TOM WOLF, GOVERNOR • PATRICK MCDONNELL, DEP SECRETARY

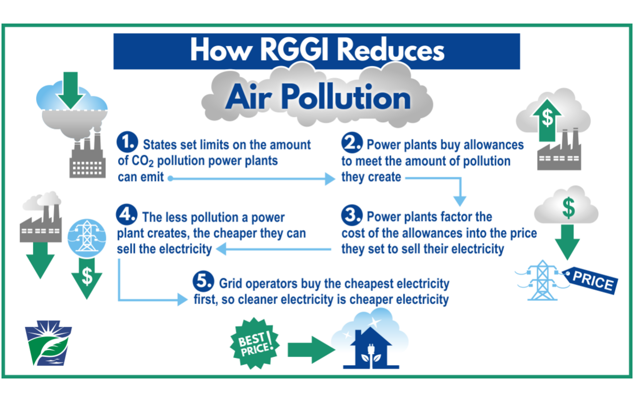
Cutting Climate Pollution with the Regional Greenhouse Gas Initiative

By Patrick McDonnell, DEP Secretary

Climate change is one of the greatest threats facing Pennsylvania today, and will have dramatic effects on our economy and our environment. One of the ways that Governor Tom Wolf and the Department of Environmental Protection are fighting climate change is by developing a regulation to reduce climate pollution from our electricity sector, one of the biggest sources of climate pollution in Pennsylvania. By setting limits on pollution from power plants in line with the multi-state Regional Greenhouse Gas Initiative (RGGI), Pennsylvania can reduce air pollution and make serious investments in jobs and the environment for Pennsylvania's future.

Taking part in RGGI will prevent millions of tons of carbon pollution by 2030, helping to mitigate climate change. But it will reduce other types of air pollution as well, cutting out tens of thousands of tons of NOx and SOx that can cause ground level ozone, which can lead to health problems like asthma. And by investing the proceeds of RGGI into clean energy, energy efficiency, and green jobs we can add 27,000 new jobs to the economy, and increase the Gross State Product by nearly $2 billion by 2030.

DEP recently held a webinar to explain how RGGI would work and the benefits. If you did not get a chance to see it already, it is available here under "RGGI 101 webinar."



TOP STORIES

Summer Is the Season to Maintain Pennsylvania Streams, and DEP Resources Can Help Avoid a Flood of Problems

Summer is the season for stream work.

With 86,000 miles of streams and rivers in Pennsylvania, maintenance of these waterways can be a daunting task for streamside landowners and local officials who often don't know where to start.

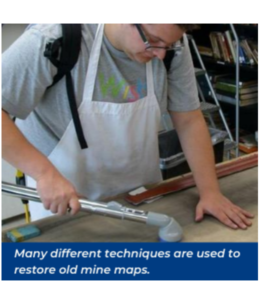
To help landowners and municipalities struggling with stream issues, DEP has created an easy-to-use guide to check if permits may be required for stabilization and maintenance projects in or alongside Pennsylvania streams.

"Streams are living, breathing things, and very tough to control," said DEP Northcentral Regional Director Marcus Kohl. "DEP has put together a really helpful booklet that helps identify the do's and don'ts for folks that have interest and concerns about streams in their backyard or in their community."

The booklet, *Guidelines for Maintaining Streams in Your Community*, is a resource for understanding DEP regulations that apply when working in Pennsylvania waterways. The guide uses a helpful "Red/Yellow/Green Light" list to provide a first step in determining what regulatory requirements may apply before a project is begun.

Read more.

How DEP's Mining Program Brought Thousands of Old, Decaying Mine Maps Back From the Dead and Into the Digital Age



Many different techniques are used to restore old mine maps.

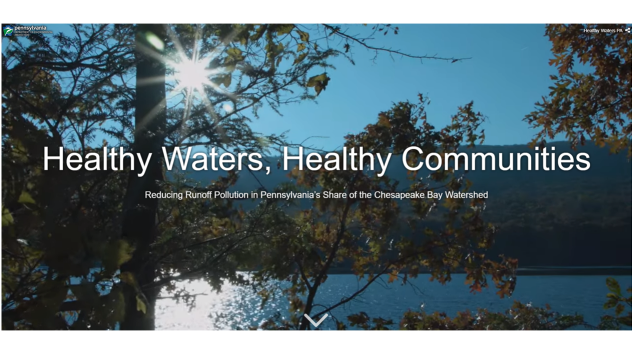
Recognizing the need to preserve and consolidate mine map collections, DEP has converted over 63,000 paper mining maps to digital format in order to make mining safer, and government more efficient.

Maps were found in a variety of places: universities, libraries, museums, mining companies, engineering firms, private individuals ... even a Pottsville city dumpster. Some of the maps were very delicate and crumbled. Others were stained. Restoring the maps that were in poor condition required a variety of techniques including: humidification, flattening, dry-cleaning, tape removal and other methods of repair.

After being restored, the maps were scanned to create an archive-quality digital mine map image. A centralized database named the Pennsylvania Historic Underground Mine Map Inventory System (PHUMMIS) was created to store the maps as well as other information relevant to past and present underground mining within the Commonwealth of Pennsylvania. Georeferencing and vectorizing the scans of historic maps allows the mining features recorded in those older mediums to transfer on to a digital map.

The availability of this high quality mine mapping data and information has allowed for more effective mine-safety and emergency-response procedures. This information has now been preserved for future generations thanks to the efforts of DEP's Mining staff and their partners!

Read more.



How to Protect Your Home Watershed—and Why You Should

One of the great things about living in Pennsylvania is that easy access to waterways can make them feel like part of our personal lives. For many of us, there's nothing better than having the boat out on the water or pedaling a riverside bike trail. Maybe you and the kids have a favorite fishing spot and good memories of fishing trips with the grandparents. You might have the kayaks and tubes out all summer. A stream may run through your private property, or a waterway may be a popular part of a community park your municipality maintains.

If you see a particular stream, river, or lake as a special part of your Pennsylvania life, the best thing you can do is to broaden your focus and remember it's connected to thousands of miles of waterways and land in the watershed you live in.

A new DEP storymap, Healthy Waters, Healthy Communities, shows how a watershed is a highly functioning natural system that benefits Pennsylvanians daily. Although the storymap addresses our sizable (43 counties) share of the Chesapeake Bay Watershed, it's a great learning opportunity for all Pennsylvanians on how watersheds work and the pollution challenges they face.

Read more.

Wolf Administration Awards Over $2.1 Million in Grants for Cleaner Fuel Vehicle Projects to Help Improve Air Quality, Address Climate Change

The Wolf Administration awarded more than $2.1 million in 2019 Alternative Fuel Incentive Grants (AFIGs) to 18 cleaner fuel vehicle projects statewide that will help improve air quality and public health and reduce greenhouse gas emissions to address climate change.

"We're committed to helping Pennsylvanians breathe cleaner air at school, in their neighborhoods, and at their workplaces and to reducing climate change by putting more cleaner fuel vehicles in use around the state," said Department of Environmental Protection (DEP) Secretary Patrick McDonnell.

Eighteen vehicle replacement projects, located in 13 counties, will put 82 cleaner fuel vehicles in use. They're expected to reduce annual greenhouse gas emissions by an estimated 1,349 metric tons per year.

Read more.

Pennsylvania is committed to assisting those small business owners who want to become energy efficient, increase their profitability, and help the environment.

DEP SECRETARY PATRICK MCDONNELL

DEP Offering Grants to Small Businesses and Farmers for Energy, Environmental Projects

DEP announced the availability of $1 million in grant funding to Pennsylvania small businesses and farmers for energy efficiency, pollution prevention, and natural resource protection projects through the Small Business Advantage grant program. New to the program this year is the opportunity for farmers to install solar pumping systems for their agricultural operations.

"This funding will support projects designed to reduce operating costs and boost competitiveness, while simultaneously protecting the environment," said DEP Secretary Patrick McDonnell.

Last year, 233 small businesses were awarded grants for their projects. Natural resource protection projects may include planting riparian buffers, installation of streambank fencing to keep livestock out of streams, and investing in agricultural storm water management projects, with the goal of reducing sediment and nutrient loads in our waterways.

"We are excited to expand the program to help lower energy bills through the use of solar energy," McDonnell said. "Encouraging businesses to embrace alternative energy projects helps clean our air, reduces greenhouse gases, and give small business owners a sense of satisfaction on making smart choices."

Read more.

Photo: Presque Isle State Park

Record-Setting High Water Levels in the Great Lakes

Photo: Presque Isle State Park

Water levels in the North American Great Lakes have been at or above monthly record highs for much of 2019 and 2020. Lakes Superior, Erie, and Ontario each reached all-time record levels in July 2019 and set monthly records for the first half of 2020. All of the Great Lakes remain well above their long-term averages.

High water levels have resulted in increased shoreline erosion during storm events, flooded roadways, and coastal property damage. High water levels have been particularly problematic for Presque Isle State Park—the most visited state park in the Commonwealth. High water levels have amplified beach erosion during storms, have damaged park marinas, and have resulted in the temporary closing of roadways, trails, and facilities.

While global sea levels have been steadily increasing for over 100 years, long-term water level trends in the Great Lakes are much more changeable and difficult to predict. Water levels fluctuate predictably on a seasonal basis, with seasonal lows occurring in the winter and seasonal highs later in the summer.

There is no way to regulate water levels in Lake Erie—Pennsylvania's Great Lake. While some water level regulation is possible in Lakes Superior and Ontario, Lake Erie's water ultimately plunges over Niagara Falls on its way downstream to Lake Ontario and then the Atlantic Ocean. A portion of this water is used to generate electricity for the United States and Canada, but nothing can stop its relentless run towards the sea. Water levels in Lake Erie will largely remain at the mercy of weather conditions in the upper lakes. As these conditions change, so too will the need for shoreline residents to adapt.

Read more.

Harrisburg's 2019 Peregrine Falcon Fledglings: Where Are They Now?

Three of the juveniles that fledged from the Rachel Carson State Office Building in Harrisburg in 2019 were fitted with Motus receivers by the Pennsylvania Game Commission.

The Motus Wildlife Tracking System is an international collaborative research network that uses a coordinated automated radio telemetry array to track the movement and behavior of small flying animals. Motus is used to track birds, bats, and large insects affixed with digitally-encoded radio transmitters that broadcast signals several times each minute. These signals are detected by receiving stations that scan for signals 24 hours a day, 7 days a week, 365 days a year, depending on the site. When results from many stations are combined, the array can track animals across a diversity of landscapes covering thousands of kilometers.

The results for the falcon banded Blue 23/BZ indicate it was detected only once. Not surprisingly, it was at Waggoner's Gap, one of Pennsylvania's best-known hawk watch sites.

The falcon Red 46/BS had eight hits. The first three detected this falcon near Nockamixon State Park. The second was at Lambs Knoll, Maryland. As this raptor continued to move southward, it was detected near Newtowne Neck in early October 2019, followed by the first hit of 2020, near Stone Harbor, New Jersey. This specific falcon was not detected again until mid-April of 2020. Remarkably, in a series of hits beginning in April and concluding May 1, 2020, 46/BS was detected near Finca las Palmeras, Colombia! That's well over 2,000 miles from Pennsylvania.

The third falcon that fledged in 2019, White 22/BZ, had six hits. The first three detected in July of 2019 placed this falcon near Reading, PA. The second was a single detection this past November, north of Toronto, Ontario. This falcon was not detected again until mid-April of 2020. Remarkably, like one of its siblings, White 22/BZ was detected twice near Finca las Palmeras, Colombia! This suggests that this particular falcon traveled over 2,700 miles between Ontario and Colombia, flying over parts of Canada, the eastern United States, across the Caribbean Sea, and into South America, reaching a location near the country's Pacific Coast. Simply remarkable!

The scientific name of the peregrine falcon is Falco peregrinus. The name means "wandering falcon." In this case, the definition certainly hits the mark!

Read more.

TOO GOOD NOT TO SHARE

Pennsylvania Reaching Out to Landowners about the Benefits of Streamside Buffers

Pennsylvania Department of Conservation and Natural Resources (DCNR) Secretary Cindy Adams Dunn recently announced "Buffer My Stream," a program to encourage 10,000 Pennsylvania landowners with streams on their property to improve water quality and lessen erosion by planting native trees and shrubs along the water's edge.

"Streamside buffers are a natural way for agricultural and residential landowners to create cleaner water and improve the stewardship of their land. Not all eligible landowners are aware of their value – and the purpose of this outreach is to bridge that gap," Dunn said. "We want to make it easy for landowners to understand the benefits of streamside buffers and connect them with funding and experts available to guide them through the process."

DCNR is committing $1.5 million to streamside buffer plantings this year. The department is leading the effort involving many partners from all levels of government and many non-profits who also plant and fund streamside buffers.

Read more.

Pennsylvania Makes Strides to Protect Its Pollinators

With one of the most diverse agricultural and pollinator dependent economies in the U.S., Pennsylvania is one of the leading states in the Chesapeake Bay watershed to connect scientific research on pollinators to landscape design and community engagement. The state supports hundreds of pollinator species that live in a variety of geographic locations, from forests and farms, and wetlands to cities. Learn more on the Chesapeake Bay Program's website.

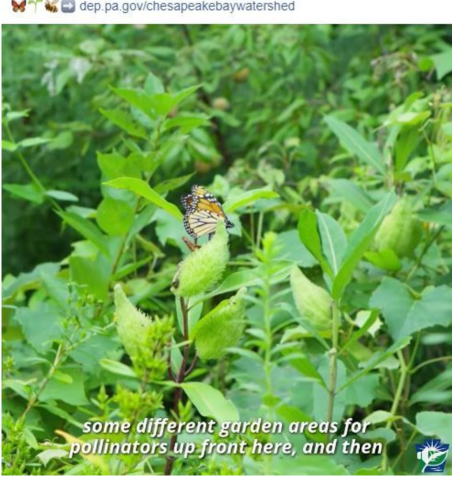
THE SOCIAL SCENE

PA Department of Environmental Protection @PennsylvaniaDEP

Recently, a group of 16 divers and two non-divers, including staff from DEP and @PABankingDept, volunteered their time to dive Cowans Gap Lake and clean up trash in and around the lake at @DCNRnews Cowans Gap State Park.

Pennsylvania Department of Environmental Protection
June 11 ·

Tom Smith planted native trees and shrubs all over his suburban yard in York County, turning an old-style detention basin into a natural environment that reduces flooding and runoff pollution from 27 acres. On our new storymap, "Healthy Waters, Healthy Communities," Tom talks about the transformation.
dep.pa.gov/chesapeakebaywatershed



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Pennsylvania Reports First Human Case of West Nile Virus in 2020, Pennsylvanians Reminded to Take Steps to Avoid Infection: bit.ly/2ZUy0UB @PAHealthDept