

ANNUAL REPORT FOR 2003



**Colington Cut Mitigation Site
Dare County
TIP No. B-2024**



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SUMMARY

The Colington Creek and Cut Mitigation Sites are located in Dare County. Originally planted in 1995, both sites were designed as mitigation for marsh wetland impacts associated with bridge project B-2024. The Colington Creek Site, having been deemed a success, was closed in 1999. The eighth year of vegetation monitoring at the Colington Cut Mitigation Site is presented in this report.

In response to mowing that occurred on the site in 2000, "Do Not Mow" signs were posted at the site in January 2002. Mowing of the Colington Cut Mitigation Site has not reoccurred since the installation of the "Do Not Mow" signs.

After eight years of monitoring, visual observation of the Colington Cut Mitigation Site shows an aerial coverage of 99% and an 85% survival rate; these results exceed the minimum area coverage (50%) and survival rate (50%) success criteria.

The site was revisited by NCDOT and CAMA in May 2003. CAMA presented a percent coverage map (produced using GPS) of the dominant species throughout the site. The acreage that CAMA approved met the success criteria as stated in the mitigation plan. Phragmites were only found in a small portion (0.09 acres) of the approved acreage.

Phragmites have been treated continuously throughout the monitoring cycle on the Colington Cut Mitigation Site. It appears that the herbicide treatments have been somewhat successful in that the survival rate and aerial coverage of the target species is above the 50% success criteria. In October 2003, NCDOT treated the site for phragmites.

Based on the aerial coverage and survival rates of the target species, NCDOT purposes to discontinue vegetation monitoring at the Colington Cut Mitigation Site.

1.0 INTRODUCTION

1.1 Project Description

The Colington Cut and Creek Mitigation Sites are located at Bridges No. 5 and 6 along SR 1217 in Dare County (Figure 1). The sites consist of approximately 1.27 acres of mitigation for marsh wetland impacts associated with project B-2024.

1.2 Purpose

In order for a mitigation site to be considered successful, a site must meet success criteria in both hydrology and vegetation. This report details the vegetation monitoring for 2003 at the Colington Cut Mitigation Site. The Colington Creek Site was previously closed out on October 15, 1999, having met vegetation success. Hydrologic monitoring was not required for either site.

1.3 Project History

July 1995	Site planted
August 1995	Vegetation Monitoring (1 month)
October 1996	Vegetation Monitoring (1 year)
September 1997	Vegetation Monitoring (2 year)
August 1998	Vegetation Monitoring (3 year)
June 1999	Site Treated for Phragmites
October 1999	Vegetation Monitoring (4 year)
October 2000	Site Treated for Phragmites
October 2000	Vegetation Monitoring (5 year)
April 2001	Site Treated for Phragmites
August 2001	Vegetation Monitoring (6 year)
October 2002	Vegetation Monitoring (7 year)
June 2003	Vegetation Monitoring (8 year)
October 2003	Site Treated for Phragmites

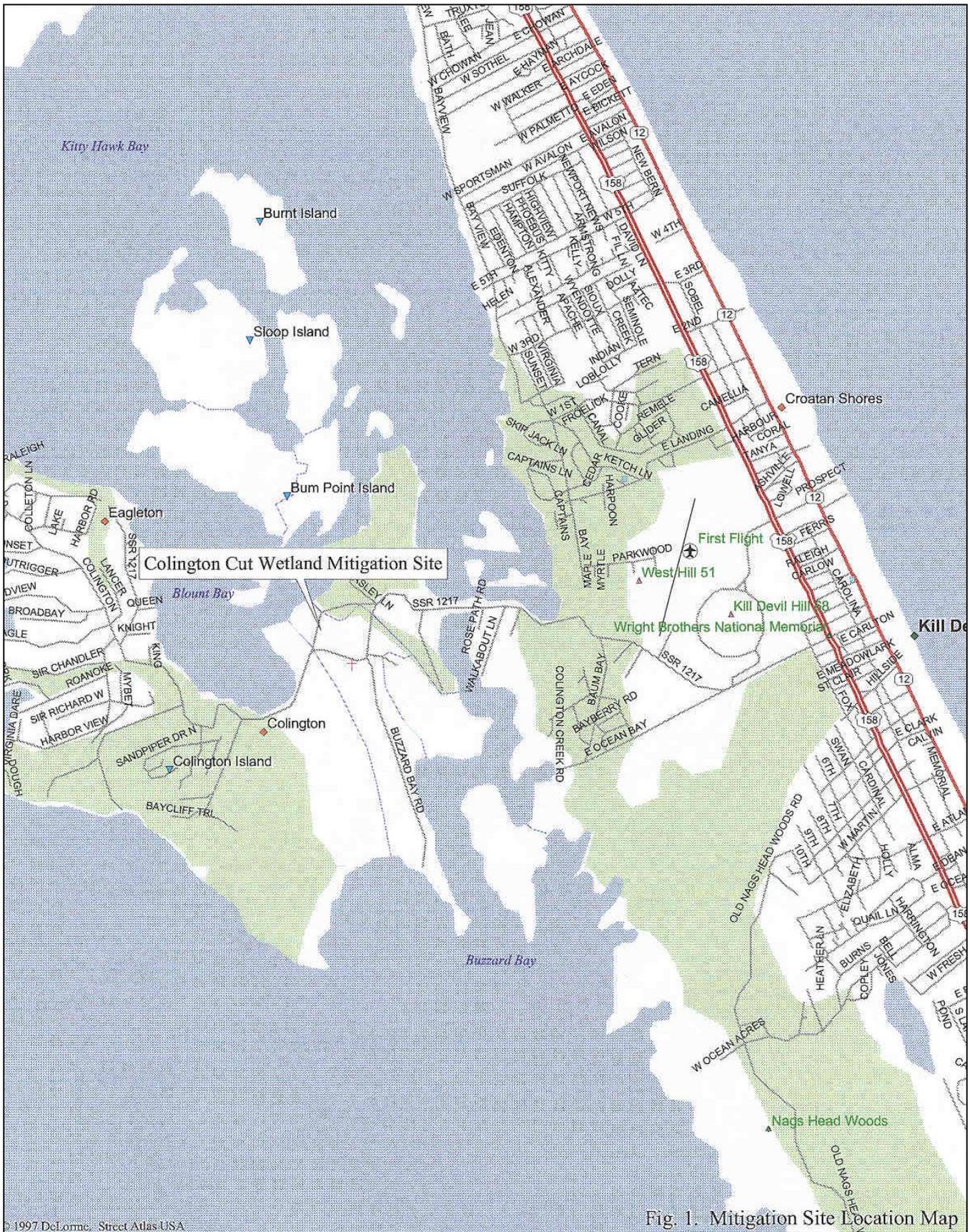


Fig. 1. Mitigation Site Location Map

2.0 VEGETATION: COLINGTON CUT MITIGATION SITE (YEAR 8 MONITORING)

2.1 Success Criteria

Success criteria states that there must be a 50% survival rate of planted species and 50% aerial coverage for at least three consecutive years or until the site is deemed successful.

2.2 Description of Species

The following marsh grass species were planted in the Wetland Restoration Area:

Juncus roemerianus, Black Needle Rush

2.3 Results of Vegetation Monitoring

Site (ON SITE)	<i>Juncus roemerianus</i>	<i>Scirpus</i> sp.	Other	% Coverage (8 year)
C. Cut	60 %	25 %	14 %	99 %

Site Notes: The site was planted with *Juncus roemerianus* in July 1995. The site has been treated numerous times for phragmites. Species noted include: smartweed, *Panicum* sp., goldenrod, phragmites, *Sesbania* sp., *Spartina patens*, *Spartina alterniflora*, and *Aster* sp.

A portion of the Colington Cut site was mowed in 2000. The telephone and power companies that service this area were contacted about the mowing but each denied responsibility. NCDOT's Division Roadside Environmental Unit, as well as NCDOT's Division and County Maintenance Offices were also contacted. There is evidence that on one occasion NCDOT County Maintenance did some selective clearing on site at the request of local citizens. "Do Not Mow" signs were posted in January 2002 (see photos). Mowing of the Colington Cut Site has not reoccurred since the installation of the "Do Not Mow" signs.

2.4 Conclusions

There were approximately 1.27 acres of marsh planted both onsite and offsite. There were no plots established on either site. By visual observation, the Colington Cut Mitigation Site revealed an aerial coverage of 99% with an 85% survival rate. Both of these values exceed the minimum aerial coverage (50%) and survival rate (50%) success criteria.

In 2002, a meeting was held with NCDOT and CAMA representatives, Kelly Williams and Lynn Mathis. During the on-site meeting, CAMA stated that they felt the site did not meet the success criteria as stated in the mitigation plan.

The site was revisited by NCDOT and CAMA in May 2003. CAMA presented a percent coverage map (produced using GPS) of the dominant species throughout the site. The acreage that CAMA approved met the success criteria as stated in the mitigation plan. Phragmites were only found in a small portion (0.09 acres) of the approved acreage.

The presence of phragmites was not listed as a concern in the approved mitigation plan. Phragmites have been treated continuously throughout the monitoring cycle on the Colington Cut Mitigation Site. It appears that the herbicide treatments have been somewhat successful in that the survival rate and aerial coverage of the target species is above the 50% success criteria. In October 2003, NCDOT treated the site for phragmites.

3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

An aerial coverage of 99% with an 85% survival rate was reported in 2003 (8th year of monitoring) on the Colington Cut Mitigation Site. The target species survival rate and aerial coverage (60%) were above the 50% success criteria for the 2003-monitoring year.

The site was revisited by NCDOT and CAMA in May 2003. CAMA presented a percent coverage map (produced using GPS) of the dominant species throughout the site. The acreage that CAMA approved met the success criteria as stated in the mitigation plan. Phragmites were only found in a small portion (0.09 acres) of the approved acreage.

NCDOT proposes to discontinue monitoring at the Colington Cut Mitigation Site.

APPENDIX A

SITE PHOTOS

Colington Cut



Photo 1



Photo 2



Photo 3



Photo 4