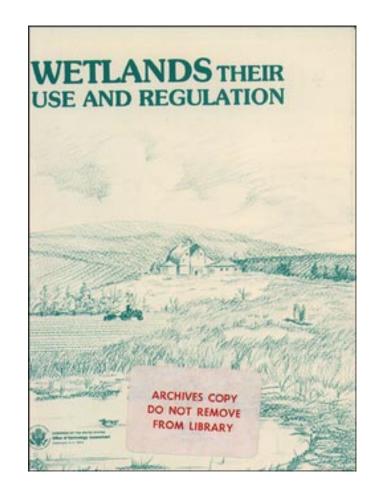
Wetlands: Their Use and Regulation

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Foreword

This report presents the findings and conclusions of OTA's analysis of approaches to wetlands use. Historically, wetlands were considered wastelands and conversion to other uses was actively encouraged. Two trends in recent decades, however, have altered this perception. First, there has been a growing appreciation for the esthetic and recreational qualities of wetlands; and second, there is now a general recognition of the hydrological and ecological services that wetlands provide. In spite of this increased awareness of the esthetic, recreational, and ecological values of wetlands, pressure to convert wetlands to cropland, commercial development sites, and other uses is still significant in certain regions of the country. This presents a conflict between those who want to convert wetlands to other uses and those who feel they should be left in their natural state.

Section 404 of the Federal Water Pollution Control Act (1972), now referred to as the Clean Water Act, authorizes the U.S. Army Corps of Engineers (Corps) to regulate the disposal of dredged or fill material into "the waters of the United States, which includes many wetlands. Because this act opened the way for Federal regulation of many development activities that occur in wetlands, the 404 program has been the center of considerable controversy. Federal regulation of privately owned wetlands through 404 is viewed by some as land-use control, traditionally the legal domain of State and local governments. Others, who view wetlands as a national water resource, argue that the Federal Government has an obligation to protect those wetlands that are important to the public.

OTA undertook this study at the request of the Senate Committee on Environment and Public Works and its Subcommittee on Environmental Pollution. It describes the ecological values of wetlands, trends in wetlands use, and the effect of Federal and State wetland programs on wetlands. In addition, OTA reviewed the existing scientific literature to provide background information on the ecological services provided by wetlands. Although this report deals broadly with wetlands and their use, many of its findings relate directly to the Corps' 404 program, which is the major avenue for Federal involvement in regulating some activities that use wetlands. Furthermore, because agricultural drainage and clearing have been responsible for the vast majority of wetland conversions since the mid-1950's, OTA examined in some detail the policies that encourage the conversion of wetlands to agricultural uses.

The data available to resolve these issues proved scanty and of highly mixed quality. For example, good data on wetland trends is only available for the 20-year period prior to implementation of the 404 program. Thus, generalizations about the values of wetlands or the effects of Federal programs, while valid to broad policymaking, are often misleading if applied to site-specific situations. However, within the limitations of this uncertainty, this OTA report provides a policy perspective that could lead to more coherent and rational policies for managing the competing uses of wetlands.

OTA is grateful for the support, assistance, and cooperation received in this assessment from many people representing a great diversity of viewpoints on wetland issues.

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