PRESCRIBED FIRE IN THE GULF COASTAL ALABAMA AND MISSISSIPPI

WHAT IS PRESCRIBED FIRE?

Prescribed fire is a controlled, planned fire used for land management, primarily. Most prescribed fires are conducted to remove dead and overgrown vegetation. Benefits of prescribed fire include:

- WILDFIRE PREVENTION
- INVASIVE SPECIES REDUCTION
- ACCESSIBLE FORESTS & INCREASED RECREATION
- FIRE TOLERANT PLANTS & WILDLIFE

FIRE REGULATIONS

Prescribed fire is regulated. To control fire and smoke, specific conditions must be met such as:

- WIND SPEED & DIRECTION
- TEMPERATURE & HUMIDITY
- FUEL BUILD UP & SMOKE SCREENING

Prescribed fires are conducted with warnings to affected community members and supervised by trained, permitted individuals. Trainings and permits are granted by local officials.

BARRIERS TO PRESCRIBED FIRE PRACTICE

1 Government-mandated burn bans restrict prescribed fire implementation due to droughts or other environmental conditions, applying to individual practitioners rather than land managers.

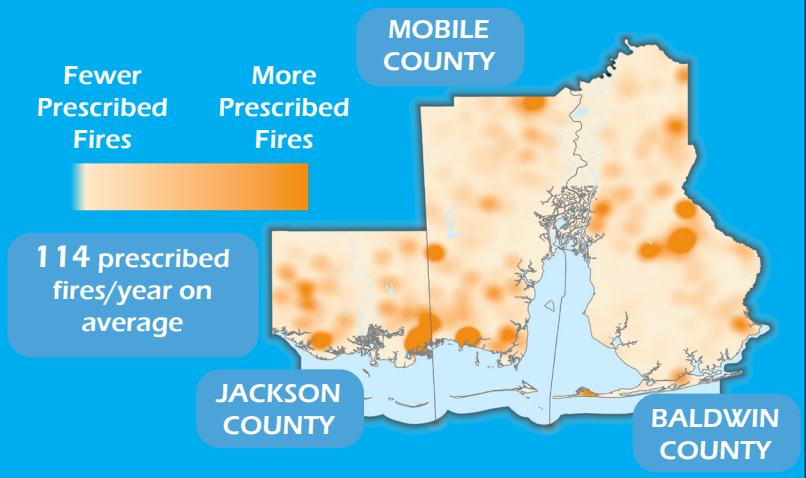
2 Environmental laws and policy, such as air quality regulations, limit prescribed fire use.

3 Historical land management practices avoid prescribed fire due to past wildfire impacts to health and livelihoods.

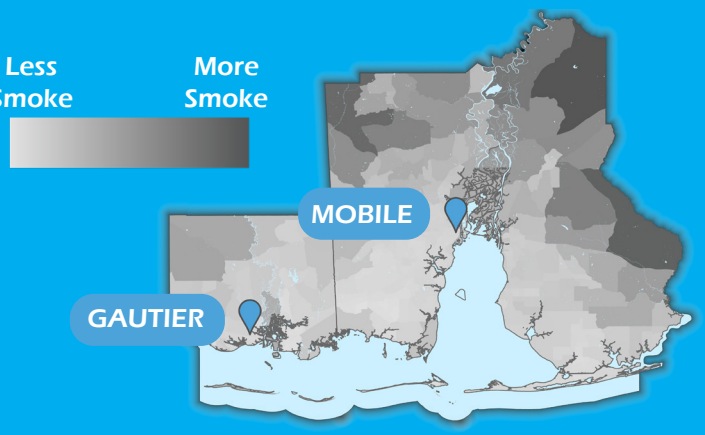
4 Fire suppression has led to debris build up, making prescribed fire unsafe in some areas and increasing wildfire risk.

HOW DOES PRESCRIBED FIRE IMPACT YOU?

NOAA's National Centers for Coastal Ocean Science (NCCOS) social science team partnered with land managers in the coastal counties of Jackson, MS and Mobile and Baldwin, AL to better understand and visualize prescribed fire practices in the area.[1]



Unlike smoke from wildfires or other human-caused fires, prescribed fire smoke is managed based on weather conditions to minimize and quickly disperse plumes, reducing impacts to respiratory health and air quality. The map below includes smoke from prescribed fires, wildfires, and other human-caused fire.[2]



Prescribed fires and smoke are more likely to affect rural, less populated areas than densely populated ones.

NCCOS social science team in partnership with land managers at Grand Bay NERR and Weeks Bay NERR. Data sources include: [1]1992-2020 fire data from the USDA Forest Service, [2]2017-2022 smoke imagery from NOAA's Office of Satellite Operations, and boundary files from the US Census Bureau.