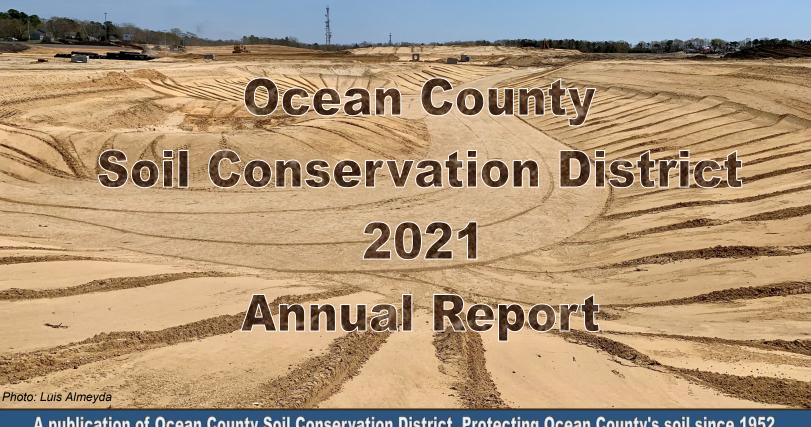
# Conservation Conversation



A publication of Ocean County Soil Conservation District. Protecting Ocean County's soil since 1952.



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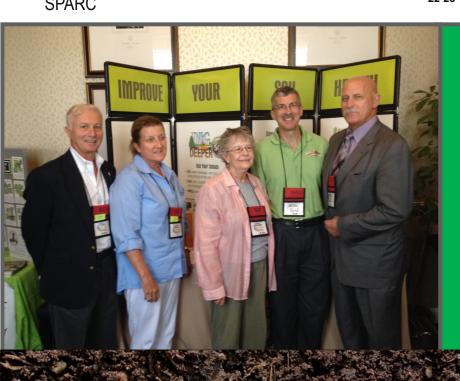
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The 2021 Annual Report was designed and edited by Becky Laboy, M.Ed., Education Outreach Specialist, OCSCD

"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

As shown in photo, from left to right:

Chair: Dr. William Pollock: wpollock@soildistrict.org

**Member:** Martha Maxwell-Doyle: mmaxwelldoyle@soildistrict.org

Treasurer: Charlene Costaris:

ccostaris@soildistrict.org

Secretary: Dr. Michael Gross:

mgross@soildistrict.org

Member Emeritus: Tony Dilodovico



## **OCSCD Conservation Leader**

Soil Conservation Districts are locally-led government agencies that implement conservation programs in consultation and cooperation with the New Jersey Department of Agriculture and other state and federal agencies and organizations. 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.

#### Our Region:

Ocean County overlays the Barnegat Bay watershed which boasts beautiful beaches and pristine Pine Barrens habitat. The ecological diversity within our borders makes Ocean County one of the most desirable places to live in New Jersey. For this reason, OCSCD's role in protecting and conserving our soil, water and natural resources is vital to the health of our communities.

#### **Vision Statement:**

OCSCD endeavors 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.

Visit our website to learn more about the Ocean County Soil Conservation District.





The Barnegat Bay watershed is a great place to work, live and play. OCSCD works 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 & 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. Please contact the District if we can be of any assistance.

Christine R. Raabe Christine R. Raabe, District Director



# Meet the Staff



Jean Baluski
Assistant District Director
Jean manages all technical
staff, ensures compliance of
plans and proper implementation of the Soil Erosion and
Sediment Control Act.



Christina Mooney
Office Manager
Christina manages office
operations and accounting, and
is the OPRA and Human
Resources contact.



Amanda Sullivan
District Clerk II
Amanda receives office visitors,
keeps official records and
executes official policy.



Jessica Pinto Erosion Control Specialist



Brittany Moore
Erosion Control Specialist



Kristin Adams, PSM
Erosion Control Specialist



Ramon Mejia Erosion Control Specialist

The District's four Erosion Control Specialists are responsible for reviewing all plans and applications for development. They ensure all documents reflect compliance with the Soil Erosion and Sediment Control Act and accurately reflect the SESC Standards. They also represent the District on various programs and play key roles in a diversity of grant projects that support soil and water conservation within Ocean County.



Georgie Grieb Inspector II



Sean Yeats Inspector I



Alexandra Augustino Inspector I



Ben Hayden Inspector I

District Inspectors visit active sites in all 36 municipalities in Ocean County where soil disturbance of over 5,000 square feet occurs. They make sure construction is adhering to the District Certified Plan and appropriately implementing the Soil Erosion Control Standards. The inspectors are the "on the ground" eyes of the District and issue Reports of Compliance and other official paperwork.



Becky Laboy, M.Ed. Education Outreach Specialist

Becky manages the District's education and outreach programs for schools, scouts and community groups. She implements grant projects and programs that focus on soil conservation and clean water through sustainable landscaping practices. Becky manages District communications and shares information about the Districts many accomplishments through our website, monthly newsletters, blogs and social media. Becky often represents the District at various events as the "face" of the Ocean County Soil Conservation District.

#### 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.

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

## 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

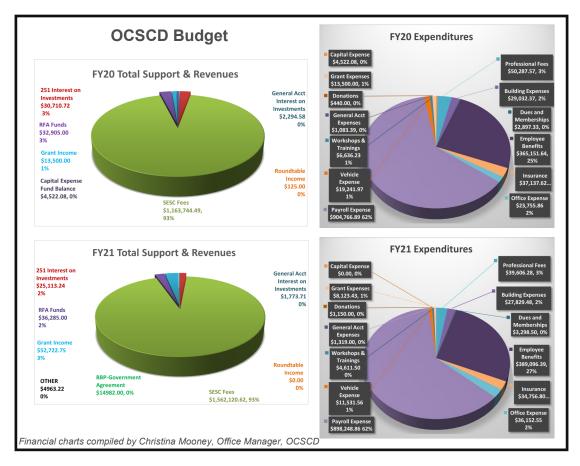
(Jackson Twp.)

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 New Jersey Department of Environmental Protection (NJDEP) currently regulates stormwater runoff from certain construction activities under its Construction Activity Stormwater General Permit (NJPDES Permit No. NJ0088323).

#### **Operational Funding**

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 Right-to-Farm. 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.

#### 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 with initiatives that benefit not only the agencies and organizations involved but, importantly, the natural resources of Ocean County. Visit our website to learn more about our many partnerships and projects. Together we accomplish more than we can alone.











Cooperative Extension











New Jersey Department of Agriculture (NJDA) Soil Conservation Districts and NJDA work cooperatively with local and state government, as well as with the development community to ensure effective management of soil and water resources during construction.

National Association of Conservation Districts (NACD) provides a member-driven voice for the 3000+ soil conservation districts across the nation. Policy priorities identified by the Board are used to secure federal funding for natural resources conservation projects. NACD and NRCS provided funding for OCSCD's Urban Agriculture Conservation Initiative and Technical Assistance grant (TAG).

Natural Resources Conservation Service (NRCS) provides farmers with financial and technical assistance to implement conservation practices. OCSCD works with NRCS on numerous projects and programs involving conservation planning. Most recently, the District is working with NRCS and local shellfish producers to further develop the conservation practices of the NJ NRCS Aquaculture Initiative, through the District's SPARC project.

The New Jersey Association of Conservation Districts (NJACD) is a 50-year-old institution providing professional development and leadership programs to the 14 Soil Conservation Districts covering 21 counties in the state. NJACD sponsors the annual Poster Contest and NJ Envirothon.

Rutgers Cooperative Extension of Ocean County provides research based information and programs to help educate our diverse population and improve their lives. OCSCD partners with RCE on the Jersey-Friendly Yards initiative.

South Jersey Resource Conservation & Development (SJRC&D) promotes the conservation of natural and community resources through education and collaborative partnerships. OCSCD is an active member of SJRC&D. OCSCD, SJRC&D and Camden SCD are partnering on the implementation of the Lakewood Township Stormwater Basin Retrofit Project, a 319 grant project. In addition, the District is collaborating with SJRC&D on the annual South Jersey Tour des Farms.

Cape-Atlantic Soil Conservation District and OCSCD have an ongoing shared services agreement that allows the districts to accomplish more activities together in a more effective and efficient manner. Although each of the 14 SCDs in New Jersey are independent, autonomous, and locally-led subdivisions of the State, it is often sensible to partner and share services on a regional level.

Barnegat Bay Partnership (BBP) is one of 28 National Estuary Programs (NEP) established by USEPA for nationally significant estuaries. BBP is committed to restoring, protecting, and enhancing the natural resources of the Barnegat Bay watershed. OCSCD is an active founding member on BBP's Science & Technical Advisory Committee and Communication & Education Committee, and partners with BBP on numerous projects including Jersey-Friendly Yards (JFY) and the Barnegat Bay Master Naturalist Program.

Ocean County Department of Parks and Recreation offers a wide variety of outdoor activities in 27 parks on over 4000 acres of preserved land. Cattus Island County Park and Jakes Branch County Park are host to several Jersey-Friendly demonstration gardens, and Jakes Branch hosts OCSCD's SHIP project. Jakes Branch will be the host site for OCSCD's 25th Annual Environmental Educators Roundtable in 2022.

The Lighthouse Center for Natural Resource Education is located on 194 acres of land leased from the New Jersey Division of Fish & Wildlife. LHC has hosted OCSCD's annual Barnegat Bay Environmental Educators Roundtable event for the past decade and remains a significant partner with District involvement with shared and common goals.



# **Education & Outreach**

By Becky Laboy, M.Ed., Education Outreach Specialist

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. I feel fortunate to represent the District in the position of Education Outreach Specialist. Over the past 8 years, I have stood on the shoulders of my predecessor, Christine Raabe, who is now the District Director, and implemented numerous projects aimed to educate, inspire and spur action in support of soil and water stewardship and conservation. Many of our programs, projects and initiatives are highlighted on the following pages.

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 and the New Jersey Envirothon, administered by NJACD. In addition, each April the District hosts our 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. Visit the Education and Projects pages on our website to learn more about the many inspiring education and outreach programs and resources available to the community. View our Calendar to find upcoming programs and events of interest. Sign-up to receive our monthly Newsletter for up-to-date information about programs, projects and District news.

For specific questions regarding our education and outreach programs, please contact Becky Laboy, Education Outreach Specialist, at education@soildistrict.org





# Barnegat Bay Environmental Educators Roundtable

Celebrating 25 Years of Local Connections, Culture & Conservation

Since 1997, the Ocean County Soil Conservation District has been hosting this much anticipated annual event. The Barnegat Bay Environmental Educators Roundtable is a professional development engagement designed for educators to enhance their knowledge of local natural resources, culture and history, and to nurture a sense of place. Dozens of environmental organizations exhibit and share their educational materials. Teachers attend a rotation of experiential workshops and receive an array of valuable tools and resources that support the development of environmental stewardship in the students they teach.

#### A Look Back at 25 Years...

(2000) Early Roundtable events took place at the Beachwood Yacht Club where teachers gathered to enjoy a delicious dinner and professional development activities.



(2001) Christine Raabe, District Director, and Kerry Jennings, retired Assistant Director, discuss the evening's agenda.



(2003) Field Trip to a stormwater basin where teachers learned about stormwater runoff and soil erosion control.



(2007) By the early 2000's, the Roundtable had moved to the Lighthouse Center for Natural Resource Education where Duffy Barrow, Naturalist, leads a bird walk.



(2007) "Experience Barnegat Bay" is a unique program offering interactive place-based environmental experiences at the Lighthouse Center for Natural Resource Education.



(2009) Berkeley Twp teacher, Lois Schoeck showcases "Lens on Potter Creek - a Photo Essay" by the Potter Creek Crusaders.



(2010) Judy Merritt, Jill Lorenz and Christine (2013) Becky Laboy OCSCD Education Raabe are jellyfish.



(2011) Terry O'Leary engages teachers in outdoor learning at the Lighthouse Center.



(2011) Teachers learn about soils through hands-on activities from soil specialist Eileen Miller.



Specialist and Pola Galie Lighthouse Center Manager teach in the Marine Laboratory.



(2014) Teachers learn the traditions of basket weaving using native plant materials, as practiced by indigenous peoples.



(2014) We are grateful for the partnership with Ocean County Parks & Recreation who's collaborative efforts ensure the success of the Barnegat Bay Environmental Educators Roundtable each year!



(2015) Karen Byrne, Senior Biologist, NJDEP, gets "Sedimental About Beaches" in a lesson presented by New Jersey Sea Grant Consortium.



(2018) Karen Walzer, Public Outreach Coordinator, Barnegat Bay Partnership, shares resources and talks to a teacher about the many education and outreach programs BBP provides.



(2019) Dr. Steve Yergeau, County Agent and Associate Professor of Rutgers Cooperative Extension of Ocean County, offers teachers a lesson about water resources in the Barnegat Bay watershed..



In 2022, we celebrate 25 years of shared learning experiences that root us to the land, to the community, and to each other. Our 25th Annual Barnegat Bay Environmental Educators Roundtable takes place on April 27. For the past decade, the Lighthouse Center for Natural Resource Education has graciously hosted this event. This year's Roundtable will take place on the grounds of Jakes Branch County Park where we will feature the film, Kiss the Ground. This documentary film "explores how regenerative agriculture can reverse the devastating effects of climate change, restore local ecosystems and create abundant food supplies." We hope you'll join us! For more information please contact Becky Laboy, M.Ed., Education Outreach specialist, OCSCD at education@soildistrict.org.





Ocean County Soil Conservation District, Cape Atlantic SCD, Camden SCD and Burlington SCD teamed-up with South Jersey Resource Conservation & Development Council to host the 2021 Tour des Farms. On September 11, nearly 130 cyclists came together to celebrate the "heart" of New Jersey's farmland and the beauty and bounty of our Garden State. This annual cycling event offers riders a chance to pedal through some of New Jersey's most beautiful farmland while shopping for local produce.

This "Get to Know Your Farmer and Food" program supports local agriculture, encourages healthy eating and exercise habits, and highlights Burlington County farms. This event features a fantastic array of participating farmers. Cyclists were able to explore the diversity of Jersey's agricultural production, including cranberries, vegetables, orchards, nurseries and organic farms. "A great day was had by all participants!", reflected Christine Raabe, Chairperson, South Jersey Resource Conservation and Development Council, and Director of the Ocean County Soil Conservation District.

Please visit SJRC&D's website for additional details as planning gets underway for our 15th Annual Tour des Farms, scheduled for Saturday, September 10, 2022. For more about this event please contact the Council directly at coordinator@sircd.org.



(Photo: courtesy of Mike Hill, Freehold SCD)

#### **Annual Poster Contest**

The New Jersey Conservation Poster Contest is an annual contest sponsored by NJDA, NACD, NJACD and the Ocean County Soil Conservation District. 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 website to view the artwork of the 2021 statewide winners. The theme for the 2021 New Jersey Conservation Poster Contest was "Healthy Forests = Healthy Communities". The theme for the 2022 Poster Contest is "Healthy Soil = Healthy Life". Learn more about the 2022 Poster Contest on OCSCD's website.





# New Jersey Envirothon Education Outreach Specialist

The New Jersey State Envirothon 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 North American



Envirothon competition. This much anticipated event includes students from Canada, as well as China. It is North America's largest High School Environmental Education competition.

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

#### 2021 Envirothon Champions - MATES

New Jersey students competed "virtually" in the 2021 Envirothon. (Unfortunately, due to the COVID-19 pandemic, the 2020 Envirothon was canceled.) Ocean Countybased 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: Jillian Peslak, Caitlin Sia, Mackenzie Fries, Maya Quinn and Logan Bukowski, and their team advisors, Mr. Adam Sprague and Mr. Dave Werner.



MATES Winning Team: Jillian Peslak, Caitlin Sia, Mackenzie Fries, Maya Quinn and Logan Bukowski. (Photo courtesy of Dave Werner).

Adam Sprague and Dave Werner have been co-advising MATES Envirothon teams together for over 15 years. They begin engaging students as freshmen and continue to 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 have won the New Jersey Envirothon many times over the years. They proudly showcase their students' accomplishments in their hallways, where plagues identify the names of students on teams who have placed first or second in the statewide competition.

# Collaborating to Ensure a Healthy Watershed for People and Wildlife

By Becky Laboy, M.Ed., Education Outreach Specialist

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. To accomplish these goals, BBP's Public Outreach Coordinator, Karen Walzer, and OCSCD's Education Outreach Specialist, Becky Laboy, focus efforts on two flagship projects: Jersey-Friendly Yards and the Barnegat Bay Master Naturalist Program.

#### Jersey-Friendly Yards

Jersey-Friendly Yards website is a comprehensive online guide to landscape practices for managing stormwater and reducing non-point source pollution in the Barnegat Bay watershed. The District's Low Maintenance Landscaping Guide for the Barnegat Bay Watershed (2000) was a catalyst in the development of the 8 Steps to a Jersey-Friendly Yard. The Jersey-Friendly Yards initiative is spearheaded by the Barnegat Bay Partnership (BBP) and funded by the New Jersey Department of Environmental Protection (NJDEP). OCSCD and BBP work together to promote Jersey-Friendly Yards.

Since BBP's launch of the Jersey-Friendly Yards website in 2013, OCSCD has been an integral partner. Through several independent grants funded by the Barnegat Bay Partnership, OCSCD has helped to grow the Jersey-Friendly Yards program. Our projects have resulted in the installation of dozens of Jersey-Friendly demonstration gardens, hundreds of Jersey-Friendly Yards educational programs, and engagement with thousands of community members.

Explore the growing Jersey-Friendly Plant Database, which houses over 400 species, and find just the right plants for the soil, water and light conditions in your yard. Explore the suite of recorded webinars that highlight Jersey-Friendly best land-scaping practices and showcase the many Jersey-Friendly demonstration gardens throughout the Barnegat Bay watershed. Follow Jersey-Friendly Yards on Facebook and Twitter to keep up on the latest Jersey-Friendly gardening tips and news.

In 2022, residents, schools and municipalities in the Barnegat Bay watershed will have the opportunity to enroll in the new Jersey-Friendly Yards Certification Program. BBP and OCSCD's collaborative efforts have resulted in positive changes in landscaping behaviors throughout the watershed and across the state! <u>Learn more</u> about our many achievements working together through this partnership, as we strive to keep the Barnegat Bay watershed a healthy and resilient place to live.





Cardinal Flower (Lobelia cardinalis)

Great Blue Lobelia (Lobelia siphilitica)

Helen's Flower (Helenium autumnale)

Purple Mistflower
(Conoclinium coelestinum)



## Pollinator Habitat at Ocean County College



Becky Laboy (OCSCD) and Karen Walzer (BBP)

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 assisted 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 located in the area between the John C. Bartlett Building (Building #2) and Parking Lot #1(R), indicated on the campus map.

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 bloom times of these perennials ensure flowers persist throughout all 3 growing seasons. Species include Swamp Milkweed, 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.



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

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

New England Aster (Symphyotrichum novae-angliae)

Seaside Goldenrod (Solidago sempervirens)

Swamp Milkweed (Asclepias incarnata)

Blazing Star (Liatris spicata)





#### **Barnegat Bay Master Naturalist Program**

By Becky Laboy, M.Ed., Education Outreach Specialist

The Barnegat Bay Partnership provides financial support to Ocean County Soil Conservation District to facilitate the 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 land-scape 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*, found on the BBP website, 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, Berkeley Island

Currently there are over 100 Master Naturalists enrolled in the Barnegat Bay Master Naturalist (BBMN) program. Once they've completed their initial training, program participants are required to complete 40 hours of volunteer service and attend 8 hours of relevant educational programs annually, in order to maintain their BBMN status. In Fall, 2020 and Spring, 2021, groups of hardy Master Naturalists participated in an Invasive Species Removal Project at John C. Bartlett Jr. Park at Berkeley Island. Many hours were spent removing Mugwort (Artemisia vulgaris), Chinese Bush Clover (Lespedeza cuneata), and other tenacious invasives that were taking over a shoreline restoration site. Eliminating these species allows natives to spread, including Seaside Goldenrod, Common Boneset, Beach Plum, and Northern Bayberry. These native species not only stabilize the soil and prevent erosion, they also provide much needed food, nesting material, and shelter for pollinators, birds and other local wildlife. Working as a team, the Master Naturalists were able to tackle a large area of the shoreline berm. Work will continue next year, as it will take several attempts to rid the park of invasive species and allow the native plants to flourish.



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

#### Dune Grass Planting 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 breviligulata)

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" 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 the 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 Heller and Jim Wack.





## Lakewood Township Stormwater Basin Retrofit Project

By Brittany Moore, Erosion Control Specialist

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

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.

The first seeding operation was implemented at the FirstEnergy Park basin, home of the Jersey Shore BlueClaws. 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 complet-

ing 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. If you are interested in learning more about this project or renting the Kasco Versa -Drill, please contact Eileen Miller at TeamHabitatCoordinator@gmail.com



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. Compared to standard turf grass, native grasses and other native plants have deeper root systems that 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 above: Monarch Butterfly nectaring on Seaside Goldenrod (Solidago sempervirens). Photo below: Female and male American Goldfinches eating seeds from Switchgrass, (Panicum virgatum). Photos by Becky Laboy, M.Ed., Education Outreach Specialist.





# **Urban Agriculture Conservation**

By Becky Laboy, M.Ed., Education Outreach Specialist



Dr. Richard Shaw and Dr. Edwin Muniz of NRCS conducted a trace metal study using x-ray fluorescence and electromagnetic induction in the LHS garden.

NACD established the Urban Agriculture Conservation Grants Initiative in 2016 to help conservation districts and their partners provide much needed technical assistance for agricultural conservation in urban areas with limited access to fresh and healthy foods. In 2017, OCSCD was one of 19 districts in 14 states awarded a National Association of Conservation Districts grant to boost technical assistance capacity for urban agriculture conservation projects.

Eight local organizations collaborated on the Urban Agriculture Conservation initiative and formed a UAC Advisory Committee. The goal of our Urban Agriculture Conservation initiative was four-fold: our aim was to offer technical support focused on: installation of a vegetable garden at Lakewood High School (LHS), augmentation and enhancement of an existing vegetable garden (The Mercy Garden) at Georgian Court University, community food distribution, and education and outreach in Lakewood Township - a "food desert", as identified by USDA.

A new food garden was established at Lakewood High School consisting of 36

raised beds, offering over 200 sq. feet of planting area. In its first season, students grew and donated over 200 pounds of fresh produce to the local Christ Church Food Pantry. Several "gleaning" field trips organized by Farm-

ers Against Hunger yielded approximately 9,000 pounds of cabbages, 4,000 pounds of apples, and 3600 pounds of butternut squash which were donated to local food pantries. Students gained insight into foods' journey from farm-to-table, while feeling a sense of pride and compassion towards helping others.

The Mercy Garden was augmented with additional raised beds. Students and volunteers grew kale, eggplant, peppers, tomatoes, swiss chard, and herbs. Four compost corrals were reconstructed and pollinator gardens were revived.

In 2018, OCSCD and partners launched the Community Garden Network (CGN) of Ocean County. The CGN seeks to connect community gardens to share knowledge and resources. Today, OCSCD continues to build and strengthen partnerships with local growers and distributors in an effort to provide healthy food to our community, and conserve and protect our soil and water resources.



Elementary students engage in a hands-on soil science lesson. (Photo: Becky Laboy)

#### OCSCD Technical Staff Assist USDA NRCS with Soil Sampling in the Barnegat Bay

By: David Steinmann, USDA-NRCS Soil Survey Office Leader

In October, OCSCD Erosion Control Specialists Brittany Moore, Kristin Adams and Ramon Mejia, along with Inspectors Georgie Grieb and Sean Yeats, assisted Soil Survey Office Leader, David Steinmann, of the NRCS with data collection in the tidal marsh of the Barnegat Bay as part of an EPA Regional Applied Research Effort (RARE) grant project.

The Hammonton Soil Survey Office (3-HAM) partnered with the Barnegat Bay Partnership (BBP), 1 of the 28 National Estuary Programs, to provide soils data for an EPA RARE grant project. The goal of the project is to study coastal wetland marsh degradation within the Barnegat Bay and Little Egg Harbor estuaries within Eastern New Jersey. The project involves 25 preselected sampling sites, the BBP is providing habitat and biological studies and NRCS is providing soil data for each site. NRCS is providing full soil characterization analysis for the 25 sites, which will be sent to the Kellogg Soil Survey Lab. Along with the typical lab sampling for the RARE project, carbon and bulk density samples will be sent to the lab for NRCS's National Coastal Blue Carbon Assessment Project (NCBCA). Both the RARE and NCBCA projects will incubated pH and a quick fill in huge soil and blue carbon data gaps within New Jersey's coastal zone.



McCauley samples are taken in the field to retrieve description of the upper 100cm.

The National Coastal Blue Carbon Assessment (NCBCA) project is an initiative developed by the NRCS's Soil and Plant Science Division's Coastal Zone Soil Survey (CZSS) Focus Team to measure the amount of coastal blue carbon sequestered in the coastal soils throughout the country.

Once on site, three vibracores are retrieved at each site location, two vibracores which will be sampled and sent to the Kellogg Soil Survey Lab for full characterization and the third for coastal blue carbon sampling; vibracoring is a soil sampling methodology used to retrieve a continuous, relatively un-disturbed sample of soil materials. Once the three vibracores are retrieved, a 100 cm McCauley Auger retrieval is pulled to capture incubated pH samples to test for hyper and hypo sulfidic materials. Vibracores are opened, sampled, and processed at a later date and sent to the Kellogg Lab for analysis.

This new updated data can and will be used by NRCS, BBP and local partners in marsh restoration projects in protection of this deteriorating but critical soil resource. For more information, please visit the Barnegat Bay Partnership website.





Left (from left to right): Kristin Adams, Sean Yeats, David Steinmann and Georgie Grieb (used with permission) Right (from left to right): Ramon Mejia, Brittany Moore, Kristin Adams and David Steinmann (used with permission)



Forty North Oyster Farms - Barnegat Light, NJ

#### Sustainable Practices for Aquaculture Resources Conservation (SPARC)

By Kristin Adams, PSM, 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 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 (TAG) 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. 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 the Soil Erosion and Sediment Control Act by the District has a direct correlation to the health of the Barnegat and Great Bay watersheds by 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 the District's mission to develop and nurture effective relationships with other public agencies and non-profit organizations 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 guality 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 is building 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 TAG 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.

OCSCD will assist the Barnegat Bay Partnership (BBP) 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 identification of appropriate conservation practices related to local resource concerns such as loss of coastal wetlands, living shorelines, water quality/nutrient loading and shellfish farming yields. OCSCD will also cochair the BBP Science and Technical Advisory Committee's (STAC) Shellfish Working Group, which 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 is 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. For OCSCD, this grant is 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, field visits and workshops. Considerable time was spent in the implementation of NRCS conservation planning. In June 2021, OCSCD staff member, 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 Grant 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. With receipt of NACD's Technical Assistance Grant for 2021, the District anticipates continued SPARC success 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 trainings and courses attended	54
Total farm visits and conservation plans assisted	27

#### **Ocean County Soil Conservation District**

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