

Conservation Committee Report

Volume 10 Issue 4

By Jack Walters, ACSL Conservation Chair

April 2008



The Conservation Pledge

I give my pledge as an
American to save
and faithfully defend from
waste,
the natural resources of my
country;
the soil, the water, the air,
the minerals, the plant life and
the wildlife.

This is my Pledge!

Inside this issue:

DCNR ACQUIRES 45-ACRE
TRACT ADJOINING FRENCH
CREEK STATE PARK

Page 7

EPA Energy Star partners
significantly reduce
greenhouse gas emissions

Page 8

Summer Fuels Outlook Pre-
dicts Sharply Higher Gas Prices

Page 9

View Peregrine Falcon
Webcams

Page 10

GOVERNOR RENDELL PROPOSES COUNTY GRANTS TO COMBAT WEST NILE VIRUS, PROTECT PUBLIC HEALTH

\$5.3 MILLION IN GRANTS TO BENEFIT PREVENTION, CONTROL EFFORTS IN EVERY COUNTY

Every county in Pennsylvania will benefit from an aggressive effort to monitor and control mosquitoes this summer, said Governor Edward G. Rendell today as he announced a \$5.3 million investment that will help fight to stop the West Nile Virus.

"We've worked diligently over the past several years to protect the public's health by ensuring that our counties have the resources they need to control mosquito populations and monitor for signs of the West Nile Virus," said

(continued on page 2)

Pollution Control Innovations for Power Plants

For the last quarter century, power plant operators in the United States have looked increasingly to new pollution control technologies to meet tightening regulatory standards for clean air and water.

The original 1970 Clean Air Act established national standards to limit levels of air pollutants, such as sulfur dioxide, nitrogen oxides, carbon monoxide, ozone, lead, and particulate matter. The Act, and its amendments in 1977, set into motion both public and private sector efforts to develop new environmental control technologies, including new flue gas desulfurization units, commonly called "scrubbers," that remove sulfur from the exhaust gases of coal-fired power plants. Federal research projects helped improve the reliability of the early scrubbers. The Energy Department's Clean Coal Technology Program in the 1980s demonstrated new, lower cost and more effective scrubber

(continued on page 4)

GOVERNOR RENDELL PROPOSES COUNTY GRANTS TO COMBAT WEST NILE VIRUS, PROTECT PUBLIC HEALTH

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Governor Rendell. "Our investments are paying dividends. With fewer human cases, few counties reporting that the virus has been detected, and a better understanding by the public of the threat, our citizens can enjoy the outdoors with more peace of mind."

In 2003, there were 237 reported human cases of the West Nile Virus, with nine fatalities. In 2006, nine Pennsylvanians were diagnosed with the virus, two of whom died. Last year, though, nine state residents contracted the virus but there were no deaths.

In humans, the virus can cause West Nile fever and encephalitis, an infection that can cause inflammation of the brain and death. Most people bitten by an infected mosquito will never develop any symptoms, and only one in 150 with symptoms will develop the more serious West Nile encephalitis.

"The investment we're making this year will help the Department of Environmental Protection and county West Nile Virus workers to remain vigilant," said the Governor. "West Nile Virus is still active in parts of Pennsylvania, and controlling it requires the aggressive mosquito surveillance and control program that we will support again this year."

DEP and county staff supported by the grants announced today use environmentally sensitive materials to control the mosquito population.

For killing larvae, which is the major method of mosquito control, the naturally-occurring bacteria Bti and Bsph are used. These bacteria attack the digestive system of the mosquito larvae, and have no effect on people, animals or plants.

Another larval control product is the insect juvenile hormone, methoprene, which prevents the mosquito larvae from developing into adults. The products used to kill adult mosquitoes, likewise, are selected based on their environmental sensitivity and are applied so they do not harm people, animals, or plants.

DEP will administer the West Nile Virus surveillance and control program for Forest County this year, with funding coming directly from the department's West Nile Virus budget. DEP has also contracted for a private firm to conduct the program in Lycoming County, at a cost of \$54,600. Pike and Susquehanna counties' programs will be run in a combined \$61,600 grant.

DEP Secretary Kathleen A. McGinty said citizens can play a major role in controlling the mosquito populations by helping to eliminate breeding grounds for the insects.

"We need people to help us in this fight by remembering the slogan, 'Dump it, drain it, treat it,'" said McGinty. "Dump it if it has water in it; drain it if it can be drained; and treat it if it has standing water. After just a few days, standing water can become a mosquito breeding ground."

McGinty also urged people to wear insect repellent containing DEET when outside in warm weather.

(continued on page 3)

**GOVERNOR RENDELL PROPOSES COUNTY GRANTS TO COMBAT WEST NILE VIRUS,
PROTECT PUBLIC HEALTH**

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Governor Rendell's proposed fiscal year 2008-09 budget also includes more than \$7 million for the West Nile Virus Control Program, which will allow DEP to continue its mission of protecting against threats to human health and safety. The proposed appropriation reflects the historical funding requests of the counties, and will save the state \$571,000 in operational costs for the program, without impacting surveillance and control efforts.

For more information on West Nile Virus, visit www.westnile.state.pa.us.

Source: PA DEP

Pollution Control Innovations for Power Plants

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technologies.

The 1990 Clean Air Act Amendments contained sweeping revisions that required further reductions in power plant emissions, especially sulfur- and nitrogen-based pollutants that can contribute to acid rain. It put into place a new market-based "cap-and-trade" system that required power plants either to reduce emissions or acquire allowances from others to achieve compliance. To meet the more stringent nitrogen oxide standards, many power plants turned to new "low-NOx" burners that had been pioneered in the Energy Department's Clean Coal Technology Program.

On February 14, 2002, President George W. Bush proposed further reductions in air pollution from electricity generators. His Clear Skies Initiative proposed dramatic reductions in three pollutants emitted from coal-fired power plants:

Sulfur dioxide emissions would be cut by 73 percent, from current emissions of 11 million tons to a cap of 4.5 million tons in 2010, and 3 million tons in 2018.

Nitrogen oxide emissions would be reduced by 67 percent from current emissions of 5 million tons to a cap of 2.1 million tons in 2008, and to 1.7 million tons in 2018, and

Mercury emissions - never before regulated as a power plant pollutant - would be cut by 69 percent, from current emissions of 48 tons to a cap of 26 tons in 2010 and 15 tons in 2018.

On March 5, 2005, the Environmental Protection Agency (EPA) issued the Clean Air Mercury Rule (CAMR) to permanently cap and reduce mercury emissions from coal-fired power plants for the first time ever. This rule makes the United States the first country in the world to regulate mercury emissions from utilities.

On March 10, 2005, in a separate but related action, EPA issued the Clean Air Interstate Rule (CAIR), a rule that will dramatically reduce air pollution that moves across state boundaries.

Together the CAMR and CAIR create a multi-pollutant strategy to reduce emissions throughout the United States.

CAIR will permanently cap emissions of sulfur dioxide (SO₂) and nitrogen oxides (NO_x) in the eastern United States. CAIR achieves

MORE INFO large reductions of SO₂ and/or NO_x emissions across 28 eastern states and the District of Columbia. When fully implemented, CAIR will reduce SO₂ emissions in these states by over 70 percent and NO_x emissions by over 60 percent from 2003 levels.

(continued on page 5)

Pollution Control Innovations for Power Plants

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The CAMR establishes "standards of performance" limiting mercury emissions from new and existing coal-fired power plants and creates a market-based cap-and-trade program that will reduce nationwide utility emissions of mercury in two distinct phases. The first phase cap is 38 tons and emissions will be reduced by taking advantage of "co-benefit" reductions - that is, mercury reductions achieved by reducing sulfur dioxide (SO₂) and nitrogen oxides (NO_x) emissions under CAIR. In the second phase, due in 2018, coal-fired power plants will be subject to a second cap, which will reduce emissions to 15 tons upon full implementation.

DOE's Innovations for Existing Plants - Helping Achieve Clear Skies

The U.S. Department of Energy's Office of Fossil Energy is developing a portfolio of environmental control technologies and a knowledge base of scientific data and regulatory analyses that can provide power plant operators with the multi-pollutant solutions needed to meet the President's Clear Skies Initiative, Clean Air Interstate Rule (CAIR), and Clean Air Mercury Rule (CAMR) at the lowest possible cost to ratepayers.

A primary focus of these efforts is to develop innovative concepts that can be retrofitted to the roughly 320,000 megawatts of existing baseload coal-fired power generating capacity in the United States. The Nation relies on this generating capacity for approximately 50 percent of its electricity, and its low-cost and price stability is one of the major reasons why U.S. consumers benefit from some of the lowest electricity rates in the world.

The major efforts in this program include: [\[Click on each for more details\]](#)

Advanced nitrogen oxide (NO_x) controls including (1) low-NO_x burners and reburning systems that limit NO_x formation in the combustion process; (2) chemical processes that cleanse NO_x already formed from the flue gases of coal combustors, and (3) oxygen-enhanced combustion that displaces a portion of the nitrogen-laden air in a low-NO_x combustor with oxygen.

> [Read More](#)

Mercury controls that can meet the Clear Skies and CAMR targets with technologies that incorporate (1) sorbents and oxidizing agents that transform gaseous forms of mercury released when coal burns into solids that can be captured by flue gas filters or other particulate removal devices, or (2) oxidizing agents that work inside a wet flue gas scrubber to capture mercury in the sulfate by-product. This effort also includes the development of ways to measure mercury emissions instantaneously and continuously so plant operators can validate the effectiveness of control technologies.

Particulate controls that can meet new National Ambient Air Quality Standards for microscopic particles called "PM_{2.5}" (which stands for particulate matter as small as 2.5 microns in diameter - or roughly 1/30th

(continued on page 6)

Pollution Control Innovations for Power Plants

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the width of a human hair). The original Clean Air Act set standards for larger ash particles, those 10 microns in diameter. The Energy Department's research is developing ways to improve particulate capture devices, such as fabric filters, electrostatic precipitators, or hybrids of both devices, so that they are effective in trapping the smaller particles. Coal utilization by-product research to develop ways to increase the recycling of carbon and other power plant waste products that must otherwise be disposed of. New NO_x and mercury controls can change the make-up of these waste products. The Energy Department's research is studying the chemical composition of these products and developing novel ways to separate carbon and other elements from the products to expand their commercial use. > [Read More](#)

Water management research that is developing more efficient technologies that can reuse power plant cooling and other process water and improve understanding of the chemical and physical characteristics of mine pools and watersheds that surround coal-fired power plants.

Source: U.S. DOE

DCNR ACQUIRES 45-ACRE TRACT ADJOINING FRENCH CREEK STATE PARK

Department of Conservation and Natural Resources Secretary Michael DiBerardinis today applauded the acquisition of a 45-acre tract that will expand French Creek State Park's southeastern border in Chester County.

North Coventry Township purchased the land in 2005 and recently donated it to DCNR.

"With this donation, North Coventry Township officials continue to show their strong commitment to land preservation," DiBerardinis said. "This is an excellent example of local and state partnerships in action that benefit the public by expanding a very popular and heavily visited state park."

Widely known as the "Sheepshank" or "Brown Tract," the donated parcel is largely mature forest acreage on a hilltop overlooking rolling hills and small stream valleys in the park's Millers Point low-density, public-use area.

"We plan to simply incorporate this valuable tract into the park's existing woodland where it will serve as a buffer against development and help with open space preservation and ground-water protection and recharge," DiBerardinis said.

With acreage now totaling 7,526, French Creek State Park ranks ninth in size among the 117 state parks. Ranked 10th in visitation, the park draws more than 883,000 visitors annually. Amid picturesque farmland rich in history, the park offers two lakes—the 68-acre Hopewell and 22-acre Scotts Run—along with extensive forests and 40 miles of hiking trails that thread through Chester and Berks counties. Hopewell Furnace National Historic Site, featuring a cold-blast furnace restored to its 1830s appearance, adjoins the park.

For information on French Creek State Park, or on any of Pennsylvania's 117 state parks, call 1-888-PA-PARKS between 7 a.m. and 5 p.m. Monday through Saturday; or visit www.dcnr.state.pa.us.

Source: PA DCNR

EPA Energy Star partners significantly reduce greenhouse gas emissions

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Energy Star award winners Giant Eagle Inc. in Pittsburgh, Pa., Gorell Enterprises, Inc. in Indiana, Pa., Marriott International Inc. in Bethesda, Md., Council Rock School District in Newtown, Pa., and the Building Owners and Managers Association International in Washington, D.C. are among those showcased in a report released today by EPA for reducing greenhouse gas emissions through energy efficiency.

The report, "Profiles in Leadership, 2008 Energy Star Award Winners," highlights 74 award-winning organizations across many sectors of the U.S. economy.

"These energy all-stars prove that a brighter future starts with each of us," said Donald S. Welsh, regional administrator EPA. "We are glad to partner with organizations in the mid-Atlantic region to preserve our environment and our energy resources."

National award winners were selected from the 12,000 organizations in the Energy Star program. Energy Star partners commit to improve the energy efficiency of products, homes, buildings and businesses. The winners have made substantial reductions in greenhouse gas emissions through energy efficiency. They are both large and small organizations with long track records of success as well as those that are quickly excelling in energy efficiency.

In 2007 with the help of Energy Star, Americans saved \$16 billion on their energy bills and avoided greenhouse gas emissions equivalent to those of 27 million vehicles. To date, more than 2.5 billion Energy Star qualified products have been sold, and nearly 840,000 new homes and 4,000 office buildings, schools, hospitals, and public buildings have earned the Energy Star. Energy Star qualified products provide what today's consumers expect

The report is posted at http://energystar.gov/index.cfm?c=pt_awards.pt_es_awards. For more information about Energy Star, visit: <http://www.energystar.gov> or call toll-free 1-888-STAR-YES (1-888-782-7937)

Source: U.S. EPA

Summer Fuels Outlook Predicts Sharply Higher Gas Prices

The Energy Information Administration today released its Short-Term Energy and Summer Fuels Outlook that predicts gasoline prices will reach \$3.60 per gallon this summer. In addition, monthly diesel prices are expected to peak at \$3.90 per gallon this spring.

The EIA, a division of the federal Department of Energy, also warned that even if the national average monthly gasoline price peaks around \$3.60 per gallon this summer, it is possible that prices at some point will cross the \$4 per gallon threshold due to several factors including:

1. Variations around the monthly average. Daily or weekly national average prices will inevitably be both above and below the monthly average price, whatever it turns out to be. For example, in May 2007, the average monthly retail price for regular gasoline was nearly \$3.15 per gallon, but the weekly price within that month increased from \$3.05 per gallon at the beginning of the month to \$3.22 per gallon by the end.
2. Variations across States. There is also significant regional variation in gasoline retail prices because of different gasoline quality specifications, distribution costs, and taxes. For example, prices along the West Coast—and more specifically, California—are often well above the U.S. average price. On March 31, 2008, the U.S. average price was nearly \$3.29 per gallon, while the average price in California was \$3.61 per gallon, or 32 cents above the U.S. average. In other periods, it has been the Midwest that has seen prices well above the U.S. average.
3. Variations within States. Finally, there is significant variation in prices between stations and areas within any State. For example, during the first three months of 2008 the price of gasoline in San Francisco has been about 10 cents per gallon higher than the California average.

The higher prices are predicted despite an expected decline in U.S. consumption of liquid fuels and other petroleum by about 85,000 barrels per day (bbl/d) as a result of the economic slowdown and high petroleum prices. After accounting for increased ethanol use, U.S. petroleum consumption is projected to fall by 210,000 bbl/d in 2008.

To read the full report, visit <http://www.eia.doe.gov/emeu/steo/pub/contents.html> .

Source: PA DEP

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**VIEW [LIVE IMAGES](#) FROM ATOP THE UNIVERSITY OF
PITTSBURGH'S CATHEDRAL OF LEARNING.**

**VIEW [LIVE IMAGES](#) FROM THE 37TH FLOOR OF THE
GULF BUILDING IN DOWNTOWN PITTSBURGH.**