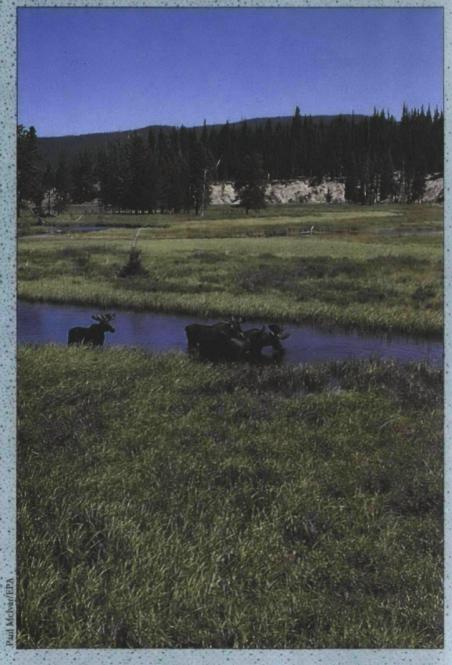
# Wetlands

in the Rocky Mountains and Northern Great Plains





#### INTRODUCTION

Wetlands are being lost at an alarming rate. Today, less than half of our original wetlands remain. Some of the major causes of wetlands loss and degradation include agricultural drainage, urban development, chemical contamination and other pollution. Once considered wastelands, wetlands are important ecosystems that deserve protection because of their unique functions and values.

Wetlands in the Rocky Mountain Region and Northern Great Plains are as varied as the states where they are

Montana, Utah and Wyoming consist of wet meadows, small vegetated ponds in the alpine tundra; and riparian areas along rivers and streams. In North and South Dakota, the

found. Wetlands in Colorado,

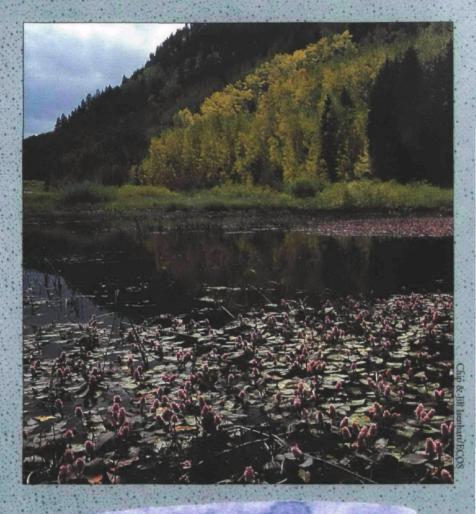
North and South Dakota, the landscape is dotted with wetlands known as "prairie

potholes." Urban wetlands, found in

both regions, consist of cattail marshes, riparian wetlands and some wet meadows.

# WHAT ARE WETLANDS?

The conditions that set wetlands apart from other ecosystems include: land that is inundated or saturated with water for part of the growing season, soils that contain little or no oxygen, and areas that grow hydrophytes-plants adapted to these conditions. Cattails, grasses, sedges, rushes, willows, marsh marigolds and cottonwoods are examples of wetland plants. The variety of wetlands found in this region result from differences in topography, soils, climate, vegetation, water chemistry and other factors.



# **FUNCTIONS AND VALUES**

Wetlands are dynamic and serve many purposes, some of which are not always obvious to the casual observer. For instance, wetlands help maintain and improve water quality. They filter excess nutrients and chemical contaminants.

Wetlands can also store water during floods. Not only does this slow the speed of floodwaters, but it reduces erosion as well. Wetlands are sources of ground

and surface water, providing for domestic and agriculture needs. Many species of wildlife depend on wetlands for their survival.

These biologically diverse areas are also recognized for their scientific and educational opportunities. They provide open space for photography, nature walks, fishing and hunting.

### RIPARIAN WETLANDS

Cottonwoods, willows and shrubs are typical riparian plants found along rivers and streams of the foothills, intermountain basins and the plains. Riparian areas are natural corridors used by wildlife for shelter and food. Wetlands associated with riparian corridors help control floods and assist in keeping streams and rivers clear by reducing sediment loads.











# MONTANE WETLANDS

Beaver ponds, small glacial ponds, wet meadows and fens (bog-like areas) can be found in the mountain valleys of the Rockies. Many mountain lakes have wetlands along their shorelines. Streams in mountain valleys generally have narrow flood plains, and wetlands occur as thin bands adjacent to their banks. These montane wetlands are critical for wildlife and can provide important water supply, water quality and flood control benefits.





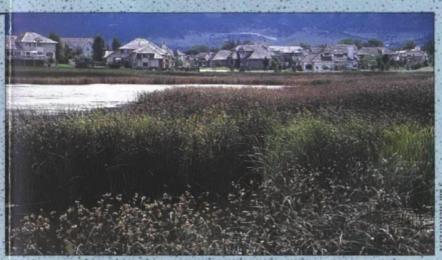
# URBAN WETLANDS

Urban wetlands are rapidly disappearing from around our growing cities and towns. In areas surrounded by development, these wetlands provide a haven for a variety of wildlife. Urban wetlands are important in reducing pollution from nearby lawns, streets and parking lots, and are used by schools to teach environmental education. These wetlands can also be critical in minimizing urban flood damage.



### PRAIRIE POTHOLES

When the glaciers retreated thousands of years ago, they left portions of North and South Dakota covered with depressions, creating the prairie pothole region. Although they comprise only about 10 percent of the nation's inland wetlands, these small depressions, ponds and lakes provide habitat for *over half* of the waterfowl in North America. Prairie wetlands range in size from less than one acre to hundreds of acres.



Mchar/EPA

# WETLANDS DON'T ALWAYS LOOK LIKE WETLANDS

The image of ducks swimming on a pond surrounded by cattails is easily mistaken as a representation of all wetlands. Not so. Some areas do not look like wetlands because their vegetation is so different. For example, wild irises frequently grow in wet meadows early in the summer. Late in the season, however, these sites

appear dry. Such areas may be

classified as wetlands because

of their hydrology

or water cycle,

characteristic soils

and vegetation.

## BECOME INVOLVED

The Environmental Protection Agency (EPA), in partnership with other government agencies, nonprofit organizations and local citizens, shares responsibility for protecting our wetland resources. EPA recognizes that an effective wetland protection program requires

citizen involvement. You can become involved by learning about EPA's "Adopt-A-Wetlands" program which encourages local groups to act as

guardians of these

valuable resources.

You can also familiarize yourself with the permit process established under Section 404 of the Clean Water Act. Once a completed application for dredging or

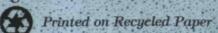
filling is submitted to the Army Corps of Engineers office, a public notice is issued, and a 30 to 90 day public comment period follows. Let your voice be heard. You should also ask your state and local agencies what they are doing to manage and protect wetlands.

For agricultural activities related to wetlands, contact your local Soil Conservation Service office regarding the 1990 Farm Bill.

For more information call the EPA Region 8 toll



free number: 1-800-759-4372. Or call EPA's Wetlands. Hotline in Washington, D.C. at 1-800-832-7828:



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