



United States Department of Agriculture

# Louisiana Conservation Update

July 2015

## Protect Thy Neighbor Flood Control in the Red River Valley

Story from the Field  
Good Grass Makes Better Cattle

Soils Are Alive

A cooperative partnership with local  
Soil and Water Conservation Districts and  
Resource Conservation and Development Councils (RC&D)

Projects • Successes • Partnerships



**Table of Contents**

**Ag Facts**.....2

**Notes from the State Conservationist** .....3

**Protect Thy Neighbor Flood Control in the Red River Valley** .....4

**International Year of Soils**.....6  
Soils Are Alive

**StrikeForce**.....6  
Central Louisiana Foodapalooza

**Story from the Field**.....7  
Good Grass Makes Better Cows

**Contact Information** .....8  
Call us with your questions

**On the Cover**



Watershed dams in Oklahoma and Texas prevent downstream flooding. To learn more about the Red River Valley Watershed, see pages 4 and 5.

The Conservation Update is distributed monthly by mail and e-mail.

If you would like to receive monthly issues of the Conservation Update, please send your mailing address or e-mail address to:

Sarah Haymaker  
Acting State Public Affairs Specialist  
USDA Natural Resources Conservation Service  
3737 Government Street  
Alexandria, Louisiana 71302  
or  
sarah.haymaker@la.usda.gov

USDA  
Natural Resources Conservation Service  
3737 Government Street  
Alexandria, Louisiana 71302  
(318) 473-7751



Follow us on YouTube: <http://www.youtube.com/user/LouisianaNRCS>

Follow us on Twitter: [http://twitter.com/NRCS\\_Louisiana](http://twitter.com/NRCS_Louisiana)

---

## Notes from the State Conservationist

It is often said: "We all live downstream from someone." We live this reality everyday of our lives as we live, work, and recreate at the lower end of the third largest river basin in the world. The Mississippi River basin covers over 41% of the continental United States. When we aggregate the Mississippi, Sabine, Red, Atchafalaya, the rivers of the Florida Parishes, and the Pearl, we live downstream of a much larger area of the country. The health of our state's resources, commerce, community life, and our very livelihood are inextricably linked to these watersheds and quality and quantity of the water making its way to the Gulf through our magnificent state. In this regard, we are truly blessed!



This spring, the communities and agriculture producers along the Red River were challenged by a flood of historic proportions. Tragically, there was property loss, crops and pastures damaged, and lost revenue from navigation and recreation to name a few of the impacts. In this issue we highlight the Red River watershed and the basin wide conservation efforts. In addition to the major dams of the U.S. Army Corps of Engineers and Bureau of Reclamation, the Natural Resources Conservation Service (NRCS) works with local sponsors, typically soil and water conservation districts, to establish and maintain a network of smaller dams for flood protection. Nationwide, NRCS has just under 12,000 dams. Over 1,600 (13.5% of the total) of these small watershed dams are scattered throughout the Red River Basin serving as "silent sentinels" holding back major rainfall events and reducing the flood waters to protect those downstream.

In this issue we highlight the Red River Basin. The dams built under NRCS's Upstream Watershed and Flood Protection Program, Small Watershed Program, and Watershed Re-habilitation Program have a relatively small foot print within our state. However, we are and will continue to be direct beneficiaries of the dam construction through these programs and the protection they afford all of us living downstream. Conservation and the benefits to our great State have no boundaries.

Kevin D. Norton  
State Conservationist

# Watershed Rehabilitation Facts

From 1998 through 2015, approximately 4,300 dams nationwide reached or exceeded their 50-year design life

USDA is investing \$73 million to rehabilitate dams across the nation

The estimated cost to rehabilitate these dams at today's cost is nearly \$19 billion

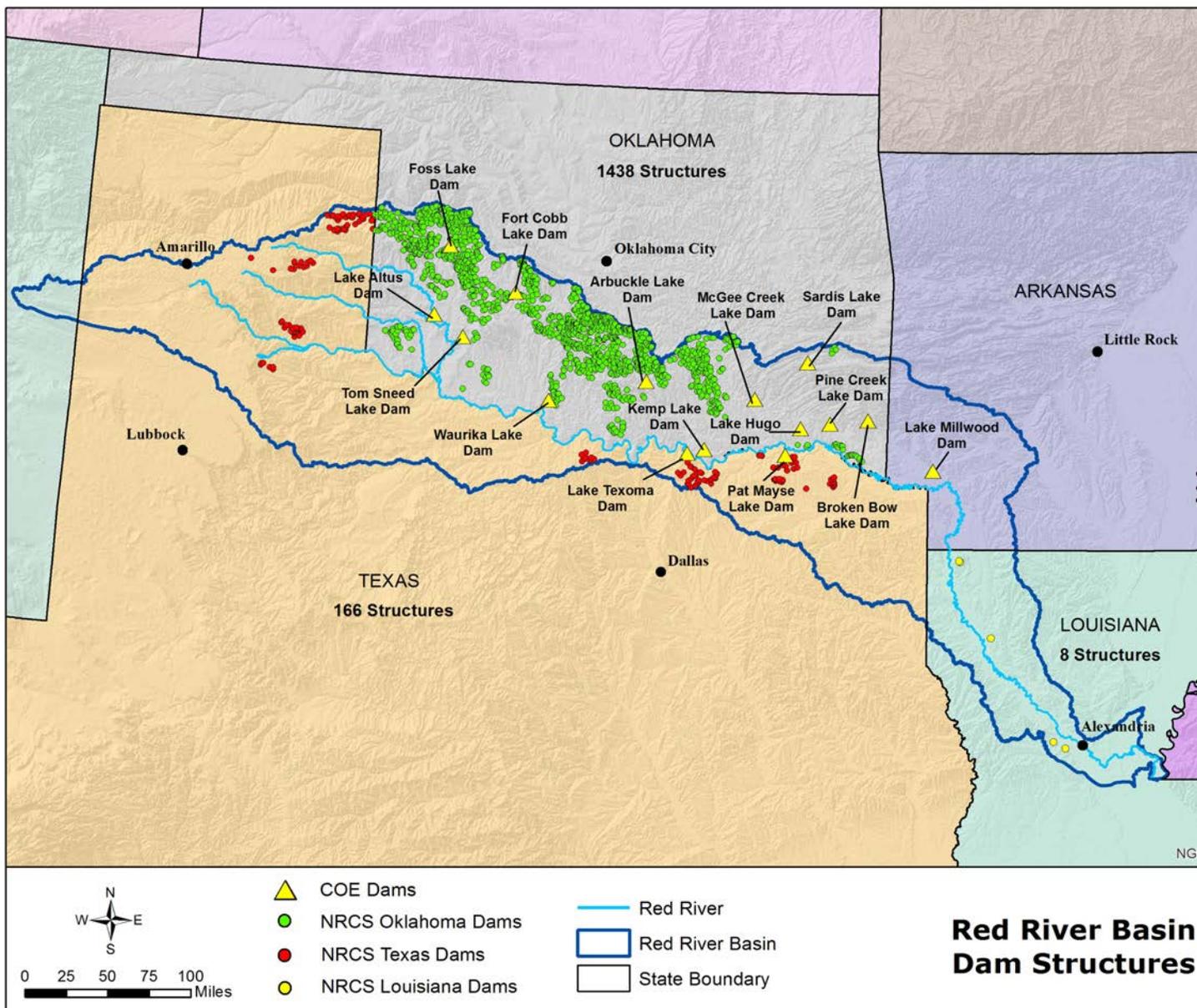
# Protect Thy Neighbor

## Flood Control in the Red River Valley

The NRCS Watershed and Flood Prevention Operations Program (WFPO) was authorized by the Flood Control Act of 1944 and the Watershed Protection and Flood Prevention Act of 1954. The WFPO provides technical and financial assistance to states, local governments and tribes to carry out works of improvement for soil conservation and for other purposes including flood prevention; conservation, development, utilization and disposal of water; and conservation and proper utilization of land.

Utilizing NRCS assistance through the Watershed and Flood Prevention Operations Program, local communities have constructed over 11,800 dams in 47 states since 1948. Of those, 1,612 are located in the Red River Valley.

This spring, many of the dams located in the Red River Valley were put to the test when 20 inches of rain fell in a two-week time span in Oklahoma. This water quickly filled the channels that are part of Oklahoma's flood control infrastructure. The auxiliary spillways of 133 dams flowed with water.



Lake Texoma in Denison, Texas, also quickly filled with water and soon water was flowing through its emergency spillway too. This spillway has only been used four times since its construction in 1943.

The water that wasn't contained by the dams eventually found its way into the Red River and downstream to northwest and central Louisiana. On June 9, 2015, the river crested in Shreveport at a little over 37 feet, which is more than 7 feet above flood stage. This is highest level it's been since 1945 when it exceeded 38 feet.

Not only did the river overflow its banks in areas, causing flooding, but backwater flooding occurred because channels and canals that normally drain into the river were unable to do so because of the high water levels. Damages were reported to homes, businesses and agriculture across the region.

Although there was flood damage and emergency spillways flowed, the impact would have been more widespread had it not been for the watershed flood prevention and control structures upstream.

Constructed, utilizing NRCS watershed funds matched with sponsor funds, these dams are now operated and maintained by local sponsors. The events this spring have made it clear how important operation and maintenance of these aging structures are to the

protection and safety of the downstream communities. Local communities benefit from these structures that provide sources of water and recreation opportunity, but often don't realize the value of the protection they offer. Oklahoma and Texas estimate that these structures prevented over \$170 million in flood damages to land, infrastructure and property during this event.

In Louisiana, there aren't many water retention structures, but the channels and weirs that were built through the same program offer local benefits, as well as benefits to our upstream communities by safely and efficiently carrying floodwaters downstream and eventually into the Gulf of Mexico.

The structures upstream protected Louisiana from a flood that could have been catastrophic. Our neighbors in the Red River Valley that operate and maintain this series of 1,612 dams are protecting our local communities also. Soil and water conservation districts, police juries and other local sponsors are doing their part in Louisiana to protect the larger Red River Valley community.

The future protection of our Red River Valley community rests on the ability of our local sponsors to maintain this network of flood control and prevention structures. With limited funding both locally and nationally, construction and repair of new or existing watershed features is often limited making maintenance of what we have critical.



River floods pasture in Grant Parish.



Watershed dam in southwest Oklahoma at storage capacity.



North Caddo Irrigation District Red Bayou pumps in flood waters.



2015  
International  
Year of Soils

### Soils Are Alive

Bacteria, bugs, fungi, nematodes, roots and worms. What do they have in common? They are all living creatures in our soil. Soils are alive! When asking the question "What's in soil?" the answer is often a mixture of minerals, air, water, organic matter and organisms. How many organisms? Scientists estimate that in one teaspoon of healthy soil, there are more microbes than there are people on Earth and in one tablespoon, more microorganisms than in all of the world's ecosystems combined. But what, if anything, is so great about billions and billions of creatures in the soil?



Some microbes eat and breathe toxic waste such as PCBs, arsenic and uranium to create safer compounds in their respiration and waste processes. Lichens are an interesting combination of fungi and algae that actually make soil by attaching to rocks and releasing organic acids that slowly dissolve the rock, creating soil over time. Even waterlogged soils have special microbes that use iron, sulfur, nitrogen or carbon for respiration.

Mycorrhizal fungi actually feed and water plants. As the fungi draws carbon and sugar from the plant roots, it pumps nutrients and water back in for the plant. You can even buy this fungi to "seed" your garden soil for more robust vegetables. Other fungi such as morel mushrooms and truffles provide nutrients and tasty treats for larger organisms with discerning pallets. And of course there are the rhizobium bacteria responsible for colonizing legume roots to convert nitrogen to a plant-usable form. Soybean farmers know that inoculating seed with rhizobium is key for a healthy crop.



Have you ever wondered why soil has a distinct and recognizable smell? If you guessed it's because of a living organism you're right! Actinomycetes, a microscopic creature like a cross between bacteria and fungi, break down organic matter and in the process create a compound called geosmin that is responsible for the "earthy" smell of good soil.

What about the other billions of organisms left? Next month we will explore how "Soils Support Health" and the fascinating products derived directly from soil organisms.

StrikeForce Initiative



Louisiana  
Update

for Rural Growth and Opportunity

### Central Louisiana Foodapalooza - Farm to School Edition

Submitted by: Dexter Sapp, NRCS StrikeForce Coordinator

I attended the Central Louisiana Foodapalooza - Farm to School Edition in Alexandria on Tuesday, July 14, 2015.



Nearly 100 area farmers, teachers, school administrators and local food enthusiasts met at the Coughlin-Saunders Performing

Arts Center in Alexandria where they were given a presentation by a representative from the Indian Springs Farmers Association from rural Petals, Mississippi. The Indian Springs Farmers Association is a cooperative made up of more than 30 small farmers in rural Mississippi who banded together to sell produce to schools in their region and parts of Louisiana.

Provisions in the 2014 Farm Bill, Section 4202 of the Agricultural Act of 2014 established a new pilot program for up to eight states to explore procurement alternatives – including local procurement for unprocessed fruits and vegetables. The farm to school implementation differs by location but the concept always includes one or more of the following: Procurement, education or school gardens. Nationwide, there are 40,328 schools with 23.5 million students engaged, \$385 million spent on local foods, and 40 states with supportive

policies associated with the Farm to School process.

The intent of the Foodapalooza Event was to bring all interested parties together in order to show educators how to get local, fresh produce into their schools and communities. After the presentation, the participants toured Gray-Walk Farms, Inglewood Farms, Pineville Youth Center and the Alexandria Farmers Market.

One of the highlights of the tour was hydroponically grown mustard greens, lettuce, and tomatoes at Gray-Walk Farms in Alexandria.



# Story from the Field

## Helping People Help the Land

### Good Grass Makes Better Cattle

Submitted by: Jordan Jessop, Soil Conservationist, Ferriday FO

On the outskirts of Vidalia, Louisiana, nestled against the Mississippi River Levee is a beautiful little cattle operation with lush green pastures surrounded by white fencing. Cecil Parker is the owner and operator of Riverview Farms LLC, and is relatively new to the cattle business. It is obvious to any passerby that Parker takes pride in his work with conscientiously maintained grounds, abundant forage, and healthy cows and horses.



Parker is an agronomist by trade and has a successful crop consultant business. Additionally, outside of Vidalia, Louisiana, he grows sweet corn that is sold locally, as well as in farmers markets in West Monroe,

Rayville, Baton Rouge and New Orleans. A couple of years ago, he acquired property along the Mississippi River levee in Vidalia, bought a few cows and began a small cattle operation as a means to pay for the land and generate additional income.

Although cows were previously kept on site, the forage was poorly managed and full of undesirable species. Parker, who recently successfully completed the LSU AgCenter's Master Cattleman class, acknowledges that he is still new to working with cattle, but his agronomic background has allowed him to enhance the forage on his pastures. While considering his cattle operation from a forage producer's perspective, Parker explained, "If I can make good grass, I'm going to have better cattle." He collected soil samples from each pasture, and applied the necessary soil amendments and nutrients to improve forage quality.

Through the Environmental Quality Incentives Program (EQIP), the NRCS cost-shared on several projects to help Cecil Parker improve his cattle operation while reducing natural resource concerns. Electric fencing was installed along drainage ditches to keep the cows out, several HUAPs were placed through gate-openings and under water troughs, and cross-fencing is being installed

to implement rotational grazing. Additionally, underground pipelines were installed for water troughs, and two portable shade-structures were built, one of which the NRCS cost-shared on.

Parker explains that he enjoys working with the cattle and finds it to be a stress-relief after work to hand-feed the horses and check on the cows. With twenty-five cows and several horses, his growing and successful cattle operation is off to a good start.



CONSERVATION  
**CLIENT GATEWAY**  
CONSERVATION ASSISTANCE JUST A CLICK AWAY

- 1 REQUEST TECHNICAL ASSISTANCE
- 2 APPLY FOR FINANCIAL ASSISTANCE
- 3 REVIEW, SIGN & SUBMIT APPLICATIONS, CONTRACTS & MORE
- 4 TRACK YOUR PAYMENTS

### Sign up today for the Client Gateway!

Visit [www.nrcs.usda.gov/clientgateway](http://www.nrcs.usda.gov/clientgateway) for step-by-step instructions. If you need additional help, personal assistance is available at (970) 372-4200.

Contact your local office for more information on this new way to work with NRCS.



United States Department of Agriculture

# Contact Our Offices

Visit our web site at:  
[www.la.nrcs.usda.gov](http://www.la.nrcs.usda.gov)

Parish	Field Office	Soil and Water Conservation District	Address	Telephone
Acadia	Crowley	Acadia SWCD	157 Cherokee Drive, Suite C, Crowley, LA 70526	(337) 783-5823, ext. 3
Allen	Oberlin	Allen SWCD	309 North 1st Street, Suite 1, Oberlin, LA 70655	(337) 639-4850, ext. 3
Ascension	Donaldsonville	Lower Delta SWCD and New River SWCD	2259 Business Park Boulevard, Donaldsonville, LA 70346	(225) 473-7638, ext. 3
Assumption	Donaldsonville	Lower Delta SWCD	2259 Business Park Boulevard, Donaldsonville, LA 70346	(225) 473-7638, ext. 3
Avoyelles	Marksville	Avoyelles SWCD	629 Tunica Drive West, Marksville, LA 71351	(318) 253-9445, ext. 3
Beauregard	DeRidder	Calcasieu SWCD	597 Mahlon Street, Suite B, DeRidder, LA 70634	(337) 463-8555, ext. 3
Bienville	Minden	Saline SWCD	216B Broadway, Minden, LA 71055	(318) 377-3950, ext. 3
Bossier	Benton	Bodcau SWCD	200 Burt Boulevard, Suite 101, Benton, LA 71006-4901	(318) 965-2185, ext. 3
Caddo	Shreveport	Caddo SWCD	1402 Hawn Avenue, Shreveport, LA 71107	(318) 676-3461, ext. 3
Calcasieu	Lake Charles	Gulf Coast SWCD	5417 Gerstner Memorial Drive, Lake Charles, LA 70601	(337) 474-1583, ext. 3
Caldwell	Columbia	Boeuf and Dugdemona SWCD	7128 Highway 165 South, Suite 2, Columbia, LA 71418	(318) 649-2651, ext. 3
Cameron	Lake Charles	Gulf Coast SWCD	5417 Gerstner Memorial Drive, Lake Charles, LA 70601	(337) 474-1583, ext. 3
Catahoula	Jonesville	Catahoula SWCD	3545 4th Street, Jonesville, LA 71343	(318) 339-4239, ext. 3
Claiborne	Minden	D'Arbonne SWCD	216B Broadway, Minden, LA 71055	(318) 377-3950, ext. 3
Concordia	Ferriday	Tensas-Concordia SWCD	8331 Highway 84, Ferriday, LA 71334	(318) 757-2455, ext. 3
DeSoto	Mansfield	DeSoto SWCD	332 Lake Road, Mansfield, LA 71052	(318) 872-4949, ext. 3
East Baton Rouge	Denham Springs	Capital SWCD	907 Florida Boulevard, SW, Denham Springs, LA 70726	(225) 665-4253, ext. 3
East Carroll	Lake Providence	East Carroll SWCD	406 Lake Street, Suite C, Lake Providence, LA 71254	(318) 559-2604, ext. 3
East Feliciana	Clinton	Feliciana SWCD	9752 Plank Road South, Clinton, LA 70722	(225) 683-5496, ext. 3
Evangeline	Ville Platte	Evangeline SWCD	205 Court Street, Ville Platte, LA 70586	(337) 363-6602, ext. 3
Franklin	Winnsboro	Northeast SWCD	616 Riser Road, Winnsboro, LA 71295	(318) 435-6743, ext. 3
Grant	Colfax	Grant SWCD	510 Main Street, Colfax, LA 71417	(318) 627-9903, ext. 3
Iberia	New Iberia	Iberia SWCD	2617 Northside Road, Suite 600, New Iberia, LA 70563	(337) 369-6623, ext. 3
Iberville	Addis	Lower Delta SWCD	7747 Highway 1 South, Addis, LA 70710	(225) 687-2184, ext. 3
Jackson	Ruston	Dugdemona SWCD	1412 Celebrity Drive, Ruston, LA 71270	(318) 255-3136, ext. 3
Jefferson	New Orleans	Crescent SWCD	1041 Rue La Cannes, Luling, LA 70070	(985) 331-9084
Jefferson Davis	Jennings	Jefferson Davis SWCD	2003 Port Drive, Jennings, LA 70546	(337) 824-0975, ext. 3
Lafayette	Lafayette	Lafayette SWCD	905 Jefferson Street, Suite 310, Lafayette, LA 70501-7913	(337) 262-6601, ext. 3
Lafourche	Thibodaux	Lafourche-Terrebonne SWCD	143 Laura Drive, Thibodaux, LA 70301	(985) 447-3871, ext. 3
LaSalle	Jonesville	LaSalle SWCD	3545 4th Street, Jonesville, LA 71343	(318) 339-4239, ext. 3
Lincoln	Ruston	D'Arbonne SWCD	1412 Celebrity Drive, Ruston, LA 71270	(318) 255-3136, ext. 3
Livingston	Denham Springs	Capital SWCD	907 Florida Boulevard, SW, Denham Springs, LA 70726	(225) 665-4253, ext. 3
Madison	Tallulah	Madison SWCD	1900 Crothers Drive, Tallulah, LA 71282	(318) 574-4158, ext. 3
Morehouse	Bastrop	Morehouse SWCD	9604 Marlatt Street, Bastrop, LA 71220	(318) 283-7626, ext. 3
Natchitoches	Natchitoches	Natchitoches SWCD	6949 Louisiana Highway 1 Bypass, Natchitoches, LA 71457	(318) 357-8366, ext. 3
Orleans	New Orleans	Crescent SWCD	1041 Rue La Cannes, Luling, LA 70070	(985) 331-9084
Quachita	Monroe	D'Arbonne/Boeuf River SWCD	2410 Old Sterling Road, Suite B, Monroe, LA 71203-2668	(318) 343-4467, ext. 3
Plaquemines	New Orleans	Plaquemines SWCD	1041 Rue La Cannes, Luling, LA 70070	(985) 331-9084
Pointe Coupee	New Roads	Upper Delta SWCD	180 East Main Street, New Roads, LA 70760	(225) 638-7746, ext. 3
Rapides	Alexandria	Rapides SWCD	3734 Government Street, Building C, Alexandria, LA 71303	(318) 473-7856, ext. 3
Red River	Coushatta	Red River SWCD	1311 Ringgold Avenue, Coushatta, LA 71019	(318) 932-4352, ext. 3
Richland	Rayville	Boeuf River SWCD	141 Industrial Loop, Rayville, LA 71269	(318) 728-4451, ext. 3
Sabine	Many	Sabine SWCD	570 Highway 171 By Pass, Many, LA 71449	(318) 256-3491
St. Bernard	New Orleans	Crescent SWCD	1041 Rue La Cannes, Luling, LA 70070	(985) 331-9084
St. Charles	New Orleans	Crescent SWCD	1041 Rue La Cannes, Luling, LA 70070	(985) 331-9084
St. Helena	Amite	Tangipahoa-St. Helena SWCD	805 West Oak Street, Suite 1, Amite, LA 70422-2820	(985) 748-8751, ext. 3
St. James	Donaldsonville	Lower Delta SWCD and New River SWCD	2259 Business Park Boulevard, Donaldsonville, LA 70346	(225) 473-7638, ext. 3
St. John	New Orleans	Crescent SWCD	1041 Rue La Cannes, Luling, LA 70070	(985) 331-9084
St. Landry	Opelousas	St. Landry SWCD	5832 I-49 North Service Road, Opelousas, LA 70570	(337) 942-2530, ext. 3
St. Martin	Lafayette	St. Martin SWCD	905 Jefferson Street, Suite 310, Lafayette, LA 70501-7913	(337) 262-6601, ext. 3
St. Mary	Franklin	St. Mary SWCD	500 Main Street, Franklin, LA 70538	(337) 828-1461, ext. 3
St. Tammany	Franklinton	Bogue Chitto-Pearl River SWCD	1111 Washington Street, Franklinton, LA 70438	(985) 839-5688, ext. 3
Tangipahoa	Amite	Tangipahoa-St. Helena SWCD	805 West Oak Street, Suite 1, Amite, LA 70422-2820	(985) 748-8751, ext. 3
Tensas	St. Joseph	Tensas-Concordia SWCD	1223 Plank Road, St. Joseph, LA 71366	(318) 766-3502, ext. 3
Terrebonne	Thibodaux	Lafourche-Terrebonne SWCD	143 Laura Drive, Thibodaux, LA 70301	(985) 447-3871, ext. 3
Union	Farmerville	D'Arbonne SWCD	501 Glory Road, Farmerville, LA 71241	(318) 368-8021
Vermilion	Abbeville	Vermilion SWCD	3221 Veterans Memorial Drive, Suite H, Abbeville, LA 70510	(337) 893-5664, ext. 3
Vernon	Leesville	Calcasieu SWCD	205 North 5th Street, Leesville, LA 71446	(337) 239-2193
Washington	Franklinton	Bogue Chitto-Pearl River SWCD	1111 Washington Street, Franklinton, LA 70438	(985) 839-5688, ext. 3
Webster	Minden	Dorcheat SWCD	216B Broadway, Minden, LA 71055	(318) 377-3950, ext. 3
West Baton Rouge	Addis	Upper Delta SWCD	7747 Highway 1, South, Addis, LA 70710	(225) 687-2184, ext. 3
West Carroll	Oak Grove	West Carroll SWCD	208 South Constitution Street, Oak Grove, LA 71263	(318) 428-9303, ext. 3
West Feliciana	Clinton	Feliciana SWCD	9752 Plank Road South, Clinton, LA 70722	(225) 683-5496, ext. 3
Winn	Natchitoches	Dugdemona SWCD	6949 Louisiana Highway 1 Bypass, Natchitoches, LA 71457	(318) 357-8366, ext. 3

The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers. If you believe you experienced discrimination when obtaining services from USDA, participating in a USDA program, or participating in a program that receives financial assistance from USDA, you may file a complaint with USDA. Information about how to file a discrimination complaint is available from the Office of the Assistant Secretary for Civil Rights. USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex (including gender identity and expression), marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) To file a complaint of discrimination, complete, sign, and mail a program discrimination complaint form, available at any USDA office location or online at [www.ascr.usda.gov](http://www.ascr.usda.gov), or write to: USDA, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410. Or call toll free at (866) 632-9992 (voice) to obtain additional information, the appropriate office or to request documents. Individuals who are deaf, hard of hearing, or have speech disabilities may contact USDA through the Federal Relay service at (800) 877-8339 or (800) 845-6136 (in Spanish). USDA is an equal opportunity provider, employer, and lender.