

# State Specific Training Module for (Mississippi)



# Purpose of this Module

This module will provide some general information that TSPs need to conduct conservation planning in our state. This information is general in nature so the TSP may need to follow up with additional reading or training to make sure they have the knowledge, skill, licenses and certifications to conduct conservation planning in this state.



## Mississippi Facts

Mississippi is a state in the Southeastern region of the United States, bordered to the north by Tennessee; to the east by Alabama; to the south by the Gulf of Mexico; to the southwest by Louisiana; and to the northwest by Arkansas. Mississippi's western boundary is largely defined by the Mississippi River. Mississippi is the 32nd largest by area and 35th-most populous of the 50 U.S. states and has the lowest per-capita income in the United States. Jackson is both the state's capital and largest city.

Mississippi's population has remained from 2 million people at the 1930 U.S. census, to 2.9 million at the 2020 census.

Mississippi is entirely composed of lowlands, the highest point being Woodall Mountain, at 807 ft (246 m) above sea level, in the northeastern part of the state. The lowest point is sea level at the Gulf Coast. The state's mean elevation is 300 ft (91 m) above sea level.

Source: Mississippi - Wikipedia



### **Review of State Laws**

In order to benefit and protect the public and the forest resources, no person in either public or private capacity shall practice or offer to practice forestry, unless he shall first have submitted evidence that he is qualified so to practice and shall be registered by the board or unless he is specifically exempted from registration under this chapter. It is unlawful for any person to practice or offer to practice forestry in this state, as defined by this chapter, or to use in connection with his name or otherwise assume, use or advertise any title or description tending to convey the impression that he is a forester, unless the person has been duly registered or is exempt from registration under this chapter. This chapter shall not be construed to prevent or to affect:

- 1. The conduct of business and support services including: tree planting, timber stand improvement, pesticide application, pest control, site preparation, heavy equipment operation, prescribed fire application, timber buying, logging contracting, timber cruising, timber marking and the application of best management practices.
- 2. The application of forestry principles and procedures on any timberlands, woodlands or forest in which the person, firm, partnership or corporation owns the timberlands, woodlands or forest; or persons, firms, partnerships and corporations having the right to manage and administer forestlands in any legal manner.
- 3. The work of an employee or a subordinate of any forester holding a license under this chapter; if that work is done under the direction, supervision and responsibility of a person holding a license under this chapter.
- 4. The practice of forestry by officers and employees of the United States government on federally-owned lands.
- 5. The practice of forestry by officers and employees of the State of Mississippi on state-owned lands.
- 6. Employees of the federal government, state government and educational institutions of the State of Mississippi who, in the exercise of their assigned duties, conduct forestry education programs.
- 7. Persons who hold valid licenses prior to July 1, 1989.

Sources: 1977, ch. 475, § 3; reenacted, 1983, ch. 326, § 3; Laws, 1989, ch. 383, § 2; reenacted, 1991, ch. 330, § 3; Laws, 2000, ch. 601, § 1; reenacted without change, Laws, 2004, ch. 416, § 3, eff from and after July 1, 2004, 73-36-05. Mississippi Board of Registration for Foresters.



### **Review of State Laws**

§73-13-1. Mississippi Code of 1972, Annotated Title 73, Chapter 13 Professional Engineers and Surveyors Effective July 1, 2019

§73-13-1. Engineers must be licensed; use of words "graduate engineer". In order to safeguard life, health, and property, and to promote the public welfare, any person or firm in either public or private capacity practicing or offering to practice engineering shall hereafter be required to submit evidence that the person or firm is qualified so to practice engineering 2 and shall be licensed as hereinafter provided; and it shall be unlawful for any person or firm to practice or to offer to practice in this state, engineering, as defined in the provisions of Sections 73-13-1 through 73-13-45, or to use in connection with his name or otherwise assume, use, or advertise any title or description tending to convey the impression that he is a professional engineer, unless such person has been duly licensed under the provisions of Sections 73-13-1 through 73-13-45. There is specifically reserved to engineering graduates of all universities and colleges accredited by a regional accrediting body that is recognized by the United States Department of Education, the right to disclose any college degrees received by such individuals and use the words "graduate engineer" on his stationery, business cards, and personal communications of any character.

Source: Mississippi Board of Licensure for Professional Engineers and Surveyors



# WHAT YOU NEED TO KNOW ABOUT PESTICIDE LICENSES, PERMITS, AND CERTIFICATES IN MISSISSIPPI.

A pest management consultant license is required for persons making recommendations and charging fees for entomology, plant pathology, or weed control services. This license is offered in three major areas: entomology, plant pathology, and weed control. There are various categories within each area:

Entomology: Persons charging fees for advice or recommendations in the control of insects and/or vertebrate pests must be licensed in the appropriate entomology category listed:

- Agricultural
- Forest
- Household, Structural, and Industrial
- Medical, Veterinary, and Public Health
- Orchard and Nut Tree
- Ornamental

Plant Pathology: Persons charging fees for advice or recommendations in the control of plant diseases must be licensed in the appropriate plant pathology category listed:

- Agricultural Plant
- Forest Plant
- Orchard and Nut Tree Plant
- Ornamental and Shade Tree Plant



## WHAT YOU NEED TO KNOW ABOUT PESTICIDE LICENSES, PERMITS, AND CERTIFICATES IN MISSISSIPPI (Continued)

Weed Control: Persons charging fees for giving advice or making recommendations in the control of weeds must be licensed in the appropriate weed control category listed:

- Agricultural
- Aquatic
- Forest and Right-of-Way
- Ornamental and Turf

Industrial or Commercial Pest management consultant licenses expire December 31 of each year. To renew, the holder must submit a form prescribed by the Bureau of Plant Industry and either have attended an approved training course or passed an examination.

Sources: <u>Microsoft Word - What You Need to Know Factsheet.doc (ms.gov)</u>



## **Review of State Laws**

Examples of Mississippi One-Call regulations (that may impact conservation planning) includes, but is not limited to:

• Excavation/trenching for construction of conservation practices



Dial 811 (when calling within the state of Mississippi) or (800) 227-6477 Source: <u>Mississippi One Call</u>



# Review of State FOTG Requirements

The Field Office Technical Guide (FOTG) is the official the repository of conservation planning guidance documents for NRCS FOTG contains:

- Section I General References
- Section II Soil and Site Information
- Section III Conservation Management Systems
- Section IV Practice Standards and Specifications
- Section V Conservation Effect

Source: Mississippi | Field Office Technical Guide | NRCS - USDA



# Review of State FOTG Requirements

Planners should be thoroughly familiar with the conservation practice standards that have been incorporated into the Mississippi Field Office Technical Guide (FOTG) and are being considered as part of the offered alternatives for addressing the client's resource concerns.

Planners should also follow the Statement of Work (SOW) requirements for each practice and utilize specifications, Technical Notes, Operation and Maintenance (O&M) instructions, and implementation requirements that are available for the practices in the Mississippi FOTG.

Source: Mississippi | Field Office Technical Guide | NRCS - USDA



### Introduction to Mississippi Soils

#### Mississippi soils are diverse, reflecting:

- the diversity of their parent materials (the raw material for soil),
- a conducive environment (warm, humid) for rapid pedogenesis (the process of soil formation),
- active biological activity (note the warm and humid climate), and
- the unique topography (the lay of the land).

#### Mississippi has three general land regions:

- 1. The Delta, a river floodplain in western Mississippi,
- 2. The Brown Loam loess region (a band of soils formed in windblown material that adjoins the Delta), and
- 3. The Coastal Plain (the rest of the state).

As land management transitioned after 1492 until now, the surface soils of each region led to the economic activity on them.

In the early 21st century, more than 80 percent of the state's row-crop production, including cotton, corn, and soybeans, is on Delta soils. These relatively flat and deep soils are derived from alluvium (deposits left by flowing streams). They are very fertile and often formed into large fields conducive to mechanized agriculture. Animal production and forestry dominate in the shallower soils of the hills of east and south Mississippi that are derived from loess (windblown materials) or Coastal Plain materials (deposited by "stationary" water). The loess and Coastal Plain regions are subdivided into smaller units based on common soils, geology, climate, water resources, and land use. These subunits, plus the Delta, are known as Major Land Resource Areas.

More information on the individual areas, visit our Mississippi Land Resource Areas page.



# Major Land Resource Areas in Mississippi

Associated land resource units, usually encompassing several thousand acres, characterized by a particular pattern of soils, geology, climate, water resources, and land use. A unit can be one continuous area or several separate nearby areas.

How about in English? It is easy to pick out one Mississippi LRA by driving through it or flying over it. The alluvial Delta plain is obvious to spot. Soils were overwhelmingly formed by silt and clay deposition by the wandering Mississippi River. Many of today's "other" rivers in the Delta were Mississippi channels in earlier times, thus there is no simple pattern of deposition from the current channel. However, other factors associate the Delta into one resource area.

There are several major LRA's in the state described below (copied from the NRCS), however it is not always as easy to spot boundaries while driving down the road.

#### The Delta: Southern Mississippi Valley Alluvium

Land use: Most of this area is in farms. About 55 percent is cropland, 35 percent woodland, and 7 percent pasture. About 3 percent is used for miscellaneous purposes. Cropland makes up about three-fourths of the acreage in the north and less than one-fourth in the south. The proportion of forest land varies inversely with that planted to crops. The proportion of pasture is a little higher in the south. This is an important cash- crop area. Soybeans, cotton, and wheat grown by highly mechanized methods are the major crops throughout the area. Rice is an important crop in this region. Controlling surface water and artificially draining the wet soils are major concerns of management.

Soils: The dominant soils are Aquepts, Aqualfs, Aquents, Udolls, and Udalfs. They are deep, medium textured and fine textured soils that have an udic or aquic moisture regime, a thermic temperature regime, and mostly smectitic or mixed mineralogy. Fine textured Epiaquerts (Alligator, Perry, and Sharkey series), Hapludolls (Desha and Bowdre series), and Epiaqualfs (Jackport series), and medium textured Fluvaquents (Commerce, Mhoon, and Convent series), Natraqualfs (Foley series), Epiaqualfs and Endoaqualfs (Dundee, Amagon, and Hebert series), and Hapludalfs (Dubbs, Bosket, and Rilla series) occupy backswamp areas and older natural levees. Minor soils include moderately coarse textured Dystrochrepts (Beulah series) and Udifluvents (Robinsonville series), and medium textured Fluvaquents (Gideon series).



#### **Southern Coastal Plain**

Land use: This area is about 69 percent woodland, 17 percent cropland, and 11 percent pastureland. About 3 percent of the area is used for rangeland, urban development, or other purposes. The woodland is 65 to 75 percent privately owned and 25 to 35 percent industry owned. A small percentage is federally owned. Timber production is important. Cash crops include soybeans, corn, peanuts, and cotton. Major vegetable crops, melons, tobacco, and pecans are important in some parts. Recently, livestock farming has increased. Pastures are used mostly for beef cattle ' but some dairy cattle and hogs are raised. Controlling soil erosion and improving drainage on low wetland areas are major concerns of management.

Soils: The dominant soils are Udults. They are deep and have a thermic temperature regime, an udic moisture regime, a loamy or sandy surface layer, and a loamy or clayey subsoil. Well drained and moderately well drained, nearly level to strongly sloping Paleudults and Kandiudults (Bama, Dothan, Malbis, Norfolk, Orangeburg, Red Bay and Ruston series) are on uplands. Well drained, gently sloping to steep Hapludults and Kanhapludults (Cowarts, Smithdale, Springhill, Luverne, Saffell, and Sweatman in the south and Suffolk, Emporia, Rumford, Kenansville, and Craven in the north) are on uplands. Associated with these soils in less sloping areas are the moderately well drained and somewhat poorly drained, loamy Fragiudults (Ora, Bourne, Pheba, and Savannah series), Fragiudalfs (Dulac and Providence series), Paleudults (Izagora, Clarendon, and Goldsboro series) and the well drained to moderately well drained, clayey Paleudults and Kandiudults (Faceville, Greenville, Marlboro, and Shubuta series). Other well drained and somewhat excessively drained, nearly level to steep Paleudults and Kandiudults (Darco, Fuguay, Lucy, Troup, and Wagram series), which have a thick sandy surface layer, are on uplands. Less extensive, but locally important soils are the nearly level to moderately steep Quartzipsamments (Alaga, Kershaw, and Lakeland series) on uplands (mostly in the south), Paleudalfs (Atwood, Boswell, Millwood, and Susquehanna series) and Glossaqualfs (Caddo, Guyton, Mollville, Waller, and Wrightsville series) (in the southwest), Paleudalfs (Lexington series) on some loess-capped hilltops in the north-central part of the area, and nearly level Endoaquults (Amy, Myatt, Rembert, and Weston series), Albaquults (Cantey and Leaf series), and Paleaquults (Byars, Coxville, Pantego, and Plummer series) on low wetland. Floodplain soils include Udifluvents (Collins, Iuka, and Ochlockonee series), Fluvaguents (Bibb, Kinston, Mantachie, and Waverly series), and Dystrochrepts (Chenneby, Ouachita, and Riverview series).



#### Southern Mississippi Valley Silty Uplands

Land use: Most of this area is in farms. A small acreage is federally owned. About 35 percent of the area is cropland, but the proportion varies greatly from county to county, depending on the soils and the topography. This is largely a cash-crop area. Cotton, corn, soybeans, and wheat are major crops. Feed grains and forage are grown on dairy farms. About 16 percent of the area is in pasture or hay. About 46 percent is in forest of mixed pine and hardwoods. Lumber is the major forest product, and some pulpwood is harvested. The present trend is toward the conversion of the pasture and forest to cropland. About 3 percent of the area is used for urban development or other purposes. There is an increase in urban development near the metropolitan areas.

Soils: Most of the soils are Udalfs. They are deep, medium textured soils that have a thermic temperature regime, an udic moisture regime, and mixed mineralogy. Well drained, nearly level to very steep Hapludalfs (Memphis series) are on uplands. Moderately well drained, nearly level to strongly sloping Fragiudalfs (Grenada and Loring series) are on ridgetops, side slopes, and terraces. Somewhat poorly drained Fragiudalfs (Calloway series) and poorly drained Udifluvents (Morganfield and Vicksburg series), moderately well drained Udifluvents (Adler and Collins series), and somewhat poorly drained (Falaya series) are on flood plains. In the east, where the loess mantle thins, well drained Paleudalfs (Lexington series), moderately well drained Fragiudalfs (Dulac and Providence series), well drained Hapludults (Brandon, Smithdale, and Silerton series), and well drained Paleudults (Ruston series), all of which are gently sloping to steep, are on ridgetops and side slopes. Well drained Dystrochrepts (Ariel series), moderately well drained Udifluvents (Collins series), moderately well drained Siles) and somewhat poorly drained Fluvaquents (Falaya and Gillsburg series) are on the flood plains.



#### **Blackland Prairie**

Land use: In Mississippi, this area is about 58 percent woodland, 26 percent pastureland, and 14 percent cropland. Most soil areas have been disturbed, and only small remnants of the former prairie vegetation remain. About 2 percent of the area is used for urban development or for other purposes. Soybeans are the major crop, but corn, small grains, and cotton are also grown. Pastures are used mainly for beef production, but in some places dairying is an important industry. The woodland is about 75 to 80 percent privately owned, and about 20 to 25 percent is owned by industry. This is not a very productive woodland area. Controlling soil erosion and infestation of Johnsongrass on soils that are cultivated are major concerns of management.

Soils: The dominant soils are Ochrepts and Uderts. They are fine or very-fine textured and have a thermic temperature regime, an udic moisture regime, and smectitic or carbonatic mineralogy. They are mainly moderately deep to deep over soft limestone or chalk and typically shrink, swell, and crack. Well drained and moderately well drained Eutrochrepts and Hapluderts (Sumter and Maytag series) and moderately well drained to somewhat poorly drained Dystruderts (Oktibbeha and Vaiden series), all of which are nearly level to gently sloping and strongly sloping, are on wide ridgetops and narrow side slopes. Shallow Udorthents (Demopolis series) occur locally but are of small extent. Moderately well drained to poorly drained, nearly level to gently sloping Epiaquepts (Leeper series), Hapludolls (Catalpa series), and Epiaquerts (Eutaw and Sucarnoochee series) are in floodplains and in low upland areas. The outer perimeter of the area is intermittently ringed with moderately well drained to somewhat poorly drained Paleudalfs (Boswell and Searcy series) and moderately well drained and well drained Hapludults (Luverne, Sweatman, and Smithdale series).

#### **Gulf Coast Marsh**

Land use: Most of this area is in marsh vegetation and is used mainly for wildlife habitat. The area is almost treeless and uninhabited. It is part of the fertile and productive estuarine complex that supports marine life of the Gulf of Mexico. The area provides wintering ground for millions of ducks and geese and habitat for many fur- bearing animals and alligators. A significant acreage west of Vermillion Bay is firm enough to support livestock and is used for winter grazing of cattle. A small acreage of freshwater marsh is drained by pumping systems and is used for pasture and for the production of rice.

Soils: The dominant soils are Aquolls, Saprists, Aquents, and Hemists. They have a thermic temperature regime and an aquic moisture regime. Most of the soils of the Gulf Coast Marsh are very poorly drained, and the water table is at or above the surface most of the time. These soils are susceptible to frequent flooding. They formed in alluvial and marine sediments and organic accumulations. The Aquolls are firm, but the other soils are soft and can sustain little weight. West of Vermillion Bay, Haplaquolls (Harris series) are dominant. Soils with a thin surface layer of peat or muck and Medisaprists (Kenner, Lafitte, and Allemands series), Hydraquents (Gentilly and Scatlake series), and floating Medihemists (Carlin series) are dominant.



#### **Eastern Gulf Coast Flatwoods**

Land use: Very little of this area is in farms. Much of it is in large holdings owned by pulp and paper companies. Part of it is in state and national forests or is used as game refuges and for military training areas. Nearly ninetenths of the area is forested. Pulpwood and lumber are the principal forest products. Some of the woodland is grazed. Only about 4 percent is cropped and a like amount is in pasture. Corn, peanuts, tobacco, and soybeans are the major crops. Some fruits and vegetables are produced, mainly for home consumption.

Soils: The dominant soils are Aquults, Aquepts, and Aquods. They have a thermic temperature regime and an aquic moisture regime. They are sandy and poorly drained or very poorly drained. Paleaquults (Plummer and Pelham series) have a loamy subsoil. Humaquepts have a dark surface layer. Alaquods (Leon and Mascotte series) have a weakly cemented layer at a depth of about 2 ft. Other important soils are sandy, moderately well drained and excessively drained Quartzipsamments (Chipley, Fripp, and Lakeland series), very poorly drained Sulfaquents, Sulfihemists, and possibly Hydraquents near the coast.



#### Mississippi Agriculture Snapshot

<ol> <li>Poultry / Eggs – \$3.84 Billion</li> <li>Approximately 715 million broilers were produced in 2022.</li> <li>1,237 broiler farms.</li> <li>1,459 million eggs produced in 2022.</li> <li>234 farms with 100+ layers.</li> </ol>	<ol> <li>Soybeans - \$1.78 Billion</li> <li>2,280,000 acres harvested in 2022.</li> <li>127,680,000 bushels produced in 2022.</li> <li>3,087 farms.</li> </ol>	<ol> <li>Forestry – \$1.3 Billion</li> <li>19,235,186 acres in 2022.</li> <li>125,000 forest landowners.</li> </ol>
<ol> <li>Corn – \$631.3 Million</li> <li>550,000 acres harvested in 2022.</li> <li>91,850,000 bushels produced in 2022.</li> <li>1,427 farms.</li> </ol>	<ol> <li>Cotton – S624.5 Million</li> <li>525,000 acres harvested in 2022.</li> <li>1,130,000 bales produced in 2022.</li> <li>780 farms.</li> </ol>	<ul> <li>6. Cattle/Calves – \$318 Million</li> <li>910,000 head in 2022.</li> <li>15,980 farms.</li> </ul>
<ol> <li>Catfish – \$258 Million</li> <li>34,100 acres of production in 2022.</li> <li>205 operations.</li> </ol>	<ul> <li>8. Hay – \$164 Million</li> <li>1.4 million tons produced in 2022.</li> <li>610,000 acres harvested.</li> <li>11,565 farms</li> </ul>	<ul> <li>9. Sweet Potatoes – S112 Million</li> <li>5.4 million hundredweight produced in 2022.</li> <li>29,500 acres harvested.</li> <li>172 farms.</li> </ul>
<ol> <li>Hogs – S112 Million</li> <li>170,000 hogs and pigs.</li> <li>437 farms.</li> </ol>	11. Horticutural Crops – S111 Million Horticulture crops include vegetables, melons, potatoes, fruits, tree nuts, berries, nursery, greenhouses, floriculture, sod and Christmas trees.	<ol> <li>Rice – S97 Million</li> <li>6,216,000 hundredweight rice produced in 2022.</li> <li>221 farms.</li> </ol>
<ol> <li>Wheat – \$35.5 Million</li> <li>3,975,000 bushels produced in 2022.</li> <li>53,000 acres harvested.</li> <li>162 farms.</li> </ol>	<ul> <li>14. Milk – \$25 Million</li> <li>7,000 milk cows in 2022.</li> <li>55 Grade A dairy herds.</li> </ul>	<ol> <li>Peanuts – \$12.6 Million</li> <li>53.3 million pounds produced in 2022.</li> <li>13,000 acres harvested.</li> <li>113 farms.</li> </ol>

Source: Mississippi Agriculture Snapshot - Mississippi Department of Agriculture and Commerce (ms.gov)



## Mississippi Forestland

Mississippi has 19.8 million forested acres.

Forestland covers 65% of Mississippi.

Types of Forestland

- Hardwood, 45%
- Pine, 29%
- Regeneration, 17% (young reforested acres, not yet classified as a forest type)
- Mixed, 9% (pine and hardwood)

77% of Mississippi's forestland is owned by private citizens.

16% of Mississippi's forestland is publicly owned by federal, state, and tribal entities.

7% of Mississippi's forestland is corporately owned.

Source: Mississippi Forestland Facts

#### United States Department of Agriculture Natural Resources Conservation Service

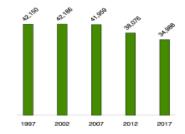


# **Mississippi Statistics**

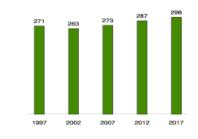
#### Total and Per Farm Overview, 2017 and change since 2012

	2017	% change since 2012
Number of farms	34,988	-8
Land in farms (acres)	10,415,136	-5
Average size of farm (acres)	298	+4
Total	(\$)	
Market value of products sold	6,195,968,000	-4
Government payments	213,785,000	+18
Farm-related income	208,081,000	+23
Total farm production expenses	4,386,538,000	-15
Net cash farm income	2,231,297,000	+37
Per farm average	(\$)	
Market value of products sold	177,088	+5
Government payments		
(average per farm receiving)	14,986	+36
Farm-related income	18,846	+36
Total farm production expenses	125,373	-7
Net cash farm income	63,773	+49

#### Number of Farms, 1997-2017



Average Farm Size, 1997-2017 (acres)



#### Farms by Value of Sales Number Percent of Total <sup>a</sup> Less than \$2,500 16,409 47 \$2,500 to \$4,999 3,296 9 \$5,000 to \$9,999 3,877 11 \$10,000 to \$24,999 3,951 11 \$25,000 to \$49,999 2.096 6 3 \$50,000 to \$99,999 1,197 \$100,000 or more 4.162 12

#### Farms by Size

	Number	Percent of Total <sup>a</sup>
1 to 9 acres	2,237	6
10 to 49 acres	8,810	25
50 to 179 acres	12,781	37
180 to 499 acres	6,684	19
500 to 999 acres	2,239	6
1,000 + acres	2,237	6

#### Source: 2017 Mississippi Census of Agriculture State Profile



# **Mississippi Statistics**

Total Producers °	54,997	Percent of farms	that:	Top Crops in Acres d	
<b>Sex</b> Male Female	36,714 18,283	Have internet access	66	Soybeans for beans Forage (hay/haylage), all Cotton, all Corn for grain	2,170,472 631,357 627,212 499,944
Age <35 35 – 64 65 and older	3,746 30,447 20,804	Farm organically	(Z)	Rice	114,104
<b>Race</b> American Indian/Alaska Native Asian Black or African American	144 151 6.927	Sell directly to consumers	3	Livestock Inventory (De Broilers and other meat-type chickens	c 31, 2017) 137,708,442
Native Hawaiian/Pacific Islander White More than one race	24 47,490 261	Hire farm labor	26	Cattle and calves Goats Hogs and pigs Horses and ponies	937,053 30,643 569,898 40,480
Other characteristics Hispanic, Latino, Spanish origin With military service New and beginning farmers	551 6,184 15,374	Are family farms	95	Layers Pullets Sheep and lambs Turkeys	5,828,262 3,428,183 16,640 1,298

#### Source: 2017 Mississippi Census of Agriculture State Profile

Practice



## **Animal Waste**

The following table lists conservation practices eligible for payment for the Animal Waste resource concern.

Practice		
Code	Name	Units
313	Waste Storage Facility	SqFt
316	Animal Mortality Facility	CuFt or SqFt
340	Cover and Green Manure Crop	Ac
342	Critical Area Planting	Ac
359	Waste Treatment Lagoon	CuFt
360	Closure of Waste Impoundment	CuFt
362	Diversion	CuYd
386	Field Border	Ac
391	Riparian Forest Buffer	Ac or Each
393	Filter Strip	Ac
410*	Grade Stabilization Structure	Each
412	Grassed Waterway	Ac
422	Hedgerow Planting	Ft
430	Irrigation Water Conveyance, Pipeline	LnFt
460	Land Clearing	Ac
484	Mulching	Ac or SqFt
512	Pasture and Hay Planting	Ac
533	Pumping Plant Water Control	Variable
558	Roof Runoff Structure	Ft
561	Heavy Use Area Protection	SqFt
576	Livestock Shelter Structure	SqFt
590	Nutrient Management (manure sludge)	Ac or Each
591	Amendments for Treatment of Agricultural Waste	1000 SqFt
601	Vegetative Barrier	Ft
629	Waste Treatment	1000 SqFt
633	Waste Recycling	Each

#### United States Department of Agriculture Natural Resources Conservation Service



# Cropland

The following table lists conservation practices eligible for payment for the Cropland land use.

Practice Code	Name	Payment Units
216	Soil Testing	No
309	Agrichemical Mixing Centers	SqFt
319	On-Farm Secondary Containment Facility	CuYd
327	Conservation Cover	Ac
328	Conservation Crop Rotation	Ac
329	Residue and Tillage Management	Ac
340	Cover and Green Manure Crop	Ac
342	Critical Area Planting	Ac
345	Tillage and Residue Management	Ac
350	Sediment Basin	CuYd
351	Well Decommissioning	LnFt
356	Dike	CuYd
362	Diversion	CuYd
386	Field Border	Ac
390	Riparian Herbaceous Cover	Ac
393	Filter Strip	Ac
397	Aquaculture Pond	Ac
410*	Grade Stabilization Structure	Each or Ton
412	Grassed Waterway	Ac
422	Hedgerow Planting	Ft
430	Irrigation Water Conveyance, Pipeline	LnFt
436	Irrigation Storage Reservoir	CuYd
441	Irrigation System, Micro-irrigation	Ac or SqFt
442	Irrigation System, Sprinkler	Variable
443	Irrigation System, Surface and Subsurface	Each
449	Irrigation Water Management	Ac or Each
450	Anionic Polyacrylamide Application	Lbs
460*	Land Clearing	Ac
462	Precision Land Forming	Ac
468	Lined Water or Outlet	SqFt



## Cropland (Continued)

484	Mulching	Ac or SqFt
512	Pasture and Hay Planting	Ac
533	Pumping Plant Water Control	Variable
554*	Drainage Water Management	Each
560	Access Road	Ft
578	Stream Crossing	SqFt
580	Streambank and Shoreline Protection	LnFt/CuYd
587*	Structure for Water Control	Variable
590	Nutrient Management	Ac or Each
600	Terraces	Ft
601	Vegetative Barrier	Ft
606	Subsurface Drain	Pound
607	Surface Drainage	CuYd
620	Underground Outlet	Ft
642	Water Well	LnFt
644	Wetland Wildlife Habitat Management	Ac
646	Shallow Water Development and Management	Ac
656	Constructed Wetland	Ac



## Forestry

#### The following table lists conservation practices eligible for payment for the Forestry land use.

Practice Code	Name	Payment Unit
315	Herbaceous Weed Treatment	Ac
327	Conservation Cover	Ac
338*	Prescribed Burning	Ac
342	Critical Area Stabilization	Ac
362	Diversion	CuYd
383	Fuel Break	Ac
384	Woody Residue Treatment	Ac
391	Riparian Forest Buffer	Ac or Each
394	Firebreak	Ft
410*	Grade Stabilization Structure	Each or Ton
420	Wildlife Habitat Planting	Ac
460*	Land Clearing	Ac
484*	Mulching	Ac or SqFt
490	Tree/ Shrub Site Preparation	Ac
612	Tree & Shrub Establishment	Each
647	Early Successional Habitat Development and Management	Ac
666	Forest Stand Improvement	Ac



## **Grazing Lands**

The following table lists conservation practices eligible for payment for the Grazing Land use.

Practice Code	Name	Payment Units
216	Soil Testing	No
314	Brush Management	Ac
315*	Herbaceous Weed Treatment	Ac
319	On-Farm Secondary Containment Facility	CuYd
327	Conservation Cover	Ac
342	Critical Area Planting	Ac
351	Well Decommissioning	LnFt
362	Diversion	CuYd
378*	Pond	CuYd
381	Silvopasture	Ac
382*	Fence	Ft
390	Riparian Herbaceous Cover	Ac
410*	Grade Stabilization Structure	Each or Ton
460*	Land Clearing	Ac
472	Access Control	SqFt
484*`	Mulching	Ac or SqFt
490*	Tree/ Shrub Site Preparation	Ac
511*	Forage Harvest Management	Ac
512*	Pasture and Hay Planting – (legume overseeding)	Ac
516	(cropland conversion) Pipeline	Ft
528*	Prescribed Grazing	Ac
533	Pumping Plant	Variable
561	Heavy Use Area Protection	SqFt
576	Livestock Shelter Structure	SqFt
578	Stream Crossing	SqFt
580	Streambank and Shoreline Protection	LnFt or CuYd
590	Nutrient Management	Ac
595	Integrated Pest Management	Ac or Each
614*	Watering Facility	Gal or Each
642*	Water Well	LnFt
V14		Lint

25



# **Review of Important Resource Issues**



#### Black Bear Program

Mississippi is home to two subspecies of black bears. The American black bear (*Ursus americanus*) is found in the northern onethird of the state and the Louisiana black bear (*Ursus americanus luteolus*) occurs in the southern two-thirds. The Louisiana black bear (recently removed from the Federally Threatened Species list), as well as the American black bear, are both classified as Endangered under Mississippi law. The two subspecies vary only in skull morphology and genetic makeup; to the naked eye, they are indistinguishable.

The MDWFP Black Bear Program began in June of 2002 at the Mississippi Museum of Natural Science. The initial focus of the program was to conduct research on Mississippi black bears in an effort to learn more about this endangered species. At the time of the program's inception, it was estimated that there were less than 50 bears residing in the state. Today, estimates of our bear population have more than tripled. This population increase is due primarily to the recent appearance of female bears in our state, which has led to the births of numerous cubs in the last several years, something not documented in Mississippi in the previous 40 years. There are currently three breeding sub-populations of black bears in Mississippi. Additionally, general sightings of bears have increased dramatically all over the state, likely due to dispersing bears from populations in neighboring states. The Black Bear Program is now within the Wildlife Bureau of the Mississippi about our black bears. Another primary objective of the program is the prevention of conflicts between bears and people.

#### Source: MDWFP - Black Bear Program



# **Review of Major Land Ownership**

Approximately 89% of this state is private lands (1). It is currently estimated that the state through its various agencies owns approximately 400,000 acres. This acreage is constantly changing due to acquisitions and sales. This total does not include 16th section school trust lands, public trust tidelands, or tax-forfeited lands. The total acres for a particular county are listed in the reports section of the <u>inventory of agency lands</u> (2).

Source(s):

(1) <u>Public and Private Land Percentages by US States : Facts & Information :</u> <u>SummitPost</u>

(2) Public Lands FAQs | Michael Watson Secretary of state (ms.gov)



# Expected TSP Workflow

- The State Resource Conservationist (SRC) will be responsible for reviewing TSP conservation planning for the National Planner Designation.
- Subsequent conservation plans will be reviewed by the District Conservationist (DC) at the local USDA Service Center.
- The SRC will conduct plan reviews for TSP planner designation renewals.
- TSPs will work with the local District Conservationist to make sure the proper environmental evaluations (NRCS.CPA.52) are completed.

# USDA ONRCS

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# Certificate of Completion

After viewing the State Specific Training module, please print and sign the completion certificate on the following slide.

The certificate is your acknowledgement that based on the information provided in this module, you have the proper knowledge, skills and ability to conduct planning in this State.

Within your NRCS Registry profile, enter the training and upload the signed certificate to verify completion.



#### STATE SPECIFIC TRAINING MODULE COMPLETION CERTIFICATE

I, \_\_\_\_\_\_\_\_\_ hereby verify I have viewed and understand the content of Mississippi State TSP Name
Specific Training Module and affirm I have the knowledge, skills, and ability to conduct conservation planning

services in this state.

**TSP Signature** 

Date