

Sky Meadows Golf Course

File Nos.: 198700137 and 198707103

City and State: Dunstable, MA and Nashua, NH

General Impacts: Unknown

Functions and Values Lost: Wildlife Habitat

Year(s) Mitigation Constructed: Unknown

Size and Type of Mitigation as Proposed:

3.05 acres tidal emergent

2.02 non-tidal scrub-shrub

Proposed Functions and Values of Mitigation: Unknown

Mitigation Special Condition(s):

Unknown

Remarks:

Project file is missing. A 1996 report by Frank Smigelski, Wetland Scientist, included these notes:

“This nationwide permit allowed 1.81 acres of fill to be retained and required restoration/creation of 5.07 acres of wetlands as resolution of an enforcement action. The site was visited in May of 1988 and again in late 1990. Even with the elevated water levels (due to a small debris dam at the system’s outlet) during the last visits it was evident that the site has much more dense wetlands than it did in 1988.

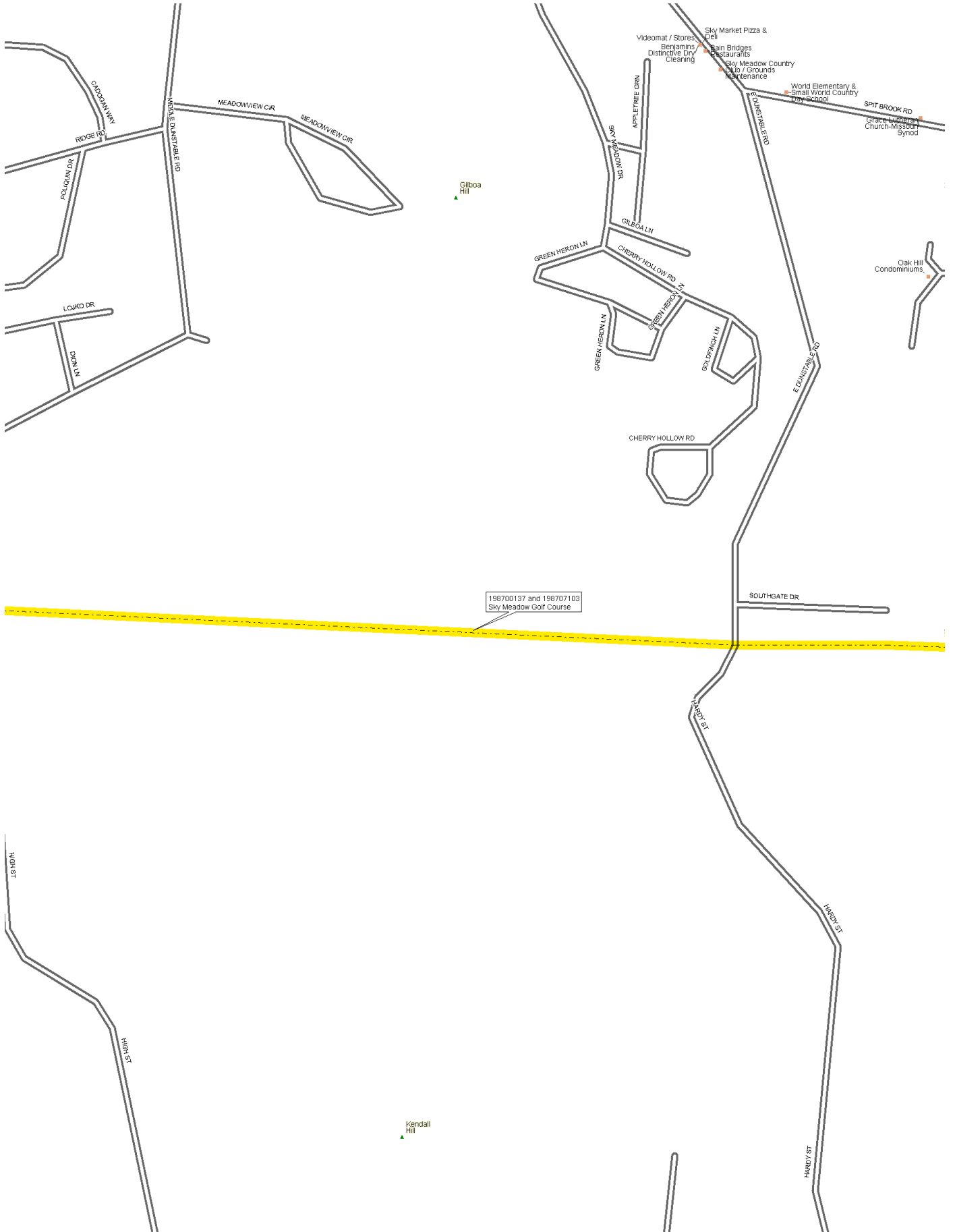
The golf course representative took a personal interest in this project and put a considerable level of effort into this project despite facing both fiscal (bankruptcies of their clients) and physical problems (geese eating plants, uncooperative grounds keeping help). This effort and care is reflected in the relative success of the restoration.

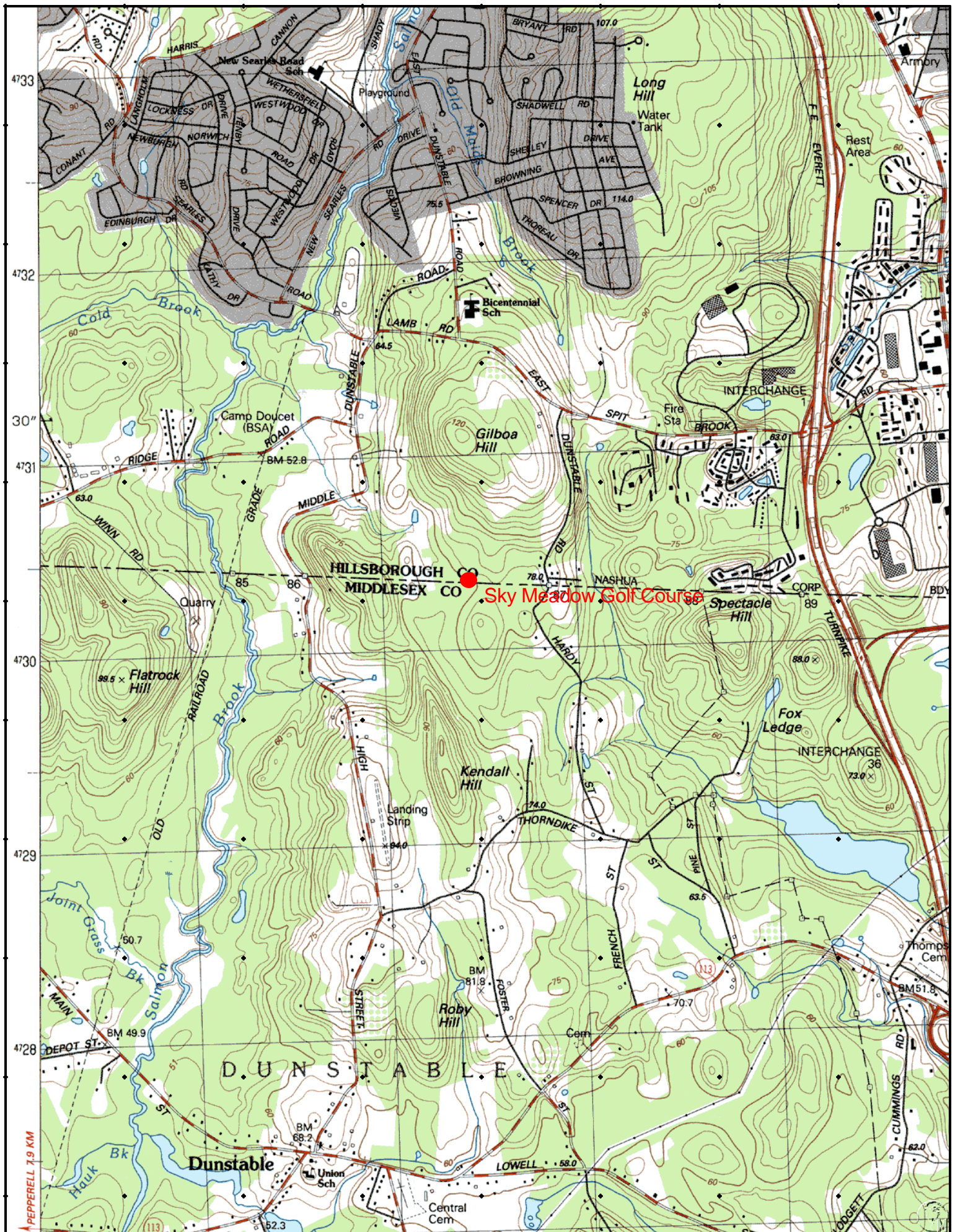
Also, the Corps had wanted an evergreen buffer placed in the project area. This was mentioned in the plan, but not stated in the permit, so the golf course staff did not follow through with this, assuming it was not required, and not of any restoration benefit. The author agrees it would not have provided much ecological benefit, and would have taken more time than it was worth to try to force plan compliance.

Conclusions- The author says the bulk of the restoration areas came back nicely and would certainly be wetlands within Federal jurisdiction. However, because a golf course now surrounds the project site, the wetland's values and functions have changed since its pre-disturbance days. Thus, the project isn't really compensatory mitigation, but restoration and impact minimization."

Directions:

Take Route 128/I-95 north to exit 32B/32A Route 3. Take 3 North, Middlesex Turnpike. Once you get into NH, take exit 1. Bear left at the exit. Go through 3 sets of lights. Pass a fire station on the right, and take a left at the ballpark. Look for sign indicating Sky Meadow at second driveway on right. Proceed to groundskeeper's building. It is the one with equipment in and around it.





MITIGATION SITE FIELD DATA FORM

Site Name: Sky Meadows Golf Course **File No. :** 198707103

City/Town: Nashua **State:** NH **Waterbody:** Golf Ponds

Monitor(s): Ladd, Minkin, Wright, McKee **Date:** 6-4-02

Was site constructed? yes

Is site wetland? yes

Size of proposed wetland: ~ 5 acres

Painted Turtles, Great Blue Heron, and Dragonflies.

Actual size of wetland: TBD

Landscape position: bottoms of rolling landscape

Lat/Long Points: N 42.70000 degrees, W071.47365 degrees

Saved GPS Waypoint name: SKY1

GPS Tracking Log Name: N/A

Perimeter: TBD

Surrounding land use:
Golf course surrounded by residential land

Is wetland function compromised by surrounding land use?
Wildlife disrupted by frequent human interruption. Poison ivy sprayed with Roundup and wetland plants are mowed.

Plant health:
Very healthy except for the wetland plants in fringes which are repeatedly mowed. Ground in this area is wet. There was also evidence of woody species being cut, including maple, alder, dogwood, and arrow wood.

Invasive species:
Phalaris arundinacea, *Lythrum salicaria*.

Wildlife Use:
One beaver chew was observed. Crawfish and catfish. Red-winged blackbirds, Mallard w/young, Bullfrogs w/tadpoles, Green frogs,

Plants:

Acer rubrum
Alnus rugosa
Betula populifolia
Carex sp. (ovales)
Carex spp. (8)
Carex lurida
Carex stipata
Eleocharis sp.
Eupatorium maculatum
Eupatorium perfoliatum
Fraxinus pennsylvanica
Hieraceum sp.
Impatiens capensis
Iris versicolor
Juncus spp.
Juncus effusus
Lythrum salicaria
Onoclea sensibilis
Osmunda cinnamomea
Osmunda regalis
Phalaris arundinacea
Pinus strobus
Polygonum sagittatum
Potentilla sp.
Potentilla recta
Rhamnus frangula
Rubus spp.
Salix nigra
Sambucus canadensis
Scirpus microcarpus
Sisyrinchium sp.
Sphagnum sp.
Thelypteris sp.

Typha latifolia
Viburnum dentatum

Viola lanciolata

Soils Data:

Soils data not collected at this site.

Sketch approximate mitigation site, noting areas and types of wetlands, waters, other features, landscape position, landmarks, etc., and data and photo point(s):

See file for course schematic.

Overall Description of site:

None

Comments, problems, recommendations:

Golf course staff member noted that the pond water level is stable. Also noted that mallard chicks are being eaten, possibly by snapping turtles. The water levels are higher than was expected from looking at maps in the file. Some wetlands that were supposed to be scrub shrub were marsh or open water. Evergreen buffers described in permit were nonexistent.

198707103
Sky Meadows Golf Course
Nashua, NH

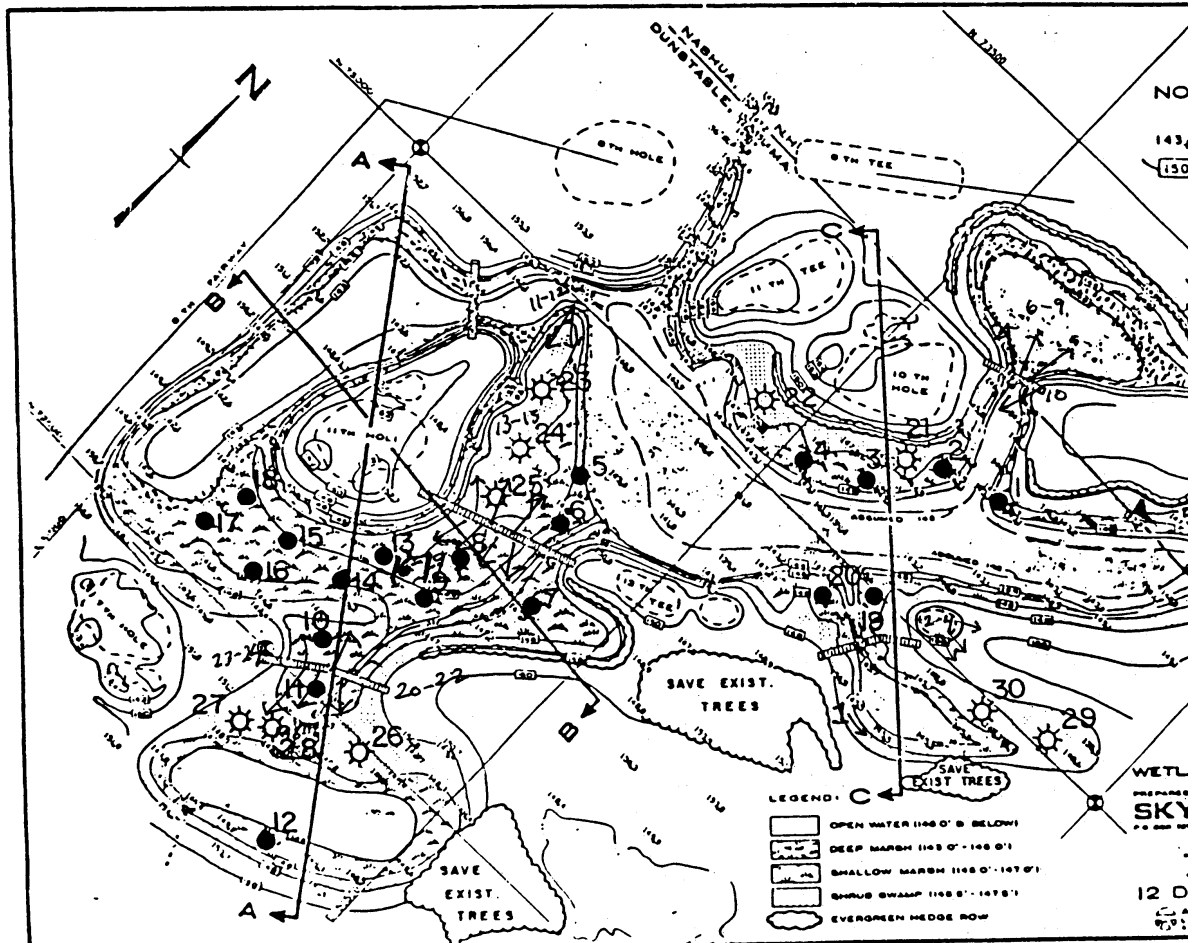


FIGURE 1: APPROXIMATE Locations of Permanently marked Vegetative Sampling Plots

photo guide

Wetland Function-Value Evaluation Form

Total area of wetland 5.07 ac Human made? modified Is wetland part of a wildlife corridor? no or a "habitat island"? no

Adjacent land use golf course Distance to nearest roadway or other development 200 feet
residential

Dominant wetland systems present POW/PEM Contiguous undeveloped buffer zone present 0

Is the wetland a separate hydraulic system? no If not, where does the wetland lie in the drainage basin? middle

How many tributaries contribute to the wetland? 2-3 rills Wildlife & vegetation diversity/abundance (see attached list)

Sky Meadow Golf Course
Wetland I.D. 198707103













Latitude N42.70000 Longitude W71.47365

Prepared by: RL PM Date 6/4/02

Wetland Impact:
Type _____ Area _____

Evaluation based on:
Office _____ Field X

Corps manual wetland delineation
completed? Y _____ N X

Function/Value	Suitability Y N		Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge	X				intermittent watercourse, water level stayed same in drought
 Floodflow Alteration		X			outlet?
 Fish and Shellfish Habitat	X				2 crayfish, schools of catfish
 Sediment/Toxicant Retention	X		2,3,5	X	herbicides used on golf course, would trap sediment, very narrow edge
 Nutrient Removal	X		1,4,2,5		large deep water, not very dense vegetation, algae = excess nutrients
 Production Export	X		4,6,8		high plant species, low vegetative structure
 Sediment/Shoreline Stabilization		X			very low erosion, very thin border of wetland
 Wildlife Habitat	X			X	for common species only generalists
 Recreation		X			
 Educational/Scientific Value		X			
 Uniqueness/Heritage		X			
 Visual Quality/Aesthetics	X				
ES Endangered Species Habitat					
Other Plant Life Habitat	X				many species of <i>Carex</i>

Notes: major function – toxicant retention

* Refer to backup list of numbered considerations.

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Nashua, NH
6/04/02



Looking northeast at the southeast side of the finger of wetland east of the “save exist. trees” and near the legend on the plan.



Looking southeasterly from the southernmost bridge towards some saved trees.



Looking south and southwest from the long, central bridge. 11th hole on the far right.



Looking southwesterly along the northwest edge of the wetland near the 10th hole

USGS 7 km S of Nashua, New Hampshire, United States 11 Apr 1998



0 100 200M

0 100 200yd

Image courtesy of the U.S. Geological Survey
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