

MANAGEMENT PLANS FOR  
SIGNIFICANT PLANT AND WILDLIFE HABITAT AREAS OF  
MARYLAND'S WESTERN SHORE: ANNE ARUNDEL COUNTY

APPENDIX B TO  
FINAL REPORT

SUBMITTED TO:

Coastal Resources Division  
Tidewater Administration

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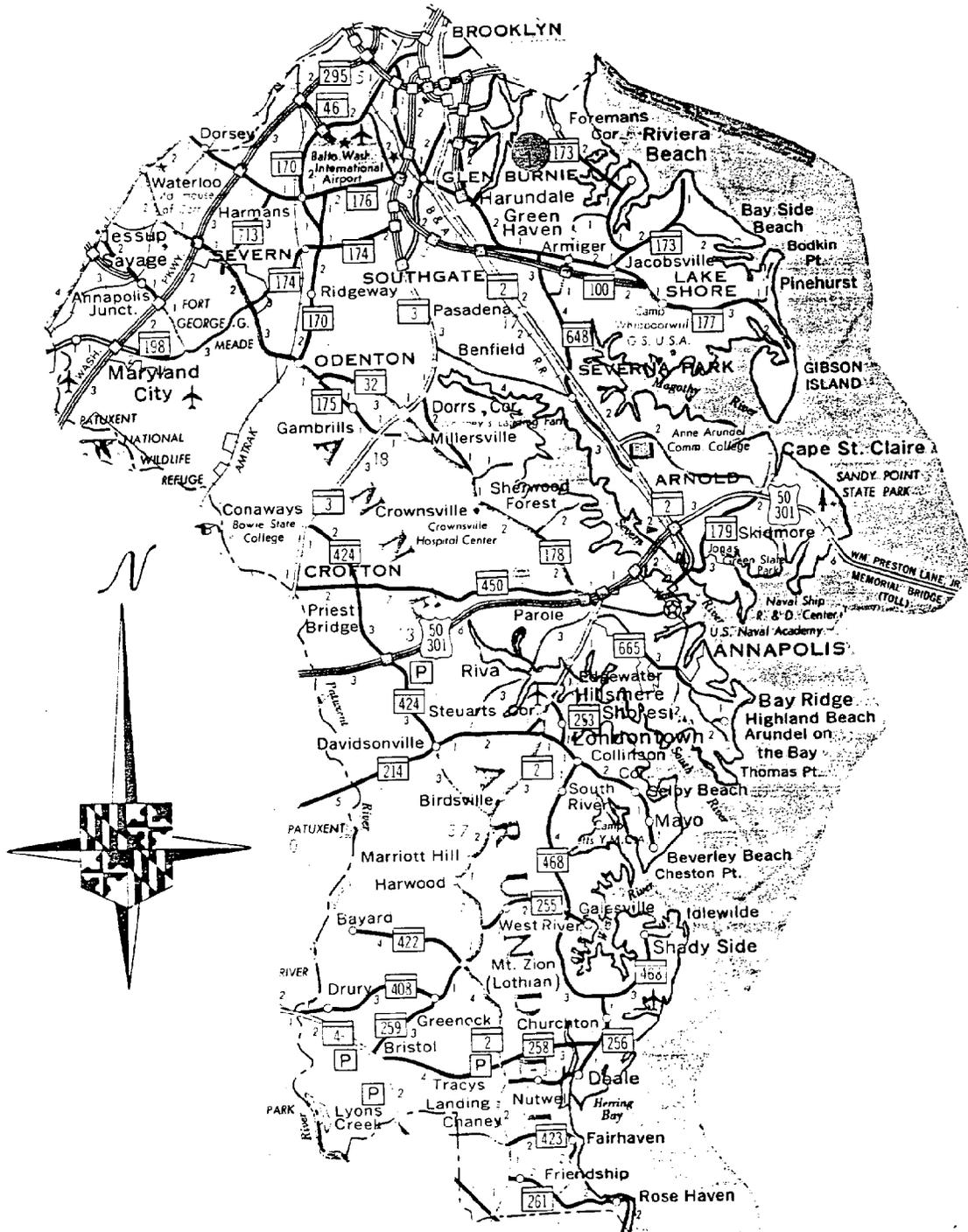
September 30, 1989

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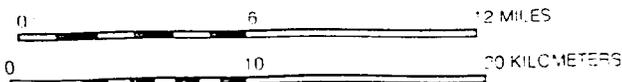
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# ANNE ARUNDEL COUNTY



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

ANNE ARUNDEL COUNTY: Protection Area Locations

<u>Protection Area</u>	<u>Site # on County Map</u>
Solley Powerline.....	1

## PROTECTION AREA SUMMARY

Protection Area Name: Solley Powerline

County: Anne Arundel

USGS Quad: Curtis Bay

### SUMMARY OF ECOLOGICAL SIGNIFICANCE:

The sandy, clayey hills of this right-of-way harbor a rare plant species known from just four other sites in Maryland, all of which are in Worcester and Wicomico Counties. This species normally inhabits the sandy, acidic soil of open pine barrens. The annual mowing of this right-of-way prohibits woody species from forming a canopy, and maintains the open, sunny environment required by this rare species. This site is at the northern edge of the range of this species, and it is the only known site on the Upper Coastal Plain of Maryland. While the rare species is not widespread within the right-of-way, the plants appear vigorous and are locally abundant in dense patches.

### OTHER VALUES AND SIGNIFICANCE:

Due to the loss of natural habitat, actively managed utility rights-of-way have become significant habitat for some rare species. Further survey of this area may reveal additional rare plant populations.

### THREATS AND MANAGEMENT NEEDS:

#### Threats

Changes in powerline maintenance practices could destroy the rare species population. Mowing during the flowering or fruiting period of the rare species would prevent the plants from sexually reproducing. This would reduce the dispersal ability of the plants, would reduce the genetic variability within the population, and thus could eliminate the population.

Maintenance vehicles traverse the right-of-way. Vehicles that wander from the dirt road that borders the right-of-way could physically damage the rare plants.

Many rare plants grow near powerline towers and could be damaged by tower maintenance activities.

#### Management Needs

A cooperative management agreement should be established

between the power company and the Natural Heritage Program in order to protect and maintain the rare species. Annual mowing of the right-of-way should be conducted in early March in order to avoid the flowering and fruiting periods of this spring-blooming rare species.

The size and reproductive success of the rare species population should be monitored. Further survey should be conducted in order to determine the extent of the rare species population.

All vehicles should travel on existing roads as much as possible. If monitoring of the population reveals vehicle damage to the rare plants, or reveals an increase in off-road traffic, the population should be well-marked or fenced to prevent further damage.

Powerline tower maintenance staff should be notified of the locations of the rare species. If work is planned for the towers near the rare species, the plants should be well-marked or fenced prior to the work in order to avoid damage to the plants.

If fencing is used to protect the rare plants, it should be temporary fencing and it should be removed prior to mowing so that the area inhabited by the rare species is mowed.

#### BOUNDARY RECOMMENDATIONS:

The protection area includes the portion of the right-of-way inhabited by the rare species and adjacent potential habitat. A road borders the protection area to the west. Relatively steep slopes mark the eastern edge of the protection area.

#### SITE DESCRIPTION SUMMARY:

This 6-acre protection area occurs within a powerline right-of-way. The right-of-way is maintained by annual mowing which prevents a canopy of shrubs or trees from developing. The rare species blooms in spring, when few other species are flowering in the right-of-way. In late summer, the right-of-way is blanketed in the brilliant yellow color of bur-marigold and goldenrod. Common Greenbrier and Sawbrier are abundant. Pitch Pine dominates the canopy of the adjacent forest. A dirt road follows the northern edge of the right-of-way and an off-shoot crosses the right-of-way near the rare species population.

Prepared by: Katharine A. McCarthy

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