Where Are You in the Watershed?

Can You Say Estuary?

An estuary (*es-choo-er-ee*) is where freshwater from inland is mixed with saltwater from the sea. Estuaries provide some of the most sensitive and ecologically important habitats on earth. They offer sanctuary for many bird species and serve as breeding areas for lots of saltwater animals, like shrimp, blue crabs, redfish and mullet. The creek at Jackson Reading Park supplies water to Eight Mile Creek, a part of the Mobile Bay Estuary.

Did You Know... That

Mobile Bay is Where Five Major Rivers Meet the Gulf of Mexico?

Rivers, creeks and streams that drain more than 65 percent of the state of Alabama and portions of Mississippi, Georgia, and Tennessee flow into Mobile Bay and mix with saltwater from the Gulf. This makes the Mobile Bay watershed the fourth largest in the continental United States by freshwater flow and the sixth largest by area. Wind and tides push salty water from the Gulf into the Bay. Because Mobile Bay is so shallow, the salinity (or saltiness) of its waters constantly changes.

Mobile Bay By the Numbers

Drains: 43,662 square miles
Receives: 62,000 cubic feet of freshwater per second
Average Depth: 10 feet
Length, North to South: 32 miles
Widest Point: 23 miles
Width at City of Mobile: 10 miles

TENNESSEE

MISSISSIPPI

ALABAMA

GEORGIA

Gulf of Mexico

The Eight Mile Creek Watershed

Eight Mile Creek and Gum Tree Branch are located in Mobile County in a "watershed" that receives stormwater flow from parts of Prichard, Mobile, and Chickasaw. Both of these streams are classified by the State for "Fish and Wildlife" use, with the exception of a section of Eight Mile Creek from Gum Tree Branch upstream to U.S. Hwy 45 classified as "Public Water Supply." The whole area is a "sub-watershed" of the greater Mobile Bay watershed.

Eight Mile Creek By the Numbers

Area: 37 square miles
Location: Includes portions of the cities of Prichard, Mobile, and Chickasaw; and the communities of Eight Mile and Whistler
Waterways include: Eight Mile Creek, Gum Tree Branch, and portions of Chickasabogue Creek

No Dumping

Litter is a major problem affecting this creek and its downstream waters. Trash, chemicals, motor oil, yard clippings or other things that reach storm drains in the watershed are carried into Eight Mile through its tribtaries, threatening the fish and wildlife that depend upon the estuary for life.

You Are Here –

Jackson Reading Park and the
surrounding area form the headwaters of this tributary to Eight Mile Creek. It joins Chickasaw Creek (west of I-65) which flows into the Mobile River, then Mobile Bay on its way to the Gulf. The downstream portion of the watershed is heavily urbanized, while many headwaters of Eight Mile Creek drain more rural and suburban land.
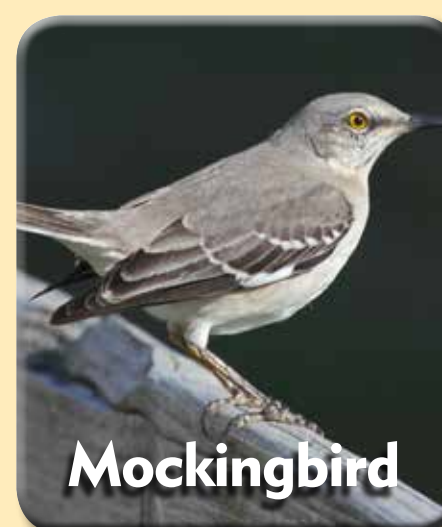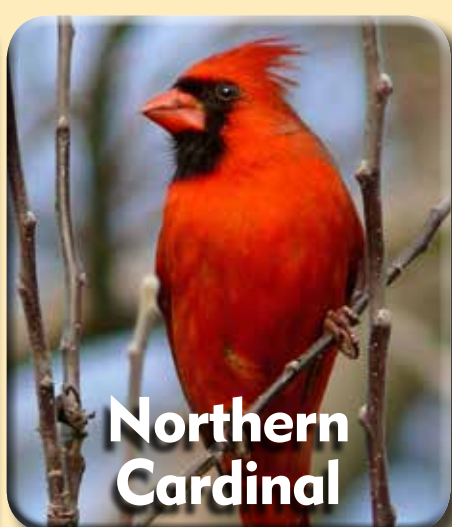
Red-tailed Hawk

Birds of Jackson Reading Park

Mockingbird **Brown Thrasher** **Northern Cardinal**

Look for these birds in the sky, in trees, and along stream banks:

- **Red-wing Blackbird** (*Agelaius phoneiceus*)
- **Mockingbird** (*Mimus polyglottos*)
- **Red-tailed Hawk** (*Buteo jamaicensis*)
- **Belted Kingfisher** (*Megaceryle alcyon*)
- **Brown Thrasher** (*Toxostoma rufum*)
- **Northern Cardinal** (*Cardinals cardinalis*)

Did You Know...

This park and its small creek support an ecosystem.

An ecosystem includes plants and animals that depend on each other for food, shelter, and survival. Creek banks are important areas that support plants and animals found in aquatic (water) and terrestrial (land) ecosystems. Even before this creek was restored, it was home to turtles, salamanders, crayfish, and minnows like mosquito fish that eat live mosquito larva. The plants in and around the creek provide shelter for the marsh-loving animals, many flowers that attract pollinators like bees, butterflies, and hummingbirds; and seeds that are eaten by birds and other wildlife.

Along the water's edge you'll find invasive plants like the bushy Chinese privet that once covered the area and *Taro* (or elephant ear) which competes for wet space with native needle rush and purple-flowered pickerel weed.

Among the wildflowers growing outside the creek's banks are the lovely Indian Blanket and Verbena.

Plants and animals that live in and around the creek are sensitive to pollutants carried by stormwater, like fluids from autos, pesticides, and even fertilizer.

Taro

Fern **Grey Rat Snake**

Plants of Jackson Reading Park

Although much of the land around the upper portion of the watershed is forested, Jackson Reading Park is located in a more heavily urbanized area of the watershed. The area at the creeks edge is called the 'riparian zone." Native plants that grow in the riparian zone provide food and refuge for animals, prevent erosion and improve water quality in several ways:

- The deep, broad roots keep the soil in place during heavy rains.
- Leaves and branches absorb the erosive impact of raindrops.
- Riparian plants absorb excess nutrient from fertilizer and animal waste.

Creek bank plants slow runoff, prevent sedimentation, increase the amount of water that soaks into the soil, and filter nutrients, pesticides, and pollutants.

What critters are in and around the creek?

The creek bordering the park is fresh and shallow and supports:

- **Mosquito Fish** (*Gambusia spp.*)
- **Salamanders** (*Pseudotriton spp.*)
- **Red Swamp Crayfish** (*Procambarus clarkii*)

Areas that surround the creek support uncountable insect and several reptile species, like:

- **Green Anoles** (*Anoles carolinensis*)
- **Skinks** (*Eumeces spp.*)
- **Box Turtles** (*Terrapene carolina major*)
- **Gray Rat Snakes** (*Elaphe obsolete spiloides*)

Mosquito Fish

Belted Kingfisher

Canopy Trees provide the shade:

- **Southern Magnolia** (*Magnolia grandiflora*)
- **Bald Cypress** (*Taxodium distichum*)
- **Willow** (*Salix spp.*)

Understory Plants found under the trees:

- **Wax Myrtle** (*Myrica cerifera*)
- **Yaupon** (*Ilex vomitoria*)
- **Groundsel Tree** (*Baccharus halimifolia*)

Look for these tall marsh plants in the shallow water:

- **Black Needle Rush** (*Juncus romereanus*)
- **Bullrush** (*Schoenoplectus spp.*)
- **Southern Wild Rice** (*Zizaniopsis miliacea*)

These wetland plant produce beautiful flower:

- **Arrowhead** (*Sagittaria lancifolia*)
- **Pickerel Weed** (*Pontederia cordata*)

Oak Leaf Hydrangea

Yaupon

Arrowhead

Pickerel Weed

Green Antole

Red Salamander

Box Turtle

Jackson Reading Park

Stabilizing the Stream

The Jackson Reading Park stream restoration project was completed by the City of Prichard, Prichard Environmental Restoration Keepers (PERK), Auburn University, and the Mobile Bay National Estuary Program. The park was made possible through a generous donation of land from Willie and Marjorie Jackson, for whom the park is named. It serves the community as an Outdoor Learning Center, showcasing environmentally-friendly ways to restore natural habitat, control erosion, and reduce pollution in an urban stream.

This project represents a successful partnership with the City of Prichard, demonstrating the community's ability to restore and protect its natural resources.

Restoration Included:

- Removal of a dense stand of Chinese privet that choked the property on the south side of the creek and replacement with flowering, native plants

- Restoration of almost 300 linear feet of degraded, channelized urban stream to mimic more natural conditions.

- Re-establishment of riparian buffer through planting of native plants on the stream bank and flood plain.

- Establishment of an educational site for showcasing environmentally appropriate streambank restoration techniques for urban settings

- Involvement of the community in restoring the health of an urban stream.

Stream Restoration

To restore the stream, MBNEP first removed dense, invasive Chinese privet from the south side of the stream. Auburn University designed and led restoration activities. The City of Prichard provided equipment, labor, and some materials for excavation and grading. Councilwoman Ossia Edwards and PERK led community investment and cleanup efforts to get the site prepared.

Restoration of this tributary will contribute directly to easing sedimentation, turbidity, and nutrient enrichment downstream in Eight Mile Creek, Chickasaw Creek, the Mobile River, and Mobile Bay.

Do your part – keep Jackson Reading Park Clean!