

Farm Bill Program Assistance to Combat Exotic Invasive Pest Plants

Projects on private lands and summary of NRCS Programs

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South Carolina

United States Department of Agriculture



Technical and financial assistance through USDA Farm Bill Programs



- Environmental Quality Incentives Program (EQIP)
- Conservation Stewardship Program (CSP)
- Program funds go toward addressing natural resource concerns on property through conservation practices, can include eradicating/reducing coverage of invasive exotic pest plant infestations
- Easement program (Wetland Reserve Program) restoration plan/funds include vegetative restoration/invasive exotic pest plant control

Programs

- ▣ Farm Bill
 - Landscape Initiatives
- ▣ Financial Assistance
 - Agricultural Management Assistance
 - Agricultural Water Enhancement Program
 - Air Quality Initiative
 - Cooperative Conservation Partnership Initiative
- ▣ Conservation Innovation Grants
 - Conservation Stewardship Program
 - Environmental Quality Incentives Program
 - Emergency Watershed Protection Program
 - Wildlife Habitat Incentive Program
- ▣ Technical Assistance
- ▣ Easements
- ▣ Landscape Planning
- ▣ Alphabetical Listing & Archive

Environmental Quality Incentives Program



Environmental Quality Incentives Program

From weather to pests, and from a lack of time to markets, each American farmer faces a unique set of challenges. The Environmental Quality Incentives Program (EQIP) helps agricultural producers confront those challenges – all while conserving natural resources like soil, water and air.

This voluntary conservation programs helps producers make conservation work for them. Together, NRCS and producers invest in solutions that conserve natural resources for the future while also improving agricultural operations.

Through EQIP, NRCS provides agricultural producers with financial resources and one-on-one help to plan and implement improvements, or what NRCS calls conservation practices. Using these practices can lead to cleaner water and air, healthier soil and better wildlife habitat, all while improving agricultural operations. Through EQIP you can voluntarily implement conservation practices, and NRCS co-invests in these practices with you.

HOW EQIP WORKS

To get started, NRCS first works one-on-one with you to develop a conservation plan that meets your goals and

Programs

- ▣ Farm Bill
 - Landscape Initiatives
- ▣ Financial Assistance
 - Agricultural Management Assistance
 - Agricultural Water Enhancement Program
 - Air Quality Initiative
 - Cooperative Conservation Partnership Initiative
- ▣ Conservation Innovation Grants
 - Conservation Stewardship Program
 - Environmental Quality Incentives Program
 - Emergency Watershed Protection Program
 - Wildlife Habitat Incentive Program
- ▣ Technical Assistance
- ▣ Easements
- ▣ Landscape Planning
- ▣ Alphabetical Listing & Archive

CSP Resources

- CSP Prior Year Info
- CSP Fact Sheet



Conservation Stewardship Program



Conservation Stewardship Program

Your Stewardship Goals. Our Assistance.

Have you ever looked across your property and thought about some land management goals you would like to take to the next level? Maybe we can help.

No one knows more about your land than you do, and no one knows more about conservation than we do. Together we can develop a plan tailored to your land and your goals to help you increase productivity and protect the value of your land.

Our Conservation Stewardship Program (CSP) helps you build on your existing conservation efforts while strengthening your operation. Whether you are looking to improve grazing conditions, increase crop yields, or




Technical and financial assistance through USDA Farm Bill Programs



- Landowners apply at the County USDA/NRCS Service Center for land in that County
- Sign up is continuous, application deadlines for fiscal year funding (deadlines are usually around Sept 30th)
- Land must be registered with the Farm Services Agency (Land and Tract numbers), bring deed and plat
- Adjusted Gross Income (AGI) form- annual income cannot exceed \$900,000 (ineligible for Farm Bill Programs)
- In compliance with highly erodible land and wetland conservation requirements
- **Work with District Conservationist and other NRCS staff on a Conservation Plan**

- Program
 - Environmental Quality Incentives Program
 - Emergency Watershed Protection Program
 - Wildlife Habitat Incentive Program
- ☑ Technical Assistance
- ☑ Easements
- ☑ Landscape Planning
- ☑ Alphabetical Listing & Archive




Conservation Activity Plans

[Conservation Activity Plans](#)




EQIP Factsheet

[EQIP Factsheet](#)



EQIP Nationwide

[EQIP Nationwide](#)



EQIP Payments

[EQIP Payments](#)



HOW DO I APPLY?

Have a resource concern you are ready to address or a management system you want to try? We are ready to help. Applications for EQIP financial assistance are accepted throughout the year. Specific deadlines are set for ranking and funding opportunities within each state. Download and complete the [EQIP application form](#).

Contact your local NRCS field office for more information.

PREPARING YOUR APPLICATION

Applications will be accepted for all eligible lands and persons. Eligible land includes:

- > Cropland and Hayland
- > Rangeland
- > Pastureland
- > Non-industrial private forestland
- > Other farm or ranch lands

Eligible person(s) include:

- > Agricultural producers
- > Owners of non-industrial private forestland
- > Indian Tribes
- > Those with an interest in the agricultural or forestry operations

Additionally, farm records must be established or updated with the [Farm Service Agency](#) for both the person(s) and the land for your application to be eligible and evaluated. Farm records for the person must indicate the applicant:

- > Controls or owns eligible land;
- > Meets [adjusted gross income \(AGI\) and payment limitation provisions](#);
- > Is in compliance with [highly erodible land and wetland conservation requirements](#)

In addition to these requirements, approved participants, through consultation with NRCS conservation planners, must develop an EQIP plan of operations that addresses at least one natural resource concern.

Note: Additional restrictions and program requirements may apply. Contact your local office for information specific to your application.

EVALUATING YOUR APPLICATION

Technical and financial assistance through USDA Farm Bill Programs



- Conservation Plan includes management practices, dates for completion, and guidance for implementation- based on LO goals and identified resource concerns
- Conservation Practice funding based on 75% region-wide ave. cost
- **Woody exotic invasive plants: Brush Management (314), several components: mechanical, chemical, infestation level, etc.**
- **Herbaceous exotic invasive plants: Herbaceous Weed Treatment (315): mechanical, chemical, can be used for aquatic invasive plants**
- Practice Standards and Jobsheets provided for all practices
- Conservation Plan comes with plan maps showing where on land practices are to take place and # of acres

Conservation Plan



Brush Management(314)

Mechanical -Heavy: This practice will address the control medium to heavy infestations of woody competition (focusing on sweetgum and black cherry) through the use of environmentally sensitive prevention, avoidance, monitoring, and suppression strategies, to manage invasive woody plants that directly or indirectly cause damage to natural community quality, structure or composition. Mechanical means will be utilized to reduce the coverage of mature, medium to heavy infestations of invasive woody plant species. Efforts should be made to minimize negative impacts upon sensitive areas, rare species, soil resources, water resources, air resources, plant resources, animal resources, and/or humans. Conduct associated practices in order to ensure success.

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
2996	12	25. ac	1	2018		
Total:		25. ac				

Conservation Cover(327)

NATIVE WARM SEASON GRASSES: Provide or improve upland habitats and connectivity within the landscape for wildlife. This practice will be utilized to address upland wildlife habitat concerns identified during the conservation planning process that enable movement, or provide shelter, cover, and food; in proper amounts, locations and times to sustain wild animals that inhabit uplands during a portion of their life cycle. Plant at least 3 native grasses or 2 native grasses and 1 forb or legume. Practice includes 1 site preparation treatment, seed cost, soil amendments, planting. Use only native species found in the SC NRCS Technical Note 327a, Native Species for Wildlife List. Follow the NRCS specification provided.

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
2996	12	5. ac	1	2019		
Total:		5. ac				

Conservation cover to provide food habitat for pollinators and beneficial insects(E327136Z1)

The participant will implement 327-Conservation Cover to meet the NRCS practice standard for the duration of the contract (see eFOTG Section IV for practice standards). In addition the participant will adopt additional criteria to address Inadequate Habitat - Food by implementing and maintaining all of the criteria specified in the Conservation Stewardship Program Job Sheet, E327136Z1

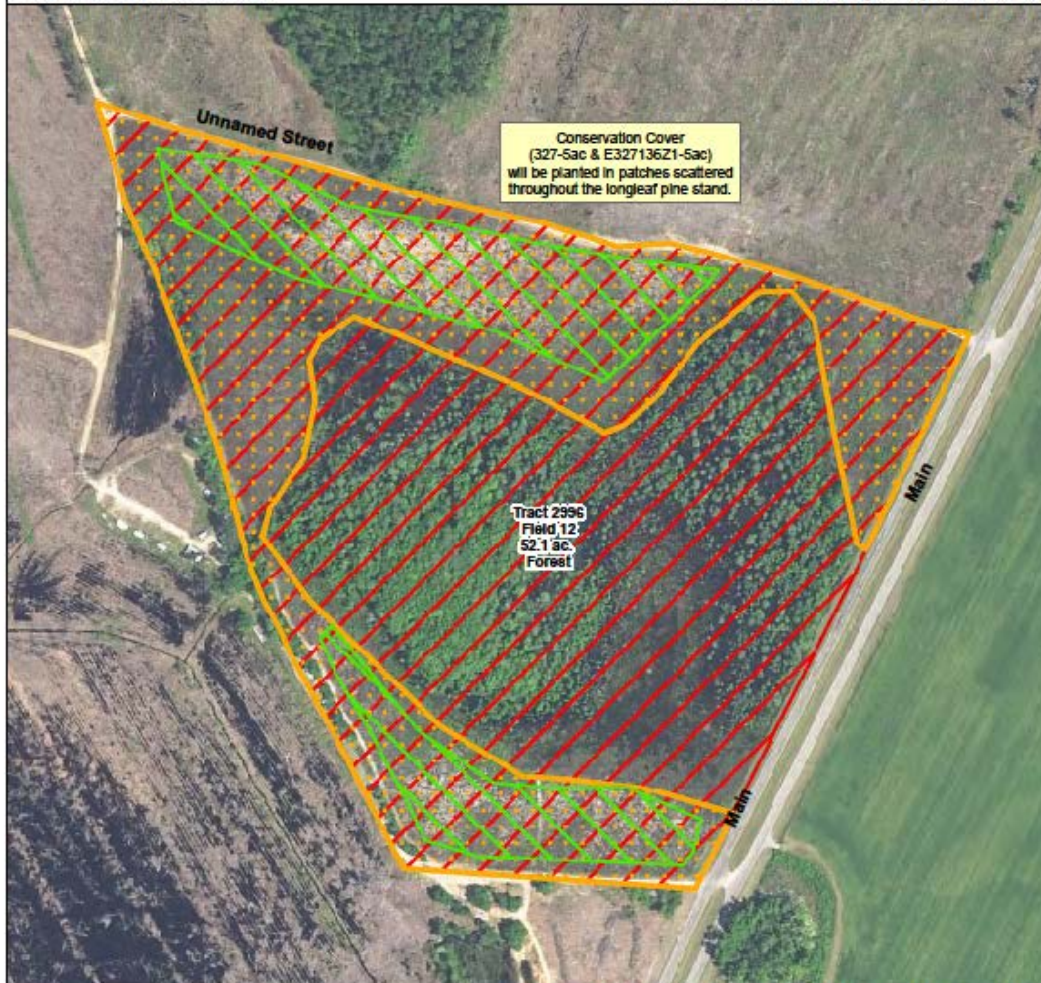
Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
2996	12	5. ac	1	2019		
Total:		5. ac				

Conservation Plan Map

Date: 7/11/2017

Customer(s): [REDACTED]
District: BAMBERG SOIL & WATER CONSERVATION DISTRICT
Approximate Acres: 52.1
Land Units: Farm 3013 Tract: 2996

Assisted By: [REDACTED]
Field Office: BAMBERG SERVICE CENTER
Agency: USDA-NRCS
State and County: SC, Bamberg County, South Carolina



Prepared with assistance from USDA-Natural Resources Conservation Service

Legend

-  Brush Management
-  Tree/Shrub Establishment & Conservation Cover
-  Prescribed Burning
-  Field Boundaries



Technical and financial assistance through USDA Farm Bill Programs



- Contracts usually 3 years (EQIP), or 5 years (CSP)
- Landowner must complete practices in plan prior to receiving funds via direct deposit (completion checked by NRCS staff)
- If practice cannot be completed contract can be modified
- If practice never completed or contract canceled landowner may be responsible for administrative costs
- Contract funding dependant on ranking score/national, state and local priority resource concerns and amount of funds allocated to SC

REVISION OF PLAN / SCHEDULE OF OPERATIONS
OR MODIFICATION OF A CONTRACT

PARTICIPANT [REDACTED]	COUNTY AND STATE BAMBERG County, SC	PROGRAM AND CONTRACT NUMBER CSP 2014 [REDACTED]	SUBACCOUNT CSP FA (2019 CSP2014 Payments and Mods)	
		ACRES 52.1	MODIFICATION NUMBER AND DATE 1 -- 9/10/2018	EXPIRATION DATE 12/31/2021

Contract Items 5: Prescribed Burning(338) Practice Lifespan: 1 year Status: Planned 2019

Prescribe burn to improve wildlife habitat and reduce the chance of wildfire. All laws and regulations regarding outdoor burning and smoke management must be obeyed. The burn should be conducted under the supervision of a Certified Prescribed Fire Manager. The South Carolina Commission of Forestry may be consulted for advice and assistance.

Fields:
Tract: 2006 Fields: 12;

Contract Item	Planned Conservation Treatment	Planned Amount	Unit Cost	Cost Share Rate/Method	COMPLETION SCHEDULE AND ESTIMATED COST-SHARE OR PAYMENT BY YEAR												
					2017 \$	2018 \$	2019 \$	2020 \$	2021 \$								
5	Prescribed Burning(338)	52.1 ac						220									
5a	Prescribed Burn - High Risk	52.1 ac	\$4.2100/ ac	PR*			220										

Notes: *Payment rates define the unit cost rate of compensation to be received by the participant.

Contract Items 6: Tree/Shrub Establishment(612) Practice Lifespan: 15 years Status: Planned 2019

(612-34) Spot-plant longleaf pine at a rate of 622 or less trees per acre. Follow all planting instructions and guidance provided by the South Carolina Forestry Commission or a private forester.

Fields:
Tract: 2006 Fields: 12;

Contract Item	Planned Conservation Treatment	Planned Amount	Unit Cost	Cost Share Rate/Method	COMPLETION SCHEDULE AND ESTIMATED COST-SHARE OR PAYMENT BY YEAR												
					2017 \$	2018 \$	2019 \$	2020 \$	2021 \$								
6	Tree/Shrub Establishment(612)	10 ac						172									
6a	Low Density-hand plant Containerized	10 ac	\$17.1500/ ac	PR*			172										

Notes: *Payment rates define the unit cost rate of compensation to be received by the participant.

Example of CSP contract, CSP payments low due to annual payment

Technical and financial assistance through USDA Farm Bill Programs



- National, State, and Local Priority Resource Concerns: issues may include soil health, water quality, wildlife habitat, state initiatives (bobwhite, longleaf restoration)
- **The most beneficial Conservation Plans will be ranked highest and therefore funded 1st**
- 2018 EQIP funds obligated: \$32,663,013.30
- 2018 EQIP # contracts: 1,135
- 2018 EQIP total # acres: 121,360.00
- Brush Management: obligated \$520,418.00, 268 contracts, 2,337.66 acres

Technical and financial assistance through USDA Farm Bill Programs

Contact local county District Conservationist for technical assistance or to apply for conservation programs.

United States Department of Agriculture



Private land in Darlington County – who's who? List of problematic exotic invasive plants

Thank you old home sites...

Chinese
privet

Japanese
honeysuckle

Nandina

Chinaberry

Chinese
Wisteria

Periwinkle

Waxy leaf privet

2017/08/24



**Private land in Darlington County
– even more exotic plants**

**Sericea
lespedeza**



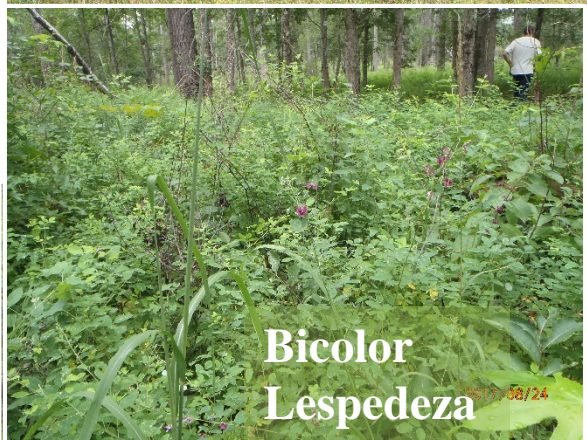
**Chinese
Wisteria**



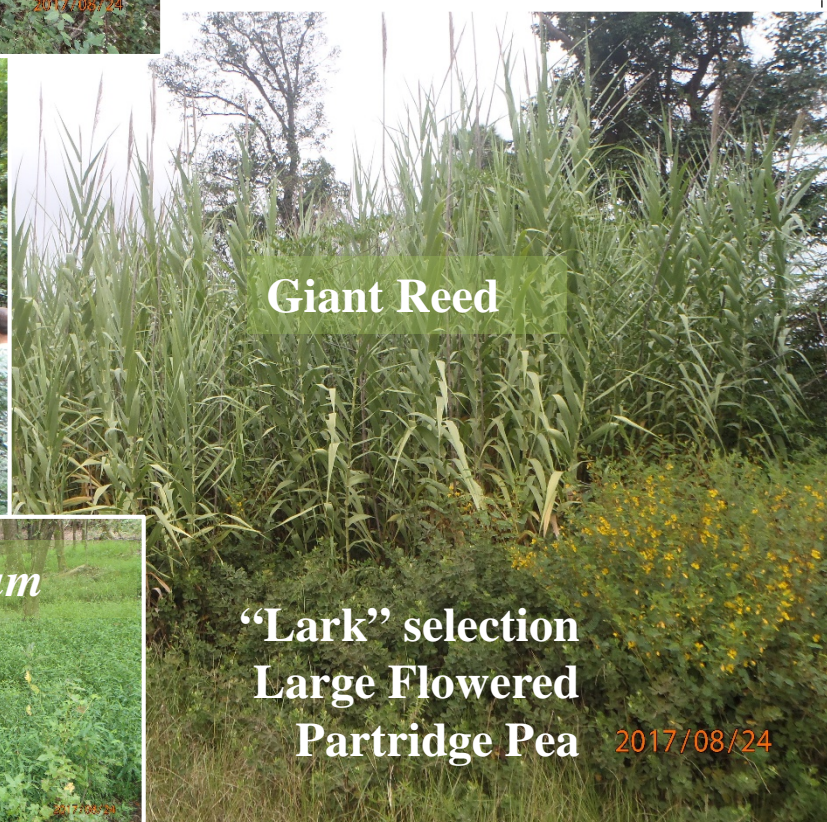
Elaeagnus pungens



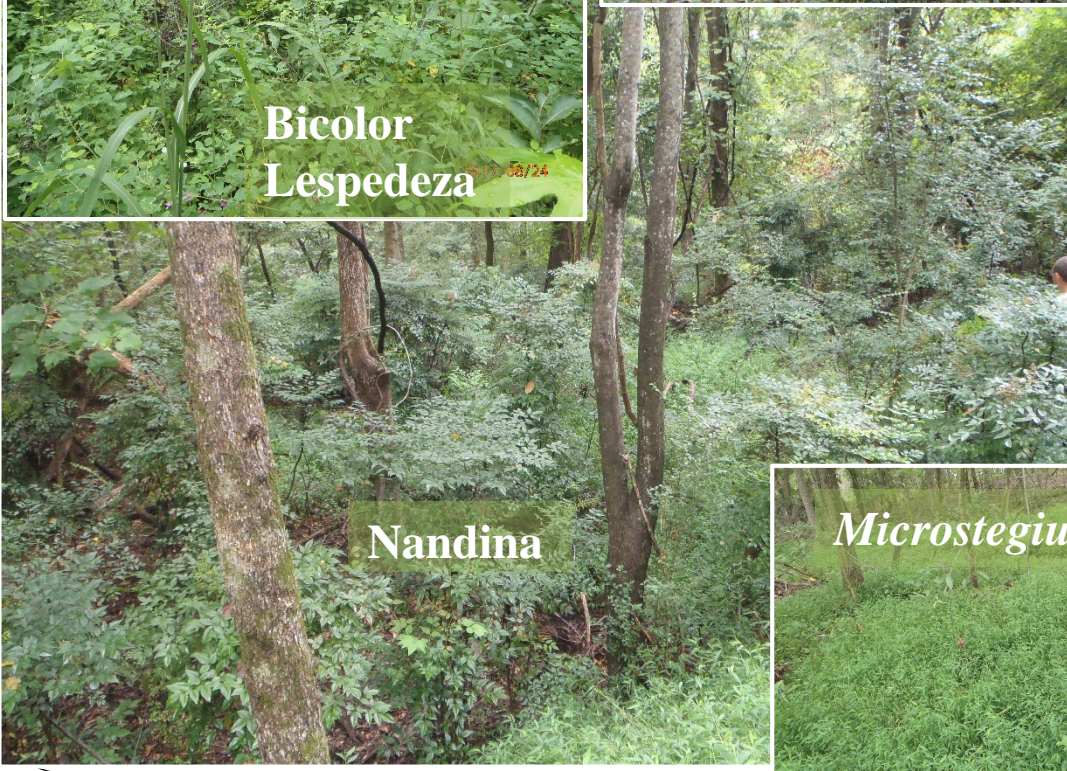
**Bicolor
Lespedeza**



Giant Reed



Nandina



Microstegium



**“Lark” selection
Large Flowered
Partridge Pea**

2017/08/24

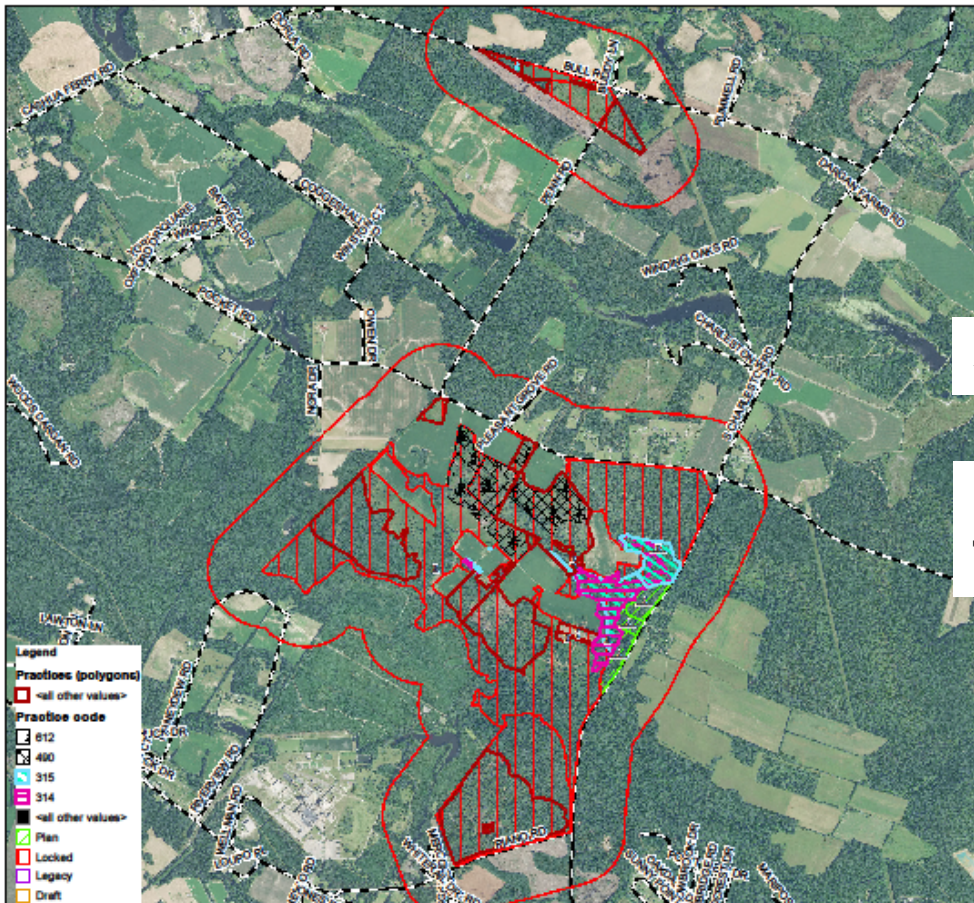
Private land in Darlington County – inventory, applied for EQIP



Customer(s) [REDACTED]
District: DARLINGTON SOIL & WATER CONSERVATION DISTRICT
Approximate Acres: 1028.4
Legal Description: FSN- 9762, 9781
Tracts- 8124, 8125, 8290

Field Office: DARLINGTON SERVICE CENTER
Agency: NRCS-South Carolina
Assisted By [REDACTED]

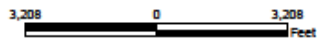
Private land in
Darlington
County –
Conservation
Plan Map, EQIP



314: Brush Management

315: Herbaceous Weed
Treatment

Prepared with assistance from USDA-Natural Resources Conservation Service



Private land in Darlington County, EQIP



1st year, after treatment, 2 more treatments planned



314: Brush Management

315: Herbaceous Weed Treatment



Private land in Darlington County, other Conservation Practices applied or to be applied through EQIP



Forest Stand Improvement –thinning to low Basal Area to improve habitat (666)



Prescribed Fire (338)

2016/07/18



2018



2018/10/04

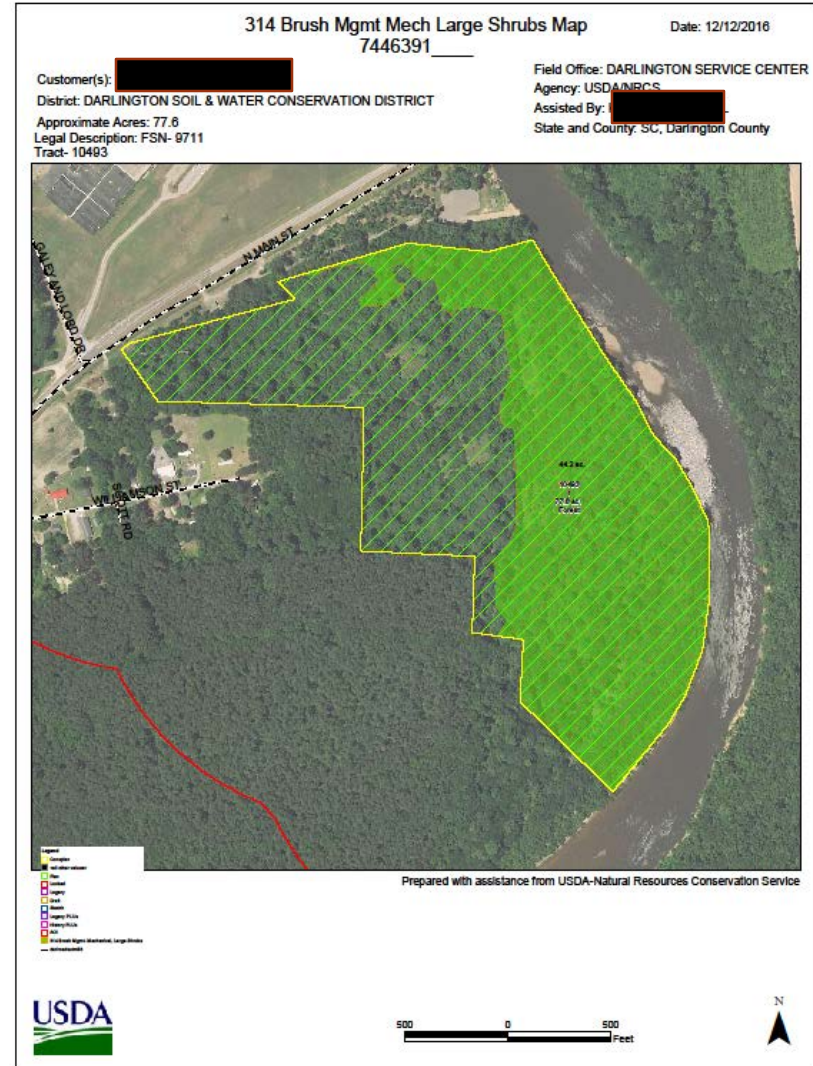
Tree and Shrub Establishment (612), Longleaf pine or other native trees and shrubs

Initial site condition



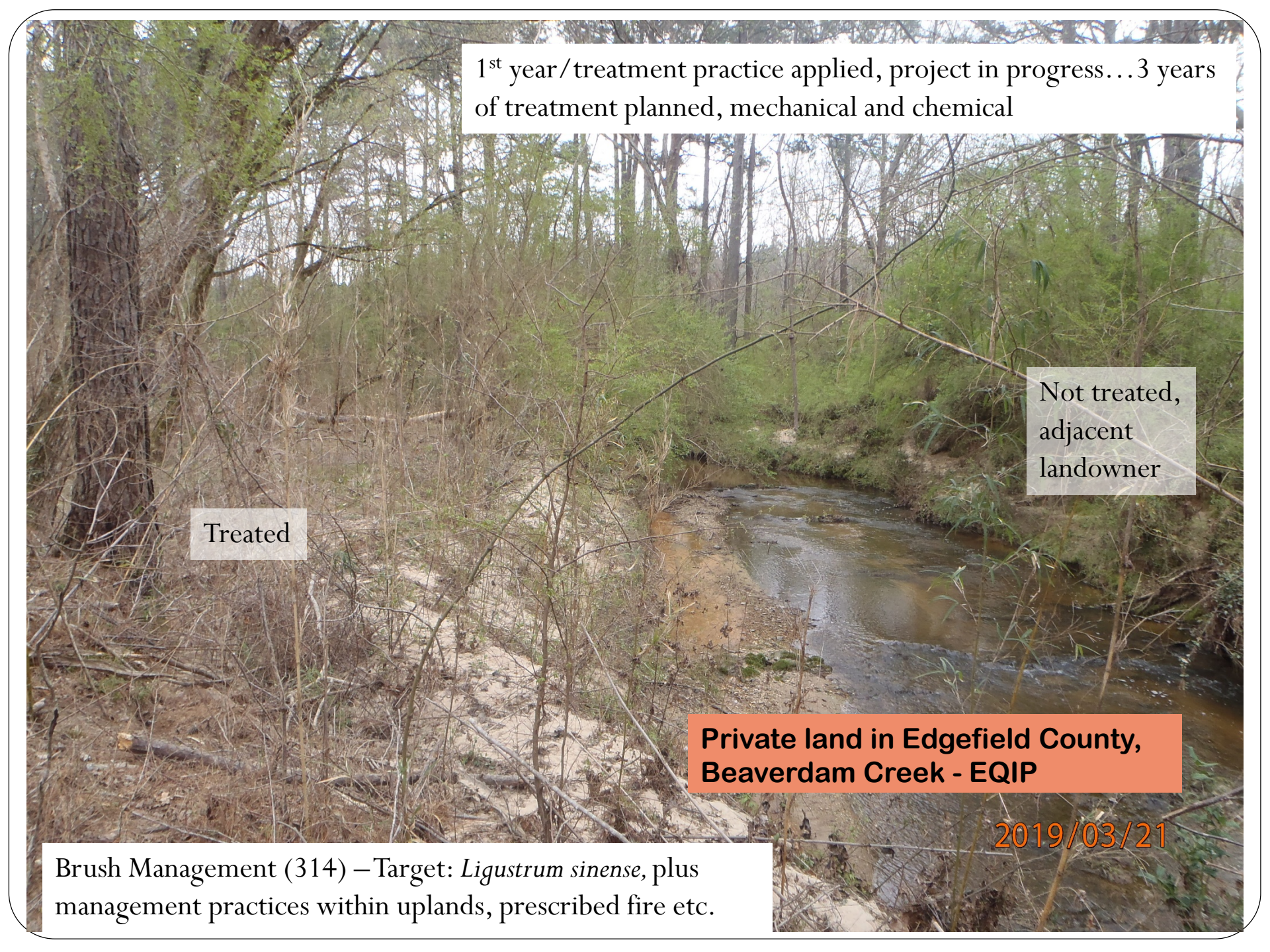
Floodplain area, Great Pee Dee River, 44 acres of Brush Management for Chinese privet, 3 years of treatment planned, mechanical and chemical

Practice applied, project in progress...



Private land in Darlington County, EQIP

2019/03/12



1st year/treatment practice applied, project in progress...3 years of treatment planned, mechanical and chemical


Treated

Not treated,
adjacent
landowner

Private land in Edgefield County,
Beaverdam Creek - EQIP

2019/03/21

Brush Management (314) –Target: *Ligustrum sinense*, plus management practices within uplands, prescribed fire etc.



1st year/treatment practice applied, project in progress...3 years of treatment planned, mechanical and chemical

Other conservation practices in current plan or in the planning process: Stream Habitat Improvement, Prescribed Fire

Private land in Edgefield County,
Beaverdam Creek -EQIP

2019/03/21

Brush Management (314) –Target: *Ligustrum sinense*

Chinaberry

Private land in Edgefield County, -EQIP




Brush Management (314) – Target: *Ligustrum sinense*, *Melia azedarach*



Stream within watershed known to harbor Carolina Heelsplitter, consulted with FWS, no foliar spray of herbicide within 50 feet of stream

Private land in Kershaw County,
Wateree River floodplain

Brush Management (314) – Target: *Ligustrum sinense*



Before, several
hundred acres
covered



1 year post trtmt



3 years post trtmt



4 years post trtmt

WRP Easement site Clarendon County, Douglas Creek



Wetland Restoration
Target: *Ligustrum sinense*

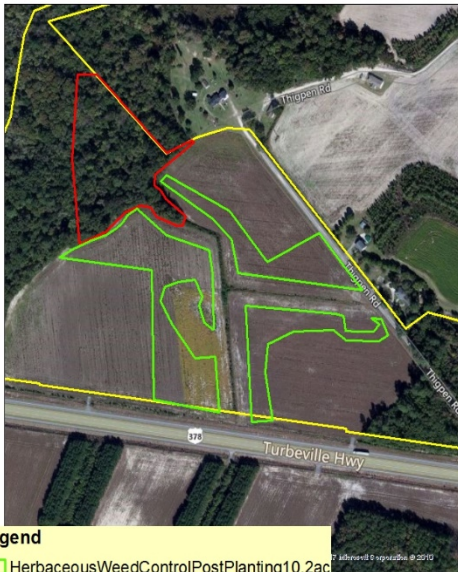


1-30-16

WRP Easement Clarendon Co.
Additional Restoration Work

2016

2018



Legend

- HerbaceousWeedControlPostPlanting10.2ac
- ChinesePrivetControl6ac
- easement_a_sc

0 170 340 680 1,020 1,360 Feet



Wetland Restoration

Target: *Ligustrum sinense*

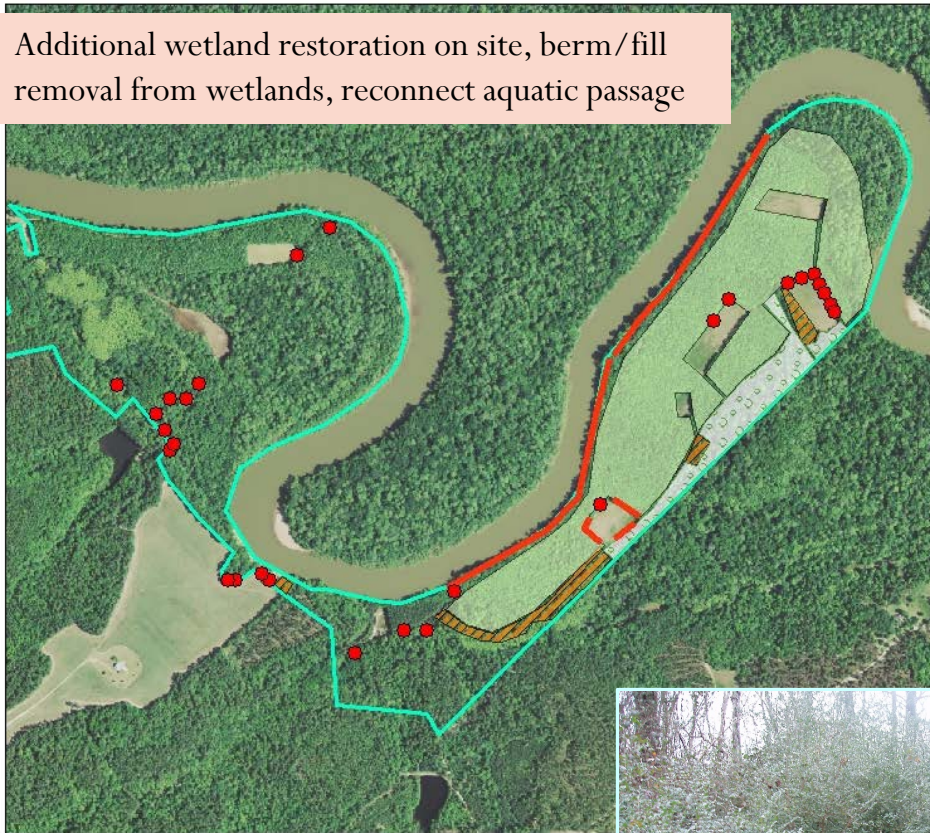
Private land in Calhoun County, Chinese privet on WRP Easement, Congaree River floodplain

WRP Chinese Privet Control and Compatible Use Plan Map

Customer(s) [REDACTED]
Date: 11-3-2010

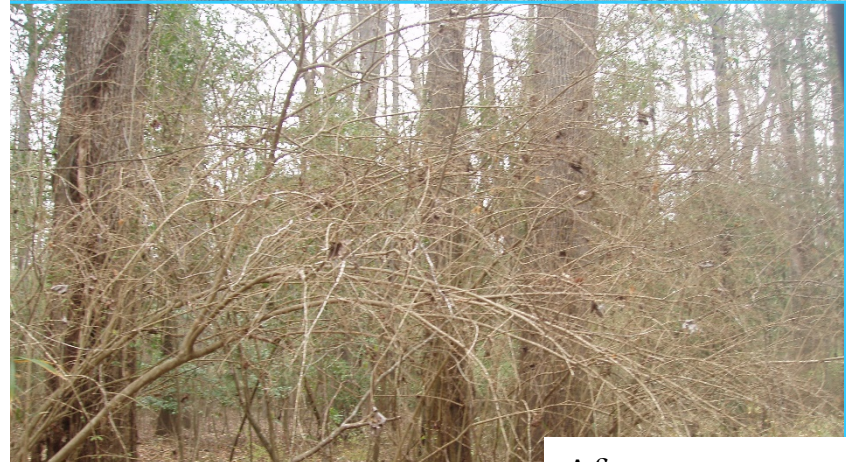
Field Office: ST MATTHEWS SERVICE CENTER
Agency: Natural Resources Conservation Service
Assisted By: Michael A Sigmon & Sudie D. Thomas

Additional wetland restoration on site, berm/fill removal from wetlands, reconnect aquatic passage



Legend

- Privet Individual trees or patches
- Privet-Linear 1 ac
- Privet-Sparse 80 ac
- Privet-Patchy 13 ac
- Privet-Heavy 7 ac



After treatment

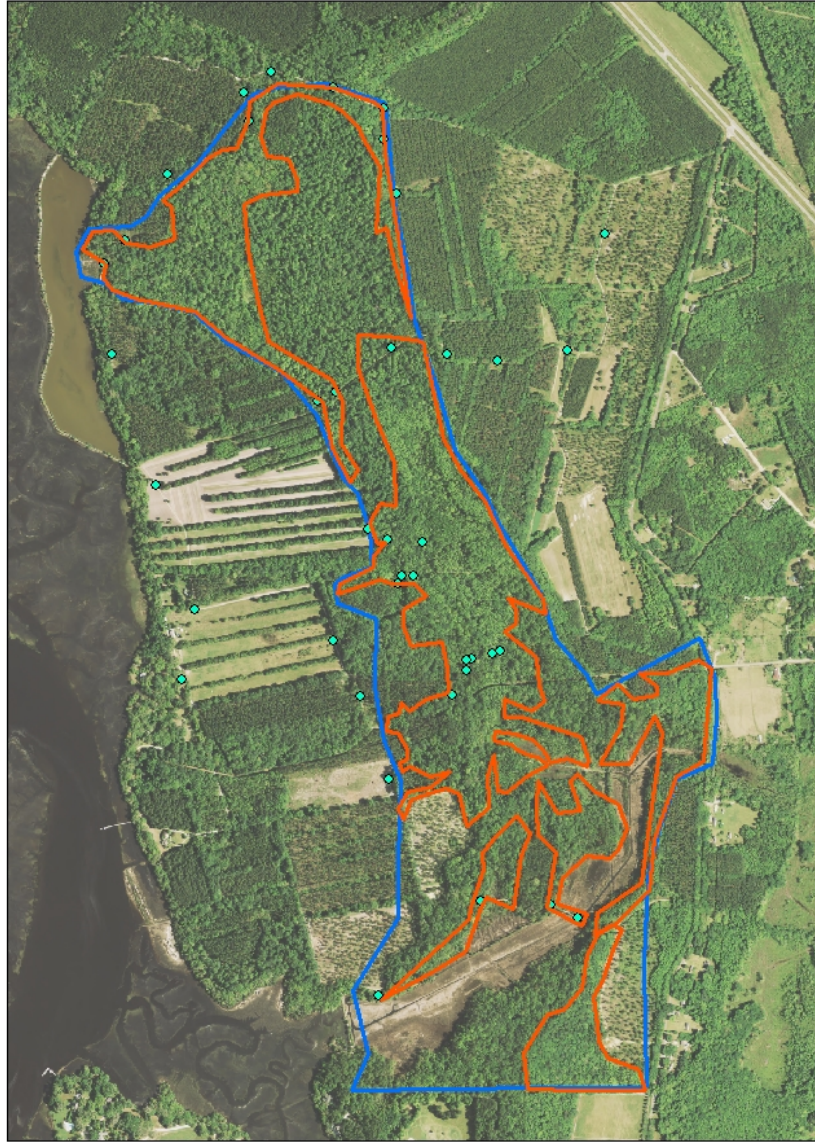


Next door



WRP Beaufort County-
Tallow infestation and targeted control areas

Private land in Beaufort County,
Chinese Tallow Tree on WRP Easement



- Red outlines area on WRP Easement infested with Chinese Tallow Tree (200 acres)
- Blue outlines WRP Easement

Private land in Beaufort County,
Chinese Tallow Tree on WRP Easement

2013/09/27

Brush Management (314) – Target: *Triadica sebifera*, 3 annual treatments



<https://vimeo.com/59610808>

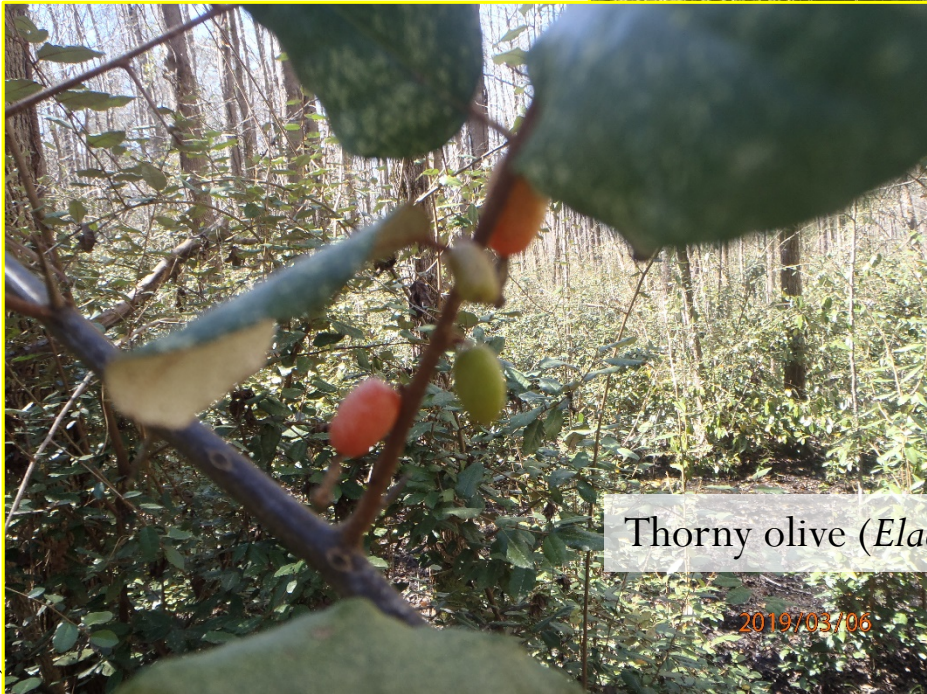


Private land in Calhoun
County, New application
for EQIP, planning

Chinese privet and Chinaberry
on site also



Trifoliolate orange (*Poncirus trifoliata*)



Thorny olive (*Elaeagnus pungens*)

2019/03/06



2019/03/06

Other species found on private lands in SC, control efforts included in Farm Bill Program projects

Brush Management (314) or Herbaceous Weed Treatment (315)



Chinaberry



Golden Bamboo, Chinese Wisteria



2018/04/06



Alamo cultivar, Switchgrass

Other species found on private lands in SC, control efforts included in Farm Bill Program projects

Conservation practices planned: Herbaceous Weed Treatment, Wetland Restoration, Aquatic Organism Passage (EQIP)

Phragmites australis –
coastal private lands

Private land in Charleston County



Other species found on private lands in SC, control efforts included in Farm Bill Program projects

“Lark” selection large-flowered partridge pea



Crotalaria spectabilis



Other species found on private lands in SC, control efforts included in Farm Bill Program projects



Spartanburg



Sumter



Marlboro

Callery pear
Pyrus calleryana



Edgefield

2018/09/28

2014/03/14

Other species found on private lands in SC, control efforts included in Farm Bill Program projects



2013/09/17



2013/09/17



2013/09/17

Lygodium japonicum



2013/09/17

Other species found on private lands in SC, control efforts included in Farm Bill Program projects

Non-native plants not allowed under most conservation practices

A few non-native grasses remain as recommendations for pasture/hay and for critical area plantings.

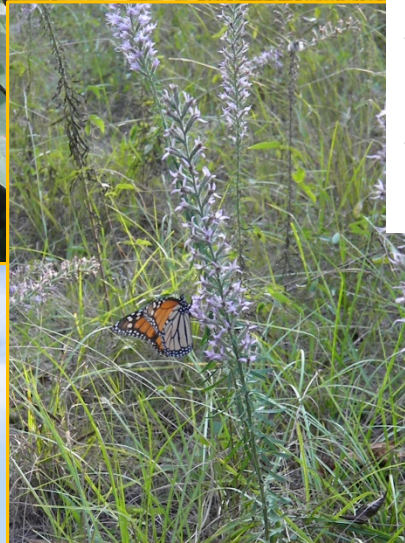


Sawtooth oak spreading

Sawtooth oak planted on WRP Easement, they had to remove it...



Planting native flora often included in Conservation Plan: woody trees and shrubs, herbaceous grasses and wildflowers



Practices:
Conservation Cover (327)
Hedgerow (422)
Tree and Shrub
Establishment (612)



NRCS staff much more aware of exotic invasive pest plant problems, identification, and how to address

Invasive exotic pest plant problems considered at many stages of the planning process

United States Department of Agriculture



2011/04/19

2011/10/17

INVASIVE SPECIES
NECH 610.30
Evaluation Procedure Guide Sheet

Check all that apply to this Guide Sheet review: Alternative 1 Alternative 2 Other

Client/Plan Information:
CPA- 52

Degraded Plant Condition - Excessive Plant Pest Pressure - Forest	
	Plant productivity is not limited from pest pressure.
	Plant productivity is limited from pest pressure. Pest damage to plants are BELOW economic or environmental thresholds AND client identified criteria and plant pests, including noxious and invasive species are managed to meet client objectives.
	Plant productivity is limited from pest pressure. Pest damage to plants are ABOVE economic or environmental thresholds OR client identified criteria and plant pests, including noxious and invasive species ARE NOT managed to meet client objectives.

NOTE: Executive Order 13112 states that "a Federal agency shall not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction and spread of invasive species in the U.S. or elsewhere." Remember that invasive species can include plants, fish, animals, insects, etc.

STEP 1.
 Is the action(s) in an area where invasive species are known to occur or where risk of an invasion exists?
NOTE: Executive Order 13112 (1999) directs Federal agencies to "prevent the introduction of invasive species, provide for their control, and to minimize the economic, ecological, and human health impacts that invasive species cause."

- No If "No," document on the NRCS-CPA-52, or notes section below, the finding, rationale, and information sources used and proceed with planning.
- Yes If "Yes," go to Step 2.

STEP 2.
 Conduct an inventory of the invasive species and identify areas at risk for future invasions (Title 190, General Manual, Part 414, Subpart D, Section 414.30). Delineate these areas on the conservation map and document management considerations in the plan or assistance notes. Have all appropriate tools, techniques, management strategies, and risks for invasive species prevention, control, and management been considered in the planning process?

- No If "No," you must consider and include all appropriate factors relating to the existing and potential invasive species for the planning area and **repeat Step 2.**
- Yes If "Yes," describe strategies, techniques, and reasons on NRCS-CPA-52 and **go to Step 3.**

STEP 3.
 Is the action(s) consistent with the Executive Order 13112, the national invasive species management plan, and any applicable State or local invasive species management plan?

- No If "No," **modify the action and repeat Step 3.** If the client is unwilling to modify the proposed action, NRCS must discontinue assistance. **Document the circumstances the NRCS-CPA-52, or notes section below, and in the case file.**
- Yes If "Yes," **document on the NRCS-CPA-52, or notes section below, the finding, rationale, and information sources used and proceed with planning.**

Application Ranking Summary
FY18 Longleaf Pine Initiative

State Issues Addressed		Issue Questions	Response
		1. Does this application pertain to land that is contiguous to a protected area such as a National Forest, Military Base, National Wildlife Refuge, State forest, Heritage Reserve, or land protected by a perpetual conservation easement (e.g. WRP, FRPP, GRP, TNC)?	No
		2. Is the field (acreage) where practice installation will take place located within a state designated priority county (or counties). Aiken, Barnwell, Bamberg, Hampton, Allendale, Berkeley, Williamsburg, Georgetown, Lee, Kershaw, Chesterfield, Beaufort, Darlington.	Yes
		3. Will offered area connect two or more blocks of longleaf pine? (Do Not Answer Question 4 if answering "YES" to this question)	No
		4. Are the offered acres adjacent to an existing longleaf pine stand?	No
		5. Will this application contain at least one (1) practice that directly benefits threatened and endangered or at-risk wildlife species (plant or animal) as identified by NRCS, South Carolina DNR, the US Fish and Wildlife Service or NOAA Fisheries?	Yes
		6. Will this application contain practices that address the control or eradication of invasive plant species as identified on the list of "Major Invasive Species of Concern in South Carolina" found on the EFOTG, Section 1, General Resources, Section C, Reference List? (314/315)	Yes
		7. Will this application result in a basal area of less than 60 square feet per acre on all of the forested acres in the proposed contract within the life of the contract? (Answer YES if land is already thinned to less than 60).	No
		8. Does the SC Wildlife Habitat Index for this application reflect a habitat net effect benefit of greater than .50? (Planned index value – Existing index value)	No
		9. Are the offered acres currently enrolled in the U.S. Fish and Wildlife Service's Safe Harbor Program?	No
		10. Has a federally listed T/E species or candidate species been identified on land immediately adjacent to the offered land in this application? (Use T&E GIS Layer)	No

South Carolina NRCS Wildlife Habitat Index Guide

Presence of exotic invasive vegetation observed over entire planning area:			
Vegetation consists of > 71% invasive species	0		
Vegetation consists of 41 - 70% invasive species	5		
Vegetation consists of 11 - 40% invasive species	10		
Vegetation consists of 0 - 10% invasive species	15		

Guidance for planners

Major Invasive Species of Concern in South Carolina

This list contains some of the most commonly encountered problematic species for NRCS projects. However, any species listed on the SC Exotic Pest Plant Council Terrestrial Exotic Invasive Species List (EFOTG, Sect 1, Invasive Species or <https://www.se-epcc.org/southcarolina/invasivePlants.cfm>) can be included as part of an NRCS project.

Terrestrial Woody Exotic Plants (use Brush Management (314) and appropriate components (chemical and/or mechanical, infestation level):

Plant (Common Name)	Scientific name	Form	Potential # of sequential annual treatments needed	Timing/Season
Tree of Heaven	<i>Ailanthus altissima</i>	tree	2	July-Oct.
Silk tree, Mimosa	<i>Albizia julibrissin</i>	tree	2	July-Oct.
Chinese Parasol Tree	<i>Firmiana simplex</i>	tree	2	growing
Chinaberry Tree	<i>Melia azedarach</i>	tree	2	July-Oct.
Princess Tree/Royal Paulownia	<i>Paulownia tomentosa</i>	tree	1	July-Oct.
Chinese Tallow Tree, Popcorn Tree	<i>Sapium</i> or <i>Triadica sebiferum</i>	tree	3	July-Oct.
Callery Pear/Bradford Pear	<i>Pyrus calleryana</i>	tree	2	June-Sept.
Autumn Olive, Russian Olive, Thorny Olive	<i>Elaeagnus umbellata</i> , <i>E. angustifolia</i> , <i>E. pungens</i>	shrub	2	any except Mar May
Shrub/Shrubby Lespedeza	<i>Lespedeza bicolor</i>	shrub	2	July-Sept.
Chinese/Japanese/Glossy Privet	<i>Ligustrum sinense</i> , <i>L. japonicum</i> , <i>L. lucidum</i>	shrub	3	dormant
Nandina, Sacred Bamboo	<i>Nandina domestica</i>	shrub	2	Aug.-Oct.
Japanese Knotweed	<i>Polygonum cuspidatum</i>	shrub	3	fall
Trifoliolate Orange	<i>Poncirus cuspidatum</i>	shrub	2	growing
Multiflora Rose, Cherokee Rose, Macartney rose	<i>Rosa multiflora</i> , <i>R. laevigata</i> , <i>R. bracteata</i>	shrub	2	growing, fall
Beach Vitex	<i>Vitex rotundifolia</i>	shrub	3	growing
Oriental Bittersweet	<i>Celastrus orbiculatus</i>	vine	3	July-Oct.
English Ivy	<i>Hedera helix</i>	vine	2	July-Oct.
Japanese Honeysuckle	<i>Lonicera japonica</i>	vine	2	June-Oct.
Japanese Climbing Fern	<i>Lygodium japonicum</i>	vine	2	July-Sept.
Kudzu	<i>Pueraria montana</i>	vine	4	June-Oct.
Periwinkle (Bigleaf and Common)	<i>Vinca major</i> , <i>Vinca minor</i>	vine	2	July-Oct.
Wisteria-Chinese Wisteria/Japanese Wisteria	<i>Wisteria sinensis</i> , <i>W. floribunda</i>	vine	4	July-Oct.

Terrestrial Herbaceous Exotic Plants (use Herbaceous Weed Treatment (315) and appropriate components (mechanical and/or chemical, method):

Common name	Scientific name	Form	Potential Number of treatments needed	Season/timing
Giant Reed	<i>Arundo donax</i>	grass	2	Sept.-Oct.
Japanese Stilt Grass, Basketgrass	<i>Microstegium vimineum</i>	grass	2-3, multi-year	summer
Chinese Silvergrass	<i>Miscanthus sinensis</i>	grass	2-3	Sept.-Oct.
Common reed***	<i>Phragmites australis</i>	grass	3, multi-year	summer
Golden Bamboo	<i>Phyllostachys aurea</i>	grass	3, multi-year	Sept.-Oct.
Johnson grass	<i>Sorghum halepense</i>	grass	3	summer
Vasey's grass, Dallis grass	<i>Paspalum urvillei</i> , <i>P. dilatatum</i>	grass	2	summer
'Alamo' Cultivar of Switchgrass	'Alamo' Cultivar (TX) <i>Panicum virgatum</i>	grass	2-3	summer
Weeping Lovegrass	<i>Eragrostis curvula</i>	grass	2	early summer
Sericea/Chinese Lespedeza	<i>Lespedeza cuneata</i>	flowering herb	1-2	July-Sept.
Musk Thistle, Nodding Thistle, Plumeless Thistle	<i>Carduus nutans</i>	flowering herb	1	spring
Bull Thistle	<i>Cirsium vulgare</i>	flowering herb	1	spring
Showy Rattlebox	<i>Crotalaria spectabilis</i>	flowering herb	2	spring
Fig Buttercup	<i>Ficaria verna</i>	flowering herb	2-3	Late winter
'Lark' Selection of Large-flowered Partridge Pea	'Lark' Selection (AR) <i>Chamaecrista fasciculata</i>	flowering herb	2-3	summer

Terrestrial species commonly troublesome for habitat conversion (use Herbaceous Weed Treatment (315) and appropriate components (mechanical and/or chemical, method):

Cultivated species that restrict wildlife habitat and limit site biodiversity by developing dense persistent monocultures stands have the potential to present problems when converting land use for the of benefit wildlife species or natural community restoration.

When needed to convert pasture and cropland to wildlife habitat or pollinator habitat (Native grasses and forbs), the following cultivated species may require chemical treatment control:

Species	Potential number of treatments	Timing/Season
Bermuda grass (<i>Cynodon spp.</i>)	3	2 during growing season, 1 growing season before planting natives in fall or next spring
Bahia grass (<i>Paspalum notatum</i>)	3	2 prior to planting year (during summer growing season), 1 pre-emergent treatment in spring before planting natives
Crab grass (<i>Digitaria spp.</i>)	3	
Johnson grass (<i>Sorghum halepense</i>)	3	