



2015

Department of Energy and Environmental Protection Highlights, Accomplishments, and Milestones



Commissioner Rob Klee with EPA Administrator Gina McCarthy in the McCarthy Auditorium: December 18, 2015

The Great Outdoors

Bureau of Natural Resources

Wildlife

- Sold 122,624 hunting licenses, permits and stamps resulting in an estimated 900,000 “trips” and more than \$300 million in expenditures within the local tourism economy.
- Played a central role, working with the U.S. Interior Department and numerous partners to restore the **New England cottontail rabbit** population to a level deemed sufficient enough to avoid listing it as a federally endangered species.



- Using federal Wildlife Restoration funds, DEEP purchased two properties totaling 157 acres to provide **wildlife conservation and hunting** opportunities. Purchases included 47 acres in Franklin and 10 acres in Colchester.
- Completed the **2015 Connecticut Wildlife Action Plan**, a 10-year blueprint for the conservation of all wildlife species in the state. The Plan identifies threats to species and habitats and prescribes actions to address them. Successful completion of the Wildlife Action Plan also ensures Connecticut will continue to receive approximately \$500,000 per year of Federal Wildlife Grant funds.
- 118 acres of marsh were restored through a **mosquito management program** that has evolved into an “Integrated Marsh Management” approach that restores the vibrancy of degraded coastal wetlands that support dozens of rare and imperiled species of wildlife.

Inland Fisheries

- Stocked over one million trout, 16,885 catfish, 36,250 walleye, 9,130 northern pike, and 1,647 Atlantic salmon broodstock to provide sport fishing opportunities for anglers.
- Sold 172,170 freshwater fishing licenses and 154,939 saltwater fishing licenses, resulting in an estimated four million fishing “trips” and more than \$400 million in expenditures in the local tourism economy.



- Introduced 8,946 students to the many benefits of fishing through **Connecticut Aquatic Resources Education (CARE)** programs. CARE certified volunteer instructors donated 4,503 hours, which generated \$223,105 in state-match for Federal sportfish restoration grants.
- Worked with partners to reconnect **19 miles of free-flowing streams** for **migratory fish** by removing six dams that were in disrepair and unneeded.

Marine Fisheries

- Reformed commercial fishery licensing for the first time in 20 years through passage of **Public Act 15-52**. Reforms include a mechanism to reduce

excess fishing capacity in some sectors while creating new opportunities for current fishermen to diversify their businesses and for new fishermen to enter the industry for the first time.

Forestry

- Received \$2.5 million in federal **Forest Legacy** dollars to conserve 1,500 acres in Northeast Connecticut. This is phase one of a two phase project with additional Forest Legacy dollars anticipated in 2016.
- Produced a report on the **Economic Importance of Connecticut's Forest Based Economy** in partnership with the Northeast Association of State Foresters. The report showed our state's Forest Based Economy contributes \$3.3 billion annually to Connecticut's overall economy including forestry and logging, value added forest products (such as furniture, flooring, cabinetry, and mulch), as well as forest based recreation (including fall foliage tourism).
- Deployed two 20-person **Fire Crews** and numerous specialized personnel in response to a record breaking year of wildfires in the western US.
- Gained approval of an updated **Forest Action Plan** from the USDA Forest



Service which establishes effective strategies for protecting woodlands and maintains Connecticut's eligibility for up to \$1 million in federal funds.

Bureau of Outdoor Recreation

State Parks



- Hosted almost 8.5 million visitors to Connecticut's State Parks. Hammonasset Beach State Park was again the most popular destination, with approximately 2.5 million visitors.
- More than 230,000 people visited 14 state park museums and nature centers.

- Expanded the State Park System to 109 locations with the addition of **Auerfarm State Park Scenic Reserve**, Bloomfield, and **Seaside**, Waterford.



- Continued major infrastructure improvements at State Parks, with completion of renovations to the **pavilion at Sherwood Island**, start of construction for the West Beach Bath House and a new **Meigs Point Nature Center** at

Hammonasset, and dozens of smaller projects to replace or rehabilitate bathrooms, picnic shelters, parking lots, and road networks.

- Accommodated 28,310 reservations for State Park campgrounds, which covered reservations for 83,845 nights of camping. Reservations made online accounted for 20,090 of these reservations and 65,476 of the nights reserved.



- Marked the 10th anniversary of the nationally recognized No Child Left Inside program with a spring **Great Park Pursuit** that attracted 658 families with 2,882 members
- Organized “**Sky’s the Limit**” Hiking Challenge to attract families to Connecticut’s highest peaks. Two-hundred thirty four people successfully hiked all 14 of the peaks and more than 400 participants hiked at least 10 of the designated locations.

Boating

- Prevented the dumping of more than one million gallons of raw sewage into the waters of Long Island Sound by supporting “pumpout” boats and facilities to serve recreational boaters.
- Funded the construction and successful operation of three new **solar electric powered pumpout boats** for use in Westbrook harbor on Long Island Sound. The vessels hauled more sewage, were cheaper to operate and had substantially less maintenance requirements than normal gas outboard motors.



- Renovated the boat launch on **Bashan Lake, East Haddam**, in conjunction with a dam replacement project.



Bashan Lake

Improvements included a new dock system and ramp, and an improved parking area – all of which are ADA accessible.

- Conducted a total of 102 eight-hour “**Boat Connecticut**” Safe Boating

and Safe Personal Watercraft

Handling courses, graduating 2,987 students, which is a 26.7% increase from the previous year.

- 14 schools and 22 students participated in Boating’s **Student Ambassador** Program.
- 15 seasonal boating education assistants (BEAs) performed 2,664 U.S. Coast Guard Auxiliary Vessel Safety Checks (VSC) at high use boat launches.
- The **M/V Prudence** was deployed nine times and spent approximately 38 hours on the water interacting with recreational boaters and promoting boating safety practices.
- Issued 69 permits to various groups for marine events on state waters and/or at state owned boating facilities.
- Enacted a restricted speed zone regulation for the cove adjacent to **Lake Waramaug** State Park in Kent to address safety concerns with anchored vessels and the swim area.
- Received 136 abandoned boat applications – nearly triple the 2014 totals.



Environmental Conservation Police

- K-9 Unit responded to 46 calls for service ranging from search and rescue, evidence tracks and fish and wildlife detections. These calls included the recovery of evidence that lead to the arrest of a convicted felon who was in possession of a firearm, assisting with the recovery of a missing boater and finding hidden illegally caught fish.
- Three officers and their Labrador retriever partners completed three weeks of **fish detection training** offered by the Connecticut State Police K-9 Unit. The training is the first of its kind within the New England State Police Administrator Compact (NESPAC). In September, the three officers and their partners were further trained in the detection of certain game species.



- Arrested eight subjects for boating under the influence, investigated 77 boating accidents and issued 120 citations and 156 warnings for boating violations.
- Participated in 202 public outreach events.

Bureau of Central Services/Land Acquisition

- Acquired **1,815 acres**, an amount in excess of the last five years of acquisitions combined and more than DEEP has acquired in one year since 2003. This included 16 acquisitions that expand the State's existing network of Parks, Forests, and Wildlife Areas, made possible by leveraging more than \$10 million in federal, municipal, and private funds with \$4.3 million in State funds.
- Completed a generation-long effort to protect a 1,000-acre parcel known as "**The Preserve**," the last, largest coastal forest between New York and Boston. This property will be protected for future generations because a first-of-its-kind partnership between the State, local governments, and private organizations.
- Launched a **Public Use and Benefit Land Registry**, a publicly-accessible mapping system that will ultimately contain information for all open space properties in Connecticut. DEEP is starting with agency-owned land and the Land Registry will show information on each individual acquisition, funding sources, levels of legal protection, and the land's conservation and recreation value.
- Awarded open space grants of almost \$6 million that will support 17 communities in the purchase of 949 acres of open space, assist three urban communities in enhancing or developing **community gardens**, and allow a fourth urban community to establish a natural habitat for **environmental education**.



The Preserve

Energy

Public Utilities Regulatory Authority (PURA)

- Adjudicated **322 dockets**, including the following:
 - Approval of **Iberdrola acquisition of United Illuminating and its gas utility holdings** that included benefits for ratepayers and the community.
 - Approval of a settlement with **Yankee Gas Services**, which included a \$1.5 million rate credit and a one-year rate freeze for customers as a result of “overearnings” by that company.
 - Required improvements in the format of monthly **residential electric bills** to make charges easier to understand and to allow for comparison of competitive supplier offers against the standard service rate.
 - Established the **maximum rate** that may be charged for renewable, submetered distributed generation supply.
- Improved responsiveness to consumers by **reducing hold times** to less than 60 seconds, eliminating backlog, and reducing case turnaround times.
- Responded to more than 20,000 calls and thousands of letters and emails from utility customers seeking **dispute resolution or information**.



- Resolved 18 formal electric supplier-related investigations.
 - Performed 500 gas pipeline safety inspections, issued 135 pipeline safety violations, assessed 17 gas pipeline civil penalties.
 - Conducted 21 Outreach events, reaching more than one thousand consumers.
- Awarded \$3.5 million in Public, Educational and Governmental Programming and Education Technology Investment Account (PEGPETIA) grant funding.

- Reviewed 524 excavation damages, assessed 151 **Call Before you Dig** (CBYD) civil penalties, initiated 226 non-civil penalty CBYD enforcement actions.

Bureau of Energy and Technology Policy

- Launched **Three State RFP process** with Massachusetts and Rhode Island to secure 4,250 KWh each year, or 15% of the state's total electricity load, of clean energy to meet region's electricity needs.
- Saved more than 388 million KWh of energy, avoided more than 450,000 ton of carbon emissions, took the equivalent of over 466,000 cars off the road, and avoided the use of more than 2 million gallons of heating fuel in one year through popular and cost effective efficiency programs. Reached more than 40,000 homes, half of which are low income, to weatherize and make more energy efficient.
- Approved the **2016-2018 Conservation & Load Management Plan** to fund over \$602 million in electric efficiency and over \$161 million in natural gas efficiency programs.
- Initiated proceeding to develop a 6MW Shared Clean Energy Facility Pilot Program that will allow electric customers to subscribe to and receive on-bill credits from community clean energy facilities, like solar.





- Announced third round of funding under the **Microgrid Grant program** with up to \$30 million to be awarded. First municipal microgrid funded under DEEP's Microgrid Grant program went on line in **Fairfield**.
- Convened the Governor's

Council on Climate Change to collaborate on existing and potential policies and strategies to reduce the state's greenhouse gas emissions and reach 80% reduction by 2050.

- Initiated proceeding to receive proposals from the state's electric utilities to modernize the grid through, for example, energy storage to better integrate clean energy technologies and gadgets that will increase communication and efficiency along the electric grid.
- Under the state's **Low and Zero Emissions Renewable Energy Credit Program (LREC/ZREC)** Eversource and UI had entered into, by the end of 2015, 1,501 contracts for clean energy. If all of these projects go in-service, it will result in approximately 268 Megawatts of installed renewable electric power in the State of Connecticut.

Connecticut Green Bank

- Saw over \$25 million in transactions for commercial and industrial building energy improvements in its **C-PACE** program that are delivering 40-50% energy savings.



- Approved its 15,000th home, and counting, to install rooftop solar panels through its Residential Solar Investment Program (RSIP), growing the rooftop solar market to nearly \$150 million.

Environmental Quality

Materials Management & Compliance Assurance

Emergency Response

Received reports of **6,925 incidents** and responded to **1,644 calls for assistance** in addressing spills, discharges, and releases of contaminants.



Engineering and Enforcement/Solid Waste

- **Producer Responsibility programs** expanded and continued to serve as effective means of industry-supporter recycling of used and obsolete materials:
 - In its fifth year, the **E-Waste program** for recycling of obsolete computer equipment and televisions, topped 50 million pounds of total recycled materials
 - A **video produced in-house** to promote public awareness of the E-Waste program was shown in **143 movie theaters** across the state during the month of December. View it at <http://go.usa.gov/cUyji>.
 - In its second year, **paint recycling** was poised to match first year results of 240,000 gallons of paint recycled.
 - **Mattress recycling** kicked off with 90 participating municipalities and 60,000 mattresses recycled
- Provided \$105,00 in **grants to enhance recycling** and composting activities in 13 communities
- Issued a **request for proposals (RFP)** to redevelop the waste-to-energy facility in Hartford as well as other facilities that have been operated by the Materials Innovation and Recycling Authority (MIRA) – formerly known as the Connecticut Resource Recovery Authority (CRRRA). The RFP invited proposals for a range of technologies to upgrade or replace the present system of facilities, to help reduce the volume of waste combusted.



- **Recycle CT Foundation** was launched to promote recycling and encourage people, government entities, businesses, and organizations to adopt recycling as part of their everyday lives or operations.
- Issued first-of-its-kind solid waste permit for a **commercial anaerobic digester**, a state-of the art composting like facility to convert food waste and other organic material into high quality compost, soil amendment materials and the ongoing production of 1.6 megawatts of clean energy once in full production.
- Handled 1,662 phone calls for compliance assistance for matters involving hazardous waste or solid waste/recycling



Water Permitting and Enforcement

- Negotiated requirements for a new **MS4 General Permit** which will cover 121 municipal entities and federal and state institutions addressing stormwater runoff contaminated with illicit discharges and pollutants from improperly managed construction sites and directly connected impervious areas.



- Conducted over **302 inspections** at industrial, commercial and municipal facilities related to water discharges.
- Received reports of more than 50% of individually permitted dischargers electronically through the online **Net DMR** system.

- Distributed final funding provided by a WPED initiated US EPA enforcement action against **Unilever** that led to a **\$3.5 million** federal settlement. The settlement provided \$2.5 million in start-up funds for the Connecticut Institute for Resiliency and Climate Adaptation (CIRCA); \$500,000 for various environmentally beneficial projects proposed by the Towns of Clinton and Madison; and \$500,000 to design and construct a **fishway at the Chapman Mill Pond in Clinton**.

Water Protection & Land Reuse

Office of Long Island Sound Programs

- Pursuant to Public Act 15-66, initiated development of a first-ever **Long Island Sound “Blue Plan”** to provide a marine spatial plan for the resources and uses of LIS.
- In partnership with UConn, supported programs and initiatives of the **Connecticut Institute for Resilience and Climate Adaptation (CIRCA)**, including a national conference on Living Shorelines and the Municipal Resilience Grant Program.
- Under DEEP leadership, a consortium of organizations including UConn, Columbia University, EPA, NOAA, Sea Grant, and New York State agencies completed the final report of a **pilot seafloor mapping project** in Long Island Sound and began planning for future phases.
- Approximately 33 acres of **tidal wetlands** and 21 acres of other coastal habitat were **restored**, 19 river miles were reconnected by removing barriers to fish passage and 1,499 acres of coastal habitat were protected.



Inland Waters/Dam Safety

State-owned dams

- Over \$12.25 million invested in dam repairs completed or underway at five major and one minor state-owned dam.
- Over \$2 million invested in **dam repairs at flood control** projects.
- Completed 64 inspections of high and significant hazard state-owned dams.
- Provided \$1.5 million in funding for projects identified by local Flood and Erosion Control Board.



Dam Safety Regulatory

- Continued roll-out of new inspection requirements for owners of private dams, which has helped identify 45 dams determined to be in “poor” condition and in need of repairs by owners.
- 196 inspection reports and 100 requests for inspections received out of 350 notifications of required inspections (due March 2015)

Remediation

- As a result of changes to regulations, **119 final environmental cleanups** were completed under the CT Property Transfer Act, the highest annual total for this program ever. Prior to DEEP’s regulation amendments in 2013, the average annual total for the prior 10 years was about 50 final cleanups per year.

- Federal and state funding secured for installation of a **public waterline** to serve approximately 100 homes with contaminated wells in Durham and for cleanup of the source of contamination at two manufacturing sites located within a federal Superfund site in that town.
- Approximately 27,000 cubic yards of **sediment containing lead** was removed from the Mill River in Fairfield, under terms of a Consent Order with the former owners of an Exide Battery facility that had operated on the shores of that water body. Remediation of lead polluted sediments from the river will restore this critical resource for the citizens of Fairfield and the State.
- Initiated planning for cleanup of **English Station site in New Haven** as a result of funding made available through the acquisition of United Illuminating by Iberdrola.

Planning & Standards

- Provided \$237 million in **Clean Water Fund grants** and loans to fund new construction or renovations of wastewater treatment plants in seven communities.
- First wastewater treatment plants with capacity for removal of **phosphorous** – which impairs the quality of inland waters – came on line in Cheshire and Manchester.
- **Mattabasset District** wastewater treatment plant expansion was completed to provide regionalized-cost effective service to the city of Middletown and also remove higher levels of nitrogen.
- Plant upgrades, with capacity for **nitrogen removal**, completed in Plymouth and West Haven.



- Sewer system completed in areas around Bolton Lake, to protect that waterbody, with treatment provided by Manchester facility.
- Continued work on major projects to separate storm water from sanitary sewer systems in Hartford area (MDC) and New Haven.

Air Management

Planning and Standards

- Promoted the sales of **Electric Vehicles**, to help reduce emissions of carbon



linked to **Climate Change** and traditional pollutants linked to respiratory ailments, with grants for

charging stations and the purchases of alternative vehicles.

- Provided \$112,850 in grants for the installation of **78 charging outlets** at 50 charging stations. This brings the total funded by EVConnecticut grants since 2013 to over \$486,000 in grants for the installation of 191 charging outlets at 127 charging stations.



- Provided \$873,750 in **rebates** of up to \$3,000 for each of 367 eligible vehicles (112 battery EVs, 255 plug-in hybrid EVs).
- Launched initiative to provide grants to cities and towns and state agencies for the installation of charging stations and the purchase of Electric Vehicles.

- Provided \$68,000 in incentives for the removal of 17 outdoor wood furnaces.
- Successfully collected over 3.5 million data records from 85 instruments at 20 **air**

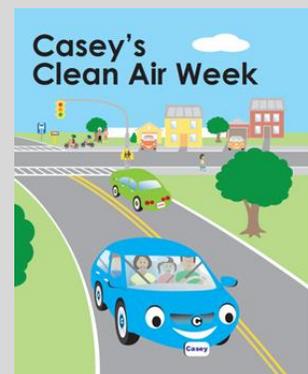
monitoring sites throughout the state.

- Transmitted over 200,000 data records to EPA for forecasted and real-time air quality maps and alerts for the protection of public health – data was reported every hour each day throughout the year.
- Awarded **EPA Village Green** grant for installation at the CT Science Museum, Hartford, of a solar/wind-powered air monitoring system configured as a park bench using innovative technology to enable community level, real-time air quality measurements publically available.

Air Engineering & Enforcement and Technical Services



- Received 309 permit applications and completed 237 air permit transactions, of which, more than 60% were completed on-time and within Department timeliness requirements.
- Completed comprehensive statewide Inventory of Air Emissions, which demonstrated that from 2005-2011, emissions of VOC and NOx – the pollutants that contribute to ground level ozone – decreased by 19% and 24% respectively. At the same time, there was a 12% growth (in current dollars) in the state GDP, demonstrating that improving air quality is compatible with economic growth.
- Developed a children's book on air quality, entitled "[Casey's Clean Air Week](#)," in collaboration with the University of Connecticut Healthy Environments for Children Initiative. Distributed copies of the book to grades K-2 at public and private schools.
- Audited over 1100 air compliance reports and over 200 air emissions tests.
- Investigated over 300 citizen air quality complaints.



- Performed over **300 facility inspections** and witnessed over 200 air emissions tests at industrial, commercial and institutional sources.
- Oversaw decommissioning of obsolete Stage II gasoline vapor recovery systems and the installation and testing of **enhanced Stage I gasoline vapor control systems** at over 1000 gasoline dispensing facilities.

DEEP Transformation

Professional Development

DEEP **On-Site** Classes - Attendees **602**

In-Service Classes - Attendees **427**

Completed **DiSC** Assessment Training **281**

All DiSC Training (2014-2015) **326**

Professional Development Off-Sites - Attendees **179**

- Fraunhofer **Center for Energy Innovation** (CEI) at UCONN
- Quinebaug Valley State Trout Hatchery and Moosup River Dam
- Sessions Woods Conservation Center and Wildlife Management Area
- Windsor Air Lab
- Hartford Flood Control System
- Rainbow Dam Fishway

- DEEP/DOT Q Bridge Program



- CT Fastrack

2015 DEEP Employee Survey Response Rate: 75%
 2015 DEEP Employee Survey Comments 575

LEAN

- Reached total of **65 LEAN projects**.
- Hosted three five-day LEAN events that included six DEEP projects:



including one interagency and two intra-agency electronic government permit related projects:

Streamlining Financing for Energy Efficiency Investments at Affordable Multi-Family Properties: 50 different individuals representing 26 different agencies and organizations, whose work involves affordable multi-family housing participated in event.

SIMS Permitting Data Entry and SOPs

MMCA Subscriber Agreement Process for UST Registration Ezfile

Water Permitting NET Discharge Monitoring Reports (DMR).

Solid Waste Facility Individual Permit Modifications and Renewals

Streamlining Air Emissions Compliance Audit Process and Water

Enforcement Consent Order Closure Process.

- Hosted three Interagency LEAN teams as a member of the Statewide Process Improvement Steering Committee.

Permitting

New General Permits issued:

AIR

- Limit Potential to Emit from Major Stationary Sources of Air Pollution

IWRD

- Dam Safety Repair and Alteration: Non Filing Categories
- Dam Safety Repair and Alteration: Filing Only Categories
- Dam Safety Repair and Alteration: Approval of Filing Categories

OLISP

- Coastal Storm Response
- Minor Coastal Structures
- Coastal Maintenance

WPED

Food Service Establishment Wastewater

Online Services

DEEP continued to expand its online business offerings through:



Now available on line:

- Boating and Fishing Permits and Registrations;
- Radiation Registrations (DTX and RMI);
- Stormwater Registrations (Construction, Industrial and No Exposure); and
- Underground Storage Tank Notifications.

Website and Social Media

Website

(Unique Visitors)

Website	Users
DEEP	2,216,965
Mosquito Management	22,567
NCLI	11,934
PURA	68,817

Facebook 

Page	# Likes
Boating	1,937
DEEP	3,316
Fish & Wildlife	12,445
State Parks	4,474
Total	22,172

New Pages:
Climate Change
Recycling

Twitter 

Page	Followers
Commissioner	937
Outdoor Rec	2,049
Total	2,986

New Accounts:
Boating
Climate Change
Fishing
Fort Trumbull



www.youtube.com/ctdeepvideos

78 videos posted

43,691 views