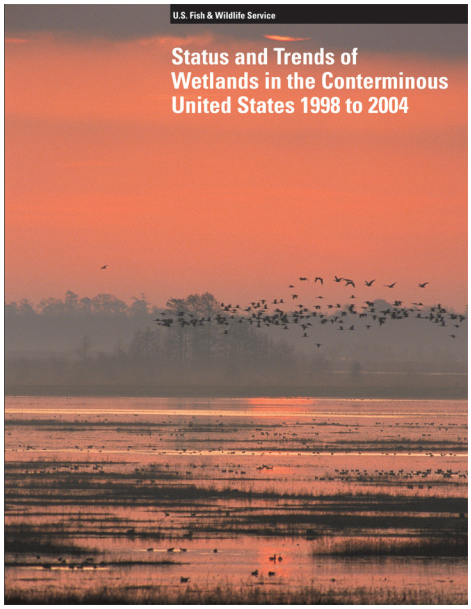
U.S. Fish And Wildlife Service

Status and Trends of Wetlands in the Conterminous United States 1998 to 2004



Efforts were enhanced by the multi-agency involvement in the study's design, data collection, verification, and peer review of the findings.

On Earth Day 2004, President Bush announced a wetlands initiative that established a federal policy beyond "no net loss" of wetlands. The President further directed the Fish and Wildlife Service complete an updated wetlands status and trends study in 2005.

This is the latest in a series of reports produced by the Service that provides the Nation with conclusive scientific and statistical results on the progress that has been made toward achieving national wetland goals.

The Service's Wetlands Status and Trends study was developed specifically for monitoring the nation's wetland area using a single, consistent definition and study protocols. An interagency group of statisticians developed the design for the national status and trends study. The study design consisted of 4,682 randomly selected sample plots. Each plot is four square miles.

Technological advances for this study included the extensive use of high resolution satellite imagery, use of computerized mapping techniques, and modernization of data management systems. The Service captured more detailed and timely information about the nation's wetlands.

Field verification was completed for 1,504 (32 percent) of the sample plots distributed in 35 States. This constituted the largest field verification effort undertaken for a status and trends report. Representatives from four States and seven Federal agencies participated in field reconnaissance trips.

Study Findings

Estimates were made of wetland area by wetland type and changes over time. This study found that there were an estimated 107.7 acres of wetlands in the conterminous United States in 2004. Between 1998 and 2004 there was an estimated net gain in wetlands of 191,750 acres. This equated to an average annual net gain of 32,000 acres.

Intertidal Estuarine and Marine Wetland Resources

Three major categories of estuarine and marine wetlands were included in this study: estuarine intertidal emergents (salt and brackish water marshes), estuarine shrub wetlands (mangrove swamps) and estuarine and marine intertidal non-vegetated wetlands. This latter category included exposed coastal beaches subject to tidal flooding, shallow water sand bars, tidal flats, tidally exposed shoals, and sand spits.

In 2004, it was estimated there were slightly more than 5.3 million acres (2.5 million ha) of marine and estuarine wetlands in the conterminous United States. Estuarine emergent wetlands declined by 0.9 percent. The average annual rate of estuarine emergent loss was 5,540 acres (2,240 ha). This rate of loss was consistent with the rate of salt marsh loss recorded from 1986 to 1997. Most of the losses of estuarine emergent wetland were due to loss to deep salt water and occurred in coastal Louisiana. One or more of several interrelated factors may have contributed to these losses including: deficiencies in sediment

Non-vegetated tidal flats grade into salt tolerant vegetation. Florida, 2000.

deposition, canals and artificially created waterways, wave erosion, land subsidence, and salt water intrusion causing marsh disintegration.

Freshwater Wetland Resources

Freshwater wetlands made up an estimated 95 percent of the nation's wetland area. The net gain in wetland area was attributed to the creation of freshwater ponds, conversion of agricultural lands or agricultural lands that have been idled and wetland restorations from other lands.

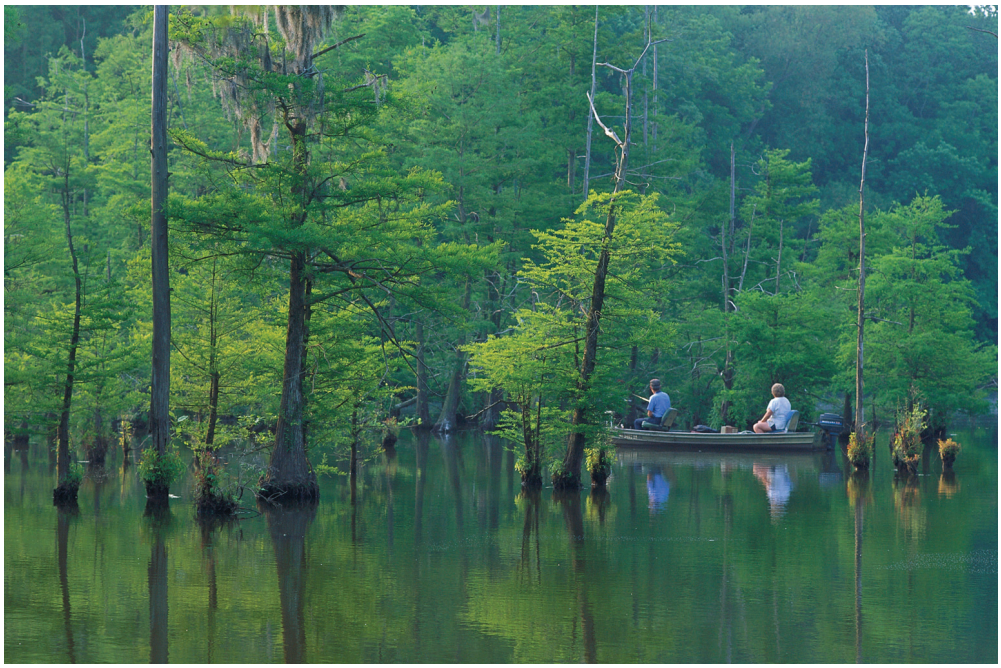
Freshwater pond acreage increased by almost 700,000 acres from 1998 to 2004, a 12.6 percent increase in area. This was the largest percent increase in area of any wetland type in this study. Some of these acreage gains were offset by loss of freshwater wetlands to development and managed forest plantations. Urban and rural development combined accounted for an estimated 61 percent of the wetlands lost between 1998 and 2004.

Estimates also indicated that the area of freshwater forested wetland increased. Between 1998 and 2004, forested wetland area increased by an estimated 548,200 acres (221,950 ha). Most of these changes came from small trees, previously classified as wetland shrubs, maturing and being re-classified as forest.

Despite the net gains realized from Despite the net gains realized from restoration and creation projects, human induced wetland losses continued to affect the trends of freshwater vegetated wetlands – especially freshwater emergent marshes which declined by an estimated 142,570 acres (57,720 ha). These wetlands are important to a number of wildlife species. Contributed inserts to the report highlight the importance of wetlands to fish and wildlife.

Overall the nation has made progress in meeting wetland quantity goals. This is the result of a multitude of governmental, corporate, and private partnerships working together to secure and conserve wetland resources for future generations.

Forested freshwater wetkand. Photo courtesy of FWS



The entire report can be viewed at:

http://fws.gov/status_trends/wetlands/StatusAndTrends/index.html

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