Hitting close to home
Global warming is fueling extreme weather across the U.S.

Every year, weather-related disasters injure or kill hundreds of Americans and cause billions of dollars in damage. Many of the risks posed by extreme weather will likely increase in a warming world. Scientists have already noted increases in extreme precipitation and heat waves as global warming raises temperatures and exacerbates weather extremes.

Weather-related disasters affect millions

- Since September 2010, counties housing 84 percent of the total Pennsylvania population (over 10 million residents) were affected by federally-declared weather disasters.
- Pennsylvania experienced five weather-related disasters, including severe storms, tornadoes, floods, and tropical storms since September 2010.

New online map shows personal stories of extreme weather

PennEnvironment’s new interactive extreme weather map shows weather-related disasters in the United States over the last five years and tells the stories of the people and communities who have endured some of those disasters.

Map visitors can focus in on specific types of weather and even add their own stories of how extreme weather has affected their lives.
Extreme weather causes widespread destruction

• In February 2015 a large winter storm and associated cold wave impacted many central, eastern and northeastern states, including Pennsylvania. The storm and cold wave caused at least 30 deaths and the total estimated costs were over $1 billion in the affected region.

• In October 2012 Hurricane Sandy caused extensive damage to several states, including Pennsylvania from wind, rain, and heavy snow. Hurricane Sandy caused at least 159 deaths and the total estimated costs were $67.6 billion in the affected regions.

• Since 2010, extreme weather events have caused at least 30 power outages in Pennsylvania, including one outage that lasted 10 days in 2012 during Hurricane Sandy.

Weather extremes are becoming more common

Globally, 2015 was Earth’s hottest year on record, surpassing 2014. Many types of extreme weather are expected to become more frequent or severe in a warming world, which could lead to more weather-related disasters.

• Tropical Storms and Hurricanes: Global warming has the potential to make tropical storms more destructive. Hurricanes and other coastal storms are likely to be more powerful and rainier, while storm surges could be more destructive as sea levels rise.

• Heavy Rain and Snow: Extreme precipitation is already increasing; continued trends could increase the risk of intense downpours, heavy snowstorms and severe flooding.

• Droughts and Wildfires: While global warming is anticipated to bring more rain to some areas, it will also likely elevate temperatures and extend dry spells. The potential for stronger drought—and greater area burned by wildfires—will increase.

Pennsylvania must cut global warming pollution

To protect our children and our communities from a future of worsening extreme weather, Pennsylvania, its cities, and the nation should limit global warming pollution to levels consistent with the Paris Climate Agreement – at least 40 percent below 1990 emissions by 2030 and at least 80 percent by mid-century. Essential steps include:

• Effectively implement the Clean Power Plan. Pennsylvania is wisely preparing to comply with the federal Clean Power Plan, despite a recent Supreme Court ruling that temporarily halted implementation of the policy. A strong compliance plan should cut more pollution than the minimum required by EPA, cover new and existing plants, focus on clean energy solutions, and ensure that polluters pay.

• Maximize energy efficiency. Pennsylvania and its cities should expand energy efficiency programs and adopt net-zero energy building codes and retrofit standards.

• Shift to 100 percent clean power. Meeting our climate goals will require accelerating deployment of clean, renewable energy sources such as solar and wind power. The state should increase its clean energy standard and extend it beyond 2020.

• Use clean energy for transportation and heating. Pennsylvania should shift energy for transportation and heating away from fossil fuels and toward electricity or other forms of clean energy.

• Keep dirty fuels in the ground. To protect the global climate and our health, the nation must cease construction of any new fossil fuel infrastructure and leave our coal, oil and gas reserves in the ground.