State Technical Advisory Committee (STAC) Meeting September 7, 2023

State Conservationist – Kasey Taylor

Kasey provided an introduction and review of the agenda.

- Roadmap for Success
 - Our Farmers and forest landowners are the backbone of Delaware's strong agricultural industry. The Delaware Natural Resources Conservation Service (NRCS) is committed to helping our agricultural producers achieve their conservation goals on privately-owned lands. As we continue the implementation of conservation solutions within the state, we are working to expand voluntary conservation in support of our two most critical resource concerns for the state, the People, and the Land.
 - As such, we have developed our roadmap for success, that will connect with the Delaware strategic plan and outreach strategy for FY24 and the outlying years.
 - Today, we will provide an overview of the strategies that will aid Delaware's agricultural operations be more efficient, productive, and profitable.
- Shared vision of Success
 - Delivering Conservation Solutions:
 - Efficiently
 - Accountably
 - Equitably
 - Leading from the local level
 - O What does success look like?
 - Through the delivery of science-based solutions that are prioritized at the local level, we are compiling producer feedback through the voice of our customers that will optimize our service delivery model, to expedite the issuance of conservation solutions listed in the conservation plan. Through the Act Now authority, NRCS has been authorized to immediately approve and obligate a ranked application in a designated ranking pool when an eligible application meets or exceeds a State-determined minimum ranking score. This means no longer having to wait for applications to be reviewed and preapproved in a ranking pool. In FY24 or October December, Delaware will utilize ACT NOW for conservation practices that are focused on climate resiliency and adaptation priorities for the state. We are in discussions and will have the list of practices available in October.
 - As we work to deliver proven and cutting-edge conservation solutions to improve Delaware's natural resources, Kasey is focused on enhancing the knowledge and skills for our employees and conservation partners that will grow our producer's stewardship. This will include increasing the employees job approval authorities and certifications that will build and enhance skills for new and existing employees and partners alike.
 - We are taking additional steps to meet the challenge of customizing conservation solutions for all. We are increasing our commitment to work closely with traditional and nontraditional organizations to strengthen support for historically underserved customers working toward sustainability. As an agency, we have an ongoing effort to improve our dayto-day operations for increased productivity and accessibility of our technical and financial assistance to Delaware producers. Through this, we will ensure equity with the services and

support by identifying the voice of our customers to ensure their needs have been identified and incorporated into our outreach and marketing strategy. As such, we will establish the Historically Underserved/Beginning Farmer subcommittee.

- Our Shared Priorities:
 - Ensure equity in all NRCS programs and services
 - Increase assistance for climate-smart agriculture
 - Address the unique needs of urban farmers and communities nationwide
 - Cultivate a diverse and well-trained workforce
 - Leverage innovative partnerships
 - We will ensure that all customers have a seat at the conservation table by expanding outreach to underserved populations; increasing assistance for climate-smart agriculture and forestry; expanding conservation tools and support to address the unique needs of urban agriculture and small farms in the state; cultivating a complete and diverse workforce that has the right tools, technologies, and training to uphold the scientific integrity our producers need and expect; and leveraging innovative partnerships to expand NRCS' ability to get conservation on the ground effectively and efficiently.
 - As we work to grow our producer's stewardship to expand voluntary conservation solutions that will build resiliency to address climate adaptations across their operations, we will build on the locally led conservation effort which serves as the foundation of NRCS' conservation program delivery process. Through local input gathered in the Local Working Groups, NRCS gathers recommendations on local natural resource priorities that will help direct conservation activities and programs that will coordinate with Federal, State, and local conservation programs. This will help provide a coordinated effort to address conservation concerns specific to the local area.
 - Through this, we will work with our producers to reduce nonpoint source pollutants; improve air quality; protect surface and ground water quality; improve soil health, enhance habitat for terrestrial and aquatic species.
- Our shared accomplishments:
 - Equity in Conservation Program Delivery
 - Expansion of Voluntary Agriculture
 - Conservation Program improvements
 - Growing our Producers Stewardship
 - Emphasis on science-based, measurement, monitoring, reporting, and verification
 - ➤ Delaware has and continues to lead on our commitment for delivering conservation solutions to all Delaware producers. As such, we are to date at more than 45% of the financial assistance being slated for historically underserved and beginning farmers in the state!
 - We are expanding our outreach and education focus in the state to increase learning engagements for Delaware producers to grow their stewardship. This will be done through quarterly engagements across the state and for all three counties and will include field days, trainings, and conferences. FY24 will kick off with a conference that will be partnered with NRCS, Delaware State University, and the First State African American Farmers Association, where we are growing together to inspire the next generation of black farmers.

- ➤ We are expanding the local working group meetings to a bi-annual sessions to capture real-time feedback for conservation practice adoption and delivery through the financial assistance programs (working lands programs and the conservation easements).
- Expansion of Urban Agriculture across Delaware through the Urban Farmer Training program. We partnered with New Castle Conservation District and Delaware State university, to conduct and develop curriculum for 60 hours of urban farmer training as part of the "New Ground Growers: A Pathway for Urban Farming in Delaware" program.
- We have expanded our conservation toolkit to allow for qualitative data and information to respond to the service improvements being made by our producers:
 - Sensitive area analysis was developed to address changing trends in agriculture, enhancing our existing nutrient management conservation efforts. The plan-initiated development of a new mapping tool to help conservation planners identify areas on the land that can be more sensitive to nutrient loss to improve subfield water quality planning.
 - Carbon Planning Report we developed a report to inform producers of the carbon impacts of their conservation planning.
- All of this is done in conjunction with the continuous process improvement efforts that are underway across the agency, to ensure that we can deliver results in a timely manner, expand the time for producer engagements on their farms.
- Our next steps:
 - Comparing tactics with priorities
 - Enhancing our service delivery method
 - Identifying barriers and potential solutions
 - Prioritizing employee competencies
 - Outreach and Education
 - As we look at the messaging and branding for our work, we are assessing the public benefits and highlighting the commitment of our valued producers that are providing long term solutions that feed and sustain our country.
 - Where there are complexities within our conservation programs, we are working to remediate challenges and provide an improved process.
 - Surveys, working groups and listening sessions will be expanded in FY24 and the outlying years to quickly deliver the solutions to all Delaware producers through our shovel ready mechanism that will include, the conservation plan, design to allow for producers to construct the structural practices in a timely manner, thereby getting the dollars in their hands, while getting conservation on the ground.

State Resource Conservationist – Jayme Arthurs

- Delaware Poultry Pilot/New and Expected Resource Concerns Update
 - The purpose of the pilot was to work with new poultry operations, particularly in Sussex County,
 Delaware. We wanted to capitalize on the flexibility provided in the 2018 Farm Bill to address
 new and expected resource concerns on new poultry farms and have been making headway for
 the last year and a half.
 - We've been working through this process and are slowly approaching the end. We drafted the environmental assessment (EA) and forwarded it to our East National Science and Technology

Center (ENSTC) for a final review. We took their comments and incorporated them into the final draft of the of the EA document which was shared with our stakeholders for final review and comment period. We have posted it on the Delaware NRCS website and added the link into the chat. https://www.nrcs.usda.gov/conservation-basics/conservation-by-state/delaware/poultry-environmental-assessment.

- Once we have those final comments, the EA will go to our national headquarters for final review and approval.
- We are hoping to have everything finalized by November, which still affords us the ability to implement the pilot in FY24 through EQIP.

Northeast Climate Hubs and Climate Smart Agriculture and Forestry - Bethany Muñoz Delgado and Julie Suhr Pierce

- Bethany Muñoz Delgado, National Technical Support Center
 - Bethany provided an overview and presentation of the Northeast Climate Hubs that deliver science-based, regionally specific information, tools, and practices to assist producers in achieving their goals in today's climate.
 - USDAs Northern Forests Climate Hub supports two regional hubs that include 20 states across NRCS Northeast and Central regions; 42% forested, 41% of US population, and >70% privately owned.
 - Bethany included a Climate Quick Reference Guide in her presentation for Kent County along with the link to the subsequent guide as well as added it the chat. https://webapps.jornada.nmsu.edu/climate-quick-guides/
- Julie Suhr Pierce, National Economist
 - o Julie provided an overview and presentation of the additional funding provided by the Inflation Reduction Act (IRA) for EQIP, RCPP, CSP, ACEP, and CTA.
 - IRA funds support data collection, improve models and tools, and improve greenhouse gases.
- Working together, the goal is to work with producers to understand the science, adaptation, and mitigation of climate change to support climate smart ag and forestry practices.
- A list of mitigation activities was included to show 137 current activities. This list can be found at the following link. https://www.nrcs.usda.gov/conservation-basics/natural-resource-concerns/climate/climate-smart-mitigation-activities
- This will be an on-going effort as science develops.
- Additional links are provided on the meeting presentation.

Acting Assistant State Conservationist, Programs - Elena Stewart

- FY23 Farm Bill Updates
 - FY23 obligations for applications that we deemed eligible and high priority for the financial assistance programs are EQIP, EQIP-IRA, AMA, AMA-RMA, CSP, and CSP-IRA.
 - For an application to be considered high priority,
 - The planner makes its determination by assessing previous contracts, current contracts and conduct a site visit.
 - The applicant must not have had any terminated contracts in the past three years.
 - They must be on schedule with current active contracts.

- They must be following their operation and maintenance plan for conservation practices, and they also must have livestock and or poultry on site.
- What makes an applicant eligible.
 - A large part of NRCS eligibility relies on the Farm Service Agency (FSA) to determine eligibility.
 - Producers AGI, determining 902s, Highly Erodible Land (HEL), wetland compliance, and farm and track number has been assigned to each farm.
 - There also must be a resource concern on site that the financial assistance program would be addressing.
- FY23 EQIP Funded (230) and unfunded (88) applications. Unfunded applications were high priority and eligible however we did not have enough funding.
 - Comparison of funds expended in FY22 versus FY23. In FY22, in addition to our EQIP allocation of \$6,503,000 we also received two additional allocations, regional equity funds totaling \$991,239 and Chesapeake Bay funds totaling \$100,000. In FY23, we received our traditional EQIP allocation of \$6,503,000 and an additional \$786,770 for EQIP-IRA to target climate smart agriculture and forestry practices. The totals represent the sum of all those allocations.
 - Elena provided a table that illustrates the ranking pools that breaks down the level of funding obligated by each ranking pool.
 - An application can be ranked in one or more ranking pools, but it can only be funded through one ranking pool.
 - Ranking pools that were fully funded in FY23; Conservation Activity Plans, EQIP-IRA, Forestry, Livestock, On-Farm Energy, Organic, Poultry Headquarters (Kent/New Castle), Poultry Headquarters (Sussex), Socially Disadvantaged Farmer, Urban Agriculture, and Wildlife.
 - The Beginning Farmer, Cropland, and EQIP-CIC ranking pools we're not fully funded. All unfunded applications represent applications that were submitted in the first batch period that were eligible and high priority.
 - Nationally mandated funding percentages are comparable to last year, the percentages do not equal 100% because some producers overlap several funding pools.
 - We are interested in partnerships to get more practices funded through EQIP. If you hear about a producer who has a need for wildlife habitat, please have them reach out to one of our field offices because we do have funding available.
- RMA and AMA funding levels, AMA allocation was \$92,000 and the AMA-RMA allocation was \$95,105.00 in Delaware. We focused these funds on smaller acreages so we can implement high tunnels and associated practices.
- ACTNOW is our new program that allows NRCS to immediately approve and obligate arranged applications in a designated ranking pool when an application meets or exceeds an established ranking threshold.
 - The ranking pool practices will be determined once we have all our final practices for FY24.
 - If there are recommendations for FY25 ranking pools, please elevate that up through your local work groups.
- Conservation Stewardship Program (CSP) expenditures in FY23
 - There were two CSP-IRA contracts totaling \$173,196.00 which funded 38,000 acres in Kent County.

- CSP Classic, there were five contracts totaling \$185,939 for over 1800 acres.
- There was one project in Kent County, two in New Castle County, and one in Sussex.
- Agricultural Conservation Easement Program (ACEP) and the Wetland Reserve Easement Program (WRE).
 - The Agricultural Land Easement Program (ALE) is an entity held easement program where NRCS provides a 50% match to eligible entities.
 - If you are interested in learning more about the ALE program, please reach out to Elena.
 - The Wetland Reserve Easement Program (WRE) is a federally held easement program where, in addition to purchasing the development rights on the property, we also pay to design and restore the hydrology on that property.
 - Currently, the only certified entity we work with is the Delaware Department of Agriculture (DDA) but, other conservation organizations that hold easements are also eligible for this program.
 - There's a 50% match, so we'll pay 50% of the appraised value of the easement for the entity to purchase the easement and hold the easement on that property.
 - An easement represents the development right and other property interests, but the property owner still retains the title and ownership of that land. WRE is the federally held easement program that we manage.
 - Before the WRE is put on the property, the property owner owns the title/right to sell or transfer the property.
 - Can exclude others from the property.
 - > Has the right to hunt and fish and sell the timber.
 - Can subdivide and build homes and other structures.
 - Can crop the fields.
 - After the easement you still own the property, hold the title, and have the right to sell or transfer the property.
 - ➤ Has the right of access and exclude others from the property, and hunt and fish but can no longer crop the fields or sell the timber.
 - WRE restores, protects, and enhances the wetland values and functions of a property.
 - Creates habitat for migratory birds and other wetland dependent wildlife.
 - Protect and improve the water quality.
 - Allows for the attenuation of floodwater, recharge of groundwater.
 - Protect and enhance the open space and aesthetic quality of the property.
 - Assists carbon sequestration.
 - Protects the native flora and fauna.
 - There are 42 WRP projects in Delaware, six WRE projects and two active contracts.
 - ➤ WRE eligibility must be privately held land previously farmed or converted and degraded. There also be able to restore the property.
 - > There also has to be a provision for adjacent land eligibility.
 - There are two different types of WRE enrollments, permanent and 30-year easements.
 - > Permanent Easement
 - ❖ The federal government pay 100% of the easement value as well as 100% of the restoration costs.

- The landowner retains the ownership and can restrict public access and can still hunt and fish.
- There is limited funding to help with stewardship costs.
- 30-Year Easement
 - Held by the federal government.
 - Landowner retains ownership rights.
 - No public access is required.
 - ❖ The federal government will only 75% of restoration costs.
- Both types of easements are governed by the warranty easement deed.
 - ❖ The landowner retains a settlement on an easement.
 - ❖ To determine the value of an easement, NRCS gets the property appraised.
 - To reduce the value of the property, we have to submit a package to determine the Geographic Area Rate Cap (GARC) which goes to the STAC for review.
 - For FY23, it was determined that we could pay 95% of the appraised value not to exceed historical value or, by statute \$3000 an acre for woodland and \$5000 an acre for cropland but, there is also an opportunity to get a waiver. Last year we successfully received a waiver at the following values.

\$11,450/acre in New Castle County

\$16,866/ acre in Kent County

\$13,203/ acre in Sussex County

- Inflation Reduction Act (IRA)
 - Congress authorized the use of ACEP funds for easements or interests in land that will
 most reduce, capture, avoid, or sequester carbon dioxide, methane, or nitrous oxide
 emissions associated with land eligible for the program.
 - The priority areas currently identified are the primarily salt marsh migration areas.
 - It is projected that we'll get over \$3M starting in FY25.
- We are trying to expand the WRE program and are interested in working with entities for outreach opportunities.
 - The funds have to be expended on privately owned lands. If you're doing an outreach
 event with producers, the public, or any kind of wetland outreach, please share this
 information.
 - NRCS has money to not only pay to protect these lands for development, but also to restore the hydrology and stewardship and we don't require public access.

FY23 Local Work Groups (LWG) Reports – Chris Bohinski, Area Resource Conservationist for Field Operations

- Chris addressed questions, recommendations, and concerns from the LWG county meetings.
 - o Will there be a separate fund pool for EQIP and IRA?
 - a. Yes, we have separate fund pools. We group applications for ranking in like funding pools.
 - b. IRA is still EQIP but has a different set of funds with different policy and procedural rules, so we keep them separate but, it still goes through the EQIP eligibility and other processes and are ranked separately.
 - O Will there be a backlog due to this IRA money?

- a. Not really. We still get our full allotment for EQIP projects and then the IRA monies is an additional chunk of money to help fulfill our EQIP backlogged contracts.
- 3. What decides what funding pool applications are designated into?
 - a. Repeat of question #1, we sort things by practices. Applications can be ranked in multiple locations.
- 4. Climate smart definition?
 - a. Julie and Bethany covered earlier in their report however, a climate smart practice aims to help producers in agroforestry build soil health, sequester carbon, reduce emissions, enhance productivity, marketability, and mitigate the effects of climate change while building resilience to strengthen the operation.
 - b. We have a list of climate smart ag and forestry practices that we will use for the IRA fund pool.
- 5. Would someone who is already using climate smart practices on their property be qualified for compensation?
 - a. Situations could be evaluated on a case-by-case basis. However, we don't have any yet.
- 6. How will producers be informed about new practices?
 - a. The Carbon symposium in Harrington this past spring, we had USDA representation there discussing how we compensate people who are already doing climate smart activities.
 - b. NRCS is taking on the role to promote outreach to get climate smart practices on the land. We are open to suggestions.
 - c. We're still seeing direct distribution of material is the most effective form.
- 7. Small farm designation. Medium scale farmers are being disenfranchised in the ranking process.
 - a. NRCS does not have an official definition. We are looking at coming up with a way to consider a small operation. So that's still that's still under discussion right now.
- 8. The Wild Quail initiative last year was seeing low payment rates, is there going to be changes?
 - a. As of right now, the payment schedule has not changed for FY24. Some of that is beyond our control here in the state, we can certainly give feedback but in the end the regional rates dictate what we can pay.
- Program Improvements, Cover Crop Program
 - Last year we had a policy that we couldn't fund applications that received federal funding for cover crop. We have updated this policy for FY24.
 - If an applicant comes in for FY24 and previously had practice standard code 340 for cover crop and received funding from us, we will allow those applicants to come back in with some caveats.
 - They need to be doing no till or reduced till on the land.
 - Planners will do a soil health test on a tract-by-tract basis based on what was done before
 justifying a specific resource concern to meet a higher level to address that concern.
 - Nutrients to Service Groundwater
 - We're increasing legumes, reducing grasses in our standard mix for three or more species.
 - There will be an earlier planting date, September 30th and a later termination date, April 15th.
 - Reducing inorganic N additions allowing a longer requirement for this specific recipe.
 - Green Chopping is also allowed.
 - Compaction

- We looked at cereal rye with brassicas, two species of brassicas required, with the same planting date requirements and termination date requirements.
- Soil Organism Habitat Loss and Degradation
 - Reducing grasses by 10% and bumping up brassicas and legumes and same planting requirements in termination requirements.
- o Organic Matter Depletion
 - Plant turnip mix with same early and late planting dates.
- Suppression and Soil Moisture Use Efficiency
 - Using standard cover crop mixes to preserve moisture and increase that cover to suppress weeds.
 - ❖ Debbie asked if cover crop contracts need to be three or five years? Chris replied that we're looking at a minimum of three up to five years. You used to be able to do cover crop one year up to three now that requirement has moved to a minimum of three years with a maximum of five and one contract.
- o How are we doing, how do we quantify the effects of practices that have been implemented?
 - We're working on fact sheets, outreach, and handouts outlining practice effects.
- o Can we match funds?
 - We talked partnerships. Our manual dictates that we cannot add funds within USDA for the same practice or activity on the same land.
 - We can bring in partnership money depending on the projects.
 - ★ Kasey noted that we are expanding out the LWG meetings to have two meetings within the year, winter (December – January) and mid to late summer (July - August). This will allow for connecting these conversations back and looking at lessons learned for how our programs were delivered on the federal side of the House as well as the state and county level in support of the needs are for all things conservation and agriculture within the state.

Update on Practices and Payment Scenarios for FY24 Jayme Arthurs, State Resource Conservationist and Ann Baldwin, State Engineer

- Jayme introduced a new member of our partnership staff here in the state, Sierra Patterson, Farm Bill Biologist with Quail and Pheasant Forever joined us a couple weeks ago here at the Delaware State Office. She will work directly with our field office planning staff, assisting folks with wildlife habitat plans and implementation of practices.
 - This is a partnership between NRCS and Quail Forever through the working lands for wildlife program and will be ongoing position here in the state to provide assistance for wildlife with a focus for Bob White Quail.
 - This is like the partnership with Chase Colmorgen, Farm Bill Biologist of Ducks Unlimited focusing on American Black Duck habitat restoration.
- New Interim Conservation Practice Standards (ICPS) Delaware adopted new ICPS between last year and this year. Interim Conservation Practice Standard is a standard practice improvement process addressing specific resource concerns that producers have on their farms within a three-year evaluation time frame. Landowners are asked to implement these practices on an annual basis and in turn, we are asked to provide feedback at the national level on what it's doing, what it's supposed to, what has, what has been the input from the producers that are implementing it. That information

- is used to decide whether it becomes a full-fledged conservation practice standard available throughout the country or not.
- Conservation Practice Standards are available for public review by visiting the Field Office Technical
 Guide via Google and typing in NRCS Field Office Tech Guide. You can pick the state and conservation
 practice standard and implementation requirements as part of those standards.
 - o ICPS 823 Organic Management
 - Designed to help support the organic transition initiative which is available through EQIP.
 This practice helped support producers that are in the process of transitioning from traditional crop production system to organic production system.
 - This helps make that transition over that time frame and provide support and technical assistance
 - It also provides payment as part of that process depending on the type of crop that you're growing in your operation. Also, the payment helps support possible lags in production due to transitioning to organic production by taking in account foregone income as part of that payment process.
 - ICPS 823 has been adopted here in the state for FY24.
 - ICPS 810 Annual Forges
 - The process is the same as ICPS 823.
 - Helps increase forge to address resource concerns on livestock operations where forge might be an issue.
 - Provides temporary cover to reduce erosion, whether water or wind erosion depending on where you are in the country.
 - It's a segue from moving converted cropland from traditional corn, soybean rotation to pasture and or hay ground.
 - Also known as a stopgap to fill that forge need and address some of those resource concerns and help with that conversion to Pasture or hay land as that cropland has changed over.
 - o Conservation Practice Standard (CPS) 336 Carbon Amendment
 - Previously ICPS 808 for Soil Carbon Amendment in FY23 that has become a full-fledged conservation practice in the US for adoption.
 - The primary goal is the addition of soil carbon amendments to crop fields to help address health concerns, particularly organic matter over time.
 - It's primarily been compost material that's been applied to cropland, but there's also opportunities for compost and biochar and mixes of those two together depending on the percentages.
 - Conservation Practice Standard 309 Agrichemical Handling Facilities
 - This practice was funded in past years and then we had gotten away from that. As a result of feedback from the local work groups, we are bringing it back to our payment schedule and list of eligible practices in FY24 with the next sign up.
 - It'll cover a roofed facility with a concrete floor and a sump, to allow for the collection of any spills or rinsing equipment and collecting and handling any agrichemicals rather than having them seep into the groundwater.
 - We will be sizing the buildings based on the storage that is currently being used over the
 past five years on the farm liquid and dry storage spills that would be contained. Also, for
 filling spray rigs or tender trucks for handling needs for agrichemicals and storage.

- o Drainage Water Management and Soil Moisture Management
 - We are adjusting our funding eligibility for this practice.
 - Where we previously funded the outlet pipes and structures that would manage the drainage water and soil moisture, going forward in this next year there will be eligible funding for the entire drainage water management system.
 - The mains, laterals, and the pipelines that would be designed to manage that water level.
 - This could include outlet practices such as saturated buffers, bioreactors, constructed wetlands, the water control structures, and the management of drainage water for at least three years.
 - Ben Coverdale, DNREC asked, if you get the engineering design done, does that lock you into implementation or is that if the grower decided to change their mind at that point, how does that process work?
 - Ann replied that the design will not lock you into implementation. It's only the contract that does. We would like to have a good sense that you are interested before we go too far along in the design, but the design does not lock you in.
 - ❖ Tim Rosen, ShoreRivers mentioned that they are closing out the contract that ends September 30th for conservation drainage designs. They still have a few days left here in September to finalize that. If anyone has any interest that includes helping producers with assessment.
 - They are looking forward to extending this for the next couple of years to accelerate implementation of conservation drainage in Delaware and will work with any producers to apply for other outside funds to help cover costs.
 - On a national scale, they are working with other partners to open cooperative agreement opportunities and hopefully the next farm bill will be more explicit for these fundings to help move money from our federal partners and to producer's hands to get conservation on the ground.
- o FY24 High Priority Practices
 - We had an opportunity to identify up to 10 practices in the state that are eligible for higher levels of payments, up to 90% payment rates as part of our payment schedule.
 - 329 Residue and Tillage Management, No-Till
 - 390 Riparian Herbaceous Cover
 - 391 Riparian Forest Buffer
 - 393 Filter Strip
 - 554 Drainage Water Management
 - 587 Structure for Water Control
 - 604 Saturated Buffer
 - 605 Denitrifying Bioreactor
 - 612 Tree/Shrub Establishment
 - 620 Underground Outlet
 - These are practices that are underutilized but have significant conservation benefits and that's why we prioritize them.
 - Some of these practices are climate smart ag and forestry practices and are also tied to our drainage water management effort here in the state.
- National Water Quality Initiative (NWQI)

- We submitted three watersheds for the planning phase to begin in FY24: Approquiniminck River, Cow Bridge Branch, and Duck Creek.
- We are working with our subcommittee to start working through the process of developing plans, to determine what practices we're going to prioritize as part of the NWQI, what level of funding we'll need to implement those practices in those watersheds, and future fiscal years.
- We can reach out to the landowners that are in those watersheds to let them know those practices and the availability of funding to implement those practices in those identified watersheds.
- Working Lands for Wildlife Aquatics Framework
 - Starting in FY24 we're going to have an opportunity to get additional funds to focus primarily on American Black Duck restoration habitat in Delaware in conjunction with Maryland,
 Virginia, New Jersey, as well as states that have been participating in that effort in the past.
 - Jenn Volk asked about Duck Creek, is that the Smyrna Duck Creek?
 - ❖ Jayme replied that yes, it is. Appoquiniminck and Duck Creek are the northern watersheds.

Committee Reports

Farm Service Agency (FSA), Maryann Reed

- FSA is nearing the end of the fiscal year. A lot of clean-up going on to finish up re-enrollments for CRP for this year as well as any new contracts or noncompliance contracts that they're trying to get straight for payments to be released October 1^{st.}
- They are also working on 2022 ARC/PLC payments, 2023 form records rollover and payment eligibility.
- Maryann and Brooke have been working together to come up with a timeline for eligibility for the
 next batch of EQIP and all other programs eligibility documentation to be completed by the
 producers as well as completed by FSA with determinations done on those.

Rural Development (RD), David Baker

- RD has programs for housing with mortgages for low-income residents, guaranteed loans for businesses, and community programs to help fund the infrastructure for local governments and nonprofits.
- They have received a lot of Inflation Reduction Act funding that may be of interest to the ag
 community under the Rural Energy for America Program (REAP). It's a grant program with some
 loans that are available for renewable energy and energy efficiency for small businesses and ag
 producers in rural areas. Grants are for up to 50% for renewable energy for solar panels and other
 energy efficiency type projects which is what they typically see.
 - They have funded quite a few solar panels for poultry farms and other farms. Also, we have funded grain dryers, irrigation power switching from diesel to electric and solar.
- There's also a tax credit of 30% as well as a depreciation that may be allowed for the business or ag
 producer. This all results in major energy savings for the ag producer or small business with minimal
 costs and quick payback.

- This program is available right now. If you're interested if or you know anyone interested, please feel free to reach out to David at 302-857-3581 or via email at david.baker3@usda.gov or Bruce Weaver, Energy Coordinator at 302-857-3629 or bruce.weaver@usda.gov.
- There's a lot of information available online at USDA Rural Development programs, <u>Rural Energy for America Program Renewable Energy Systems & Energy Efficiency Improvement Loans & Grants in Delaware</u>, Maryland | Rural Development (usda.gov).

Delaware Natural Resources and Environmental Control (DNREC), Ben Coverdale

- Ben manages the Nonpoint Source Program for the Delaware Department of Natural Resources and Environmental Control (DNREC) Division of Watershed Stewardship. The NPS Program administers various water quality grants aimed and implementing BMPs to enhance water quality in watersheds across the State of Delaware.
- The NPS Program has been engaging with partner organizations and have some projects that show potential in the near term.
 - One of which they've been focusing on, Ben has been working with the State's Office of Management and Budget, Facilities Management (OMB DFM), to try and implement water quality BMP projects on State owned facilities. In the past, lack of implementation has likely been attributed to lack of communication and coordination among agencies, so this effort recently has helped to remove some of those barriers. As a result, there is tentatively some good BMP projects lined up at a State-owned facility in Sussex County.
 - This first project will incorporate vegetated filter strips with pollinator friendly plantings to enhance the existing stormwater infrastructure on the property. These filter strips will be positioned in the current grass swales on the property leading to the dry ponds.
 - The NPS Program also collaborated with OMB DFM to plant up to 30 acres of trees on current agricultural lands that experience heavy deer damage. A local NGO will be serving as the project lead on the tree planting and filter strip projects.
 - The NPS Program had an HOA come to them with interest in doing a larger scale, 10-to-15-acre tree planting project. A site visit is scheduled to discuss details.
 - There is another HOA that has expressed interest in possibly implementing some stormwater retrofit type projects. A site visit with the local NGO is scheduled to evaluate options and feasibility. There is the possibility some larger scale restoration could occur depending on the info obtained during this site visit.
 - On the tree front, the NPS Program has a current grant agreement with the DNREC Division of Parks and Recreation to conduct a 39-acre reforestation project on State owned ground associated with Trap Pond State Park in Laurel.
 - The Division of Watershed Stewardship, Chesapeake Bay Implementation Program has a new Riparian Forest Buffer Program and the Community Conservation Assistance Program (DECAP) in the Chesapeake Bay watershed focusing on smaller scale urban BMP's such as rain gardens, rain barrels, conservation landscaping/pollinator plantings, and stormwater retrofit type BMPs. Information can be found on DNREC's website. You can reach out to the identified contacts, and they will assist with any questions.

University of Delaware Extension, Jenn Volk

- The Mid-Atlantic Crop Management School is coming up, Tuesday, November 14th through Thursday, November 16th. Registration information should be going out next week, so keep an eye out for that if you're interested.
 - If you don't see it within the next two weeks, contact Jenn and she can check on that for you directly.
 - Last year they did virtual options with recordings of the presentations made available later for folks to register and watch. This year will be fully back in person.
- Ag Week is coming up on January 8th. Session planning is underway for that.
 - Jayme expressed an interest in participating in some of those sessions to talk about climate smart farming practices and NRCS' different conservation programs, so she will make sure NRCS is incorporated into various sessions at Ag Week.
- They are prepared to move forward with launching the next class of LEAD Delaware, this will be the 7th class. They are hoping to have them started in 2024, so be looking for the application period to come out October 1st with a quick turnaround to get folks selected.
- They are moving forward with the search for the new Dean for the College of Agriculture and Natural Resources and the new extension director as Michelle Rogers retired July 1st.

Delaware State University USDA 1890 Liaison, Chandra Owens

- In the next few weeks, Chandra will be providing workshops and webinars on interview skills,
 preparing for USAJobs, and creating federal resumes as well as enhancing what students have
 learned over their internships in various locations, whether it's food service or out in the ag field.
 Making sure that there is representation on paper for them to be one of the better candidates being
 assessed.
 - This is preparing our students to be technically prepared for whatever agency they engage upon as they enter with their bachelor's degree.
- She is working on meeting with all the clubs and organizations on campus as there are a few new ones that tap into natural resources or environmental sciences. She wants to make sure that they are aware of all the opportunities that are coming along from the state level as well as the federal.
 - If there are any internships or full-time positions for those who will be graduating, please let her know or send them to her or her student access points so they can have those and can prepare them for those application, making sure that they meet the criteria and eligibility.
- Chandra is still working with our black farmers for their conference, November 8th and 9th that will be
 coming up in the fall as well as doing more promotion of opportunities with NRCS on campus so that
 everyone understands the full gamut of positions and majors that are being sought from this agency
 as well as all the others, so they know that there are opportunities on the federal side besides the
 private sector.
 - If you have any positions that you want to be filled by young interns or entry level positions,
 please send them to Chandra to share with the students.
 - Kasey is working with Del State University, Professor Marshall, and that team to have the agenda finalized and then share that information out in a wider cadence. Once we have that, we will send it out through our State Technical Advisory Committee.

Delaware Association of Conservation Districts, Jen Nelson

- The 2024 Delmarva Soil Summit dates are set for February 6th and 7th at the Wicomico Civic Center.
 - They are working on identifying speakers and opening registration in the near future. Put a hold on your calendar for now and more information will be coming.
- Jen is also working with the Delmarva Land and Litter Collaborative. She helped to co-chair the Watershed Approach Work Group and they are putting on a webinar series over the coming months. She will send out information once those details have been nailed down.
 - They are looking to evaluate or learn more about watershed approaches from across the country and are planning to have one that looks at the Lancaster Clean Water Partnerships rapid listing strategy that would provide some information and perspectives on lowa. To batch and build approaches where they group a series of saturated buffers to implement and put a package together to bid all at once and implement things as a group.
 - Jen is also looking at Wisconsin, they have an initiative where they've been looking at coordinating a series of producer lead watershed groups.
 - She's looking at building a webinar series around those three initiatives and then trying to have a meeting with farmers over the winter where we would collectively look at what we can pull from those initiatives and apply in this area and then provide that back to farmers to get their feedback on if those potential approaches might work and what we can do to tweak them to make them successful here. More information to come.
 - If you're interested in that, you can contact Jen directly.
- In the past few months, they have been working on trying to get our NRCS agreements all tucked in for this next year and are looking forward to it.

New Castle Conservation District (NCCD), Michael Popovich

- Mike provided a brief overview of what 2024 shared program looks like for NCCD.
- They are still doing urban and suburban agricultural erosion control, water management, water quality practices, wildlife habitat, if no other programs are available, some forestry programs as well.
 - o If the same rules are applicable, they also do large animal mortality and have an urban agricultural and community garden fund.
 - He has recently been working CBIG, which ties into Ben Coverdale's conversation earlier where they're doing some retrofits and stormwater management for residential properties in the Chesapeake watershed. We should be starting within the next month or so.
- Urban Ag and Community Garden project Madison Water, urban ag coordinator has been painstakingly over the last 2-3 years killing it in urban ag sector.
 - Her plan for 2024 is a three-prong approach for the inner agency training component with our conservation partners or ag service providers to ensure we are meeting the needs of our urban ag producers.
 - She's going to be launching a tailored, focused outreach effort which kind of identifies like a single conservation practice that's in most demand for ag producers. They've already identified that and now are onto the next steps, the continuation of the urban ag farmer training program working with 17 local partners, local government, municipalities, farms, and nonprofits.
- Soil Health Workshops
 - The first one will be kicking off next Thursday in Southern New Castle County so that it's accessible for Kent and New Castle County producers.

 This is in conjunction with NRCS and the extension service working with our new agent in New Castle County and it's allowing him to reach more producers in their network.

Kent Conservation District (KCD), Stephanie Walt

- Zachary Torgerson, district planner, is going to be leaving. He gave his official notice on Tuesday. If you have any applications or can send any recommendations their way, they would appreciate it.
- They had a successful Soil Health Workshop on August 23rd. They had over 40 farmers in attendance at the Viola Ruritan.
 - Justin Ford set up a table for farmers to pick up various USDA resources.
 - They gave out a lot of information, trying to focus on information on CSP and EQIP.
 - They had a farmer panel that discussed their experience with cover crops and Jared Miller from the University of Delaware and Drew Harris, Cooperative Extension Agent tag teamed and gave a presentation on some recent research that they've done.
- Stephanie mentioned that they have for their upcoming FY24 cover crop cost share that has been approved with the same payout as in FY23.
 - They have received applications for planting 54,733 acres.
- They did get additional funding from the Delaware Department of Agriculture to supplement funding that was lost from last year so, they're in pretty good shape this year. However, she expressed her concerns about funding for FY24 to maintain the amount that they've been paying, because every year it seems to be getting a little increase on the acreage.

Sussex Conservation District (SCD), Debbie Absher

- SCD had their cost share sign up, which wrapped up the end of July. They received 287 cover crop applications, enrolling over 185,000 acres of cover crops. All of those acres will not get planted, but if it did, \$8.4M is what would have to be paid out.
- They also had their tax ditch sign up for state and county matching funds. They received 260 applications requesting over \$772,000 in practices such as dipping out/cleaning out of the tax ditches, mowing, weed wiping, and bonding.
- SCD is now fully staffed. Owen Lenkner retired at the end of May, and they just hired Lyndsie Mikkelson from the University of Maryland Extension where she was a nutrient management advisor. Prior to that, Lyndsie worked in the Kent County FSA office so she's familiar with their programs and is already nutrient management certified.
- They held their Soil Health Workshop on August 16th with a good turnout and good feedback.
 - They had Annie Dee, who is an NACD soil health champion from Alabama. She gave a
 presentation about her operation and the soil health practices being implemented on her farm.
 - Phil King and Jayme Arthurs from NRCS also presented about the importance of organic matter and soil health evaluations.
 - SCD's Amanda Fabi, Beth Johnson, and Rachel Driscoll went over how they do soil health evaluations.
- Debbie announced that they have a new program that they're implementing this year. The board approved a pilot program for oyster aquaculture in the Delaware Inland Bays.
 - Currently, there hasn't been any financial assistance available for that group because they farm a little differently than in the Delaware Bay, because the oysters have to be raised in bags or cages.

- They put together a program that will pay for the nutrient reductions for the oysters in the Bay at \$0.05 an Oyster with a maximum of 150,000 oysters per person for up to \$7,500.00.
- In addition to the nutrient reductions that they're paying for, SCD is hoping that these funds will help the oyster farmers with some of their high start-up costs to getting into that business, increasing the number of oysters grown.
- There are currently about eight active growers with over 200 to 300 possible lease acres available
- SCD has been working with NRCS on developing commercials through an agreement.
 - Siobhan Kelley shared the links in the chat for the Black Duck and Climate Smart practices videos.

Black Duck - https://youtu.be/T_auAcYx0Kg Climate Smart - https://youtu.be/p00zFeXYIII

• SCD is finishing up their RCPP project for cover crops in the inland bays. They had 11 contracts this summer for over \$323,000 on 4271 acres.

Delaware Rural Water Association, Anita Beckel

- Anita is working on the Cowbridge Branch Watershed that Jayme Arthurs, NRCS had identified as a 10% priority source water protection area.
 - They had at least 17 public water systems in that watershed and many of them had nitrate violations over the years and, in addition to that three others have nitrate removal systems to prevent the violations.
 - Anita noted that she was surprised at how many water systems they had between south of Georgetown and north of Millsboro and three of them (Sussex Central High School and the Stokeley Center and Delaware State Police Troop 4) are state facilities so it would be great to involve them in some projects.
 - Anita has been working with Bryan Jones to identify producers in the area to get them involved in a workshop.

Delaware Farm Bureau, Richard Wilkins

- Richard had connection issues, so Kasey reported that she, David, and Robin had an opportunity to
 connect back with the Farm Bureau and a round table conversation with our producers in the state
 over a week ago where they met with Senator Carper and his team to make sure that the direction
 of what we see are the needs for our producers and challenges across the state. They are going to
 start looking at where we see opportunities within our current authorities, whether if it's through
 NRCS, Farm Service Agency, or Rural Development to meet our producer's needs.
- The team was able to walk away with some really good information with a lot of it focusing into what we're seeing as the pressing needs and or concerns for expanding voluntary conservation.
 - We have substantive information that essentially went back with Senator Carper and his team
 making sure that now we're able to support them and what those changes need to be going into
 the new farm bill.
 - The Farm Bureau is definitely at work for you. They were able to help communicate those efforts and needs and concerns into the larger conversation and moving that forward.
- Richard was able to connect back in and report that he's farmed 50 years now and has seen the conservation spending and conservation cost go through phases.

- He's been on the on the stage in many places around the world talking about the three pillars of sustainability with the economic sustainability being ultimately of importance for willing private citizens and private stakeholders.
- Kasey clarified, the one thing that we've been looking at doing for many years is being able to go in
 and address conservation improvements and investments that are needed whether looking at
 pastureland, forestry related activities, urban, conventional farming, and small acres for those
 commodity crops we've always been able to provide both technical and financial assistance and
 support.
 - o If it's tied back into compliance areas where this is getting into your farm, wetlands, or wetland areas looking at those type of improvements, this is where you will have some of those restrictions and pushbacks because we're not going to be able to over improve or make that into a crop for acres that are going to have those specific land signatures unless they're tied back into knowing what those farm or wetland acres are. We can't go in and make those acres bigger.
 - It's imperative for us to have these conversations so everyone is dialed in and knowing what those options are as well as where we're going to expand this and in connection with what we're doing as far as those current offerings.
 - When we go into the expansion, that's going to focus on resiliency and adaptation to connect back into next steps that will help us remediating carbon sequestration and other opportunities across the state.
 - Our core practices, whether pasture and hay land looking at nutrient management in soil health, water conservation, management activities, and beyond are going to be our common occurring suite of practices and best management systems that we continue to expand across the state and over the years.
 - If we're thinking the world of compliance, then that is going to be a very specific conversation as we're working with you, our District Conservationists, and their staff and then moving forward as we combine those conversations with our sister agency, FSA.

<u>Fiscal Year 2024 State Technical Advisory Committee Meeting Dates:</u>

February 8, 2024 May 9, 2024 September 12, 2024





USDA – NRCSNatural Resources Conservation Service

STATE TECHNICAL ADVISORY COMMITTEE

Thursday, September 7, 2023





USDA	United States Depart	ment of	f Agricu
00 – 9:10			Wel

9:10 - 9:30

9:30 to 9:40

9:40 to 10:20

10:20 to 10:40

10:40 to 10:50

10:50 to 11:10

11:10 to 11:25

11:25 to 12:30

	United States Depart	ment of Agricultu
0 - 9:10		Welc

nt of	Agri	cult	u
	144		

Break

Input Items

Reports

Guest Reports

Scenarios for FY24

Committee Member

vveicome	
Delaware NRCS Implementation	

Expected Resource Concerns Update

Northeast Climate Hub and Climate

Strategy – Roadmap for Success

Delaware Poultry Pilot, New and

Smart Agriculture and Forestry

FY23 Farm Bill Programs Updates

FY23 Local Work Groups Reports, STAC

Update on New Practices and Payment

Kasey Taylor

Julie Suhr Pierce, National

Delgado, Natural Resource

Jayme Arthurs/Ann Baldwin

Economist and Bethany Munzo

Jayme Arthurs

Specialist

Elena Stewart

Chris Bohinski

All

Kasey Taylor

Roadmap for NRCS Success

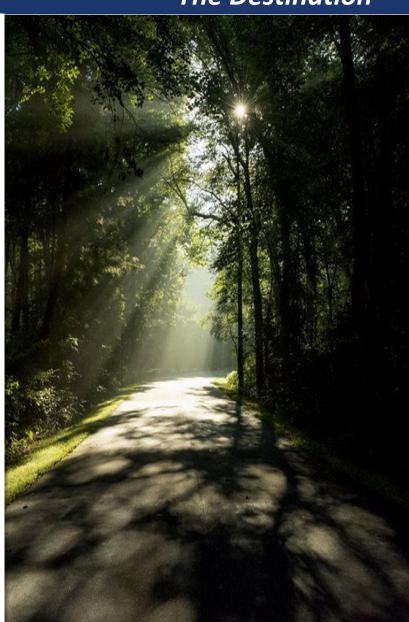


Our shared vision of success:

Delivering Conservation Solutions:

- Efficiently
- Accountably
- Equitably

Leading from the local level







Our shared priorities:

- Ensure <u>equity</u> in all NRCS programs and services
- Increase assistance for climatesmart agriculture
- Address the unique needs of urban farmers and communities nationwide
- Cultivate a diverse and well-trained workforce
- Leverage innovative partnerships



Our shared accomplishments:

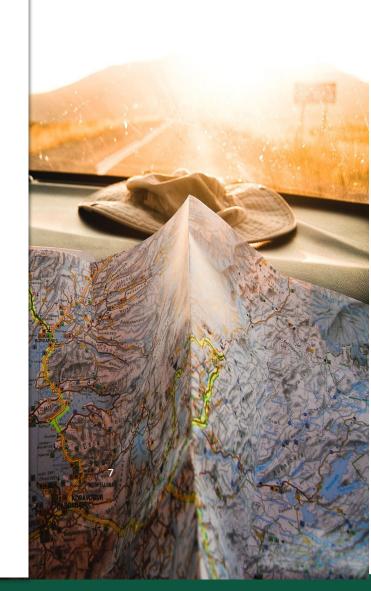
- Equity in Conservation Program Delivery
- Expansion of Voluntary Agriculture
- Conservation Program improvements
- Growing our Producers Stewardship
- Emphasis on science-based measurement, monitoring, reporting and verification





Our next steps:

- Comparing tactics with priorities
- Enhancing our service delivery method
- Identifying barriers and potential solutions
- Prioritizing employee competencies
- Outreach and Education





Wrap-up Questions/Discussion









9:30 am-9:40 am

Delaware Poultry Pilot,
New & Expected
Resource Concerns
Update
Jayme Arthurs
State Resource Conservationist





Delaware Poultry Pilot Environmental Document



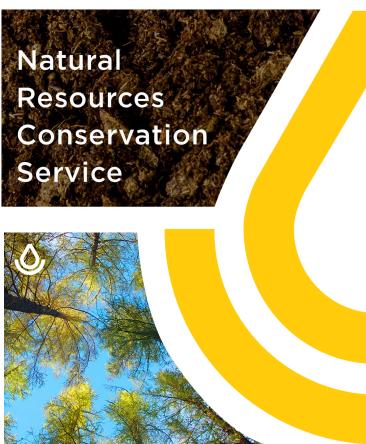
Purpose: Address New and/or Expected Resource Concerns on New Poultry Farms in Sussex County

- Environmental Assessment document was drafted and reviewed by staff at the East National Science and Technology Center. Suggestions and edits were incorporated into final document.
- Final Draft has been sent to Stakeholders for one last comment period.
- Any additional comments will be incorporated and final document will be sent to NRCS National Headquarters for review.
- Anticipated completion date with all reviews is November 2023 with an EQIP rollout for FY24.



United States Department of Agriculture





USDA Northeast and Northern Forests Climate Hubs Delaware State Technical Advisory Committee (STAC)

Natural Resources Conservation Service

nrcs.usda.gov/

Agenda



- Welcome
- What's Changing in Delaware
- County-Level Changes: Climate Quick Reference Guides
- IRA Funding/Capacity Issues and Questions
 - Climate Hub Collaboration: Quantification of Benefits
- How Can We Work Together?



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What are USDA Climate Hubs?





USDA Climate Hubs



- Formed in 2014 by Secretary Vilsack
- 10 Regional Climate Hubs all of US and Territories
- Collaboration between ARS, FS, and NRCS
- Deliver science-based, regionally specific information, tools, and practices to assist producers in achieving their goals in today's climate
- Help farmers and foresters adjust and adapt to climate change by demystifying the concept and supporting climate-informed decision-making to stay profitable
- Focused on what's happening now

www.climatehubs.usda.gov



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Northeast Climate Hub Priorities









- Better understanding among NRCS state-level leadership of USDA Climate Hubs
- Improve feedback loop on what the Northeast States need from Climate Hubs

Economic Analyses

Case Studies & Long-term Soil Health Practice

Climate Mitigation

- **Wood Vaults**
- **Forest Carbon Markets**

Water

- Flash Drought
- Saltwater Intrusion
- **Shallow Wells**

Climate Literacy

- Peer Learning Forums
- Applied Science Exchange (ARS/FS -> NRCS)
- SCAN/TSCAN tool development



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Climate Learning Forum 4 4 4 4

Goals:

- Improve cooperation and information exchange through networking
- Increase comfort levels to foster collaboration among ag service providers
 - What are your climate-related priorities? What questions remain unanswered?
 - What areas of technical assistance are not consistently addressed by service providers? Where are the gaps?
 - What climate-related expertise or information would you like greater access to?

Key Audience: Ag Service Providers (NRCS, Extension, etc.) Activities: Listening Sessions, Networking, and Workshops.

For more information, visit:

https://www.climatehubs.usda.gov/hubs/northeast/news/climateutural Resources Conservation



USDA Northern Forests Climate Hub



Quick Facts

USDA Northern Forests Climate Hub:

Special focus on forest and ecosystems land management

Supports two Regional Hubs

20 states across NRCS Northeast and Central regions

- 42% forested
- 41% of US population
- >70% privately owned

Climate Services

- Assessment
- Practical resources
- Technical assistance

Supported by

NIACS NORTHERN INSTITUTE OF APPLIED CLIMATE SCIENCE







What's Changing Where You Are?

USDA Northeast Climate Hub



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Incs.usda.gov/



Fourth National Climate Assessment 2018

- 1,500 page congressionally mandated report done every four years by the US Global Research Program (federally funded).
- Lead agency: National Oceanic and Atmospheric Association, many other partner contributors including USDA

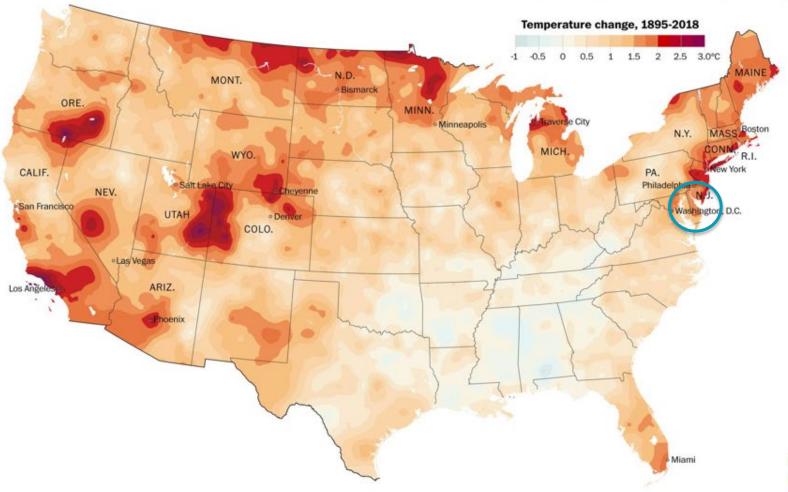
Fourth National Climate Assessment Volume II Impacts, Risks, and Adaptation in the United States

https://nca2018.globalchange.gov/



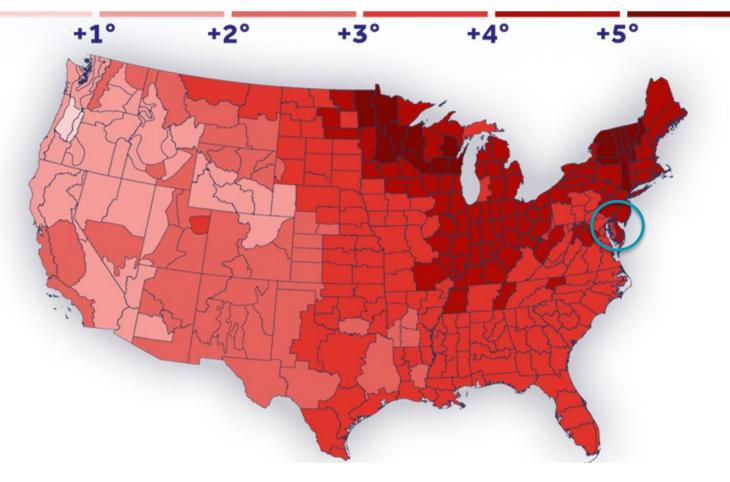
Observed: U.S. Change in Temperature Since 1895







Not All Seasons Are Warming at the Same Rate: Winter Warming Since 1970 (° F)

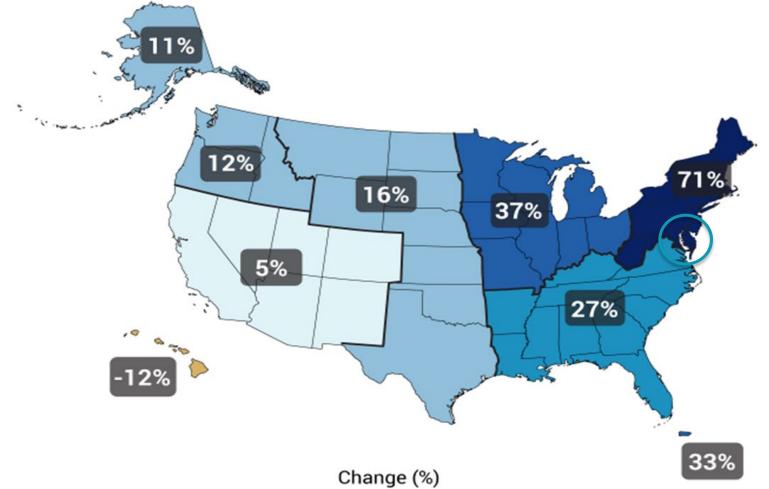


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Source: NOAA/NCEI Climate at a Glance Dec-Feb

Observed: Percent Increase in Extreme Precipitation (1958-2012)



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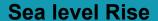
Regional Impacts: Agriculture



- + Erosion
- + Ponding
- + Crop Loss
- Delayed Planting/Harvest

Increased Temperature

- + Winter temps
- + "False" Springs
- + runoff/erosion in winter
- + Pests/invasive species



- + Soil and well salinization
- + Farm/forest land and loss



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Regional Impacts: Urban Communities

Flooding

- Sea Level Rise
- Saltwater Intrusion
- Storm Surge
- Stormwater Management

High Temperatures

- Heat islands
- Increased evapotranspiration
- Heat Exposure

Energy Issues

- Energy disturbance
- Increased utility costs



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nrcs.usda.gov/

From: https://nca2018.globalchange.gov/chapter/11/

Regional Impacts: Vulnerable Communities



Exacerbate

- Challenges to quality of life
- Social Inequality
- Aging and deteriorating infrastructure
- Stressed urban ecosystems
- Food Insecurity

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Regional Impacts: Forestry

Changes in precipitation patterns, disturbance regimes, soil moisture, pest and disease outbreaks, and nonnative invasive species are expected to contribute forest vulnerability across the Northern Forests (a 20-state region).

Forests vary widely across the region, and vulnerabilities are strongly influenced by regional differences in climate impacts and adaptive capacity.

- Boreal, montane, and northern forests have the <u>greatest assessed</u>
 <u>vulnerability</u> as many of their dominant tree species are projected to
 decline under warmer conditions (e.g., red spruce, balsam fir, hardwoods
 such as paper birch)
- Upland systems dominated by oak species generally have low vulnerability due to greater tolerance of hot and dry conditions, and some oak, hickory, and pine species are expected to become more competitive under hotter and physiologically drier conditions.
- Coastal forests have <u>high vulnerability</u>, as sea level rise along the Atlantic/Gulf coast increases damage from inundation, greater coastal erosion, flooding, and saltwater intrusion. (e.g., pitch pine, Atlantic whitecedar, coastal bald cypress)



Penobscot Experimental Forest Bradley, ME

Natural Resources Conservation Service



More information can be found at: www.climatehubs.usda.gov/hubs/northern-forests/topic/northern-forests-vulnerability

Climate Quick Reference Guides

https://webapps.jornada.nmsu.edu/climate-quick-guides/



Natural Resources Conservation Service | Southwest Climate Hub

CLIMATE QUICK REFERENCE GUIDE | Delaware

Historic Changes 1900-2020

- Average temperatures have risen 1.9°F since 1970, while the winter average has increased 4-5°F.
- From 1950 2021, average rainfall has increased 19% and the number of 2-inch extreme precipitation events in a 24-hour period has increased 55%.
- Sea level has risen 8" since 1880, particularly concerning because Delaware has the lowest average elevation of all the U.S. states.

Projected Changes 2042-2070

- Temperature, precipitation, and occurrences of large storms are projected to increase. In the near term (2020– 2039), extreme heat waves are projected to occur 3 out of every 5 years. Even under low emissions scenarios, averages of 1 or more extreme heat wave per year are expected.
- Sea levels are projected to rise 1.5 2.5 ft in the next 40 years.

Kent County Summary

County Max Temperature (Fahrenheit)

,					
Season	Current	2040-2070	Change		
Spring	65	69.9	+4.84		
Summer	85.2	91.1	+5.81		
Fall	68.8	74.4	+5.53		
Winter	45.7	50.5	+4.81		
Annual	66.2	71.4	+5.25		

County Max Precipitation (Inches)

, , , , , , , , , , , , , , , , , , , ,					
Season	Current	2040-2070	Change		
Spring	11.9	12.7	+0.85		
Summer	12	12.7	+0.67		
Fall	10.8	11.4	+0.6		
Winter	10.3	11.7	+1.46		
Annual	44.9	48.5	+3.59		

Current data comes from PRISM Climate Group 30-year normal data for the 1971-2000 time period. Future is derived from the CMIP5 data using the mid-century



© IRA Updates





Inflation Reduction Act (IRA) 🔷 🔷 🔷

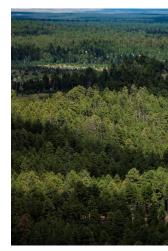








- The IRA provides NRCS with \$19.5 billion in additional funds for its **existing** conservation programs:
 - \$8.45 billion Environmental Quality Incentives Program (EQIP)
 - \$4.95 billion Regional Conservation Partnership Program (RCPP)
 - \$3.25 billion Conservation Stewardship Program (CSP)
 - \$1.4 billion Agricultural Conservation Easement Program (ACEP)
 - \$1 billion Conservation Technical Assistance
- **The IRA does not create any new programs** it gives NRCS additional funds to expand its existing climate efforts and satisfy unmet demand
- The IRA accelerates NRCS' ability to deliver voluntary, locally led conservation assistance to America's farmers and producers.
- IRA funds begin in **fiscal year 2023**; all IRA funds must be spent by **September 30, 2031**





IRA Updates









Models/Tools

Generating Better Estimates





Soil Carbon Monitoring & Research Network with perennial biomass component



Models and Tools for assessing outcomes



Improved conservation mitigation outcomes at program level



Greenhouse Gas Research Network



Conservation Practice Standards and implementation of GHG mitigation opportunities







Temporal and spatial coverage of national conservation activity data



Greenhouse Gas Inventory and Assessment Program of USDA



Improved GHG estimates in national inventory



Data management infrastructure & capacity

https://www.usda.gov/oce/energy-and-environment/climate/mitigation

Climate Hubs: Quantification of Benefits





Phase 1: Increasing Climate Literacy with Climate change mitigation Conversations

Phase 2: Decision Support Tools and Information on Mitigation Benefits of Conservation Practices

Phase 3: Evaluating Practices: Climate change mitigation Fellows integrating science innovations into climate change mitigation outreach and education

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O How can we work together?



Role of Climate Hubs (and NRCS!)





- improving understanding of climate change impacts and responses
- translating science into information and action

CLIMATE CHANGE

Adaptation

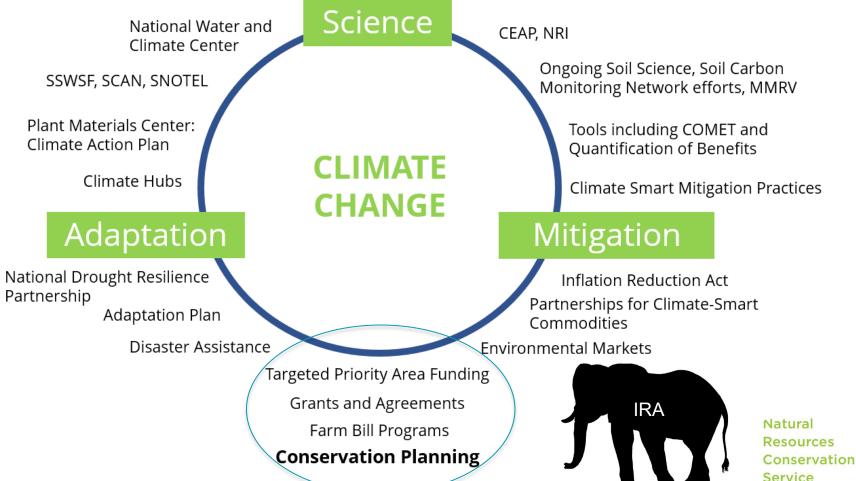
- managing impacts and risks
- adapting to changes and stressors and building resilience

Mitigation

- addressing root causes
- reducing GHG emissions and increasing carbon sequestration



NRCS has already integrated climate... and we continue to do more!





ervice



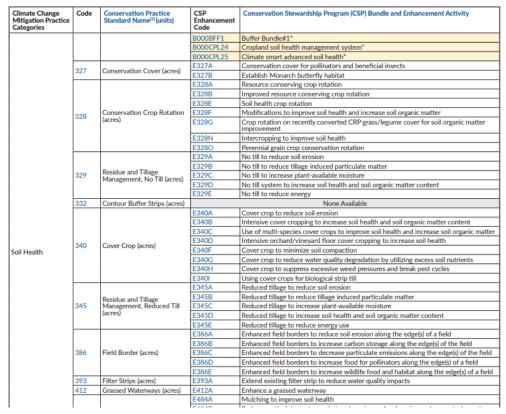
CSAF Mitigation Activity List





Climate-Smart Agriculture and Forestry (CSAF) Mitigation Activities List[®] FY2023







https://www.nrcs.usda.gov/conservation-basics/natural-resource-concerns/climate/climate-smart-mitigation-activities

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Ongoing Efforts



- In FY2023, NRCS added provisional activities under the premise that they <u>may</u> provide mitigation benefits (directly or supporting/facilitating), and a quantification methodology will be evaluated/developed during the FY (must be repeatable)
 - These practices may be removed from the mitigation practice list if quantification is not possible
- This will be an annual occurrence as science develops





Resources to Learn More 4 4 4 4













Climate Quick Reference Guide

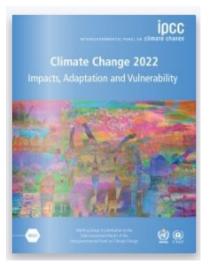




Intergovernmental Panel on Climate Change

(IPCC) Sixth Assessment Report (AR6)





Northeast Climate Hub **Northern Forests Climate Hub**



Natura Resources Conservation Service





THANK YOU and How can we help?



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10:20am-10:40am



Elena Stewart

Acting – ASTC-Programs







Overview of Financial Assistance for FY2023

Obligations for:

EQIP

EQIP-IRA

AMA

AMA-RMA

CSP

CSP-IRA







What makes an application "High Priority?"

Applicant MUST:

Not have any terminated contracts in the past 3 years for reasons within their control

Be on schedule with current, active contracts

Following their operation and maintenance plan for conservation practices within lifespan

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Have livestock and/or poultry on site



What makes an applicant and/ or an application "Eligible?"

Has a compliant AGI for FY of application

Has a determined 902

Direct deposit on file

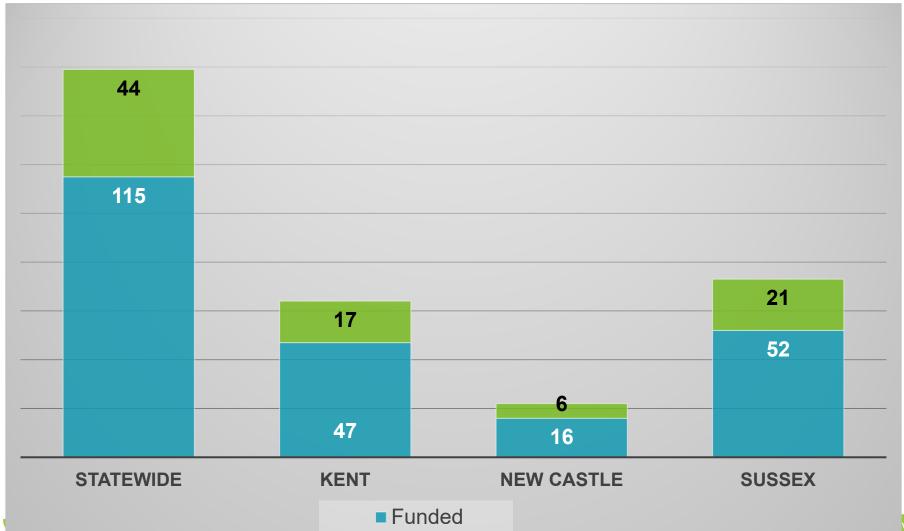
Compliant with Highly Erodible Lands (HEL) and Wetland Conservation provisions

Has a farm and tract number assigned

A Resource Concern



EQIP 2023 Applications 4 4 4





EQIP 2022 vs 2023



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		Kent	New Castle	Sussex
Ranking Pool		\$2,482,357.00	\$1,263,937.00	\$3,434,309.00
IRA-EQIP	\$	467,148.00	\$ 4,622.00	\$ 295,355.00
Wildlife	\$	84,104.00	\$ 78,640.00	\$ 227.00
Beginning Farmer	\$	573,022.00		\$ 424,401.00
Conservation Planning Activities	\$	42,631.00	\$ 8,373.00	\$ 29,141.00
Cropland	\$	299,905.00	\$ 622,923.00	\$ 718,903.00
EQIP-CIC	\$	119,630.00	\$ 319,328.00	\$ 88,404.00
Forestry	\$	9,444.00		\$ 32,606.00
Livestock	\$	269,357.00	\$ 203,598.00	\$ 395,658.00
On Farm Energy				\$ 46,907.00
Organic Transitioning & Certific	ed			\$ 13,544.00
Poultry HQ Kent/New Castle	\$	336,162.00	\$ 18,027.00	
Poultry HQ Sussex				\$ 801,638.00
Socially Disadvantaged Farmer	\$	280,954.00		\$ 549,033.00
Urban Agriculture			\$ 8,426.00	\$ 38,492.00
•				Service

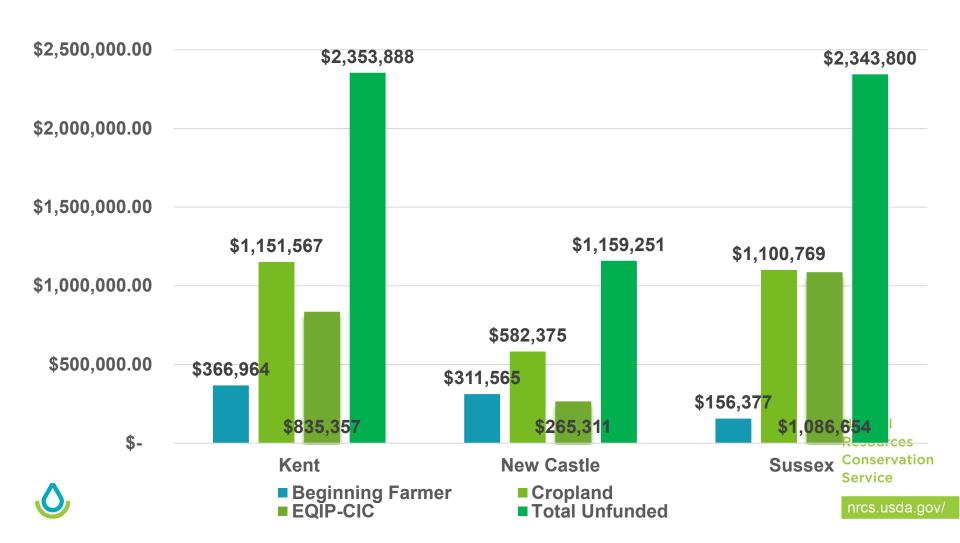


Fully Funded EQIP Ranking Pools for 2023

Beginning Farmer (BF)	On Farm Energy
Conservation Activity Plans (CAP	Organic
Cropland	Poultry Headquarters Kent/New Cast
EQIP CIC	Poultry Headquarters Sussex
EQIP IRA	Socially Disadvantaged Farmer
Forestry	Urban Agriculture ✓
Livestock	Wildlife



FY 2023 Unfunded Applications by A Ranking Pool





Nationally Mandated Funding

Nationally mandated to spend 5% of our funds in:

- Beginning Farmer/Limited Resource Farmer
 - 43% of Delaware's allocation went to Beginning Farmers
- Socially Disadvantaged
 - 17% of Delaware's allocation went to Socially Disadvantaged Farmers

Nationally mandated to spend 50% of our funds on livestock practices

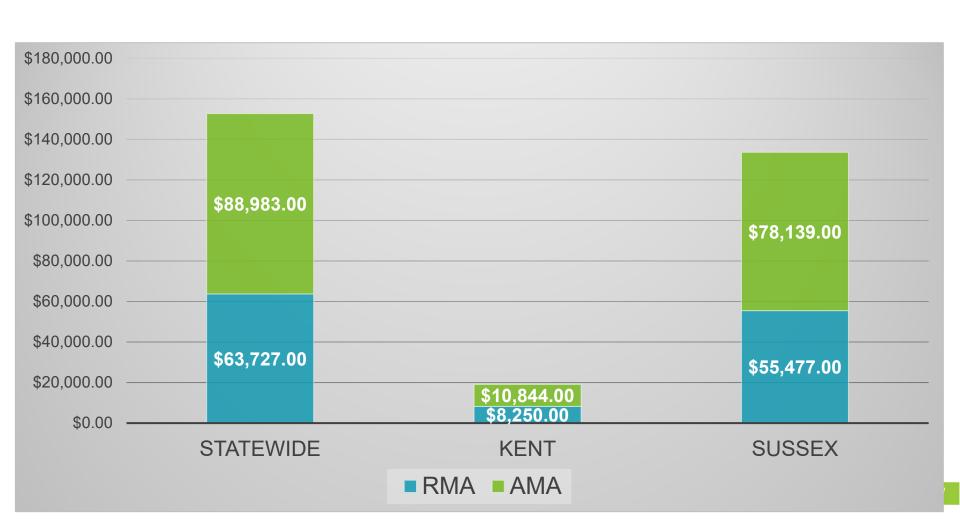
- 67% of Delaware's allocation went to Livestock practices

Nationally mandated to spend 10% of our allocation on wildlife practices

4.7% of Delaware's allocation went to wildlife practices (fully funded)



RMA & AMA Funding Levels



ACT NOW



This process does not negate the eligibility documents that must be in place prior to ranking

FY 2024 Potential Ranking Pools

On Farm Energy

Drainage Water Management

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CSP Classic & IRA

2 CSP IRA contracts totaling \$173,196 for over 3,800 acres

- 2 Kent

CSP Classic

- 5 contracts for \$185,939 for over 1,800 acres.
 - 1 Kent
 - 2 New Castle
 - 2 Sussex







Agricultural Conservation Easement Program (ACEP)

Agricultural Land Easements (ALE) Wetland Reserve Easements (WRE)

Brooke Jones, ASTC-Programs
Elena Stewart, Easement Program Manager
Emily Palmer, Easement Coordinator



Agricultural Conservation Easement Program (ACEP) Overview

Agricultural Land Easement Program (ALE)

- DE Dept. of Agriculture certified entity
 - Reimbursed 50% of appraised value
- Farms will be protected forever but are still privately owned and can be sold or willed to subsequent generations

Wetland Reserve Easement Program (WRE)

 NRCS pays the property owner for the development rights and then pays to restore the hydrology on private property.



What is an "Easement"?



- Full ownership of land comes with a variety of ownership rights – these property rights can be thought of as a "bundle of sticks."
- A landowner can hold all the sticks in the bundle or transfer some of those sticks to others.
- A conservation easement takes several of the sticks in the bundle and transfers them to the buyer.
- One of those "sticks" the right to develop the property





What is a "Wetland Reserve Easement"?

Before (Full Ownership)

- Title right to sell or transfer property
- The right to exclude others from the property
- The right to hunt and fish
- The right to sell timber
- The right to build homes and other structures
- The right to crop the fields
- The right to subdivide and develop the property

After (Wetland Reserve Easement)

- Title right to sell or transfer property
- The right to exclude others from the property
- The right to hunt and fish
- Limited tree removal (not for sale)



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Purpose of WRE



- Restore, protect, and enhance wetland values and functions on wetlands to attain:
 - Habitat for migratory birds and other wetland dependent wildlife
 - Protection and improvement of water quality
 - Attenuation of floodwater
 - Recharge of groundwater
 - Protection and enhancement of open space and aesthetic quality
 - Carbon sequestration
 - Protection of native flora and fauna
- WRE vs. WRP
 - 42 WRP
 - 6 WRE (2014 Farm Bill)
 - 2 active contracts



Wetland Reserve Easement Program (WRE)

Primary Eligibility:

- Privately held farmed or converted wetlands that were previously degraded due to agricultural uses and can be successfully and cost-effectively restored.
- Must have hydric soils

Adjacent Land Eligibility:

- Lands with adjacent land eligibility are those adjacent to, or contiguous with lands enrolled with primary eligibility, that will contribute significantly to the wetland functions and values of the restored land.
- Don't have to have hydric soils

NRCS will prioritize applications based the easement's potential for protecting and enhancing habitat for migratory birds and other wildlife.







Soil Rating Polygons

Hydric (100%)

Hydric (66 to 99%)

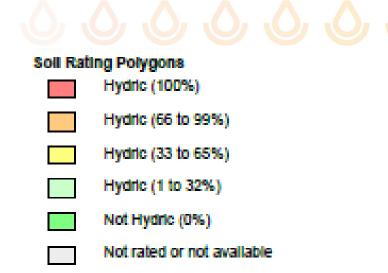
Hydric (33 to 65%)

Hydric (1 to 32%)

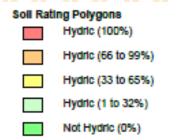
Not Hydric (0%)

Not rated or not available









Not rated or not available







Permanent Easements

- Held by federal government
- The landowner retains ownership of the land and reserves the rights to use and lease the property for recreational purposes, and to restrict public access to the property.
- No public access required
- Easement payments compensation based on a percentage of fair market value (FMV) determined by the State-wide geographic area payment rate caps (GARCs)
- Federal government pays for 100% of restoration costs
- Limited funding available to help with stewardship costs

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30 Year Easements

- Held by federal government
- The landowner retains ownership of the land and reserves the rights to use and lease the property for recreational purposes, and to restrict public access to the property.
- No public access required
- Easement payments compensation based on a percentage of fair market value (FMV) determined by the State-wide geographic area payment rate caps (GARCs)30 year easements are paid 75% of what a permanent easement is valued
- Federal government pays for 75% of restoration costs
- Limited funding available to help with stewardship costs







- WRE transferred from the landowner to NRCS through a Warranty Easement Deed.
- The deed is then recorded publicly within the land records.
- Settlement on a WRE is the same as if you were buying a property outright.
- The Warranty Easement Deed outlines all the property rights that the US purchased and that the landowner retained.

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FY23 Geographic Area Rate Cap (GARC) in Delaware

- The GARC appraisal percentage value is 95% of appraised value and <u>not to exceed (NTE)</u> value by market area are:
 - \$11,450/acre in New Castle County
 - \$16,866/ acre in Kent County
 - \$13,203/ acre in Sussex County
- Appraisals for WRE
 - Based upon "as is" usage, not taking into consideration "highest and best use" as development

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Inflation Reduction Act (IRA) - ACEP

- The Inflation Reduction Act P.L. 117-169 passed by the 117th United States Congress authorized the use of ACEP funds for easements or interests in land that will most reduce, capture, avoid, or sequester carbon dioxide, methane, or nitrous oxide emissions associated with land eligible for the program.
- The IRA funds used for ACEP must be used in agreements implemented, executed, closed, and paid prior to September 30, 2031.
- The IRAACEP-WRE priority areas identify regions with soils high in organic carbon. These soils have a high nutrient content and available water capacity, have the highest soil carbon sequestration potential, and are a priority for wetland restoration as a climate strategy for greenhouse gas mitigation.



Looking ahead – Goals of WRE Program

- Currently, we are trying to expand the WRE program!
- WRE does not require public access and pays the landowner for the development rights as well as pays for the design and restoration. There is additional money for stewardship as well!





BREAK 5 minutes

10:40 am-10:50 am



United States Department of Agriculture

10:50am-11:10am



Chris Bohinski, ACTING ASTC-Field Operations

















Programs, Resource and Outreach Questions:

1. Will there be separate funding pools for EQIP and IRA?

a. Yes, EQIP and IRA will have separate funding pools

2. Will new priority for IRA further delay backlogged EQIP projects?

a. There is currently no pressing issue with fulfilling backlogged EQIP contracts but considering the EQIP and IRA financial assistance programs have separate funding pools, the issue should not arise.

3. What decides what funding pool applications are designated into?

a. The sorting of the application into a funding pool comes from the list of practices that can be covered under the funding pool. However, since a particular practice may be funded by multiple funding pools, it is further evaluated by the planner assigned to the project.

4. What defines a climate smart practice?

a. A climate smart practice, as defined by the USDA, is a practice that aims to help producers in agriculture and forestry build soil health, sequester carbon, reduce greenhouse gas emissions, enhance productivity and commodity marketability, and mitigate the impacts of climate change while building resilience to strengthen the operation. The current list of these practices is subject to change as more research and monitoring is done.





Programs, Resource and Outreach Questions:

- 5. Would someone who is already using climate smart practices on their property be qualified for compensation?
 - a. It was stated that such situations could be evaluated on a case-by-case basis. However, there is no certainty yet.
- 6. How will producers be informed about new practices?
 - a. Currently, there are plans to increase outreach and make information regarding practices readily available to producers. However, direct distribution of practice material was determined to be the most effective form of communication.
- 7. Will NRCS create/implement a "small farm designation" to make ranking more competitive? What is the NRCS definition of a small farm? Medium scale farmers are being disenfranchised in the ranking process.
 - a. There is a decision being formulated surrounding 40 acres being the limit considered for small farms, however NRCS does not define what a small farm is or how many acres are included.
- 8. Many producers expressed interest in the new Wild Quail Initiative in 2022/2023 but did not sign up because payment rates are too low. Is there going to be changes to this program to address this issue?
 - a. We are continually reviewing this initiative, but there are no significant increases in the payment schedule for FY24. We will explore options for partnering on practices with o others in the future.





Program Improvements:

There should be practices like cover crop, that NRCS sees as a priority. This is the basis for all soil health related practices and is often the first thing producers adopt when working with NRCS; it often leads to inroads for other programs/practices.

a. FY 23 policy limited adoption of 340 Cover Crop to applicants that had not received prior federal funding for cover crop or were moving from single species to a mix. This policy has been updated for FY24















340 Cover Crop FY24 Policy Update

Applicants in FY 2024 that have previously implemented 340 Cover Crop will be allowed to apply for, and potentially receive funding for 340 if the following criteria are met:

- Applicant must be utilizing no-till or reduced tillage on the PLU that will be contracted for cover crops. Organic operations are exempt.
- Planners will utilize the Delaware Soil Health Card on a tract-by-tract basis to identify Fair or Poor indicators where cover crops will address a resource concern that will meet a higher-level of quality or conservation benefit from the previous cover crop(s).
- Planners will select one of the options below to be implemented ural under the current application:

 Conservation



LWG Recommendations 340 Cover Crop FY24 Policy Update

Nutrients to Surface and Groundwater

- Reduced rates of grasses by 10%, increased rates of legumes by 10%, 3 or more species required and
- Early planting (September 30th) and late termination date (April 15th) and
- Reduce inorganic N additions by 30% as determined by NMP or PSNT or
- Mowing cover crops (after allowable termination date) to allow regrowth enhancing rooting depth and density, thereby increasing nutrient-recycling efficacy or
- "Green Chop" for hay or silage to remove excess nutrients.

В. Compaction

Plant Cereal Rye mixed with brassicas, 2 brassica species required and Early rest planting (September 30th) and late termination date (April 15th).

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LWG Recommendations 340 Cover Crop FY24 Policy Update

C. Soil Organism Habitat Loss or Degradation

- Reduced rates of grasses by 10%, increased rates of brassicas and legumes by 10%, 3 or more species required <u>and</u>
- Early planting (September 30th) and late termination date (April 15th)

D. Organic Matter Depletion

- Plant Cereal Rye, vetch, and turnips <u>and</u>
- Early planting (September 30th) and late termination date (April 15th)

E. <u>Improve Soil Moisture Use Efficiency and Weed Suppression</u>

- Established rates of cover crop mixes <u>and</u>
- Mowing or rolling cover crops to increase ground residue cover.













Program Improvements:

NRCS needs to do a better job of quantifying the effects of practices that have been implemented. Fact sheets, handouts etc. describing the environmental and ecological impacts of these efforts would be helpful.

 Currently NRCS Delaware is working on a variety of documents, facts sheets, outreach and other handouts that outline conservation practice effects, economic benefits of practice adoption through our Farm Bill programs, as well as other information highlighting success stories from local landowners, growers, and producers who have implemented conservation practices.

O













Concerns to address:

- The Delaware Legislature is moving back into the direction of "joint cost share" with other partners to provide more financial assistance for practices. Is NRCS planning to allow IRA funds to be used in this manner?
 - 530.51 C. Use of other funds (1)A participant is not eligible for payments for conservation practices or activities when the participant receives payments or other benefits under any other conservation program administered by USDA for the same practice or activity on the same land. NRCS field personnel must monitor payment activity across all programs to ensure that there are no duplicate payments across NRCS programs.







Thank you to the Districts for holding LWG meetings this spring and submitting minutes for the STAC



11:10am-11:25am

Update on Practices and Payments Scenarios for FY24

Jayme Arthurs/Ann Baldwin State Resource Conservationist/State Conservation Engineer





New Partnership Staff

MEET OUR STAFF





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Sierra Patterson

Farm Bill Biologist II - Dover, DE

New Castle, Kent, and Sussex Counties

Sierra grew up in Pasadena, Maryland where she developed a passion for wildlife from a young age through enjoying the natural resources in and around the Chesapeake Bay. She pursued this passion and completed her Bachelor of Science in Wildlife Biology at West Texas A&M University where she involved herself in as many field work opportunities as possible taking her all throughout the state. During this time, she gained the hands-on experience to understand the importance of maintaining habitat for the conservation and management of wildlife. Now in Delaware, Sierra continues to enjoy the outdoors by bird watching, hiking, and crabbing/fishing in her spare time.

"Conservation is a cause that has no end. There is no point at which we will say our work is finished." - Rachel Carson





New Practices and Payment Scenarios

ICPS 823 Organic Management

- Requires development of full conservation plan addressing all identified resource concerns.
- Support natural resource activities not in existing standards and incorporates all National Organic Practice standards
- Provides foregone income when warranted based on crops

ICPS 810 Annual Forages

- Provide or increase forage supply during periods of low forage production or to extend the grazing season





New Practices and Payment Scenarios

CPS 336 Soil Carbon Amendment (formerly ICPS 336)

 Using carbon-based amendments to increase soil carbon and improve the physical, chemical, and biological properties of soils

CPS 309 Agrichemical Handling Facility

- A roofed building with an impervious floor to provide an environmentally safe area for the handling of on farm agrichemicals.
- Sized for liquid and dry storage, containment of spills and filling of largest spray rig or tender truck for hauling to the field.



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New Practices and Payment Scenarios



Drainage Water and Soil Moisture Management

Eligible for Funding:

- Conservation Drainage practices including Saturated Buffers (604), Denitrifying Bioreactors (605), Underground Outlet (620), Constructed Wetland (656), Structure for Water Control (587), and Drainage Water Management (554). Associated practices may include Subsurface Drain (606) and Critical Area Planting (342).
- Underground Outlet with a *conservation inlet installed on existing surface inlets/tile wells
- Managed drainage of drained cropland.
- New drainage systems meeting basic requirements above.

Not Eligible for Funding:

- Any system or practice which will negatively affect nearby wetlands
- Conservation drainage outlet practices on systems with open surface inlets which may allow distribution pipes to be plugged.
- Drainage which extends beyond the managed area or does not outlet to a conservation drainage outlet or water control structure. Resources

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FY2024 High Priority Practices











Traditionally underutilized practices with significant conservation benefits and are eligible for higher payment rate.



National Water Quality Initiative (NWQI)







Three watersheds were submitted for "Planning Phase" for FY24.

- Appoquiniminck River
- Cow Bridge Branch
- Duck Creek

"Plans" will determine practices, level of funding, and outreach required to meet water quality goals in identified watersheds

Working Lands for Wildlife, Aquatics Framework

Additional funds will be received through the initiative to further support habitat restoration for American Black Duck in DE, NJ, MD, VA, WV, TN, GA, AL, TX, and FL.



Resources Conservation



Committee Reports





Guest Reports





State Technical Advisory Meetings 🔾 🔘 🔘 🔘













Next Meeting dates are:

2/8/24

5/9/24

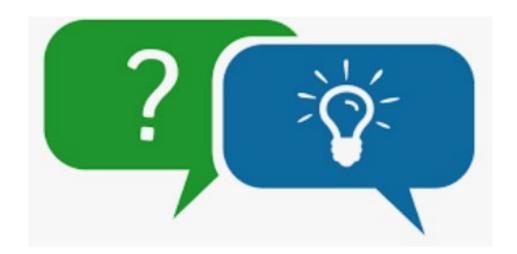
9/12/24







Wrap-up Questions/Discussion









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