# Storm Water Management Program

In May of 2001 the governmental agencies that make up ALOA joined together to address EPA's upcoming Phase II requirements.

This brochure is one of a series of publications regarding storm water issues in Lee County.

The series is produced by the ALOA Storm Water Advisory Panel and is intended to protect, maintain, and restore the chemical, physical, and biological integrity of local waters in order to enhance the quality of life for our citizens.



Cleaner streams provide a benefit to all.

## Wetlands

# CONTACT INFORMATION

For more information regarding your community's storm water program please contact the following agencies:

City of Auburn – Department of Public Works 334-501-3000 http://www.auburnalabama.org/pubworks/phase2stormwater.html

Lee County – County Engineer 334-745-9792

City of Opelika - Department of Public Works 334-705-5400 www.opelika.org

Auburn University – Risk Management and Safety 334-844-4870



# STORM WATER MANAGEMENT PROGRAM

### Wetlands



"Local Citizen Groups and Governments Working Together for Clean Water"

### WHAT ARE WETLANDS?

The EPA defines a wetland as:

"Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

Wetlands are the vital link between water and land. They are among the most biologically productive and diverse ecosystems in the world. Although wetlands are often wet, a wetland might not be wet year-round. In fact, some of the most important wetlands are only seasonally wet.

According to the U.S. Fish and Wildlife Service and other researchers, a single acre of wetland can store 1-1.5 million gallons of floodwater. Although the capacity for floodwater retention varies among wetland types, a network of small wetlands can store an enormous

amount of water



### WHAT TYPES OF WETLANDS ARE THERE?

Wetlands found in the United States fall into four general categories: Marshes, Swamps, Bogs, and Fens.

#### WHAT ARE THE BENEFITS OF WETLANDS?

Wetlands provide a wide variety of benefits, including:

- Improving water quality by filtering sediments, nutrients, and pollutants.
- Reducing flood damage.
- Preventing stream bank erosion.
- Recharging ground and surface water supplies.
- Providing fish & wildlife habitat.
- Offering opportunities for recreation, education, and outreach.

#### WHAT IS THE CURRENT STATUS OF OUR WETLANDS?

According to a recent finding by the EPA, approximately 100 million wetland acres remain in the 48 contiguous states. This is roughly half of the 220 million wetland acres that existed in 1780. Although the rate at which wetlands are being lost has declined over the past 20 years, wetlands continue to be lost at a rate of more than 60,000 acres annually.

In Alabama, 50% of the wetland acreage has been lost since 1780. While draining wetlands for agricultural purposes accounted for a significant portion of the decline, since the 1990s, development has emerged as the leading cause of wetland loss.

#### HOW ARE WETLANDS AFFECTED?

In addition to the outright loss of wetland acreage, many remaining wetlands are being degraded by human activities. The degradation prevents the wetland from functioning properly. Degraded wetlands are less capable of providing the beneficial functions previously listed.

Human activities cause wetland degradation and loss by changing water quality, quantity, and flow rates; increasing pollutant loading; and changing species composition. Activities include:

- Hydraulic alteration: Filling, dredging, diking and damming to form ponds, diversions of flow, and the addition of impervious surfaces to watersheds increases flow and pollutant loading.
- Pollutant input: Although capable of absorbing pollutants from surface water, there is a limit to their capacity to do so. The primary pollutants include fertilizer, human sewage, animal waste, pesticides, and heavy metals.
- Vegetation damage: Wetland plants are susceptible to degradation by hydrologic changes and pollutant inputs.

### WHAT CAN WE DO TO PROTECT OUR WETLANDS?

Citizens can play a pivotal role in protecting our wetlands by:

- Conserve and restore wetlands on your property
- Support local wetland and watershed protection initiatives by donating materials, time, land, or money.

- Work with your local municipality or government agency to develop a strategy to protect wetlands in your
- Encourage neighbors to protect the function and value of wetlands in your watershed.
- Maintain wetlands and adjacent buffer strips.
- Support "Greenway" initiatives that move to limit development of these areas.
- Minimize use of pesticides and herbicides (insect and weed killers). If you must use them, make sure you are using the right product and the right amount.
- Dispose of motor oil, antifreeze, or any other chemicals in the proper means and not down the storm drain. One quart of oil can contaminate 250,000 gallons of water! If you spill motor oil or other fluids, don't hose the spill into the gutter or ditch. Instead, spread kitty litter to absorb the spill, then sweep it up and put it in the trash. Inspect and maintain your car to keep oil, antifreeze, and other fluids from leaking.
- Take advantage of recycling opportunities such as Hazardous Waste Collection Days. You can take paint, solvents (like turpentine), and other household hazard-

ous wastes to a recycler for proper disposal.



For more information on wetlands please visit: http://pillar.saj.usace.army.mil/permit/working\_pages/ recognizing\_wellands.htm