



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Raleigh Field Office
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February 3, 1993

Mr. L. J. Ward, Manager
Planning and Environmental Branch
Division of Highways
N.C. Department of Transportation
Post Office Box 25201
Raleigh, North Carolina 27611-5201

Dear Mr. Ward:

This responds to the proposed revisions to the Restoration and Monitoring Plan (Plan) for the Pridgen Flats Mitigation Bank (Bank) in Sampson County, North Carolina. The proposed modifications were presented by the North Carolina Department of Transportation (NCDOT) at a December 18, 1992 meeting with the Fish and Wildlife Service (Service) and the North Carolina Wildlife Resources Commission (WRC). A joint, interagency site visit was then scheduled and undertaken on January 6, 1993 to further evaluate the proposed actions. This report documents the Service's position on the proposed changes and the mitigation credits that the Bank should contain. Recommendations for further action are also provided.

Over the past year, the NCDOT has been analyzing soil types and monitoring well data from the site to determine historical wetland boundaries, which, in turn, should indicate the area that can be restored by the proposed actions. We have been awaiting these findings in order to determine the total amount of mitigation credits that the Bank would contain. The revised boundaries for the Bank area are largely based on soils identification, but, even though not conclusive at this time, well data tends to support the current hydric soil delineations. Table 1 and Figure 1 present the amount and location, respectively, of hydric soil areas as defined by the NCDOT. The total cumulative acres corresponds to the total acreage of the Bank and, therefore, the total mitigation credits available would be 127.3 acres.

While it is recognized that only an estimated 87.2 acres of the total acreage included in the Bank are hydric soil, in this

specific case there are other considerations involved in determining the credits that the Bank should contain. The diversity of habitat that is created by an intermingling of various microhabitats has the potential to enhance the overall wildlife habitat value, and such conditions are common in pocosin habitats. The NCDOT has demonstrated a commendable attitude and expended considerable staff time and funds in responding to suggestions for experimenting with a variety of restoration techniques to determine the most successful approaches to restoring pocosin habitat on this National Wildlife Refuge-administered site. The value of this project as both a research and management tool is considerable, and the future benefits are likely not yet fully realized. The Service is also considering the habitat value improvement gained by identifying and removing the existing tile drains throughout the site. The existence of these drains were unknown at the time the MOU was signed or they would have been addressed at that time.

Based on the hydrological data acquired since signing the Mitigation Banking Memorandum of Understanding, we concur with NCDOT's proposal to delete the culverts proposed at specific locations, but the Service reserves the right to require installation of additional culverts under the abandoned railroad bed in the future. Further, we agree to temporarily blocking the existing culvert to evaluate the effects on hydrology. If blocking this culvert has favorable wetland results and the Refuge Manager desires to block this culvert permanently, then it is our understanding that the NCDOT will install a new culvert at the natural ground level (i.e., top of ditch banks) in the vicinity of the existing culvert. These changes should be made to the Plan.

The Plan also should address the disposition of the existing tile drains that were discovered after initial restoration planning was completed. The Service recommends removing a 100-foot section of each tile drain and backfilling the area from which the drain was removed with a low permeability soil.

In summary, it is the position of the Service that the proposed actions will effectively restore palustrine, scrub-shrub habitat and appropriate hydrologic conditions sufficient to mitigate for the wetland impacts resulting from the six highway construction projects for which debits will be granted from this Bank.

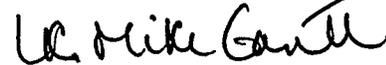
Recommendations

The Service concurs with the proposed modifications and recommends that the NCDOT:

1. Revise the Restoration and Monitoring Plan, which is an Attachment to the MOU, as proposed in this report and submit the revised plan to the Service and the WRC for review and concurrence.
2. Proceed immediately with site preparation, including a controlled burn, and the proposed planting of the designated 42.3 acre portion of the site.
3. Repair erosion damage that was observed January 6, 1993 at flashboard riser #4 by placing additional fill over the culvert and extending this out for a distance of approximately 30 feet to form a low berm that will divert high water flow and retard future erosion.
4. Remove an approximately 100-foot section of each existing tile drain and backfill the area from which the drain was removed with a low permeability soil. This area also should be vegetatively stabilized.

Upon acceptance of the revised Restoration and Monitoring Plan, the Service will prepare and circulate for signature by the parties to the Mitigation Bank MOU, a debit transaction sheet detailing the debits for each highway project involved and the balance of credits the Bank contains. A draft debit transaction sheet is attached to this report for your preliminary review. As we have discussed, in view of the new hydric soil information as well as the other management measures addressed herein, there is general agreement among the Service, the North Carolina Department of Transportation and Wildlife Resource Commission that the credits in this Bank will be considered expended for the subject six projects.

Sincerely yours,



L.K. Mike Gantt
Field Supervisor

Table 1. Hydric Soil at Pridgen Flats Mitigation Bank.

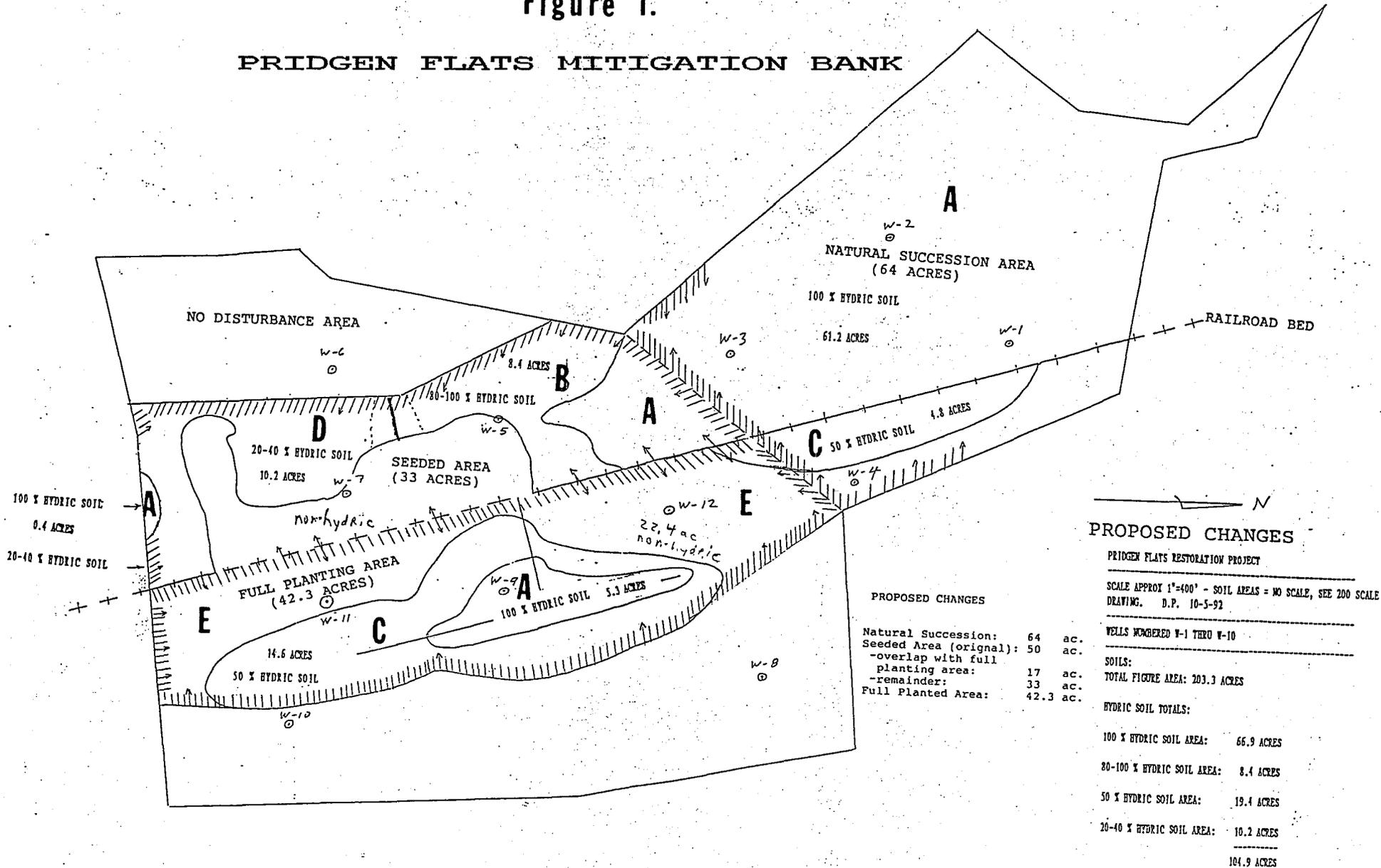
PRIDGEN FLATS MITIGATION BANK			
Area ¹	Hydric Soil Content ²	Acres	Cumulative Acres
A	100%	66.9	66.9
B	80-100%	8.4	75.3
C	50%	19.4	94.7
D	20-40%	10.2	104.9
E	Non-hydric	22.4	127.3

¹ Figure 1.

² Soil identification and mapping by the North Carolina Department of Transportation, Division of Highways, Planning and Environmental Branch, 1992.

Figure 1.

PRIDGEN FLATS MITIGATION BANK



PROPOSED CHANGES

Natural Succession:	64	ac.
Seeded Area (original):	50	ac.
-overlap with full planting area:	17	ac.
-remainder:	33	ac.
Full Planted Area:	42.3	ac.

PROPOSED CHANGES

PRIDGEN FLATS RESTORATION PROJECT

SCALE APPROX 1"=400' - SOIL AREAS = NO SCALE, SEE 200 SCALE DRAWING. D.P. 10-5-92

WELLS NUMBERED W-1 THRU W-10

SOILS:

TOTAL FIGURE AREA: 203.3 ACRES

HYDRIC SOIL TOTALS:

100% HYDRIC SOIL AREA:	66.9 ACRES
80-100% HYDRIC SOIL AREA:	8.4 ACRES
50% HYDRIC SOIL AREA:	19.4 ACRES
20-40% HYDRIC SOIL AREA:	10.2 ACRES

	104.9 ACRES

Pridgen Flats Mitigation Bank
Debit Sheet

PROJECT NAME/ROUTE	COUNTY	TIP #	NCDOT WORK ORDER #	USACE PERMIT #	POCOSIN WETLAND IMPACTS (acres)	BANK DEBITS (acres)	CUMULATIVE BANK DEBITS (acres)	BANK CREDITS REMAINING (acres)
INITIAL BALANCE								127.30
US 17	Brunswick	R-0083C	8.1230301	C089-N-010-0521	7.80	15.60	15.60	111.70
US 17	Brunswick	R-0097B/C	8.1310807/8	199101066	5.50	11.00	26.60	100.70
US 117	Duplin	R-0606	8.1240601	199101124	2.50	5.00	31.60	95.70
NC 132	New Hanover	R-0536	9.8039045	199100907	11.40	22.80	54.40	72.90
SR 1470	Onslow	U-1253H	9.8031446	89-N-067-0109	15.00	30.00	84.40	42.90
US 264	Pitt	R-1022BA	6.229003T	C090-N-0326	16.10	32.20	116.60	10.70

Submitted by:

USFWS

Name

Title

Date

Concur:

NCWRC

Name

Title

Date

NCDOT

Name

Title

Date