



INSPIRING AMERICANS TO PROTECT WILDLIFE FOR OUR CHILDREN'S FUTURE.

Fact Sheet

The Clean Power Plan and Virginia

Across the United States and around the world, climate change poses an increasingly dire threat to wildlife, communities, and public health. Changes to our climate are destroying critical wildlife habitat, causing habitat ranges to shift, increasing incidence of pests and invasive species, decreasing available food and water, and even increasing the rate of species' extinction. Luckily, the Environmental Protection Agency has stepped up to address the largest source of carbon pollution in the U.S.

What is the Clean Power Plan

On June 2nd, 2014, the Environmental Protection Agency announced the Clean Power Plan – first-ever standards to reduce carbon pollution from existing power plants, our nation's largest source of climate-changing emissions. The Clean Power Plan establishes state pollution targets, based on each state's particular fuel mix and emissions-reduction potential. **Once implemented, the Clean Power Plan will reduce national carbon pollution by 30% by 2030, an important step towards protecting our wildlife heritage from the impacts of unchecked climate change.**

Virginia wildlife is suffering because of climate change

The **LARGEMOUTH BASS**, a favorite of Virginia anglers, is likely to be impacted by temperature-driven changes to the aquatic food system, as well as by habitat loss from extreme weather and sea level rise.ⁱ

The **BLACK DUCK**, another Virginia wildlife species, is susceptible to climate-change driven sea-level rise. In fact, one-third of the 165 species of wetland breeding birds show medium or high vulnerability to climate change.ⁱⁱ



Henry McLip



David Rabon USFWS

Virginia is also home to several species of **SEA TURTLES**, which are threatened by the impacts of climate change, as parts of the Atlantic Coast could see a 50-80% decline in suitable sea turtle habitat.ⁱⁱⁱ

As temperatures continue to rise, a growing number of iconic wildlife species in every state around the country face an increasingly dire situation. If we hope to protect these vulnerable species, action to combat climate change is critical.

Wildlife benefits of Clean Power Plan go beyond climate change

In addition to limiting carbon pollution to combat climate change, the Clean Power Plan will also reduce numerous other pollutants that are harmful to wildlife and their habitats – delivering substantial additional benefits to our country's wildlife heritage. **According to EPA's estimates, the Clean Power Plan will remove between 424,00 to 471,00 tons of sulfur dioxide and 407,000 to 428,000 ton of nitrogen oxides, which will mean less acid rain and nitrogen pollution in lakes and estuaries downwind of power plants.**^{iv} By reducing reliance on coal-burning for power generation in the U.S., the Clean Power Plan will also help protect wildlife from mining practices that destroy habitat, and from leaking toxic coal waste ponds that poison our waterways.^v The Clean Power Plan is clearly a win for wildlife!



Virginia and the Clean Power Plan

Extreme weather threatens Virginia's cities, industry and infrastructure

In Virginia, climate change will mean higher annual average temperatures, more frequent heavy precipitation events, and increasing sea surface temperatures. Virginia is already seeing the dramatic impacts of rising sea levels and increasing flooding events:

- Large numbers of cities, roads, railways, ports, airports, oil and gas facilities, and water supplies in Virginia are at low elevation and are vulnerable to the impacts of sea level rise. Virginia is already feeling the impacts of rising sea levels today. Over the past 100 years, sea level in Virginia has risen 18 inches^{vi} and by 2050, sea levels in Virginia will increase another 16 inches, further devastating towns like Virginia Beach and Norfolk.^{vii}
- The Chesapeake Bay region is ranked the 3rd most vulnerable region to sea level rise, behind Louisiana and Southern Florida.^{viii}



Newport News experiences regular flooding as sea levels rise.

Climate change is hurting Virginia's vibrant outdoor recreation economy

Outdoor recreation is a big part of Virginia's identity and economy. But climate change poses a direct threat to outdoor recreation, including hunting and fishing, as droughts, floods and higher temperatures impact fisheries and outdoor activities across the state.

- Every year, outdoor recreation generates \$13.6 billion in consumer spending and 138,000 direct Virginia jobs^{ix}. **Of that, \$870 million was spent on hunting and \$1.1 billion on fishing.**^x
- At least 46% of Virginia residents participate in outdoor recreation every year.^{xi}
- Every year, at least 591,000 people in Virginia head out to watch wildlife, like deer and elk.^{xii}

Virginia on the path to a wildlife-friendly energy future

In 2012, power plants and major industrial facilities in Virginia emitted more than 40 million metric tons of carbon pollution – equal to the yearly pollution from more than 8 million cars.^{xiii} **By applying the four building blocks of the Clean Power Plan, EPA estimates that Virginia can reduce these emissions by 38% by 2030. There are clear opportunities for Virginia to reduce carbon pollution by relying on wildlife-friendly renewable energy and energy efficiency.**

- In 2012, Virginia generated 4.8% of the state's energy from renewable sources, namely hydropower and biomass.^{xiv} **Going forward, it will be important that wind and solar energy play a large role in Virginia's plan to comply with the Clean Power Plan.**
- EPA estimates that Virginia could reduce total energy demand by 1.2% in 2020 and 9.3% in 2030.^{xv}
- EPA also estimates that Virginia could generate 6.8% of their power from renewable sources in 2020 and 15.8% in 2030.^{xvi} **Virginia can easily surpass this level of renewable energy generation by implementing strong state policies to promote wind and solar projects in the Commonwealth.**



Virginia and the Clean Power Plan

Virginia can reduce carbon pollution and grow the economy

Virginia should comply with the Clean Power Plan through continued emphasis on wildlife-friendly renewable energy and energy efficiency.

- Virginia is a state with great offshore wind energy potential. Virginia Beach, for example has a potential wind generation capacity of over 2GW according to the Bureau of Ocean Energy Management – enough energy to power 700,000 homes.^{xvii}
- The potential positive impacts of capping carbon pollution in Virginia could add \$455 million to the economy and create over 6,000 jobs.^{xviii}



Virginia should use their substantial offshore wind potential to comply with the Clean Power Plan.

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ⁱ http://www.nwf.org/pdf/Global-Warming/CAA_Factsheet_Virginia_2.pdf

ⁱⁱ *Ibd*

ⁱⁱⁱ <http://www.nwf.org/~media/PDFs/Global-Warming/Reports/Wildlife%20Legacy-FINAL%20LOW%20RES-050214.pdf>

^{iv} <http://blog.nwf.org/2014/07/wildlife-benefits-of-clean-power-plan-go-way-beyond-climate-change/>

^v <http://blog.nwf.org/2014/07/wildlife-benefits-of-clean-power-plan-go-way-beyond-climate-change/>

^{vi} <http://www.usatoday.com/story/news/nation/2013/12/17/sea-level-rise-swamps-norfolk-us-coasts/3893825/>

^{vii} <http://slr.s3.amazonaws.com/factsheets/Virginia.pdf>

^{viii} <http://www.nrdc.org/health/climate/va.asp>

^{ix} http://outdoorindustry.org/images/ore_reports/VA-virginia-outdoorrecreationeconomy-oia.pdf

^x <https://www.census.gov/prod/2013pubs/fhw11-va.pdf>

^{xi} http://outdoorindustry.org/images/ore_reports/VA-virginia-outdoorrecreationeconomy-oia.pdf

^{xii} <https://www.census.gov/prod/2013pubs/fhw11-va.pdf>

^{xiii} http://www.whitehouse.gov/sites/default/files/docs/state-reports/VIRGINIA_NCA_2014.pdf

^{xiv} http://www.whitehouse.gov/sites/default/files/docs/state-reports/VIRGINIA_NCA_2014.pdf

^{xv} <http://www2.epa.gov/sites/production/files/2014-05/documents/20140602proposal-cleanpowerplan.pdf>

^{xvi} <http://www2.epa.gov/sites/production/files/2014-05/documents/20140602proposal-cleanpowerplan.pdf>

^{xvii} <http://www.renewableenergyworld.com/rea/news/article/2013/09/second-us-offshore-wind-lease-goes-to-dominion>

^{xviii} <http://energy.georgetownclimate.org/explore-the-potential-benefits-of-capping-carbon-pollution?state=VA#state>