial park has more contrast than a seasonally flooded meadow bordering pastureland.
3. Wetland type. A diversity of wetland types, such as open water associated with marshes and wooded swamps, can enhance scenic value while at the same time attracting a variety of wildlife.
4. Quality. Visual evidence of pollution or odors will reduce the wetland's aesthetic value. The existence of eyesores within the view will also detract from its value. It is important to distinguish easily removable eyesores--junked cars, litter, abandoned gravel pits--from those more difficult to remove--utility poles and wires, industrial fumes, and sewage.
5. Historic interest. Historic sites such as early industrial manufacturing mills were frequently situated on watercourses and add considerably to their aesthetic value.
6. Accessibility. The scenic and historic values of a wetland or watercourse are enhanced by identification, such as a mapped scenic highway route including turnout areas which make the best views easily accessible. Accessibility would be similarly increased by a marked foot trail and a guide booklet explaining ecologic and historic features. Proximity to users should also be considered as for water-based recreation.

H. Education

1. Concerns:

Provide outdoor education facilities and protect areas for research - Wetlands, particularly swamps, marshes and ponds, are ideal areas for natural outdoor educational and scientific research laboratories because of the intimate association of plant and animal life and life support cycles that they exhibit. A wetland is a superb self-contained living laboratory for studying ecosystem dynamics.

2. Factors Influencing Importance of Function:

Factors which make a wetland an important fish and wildlife habitat also contribute to the educational viability of the wetland. Also important is an area's proximity to the users. In the past, schools have frequently been constructed on or adjacent to wetlands. Inland wetlands agencies should encourage the use or acquisition of easily accessible, inexpensive, natural wetland areas for outdoor classrooms.

II. INVENTORY OF THE INLAND WETLANDS OF THOMPSON, CONNECTICUT

(Prepared by C. K. Bowllan, D. L. Civco and W. C. Kennard, Natural Resources Center, University of Connecticut)

The purpose of this project was to covertype inland wetlands that had been delineated on a 1:12,000 scale wetlands and watercourses map prepared for the Town of Thompson, Connecticut, by the Northeastern Connecticut Regional Planning Agency (NECRPA) based on soils definitions as established by Connecticut State Statute.

The classification system used in this project was based on two criteria: vegetation cover type and surface hydrology. The seven wetland classes identified are described in Appendix I. Wetlands were classified through field studies and interpretation of 1:12,000 scale black and white aerial photographs taken in April 1975. Field studies also provided verification for the photointerpretations. Changes were made on the map provided by NECRPA where it was necessary to delineate new boundaries, to include waterbodies not shown on the original map, or to change incorrect delineations.

The accompanying map identifies each wetland class by color and letter code. The area of each class on this map was determined with a Lasico digital compensating planimeter (Table 1). The area was calculated with an accuracy of 95%. It was found that wetlands cover nearly 20% of the total town area of 31,168 acres. Of the seven wetland types identified, the Wooded Swamp-Deciduous type occurs most frequently, covering some 2,448 acres and constituting about 42% of all wetlands and approximately 8% of the town area. Together, the three related types of wooded swamp wetlands (deciduous, coniferous, and mixed) cover 4,613 acres and constitute 80% of all wetlands in the town. Herbaceous and deep marsh wetlands are found least frequently, covering 74 and 56 acres respectively.

Ten especially noteworthy wetlands based on uniqueness, size or apparent hydrological role were selected. In addition to being marked on the map with the appropriate wetland class symbol, these wetlands also have been identified with the letters A to J within a circle. The acreage and the location of each special wetland also are given. The largest of these wetlands is A, a Wooded Swamp-Deciduous type, which covers nearly 156 acres. Another of the significant wetlands, area I, accounts for about 37% of the total Herbaceous wetland acreage in the town.

DESCRIPTION OF WETLAND CLASSES

The class Wooded Swamp was subdivided into 3 categories--deciduous, coniferous, and mixed. In general, a wooded swamp is characterized by having trees as the dominant life form. The water table is at or near the surface during the growing season and usually above during the non-growing season. Some tree species found in these wetlands are Red Maple (*Acer rubrum* L.), Yellow Birch (*Betula lutea* Michx.), Slippery Elm (*Ulmus rubra* Muhl.), and American Elm (*Ulmus americana* L.). In addition, some common shrub species include Spicebush (*Lindera benzoin* (L.) Blume), Winterberry (*Ilex verticillata* (L.) Gray), Sweet Pepper-Bush (*Clethra alnifolia* L.), and Highbush Blueberry (*Vaccinium corymbosum* L.). Some common herbaceous species are Skunk Cabbage (*Symplocarpus foetidus* (L.) Nutt.), False Hellebore (*Veratrum viride* Ait.), and

several species of ferns, the most common one being the Cinnamon Fern (*Osmunda cinnamomea* L.).

Shrub Swamps are characterized by a lack of trees and by a dominance by shrubs. The water table is higher than that of a wooded swamp, being above the surface during the growing season--sometimes by as much as 12 inches. Since the delineation criterion for a shrub is height, species less than 20 feet are classified as shrubs. Therefore, Red Maple (*Acer rubrum* L.) is often found as a dominant species in a shrub swamp.

Deep Marshes are also characterized by a very high water table during the growing season but are different from shrub swamps in two important respects: 1) trees and shrubs are absent; dominance is by herbaceous species that can tolerate high water levels, and 2) the water table ranges from 6 inches above the surface during the growing season.

Herbaceous wetlands are characterized by a lack of trees and shrubs and by a dominance by herbaceous species. However, the water table is considerably lower than the preceding type, being at or near the surface during the growing season. Consequently, different herbaceous species are more commonly present. Herbaceous wetlands are usually found in utility rights of way, along perimeters of streams, or in open wet areas within a forest.

Meadows are similar to herbaceous wetlands but are found in agricultural fields. As a result of grazing or mowing, the vegetation is different from that of a typical herbaceous wetland. Broad-leaved herbs are absent, or if present, then in small amounts.

The following is a list of the seven wetland classes with their more commonly occurring species:

Wooded Swamp - Deciduous (WS-1): Coniferous trees are absent, or if present, then by less than 20%. The dominant tree species is usually Red Maple (*Acer rubrum* L.).

Wooded Swamp - Mixed (WS-2): Both deciduous and coniferous trees are conspicuously present in nearly equal proportions.

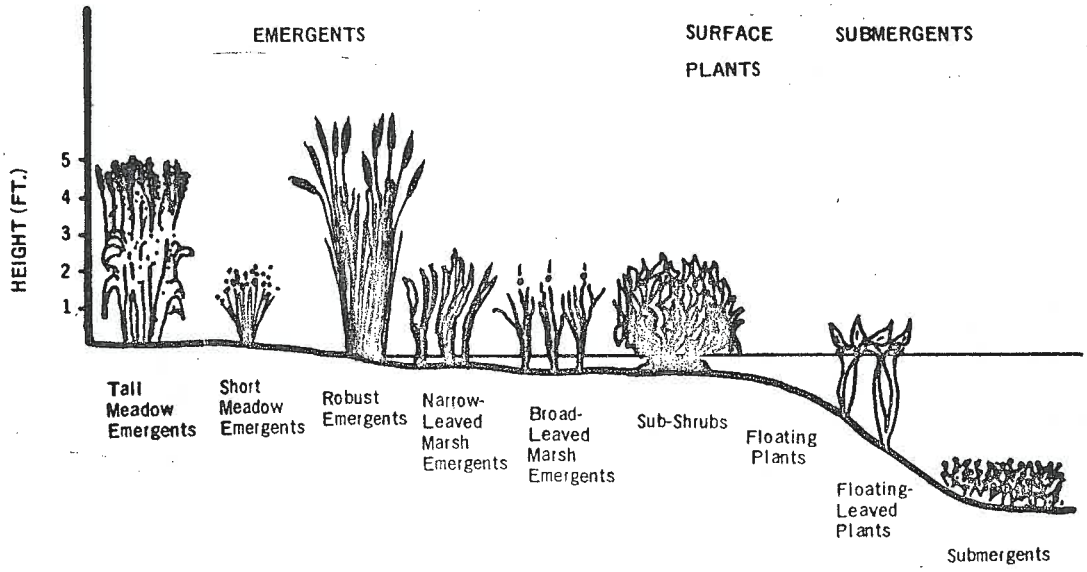
Wooded Swamp - Coniferous (WS-3): Deciduous trees are absent, or if present, then by less than 20%. Two common dominant species are White Pine (*Pinus strobus* L.), and Hemlock (*Tsuga canadensis* (L.) Carr.).

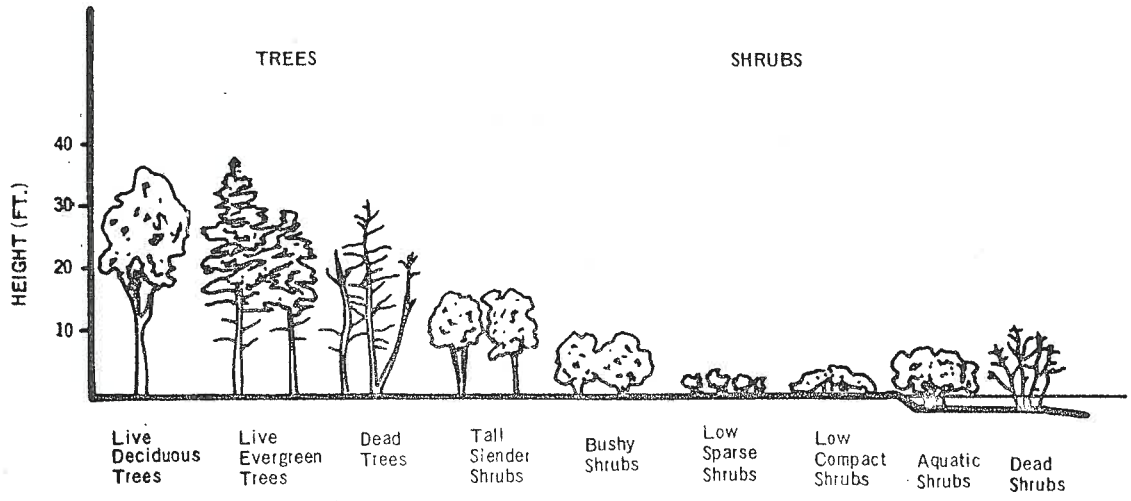
Shrub Swamp (SS): Shrub species commonly present are Buttonbush (*Cephalanthus occidentalis* L.), Speckled Alder (*Alnus rugosa* (Du Roi) Spreng.), and Red Maple (*Acer rubrum* L.). Associated herbaceous species are sedges (usually Tussock Sedge--*Carex stricta* Lam.), grasses, and broad-leaved herbs.

Deep Marsh (DM): Usually found bordering waterbodies; herbaceous species include Cattails (*Typha latifolia* L.), Common Reed (*Phragmites australis* (Cav.) Trin. *ex* Steud.), Pickerelweed (*Pontederia cordata* L.), Bur Reed (*Sparganium* spp.), Smartweed (*Polygonum* spp.), sedges, and rushes.

Herbaceous (H): Characteristic members of an herbaceous wetlands flora are grasses, sedges, rushes, and broad-leaved herbs such as Jewel-Weed (*Impatiens capensis* Meerb.), Joe-Pye-Weed and Boneset (*Eupatorium* spp.), Loosestrife (*Lythrum* spp.), and Knotweed (*Polygonum* spp.).

Meadow-Grazed (MG): Sedges, rushes, and grasses are the common species.


EMERGENTS
SURFACE PLANTS
SUBMERGENTS
HEIGHT (FT.)
5
4
3
2
1
Tall Meadow Emergents
Short Meadow Emergents
Robust Emergents
Narrow-Leaved Marsh Emergents
Broad-Leaved Marsh Emergents
Sub-Shrubs
Floating Plants
Floating-Leaved Plants
Submergents


TREES
SHRUBS
HEIGHT (FT.)
40
30
20
10
Live Deciduous Trees
Live Evergreen Trees
Dead Trees
Tall Slender Shrubs
Bushy Shrubs
Low Sparse Shrubs
Low Compact Shrubs
Aquatic Shrubs
Dead Shrubs

WETLAND USE AS WILDLIFE HABITAT
(adapted from Golet and Larson, 1974)

WETLAND CLASS Wildlife Use	Dominant Vegetation	Characteristic Plants	WILDLIFE USE Winter-ing	Migra-tion	Breed-ing	Feed-ing
Open Water or Water course	Submergents and surface plants	Pondweeds, wild celery, coontail, water milfoil, fanwort, muskgrass, white water lily, watershield, spatterdock, duckweed	F,W	F,W	F	F,W
Seasonally flooded flats	Emergents; some shrubs and trees	Willow, dogwood, buttonbush, reed canary grass, blue-joint, sedges, red maple, highbush blueberry	F,B SM WM	W,B	F,W,B, SM,WM	F,W B,SM WM,LM
Wet Meadows	Meadow emergents	Reed canary grass, blue-joint, woolgrass, manna grass, soft rush, sweet flat, hardhack, sedges	B,SM	B,W	B,SM W	B,SM WM,LM, W
Shallow Marsh	Emergents; some surface and submergents	Cattail, wild rice, reed, purple loosestrife, bur-reed, great bulrush, water lily, pickerel weed, arrow arum, water plantain	B,WM SM	W,B	F,W,B, SM,WM	F,W,B, SM,WM
Deep Marsh	Emergents and aquatic shrubs; some surface and submergents	Buttonbush, water-willow, cattail, wild rice, bur-reed, bulrush, pickerel weed, arrow arum	F,W,B, SM,WM	F,W,B	F,W,B, WM	F,W,B, SM,WM, LM
Shrub Swamp	Shrubs	Buttonbush, alders, red maple, sweet gale, sedge, blue-joint, cattail, viburnum, dogwoods	F,SM LM,WM	F,W	W,B,SM	F,W,B, SM,LM, WM
Wooded Swamp	Trees and some shrubs	Red maple, swamp white oak, black ash, Atlantic White cedar, willow spice bush, sweet pepperbush	F,B, LM,SM	W,B	F,W,B, SM,LM	F,W,B, SM,LM
Bog	Sphagnum, trees and shrubs	Black spruce, larch, red maple, leatherleaf, sheep laurel, pitcher plant, sundew, cranberries, sphagnum	W,B, LM,WM	W,B	F,W,B, SM,WM	F,W,B, SM,WM, LM

KEY TO WILDLIFE

F Fish, amphibians and reptiles

W Waterfowl

B wetland birds (heron, rails)

LM Large mammals (deer)

SM Small mammals (mink and smaller)

WM Water mammals (beaver)

COVERAGE OF WETLAND CLASSES

Wetland Class	Code	Acres	Percent of Total Wetland Area	Percent of Total Town Area (31,168 Acres)
Wooded Swamp-Deciduous	WS-1	2,448	42.2	7.8
Wooded Swamp-Mixed	WS-2	2,026	34.9	6.5
Wooded Swamp-Coniferous	WS-3	139	2.4	0.4
Shrub Swamp	SS	578	10.0	1.8
Deep Marsh	DM	56	1.0	0.2
Herbaceous	H	74	1.3	0.2
Meadow-Grazed	MG	478	8.2	1.5
		5,799	100.0%	18.4%

SIGNIFICANT WETLANDS

Wetland Class	Code	Criteria			Size (acres)	Location
		Uniqueness	Size	Hydrology		
Wooded Swamp-Deciduous (WS-1)	A		X	X	155.4	Along the Quinebaug River in the Quinebaug section of the town, northwest of the West Thompson Reservoir.
Deep Marsh (DM)	B	X	X	X	48.4	Jerrys Swamp located northeast of Sand Dam Rd., in the East Thompson section of the town.
Shrub Swamp (SS)	C	X		X	37.9	Between Little Pond and Sand Dam Rd., in the East Thompson section of the town.
Shrub Swamp and Deep Marsh (SS,DM)	D	X		X	41.1	Surrounding Long Pond and continuing south from the western edge of the pond, in the East Thompson section of the town.
Wooded Swamp-Mixed (WS-2)	E		X	X	70.6	Just south of the intersection of Babula and Sand Dam Rds., in the East Thompson section of the town.

Wetland Class	Code	Criteria			Size (acres)	Location
		Uniqueness	Size	Hydrology		
Shrub Swamp (SS)	F	X	X	X	66.1	Between Thompson Raceway and Stump Pond, in the East Thompson section of the town.
Shrub Swamp (SS)	G	X	X	X	66.6	South of the Quaddick Reservoir, surrounding Lower Pond, in the Quaddick section of the town.
Wooded Swamp-Deciduous (WS-1)	H		X	X	65.1	Along the eastern edge of the preceding shrub swamp, in the Quaddick section of the town.
Herbaceous (H)	I	X	X	X	27.2	6,000 ft. northwest of the intersection of Ravenelle and Bull Hill Rds., in the West Thompson section of the town.
Wooded Swamp-Coniferous (WS-3)	J	X	X	X	57.3	On the edges of the preceding Herbaceous wetland.

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