



United States Department of Agriculture



NRCS Programs to Promote Pollinator Habitat – Nancy Ferlow

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NRCS Services and Programs

Who we are:

The Natural Resources Conservation Service (NRCS) is the U.S. Department of Agriculture's principal agency for providing conservation "planning assistance" in "working lands" such as farms and private forest. This service is free of charge.

Our Job:

- NRCS delivers conservation technical and financial assistance to groups or individuals interested in conserving our natural resources and sustaining agricultural production.



NRCS Services and Programs

Our Origins:

- USDA Soil Scientist Hugh Hammond Bennett Realized that Soil Erosion was a National Menace
- Soil Conservation Act Of 1935 Created The Soil Conservation Service
- 1994 USDA Reorganization Changed the Agency's Name



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Why are we here?



With decline of Monarchs at 90 percent, and many bee species declining rapidly, we are in a crisis.

Pollinators are critical to our ecosystems and crops.



What Can We Do?



- **Increase habitat area**
- **Provide food sources**
- **Provide safe nesting sites**
- **Protect the pollinators from harmful chemicals.**



Practices to help Pollinators



NRCS Conservation Practice and Scenarios to Benefit the Species	Comments
Conservation Cover (327)	A standard for establishing permanent herbaceous wildflower plantings for pollinators
Tree/Shrub Establishment (612)	Selected trees and shrub species are long-term pollen and nectar resources that can target bloom gaps (e.g. early spring)
Early Successional Habitat Development/Management (647)	To maintain through management existing habitat, or to create flower-rich forest openings
Hedgerow Planting (422)	Long-lived linear plantings of woody shrubs that can include herbaceous perennial flowers.
Field Border (386)	Can be used to establish flowering pollen and nectar rich plants on field edges.
Wetland Restoration (657)	If enhancement increases abundance and diversity of flowering plants, and transitions area into a semi-permanent undisturbed habitat.
Riparian Forest Buffer (391)	Can be used to establish flowering pollen and nectar rich plants along riparian areas.
Wildlife Habitat Planting (420)	Practice under development. May become new standard for pollinator habitat.



More Practices to help Pollinators

NRCS Conservation Practice and Scenarios to Benefit the Species	Comments
Pollinator Habitat Enhancement Plan (146)	Provides participants in-depth assessment of site and tenable enhancement strategies
Integrated Pest Management Plan (114)	Provides measures to avoid and minimize pesticide exposure to pollinators.
Filter Strip (393)	A water quality practice to mitigate pesticides by protecting pollinator habitat (planted, existing, or weedy edges) downslope of areas treated with pesticides, fertilizer, etc.
Integrated Pest Management (595)	Extremely important to prevent pesticide exposure to pollinators. Should be used in conjunction with habitat creation on sprayed farmland.
Windbreak/Shelterbelt Establishment (380)	To benefit pollinators, this practice should be used to prevent pesticide drift into pollinator habitat.
Conservation Crop Rotation (328)	This short-term practice can be an effective part of farmscape pollinator habitat management.



And More...



NRCS Conservation Practice and Scenarios to Benefit the Species	Comments
Contour Buffer Strips (332)	Typically used on tilled, annual cropping systems to control erosion and runoff. Plants may be pollen and nectar rich and address pollinator habitat as a secondary resource concern
Cover Crop (340)	Used in annual cropping systems to improve soil condition. If allowed to flower, may be an effective part of farmscape pollinator habitat management
Residue and Tillage Management (329)	Decreases soil disturbance, increasing available nesting and overwintering habitat for bumble bees.
Wetland Enhancement (659)	If restoration increases abundance and diversity of flowering plants, and transitions area into a semi-permanent undisturbed habitat, food and nesting habitat for bumble bees is increased.
Conservation Plan Supporting Organic Transition (138)	Transition from conventional to organic operation reduces incidence of lethal and sub-lethal pesticide exposure to bumble bees. May increase tillage, thereby negatively affecting nesting and overwintering habitat.
Brush Management (314)	Can reduce invasive or undesirable vegetation, allowing them to be replaced with plants of greater value to pollinators.



And Finally...



NRCS Conservation Practice and Scenarios to Benefit the Species	Comments
Herbicide Weed Treatment (315)	Can reduce invasive or undesirable vegetation, allowing them to be replaced with plants of greater value to pollinators.
Stream Habitat Improvement and Management (395)	Revegetation/reforestation of riparian areas with flowering plants.
Upland Wildlife Habitat Management (645)	Used to release flowering trees increasing floral resources
Forest Stand Improvement (666)	When increasing floral resources for pollinators





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How Do I Get Help: Working With NRCS



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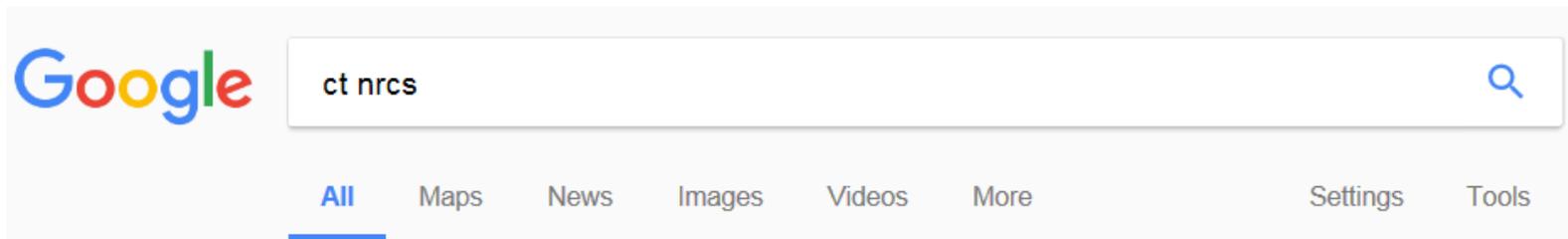
Step 1. Request Assistance



1. Visit or contact your local NRCS office .
2. Establish Records for yourself, business, and land. (FSA)
3. Schedule an appointment for a site visit. (NRCS)



Step 1a. Do Your Homework



A screenshot of a Google search interface. The search bar contains the text "ct nrcs" and a magnifying glass icon. Below the search bar are navigation tabs: "All" (underlined), "Maps", "News", "Images", "Videos", "More", "Settings", and "Tools".

About 219,000 results (0.46 seconds)

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<https://www.nrcs.usda.gov/wps/portal/nrcs/site/ct/home/> ▼

Highlights. **CT** Department of Energy and Environmental Protection Announces Partnership with **NRCS** · System for Award Management (SAM) · Earth Team Volunteer Program · **NRCS** Publications ...



Step 2. Farm Visit/Assessment

This is your farm, if I am working on your land, I need you with me.



The designated NRCS Conservationist will schedule a visit with the applicant to conduct an Assessment of Client Objectives and Resource Concerns. This assessment will be the foundation for the development of a Conservation Plan.



Conservation Plan



A conservation plan is the **RECORD OF DECISIONS AND SUPPORTING INFORMATION** for treatment of a unit of land meeting NRCS planning criteria for one or more identified **NATURAL RESOURCE CONCERNS** as a result of the **NRCS PLANNING PROCESS**.

Record Of Decisions

Often referred to as the:

Conservation Plan Document

Includes:

Farmer/Partner Names

Location Information

Objectives Statement

Practice Narratives

Schedule for Practices

Conservation Plan

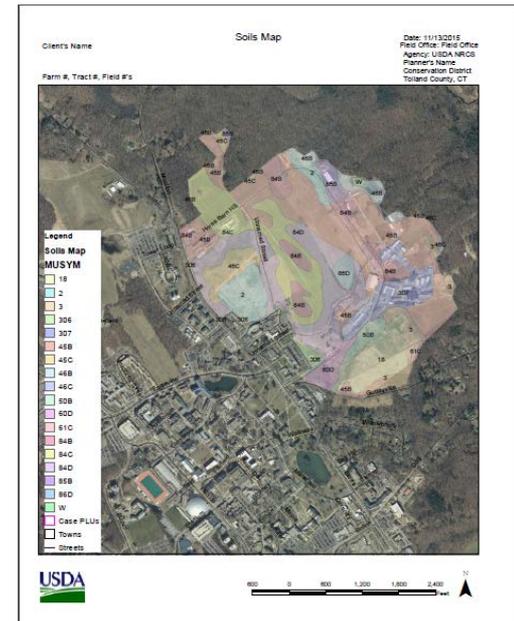
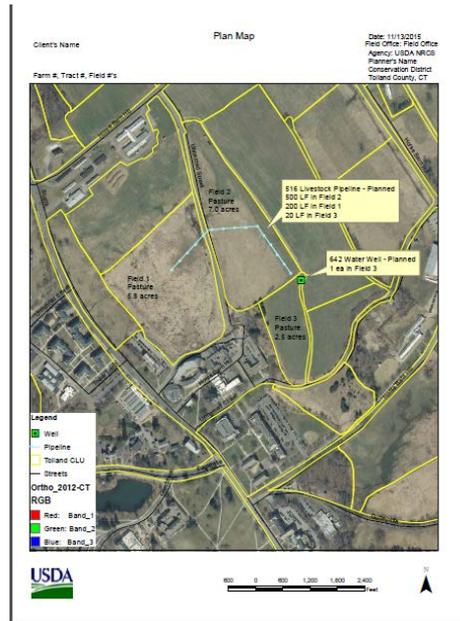
Joe Farmer
12 Jones Road
Somewhere, VT 05733-9873

Sue Farmer
12 Jones Road
Somewhere, VT 05733-9873

Objective(s):
The Farmers primary objective is to improve their ability to manage the pasture, hayland, and agricultural wastes on the farm. While doing so, they plan to provide adequate protection of the soil, water and wildlife resources on the farm. Another important objective is to improve cash flow, and improve the facilities.
Their son (John) hopes to purchase the farm within 5 years.

Comprehensive Nutrient Management Plan Development (100)
PL-566 2004 Contract - Lower Lake Champlain Watershed
Practice LRPespan equals 1 year.
A Comprehensive Nutrient Management Plan (CNMP) will be written by a certified CNMP planner according to the NRCS 5950 Nutrient Management standard. The plan will be reviewed annually and modified as needed whenever there is a significant change in the farming operation. 80 head of dairy cows, 40 large heifers, and 40 young stock will be milked and housed in the barn and barnyard. To handle the viscous manure from the milkers and the milkhouse waste will be pumped to the existing slurrytanks and will provide one years worth of storage for this waste. Roof water will be collected and diverted from the barnyard with roof gutters and a stone underdrain. Broken concrete pad areas with poor subgrade will be repaired, the entire outdoor barnyard area will be paved with 3" of asphalt including the passage thru the barn heading east. A 2 ft curb will be installed along the west and north side of the barnyard to separate cattle from the stone roof drain. Asphalt will be placed over the curb footing. A roof gutter will be installed on the east side barn roof, water will drain north and south and flow thru the stone underdrain pipe to the water way east of the barn. An asphalt compost pad (155 ft x 65 ft) will be installed east of the barn to accommodate waste from the barnyard and heifers housed in the freestall and pack areas. A runoff ramp will head east from the barn, south of the compost pad to a clay lined manure storage pond designed to hold 365 days of runoff from the barnyard and compost pad areas. The pasture system (131 acres) will provide adequate area to allow for up to a 30 day regrowth period for all the livestock during the grazing season. Suitable field stacking sites will be utilized for field stacking of manure and the turning of compost - these sites will be used during frozen ground and dry periods, the compost pad will be used when ground conditions do not permit travel in the fields. The pasture system will include perimeter fencing, laneway improvements where needed, waterline and tubs, and implementation of a prescribed grazing system. Hayland management and nutrient management will be practiced on all other fields.

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
T2001	F10	1.0 no.	8	2005		
	G1a	1.0 no.				



Why would I want a Conservation Plan?

A conservation plan ...

- May help you ensure the land's natural resources are managed to maintain sustainability and productivity.
- May help you qualify for financial assistance and easement programs provided by NRCS or other federal, state, or local programs.
- **May help you gain or maintain eligibility for USDA farm program benefits. (HELC and WC Compliance)**
- May help you comply with environmental regulations.
- May help you adapt to changing farm or ranch operational goals.
- May help you adapt to climate change.
- May help you meet the requirements for specialized certifications such as organic, free-range, or grass fed.



HELC and WC Compliance

- Aim to reduce soil loss on erosion-prone lands (HEL) and to protect wetlands.
- Apply to all land that is considered highly erodible or a wetland (federal definition)
- Impact farmers or owners of farmland participating in USDA programs



HELC and WC Compliance

- **AD 1026 self-certification**
- **Cropland Land Determined as HEL (when used for commodity crop production) must be farmed under an approved conservation system for erosion control.**
- **Conversion of Wetland areas that make possible the production of an agricultural must be mitigated**



NRCS Natural Resource Concerns

SOIL EROSION

- Sheet, Rill, & Wind Erosion
- Concentrated Flow Erosion (Classic Gully & Ephemeral Erosion)
- Excessive bank erosion from streams, shorelines, or water conveyance channels

DEGRADED PLANT CONDITION

- Undesirable Plant Productivity and Health
- Inadequate Structure and Composition
- Excessive Plant Pest Pressure
- Wildfire Hazard, Excessive Biomass Accumulation

SOIL QUALITY DEGRADATION

- Subsidence
- Compaction
- Organic Matter Depletion
- Concentration of Salts and other Chemicals

INADEQUATE HABITAT FOR FISH AND WILDLIFE

- Habitat Degradation (Food, Water, Cover/Shelter, and Habitat Continuity/Space)

EXCESS / INSUFFICIENT WATER

- Ponding, Flooding, Seasonal High Water

Table, Seeps, and Drifted Snow

- Inefficient Moisture Management
- Inefficient Use of Irrigation Water

LIVESTOCK PRODUCTION

LIMITATION

- Inadequate Feed and Forage
- Inadequate Livestock Shelter
- Inadequate Livestock Water

WATER QUALITY DEGRADATION

- Excess Nutrients in surface and ground waters
- Pesticides transported to surface and ground waters

- Excess Pathogens and Chemicals from manure, bio-solids, or compost applications in surface waters and ground waters
- Excessive Salts in surface waters and ground waters
- Petroleum, Heavy metals, and other pollutants, transported to waters
- Excessive Sediment in surface waters
- Elevated Water Temperature

AIR QUALITY IMPACTS

- Emissions of Particulate Matter (PM) and PM Precursors
- Emissions of Greenhouse Gases
- Emissions of Ozone Precursors
- Objectionable Odors

INEFFICIENT ENERGY USE

- Equipment and Facilities
- Farming/Ranching Practices and Field Operations



Wildlife

Feed, Forage, Water, & Shelter



Step 3. Prioritize Conservation Objectives



The designated conservationist works with the land owner to identify and prioritize conservation objectives.



Step 4. Develop Alternatives



The designated conservationist works with the land owner to identify conservation practices that would address the prioritized resource concern to meet the client's conservation objectives.



Step 5 Evaluate Alternatives



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Considerations



ARE WE DONE PLANNING?

- Do we need additional Technical Input/Consultation (engineer, biologist, agronomist) ?
- Are there regulatory consultations required (NEPA, State & Local Regulations)?

IS IT FEASIBLE?

- Do the benefits justify the cost?
- Are the resource available to implement recommendations (Equipment, Finances)?
- Is the land owned or leased, what are the terms of the lease?
- Are there easement restrictions on the land?
- Are there site limitation (Soils, Geology, Utilities)?

IS IT SUSTAINABLE?

- What is the management level required?
- What are the regular inputs to the system (time, labor, fuel, bedding)?
- Are there specialized skills or knowledge needed to maintain the system?

Scale

- Planning Area: Field, Tract, Farm
- Time: Short Term (months), Long Term (years)



Step 6. Make Decisions



- **Client selects set of practices that will make the planned system.**
- **Client and planner schedule selected practices for implementation.**
- **Client and planner discuss and schedule other consultation/technical assistance needed (engineering designs)**
- **Decisions are documented in the Conservation Plan.**





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Financial Assistance



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EQIP

The Environmental Quality Incentives Program (EQIP) provides financial and technical assistance to agricultural producers in order to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation or improved or created wildlife habitat.



EQIP Eligibility - Producer

- **Be an Agricultural Producer**
- **Have Control of the land for the Term of the Contract Period**
- **Be in compliance with the provisions for protecting the interests of tenants and sharecroppers**
- **Be in compliance with the highly erodible land and wetland conservation compliance provisions**
- **Be within appropriate payment limitation requirements**
- **Be in compliance with adjusted gross income (AGI) requirements**
- **Entities - Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS – <http://fedgov.dnb.com/webform/>) number and register the number in the System for Award Management (www.SAM.gov) database**



Ineligible Entities



- (1) Federal, State, county, and local governments, and political subdivisions of State government**
- (2) Agricultural support businesses, such as agricultural supply buyers and sellers**
- (3) Any producer who is producing marijuana or engaged in controlled substance activities on any part of their agricultural operation in violation of Federal law.**



Land Eligibility



- 1. Be agricultural land, nonindustrial private forest land, Tribal land, or other land on which agricultural products, livestock, or forest-related products are produced.**
- 2. Be:**
 - (i) Privately owned land
 - (ii) Eligible publicly owned land.
 - (iii) Indian land
- 3. The participant owns or has control of the land for the term of the contract.**
- 4. Be land on which NRCS determines that planned practices will address identified natural resource concern.**





CONSERVATION STEWARDSHIP PROGRAM



The Conservation Stewardship Program (CSP) helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resources concerns. Participants earn CSP payments for conservation performance—the higher the performance, the higher the payment.

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How does CSP work?

Most of the agriculture producers that are approved to participate in CSP have already been implementing [conservation practices](#) on their land. CSP steps in and offers enhancements for those practices.



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CSP Eligibility - Applicant

- Be the operator for all land offered for enrollment in the program.
- Document effective control of the land
- Be in compliance with the provisions for protecting the interest of tenants and sharecroppers.
- Be in compliance with the highly erodible land and wetland conservation provisions.
- Be in compliance with payment eligibility provisions, including the adjusted gross income (AGI) provisions.
- Be within appropriate payment limitation requirements.
- Entity applicants using an Employee Identification Number (EIN) must obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number and register the number in the System for Award Management (SAM) database



CSP Eligibility - Land



A contract application must include all eligible land associated with an applicant's agricultural or nonindustrial private forestland (NIPF) operation, such as:

- Private agricultural land (cropland, pastureland and rangeland)
- Agricultural Indian lands (cropland, pastureland and rangeland)
- Nonindustrial private forest land (NIPF)
- Associated agricultural land (AAL)
- Farmstead

Ineligible Land:

- Land Currently enrolled in CRP, WRE, WRP
- Land enrolled in the Conservation Security Program (CSP 2002), 7 CFR Part 1469, or an active CSP 2008 or 2014 Contract.
- Land used for crop production after February 7, 2014 (the date of enactment of the 2014 Act) that had not been planted, considered to be planted, or devoted to crop production for at least 4 of the 6 years





Enhancements

Through CSP, participants have the opportunity to give those practices a boost with conservation activities called “enhancements.”



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Enhancement Examples

Cropland (Annual & Mixed)

Resource Concern:
Erosion

Enhancement Activity:
Convert cropland to grass-based agriculture to reduce water erosion (E512101Z1)

Forest

Resource Concern:
Degraded Plant Condition

Enhancement Activity:
Reduce forest stand density to improve a degraded plant community. (E666132Z2)

Range & Pasture

Resource Concern:
Fish and Wildlife - Inadequate Habitat

Enhancement Activity:
Grazing management for improving quantity and quality of cover and shelter for wildlife (E528137Z1)

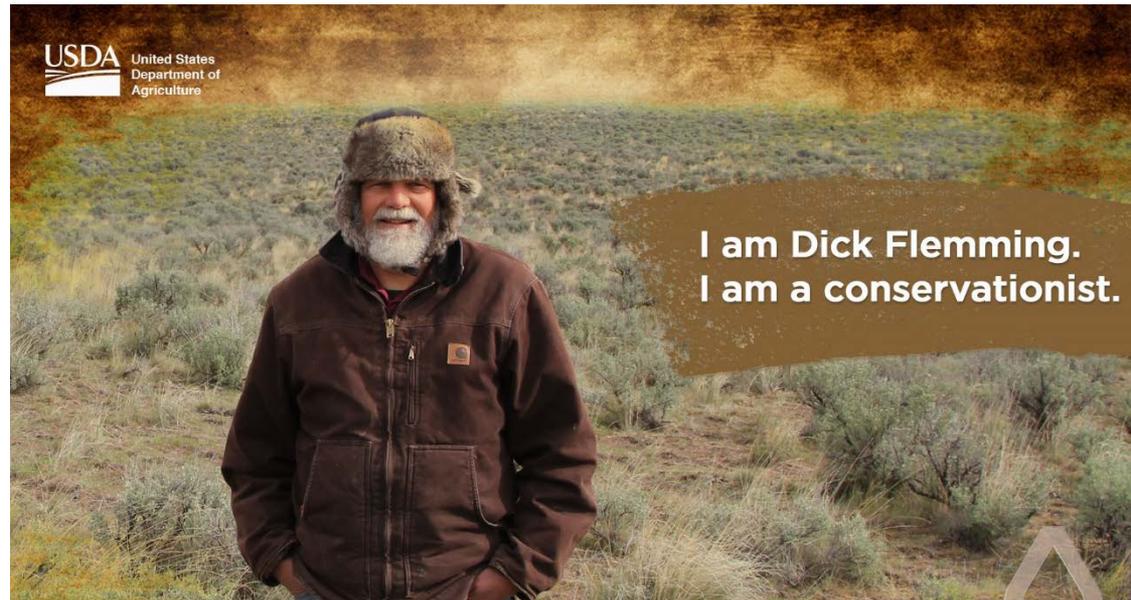




CSP Contracts

Contract are for 5 years and the payments are based on two components:

- Payments to ***maintain the existing conservation*** based on the operation type and number of resource concerns that are meeting the stewardship level at the time of application
- payments to ***implement additional conservation*** activities.



NRCS Financial Assistance Programs

EQIP & CSP

- **Contracts NOT Grants.**
- **Payments are made upon successful implementation of contracted items.**
- **Payments are considered taxable income.**

Common Violations:

- **Commencement of implementation prior to Contract Obligation.**
- **Failure to adhere to NRCS plan, designs, standards, specifications.**
- **Failure to implement contracted items as scheduled.**
- **Eligibility Problems (AGI, HELC and WC)**
- **Loss of control of land.**



Questions



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