

United States Department of Agriculture

Maryland NRCS Soil Health Resources







United States Department of Agriculture

Maryland

NRCS Technical & Financial Assistance







Today's MD NRCS Representatives:

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- Types of Technical Assistance focus on
 Soil Health
- Outline the typical steps to access NRCS Assistance



 Brief intro to basic financial assistance programs offering soil health related practices

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Sustaining Agricultural Soil Productivity 🕗

 Historically – Hugh Hammond Bennett focused his whole life's work on learning and disseminating information on soil degradation.

• Now we move forward from reducing erosion...

To building Soil Health and resilience



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Resources

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Soil Health Assessment

Ongoing studies in the field - assisting in field soil health assessment

- Grant funded Projects
- University projects
- Sampling strategy development

Assessment Tools

- -Soil Health Card simple, indicator-based scoring, qualitative
- –Soil Health bucket kit more parameters, semiquantitative to quantitative

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Technical Assistance

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Training for field staff

- In the (virtual) classroom, On the Job Training, in the field
- Integrating soil health principles explicitly into many facets of what we do

Pamphlets & Outreach

- Fact sheets for producers/land managers
- Information for educators
- Demonstrations
- https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/soils/health/
- Videos:

https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/soils/health/?cid=stelprdb1048858ral

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Soils Information

Web Soil Survey -

- -soil health related
- interpretations
- -Land Capability planning

to promote appropriate land use, maximizing soil's function for it's best-suited role in the environment

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tou are here. Web Soil Survey Home



Conservation Planning

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Conservation Planning

Conservation Plans –

- -Landowner or farm operator goals determined
- -All resources on the farm assessed
- -Plan developed
- Work with all types of ag production systems, also forestry & wildlife







Planning for Soil Health



- Ongoing training for field staff in MD Conservation Partnership
 - addressing Soil Health principles explicitly when that is the goal of the customer
 - Modeling effects of management systems on soil health the Soil Conditioning Index (SCI) in RUSLE2
 - Detailed systems input
 - Trends in soil organic matter show in SCI OM subfactor





Cover Crop

Rotation

Conservation Crop

Pasture & Hay Planting

Conservation Crop

Cover Crop

Rotation

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Soil Health Principles

No Till Cover Cropt Natural Resources Conservation Service

Maximize Biodiversity

oninuous Living Roots



FOUR SOIL

PRINCIPLES

HEALTH

Minimize Disturbance

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NoTill

Financial Assistance

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Financial Assistance



Landowner has a Conservation Plan - we can help them access Conservation Programs.

Financial Assistance addresses Resource Concerns

Practices and scenarios can be selected to address Soil Quality Limitations

Programs require participant to "take conservation to a higher level".

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Tiny Example -

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340	Cover Crop	Cover Crop - 1 acre or less	Ac	\$232.16
340	Cover Crop	HU-Cover Crop - 1 acre or less	Ac	\$278.60
340	Cover Crop	Cover Crop - Basic (Organic and Non-organic)	Ac	\$51.86
340	Cover Crop	HU-Cover Crop - Basic (Organic and Non-organic)	Ac	\$62.24
340	Cover Crop	Cover Crop - Multiple Species (Organic and Non-organic)	Ac	\$63.39
340	Cover Crop	HU-Cover Crop - Multiple Species (Organic and Non-organic)	Ac	\$76.07





Program Eligibility



- Staff will assist in determining eligibility:
 - -The Producer
 - -The Land
 - -The Conservation Practices
- Competitive Programs
 - -Applications are ranked
 - -Numerous fund pools
 - -Application deadlines for annual funding cycle





Financial Assistance Programs 👌 👌 👌 🎸

Contracts

- Practices meet standard designs and details provided
- Participant arranges to install or construct or plant or DIY
- Participant is reimbursed after the practice(s) installed & certified





And now we dive into some alphabet soup:

- <u>EQIP</u> Environmental Quality Incentives Program
- <u>RCPP</u> Regional Conservation Partnership Program
- <u>CSP</u> (or CStP or CStwP) Conservation Stewardship Program
- <u>CIG</u> Conservation Innovation Grants





EQIP



- The old workhorse of the NRCS programs
- National & State resource concern priorities
- Locally led funding priorities
- Numerous Soil Health related practices on list
- Higher payment rates for historically underserved participants
 - <u>https://www.nrcs.usda.gov/wps/portal/nrcs/detail/md/programs/f</u> inancial/eqip/?cid=nrcseprd1710026

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Conservation Stewardship Program

- Rewards producers for conservation already implemented
- Takes conservation to a higher level by doing activities or enhancements beyond the basic practice
- Annual Payments for 5 years:
 - -Resource Concerns met at time of application
 - -Land enrolled
 - -Payments for the Activities the year installed

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Resource Conservation Partnership() () () Program (RCPP)

\$300 million allocated annually Nationwide

- -State/Multi-State
- -Critical Conservation Areas (CCA)

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RCPP Critical Conservation Areas 📣 📣 🖒



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- Promotes coordination of NRCS conservation activities with Partners to:
 - -Implement projects for innovative solutions
 - -Provide measurable improvements
 - -Outcomes will improve Resource Concerns





RCPP – How it Works 🛛 🛆 🛆 🛆 🕗

OVERVIEW:

- Partners apply to NRCS for project awards
- Selected Projects have their own Funding Pool
- Partners enter into Agreement with NRCS

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RCPP – How it Works, continued 👌 🍐 🄇

ELIGIBILITY:

- Partners
 - -Must be interested in partnering with NRCS
 - -Present project focused on RCPP Goals
- Lands
 - -Projects carried out on:
 - Agricultural
 - Nonindustrial Private Forest
 - Associated Lands





RCPP – Conservation Activities 👌 👌 👌 🎸

- Land Management
- Land Improvements
- Restoration Activities
- Land Rentals
- Entity-Held Easements
- U.S.-Held Easements
- Public Works/Watersheds

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RCPP – How to Apply 🛛 🛆 🖉 🖉 🖉

- Partners applying for RCPP funds:
 - -Application round for Fiscal Year '22 TBD
 - Work with State Office RCPP Program Specialist
 Jordan Bailey Jordan.Bailey2@usda.gov-

410-913-0264

- Producers applying for Partner acquired RCPP funds:
 - -Look for NRCS & Partner announcements
 - –Work with NRCS Field Office in each County





Current MD RCPP Projects

- 8 Active Projects
 - -4 CCA
 - -3 State
 - -1 National





RCPP in **MD**



- Grazing for Water Quality & Soil Health
 - -Lead Partner: Chesapeake Bay Foundation, Inc.
 - -Funding Pool: State
 - -Lead NRCS State: Maryland
 - -Project Years: 2020-2022
 - -Primary Resource Concern: Aquatic Habitat
 - –Additional RCs: Field Sediment, Nutrient & Pathogen Loss

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RCPP in MD – example cont. 🕗 🕗 실 🎸

- Geographic Area of MD:
 - -Washington, Frederick, Carroll, Montgomery, Baltimore
- Rationale: Counties with highest concentration
 of dairy and livestock operations
- Core Practices:
 - -Pasture Planting (512)
 - -Prescribed Grazing (528)
 - -Watering Facilities (614)

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RCPP in **MD** – example cont.

- Supplemental Practices:
 - Grazing Management Plans (110)
 - Waste Storage Facilities (313)
 - Fencing (382)
 - Trails & Walkways (575)
 - Water Well (642)
 - Pumping Plant (533)



- Access Control (472)
- Cover Crops (340)
- Riparian Forest Buffers (391)
- Livestock Pipeline (516)
- Heavy Use Area Protection (561)

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CIG – Conservation Innovation Grants

• FY '21 Topics:

- –Innovative Technology or Methods/ or Water Quality or Nutrient Management
- –Environmental Health & Productivity of Grazing Land
- -Soil Health & Regenerative Agriculture Conservation Innovation Grants | NRCS Maryland

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Questions?





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