MANAGEMENT PLANS FOR SIGNIFICANT PLANT AND WILDLIFE HABITAT AREAS OF MARYLAND'S WESTERN SHORE: ST. MARY'S COUNTY

APPENDIX B TO

FINAL REPORT

SUBMITTED TO:

Coastal Resources Division
Tidewater Administration

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ST. MARY'S COUNTY

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

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ST. MARYS COUNTY: Protection Area Locations

Protection Area	Site # on County Map
Miski Run Woods	1

PROTECTION AREA SUMMARY

Protection Area Name: Miski Run Woods

County: St. Mary's USGS Quad: Leonardtown

SUMMARY OF ECOLOGICAL SIGNIFICANCE:

Miski Run Protection Area contains a large, unusually diverse bottomland forest with many species that are typically found in the mountains and Piedmont, but are rare on the Coastal Plain. The soils at this site are calcareous, due to shell deposits in the underlying Choptank geological formation. Circumneutral soils are uncommon on the Coastal Plain, which is typically characterized by more acidic soils. The nutrient-rich floodplain is carpeted with wildflowers in the spring, and is flanked by steep, north-facing slopes. The clear stream which flows through the site supports insect larvae characteristic of unpolluted waters. Abundant mosses and liverworts grow on its uneroded banks.

Two rare plant species grow in this protection area. One species covers large portions of the floodplain forest floor in the spring. A small population of another rare species grows in the damp soil near Miski Run. This plant is known from only six other sites in the State, and all known populations are small.

OTHER VALUES AND SIGNIFICANCE:

This protection area is part of a large, contiguous forest that provides excellent habitat for forest interior breeding birds, as well as deer, fox, and many other forms of wildlife. Large, mature forested tracts are increasingly uncommon in Maryland's Coastal Plain and are vital habitat for many wildlife species.

THREATS AND MANAGEMENT NEEDS:

Threats

Development pressures are increasing in the vicinity of the protection area and could destroy the site directly or impact it indirectly. The rare plants occur in the intermittently flooded bottomland forest, and thus a decline in water quality in Miski Run would be detrimental to these species.

If the forest were cleared within the protection area, erosion and sedimentation would be detrimental to water quality

and to the survival of the rare species' populations. The cutting of trees would also increase the growth of invasive non-native species that can outcompete native species. Non-native plants are common in the powerline that borders the protection area, and in the portion of the bottomland forest nearest the powerline.

Management Needs

Activities that would alter the quantity or quality of water in Miski Run should be avoided.

Forest clearing should not be conducted within the protection area.

The size of populations of non-native plant species in the protection area should be monitored. If the non-native species appear to threaten the rare species, steps should be taken to control the growth of the non-native species.

BOUNDARY RECOMMENDATIONS:

The protection area boundary encompasses the bottomland forest which includes the rare species habitat and the adjacent forested slopes that drain into the bottomland. The protection area is bordered by powerlines on the northeast and southwest, and excludes developed agricultural lands to the northwest and southeast.

SITE DESCRIPTION SUMMARY:

The older, second-growth bottomland forest in this 420-acre protection area is dominated by Red Maple and River Birch with Pawpaw and Spicebush common in the understory. In the spring, the forest floor is carpeted with wildflowers, including many species indicative of rich, circumneutral soils, such as Cut-leaved Toothwort and Dwarf Ginseng. Large patches of Mayapple are common. Non-native species such as Japanese Honeysuckle are abundant in localized areas. Southwest of the floodplain are steep, north-facing slopes dominated by old White Oaks and Beech trees (up to 30" dbh) with Mountain Laurel, Christmas Fern, orchids, and other wildflowers on the steep slopes. North of the floodplain are gentler ravines dominated by Red and White Oaks and Beech. American Holly and Beech saplings are common in the understory, as are Pawpaw and Spicebush in the wetter areas.

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