

FIELD SUMMARY REPORT

I. Introduction

A. Study Area

This project entitled the "Mississippi River Roundout" is bordered by the Mississippi river on the east and includes two complete and five partial 1:100,000 maps, all within the state of Missouri. The work area falls within:

Burlington SW	20 quads
Quincy NW	26 quads
Quincy SW	32 quads
Quincy SE	10 quads
St. Louis NE	29 quads
St. Louis SE	26 quads
Rolla NE	32 quads

B. Field Trip Dates

April 4, 1988 - April 15, 1988

C. Field Personnel

Norm Mangrum	Martel Laboratories, Inc.
Karen Schultz	Martel Laboratories, Inc.
Joseph Greene	Martel Laboratories, Inc.
Nick Rowse	USFWS
Les Vilcheck	USFWS
Richard Szlemp	USFWS
Michael Struckhoff	Missouri Department of Natural Resource

D. Photography

Type: CIR
Scale: 1:58,000
Dates: See attached

PHOTOGRAPHY DATES

Mississippi River Roundout

Burlington SW	Quincy NW	Quincy SW	Quincy SE	St. Louis NE	St. Louis SE	Rolla NE
04/06/84 50%	04/18/84 20%	04/06/84 50%	03/15/85	03/15/85 36%	03/18/85 30%	04/15/83 20%
03/15/85 20%	03/15/84 25%	03/15/85 25%		03/18/85 34%	03/15/85 25%	04/19/84 50%
04/15/83 20%	04/06/84 30%	04/15/83 13%		03/21/86 15%	04/19/84 30%	03/21/86 15%
04/18/84 5%	04/23/83 10%	04/18/84 12%		04/15/83 7%	03/15/83 7%	03/15/85 15%
	04/15/83 15%			04/18/84 8%	03/21/86 8%	

E. Collateral Data

1. USGS quadrangles pertaining to the work area.
2. Soil surveys for Marion, Ralls, Knox, Monroe, Shelby, St. Clair, St. Francois, Montgomery, and Warren counties.
3. Hydric Soils of the State of Missouri, U.S. Department of Agriculture, Soil Conservation Service, 1985.
4. Wetland Plants of the State of Missouri, U.S. Department of Interior, Fish & Wildlife Service, 1986.
5. Bailey, Robert G., Description of the Ecoregions of the United States, U.S. Department of Agriculture, 1980.
6. Missouri Wetlands, Missouri Department of Conservation.
7. Information provided by Ross Adams, Clarence Cannon National Wildlife Refuge.

II. Overview

A. Ecoregions

The work area for the "Mississippi River Roundout" falls into two distinct ecoregions as described in Bailey's. The Missouri river serves as an approximate boundary between ecoregions.

The region north of the Missouri river falls predominately within the Oak, Hickory, Bluestem, Parkland (2511) ecoregion. According to Bailey this ecoregion covers an extensive area from northern Illinois to the Gulf of Mexico. The topography is mostly gentle plains however, steep bluffs border a number of valleys.

The vegetation in this region is forest-steppe type characterized by prairie, groves and strips of deciduous trees. Grasses are dominant in the prairie vegetation while upland forest are dominated by oak-hickory forest. Flood plains and wetter hillsides are predominantly elm, sycamore, burr oak, eastern cottonwood, hackberry, redbud and buckeye.

The region south of the Missouri river, within the work area, is almost exclusively within the Oak-Hickory forest (2215) ecoregion. The topography in this region ranges from gently rolling hills near the Missouri and Mississippi rivers to greater relief in the Ozark mountains in the Rolla 1:100,000 mapping area.

The vegetation in the Oak-Hickory region is dominated by broadleaf deciduous forest. Common trees in the area are oak, beech, birch, hickory, walnut, maple, brasswood, elm, ash and tulip trees. Poorly drained areas are characterized alder, willow, ash, elm and many hydrophytic shrubs.

III. Biological Characteristics of Wetlands

A. **Marine**

Not present.

B. **Estuarine**

Not present.

C. **Riverine**

The major river systems, with the most extensive flood plains, that are pertinent to the project are the Mississippi and Missouri. The Mississippi, however, is under lock and dam and will be classified in the Lacustrine system.

Other lesser drainages include the Des Moines, Wyaconda, Fabius, North River, South River, Fox, Salt, Cuivre, Meramec and Big River. All the above river systems are classified as lower perennial and permanently flooded.

D. **Palustrine**

The forested wetlands within the work area are primarily found along the floodplains of the perennial drainages. However, much of the floodplain on larger drainages has been clean-cut and farmed.

Forested wetlands classified as temporarily flooded is the dominant forest wetland on the floodplains. Characteristic species of this type of wetland are silver maple (Acer saccharinum), sycamore (Platanus occidentalis), hackberry (Celtis occidentalis), box elder (Acer negundo), eastern cottonwood (Populus deltoides), American elm (Ulmus americana), red maple (Acer rubrum), pin oak (Quercus palustris) and black willow (Salix nigra). Common understory in temporarily flooded forest of the region included stinging nettle (Urtica dioica), poison ivy (Rhus radicans), and giant ragweed (Ambrosia trifida).

Forested wetlands classified as seasonal were more commonly found in sloughs and low pockets on the floodplains. These areas typically have very little understory with seasonally standing water evident by buttressing of tree trunks, high water marks and debris on forest floor. Common species in seasonally forested wetlands include black willow (Salix nigra), river birch (Betula nigra), Silver maple (Acer saccharinum), sycamore (Platanus occidentalis).

E. Lacustrine

All bodies of water not included in the riverine system and over 20 acres in area are classified as lacustrine. The Mississippi river is classified as LIUBHh because it is under the lock and dam system. Both natural and man-made lakes were encountered within the work area. However, most lakes over 20 acres were man-made as a result of excavation or impoundment. The most prominent Lacustrine feature within the work area is Clarence Canyon Reservoir.

IV. Imagery, Primary Delineations and Field Checking

There were several different dates and emulations on the photography. This generally did not present a problem. However, the Clarence Canyon Reservoir covers strips 6,7,8 at the bottom of Quincy NW and the top of Quincy SW. Strips 6 and 8 are 04/06//84 photography and represent normal pool level of the reservoir. Strip 7 photography is dated 04/15/83, which is before the reservoir was gated, showing the Salt River floodplain.

The USGS topographic maps was used to project normal pool level in strip 7.

Spring photography along Mississippi river indicated a considerable amount of standing water on the floodplains. However, field conditions at the time of field checking proved to be quite dry. USGS topographic information and precipitation data were utilized to present an accurate picture of normal conditions.

V. Summary

In an effort to achieve the most accurate representation of wetland conditions within the work area, all available collateral information was utilized to augment the photography. While in the field great care was taken to obtain information from experts well versed in wetland soils and plants as well as knowledgeable local people familiar with the conditions of the area. Soil samples and soil surveys were used when pertinent and the USGS topographic maps provided considerable information.