

# Department of Energy and Environmental Protection



## *At a Glance*

**ROBERT J. KLEE, Commissioner**

**Mary Sotos, Deputy Commissioner of Energy (Public Utilities Regulatory Authority and Energy and Technology Policy)**

**Bob Kaliszewski, Deputy Commissioner of Environmental Quality (Air Management, Materials Management and Compliance Assurance, and Water Protection and Land Reuse)**

**Susan Whalen, Deputy Commissioner of Environmental Conservation (Outdoor Recreation and Natural Resources)**

***Established – 2011***

***Statutory authority – CGS Public Act 11-80, 2011***

***Central office – 79 Elm Street, Hartford, CT 06106-5127***

***Average full-time employees – 1,035***

***Operating expenses - \$215,285,713***

***Organizational structure –***

***Office of the Commissioner – Chief of Staff, Offices of Affirmative Action, Legal Counsel, Adjudications; and the Bureau of Central Services.***

***Office of the Deputy Commissioner of Energy (Public Utilities Regulatory Authority and Energy and Technology Policy) – Public Utilities Regulatory Authority (PURA): Divisions of Utility Regulation, Administration, and Procurement. Bureau of Energy and***

**Technology Policy:** Offices of Climate Change, Technology and Research; Energy Supply; and Energy Demand.

*Office of the Deputy Commissioner of Environmental Quality (Air, Waste and Water) – Bureau of Air Management:* Divisions of Engineering & Enforcement; Planning & Standards; and Radiation. **Bureau of Materials Management and Compliance Assurance:** Divisions of Waste Engineering & Enforcement; Emergency Response and Spill Prevention; and Permitting and Enforcement (permitted discharges). **Bureau of Water Protection & Land Reuse:** Divisions of Remediation; Water Planning & Management; Land & Water Resources.

*Office of the Deputy Commissioner of Environmental Conservation (Outdoor Recreation and Natural Resources) – Bureau of Natural Resources:* Divisions of Forestry; Inland Fisheries; Marine Fisheries; and Wildlife. **Bureau of Outdoor Recreation:** Divisions of Boating; Environmental Conservation Police; and State Parks & Public Outreach.

## **Mission**

*It is the mission of the Department of Energy and Environmental Protection (DEEP) to fulfill the intent of the General Assembly, which declared that it is the policy of the state of Connecticut to:*

*“...conserve, improve and protect the air, water and other natural resources and environment of the State of Connecticut while fostering sustainable development. The agency’s mission includes the goals of reducing electrical rates and decreasing costs for Connecticut ratepayers, ensuring the reliability of the state’s energy supply, increasing the use of clean energy and developing the state’s energy-related economy...”*

## **Statutory Responsibility**

Public Act 11-80, effective July 1, 2011, facilitated the establishment of the Department of Energy and Environmental Protection. The majority of the Commissioner’s statutory responsibilities are found in the following titles of the Connecticut General Statutes: 15, 16, 16a, 22a, 23, 25, and 26.

## **Public Service**

The Department of Energy and Environmental Protection (DEEP) was created by Public Act 11- 80. Effective July 1, 2011, DEEP brought together the former Departments of Environmental Protection (DEP) and Public Utility Control (DPUC) – now called the Public Utilities Regulatory Authority (PURA) – along with the energy policy group from the Office of Policy and Management (OPM).

During 2016-2017, DEEP continued to focus on:

- Improving the efficiency and effectiveness of the department

- Advancing the state's agenda to provide cleaner, cheaper, and more reliable energy to Connecticut's residents and businesses,
- Effective and efficient of the state's public utilities
- Protecting our environment and natural resources
- Providing first-class outdoor recreational opportunities to residents and visitors

## **Highlights and Achievements 2016-2017**

### **Energy**

- Selected projects under two historic Requests for Proposals (RFPs) to secure new, cost-effective clean energy resources to help ensure supplies of affordable and reliable power for Connecticut families and businesses.
  - *Large-Scale Clean Energy:* Four projects of 20 Megawatt and above, as well as associated transmission. Were selected. This RFP was coordinated with the states of Massachusetts and Rhode Island.
  - *Small-Scale Clean Energy, Energy Efficiency, and Energy Storage:* 11 projects in Connecticut were selected that will each provide or supplant 2-20 Megawatts.
- Three projects selected to participate in a Shared Clean Energy Facilities pilot program designed to make access to renewable power available to more state residents. The three solar projects have a combined capacity of 5.2 Megawatts and at least 20% of the subscribers to that power will be low-to-moderate income customers.
- As a result of increased investments in energy efficiency, Connecticut was ranked fifth among the 50 states in the annual scorecard issued by the American Council for an Energy Efficient Economy (ACEEE). The strong ranking reflects the state's efforts to reduce the demand for electric power to reap the benefits of lower bills for families and businesses, a stronger economy, cleaner air, and a reduction in harmful carbon emissions linked to climate change.
- Six microgrids are now operation and four more under construction as a result of financial support from DEEP's Microgrid Grant Program. The program was developed in 2012 in response to the recommendation of the Governor's Two Storm Panel after multiple storms resulted widespread outages of long duration. DEEP conducted competitive solicitations in 2013 and 2014 and received applications on a rolling basis from 2015 to 2017. DEEP has issued \$20.5 million in grants for these ten projects.
- Connecticut took a major step forward to reduce energy use in state facilities, with ground breaking for a major project at Connecticut Valley Hospital (CVH) – which will largely pay for itself through reduced energy costs. The projects offers a

guaranteed energy savings of \$31.9 million over the 15-year performance period of the improvements.

## **Utility Regulation**

The Public Utilities Regulatory Authority (PURA) has plenary economic and service quality jurisdiction over Connecticut's investor-owned electric, water, natural gas, and telecommunications utilities, along with other utility regulatory responsibilities.

- During 2016-2017, PURA:
  - Adjudicated several major proceedings including a United Illuminating comprehensive rate case.
  - Set standard service electric rates for Eversource and the United Illuminating Company.
  - Reviewed the gas expansion plans of the major natural gas companies, and performed more than 450 inspections of natural gas facilities.
  - Issued a Declaratory Ruling affirming PURA's jurisdictional authority to consider and approve the installation of wireless facilities on utility poles in the public right of way.
  - Reviewed and approved 98 applications from wireless telecommunications providers to install advanced facilities for small cell deployment.
  - Streamlined the cellular "small cell antenna" process and pole attachment policies.
  - Ramped up electric supplier -related enforcement, education and outreach activities.
  - Streamlined process for handling water submetering vendor dockets.

## **Climate Change**

CT continues to serve as a national leader in addressing Climate Change from both sides of the climate equation: The state is focused on both mitigation – reduction of carbon emissions – and adaptation – strategies to protect communities from changes we are already seeing.

### **Mitigation**

- The Governor's Council on Climate Change (GC3) analyzed sector specific greenhouse gas emission reduction scenarios in order to inform its recommendation

for setting a mid-term target that ensures the state is on a path to meet its Global Warming Solutions Act goal of 80 percent below 2001 carbon levels by 2050. The GC3 also released an Exploratory Report which outlines a wide variety of voluntary actions for state agencies, municipalities, and businesses to implement as means to reduce their carbon footprint.

- Connecticut continues to be an active participant in the Regional Greenhouse Gas initiative (RGGI), an initiative of nine New England and Mid-Atlantic States aimed at reducing carbon emissions from electric generating facilities – a major source of carbon emissions. The RGGI states have experienced a reduction of more than 45 percent in power sector CO pollution since 2005, even as the regional economy has grown 8 percent. In addition, participating states have benefited from more than \$1.3 billion in RGGI proceeds to invest in energy efficiency, clean and renewable energy, greenhouse gas abatement, and direct bill assistance.
- Expanded funding by over \$2.3 million in November for the Connecticut Hydrogen and Electric Automobile Purchase Rebate (CHEAPR) program, which puts money back in the pockets of car buyers when they choose electric vehicles that help reduce carbon emissions and conventional pollution from the transportation sector. This sector produces nearly 40% of Connecticut’s greenhouse gas pollution as well as half of all smog- forming air pollution emitted in the state.

### **Adaptation**

- The CT Institute for Resilience and Climate Adaptation (CIRCA), a partnership between DEEP and the University of Connecticut, continues to support resiliency initiatives of communities, residents, businesses, and institutions in vulnerable shoreline and flood plain areas of our state. CIRCA is providing grant funds for projects to protect critical infrastructure and properties, as well as developing data and information, including localized sea-level rise projections, that communities will use to engage in sound land use planning for the future. CIRCA also played a key role in Connecticut’s successful application to HUD’s National Disaster Resilience Competition that resulted in a \$54 million federal grant award, and will use a portion of those funds to develop the Connecticut Coastal Connections Resilience Plan for Fairfield and New Haven counties.
- DEEP has collaborated with academic, non-profit and government partners at the local, state and regional level to advance development and implementation of coastal green infrastructure and living shorelines solutions for shoreline management.
- DEEP and UConn in partnership with a statutory advisory committee and non-profit organizations are developing the Long Island Sound Blue Plan ([Public Act 15-66, An Act Concerning a Long Island Sound Blue Plan and Resource and Use Inventory](#)). The Blue Plan is intended to create a spatial plan for the waters of Long Island Sound so as to protect and minimize conflict between natural resources and existing and future uses such as fishing, aquaculture, and navigation.

## **Environmental Quality**

### **Air Management**

- Unveiled a new, state-of-the-art tool to protect people's health and provide real-time air quality data to people, in the form of a "Village Green Station" - a wind- and solar-powered air monitoring bench that has been installed in the park abutting the Connecticut Science Center in downtown Hartford. The structure, which resembles a bench, contains built-in air quality monitors which measure ozone and particle pollution along with weather conditions. The bench is made from recycled materials and features solar panels and a wind turbine.
- Filed two petitions and a lawsuit with EPA seeking the following actions to improve the state's air quality and protect public health:
  - Require the 1,500MW Brunner Island Steam Electric Station in York County, Pennsylvania to reduce air pollution generated from its three coal-fired electric generating units, and
  - Set stricter limits on emissions from large on-road diesel trucks that travel through Connecticut.
- Established a web portal and began early planning actions in anticipation of federal funding to offset illegal emissions from the Volkswagen emissions cheating scandal.

### **Materials Management**

- Consistent with P.A. 14-94, issued the Phase II Request for Proposals (RFP) to redevelop the waste-to-energy facilities in Hartford and other locations operated by the Materials Innovation and Recycling Authority (MIRA), formerly known as the Connecticut Resource Recovery Authority (CRRA). The Phase II RFP invited proposals from 3 finalists for a range of technologies to upgrade or replace the present system in order to significantly reduce the volume of waste combusted.
- Permitted two additional anaerobic digestion (AD) facilities to foster the commercial recovery of compost and clean energy from food scraps and other organic material. AD is a state of the art composting like process where microorganisms break down organic materials, such as food scraps and manure, in the absence of oxygen, typically in a sealed oxygen tank called an anaerobic digester. The benefits of AD include green jobs, renewable energy generation, greenhouse gas emissions reduction, waste diversion and production compost suitable for sale and use as a soil amendment. The two new facilities are B&R Corporation, and Turning Earth, LLC, both located in Southington.

- Achieved a milestone of 100 million pounds of Electronic Waste (“EWaste”) recycled, since the inception of Connecticut’s EWaste program in 2011. The EWaste program has transformed the collection and recycling of unwanted computers, printers and TVs in Connecticut. As a result, thousands of tons annually of unwanted EWaste are getting recycled into new products, creating new jobs, keeping toxic materials out of the environment, and to date saving towns nearly \$5.0 million dollars in avoided disposal fees.
- Moved forward to implement recommendations of a new Comprehensive Materials Management Strategy (CMMS), which provides a framework for doubling the diversion of trash to 60% by increasing the recycling rate and recapturing more materials of value from the waste stream. The strategy focuses on strengthening local waste reduction and recycling programs; use of new technologies to more effectively sort recyclables and recover materials from the waste stream; and greater participation from corporations that produce materials to have them share in the cost and development of recycling programs.

### **Emergency Response**

- Responded to reports of 1,394 releases of petroleum or hazardous material in order to ensure steps were taken to protect public health and the environment and that a proper cleanup was conducted.

### **Stormwater Management**

- Formed five-year partnership with the Center for Land Use Education and Research and the Nonpoint Education for Municipal Officials programs at the University of Connecticut to assist Connecticut municipalities with implementing the requirements of the MS4 General Permit. This permit contains requirements for the operation of 121 municipal and federal and state institution stormwater systems in order to protect and enhance the quality of the state’s waters.

### **Brownfields Remediation**

- Continued efforts to streamline the process for cleanup of contaminated lands in order to put properties back into productive reuse – eliminating threats to human health and the environment and public health as well as generating new tax revenues for cities and towns and creating jobs for our residents.

### **Water Diversions**

- DEEP proposed a change to the Water Diversion Regulations to ensure that increased use of registered diversions into new or expanded service areas will not significantly impact the environment. This proposal was approved by the General Assembly’s Regulations Review Committee.

## **Wastewater Treatment**

- Work continued on major Clean Water Fund projects with the Hartford area Metropolitan District Commission (MDC) and the New Haven area wastewater treatment district aimed at separating storm water from sanitary sewer systems in order to reduce overflows of sewage into the Connecticut River or Long Island Sound.

## **The Great Outdoors**

### **State Parks**

- With opportunities for public input and comment, plans moved forward for major investments at Silver Sands State Park, Milford, and Seaside, Waterford. These projects will help ensure a strong future for the state park system and increase public access for outdoor recreation opportunities on Connecticut's shoreline.

### **Boating**

- First ever Aquatic Invasive Species Awareness Weekend took place at popular boat launches throughout the state to educate boaters on prevention of the spread of invasive plants and animals. DEEP partnered with Candlewood Lake Authority and Mystic Aquarium and provided public awareness and recommendations on how to discourage the growth of these harmful plants and animals.
- DEEP partnered with federal and local officials to award more than \$700,000 in grant money, at five locations, to public and private agencies, marinas and other facilities that provide tie-up opportunities for recreational boats 26' or more in length in Connecticut. Investment in moorings for larger recreational vessels along the Connecticut River and Long Island Sound encourage use of these waterways and stimulates tourism and economic development.
- A record level of over 1.267 million gallons of recreational vessel boat sewage removed through pumpouts from vessels in Candlewood Lake and Long Island Sound in 2016, resulting in an increase of eight percent in the amount of waste removed from previous years. Grant money totaling \$1 million also awarded for boat sewage disposal facilities, or pumpout stations, for 47 marine facilities during the 2017 boating season. Program is administered by DEEP with a grant from the US Fish and Wildlife Service's Clean Vessel Act (CVA) program and provides free pumpout service to boaters in Connecticut.

### **Fishing**

- In anticipation of 2017 Opening Day, more than 306,000 trout were released into nearly 100 lakes and ponds and more than 120 rivers and streams located throughout

Connecticut. By the end of spring stocking in 2017, approximately 530,000 trout were released.

### **Open Space Protection**

- More than \$400,000 in grants was awarded for seven projects to plan and design, build, expand, or enhance and improve multi-use trails and greenways across the state. The funding was provided through the Recreational Trails Grant Program.
- 18<sup>th</sup> Annual Governor's Greenways Council designated two new greenways and presented awards to five individuals and a regional planning organization who volunteered their time and efforts to promote, develop and enhance greenways throughout Connecticut.
- Grant awards of \$4.7 million were awarded to support 17 communities in the purchase of 1,170 acres of open space and to assist two urban communities in enhancing or developing community gardens. The funding was provided through the Open Space and Watershed Land Acquisition program.
- The updated 2016-2020 Comprehensive Open Space Acquisition Strategy (Green Plan) guides the state's effort to meet its goal of conserving 21 percent of Connecticut's land base as open space by year 2023. The newly revised Green Plan contains an action strategy with acquisition priorities and targeted acreages that are capable of providing certain benefits – such as buffers to climate change, critical wildlife habitats, and recreational trails.

### **Protecting Bird Species**

- Working with Audubon Connecticut, DEEP established five Important Bird Areas (IBAs) to support sustainable populations of birds in greatest need of conservation. Protection of these areas provides special habitats for birds, people and for future generations.

### **Agency Transformation**

#### **LEAN**

- DEEP continues to employ LEAN techniques to streamline permitting and enforcement decision making processes as well as to improve the agency's own business practices.

#### **Technology Advances**

- DEEP is working to make the best use of modern technologies to make it more convenient and efficient for the regulated community and the public to do business with the agency and to communicate important information to these audiences.
- Online offerings through DEEP's EZ-File system were expanded and now provide the opportunity to obtain several permits electronically and also to file various reports and information that are required.
- DEEP expanded the number of Facebook pages provided by various programs, to reach more people with important news and information.