



Energy and Environmental Quarterly

U.S. Department of Commerce; Office of Administrative Services; Office of Sustainable Energy and Environmental Programs Volume 4, Issue 2

Reducing Water Pollution with EPA's Stormwater Calculator

The U.S. Environmental Protection Agency (USEPA) recently released the national Stormwater Calculator (<http://www.epa.gov/nrmrl/wswrd/wq/models/swc/>), an innovative addition to the administration's virtual Climate Resilience Toolkit. The new calculator will help protect local waterways from pollution caused by stormwater runoff.

Polluted stormwater runoff is a leading cause of impairment to the nearly 40 percent of surveyed U.S. water bodies that do not meet water quality standards. On land or via storm sewer systems, rainwater becomes polluted by picking up pet waste, fertilizers, oil from cars, and other waste as it makes its way, often untreated, directly into local water bodies. When left uncontrolled, this water pollution can result in

the destruction of fish, wildlife, and aquatic life habitats; a loss in aesthetic value; and threats to public health due to contaminated food, drinking water supplies, and recreational waterways.

To assist facility managers and government and private sector experts, the USEPA developed its Stormwater Calculator, a desktop application that estimates the annual volume of stormwater runoff from a specific site. The calculator utilizes information on soil conditions, slope, land cover, and historical rainfall records. Users can enter any U.S. location, that estimates runoff at a specific location. Users can select different scenarios to learn how specific green infrastructure changes, including inexpensive changes like rain barrels and rain garden, can prevent pollution.

"The Stormwater Calculator demonstrates different types of green infrastructure approaches that can result in protection from flooding, energy savings, improved air quality, increased property values, healthier communities, and cost savings for the American people," said Lek Kadeli, principle assistant administrator for USEPA's Office of Research and Development.



Lighting Facts Per Bulb	
Brightness	800 lumens
Estimated Yearly Energy Cost \$1.57	
Based on 3 hrs/day, 11 c/kWh	
Cost depends on rates and use	
Life	9 years
Based on 3 hrs/day	
Light Appearance	
Warm Cool	
2700 K _____	
Energy Used	13 watts

Do You Know... Lumens?

The transition from incandescent light bulbs to energy efficient light bulbs in the marketplace has changed the way we choose our light bulbs. In new energy efficient bulbs, the brightness of the bulb is based on the number of lumens, a measure of brightness. So, if you have been lighting your living room with 100 watt bulbs, how many lumens should your new energy efficient bulbs have?

- For a 100 watt bulb, buy an energy efficient bulb with 1,600 lumens
- For a 75 watt bulb, buy an energy efficient bulb with 1,100 lumens
- For a 60 watt bulb, buy an energy efficient bulb with 800 lumens
- For a 40 watt bulb, buy an energy efficient bulb with 450 lumens

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Meet A DOC Sustainability Community Member: Michael Hill



Michael came to work at the DOC's Office of the Chief Information Office (OCIO) in 1992 with a great deal of experience to aid the Department in its mission. Prior to coming to DOC, he served in the United States military for 33 years working for the Department of the Navy and the D.C. Air National Guard. His positions working for the Armed Forces varied from computer programmer, to program manager, to Wing Weapons Manager. He retired as a Chief Master Sergeant in 2001. Michael now serves as OCIO's Program Manager for Continuity of Operations (COOP) and Emergency Preparedness. He ensures that OCIO is prepared to perform its mission essential functions under any conditions and is responsible for the safety of OCIO personnel during any emergency events.

Being OCIO's Sustainability Representative ties in very well with some of the functions of Michael's job. He serves as the Program Manager for Electronic Stewardship, making sure the organization is acting as good stewards of the

environment. Recently, he took on the responsibility of project lead for data center consolidation for the Department. This effort will help to close 40 percent of our non-core data centers by the end of FY2015. The goal is to make sure OCIO is maintaining our data centers and operations in an efficient and cost effective manner. Michael is also an active participant in the Data Center Consolidation Task Force (DCCTF) monthly meetings.

As OCIO's Sustainability Representative, Michael coordinates with the Office of Acquisition Management to guarantee that the procurement of office electronic equipment meets the green initiatives expressed in President Obama's Executive Order 13514 - Federal Leadership in Environment, Energy, and Economic Performance. OCIO is actively working to reduce the Department's carbon footprint of office electronics while reducing costs to the Federal government. He regularly coordinates with the Office of Acquisition Management for green purchasing efforts

and with the Office of Commerce Services for the environmental disposition of outdated and surplus office electronic equipment. Michael certainly stays busy as an environmental steward as evidenced through OCIO's participation in the Green Grant program, as well as implementing power management and print management initiatives for desktops, laptops, monitors, and imaging equipment. Michael believes these undertakings are central in OCIO's efficiency efforts. Print management policies are in place to reduce the number of devices, reducing defaults to duplex printing, and reduce toner usage by only printing what is absolutely necessary.

Michael and OCIO are very active within the Department relative to information technology, data consolidation, and electronics acquisition and management. DOC is certainly fortunate to have such an experienced and committed individual playing this important role.

The 2013 Energy and Environmental Stewardship Awards

And the Sustainability Hero Is....

The Department of Commerce held its 6th annual Energy and Environmental Stewardship Awards ceremony in April. In the category of Sustainability Hero, the Energy and Environmental Award panel awarded 1st place to Mr. Ingo Fleming, a Fisheries Reporting Specialist. Mr. Fleming is approaching his 20th year with NOAA's Fisheries Service, beginning in Ocean City, Maryland, in 1993 and now in Cape May, NJ, where

he transferred in 2000. Mr. commutes daily by riding his bike or walking, a testament to his love of the environment. He does this in the sun, the wind, the rain, and the snow and has been doing so for the past 20 years. He is an inspiration to all who work with him.



OSEEP's Green Store: DOC Accrues \$50,000 in Savings Within Three Months of Opening

the Office of Sustainable Energy and Environmental Programs is thrilled to report that its' Green Store, which opened April 24, has already led to more than \$50,000 in savings for the Department of Commerce. The store's concept is to use and reuse items no longer needed by one office and needed by another office. The idea of collecting and consolidating unused and



excess office supplies and then reusing the supplies is innovative and much needed, both due

to budget constraints and environmental purposes. Doubling its initial savings goal of \$25,000, interns and Green Team volunteers have stocked the store with surplus and often brand new supplies ranging from printer paper to blackberry phone cases. A willingness by the HCHB community to participate in stocking inventory and the interns' ability to run a well-organized shop has impacted the Department greatly, creating a strong

model for concept of recycling and reusing goods. The donations to the store have allowed for a wide variety of choices for the HCHB customers, and limited the need for offices to buy new supplies.



WE HAVE BEEN BUSY!
 Help keep our shelves stocked
 DONATION DROP #H2064

Saving Energy Starts with YOU



Saving energy at work can feel like someone else's problem. It's true that major upgrades to air conditioning, lighting, and other building systems must be made by

facility managers, but occupant behavior – your behavior – is just as important as those costly and complex upgrades. A recent study by the Department of Energy showed that energy-conscious workers save 40 percent more energy than occupants that are indifferent about energy conservation. What can you do to save energy at work? Here are a few easy tips:

- Increase the thermostat set point in the summer and decrease the temperature in the winter, even by a couple of degrees.
- Turn off lights and computer monitors when you leave for the day
- Unplug equipment that drains energy when not in use (i.e. cell phone chargers, fans, coffeemakers, desktop printers, radios, etc.).

- Take advantage of daylight and task lighting to turn off unnecessary overhead lights. In the winter months, open blinds on south-facing windows during the day to allow sunlight to naturally heat your workspace. At night, close the blinds to reduce heat loss.
- Finally and most importantly, set an example for your co-workers and managers! Show them how easy and fulfilling it is to be energy-conscious and inspire others to follow your lead. For more information please contact Jennifer Brundage at 202-482-3444 or jbrundage@doc.gov.

EPA Finalizes Amendments to Emissions Standards For Hazardous Air Pollutants

In 1948, an environmental disaster in southwestern Pennsylvania shocked the country. It forever changed the way Americans think about industrial pollution and their health. The blue-collar town of Donora, PA., a small mill town about 25 miles south of Pittsburgh was coated with a thick yellow smoke caused by local steel plants, rail road yards, and zinc works. The smog darkened the valley for five straight days. The ever-thickening smog turned lethal: 20 people died, and half the town got sick, making it the worst air pollution disaster in U.S history. The event raised a lot of concern for air quality, and so incensed the country that Congress passed the first clean air legislation in 1955. In 1970, along with the creation of the Environmental Protection Agency (USEPA), the Clean Air Act (CAA), as we know it today, was passed. The legislation allows for the regulation and control over air pollutants and the sources that release those air pollutants. This legislation is important to the maintenance and im-

provement of air quality in the United States. The USEPA's current major goal through the CAA is to prevent over 230,000 premature deaths caused by air pollution.

On January 14, 2013 the EPA finalized amendments to the National Emissions Standards for Hazardous Air Pollutants for stationary reciprocating internal combustion engines (RICE), which include emergency generators at the Department of Commerce (DOC) facilities and aboard offshore vessels. These amendments ensure that the set standards are cost effective, achievable, and protective of at-risk populations. The amendments require the use of cleaner ultra-low sulfur diesel fuel for emergency engines. Furthermore, use of emergency demand and response back-up generators may not exceed 100 hours a year without meeting RICE emission standards. The reasoning is to further reduce particulate matter and sulfur dioxide emissions. These pollutants

cause serious health issues which including cancer, lung problems, and death, particularly for at-risk populations like and the elderly.



For more information refer to:
<http://www.epa.gov/ttn/oarpg/t3pfpr.html>



Our Summer Interns

The OSEEP team would like to recognize and thank our summer interns for all their hard work over the last few months. These impressive young adults have been pivotal in making OSEEP's Green Store such a success! All of the interns are upcoming high school seniors or college freshmen. They worked together to form a productive and cohesive group that helped to promote, organize, and track the successes of our newly founded Green Store. We hope they enjoyed their experience and find useful the knowledge they gained here at DOC as much as we enjoyed having them as part of our team. So, Harris Kelly, Tiffany Lopes, Sahil Sharma, Kyle Lowery, Kristina Lowe, and Micah Harris, please know that the OSEEP team wishes you all the best.

An Update On Our Energy Services Contracts

The National Oceanic and Atmospheric Administration (NOAA), the National Institute of Standards and Technology (NIST), and the Census Bureau are all making progress in establishing performance-based energy savings performance contracts (ESPC), as reported in the last issue of the E&E newsletter. Over the summer, NIST and NOAA reviewed preliminary assessments from contractors and issued notices of intent to award one contractor for each site. Preparations are currently underway for investment-grade audits of NOAA and NIST facilities, which will provide an accurate, detailed account of energy and water use and potential savings opportunities at each site. The Census Bureau's National Process Center is currently drafting a Memorandum of Agreement to pursue an ESPC in partnership with General Services Administration (GSA), a more prudent course given that their facilities are GSA-owned and delegated.

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