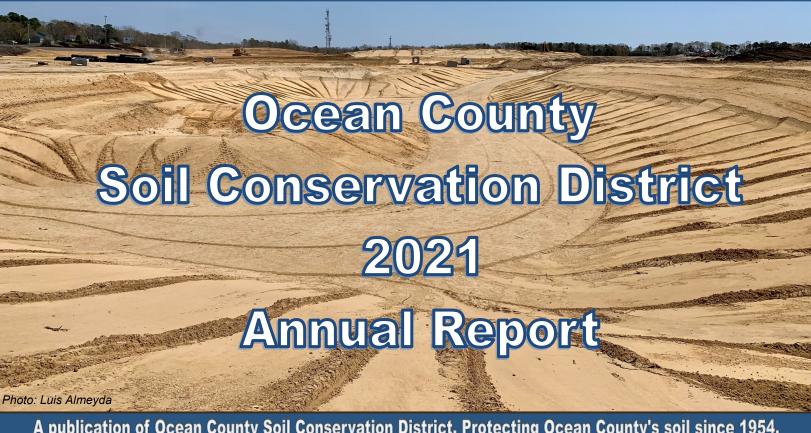
Conservation Conversation



A publication of Ocean County Soil Conservation District. Protecting Ocean County's soil since 1954.



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"Place your hands into the soil to feel grounded. Wade in water to feel emotionally healed. Fill your lungs with fresh air to feel mentally clear. Raise your face to the heat of the sun to connect with that fire and feel your own immense power."

- Victoria Erickson



BOARD OF DIRECTORS

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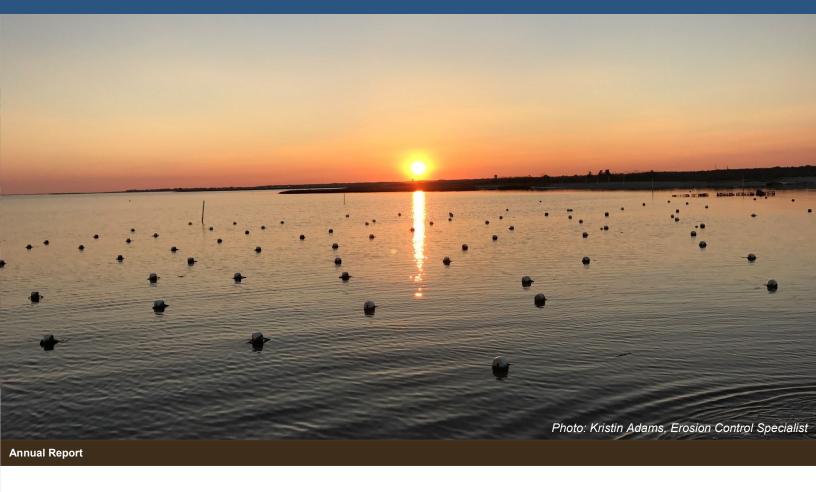
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OCSCD Conservation Leader

The Ocean County Soil Conservation District strives to lead efforts to conserve our soil and water resources. Effective soil management is fundamental to protecting water quality, water quantity, and to minimizing soil erosion and nutrient loss. We strongly support the protection and restoration of our soil resources through our ability to plan, provide technical assistance and most importantly, to educate.

Vision Statement:

To be recognized as a conservation leader with the ability to partner effectively, and use every opportunity to further sustainable resource management for current and future citizens of Ocean County and beyond.

Mission Statement:

OCSCD strives to implement exemplary programs and services focusing on the protection, restoration and sustenance of fully functioning soil resources. We further natural resource stewardship through educational programs, outreach to educators and youth, grant projects, and partnerships with public agencies, elected officials, non-profit organizations and community stakeholders.





The Barnegat Bay watershed is a great place to work, live and play. OCSCD works hard to keep our soil and water healthy and clean for the community.

The Ocean County Soil Conservation District (District or OCSCD) strives to build and sustain a conservation legacy through implementation of the Soil Erosion and Sediment Control Act, as well as a robust education and outreach program. The District views its role in protecting soil and water quality as integral to the health and vibrancy of our community. Through effective regulation and innovative education programs we can ensure a flourishing watershed that serves our constituents and sustains the natural resources of the region. As one of the 3000+ soil conservation districts in the United States, OCSCD embodies its role as a local conservation voice. Ocean County Soil Conservation District is proud of its many accomplishments.

Through open and effective communications with many partners and local community leaders, the District addresses critical and priority issues pertaining to the protection of soil and water. OCSCD welcomes input and participation and seeks opportunities to engage with constituents and enhance our effectiveness.

This Annual Report is produced in an effort to share the success stories of the District. It represents the be-

ginning of what we hope is an ongoing "Conservation Conversation" that will not only benefit the valuable natural resources of our county and region, but also the people that live and work in our local communities. In the pages that follow, we have shared a snapshot of the District - our staff, our partners, our programs and our projects. We hope that you will find our story of interest, and we welcome your comments and input. The District looks forward to 2022 and the ongoing opportunity to do our part in protecting the resources of Ocean County, and continuing this conversation. Please contact the District if we can be of any assistance.

OCEAN COUNTY SOIL CONSERVATION DIS

www.SoilDistrict.org

Christine R., Raabe Christine R. Raabe, District Director

Meet the Staff



Jean BaluskiAssistant District Director



Becky Laboy
Education Outreach Specialist



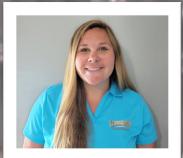
Christina Mooney
Office Manager



Jessica Pinto
Erosion Control Specialist



Brittany Moore
Erosion Control Specialist



Kristin Adams
Erosion Control Specialist



Ramon Mejia Inspector I



Georgia Grieb Inspector I



Sean Yates Inspector I



Alexandra Augustino Inspector I



Amanda Sullivan
District Clerk II

The District's Mission: Conserve & Protect Soil

By Jessica Pinto, Erosion Control Specialist

Ocean County Soil Conservation District is dedicated to our mission of protecting, conserving and restoring our soil and water resources. With support from the District's Board, OCSCD's Director, Assistant Director and our 10 technical and support staff work diligently to ensure all projects under the District's jurisdiction follow the rules and regulations of the Soil Erosion & Sediment Control Act of 1975. In addition, OCSCD understands the importance and the power of education. The District is passionate about engaging with our constituents to instill an appreciation of the soil, water and natural resources within Ocean County that are essential to a healthy and vibrant community. Numerous projects have been implemented over the past several years by the District's Education Outreach Specialist, aimed to educate, inspire and spur stewardship action in support of conservation efforts.

Soil Erosion and Sediment Control

At the Ocean County SCD we seek to minimize soil erosion and sedimentation problems resulting from land disturbance activities through review of the Soil Erosion and Sediment Control Plan and inspection to determine compliance with the NJ State Standards.

The Ocean County Soil Conservation District is a special purpose subdivision of the New Jersey Department of Agriculture serving Ocean County since 1975. The District is one of 14 New Jersey Soil Conservation Districts, all of whom are semi-autonomous locally governed regulatory agencies, who each play a very unique role in the protection of New Jersey's natural resources.

Due to the crisis of the Dust Bowl in the 1930s, Congress passed Public Law 46, declaring soil and water conservation a national priority. Local leadership was needed to coordinate efforts and tie activities to local conditions, needs, and priorities. In 1937 President Franklin D. Roosevelt recommended that states allow landowners to form soil and water conservation districts, resulting in the creation of Conservation

2020 Ocean County **Soil Conservation District Statistics**

Applications Received: 722

Total Area of Projects: 1.033.7 acres

Reports of Compliance Issued: 624 Site Inspections: 1.853

Largest Proposed Project:

122.7 acres

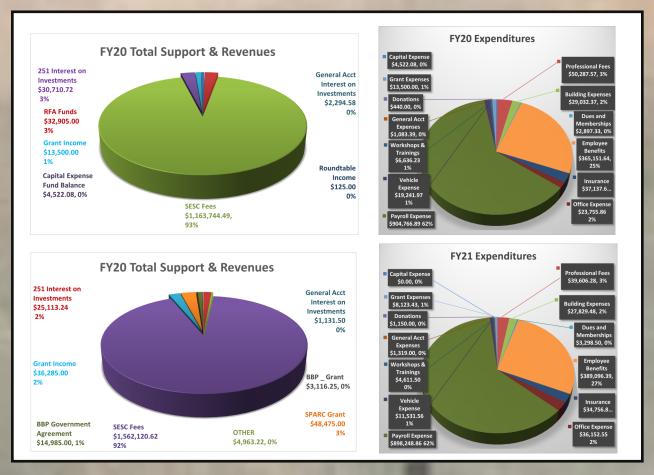
(Jackson Twp.)

Districts. Today there are close to 3,000 Conservation Districts across the country.

The birth of the Ocean County Soil Conservation District came in 1952 through a group of passionate citizens who wanted to set themselves apart from the previously established "Camburton Soil Conservation District" (comprised of Ocean, Camden and Burlington Counties). Subsequently, in 1975, the NJ State Legislature enacted Chapter 251, P.L. 1975, or the Soil Erosion and Sediment Control Act, which mandates that a municipality cannot issue a construction permit unless the local soil conservation district has reviewed and certified a soil erosion and sediment control plan for that construction. OCSCD implements this law on construction and development sites, as well as in support of the agricultural industries within Ocean County.

The District regulates construction projects involving greater than 5,000sq ft of soil disturbance. Disturbance is defined as any activity involving clearing, excavating, storing, grading, filling or transporting of soil. More details about the Soil Erosion and Sediment Control Program, as administered by the Ocean County Soil Conservation District can be found on the District's website.

The primary operational funding of the District is obtained through regulatory permit fees for development and construction. In addition, the District continually identifies and investigates diversified funding opportunities, including grants and partnerships that support delivery of an enhanced conservation effort. OCSCD staff receive quality professional development that increases knowledge and skills, and enhances efficiency and effectiveness. An overview of revenue and expenditures are reflected in the charts below for fiscal years 2020 and 2021.



Farmland Preservation Partnership

Ocean County Soil Conservation District seeks to bolster partnerships to preserve farming legacies.

County Agriculture Development Boards (CADBs) are important partners in New Jersey's farmland preservation and <u>right-to-farm efforts</u>. The NJ Agriculture Retention and Development Act of 1983 states that every Agriculture development board shall consist of three non-voting members as follows: a representative of the local soil conservation district, a representative of the county planning board, and the county agent of the New Jersey Cooperative Extension Service. As a non-voting member, the OCSCD representative attends OCADB meetings, annual farmland inspections, provides technical soil erosion and sediment control guidance for farmers and verifies which Ocean County farm activities are exempt from the Soil Erosion and Sediment Control Act.

The Ocean County Agriculture Development Board (OCADB) was established in 1984 to review and select agricultural land for preservation. The first easement was purchased on the Hallock U-Pick farm in Plumsted Township in 1991. The Natural Lands Trust Fund is used to provide the county's funding match for preserving farmland. As of January 2020, 55 farms totaling 3,357 acres have been preserved. For additional information, please contact the Ocean County Planning Department that administers the program locally.



OCSCD understands the importance and the power of education. The District is passionate about engaging with our constituents to instill an appreciation of the soil, water and natural resources within Ocean County that are essential to a healthy and vibrant community.

Over the past 30 years, Ocean County Soil Conservation District has developed an Education Program designed to heighten awareness about the importance of healthy soil and clean water, underscore the benefits provided by our natural resources, and inspire stewardship of our native land-scapes throughout Ocean County. Of the 14 New Jersey Soil Conservation Districts, OCSCD is the only District to boast a full-time staff person dedicated to education and outreach, Becky Laboy, M.Ed. Numerous projects have been implemented over the past several years aimed to educate, inspire and spur action in support of stewardship and conservation efforts.

The District offers a variety of educational programs for community members, including students, scouts, teachers, environmental commissions, garden clubs, green groups and professionals. OCSCD is an active participant in statewide educational initiatives including the annual Poster Contest administered by NJACD, and the New Jersey Envirothon. In addition, each April, the District hosts their annual signature event - the Barnegat Bay Environmental Educators Roundtable, that serves to bring together local educators and provide an evening of professional development in a fun, interactive, outdoor setting that emphasizes and showcases the Barnegat Bay watershed's unique natural resources.

Partnerships and combined efforts with agencies such as the NJ Department of Environmental Protection, USDA-NRCS, Rutgers Cooperative Extension of Ocean County, and the Barnegat Bay Partnership have served to enhance our education efforts. We highlight several of our programs, projects and initiatives on the following pages. Visit the <u>Education</u> and <u>Projects</u> pages on our website to learn more about the many inspiring education and outreach programs and resources available to the community. View our <u>Calendar</u> to find upcoming programs and events of interest.



Annual Poster Contest

The New Jersey Conservation <u>Poster Contest</u> is an annual contest sponsored by the NJ Department of Agriculture, the <u>NJ Association of Conservation Districts</u> and the <u>Ocean County Soil Conservation District</u>. The contest aims to promote a better understanding of the connection between natural resources and humans in a fun and creative way that engages students throughout the county, state and nation. Visit the NJACD webpage to view the artwork of the 2021 statewide winners. The theme for the 2022 New Jersey Conservation <u>Poster Contest</u> is "Healthy Soil = Healthy Life". Visit the <u>District</u> <u>website</u> for more information.





Congratulations!

MATES Students - New Jersey Envirothon Champions!

The <u>New Jersey State Envirothon</u> is an annual competition of high school students who test their knowledge of environmental topics through hands-on interactive problem solving. The team that best demonstrates a comprehensive understanding of natural resources, as well as teamwork and communication skills, moves on to represent New Jersey in the 32nd annual <u>North American Envirothon</u> competition which includes students from Canada, as well as China. It is North America's largest High School Environmental Education competition.

New Jersey students competed "virtually" in the 2021 Envirothon. (Unfortunately, due to the COVID-19 pandemic, the 2020 Envirothon was canceled.) We are proud to announce that the Ocean County-based MATES (Marine Academy of Technology & Environmental Science) team took First Place! They moved-on to compete "virtually" in the North American Envirothon, where they placed 13th out of 42 teams. Congratulations to our hometown heroes: Caitlin Sia, Jillian Peslak, Logan Bukowski, Mackenzie Fries and Maya Quinn.

The <u>first New Jersey Envirothon</u> was held in 1994. MATES' teachers, Adam Sprague and Dave Werner, have been co-advising MATES Envirothon teams together for over 15 years. They begin engaging students as freshmen, and build upon the foundation of knowledge the students gain each year. Juniors and seniors on MATES' two teams offer their expertise as mentors to new team members, and together they "create a cohesive team built on friendship, trust and fun," says Mr. Sprague, who believes student-to-student mentorship is one of the keys to their continuing success. MATES has won the New Jersey Envirothon many times over the years, and proudly showcases their students' accomplishments in their hallways, where plaques identify the names of students on teams who have placed first or second in the statewide competition over past years.

Fun for All:

The Envirothon teams are tested for their knowledge in several categories: Soil, Forestry, Wildlife, Aquatics and a "Current Issue". Each year, Ocean County Soil Conservation District assists with the administration of the Wildlife Station. Sans COVID, students are tested on their knowledge of wildlife through a "written" test, as well as a "hands-on" component. The Envirothon typically includes an overnight camping experience enjoyed by all participating teams, which includes games, prizes, food and a DJ to celebrate success!





Roundtable

Replace text with Roundtable info: Partnerships: Ocean County Soil Conservation District regularly works with local and regional partners to coordinate and collaborate on numerous natural resource projects and programs. We welcome opportunities to leverage resources, share expertise and assist in appropriate initiatives that benefit not only the agencies and organizations involved but, more importantly, the natural resources of Ocean County Together we accomplish more than we can alone. The following pages showcase a few of our recent successes. Visit our website to learn more about our many partnerships and projects.

Communication & Outreach Grant Program

Collaborating to Ensure a Healthy Watershed for People and Wildlife

By Becky Laboy, Education Outreach Specialist

For the past 2 years, OCSCD has received generous funding from the Barnegat Bay Partnership (BBP) in support of a unique collaboration between the two agencies to expand and grow education, outreach and stewardship efforts within the Barnegat Bay watershed. OCSCD's Education Outreach Specialist, Becky Laboy, under the direction of BBP's Public Outreach Coordinator, Karen Walzer, together focus efforts on a suite of shared goals. Accomplishments include promotion and expansion of the Jersey-Friendly Yards initiative through programs, messaging and further development of Jersey-Friendly Yards website content, as well as continued growth of the Barnegat Bay Master Naturalist Program to increase watershed stewardship by engaging a corps of volunteer Master Naturalists. Learn more about our many achievements on the following pages. We look forward to our third year working together through this partnership, as we strive to keep the Barnegat Bay watershed a healthy and resilient place for people and wildlife.



Becky Laboy (OCSCD) and Karen Walzer (BBP) pose for a photo as they prepare to install a Jersey-Friendly pollinator garden.



Jersey-Friendly Yards

The Jersey-Friendly Yards initiative is spear-headed by the Barnegat Bay Partnership, which is the National Estuary Program (NEP) for the Barnegat Bay watershed. A critical component of BBP's clean water priority involves reducing the "people" pollution carried from yards by stormwater runoff into our waterways. In 2013 the New Jersey Department of Environmental Protection (NJDEP) provided grant funding to the BBP to develop the Jersey-Friendly Yards website as a comprehensive online source of information about environmentally friendly landscaping throughout New

Jersey. The website brings together multiple resources about the best landscaping practices to help property owners make sound decisions for a healthy environment and a healthy economy.

Since Barnegat Bay Partnership's launch of the Jersey-Friendly Yards initiative in 2015, OCSCD has been an integral partner. Through several independent grants valued at over \$85K, funded by the <u>Barnegat Bay Partnership</u> and <u>The Watershed Institute</u>, OCSCD has helped to grow the Jersey-Friendly Yards program. Our projects have resulted in the installation of dozens of Jersey-Friendly demonstration gardens, the facilitation of hundreds of Jersey-Friendly Yards educational programs, workshops, conference presentations, garden tours and <u>webinars</u>, and engagement with thousands of community members in best landscape management practices. With the creation of healthy soils, fidelity to native plants, installation of water conservation practices in the landscape, deference to fertilizers, elimination of pesticide use, and reduction of stormwater runoff and non-point source pollution, Jersey-Friendly Yards helps make the Barnegat Bay watershed a great place to live, work and play.



Cardinal Flower (Lobelia cardinalis)

Great Blue Lobelia (Lobelia siphilitica)

Helen's Flower (Helenium autumnale)

New England Aster (Symphyotrichum

Pollinator Habitat at Ocean County College

Through a generous grant from Xerces Society for Invertebrate Conservation, the Barnegat Bay Partnership received a pollinator habitat kit containing 750 native plants from Pinelands Nursery to create a Jersey-Friendly pollinator garden on the Ocean County College campus, where BBP is headquartered. Ocean County Soil Conservation District, Barnegat Bay Master Naturalists and AmeriCorps New Jersey Watershed Ambassadors collaborated with Barnegat Bay Partnership staff and the Ocean County College grounds crew to install the garden in May, 2021.

The plugs were soaked in water and the roots were "cut and tickled" before they were transplanted into the prepared bed next to the John C. Bartlett Building. All 750 plants were then thoroughly hand watered before a sprinkler system

was set-up to keep the soil moist as they take root. The garden is <u>located</u> in the area between the John C. Bartlett Building (Building #2) and Parking Lot #1(R), indicated on the <u>campus map</u>.

A variety of natives were pre-selected by Xerces Society based on the plant's value to pollinators in their adult stage, as well as in their larval (caterpillar) stage. Varied boom times of these perennials ensure flowers persist throughout all 3 growing seasons. Species include Swamp Milk-weed, Great Blue Lobelia, Seaside Goldenrod, Purple Mistflower, New England Aster, Purple Coneflower, Swamp Verbena, Foxglove Beardtongue, Cardinal Flower, Helen's Flower, Blue Vervain and Blazing Star.

This <u>Jersey-Friendly</u> pollinator garden is visible and available to the community and will serve as a <u>Jersey-Friendly demonstration site</u>. Visit the garden and be inspired to create your own Jersey-Friendly Yard!



Master Naturalist, Susan Slim, prepares the plugs for transplanting. (Photo: Becky Laboy)



"BEFORE"

"AFTER"



Photo: Master Naturalists Jerri McClenaghan-linde, Jackie Haydux, Rich Tomasik, Candi Tomasik, P and Barry Schrierder Join torces to remove invasive

Partnership in Support of Watershed Stewardship

By Becky Laboy, Education Outreach Specialist

species from the park. (Photo by Becky Laboy, Education Outreach Specialist)

Barnegat Bay Partnership's Communication and Outreach Grant provides financial support to Ocean County Soil Conservation District to assist Barnegat Bay Partnership (BBP) with facilitating the Barnegat Bay Master Naturalist program, in an effort to increase stewardship in the Barnegat Bay watershed. Barnegat Bay Master Naturalists provide their time, effort and knowledge through a variety of stewardship opportunities offered by various environmental organizations, government agencies and advocacy groups throughout the watershed. Following their interests and expertise, Master Naturalists assist with science, research, education and conservation projects, including aquatic and terrestrial species monitoring, native garden installation and care, natural landscape restoration, dune protection, beach clean-ups, and more. OCSCD assists with identifying and facilitating service projects, and connecting Master Naturalists with local organizations who need volunteers. The District also assists BBP with compiling a quarterly newsletter, *The Naturalist*, that features articles for and by Barnegat Bay Master Naturalists - highlighting their stewardship, showcasing natural resources, and keeping connected.

Invasive Species Removal Project at John C. Bartlett Jr. Park at Berkeley Island

Currently there are over 100 Master Naturalists enrolled in the Barnegat Bay Master Naturalist program. Each Master Naturalist has completed a 40-hour training program administered by the Barnegat Bay Partnership. The training provides outdoor field experiences to participants at a variety of locations - from the head waters of local rivers to the brackish salt marsh and back bay estuaries, and to the mouth of the shallow Barnegat Bay. Participants in the training are introduced to scientists, experts, and leaders who all have their finger on the pulse of the Barnegat Bay watershed where the Barnegat Bay Master Naturalists volunteer their service.

Program participants are also required to complete 40 hours of volunteer service and attend 8 hours of relevant educational programs annually, in order to maintain their BBMN status, Barnegat Bay Partnership, Ocean County Soil



Master Naturalists, Anne Towkanewski, Amy Kane and their families help pull invasive species at Berkeley Island. (Photo: Becky Laboy)

Conservation District, Island Beach State Park, Ocean County Parks, Jacques Cousteau National Estuarine Research Reserve and Save Barnegat Bay are just a few of the local organizations in the Barnegat Bay watershed that benefit from the time, effort and experience of Barnegat Bay Master Naturalists.

Planting Dune Grass at Island Beach State Park

On December 12, 2020, Becky Laboy, Education Outreach Specialist for OCSCD, led a group of Barnegat Bay Master Naturalists on an endeavor to

plug a "hole" in the dunes at Island Beach State Park. Within about 3 hours they dug 900 culms of American Beach Grass (Ammophila breviliqulata) into the sides of the near vertical slopes of a large blow-out behind Ocean Bathing Area 2. Individual plants were slid about 8 inches deep, and quickly packed-in with sand. Placed about 1 to 2 feet apart, plants were installed throughout each face of the sheer sides of the giant hole.

The best time for planting Dune Grass is between October 1 and March 31, when the temperature is cool and it's reliably wet with precipitation. Otherwise, the plants will dry out and die before the roots are able to take hold. Throughout the life of the plant, the roots will continue to grow, reaching lengths of several meters long. They intertwine below the sand, forming large "nets", miles long, which hold the sand together, helping to create the "dune". These plants are especially important as a defense against wind and water erosion caused by nor easter storms and hurricanes. Adapted to living in this harsh ecosystem, American Beach Grass thrives

when buried under blowing sand. It continues to send out new shoots, while building an underground fortress of biomass consisting of roots and stems.

The back-aching work of planting Dune Grass on this near vertical slopes was carried out by a small team of hardy Master Naturalists, to whom we give many thanks: Master Naturalists Casey Wolf, Jim Hutcheson, and Jim Heller.

Photos: Master Naturalists Jim Hutcheson (top) and Casey Wolf (bottom) plant Beach Grass at Island Beach State Park, Dec. 2020.





Forty North Oyster Farms - Barnegat Light, NJ

Sustainable Practices for Aquaculture Resource Conservation (SPARC) By Kristin Adams, Erosion Control Specialist

Across the country, Soil Conservation Districts have had a close working relationship with the Natural Resources Conservation Service (NRCS), since 1937 with the passing of the Soil Conservation Act. The Districts and NRCS work together to conserve soil and water resources on private land. Historically, the Ocean County Soil Conservation District (OCSCD) has primarily worked with the construction and development industry to conserve these natural resources, through the authority granted by the Soil Erosion and Sediment Control Act, Chapter 251, P.L. 1975, while NRCS has worked with farmers. In July 2020, OCSCD was awarded a Technical Assistance Grant from the National Association of Conservation Districts (NACD) that allowed the District to assist NRCS in conserving natural resources on private farmland and forests, and begin the process of training required for Conservation Planner Certification as well as working with a unique group of producers in the shellfish aquaculture industry. Although harvesting shellfish is considered a historical and cultural regional livelihood for traditional "baymen"; there has been a recent resurgence of this industry specifically, in the Barnegat Bay region. The effective implementation of Chapter 251 P.L. 1975 Soil Erosion and Sediment Control Act by the District has a direct correlation to the health of the Barnegat and Great Bay watersheds through keeping sediment from entering waterways. By engaging with the farmers and aquaculture producers in this region, the District is furthering our mission - to protect, restore and sustain fully functioning soil resources to minimize nutrient transport and nonpoint pollution and to contribute to sustainable soil management practices for farm use. In addition, it is also part of the District's mission to develop and nurture effective relationships with other public agencies and non-profit organization and to sustain functioning ecosystem services through education and resource management. Shellfish producers are a special niche of farmers - not only do they produce food for consumption within the tidal water bodies of New Jersey, but the clams, oysters and scallops the farmers grow provide ecosystem services including improved water quality and aquatic habitat. SPARC presents a unique opportunity for OCSCD to support conservation practices on privately held shellfish aquaculture leases in the tidal waters of the Barnegat and Great Bay. Ultimately, protecting soil resources protects water resources and this initiative will improve the water quality and aquatic habitat as crucial conservation benefits addressing critical resource concerns in this coastal region.

This NACD Technical Assistance Grant has created a unique niche for the District and is beginning to provide a needed service and collaborative coordination among resource managers and the aquaculture producers of the region by addressing the needs of this unique population of producers and "non-traditional" farmers. Aquaculture continues to be a natural resource priority and need in the coastal region of New Jersey, which was one of the main criteria required to be a recipient of the NACD Technical Assistance Grant.

Ocean County Soil Conservation District's Sustainable Practices for Aquaculture Resources Conservation (SPARC) project has started to build District capacity through two pathways that are occurring simultaneously. District staff, along with a broad-based Advisory Committee Partnership, has started to connect with local shellfish farmers, to gain a better understanding of their specific natural resource concerns and best management practices. As a result of the support provided by the TA grant, a full-time District employee has achieved NRCS Apprentice Conservation Planner certification and has a long-term goal of achieving NRCS Certified Conservation Planner status. The District will continue to provide a boots-on-the-ground, local connection between NRCS and the shellfish producers, to further develop the conservation practices of the NJ NRCS Aquaculture Initiative, while increasing funding opportunities for producer participation and involvement.

Additionally, OCSCD has been invited to assist the Barnegat Bay Partnership and Rutgers University (Center for Remote Sensing and Spatial Analysis) with the creation and implementation of the grant-funded watershed management plans of the Toms River, Cedar Creek/Forked River, and Little Egg Harbor through assisting with identifying appropriate and accessible conservation practices related to local resource concerns such as loss of coastal wetlands, living shorelines, water quality/nutrient loading and shellfish farming yields. OCSCD has also been invited to be a co-chair of the Barnegat Bay Partnership Science and Technical Advisory Committee's (STAC) Shellfish Working Group, which, among other goals, aims to develop a collective vision for the future of the estuary's shellfish resources.







Hard clam seed at Parsons Mariculture—Little Egg Harbor, NJ

The main goal of SPARC was to initiate conservation planning and technical assistance training for New Jersey coastal bays that emphasizes the natural resource needs and concerns of regional shellfish aquaculture producers and to provide access to various opportunities. OCSCD used this grant as an initial and necessary first step in establishing a regional and inclusive approach to engaging soil conservation districts in building capacity to achieve fulfillment of an identified natural resource conservation need that focuses on estuarine shellfish farming and coastal aquaculture. In addition to networking with aquaculture industry professionals, District staff participated in a total of 54 courses, trainings, and workshops. Considerable time was spent participating in NRCS courses, trainings, nearly 30 field visits, as well as the structure and implementation of NRCS conservation planning. In June 2021, Kristin Adams was approved as an NRCS Apprentice Conservation Planner, indicating completion of all the necessary course work, on the job training and supervisor approved experience/knowledge checks required for this step.

Another goal for the SPARC project was to organize a broad-based Advisory Committee Partnership that connects with local shellfish farmers, primarily within Barnegat and Great Bays, in order to gain a better understanding of their specific natural resource concerns. The District was fortunate to gain the support from a diverse group of devoted partners, including: NRCS, NJ Department of Agriculture, NJ Department of Environmental Protection - Bureau of Shellfisheries, Barnegat Bay Partnership, Long Beach Township, Stockton University, Rutgers Cooperative Extension of Ocean County, Parsons Mariculture and Jetty/Jetty Rock Foundation. These partners have and continue to aid in getting the SPARC project off the ground and will be a vital part of future projects in the aquaculture initiative as it evolves. A dialogue between the District, NJ NRCS and partners has begun regarding the potential adoption of new conservation practice scenarios that would provide additional opportunities for aquaculture producers. These include oyster reef restoration and setting tanks/raceways for the raising of shellfish larvae.

The District was recently awarded a second year of NACD Technical Assistance funding to support the continuation of the efforts initiated in year one of the SPARC project. The momentum and connections made with regional partners and the aquaculture community will be nurtured and continue to expand. OCSCD will continue efforts to achieve NRCS Certified Conservation Planner status and aim to provide a direct, local connection to shellfish producers by further developing the NJ NRCS Aquaculture Initiative and increasing funding opportunities and participation. SPARC has provided OCSCD a unique opportunity to expand its goals, mission and natural resource assistance to the ecosystems in the region. By connecting soil and water conservation efforts, the District has expanded outreach to all user groups that rely on a healthy and thriving watershed, including the aquaculture community. Ultimately, the work of the District's Aquaculture Initiative will expand opportunities for shellfish producers and will also help to improve the ecological health of the Barnegat and Great Bay estuaries and ecosystems. Being awarded the NACD's Technical Assistance Grant for 2021, the District anticipates continued successes of SPARC and looks forward to meeting the needs of the unique aquaculture community in the region. For more information, please visit the SPARC Project page on the District's website.



Sampling the Tuckerton Reef, October 2020

NACD TAG2020 - SPARC Year 1 Grant Totals (August 2020 - June 2021)

Grant funded staff hours	785
OCSCD match funded staff hours	163
Grant funded staff salary and fringe benefits	\$40,800
Grant funded training, travel & equipment	\$1,589
OCSCD match funded staff salary and fringe benefits	\$11,821
Total training and courses attended	54
Total farm visits and conservation plans assisted	27



Lakewood Township Stormwater Basin Retrofit Project

By Brittany Moore, Erosion Control Specialist and Becky Laboy, Education Outreach Specialist

The Ocean County Soil Conservation District is partnering with <u>Camden County Soil Conservation District</u>, <u>South Jersey Resource Conservation and Development Council (SJRC&D)</u>, and <u>Lakewood Township Department of Public Works</u> on a grant project called the Lakewood Township Stormwater Basin Retrofit Project (WM20-008). The project is funded by a <u>Federal 319(h) Water Quality Restoration grant</u> awarded by the <u>NJ Department of Environmental Protection</u> to the <u>SJRC&D</u>.

The 4-year grant focuses on retrofitting stormwater basins within the North and South Branches of the Metedeconk River watershed, a sub-watershed of the Barnegat Bay watershed, spanning Ocean and Monmouth counties. The restoration of the Metedeconk River watershed is of critical importance - the Metedeconk River provides over 100,000 residents with a source of clean water for drinking and personal use.

The primary goals of the project are to reduce non-point source pollutant loading, and improve water quality and wildlife habitat by retrofitting stormwater basins. It is anticipated that up to 12 stormwater basins in Lakewood Township will be retrofitted, each with an individual retrofit design that could include revegetation of the basin with native grasses and wildflowers, reforestation of the basin, structural modification, or other methods that would accomplish an efficient and cost-effective retrofit. Once renovated, the ba-

sins will be able to treat and filter target pollutants from stormwater runoff and recharge groundwater more effectively, therefore, decreasing the amount of pollutants and volume of stormwater discharged to receiving streams.

Lakewood Township's 181 stormwater basins were analyzed and ranked for retrofit potential. Stormwater basin ranking was based on a list of characteristics, including the basin's proximity to waterways or wetlands, soil conditions, type and condition of basin, as well as construction costs, feasibility and potential public acceptance. Basins in close proximity to wetlands or waterbodies were prioritized due to their greater impact on receiving waterbodies. The analysis concluded that 10 publicly maintained basins were within 250 feet of areas designated as wetlands. Subsequent field inspections were undertaken by Craig McGee, District Manager at Camden County Soil Conservation District, OCSCD Inspectors Ramon Mejia and Luis Almeyda, and Team Habitat Coordinator for South Jersey Resource Conservation & Development Council, Eileen Miller, to further evaluate retrofit potential for the basins, resulting in a short list of target basins.



Staff inspect a stormwater basin to determine if it's a candidate for the Retrofit Project. (Photo: Eileen Miller, SJRC&D)

In spring, 2021, work started on two selected stormwater basins in Lakewood Township, one located at Avenue of the States adjacent to FirstEnergy Park, and another located

on Commonwealth Drive. OCSCD Inspectors Ramon Mejia, Luis Almeyda and Sean Yeats and SJRC&D Team Habitat Coordinator, Eileen Miller, collected and tested soil samples from the two basins. Soil samples will be collected and tested throughout the 4-year project to track the positive changes native vegetation provides to the basins' soil health. (What was the results of the soil test?)

The first seeding operation was implemented at the FirstEnergy Park basin, home of the Lakewood Blue Claws. Native grass seeds were drilled into the basin using SJRC&D's newly purchased no-till Kasco Versa-Drill. The unique design of the Kasco Versa-Drill makes it durable enough for use in no-till conditions on the most uneven terrain and offers exact placement of seed, ensuring direct contact with the soil and improved germination results. The Kasco Versa-Drill is able to create

an opening in the soil, deposit the seed, and close the opening while completing a single pass. The use of no-till drills for basin retrofit projects promotes maximum soil conservation by limiting water and wind exposure reducing potential for soil erosion.

(Photo: Monarch on Seaside Goldenrod, Solidago sempervirens, by Becky Laboy)



The seed box of the Kasco Versa-Drill is compatible with the "fluffy" seeds of native grasses proposed within the retrofit design. Species include Big Bluestem (Andropogon gerardii), Virginia Wild Rye (Elymus virginicus), Switchgrass (Panicum virgatum), and Indiangrass (Sorghastrum nutans). These species are fast growing and considered superb for erosion control and stabilization. Seaside Goldenrod (Solidago sempervirens), a native flowering perennial, was added to the seed mix to provide fall color, nectar for migrating Monarchs and other butterflies and pollinators, as well as seed for songbirds, including Pine Siskin, American Goldfinch and sparrows. The seed mix is supplied by Pinelands Nursery.

Native vegetation offers both hydrological and ecological benefits. Native grasses and plants have deeper root systems compared to standard turf grass, which can filter and infiltrate stormwater runoff more effectively. Once established, native vegetation also requires less frequent maintenance, reducing costs and emissions from maintenance equipment. In addition, native vegetation provides habitat and a food source for local wildlife and offers an enhanced aesthetic appearance for the community.

The team will continue retrofitting the remaining basins over the course of the 4-year grant.

(Photo: Female and male American Goldfinches eating seeds from Switchgrass, Panicum virgatum, by Becky Laboy)



SJRC&D

Urban Agriculture

Partnerships, Projects & Initiatives:

Ocean County Soil Conservation District regularly works with local and regional partners to coordinate and collaborate on numerous natural resource projects and programs. We welcome opportunities to leverage resources, share expertise and assist in appropriate initiatives that benefit not only the agencies and organizations involved but, more importantly, the natural resources of Ocean County Together we accomplish more than we can alone. The following pages showcase a few of our recent successes. Visit our website to learn more about our many partnerships and projects.

Jersey-Friendly Yards

Urban Agriculture Conservation Initiative

SPARC

Lakewood Township Stormwater basin Retrofit Project

SHIP Gardens

Subaqueous soils

Outdoor Classrooms

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