

Climate Action in Delaware:

2016 Progress Report



About this Document

In September 2013, Governor Markell signed Executive Order 41: *Preparing Delaware for Emerging Climate Impacts and Seizing Economic Opportunities from Reducing Emissions*. The Executive Order directed Delaware state government agencies to address both the causes and consequences of climate change. A technical committee—the Mitigation Workgroup—inventoried Delaware’s greenhouse gas emissions and recommended that the state reduce its greenhouse gas emissions by 30 percent by 2030 from a 2008 baseline. Another technical team—the Flood Avoidance Workgroup—developed guidelines and maps for state agencies to use to reduce the risk of flood damage to state assets.

In addition, each state agency developed “agency-specific actionable recommendations for improving Delaware’s preparedness and resilience to climate impacts.” Through a year-long planning process, representatives of eleven state agencies worked together to identify climate risks to their departments. Each agency then proposed strategies to reduce impacts to their workers and facilities, and to maintain their ability to provide programs and services to the people of Delaware. The planning work culminated in the publication of the *Climate Framework for Delaware* in December 2014. The *Framework* contains 155 recommendations from state agencies for adaptation actions and greenhouse gas reductions.

Since 2014, state agencies have been working together to put these recommendations into action. This progress report highlights the actions and accomplishments made by Delaware’s state government to curb greenhouse gas emissions and adapt to the impacts of climate change. The report also provides an overview of local government actions and sets out a vision for future actions.

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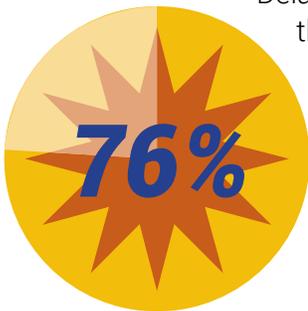


CLIMATE CHANGE IN DELAWARE

How will climate change affect Delawareans?

Climate change is more than a buzzword in Delaware—it's a public health, safety, and economic priority. As a low-lying state with 381 miles of shoreline, Delaware is vulnerable to coastal storms, sea level rise, and flooding exacerbated by climate change. Sea levels around Delaware have already risen more than a foot in this century. In addition, rising temperatures and extreme heat events as a result of climate change threaten public health and especially Delaware's vulnerable citizens – young children, the elderly, outdoor workers, and people with underlying health conditions. Temperature and rainfall extremes, combined with sea level rise, endanger our agriculture and tourism economies, and impose increasing costs for maintaining and repairing critical infrastructure.

Public support for climate action is strong across Delaware



76% of Delawareans think immediate action should be taken to reduce the impacts of climate change and sea level rise

Delaware residents understand the threats of climate change and are ready to act, according to a 2014 survey conducted by the Department of Natural Resources and Environmental Control and Delaware Sea Grant that garnered over 1,500 responses. The overwhelming majority of Delawareans support im-

mediate action to reduce the impacts of climate change. Furthermore, they support putting state and local government resources toward projects that prepare and protect infrastructure.

The State is taking action on climate change

The state of Delaware is meeting the challenge of climate change with the support of the public, directives from the Governor, and collaborative work across agencies and local governments. The state's policies, programs, and tools are reducing our emissions of heat-trapping gases and preparing us for the effects of climate change. These actions can be divided into three categories:

- **Mitigation:** Reducing greenhouse gas emissions to lessen human contributions to climate change
- **Adaptation:** Protecting Delaware residents and resources from the effects of climate change
- **Flood Avoidance:** Reducing the risk of flood damage to infrastructure by building to a higher standard and avoiding areas with high flood risk

The good news is that many of the climate-ready actions the state is taking—like increasing energy efficiency, renewable energy, conservation practices, and clean transportation—yield benefits in addition to climate readiness. They present opportunities for economic growth, cost-savings for businesses, innovation, healthier communities, and overall improvements to Delawareans' way of life.

CLIMATE MITIGATION: Reducing Greenhouse Gases in Delaware

Progress to Date

In 2014, the Mitigation Workgroup recommended to Governor Jack Markell that the state adopt a greenhouse gas reduction target of 30 percent emission reductions by 2030 from a 2008 baseline. The target was developed through an analysis of historic and forecasted greenhouse gas emissions, an evaluation of current programs and policies, and an assessment of potential strategies to reduce emissions. The Mitigation Workgroup considered a variety of emission reduction strategies to assist in achieving the mitigation target. These strategies included lower emitting vehicles and public transportation, energy efficiency improvements, land and forest preservation programs, and waste management policies and programs. The target is aggressive, yet attainable, if the policies and programs in the *Climate Framework for Delaware* can be implemented and continued.

An inventory of Delaware's greenhouse gas emissions through 2013 shows that since 2008, emissions from some economic sectors have increased, while others have decreased. (Data

David Wolanski, DNREC



Volunteers planting trees.

collected from 2013 is the most recent data available for greenhouse gas emissions.) The transportation, commercial, residential, and agriculture sectors recorded decreased emissions between 2008 and 2013. Reductions in emissions in these sectors are attributed to more fuel efficient vehicles, energy efficiency improvements, and decreases in livestock emissions. As the federal Corporate Average Fuel Economy standards are fully implemented, emissions from the transportation sector are expected to continue to decrease into

the future. Additionally, energy efficiency programs and fuel switching (from #2 heating oil to natural gas) for commercial and residential sectors have been very successful in Delaware. Using less energy to heat buildings and residential spaces is reducing emissions as well as cutting energy costs.

Greenhouse gas emissions growth in Delaware came from the electric power generation sector and the industrial sector. Both sectors' emissions increased primarily due to increased economic activity and the recovery from the 2008 recession. Between 2008 and 2013, both sectors' emissions have increased faster than modeled.

Delaware is focusing on a variety of sectors for greenhouse gas reductions, but transportation and electricity generation are two key sectors for reductions. Regional and national collaboration in the transportation sector is imperative. Delaware participates in the Transportation and Climate Initiative, a regional collaboration of 12 Northeast and Mid-Atlantic jurisdictions that seeks to develop the clean energy economy and reduce greenhouse gas emissions in the transportation sector. In addition, Delaware leads a robust partnership of stakeholders through the Clean Cities Coalition, a national effort to cut petroleum dependence throughout the United States. Delaware is also working to reduce emissions from electricity generation through a regional market-based cap and trade program called the Regional Greenhouse Gas Initiative. Large electricity generators must purchase allowances for every ton of carbon dioxide they produce. Proceeds generated from the purchase of the allowances are invested in energy efficiency, renewable energy, and weatherization programs in Delaware.

The following pages highlight progress to date and the continued efforts to reduce Delaware's greenhouse gas emissions.

CLIMATE MITIGATION: Reducing Greenhouse Gases in Delaware

Electric Vehicles in the First State

The Delaware Department of Natural Resources and Environmental Control (DNREC), the Office of Management and Budget (OMB), and the Delaware Department of Transportation (DelDOT) are working together to deploy electric vehicles and electric vehicle charging infrastructure

Jessica Quinn, DNREC



State employee plugging in a fleet electric vehicle for charging.

in the state. On average, a single electric vehicle will save 9,276 pounds of carbon dioxide emissions annually compared to a similar gasoline vehicle. In July 2016, OMB purchased two new electric Ford Focus cars for the state fleet along with charging stations to support these vehicles. OMB's Fleet Services will work to increase

the number of electric vehicles in the state fleet in the coming years.

In August 2016, DNREC installed two publicly available electric vehicle chargers at their State Street campus. These two public chargers added to the growing network of charging infrastructure throughout the state.

Propane Education Research Council



A propane powered school bus has lower emissions.

Cleaner Buses for Delaware's Children

In 2013, the **Delaware Department of Education** sponsored a statewide propane school bus pilot project to test the effectiveness and reliability of propane as a fuel for school buses. Propane school buses produce fewer greenhouse gas and particulate emissions than their diesel counterparts and also cost less to operate. In 2016, there were 48 propane-powered school buses transporting Delaware students throughout the state. An additional five propane buses have been ordered and will be on the road in 2017.

Reducing Emissions in the Agriculture Sector

Agriculture plays a critical role in the efforts to reduce greenhouse gases. Reducing fertilizer usage, using conservation tillage practices, and protecting agricultural lands all assist in reducing greenhouse gas emissions from agriculture. The **Delaware Department of Agriculture** is working with Delaware farmers to apply these types of practices in the field by promoting permanent land protection through the Delaware Agricultural Lands Preservation Program, supporting nutrient management by encouraging up-to-date nutrient management plans and programs, and supporting healthy trees and forests through the Forest Stewardship and Urban and Community Forestry Programs. Many of these programs have co-benefits that include improved water quality and soil health.

Delaware Department of Agriculture



A Felton, Delaware farm enrolled in the Delaware Ag Lands Program.

CLIMATE MITIGATION: Reducing Greenhouse Gases in Delaware

Weatherization for Delaware Homes

The **Delaware Department of Natural Resources and Environmental Control's** Weatherization Assistance Program has served more than 1,900 Delawareans over the past three years.



A weatherization professional installs insulation panels into the roof of a home.

The Weatherization Assistance Program serves low- and moderate-income Delawareans by providing weatherization services in their homes. Weatherization services include air sealing, insulation installation, furnace checks, and other services that reduce energy use and make homes more comfortable. On average, the program reduces energy consumption and helps families save up to 35%, or \$400 annually, on their energy bills. Energy efficiency is a key strategy for reducing greenhouse gas emissions.

Reducing Emissions in Paratransit Service

Each year, the **Delaware Transit Corporation (DTC)** provides nearly one million paratransit trips statewide for Delaware residents. DTC purchased five propane vehicles in 2014 as a pilot to determine the feasibility of operating the buses in paratransit service. The success of the pilot resulted in the purchase of 50 propane buses in 2016 and 55 buses in 2017. An additional 20 propane vehicles are planned for 2018,



DelDOT Secretary refuels a paratransit bus with propane.

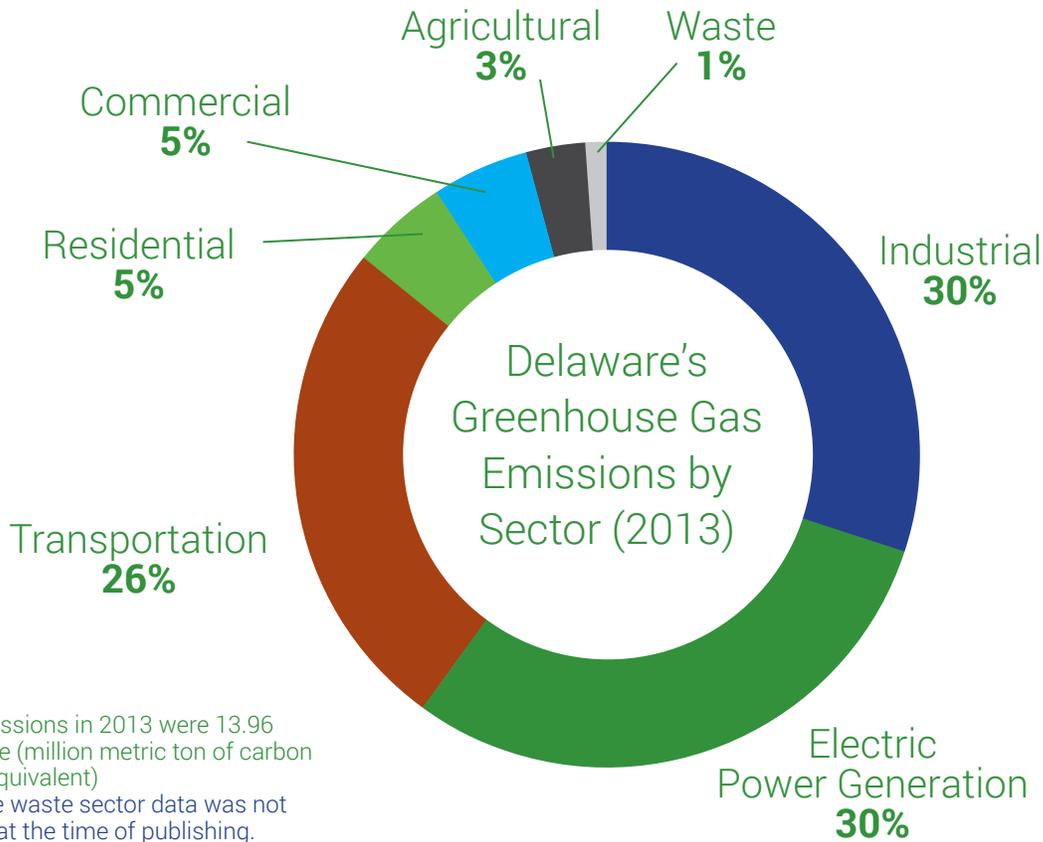
bringing the total to 130—approximately 45% of the total paratransit fleet.

Each propane vehicle will emit 91,000 fewer pounds of carbon dioxide compared to an equivalent gasoline model over the service life of five years. In addition, compared to gasoline, propane is a cleaner-burning fuel that produces 60% less carbon monoxide and fewer particulate emissions compared to gasoline. The propane-fueled buses also save money: DTC expects to operate propane buses over 1.5 million miles in 2017 at a cost savings of approximately \$1,000,000.

Cleaner Buses in Dover

The **Delaware Transit Corporation (DTC)** received a grant through the Federal Transit Authority to help fund the purchase of six fully electric transit buses that will operate in DTC's fixed route service in Dover. Fully electric buses are much quieter than diesel buses, and average 17.5 miles per gallon (MPG) equivalent vs. diesel at 4.0 MPG. Lifetime (12-year) fuel costs are \$81,000 per vehicle compared to \$378,000 for diesel. Cost savings will also be realized with the elimination of engine and exhaust-related maintenance.

CLIMATE MITIGATION: Reducing Greenhouse Gases in Delaware



Next Steps

Moving forward, new strategies need to be developed and implemented to ensure that increases in emissions from a couple of sectors do not derail previous and continued successes for reducing emissions overall. The chart above shows Delaware's emissions from the 2013 greenhouse gas inventory. (Data collected from 2013 is the most recent data available for greenhouse gas emissions.)

There are ample opportunities for reducing emissions in every sector. Special attention should be given to reductions or policies that can be deployed in the electric generation and industrial sectors. As an example, strategies to improve on-site fossil fuel efficiency for large industries would assist in lowering emissions in the industrial sector. Additionally, energy efficiency for commercial and residential and renewable energy will assist in lowering emissions from the power generation sector. Overall, steps

should be taken to solidify a long-term greenhouse gas mitigation target, seize opportunities to reduce emissions both internal and external to state government, and engage stakeholders to determine pathways forward that achieve emissions reductions that are both economically and environmentally beneficial.



Solar panels on a Delaware home.

CLIMATE ADAPTATION: Improving Delaware's Resilience

Progress to Date

Improving Delaware's resiliency to climate change encompasses a wide range of strategies

Over the past two years, significant progress has been made within state agencies to move from planning to implementation:

- 7 adaptation actions have been completed
- 103 adaptation actions are in progress

to strengthen the state's preparedness and ability to adapt to current and future climate impacts. Under Executive Order 41, eleven state agencies developed a total of 155 recommendations for climate adaptation actions. These agency-specific climate adaptation recommendations are included in

the *Climate Framework for Delaware*, released in December 2014.

State agencies have proven to be resourceful in finding ways to implement climate adaptation actions within their agencies. One of the innovative approaches to climate adaptation for state agencies is to focus on cross-cutting issues. Through the adaptation planning process, many agencies identified similar or related vulnerabil-



April Abel, DNREC

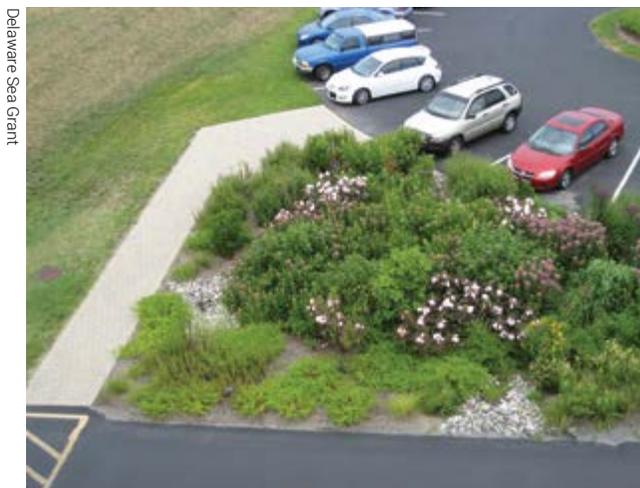
Keeping Delaware's lands healthy.

ities to impacts from increasing temperatures, more frequent extreme heat events, and increased flooding from extreme precipitation and sea level rise.

One of concerns shared by many state agencies is the impact of climate change on state assets and infrastructure. Hotter summers, sea level rise, and heavier rainfall contribute to the growing risk of damage to state assets and higher operating and maintenance costs. This is one of the issues being addressed through pilot projects that bring together teams of interagency partners to identify and share best practices and develop possible solutions.

Another innovative approach is the creation of the Strategic Opportunity Fund for Adaptation. Launched in 2016, this new grant program provides funding to help stimulate implementation of state agency climate adaptation activities related to their recommendations in the *Climate Framework for Delaware*. In its first year, ten projects from six state agencies were awarded grants for a wide range of adaptation actions.

Examples of progress are highlighted in the following pages. A detailed summary of progress toward climate adaptation recommendations is provided in the Adaptation Appendix.



Delaware Sea Grant

Green infrastructure is used to reduce flooding.

Reducing the Risks of Flooding and Sea Level Rise

Executive Order 41 directed state agencies to incorporate measures for adapting to increased flood heights and sea level rise in the siting and design of state structures and infrastructure. The order called for the state's sea level rise scenarios to be incorporated into long-range plans for infrastructure, land use, and capital spending. It also directed DNREC to periodically update sea level rise scenarios as new data emerge and to distribute guidance to state agencies.

Building on the work conducted by the Delaware Sea Level Rise Advisory Committee and the Delaware Floodplain and Drainage Advisory Committee, the Executive Order 41 Flood Avoidance Workgroup collaborated to develop a set of tools and guidelines to help state agencies comply with the flooding directives of the order. *Avoiding and Minimizing Risk of Flood Damage to State Assets* was approved by the Cabinet Committee on Climate and Resiliency and published in March 2016. This guide contains information and step-by-step instructions for state agencies undertaking projects to build or repair structures and infrastructure. To help state agencies more fully understand existing and future flood risk, a new statewide map depicting the combined impacts of storms and sea level rise was also developed as a companion to the guide (See Toolbox).

The risks of sea level rise have also been recognized in the state's long range plans. Delaware's Strategies for State Policies and Spending incorporated sea level rise as a factor in its Investment Level analysis and maps, and highlighted sea level rise as an issue. Sea level rise has also been incorporated into decision-making criteria such as the Open Space Protection Program and Clean Water Infrastructure Grants.

Toolbox

Flood Avoidance and Design Guidance for State Agencies:

This document provides a guide for state agencies to better understand long-term flood risk and take steps to reduce the likelihood that state assets will be damaged by flooding.

www.de.gov/floodavoidance

Flood Risk Adaptation Maps: As a companion to the Flood Avoidance and Design Guidance for State Agencies, this new map depicts areas that will be at risk to flooding in the future as a result of both sea level rise and storm surge combined. It is available for download as a GIS layer on Delaware's First Map website. <https://firstmap.delaware.gov/>

Sea level rise, increased precipitation, and increasing potential for flood damage to structures and infrastructure were cited in a great number of the "actionable adaptation actions" developed by state agencies. Progress is described in the following pages and in the Adaptation Appendix.

Joanna Wilson, DNREC



DNREC's DuPont Nature Center at the Mispillion Harbor Reserve.

Safeguarding Public Health & Safety

Environmental Public Health Tracking Network

Climate change poses risks to human health. Hotter summers, heavier rainfall, and more extreme weather events can affect people in many ways—from direct impacts related to heat and air quality, to indirect impacts related to food-, water-, and insect-borne diseases. To better monitor changes in public health, Delaware's **Division of Public Health** is developing an Environmental Public Health Tracking Network. The network is a tool that compiles health, exposure, and hazard information and data to improve our understanding of how environmental changes can affect the health of individuals and communities.

Climate-Ready Workforce

People who work outdoors, or in unprotected work sites, can be vulnerable to weather-related hazards, especially under conditions of extreme heat, humidity, poor air quality, flooding, and storms. The state of Delaware has initiated a pilot project that brings together several state agencies with outdoor workers, including park

staff, wildlife managers, health service workers, transportation and construction crews, and emergency personnel, to identify “best practices” to support the health and safety of these at-risk workers. The Climate-Ready Workforce is a coordinated effort to prepare state workers for changing climate conditions—and one of the first projects of its kind in the nation.

Advanced Search and Rescue Training

Storm surge and heavy precipitation cause flooding—a risk that may become more frequent and more severe as the effects of climate change intensify in Delaware. The **Delaware State Police** Aviation Section is increasing Delaware's preparedness for extreme weather events by providing advanced training for state troopers and members of the Delaware Air Rescue Team and strengthening the state's capability for emergency response.

James Pernol, DelDOT



The state's outdoor workers are vulnerable to the impacts of climate change.

Thinkstock



Advanced training prepares Delaware's emergency response team.

Delaware Sea Grant



Building Resilient Communities and Economies

Strengthening Local Comprehensive Plans

Many communities are beginning to consider the impacts of climate change in their local land use plans. Several state agencies, including the **Office of State Planning Coordination** and the **Department of Natural Resources and Environmental Control**, support Delaware communities through their planning processes. By providing information and expertise on flood management and climate impacts from heat

Karen Horton, Delaware Housing Authority



Energy efficient housing makes homes healthier and safer for residents.

Toolbox

Green Infrastructure Primer: Green infrastructure is a nature-based approach to addressing environmental challenges, including adapting to the impacts of climate change. The Green Infrastructure Primer developed by the DNREC Division of Energy and Climate provides an introduction to green infrastructure projects and their benefits, as well as information on selecting, building, and maintaining them. This document provides an overview of the benefits of green infrastructure, an introduction to site-scale and landscape-scale projects, and a complete list of resources. www.de.gov/greeninfrastructure

and sea level rise, state agencies and other partners can help local planners and citizen groups strengthen their goals to build resilient and thriving communities and economies. When focused planning efforts are needed, **Delaware Coastal Programs** and the **Division of Energy and Climate** can provide grants and technical assistance.

Improving Energy Efficiency in Housing and Downtown Districts

Building heating and cooling costs have a significant impact on low-income residents, homeowners, and businesses. The **Delaware State Housing Authority** is providing incentives to help improve energy efficiency in qualified rental housing projects. These improvements will save money on energy bills while also reducing energy use and lowering greenhouse gas emissions. Energy improvements make homes healthier and safer for vulnerable residents, including children, elderly citizens, and people with health conditions. In addition, the authority is making improvements to its Downtown Development District Grant Program by adding incentives for projects that achieve the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) certification. Promoting sustainable building practices improves community resilience to climate change impacts while also providing economic benefits.

Improving Resilience in State Assets and Infrastructure

Preparing for Sea Level Rise on our State Highways

State Route 9 is a critical transportation corridor providing access to the state's natural areas and linking communities along the Delaware Bayshore. Due to its proximity to the bay and surrounding wetlands and waterways, SR9 is vulnerable to tidal flooding, coastal storms, and sea level rise. **The Delaware Department of Transportation** has begun a comprehensive corridor evaluation to develop strategies for long-term use and maintenance of the roadway. In a related project, DeIDOT is working to identify nature-based approaches to increasing the resilience of State Route 1 along the state's Atlantic coast. The goal is to compare options for green infrastructure, as well as "green and gray" designs and nonstructural solutions.

Greening Coastal Access

Providing public access for fishing and boating is an important asset in a coastal community. But paved parking areas can intensify summer heat and add to problems with local flooding and stormwater runoff during rainy weather. In Bowers Beach, the **Department of Natural Resources and Environmental Control** is using state and federal grant funds to renovate a



April Abel, DNREC

Maintaining access and infrastructure in Delaware's state parks.

state-owned parking lot by converting two acres into public green space, adding shade trees and a vegetated buffer. The project will reduce tidal flooding, lessen heat impacts, and add an amenity for the local community. The project also demonstrates green infrastructure techniques that can provide nature-based solutions for other public facilities.

DNREC



Installing a living shoreline along Lewes Canal.



DNREC

Vegetated swales are a nature-based technique to manage stormwater runoff.

Protecting and Monitoring Natural Resources

Identifying Ecosystem Indicators

Delaware's shorelines and wetlands provide critical habitat for migratory waterfowl and shorebirds and also support the state's recreation and tourism economy. Changes in temperature,

sea level, and other climate conditions will affect these important natural resources. The

Delaware National Estuarine Research Reserve

is developing a selection of biological "indicators" to track changes in natural ecosystems and wildlife species. The project will include a citizen science component to engage volunteers, visitors, and school children in helping to monitor environmental



Kerri Yandrich, DNREC

Protecting Delaware's natural areas includes planning for a changing climate.

changes. Tracking environmental changes over time will help inform management decisions to support protection of these vital habitats.

Planning for Climate Change

The **Department of Natural Resources and Environmental Control** is responsible for the protection and management of the state's wildlife and natural resources. Maintaining healthy habitats is challenged by current and future impacts of climate change. Resource managers are updating management planning efforts to consider changes in temperature, precipitation, and sea level rise that can affect Delaware's natural heritage. The state's Wetlands Management Plan and Wildlife Action Plan have both been revised to prepare for changing management needs. Delaware Coastal Programs has also



DNREC

Identifying the biodiversity of Delaware's lands.

produced site-specific adaptation plans for the Delaware National Estuarine Research Reserve sites at St. Jones and Blackbird Creek Reserves.

Designing Climate-Smart Restoration Projects

Coastal storms and rising seas are changing shorelines and coastal habitats throughout Delaware. The **Division of Fish and Wildlife** is preparing for these changes by developing new ways to design and manage coastal impoundments. Coastal impoundments serve a number of purposes by providing habitat for migratory waterfowl and shorebirds, as well as recreation opportunities and even mosquito control. By creating an 86-acre wetland complex at the Ted Harvey Wildlife Area, the "climate-smart" coastal impoundments will provide critical habitat and

allow freshwater species to migrate inland over time. Other adaptation efforts include the installation of a living shoreline project on Blackbird Creek and restoration designs for Mispillion Harbor, Milford Neck marsh, and Port Mahon shoreline.



Chris Bennett, DNREC

The Delaware Bay is vital to horseshoe crabs.

SUPPORTING LOCAL COMMUNITIES

Local governments play an important role in preparing and responding to climate change because they have responsibility for land use decisions, building codes, and infrastructure such as water and wastewater systems. To help meet this challenge, Executive Order 41 specifically called upon state agencies to assist municipal and county governments in taking climate action.

The towns of **Lewes, Delaware City, Bowers Beach, Fenwick Island, Milton, and South Bethany** have assessed their vulnerability to sea level rise, coastal flooding, and/or climate change and developed actions that can be taken

These plans were made possible through a variety of grant funding, technical assistance, and partnerships from state agencies, including DNREC's Delaware Coastal Programs, DNREC's Environment Finance Branch, and the University of Delaware Sea Grant College.

to increase their resiliency to these threats. The town of **Slaughter Beach** is conducting an assessment now.

The towns of **Frederica** and **Little Creek** used their comprehensive plans as an opportunity to assess and plan for sea level rise. Their updated comprehensive plans highlight flooding issues their towns face today and how climate change may exacerbate flood risk in the future.

They also developed future goals with an eye to minimizing flood risks to infrastructure and homes in the future. These plans can serve as a model for other communities.

Other towns are taking more specific actions to protect infrastructure against climate impacts. The town of **Bethany Beach** obtained grant funding to help it better monitor its drinking water system for saltwater intrusion, and the city of

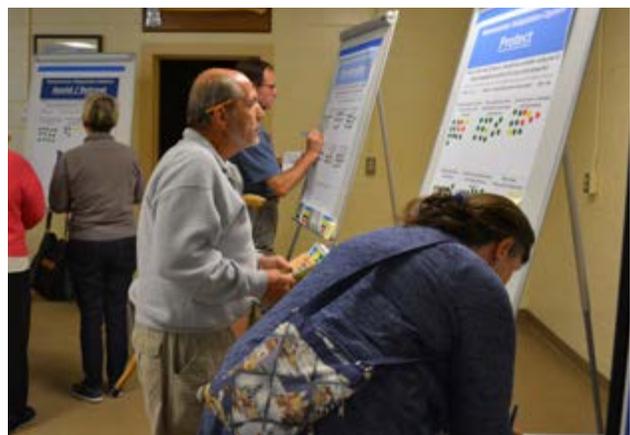


Joanna Wilson, DNREC

Delaware City has incorporated climate change into their hazard mitigation plan.

Seaford conducted a sea level rise vulnerability study for its wastewater treatment facility. The town of **Slaughter Beach** conducted a wastewater management feasibility study—a proactive effort to ensure continued wastewater service as sea levels rise and cause septic systems to no longer function properly.

Delaware's towns and cities are also increasingly incorporating green infrastructure into their plans for flood abatement, water quality improvements, and climate resiliency. For example, the city of **New Castle** is investigating the feasibility of installing a living shoreline along the Delaware River, and the town of **Laurel** is using green infrastructure along Broad Creek as part of a comprehensive plan to drive economic investment and reduce flood risk.



Kelly Valenok, DNREC

A public workshop in Slaughter Beach.

MOVING FORWARD

Preparing and responding to the threats of climate change requires decades, not months. While Delaware state agencies have made significant progress, much remains to be accomplished to ensure that Delaware is resilient to the impacts of climate change and does its part to reduce greenhouse gases in the atmosphere. Building upon efforts already underway in state agencies, the state should consider these actions to continue moving forward:

- Engage citizens and businesses in climate planning and strategy.
 - Strengthen the state's commitment to a statewide greenhouse gas reduction target.
 - Ensure tracking and reporting of progress toward the current greenhouse gas reduction goal of 30 percent reduction by 2030 from a 2008 baseline.
 - Develop a long-term reduction target to bring Delaware's mitigation goal in line with national and international climate commitments.
 - Develop strategies and a plan for meeting the target.
 - Develop a climate action governance structure that provides opportunity and accountability.
- Expand the Cabinet Committee on Climate and Resiliency to include community, business, and academic representatives to ensure strong citizen and stakeholder engagement.
 - Identify roles and responsibilities for developing goals, action plans, and tracking and reporting mechanisms.
- Continue to develop and improve tools and resources for strengthening the state's resiliency to climate change.
 - Continue efforts to provide training, technical assistance, and funding opportunities to communities and businesses.
 - Share best practices within Delaware and with other state, regional, and national partners.

Delaware's progress on climate change action is a reflection of the commitment of state government leaders and agency staff working with local communities and partner organizations to make Delaware a more resilient and prosperous state for the citizens we serve.

The state's ongoing efforts will continue to build on these accomplishments, as we reach out and engage stakeholders to help meet the challenges of climate change.



DNR/REC

Acknowledgments

Cabinet Committee on Climate and Resiliency

Department of Agriculture



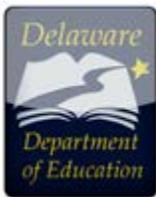
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Timothy Slavin

This document was prepared by The Department of Natural Resources and Environmental Control Division of Energy and Climate



Jennifer de Mooy
Morgan Ellis
Caren Fitzgerald
Susan Love
Kerri Yandrich



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