STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
JAMES B. HUNT JR. P.O. BOX 25201, RALEIGH, N.C. 27611-5201 DAVID McCOY
GOVERNOR SECRETARY

May 8, 2000

Doug Huggett
Division of Coastal Management
1638 Mail Service Center
Raleigh, NC 27699-1638

SUBJECT: Pea Island Mitigation Site, Dare County. State Project No. 6.051029, TIP Project No. R-3113 WM; COE Action ID No. 199404858.

Dear Mr. Huggett,

The Department of Transportation (NCDOT) has monitored the Pea Island Mitigation Site since 1996. The purpose of the mitigation was to establish 37.6 acres of low shrub/grassland wetland habitat favorable for migrating waterfowl, thus replacing unavoidable losses to wildlife foraging value associated with the NC 12 realignment. Mitigation on this site involved the restoration of the following marsh grass species: *Panicum amarum*, *Panicum amarulum*, *Scirpus americanus*, *Scirpus robustus*, *Scirpus olneyi*, and *Bidens aristosa*. Both vegetation and hydrologic monitoring were required on this site.

As per the Mitigation Plan (February 1995), vegetation success criteria calls for a 50% survival of plants, measuring success in plants per acre for 3 years. A determination was made that the measure of plants per acre is more appropriate when dealing with the survival of woody species of vegetation. Vegetative success on this site would be better evaluated using a per cent areal cover, instead of trees per acre, since the Pea Island Mitigation Site was planted with grasses and other herbaceous species (Corps of Engineers Wetlands Delineation Manual, 1987). Please see the attached Permit Modification letter, dated September 15, 1999. This letter is in regard to this determination and requests that the Monitoring Plan be revised to state that vegetative success criteria will be > 50 % areal coverage of grasses and other herbaceous vegetative species for a period of at least three years. This site continues to provide an excellent source of food for waterfowl and as the 1999 Monitoring Report indicates the site supports vegetation that continues to exceed success criteria.

In accordance with federal guidelines for wetland mitigation, the success criteria for hydrology states that the area must be inundated or saturated (within 12" of the surface) by surface or ground water for at least 12.5% of the growing season. This past year the site met this requirement for more than 27% of the growing season. This site has continued to produce successful hydrologic conditions over three years of monitoring.

Clarification is necessary to resolve some concerns addressed in a letter from the Division of Coastal Management, dated February 14, 2000, as well as in the minutes reported from the February 18, 2000 Mitigation Monitoring Report Meeting. There is some confusion regarding the actual hydrologic success criteria used for this site. Each monitoring report has mentioned, "normal guidelines for hydrologic success may not apply." Originally, it was assumed that groundwater levels may vary significantly on a daily basis in association with the site's sandy substrate and its proximity to a tidally influenced body of water. However, three years of hydrological monitoring have shown no evidence of any frequent changes in groundwater levels. Neither the site's substrate or its proximity to the Atlantic Ocean has resulted in abnormal affect on the hydrology of the site. Therefore, normal guidelines for hydrologic success, set forth by the Mitigation Plan, do apply for this site.

As stated in the 1999 Monitoring Report, after four years of vegetation monitoring and three years of hydrologic monitoring, the site has met success criteria. The site is a functioning wetland and provides an excellent foraging location for many avian species. Significant utilization by migratory waterfowl confirms that this site is serving its intended purpose.

At this time, NCDOT would request discontinuing the monitoring of the Pea Island Mitigation Site. If you have any questions, please call Heather Montague, Natural Systems Specialist, at (919) 715-0248. Thank you for your continued support and cooperation.

Sincerely,

SOR V. Charles Bruton, Ph.D.
Assistant Branch Manager
Project Development
Environmental Analysis Branch

cc w/attachment:
Mr. David Franklin, USACE
Mr. Mike Bell, USACE
Mrs. Kelly Williams, DCM
Mr. David Cox, WRC
Mr. John Dorney, NCDENR
Ms. Beth Smyre, NCDOT