MANAGEMENT PLANS FOR SIGNIFICANT PLANT AND WILDLIFE HABITAT AREAS OF MARYLAND'S EASTERN SHORE: DORCHESTER COUNTY

APPENDIX C TO

FINAL REPORT

SUBMITTED TO:

Coastal Resources Division
Tidewater Administration

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DORCHESTER COUNTY

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15 = Locations of Protection Areas of significant habitat. Sites are numbered in order from north to south.

DORCHESTER COUNTY: Protection Area Locations

Protection Area	Site # on County Map
Cabin Creek Seep	1

PROTECTION AREA SUMMARY

Protection Area Name: Cabin Creek Seep

County: Dorchester USGS Quad: East New Market, Preston

SUMMARY OF ECOLOGICAL SIGNIFICANCE:

The low-lying, sphagnous seep within the protection area supports a population of a species known from just four other sites in the State. This species is rare throughout its range, and is known from fewer than one hundred sites nationwide. This is the only known site for this species on the Eastern Shore. Although the population is small, casual observations reported to the program suggest that the population may be expanding. An uncommon tree species grows on the upland forest slopes bordering the seep to the east.

OTHER VALUES AND SIGNIFICANCE:

The pine-hardwood swamp forest provides rich habitat for birds, amphibians, and reptiles. Protection of the forested area would buffer this tributary of Cabin Creek from runoff from upland farm fields.

THREATS AND MANAGEMENT NEEDS:

Threats

Potential threats to the reproductive success of this rare species include any disturbance during the seedling stage, browsing of inflorescences by deer or other herbivores, or restricted number of sites available for germination.

Draining, filling, channeling, or damming of the pond or swamp to the north of the seep would be detrimental to the quality and quantity of water available to the seep. Logging or clearing of the forest would increase the amount of available sunlight and promote the invasion of non-native, weedy species. These weedy species may outcompete and exclude the rare species.

Unless access to the seep is restricted, trampling by horses and hikers may threaten the population. This rare species is particularly vulnerable to disturbance between April and early September, when seedling germination and growth occur.

Management Needs

Avoid logging or clearing of trees for any purpose within the protection area.

Maintain pond, swamp, and alluvial forest hydrology in current condition, without modifications.

Any new trail construction should be restricted to the swamp forest north of the pond. Hiking and horseback riding on the south side of the pond should be limited to the area east of the dirt road leading through the upland forest. At south end of pond, fencing of the western forest boundary adjacent to the camp and the eastern boundary adjacent to the dirt road may be advisable.

The size and reproductive success of the rare species population should be monitored. Research on the habitat requirements of the species is needed. Seedling germination and establishment should be monitored to determine which habitat types sustain successful colonization.

BOUNDARY RECOMMENDATIONS:

The protection area boundary contains the rare species population, adjacent swamp and upland forests required to maintain the water quality and hydrology of the rare species' wetland habitat, and the upstream impoundment.

SITE DESCRIPTION SUMMARY:

The focus of this 35-acre protection area is a sphagnous seep, dominated by Green Ash, Red Maple, Sweet Pepperbush, and Swamp Azalea. The stream flows faster and deeper north of the impoundment, with few seepage areas. Downstream from the seep, the subcanopy and herbaceous cover becomes much more dense. To the east of the seep, the forest is dominated by Loblolly Pine, species of oak, and Mountain Laurel. The buildings and horse corral of a youth camp are located to the west of the seep.

If the rare species can only succeed in bottomland seepage areas with minimal subcanopy and herbaceous layers, its potential habitat at this site may be an area no larger than 30 to 40 square feet. Since the species has colonized upland habitat and occurs at greater densities at other sites, this population has potential to expand in both numbers of individuals and area occupied.

Residential developments are located to the north and south of the protection area. Farm fields lie to the east, northeast, and southeast. To the west, northwest, and southwest, the protection area is bordered by a road.

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