

WISCONSIN

What Do Trump's Attacks On Science Mean For Wisconsin?

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TL/DR:

Wisconsinites Believe In Climate Change - And They Want Their Leaders To Act

- <u>65% of Wisconsinites</u> believe in climate change, and <u>55% of the state's residents</u> are worried about climate change.
- <u>57% of Wisconsinites</u> believe both the President and Congress should do more to address climate change. <u>52% of Wisconsinites</u> believe their Governor and local officials should do more.
- Click here to jump to more research below

Trump's Climate Denial Is Harmful To Wisconsinites' Health:

- Wisconsin <u>currently experiences</u> 10 days of extreme heat each year but it's <u>projected to jump</u> to 60 extreme heat days by 2050.
 - In 2018, Wisconsin <u>recorded</u> 659 emergency department visits for heat-related illnesses. Currently, more than <u>130,000</u> Wisconsinites are especially vulnerable to extreme heat.
- Trump's EPA gave a <u>special carve-out</u> from ozone restrictions for part of southeast Wisconsin that would help a Foxconn plant <u>over the objections</u> of career scientists.
- In 2019, eight counties in Wisconsin received an F grade for ozone pollution, and Milwaukee and Sheboygan were listed in the top 25 most polluted cities in the country for ozone pollution.
- Trump's anti-science attitude led him to block action to make polluters pay for cleaning
 up toxic chemicals that have been <u>found</u> in water supplies across the state. These
 chemicals, called PFAS are <u>linked</u> to kidney and testicular cancer, hypertension and
 other diseases.

- In 2017, some 33% of children <u>tested positive</u> for lead poisoning in some areas of Milwaukee.
- Click here to jump to more research below

Trump's Climate Denial Puts The Safety Of Wisconsinites At Risk:

- Wisconsin is at risk from climate-related flooding:
- Scientists have linked an increase in heavy downpours to climate change.
- Cycles of drought and flooding have turned the Great Lakes into the "erratic high seas
 of the Midwest." Last year, Lake Michigan hit record high water levels. This year, the
 Army Corps of Engineers predicts it will get worse.
 - Currently, 200,000 people are <u>at risk</u> of flooding in Wisconsin.
- In the last decade, Wisconsin <u>witnessed</u> two severe flooding events that caused a total of at least \$12 billion in damages and 3 deaths.
- Wisconsin is at risk from climate-related wildfire and droughts:
 - <u>Studies show</u> climate change is increasing the severity, frequency, and extent of wildfires.
 - Climate change is <u>already affecting</u> global patterns of drought, and such trends are expected to continue, with longer and more intense droughts <u>predicted</u>.
 - From 2009 through 2016, Wisconsin <u>witnessed</u> two drought events that caused a total of 45.9 billion in damages and 176 deaths.
- Click here to jump to more research below

Trump's Climate Denial Hurts Wisconsin's Economy:

- In 2017, agriculture <u>generated</u> over \$104.8 billion in gross state product and employing 435,700 workers, or 11.8% of Wisconsin's workforce.
 - Climate change is <u>projected</u> to cause a 9.75% loss in crop yields in Wisconsin, including a 24% loss in grains.
- Outdoor recreation in Wisconsin supports 168,000 jobs and \$17.9 billion in consumer spending.
 - Since the early 1970s, <u>winter ice coverage</u> in the Great Lakes has decreased by 63 percent threatening winter recreational activities.
 - For example: the American Birkebeiner, the longest cross country ski race in North America, has increasingly <u>been disrupted</u> by climate change.
 - In the summer, recreation on the Great Lakes is being threatened as three shoreline counties reported <u>\$10 million</u> in damages from flooding this spring.

- <u>Tourist attractions</u> have been flooded out and high winds and towering waves caused millions of dollars of damages to <u>Port Milwaukee</u>.
- In the past decade, Wisconsin has <u>experienced</u> 13 climate-related disasters responsible for a total of \$85 billion in damages.
 - Since Trump assumed office, Wisconsin has <u>experienced</u> 5 climate-related disasters responsible for a total of \$17 billion in damages.
- Trump's clean cars rollback will cost Wisconsinites over \$427 million per year.
- Click here to jump to more research below

Trump's Climate Denial Is Especially Harmful To People Of Color In Wisconsin:

- Wisconsin was one of only two states to <u>receive</u> an F grade for environmental racism in the siting of dangerous chemical facilities.
 - Poor Latino children are three times more likely to <u>live near</u> facilities than white children not in poverty, and children of color under age 12 are twice likely to live in the shadow of a hazardous chemical facility compared to white children.
- Minority communities in Madison <u>report</u> unsafe levels of PFAS, where young people are <u>resisting</u> environmental racism.
- A 2016 report found 11% of Milwaukee children <u>tested positive</u> for lead poisoning, which is double the rate in Flint.
 - Children in Milwaukee <u>have gotten</u> lead poisoning without even drinking the water at home.
- Native Americans in Wisconsin continue to <u>fight to shut down</u> the dangerous reroute of Enbridge Line 5 pipeline.
- A 2014 report found that in five counties that were disproportionately black and Latinx, more than one in five wells were <u>contaminated</u> with coal ash.
- Click here to jump to more research below

Wisconsin Has An Opportunity To Build A Strong Green Economy:

- In 2019, there were <u>more jobs</u> in renewable electricity generation than in fossil fuels.
- In 2019, Wisconsin was <u>ranked</u> 17th for clean energy employment, with 76,685 jobs, and 4th for clean energy jobs in <u>rural areas</u>, with 19,513 jobs.
- In 2019, Wisconsin was home to nearly 2,871 jobs in the <u>solar industry</u> and 1,001 to 2,000 direct jobs in the <u>wind industry</u>.
- Click here to jump to more research below

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HERE'S WHAT'S HAPPENING:

A <u>majority</u> of Wisconsinites both believe in climate change and want their elected officials at all levels to do more to address the issue. President Trump's climate denial is harmful to Wisconsin's health, safety, and economy – and is particularly harmful to communities of color.

Currently, <u>more than 130,000</u> Wisconsinites are especially vulnerable to extreme heat and in 2019, heat-related illnesses <u>resulted</u> in 659 emergency room visits across the state.

In 2019, eight Counties in Wisconsin <u>received</u> an F grade for ozone pollution, and Milwaukee and Sheboygan were <u>ranked</u> the 25 worst city in America for ozone pollution. That didn't stop Trump from giving a <u>special carve-out</u> from ozone restrictions for part of southeast Wisconsin that would help a Foxconn plant <u>over the objections</u> of career scientists who were concerned about ozone levels.

In addition to extreme heat and air pollution concerns, Wisconsin faces serious issues with access to clean water. Trump's anti-science attitude led him to block action to make polluters pay for cleaning up toxic chemicals that have been <u>found</u> in water supplies across the state. PFAS chemicals are <u>linked</u> to kidney and testicular cancer, hypertension and other diseases.

Milwaukee is considered to have in some ways a worse lead poisoning problem than nearby Flint, Michigan. Citywide, 11% of Milwaukee children <u>tested positive</u> for lead poisoning, which was twice the rate of Flint, and in some areas of Milwaukee <u>the rate</u> was 33%.

Alongside health factors, Trump's Climate Denial places the safety of Wisconsinites at risk. Currently, 200,000 people are <u>at risk</u> of flooding in Wisconsin and over the past decade, Wisconsin <u>witnessed</u> two severe flooding events that caused a total of at least \$12 billion in damages and 3 deaths. In addition to floods, Wisconsin is at risk from climate-related drought and wildfire. From 2009 through 2016, Wisconsin <u>witnessed</u> two drought events that caused a total of 45.9 billion in damages and 176 deaths.

Trump's climate change denial harms Wisconsin's economy. Climate change will also harm the state's <u>agriculture</u> and <u>outdoor recreation</u> industries.

In 2017, agriculture <u>generated</u> over \$104.8 billion in gross state product and employing 435,700 workers, or 11.8% of Wisconsin's workforce, but climate change is <u>projected</u> to cause a 9.75% loss in crop yields in Wisconsin, including a 24% loss in grains.

Outdoor recreation in Wisconsin supports 168,000 jobs and \$17.9 billion in consumer spending, but the seasons for popular winter recreational activities in Wisconsin, such as snowmobiling and ice fishing are going to be shortened if not eliminated entirely by

warming winters due to climate change. Since the early 1970s, <u>winter ice coverage</u> in the Great Lakes has decreased by 63 percent.

In the summer, recreation on the Great Lakes is being threatened as three shoreline counties reported <u>\$10 million</u> in damages from flooding this spring. <u>Tourist attractions</u> have been flooded out and high winds and towering waves caused millions of dollars of damages to <u>Port Milwaukee</u> over the winter.

In the past decade, Wisconsin has <u>experienced</u> 13 climate-related disasters responsible for a total of \$85 billion in damages, and since Trump assumed office, Wisconsin has <u>experienced</u> 5 climate-related disasters responsible for a total of \$17 billion in damages.

Trump's climate policies harm upon the state's economy can be evidenced with his administration's clean cars rollback, which will <u>cost</u> Wisconsinites over \$427 million per year.

Wisconsin was found to be one of only two states to receive a <u>failing grade</u> on environmental racism in the siting of dangerous chemical facilities, and a 2014 report found that in five disproportionately Black and Latinx counties, one in five wells was <u>contaminated</u> with coal ash.

Trump's Climate Denial is especially harmful to people of color in Wisconsin, who <u>continue</u> to fight for clean, lead-free water and against <u>pipelines</u> that threaten tribal land.

Despite Trump's climate change denial, Wisconsin has an opportunity to build a strong green economy. The state was <u>ranked</u> 17th for clean energy employment in 2019, with the sector providing 76,685 jobs, and 4th for clean energy jobs in <u>rural areas</u>, with the sector providing 19,513 jobs. In 2019, there were <u>more jobs</u> in renewable energy than there were in the state's fossil fuel sector. In 2019, Wisconsin was home to over 2,871 jobs in the <u>solar industry</u> and 1,001 to 2,000 direct jobs in the <u>wind industry</u>.

RESEARCH:

WISCONSINITES WANT CLIMATE ACTION

64 Percent Of Wisconsinites Believe In Climate Change. According to public opinion survey estimates modeled by the Yale Program on Climate Change Communication and the George Mason Center for Climate Change Communication, 64% of Wisconsinites agree that global warming is happening. [Yale Program on Climate Change Communication, 9/17/2019]

55 Percent Of Wisconsinites Are Worried About Climate Change. According to public opinion survey estimates modeled by the Yale Program on Climate Change Communication and the George Mason Center for Climate Change Communication, 55% of Wisconsinites are worried about global warming. [Yale Program on Climate Change Communication, 9/17/2019]

58 Percent Of Wisconsinites Believe The President Should Do More To Address Climate Change. According to public opinion survey estimates modeled by the Yale Program on Climate Change Communication and the George Mason Center for Climate Change Communication, 58% of Wisconsinites believe the President should do more to address global warming. [Yale Program on Climate Change Communication, 9/17/2019]

57 Percent Of Wisconsinites Believe That Congress Should Do More To Address Global Warming. According to public opinion survey estimates modeled by the Yale Program on Climate Change Communication and the George Mason Center for Climate Change Communication, 57% of Wisconsinites believe that Congress should do more to address global warming. [Yale Program on Climate Change Communication, 9/17/2019]

55 Percent Of Wisconsinites Believe That Their Governor Should Do More To Address Global Warming. According to public opinion survey estimates modeled by the Yale Program on Climate Change Communication and the George Mason Center for Climate Change Communication, 55% of Wisconsinites believe that their Governor should do more to address global warming. [Yale Program on Climate Change Communication, 9/17/2019]

52 Percent Of Wisconsinites Believe That Their Local Officials Should Do More To Address Global Warming. According to public opinion survey estimates modeled by the Yale Program on Climate Change Communication and the George Mason Center for Climate Change Communication, 52% of Wisconsinites believe that their local officials should do

more to address global warming. [Yale Program on Climate Change Communication, 9/17/2019]

TRUMP'S CLIMATE DENIAL IS HARMFUL TO WISCONSINITES' HEALTH

EXTREME HEAT DAYS

Wisconsin Currently Experiences An Average Of 10 Extreme Heat Days Per Year.

According to States At Risk, Wisconsin currently experiences an average of 10 extreme heat days per year. [StatesAtRisk.Org, Accessed 4/29/2020]

By 2050, The Number Of Extreme Heat Days Wisconsin Experiences Annually Is Projected To Jump To 60. According to States At Risk, Wisconsin is expected to see 60 days of extreme heat per year by 2050, an increase of 50 days from current averages.

[StatesAtRisk.Org, Accessed 4/29/2020]

Milwaukee Is The 15th Fastest-Warming City In The United States. According to States At Risk, Wisconsin's Milwaukee is the 15th fastest-warming city in the United States.

[StatesAtRisk.Org, Accessed 4/29/2020]

HEAT RELATED ILLNESSES

In 2017, There Were 659 Emergency Department Visits For Heat-Related Illnesses In Wisconsin. According to data collected by the Wisconsin Environmental Public Health Tracking Program, in 2017 there were 657 emergency department visits for heat stress in Wisconsin. [Wisconsin Environmental Public Health Tracking Program, accessed 6/11/2020]

Vulnerable Populations

Currently, More Than 130,000 Wisconsinites Are Especially Vulnerable To Extreme Heat. According to States At Risk, there are 130,000 people who are particularly vulnerable to extreme heat – those under 6 years old, above 65 years old, or living in extreme poverty – in Wisconsin. [StatesAtRisk.Org, Accessed 4/29/2020]

ISSUES WITH ACCESS TO CLEAN AIR

Ozone Levels

Eight Wisconsin Counties Received F Grades For Ozone Pollution In 2019. According to the American Lung Association's annual State of the Air report in 2019, Door, Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, and Sheboygan counties all received

a grade of F grade for having high ozone days. [American Lung Association State of the Air Report Card: Wisconsin, 2020]

Sheboygan Metropolitan Area Ranked 22nd Worst City In America For Ozone Pollution. According to the American Lung Association's 2020 State of the Air report, Sheboygan ranks as the 22nd worst metropolitan area in the US for ozone pollution. [American Lung Association State of the Air Report, 2020]

Milwaukee Metropolitan Area Ranked 24th Worst City In America For Ozone Pollution. According to the American Lung Association's 2020 State of the Air report, Milwaukee ranks as the 24th worst city in the US for ozone pollution. [American Lung Association State of the Air Report, 2020]

Asthma and Allergy Foundation: "Ozone Triggers Asthma." According to the Asthma and Allergy Foundation of America, "Ozone, a gas, is one of the most common air pollutants. Ozone contributes to what we typically experience as "smog" or haze. It is most common in cities where there are more cars. It is also more common in the summer when there is more sunlight and low winds. Ozone triggers asthma because it is very irritating to the lungs and airways. It is well known that ozone concentration is directly related to asthma attacks. It has also caused the need for more doses of asthma drugs and emergency treatment for asthma. Ozone can reduce lung function. Ozone can make it more difficult for you to breathe deeply." [Asthma and Allergy Foundation of America, October 2015]

American Lung Association: "Southeastern Wisconsin's Air Quality Worsens For Ozone." In April of 2019, the American Lung Association issued a press release titled "Southeastern Wisconsin's Air Quality Worsens for Ozone Finds 2019 'State of the Air' Report -- Climate Change Impacts Our Air." According to the ALA: "The American Lung Association's 2019 'State of the Air' report found Southeastern Wisconsin has earned mixed results for the nation's most widespread air pollutants. The annual air quality 'report card' tracks Americans' exposure to unhealthful levels of ozone and particle pollution, both of which can be deadly. The 20th annual report found the region experienced more high ozone days than in the previous year's report, slightly more particle pollution as measured on a daily basis, but an overall reduction in annual particle pollution. 'Residents should be aware that we're still breathing unhealthy air. Potential sources include emissions from power plants and vehicles and, hotter weather as a result of climate change, placing our health and lives at risk,' said Dona Wininsky of the American Lung Association in Wisconsin."

[American Lung Association Press Release, 4/24/2019]

American Lung Association: "Much Of Fox Valley/Northeast Wisconsin's Air Quality Worsens For Ozone." In April of 2019, the American Lung Association issued a press release titled "Much of Fox Valley/Northeast Wisconsin's Air Quality Worsens for Ozone, Finds 2019 'State of the Air' Report -- Climate Change Impacts Our Air." According to the ALA: "The American Lung Association's 2019 'State of the Air' report found air quality in the Fox Valley and eastern lakeshore counties have earned mixed results for the nation's

most widespread air pollutants. The annual air quality 'report card' tracks Americans' exposure to unhealthful levels of ozone and particle pollution, both of which can be deadly. The 20th annual report found the counties along Wisconsin's lakeshore experienced more high ozone days than in the previous year's report, although those farther away from the Lake Michigan saw the levels drop slightly. All but two counties in the region were not monitored for particle pollution. 'Residents should be aware that many Wisconsinites are still breathing unhealthy air. Potential sources include emissions from power plants and vehicles and, hotter weather as a result of climate change, placing our health and lives at risk,' said Dona Wininsky of the American Lung Association in Wisconsin." [American Lung Association Press Release, 4/24/2019]

Special Carve-Out For Foxconn Plant

May 2018: EPA Narrowed A Region Of Wisconsin Facing Ozone Restrictions. In May of 2018, the Milwaukee Journal Sentinel reported: "The U.S. Environmental Protection Agency has sided with Wisconsin officials by sharply limiting areas that will come under stricter federal ozone regulations to small strips of land along Lake Michigan. The agency's decision announced Tuesday is a big win for business interests and the administration of Republican Gov. Scott Walker, who argued that metropolitan Milwaukee and areas along Lake Michigan were being polluted by smog, or ozone, from Illinois and northern Indiana. The decision effectively shrinks the footprint of eastern Wisconsin that would need to take steps to reduce smog levels, but keeps intact long-standing clean-air mandates for the region, such as reformulated gasoline." [Milwaukee Journal Sentinel, 5/1/2018]

EPA's May 2018 Move Reversed A Previous Finding On Racine County, And Determined That The Home Of The Planned Foxconn Did Not Need Ozone Restrictions. "Racine County — the future home of the Foxconn Technology Group plant — was declared in compliance with the new standard. The EPA also exempted Waukesha and Washington counties. The agency was under a court-ordered deadline of Monday to decide which counties across the country were in violation and would thus need to take potentially costly steps to reduce pollutants that form ozone. Tuesday's announcement was a shift from the EPA's stance in December when it determined a much broader area of southeastern Wisconsin failed to meet ozone standards. At that time, the EPA declared Milwaukee, Waukesha, Ozaukee, Washington and Racine counties in violation. The same was true for northern Door County and Kenosha County east of I-94. The EPA also found that areas near the shoreline of Sheboygan and Manitowoc counties in violation." [Milwaukee Journal Sentinel, 5/1/2018]

Emails Revealed That Trump's EPA Administrator Intervened, Over The Objections Of Scientists To Exempt Racine County From Smog Safeguards. In May of 2019, the New York Times reported: "Newly released emails show that Environmental Protection Agency scientists raised strong objections to a 2018 decision by Scott Pruitt, who was head of the agency at the time, to exempt most of southeastern Wisconsin from federal limits on smog. The decision by Mr. Pruitt was notable because it came as Gov. Scott Walker, a Republican, was campaigning for a third term and trying to bring a Foxconn factory, and thousands of

new manufacturing jobs, to a part of the state where pollution levels already exceeded federal limits." [New York Times, 5/24/2019]

Racine County Was Rated "F" In 2018 For Ozone Pollution By The American Lung Association. According to the American Lung Association's 2019 State of the Air report, Racine County, Wisconsin received an "F" grade for ozone pollution in 2018, having had 20 days when ozone air pollution was at levels considered unhealthy for sensitive populations and one day when levels were unhealthy for all populations. [American Lung Association State of the Air 2019, Racine County, WI]

Decision To Exclude Racine County From Smog Restrictions Spared Foxconn From Having To Install Pollution Controls. In a May, 2019 article on the EPA Administrator's intervention in Southeast Wisconsin smog restrictions, the New York Times reported: "Mr. Pruitt subsequently decided to significantly reduce the size of areas in Wisconsin required to crack down on the emissions of pollutants that cause smog. That ruling, which reversed the findings of an agency decision under the Obama administration, would have saved Foxconn from having to install expensive and more stringent pollution controls." [New York Times, 5/24/2019]

ISSUES WITH ACCESS TO CLEAN WATER

PFAS Contamination

Wisconsin's Department Of Natural Resources Is Investigating 29 Sites Of Potential Or Confirmed PFAS Contamination Across The State. According to data collected by the Wisconsin Department of Natural Resources, 29 sites in Wisconsin are under review for possible or confirmed PFAS contamination. [Wisconsin Department of Natural Resources, 11/7/2019]

Environmental Working Group Reports 4 Confirmed Cases of PFAS Contamination in Wisconsin Water Sources. On May 4th 2020, the Environmental Working Group reported 4 confirmed cases of PFAS contamination in Wisconsin water sources, specifically in the Madison Water Utility, West Bend Waterworks, La Crosse Waterworks, and Rhinelander Water & Wastewater. [Environmental Working Group: PFAS U.S. Contamination Map, 5/4/2020]

Environmental Working Group Reports 6 Confirmed Cases of PFAS Contamination in Wisconsin Military Bases. On May 4th 2020, the Environmental Working Group reported 6 confirmed cases of PFAS contamination in Wisconsin military bases, specifically in the General Mitchell International Airport, Dane County Regional Airport, Badger Army Ammunition Plant, Camp Douglas, Fort McCoy, and the Hayward TNG Site. [Environmental Working Group: PFAS U.S. Contamination Map, 5/4/2020]

Environmental Working Group Reports 1 Confirmed Cases of PFAS Contamination in In Peshtigo, Wisconsin, Listing The Suspected Source As Industrial Pollution. On May 4th

2020, the Environmental Working Group reported 1 confirmed cases of PFAS contamination in Peshtigo, Wisconsin, and listed the suspected source as "industrial pollution." [Environmental Working Group: PFAS U.S. Contamination Map, <u>5/4/2020</u>]

PFAS Groundwater Contamination

Wisconsin DNR Issued PFAS Fish Advisory For Starkweather Creek And Lake Monona In Dane County. In January of 2020, the Wisconsin DNR issued a press release announcing: "Based on fish tissue data, the Wisconsin Department of Natural Resources (DNR) and the Department of Health Services (DHS) are recommending PFAS-based fish consumption advisories for Starkweather Creek and Lake Monona in Dane County. Recent sampling by the Wisconsin Department of Natural Resources shows elevated PFOS in fish tissue and surface water in those waterways. PFOS is one of many per- and polyfluoroalkyl substances (PFAS). PFOS detection is the driving force behind establishing the fish consumption advisory for Starkweather Creek and Lake Monona in Dane County."

[Wisconsin DNR, 1/15/2020]

July 2018: PFAS Levels Of 23,000 Parts Per Trillion (ng/L) Found In Groundwater At Volk Field Air National Guard Base In Camp Douglass, Wisconsin. [Citizens for Safe Water Around Badger, 10/18]

EPA: PFAS Health Advisory Benchmark Is 70 Parts Per Trillion. According to the U.S. Environmental Protection Agency, "To provide Americans, including the most sensitive populations, with a margin of protection from a life- time of exposure to PFOA and PFOS from drinking water, EPA established the health advisory levels at 70 parts per trillion. When both PFOA and PFOS are found in drinking water, the combined concentrations of PFOA and PFOS should be compared with the 70 parts per trillion health advisory level. This health advisory level offers a margin of protection for all Americans throughout their life from adverse health effects resulting from exposure to PFOA and PFOS in drinking water." [U.S. Environmental Protection Agency, 11/2016, 2]

May 2018: A Buried HHS Assessment Determined PFAS Levels One-Sixth EPA Advisory Could Lead To Negative Health Outcomes. According to Politico, "In 2016, the agency published a voluntary health advisory for PFOA and PFOS, warning that exposure to the chemicals at levels above 70 parts per trillion, total, could be dangerous. One part per trillion is roughly the equivalent of a single grain of sand in an Olympic-sized swimming pool. The updated HHS assessment was poised to find that exposure to the chemicals at less than one-sixth of that level could be dangerous for sensitive populations like infants and breastfeeding mothers, according to the emails." [Politico, 05/14/18]

PFAS Were Recently Found At The Former Badger Army Ammunition Plant. According to WPR, "Attention around the former Badger Army Ammunition Plant in Sauk County provides a case study for the concern over PFAS, as well as the lack of clarity over their regulation. Cleanup at the decommissioned plant has lasted years, since the 1990s, and soil and water samples have shown a litany of contaminants, from mercury and lead to

carbon tetrachloride and dioxane. Recently, tests of the soil, surface, sediment and groundwater around Badger Army Ammunition Plant, conducted by the U.S. Army, showed small amounts of PFAS." [WPR, 03/12/19]

May 2018: Army Representatives Claimed PFAS Contamination Levels At Badger Army Ammunition Plant Were Below The EPA Advisory Level Of 70 PPT, But Comprehensive Testing In-Line With More Rigorous Standards Found Levels Of 82 PPT. According to WPR, "Still, Army representatives presented their test results, obtained in May 2018, at a Army Restoration Advisory Board meeting in November. Bryan Lynch, of the Army's Environmental Command, told residents that the highest sample of PFOA and PFOS found in groundwater was 19.5 parts per trillion. The Army's full dataset shows, however, that they tested for as many as 14 PFAS compounds, and that in the same sample that showed 19.5 parts per trillion of PFOA and PFOS, they detected notable amounts of four other PFAS compounds. The summed-total concentration is over 82 parts per trillion. Two of these previously undisclosed compounds — PFHpA and PFHxs — are regulated through a summed-concentration formula (combined with PFOA and PFOS) in Connecticut, Massachusetts and Vermont." [WPR, 03/12/19]

2013: Tyco Fire Products In Marinette, Wisconsin, Discovered Contamination From Perfluorinated Chemicals In Soil And Wells On Its Property. According to the Milwaukee Journal Sentinel, "A Marinette manufacturer of firefighting foam knew it was polluting groundwater at least four years before the company began providing bottled water to residents and was ordered by state officials to investigate the extent of the contamination. State records show Tyco Fire Products had test results of soil and well contamination on its property dating back to October 2013 for a class of compounds known as perfluorinated chemicals. The chemicals are facing growing scrutiny in Wisconsin and nationally because of their human health risks." [Milwaukee Journal Sentinel, 2/4/19]

The Chemicals Reached The Green Bay Shoreline Through Ditches And Groundwater In Marinette. According to the Milwaukee Journal Sentinel, "In Marinette, the chemicals are entering the Green Bay shoreline from ditches and groundwater, according to Tyco records filed with the DNR. [...] The City of Marinette has found concentrations in Tyco's wastewater stream, even though the company says most of the foam used in indoor testing is collected and trucked off-site. Perfluorinated chemicals have also been found near the city's water intake pipe off the shore in Green Bay. Levels detected in municipal drinking water are not considered a safety threat, according to state and local officials." [Milwaukee Journal Sentinel, 2/4/19]

Health Risks

Environmental Working Group: PFAS Contamination of Drinking Water Far More Prevalent Than Previously Reported, Detectable In All Major Water Supplies In The U.S. In January of 2020, the Environmental Working Group published a report stating: "New laboratory tests commissioned by EWG have for the first time found the toxic fluorinated chemicals known as PFAS in the drinking water of dozens of U.S. cities, including major metropolitan

areas. The results confirm that the number of Americans exposed to PFAS from contaminated tap water has been dramatically underestimated by previous studies, both from the Environmental Protection Agency and EWG's own research. Based on our tests and new academic research that found PFAS widespread in rainwater, EWG scientists now believe PFAS is likely detectable in all major water supplies in the U.S., almost certainly in all that use surface water. EWG's tests also found chemicals from the PFAS family that are not commonly tested for in drinking water." [Environmental Working Group, 1/22/2020]

PFAS Chemicals Were Linked To Kidney And Testicular Cancer, Hypertension, And Other Diseases. According to Politico: "The chemicals, known as PFOA and PFOS, have been linked to kidney and testicular cancer, hypertension and other ailments. Major chemical companies like 3M as well as the Defense Department would face billions of dollars in liability from aggressive efforts to regulate and clean up the chemical, which has contaminated groundwater near hundreds of military bases and chemical plants." [Politico, 1/28/19]

Per- And Polyfluoroalkyl Substances, Known As PFAS, Are Prevalent Man-Made Chemicals That Do Not Break Down And Accumulate Over Time In The Environment And Human Body. According to the EPA, "Per- and polyfluoroalkyl substances (PFAS) are a group of manmade chemicals that includes PFOA, PFOS, GenX, and many other chemicals. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body – meaning they don't break down and they can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects." [EPA.gov, accessed 3/8/19]

PFAS Are Known As "Forever Chemicals" Because They Do Not Break Down. According to The Washington Post, "Because PFAS do not break down in the environment, they have become known as 'forever chemicals.'" [Washington Post, 2/14/19]

PFAS Chemicals Are Currently Not Designated "Hazardous Substances" Under The Superfund Law. According to the Environmental Working Group: "Superfund distinguishes between chemicals that have been designated as 'hazardous substances' and things that are merely considered 'pollutants or contaminants.' Under current law, PFAS chemicals are considered 'pollutants or contaminants' but not 'hazardous substances.' This significantly limits the power of the Environmental Protection Agency and the states to clean up PFAS pollution. A 'hazardous substance' designation under Superfund triggers reporting requirements for releases over a certain threshold. Anytime the hazardous substance is released into the air, land or water in amounts exceeding the threshold, it triggers an investigation and potential cleanup. By contrast, when a substance is simply a 'pollutant or contaminant,' it must be shown to pose an 'imminent and substantial danger' to public health before the site can be investigated and cleaned up – and, even then, the

EPA has considerable discretion over whether to pursue cleanup." [Environmental Working Group, 7/3/2019]

Under Superfund, Parties Responsible For Contamination Are Forced To Either Perform The Cleanup Work Or Reimburse The Government For Cleanup Costs. According to the Environmental Protection Agency, "CERCLA is informally called Superfund. It allows EPA to clean up contaminated sites. It also forces the parties responsible for the contamination to either perform cleanups or reimburse the government for EPA-led cleanup work."

[Environmental Protection Agency "What is Superfund" accessed 2/5/2020]

Lead Poisoning

In Some Milwaukee Neighborhoods, As Many As 33 Percent Of Children Tested Had High Levels Of Lead. In May of 2017, Wisconsin Public Radio reported: "In the last year, children under age six in the city had higher lead poisoning levels than in Flint, Michigan, where a years-long water contamination crisis beginning in 2014 gained international attention. In some Milwaukee neighborhoods, as many as 33 percent of children tested had high lead levels, according to reporting from Reuters." [Wisconsin Public Radio, 5/31/2017]

TRUMP'S CLIMATE DENIAL PUTS THE SAFETY OF WISCONSINITES AT RISK

FLOODS

Link to Climate Change

Scientists Have Linked Increases in Flooding to Climate Change. According to the National Climate Assessment, "Floods are caused or amplified by both weather- and human-related factors. Major weather factors include heavy or prolonged precipitation, snowmelt, thunderstorms, storm surges from hurricanes, and ice or debris jams [...] Increasingly, humanity is also adding to weather-related factors, as human-induced warming increases heavy downpours, causes more extensive storm surges due to sea level rise, and leads to more rapid spring snowmelt [...] The risks from future floods are significant, given expanded development in coastal areas and floodplains, unabated urbanization, land-use changes, and human-induced climate change" [National Climate Assessment, Extreme Weather, 2014]

Scientists Say Climate Change Played A Hand In Deadly 2019 Midwest Floods. In March of 2019, Reuters reported: "Climate change played a hand in the deadly floods in the U.S. upper Midwest that have damaged crops and drowned livestock, scientists said on Thursday, while a Trump administration official said more homework was needed before making that link. The "bomb cyclone" that dumped rain on Nebraska, Iowa and Missouri and killed at least four people now threatens a wider region downstream of swollen rivers and smashed levees. Manmade greenhouse gases trap heat in the atmosphere, warming the oceans and making the air above them more humid, scientists said. When a storm picks up and eventually spits out that moisture, it can be devastating for people caught below. 'The atmosphere is pretty close to fully saturated, it's got all the water it can take,' said Michael Wehner, a senior scientist at the Lawrence Berkeley National Laboratory." [Reuters, 3/21/2019]

2019: "Climate Change Is Fueling Conditions That Have Turned The Great Lakes Into The Erratic High Seas Of The Midwest." In August of 2019, E&E News reported from Grand Haven, Michigan: "Streets are flooded in 'Coast Guard City, USA,' and the maritime rescue force is responding to dangerous events not seen for decades on Lake Michigan. Boats ramming breakwalls and other objects hidden below the lake surface. People and pets nearly swept off piers by crashing waves. Swimmers fighting riptides that have drowned 30 people so far this year. Beach walkers becoming trapped between pounding surf and cliff-like dunes. Welcome to the nation's 'Third Coast,' where climate change is fueling conditions that have turned the Great Lakes into the erratic high seas of the Midwest." [E&E News, 8/22/2019]

Heavy Rainstorms Have Become Heavier And More Frequent In The U.S. In The Past Three To Five Decades. According to the National Climate Assessment, "Heavy downpours are increasing nationally, especially over the last three to five decades. The heaviest rainfall events have become heavier and more frequent, and the amount of rain falling on the heaviest rain days has also increased. "[National Climate Assessment, Extreme Weather, 2014]

Scientists Have Linked An Increase in Heavy Downpours To Climate Change. According to the National Climate Assessment, "Global analyses show that the amount of water vapor in the atmosphere has in fact increased due to human-caused warming. This extra moisture is available to storm systems, resulting in heavier rainfalls." [National Climate Assessment, Extreme Weather, 2014]

National Climate Assessment: "Heavy Downpours Are Increasing Nationally...The Mechanism Driving These Changes Is Well Understood." According to the 2014 National Climate Assessment: "Heavy downpours are increasing nationally, especially over the last three to five decades. The heaviest rainfall events have become heavier and more frequent, and the amount of rain falling on the heaviest rain days has also increased. Since 1991, the amount of rain falling in very heavy precipitation events has been significantly above average. This increase has been greatest in the Northeast, Midwest, and upper Great Plains – more than 30% above the 1901-1960 average. There has also been an increase in flooding events in the Midwest and Northeast, where the largest increases in heavy rain amounts have occurred. The mechanism driving these changes is well understood. Warmer air can contain more water vapor than cooler air. Global analyses show that the amount of water vapor in the atmosphere has in fact increased due to human-caused warming..., This extra moisture is available to storm systems, resulting in heavier rainfalls. Climate change also alters characteristics of the atmosphere that affect weather patterns and storms." [2014 National Climate Assessment: Extreme Weather]

People At Risk

Currently, Nearly 200,000 People Are At Risk Of Inland Flooding In Wisconsin. According to States At Risk, there are currently nearly 200,000 people living in areas at elevated risk of inland flooding in Wisconsin. [StatesAtRisk.Org, Accessed 4/29/2020]

Impact On The Great Lakes

2013: Lakes Michigan Reached Lowest Levels In Recorded History. In February of 2013, the Associated Press reported: "Two of the Great Lakes have hit their lowest water levels ever recorded, the U.S. Army Corps of Engineers said Tuesday, capping more than a decade of below-normal rain and snowfall and higher temperatures that boost evaporation. Measurements taken last month show Lake Huron and Lake Michigan have reached their lowest ebb since record keeping began in 1918, and the lakes could set additional records over the next few months, the corps said. The lakes were 29 inches below their long-term average and had declined 17 inches since January 2012. The other

Great Lakes - Superior, Erie and Ontario - were also well below average." [Associated Press, 2/6/2013]

2019: "Climate Change Is Fueling Conditions That Have Turned The Great Lakes Into The Erratic High Seas Of The Midwest." In August of 2019, E&E News reported from Grand Haven, Michigan: "Streets are flooded in 'Coast Guard City, USA,' and the maritime rescue force is responding to dangerous events not seen for decades on Lake Michigan. Boats ramming breakwalls and other objects hidden below the lake surface. People and pets nearly swept off piers by crashing waves. Swimmers fighting riptides that have drowned 30 people so far this year. Beach walkers becoming trapped between pounding surf and cliff-like dunes. Welcome to the nation's 'Third Coast,' where climate change is fueling conditions that have turned the Great Lakes into the erratic high seas of the Midwest." [E&E News, 8/22/2019]

U Mich Scientist Says Extreme Rains And Drought Driven By Climate Change Will Make The Great Lakes Water Levels "Very High" And "Very Low." In August of 2008, MLive reported: "Michigan may not get a break anytime soon from high lake levels wreaking havoc across the state, but when it does, the pendulum likely will swing the other way. That's according to researchers with the University of Michigan, who say climate change is behind heavy precipitation that has engorged the Great Lakes as well as water tables throughout the state. It also will be behind periods of dry weather in coming years that will result in low water levels, said Richard B. Rood, a professor in U-M's Department of Climate and Space Sciences and Engineering. He calls the change from high to low water periods of 'variability.' 'We think you're going to see it very high and there also will be times when you will see it very low,' Rood said." [MLive, 8/15/2019]

Great Lakes Water Levels Expected To Top 2019 Records In 2020. In January of 2020, Fox 2 Detroit reported: "With water levels in the Great Lakes breaking records in 2019, the U.S. Army Corps of Engineers is predicting levels to reach similar heights in 2020, with a chance of new records being set again. Projections that extend six months from the present-day estimate levels in every Great Lake, as well as Lake St. Clair will be well above the average levels, with Lakes Michigan and Huron appear the most likely to set record highs. Both came close to records in 2019." [Fox 2 Detroit, 1/8/2020]

Recent Flooding Events 2019 Flooding Events

March 2019: Missouri River And North Central Flooding Caused \$10.9 Billion In Damages And Resulted In 3 Deaths. According to NOAA's National Centers for Environmental Information, flooding of the Missouri River and in the North Central U.S., which hit Wisconsin in March 2019, caused \$10.9 billion in damages and resulted in 3 deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

Wisconsin Was One Of Eight States Most Affected By The Historic Midwest Flooding, Which Was One Of The Costliest U.S. Inland Flooding Events On Record. According to NOAA's National Center for Environmental Information, "Historic Midwest flooding inundated millions of acres of agriculture, numerous cities and towns, and caused widespread damage to roads, bridges, levees, and dams. The states most affected were Nebraska, Iowa, Missouri, South Dakota, Minnesota, North Dakota, Wisconsin and Wisconsin. This flood was triggered by a powerful storm with heavy precipitation that intensified snow melt and flooding. [...] This historic flooding was one of the costliest U.S. inland flooding events on record." [ndcd.noaa.gov, Accessed 4/30/2020]

September 2019: Heavy Rains Caused Flooding Across NE Wisconsin And Forced Evacuations In Green Bay. In September of 2019, the Green Bay Press Gazette reported: Heavy rains swept across the state Wednesday, causing flooding that shut down roads in parts of northeastern Wisconsin and forced evacuations in Green Bay. The situation was expected to get worse, as the National Weather Service warned residents of the region that more downpours and damaging winds were forecast through the night and into Thursday. Brown County Emergency Management ordered residents living on Monroe Road in Bellevue to evacuate. People who live between Hoffman Road and Dickinson Road were told they should evacuate south of GV/Monroe Road. [Green Bay Press Gazette, 9/11/2019]

Flooding In Kalamazoo Completely Covered WMU's Football Field At Waldo Stadium. In June of 2019, the Detroit Free Press reported: "The recent rains have caused flooding in the streets of Kalamazoo, and the backed up water has spilled into Western Michigan football's Waldo Stadium. WOOD-TV (Grand Rapids) meteorologist Ellen Bacca shared a picture on social media of the Broncos' home, which showed the field entirely covered with a muddy water. WOOD-TV reports that the rains that swept through Kalamazoo County have caused flooding and fallen trees on several major roads. The National Weather Service placed the county under a flood advisory until 11:15 p.m., according to the report." [Detroit Free Press, 6/20/2019]

Twenty Toxic Sites In Michigan Are At Risk Of Flooding And Releasing Contaminants Due To Climate Change. In November of 2019, the Lansing State Journal reported: "Twenty toxic sites in Michigan are at high risk of releasing dangerous chemicals into the environment during floods, which are expected to become more intense and frequent as the climate changes, a federal report states. The Government Accountability Office's October report to Congress identified over 1,500 toxic sites in the U.S. at risk of releasing contaminants during floods, wildfires, storm surges and sea level rise. That means 60% of toxic hot-spots in America are at risk, according to the Associated Press. The Michigan sites include Parsons Chemical Works in Grand Ledge, the Shiawassee River in Howell and the Verona Well Field in Battle Creek. All 20 are considered risky, as high flood hazards with a 1% chance of flooding every year." [Lansing State Journal, 11/24/2019]

2010 Flooding Events

July 2010: Midwest/Northeast Severe Storms And Flooding Caused \$1.1 Billion In Damages And Zero Deaths. According to NOAA's National Centers for Environmental Information, severe storms and flooding across the Midwest and Northeast, which hit Wisconsin in July 2010, caused \$1.1 billion in damages and zero deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

Wisconsin Was One Of Six States Impacted By Severe Storms And Flooding. According to NOAA's National Centers for Environmental Information, "Severe storms and flooding affect the states IA, IL, MD, NY, PA, WI across the Midwest and Northeast." [ndcd.noaa.gov, Accessed 4/30/2020]

WILDFIRES

Link to Climate Change

Climate Change Is Increasing The Severity, Frequency, And Extent Of Wildfires. According to a report from the EPA: "Higher temperatures and drought are likely to increase the severity, frequency, and extent of wildfires in Colorado, which could harm property, livelihoods, and human health. In 2013, the Black Forest Fire burned 14,000 acres and destroyed over 500 homes. Wildfire smoke can reduce air quality and increase medical visits for chest pains, respiratory problems, and heart problems. The size and number of western forest fires have increased substantially since 1985." [Environmental Protection Agency, "What Climate Change Means for Colorado" August 2016]

Acres Burned By Wildfire Doubled In Recent Decades Due To Climate Change. According to the 2018 National Climate Assessment Report: "Wildfire is a natural part of many ecosystems in the Southwest, facilitating germination of new seedlings and killing pests. Although many ecosystems require fire, excessive wildfire can permanently alter ecosystem integrity. Climate change has led to an increase in the area burned by wildfire in the western United States. Analyses estimate that the area burned by wildfire from 1984 to 2015 was twice what would have burned had climate change not occurred. Furthermore, the area burned from 1916 to 2003 was more closely related to climate factors than to fire suppression, local fire management, or other non-climate factors." [National Climate Assessment, Chapter 25, 2018]

Recent Wildfire Seasons

2019 Fire Season

In 2019, 1,198 Acres Of Land Were Burned Due To Wildfire In Wisconsin. According to the National Interagency Fire Center's 2019 report, 1,198 acres of land were burned in 710 fires across Wisconsin in 2019. [National Interagency Fire Center, National Report of Wildland Fires and Acres Burned by State, 2019 Report]

2018 Fire Season

In 2018, 1,678 Acres Of Land Were Burned Due To Wildfire In Wisconsin. According to the National Interagency Fire Center's 2018 report, 1,678 acres of land were burned in 825 fires across Wisconsin in 2018. [National Interagency Fire Center, National Report of Wildland Fires and Acres Burned by State, 2018 Report]

2017 Fire Season

In 2017, 661 Acres Of Land Were Burned Due To Wildfire In Wisconsin. According to the National Interagency Fire Center's 2017 report, 661 acres of land were burned in 696 fires across Wisconsin in 2017. [National Interagency Fire Center, National Report of Wildland Fires and Acres Burned by State, 2017 Report]

DROUGHT

Link To Climate Change

Scientists Have Linked Prolonged Heat Waves To Climate Change. According to the 2014 National Climate Assessment Report: "Analyses show that human-induced climate change has generally increased the probability of heat waves." [National Climate Assessment, Extreme Weather, 2014]

Recent Heat Waves "Unprecedented" Since Records Began Over One Hundred Years Ago. According to the 2014 National Climate Assessment Report: "prolonged (multi-month) extreme heat has been unprecedented since the start of reliable instrumental records in 1895." [National Climate Assessment, Extreme Weather, 2014]

National Climate Assessment Showed That Climate Change Is Affecting Us Now, Not Just In The Future. According to CNN, "An analysis by the environmental advocacy group the Sierra Club, released Monday, found nine instances in which Wheeler's statements about the delayed impact of climate change were directly contradicted in the National Climate Assessment, a government-sponsored climate analysis authored by scientists from 13 federal agencies that was released in November. (there is no link to this analysis because they gave it to us exclusively)" [CNN, 4/22/19]

Higher Temperatures. According to CNN, "Between 1901 and 2016, the global average temperatures 'have increased by 1.8 degrees Fahrenheit,' and there is no evidence that the rise in temperature has been caused by any 'natural explanation,' according to the report. 'The evidence consistently points to human activities, especially emissions of greenhouse or heat-trapping gases, as the dominant cause,' the report states." [CNN, 4/22/19]

Hotter Years. According to CNN, "Each decade has been the hottest on record in succession over the past 30 years. Seventeen of the 18 hottest years on record have occurred since 2001, according to the report." [CNN, 4/22/19]

NASA Research Showed Human Activity Has Been Influencing Global Patterns Of Drought, With Increased Drought Occurring In Response To Greenhouse Gas Emissions. According to NASA, "Warming temperatures and changing precipitation patterns can lead to droughts, and NASA research shows that humans have been influencing global patterns of drought for nearly a century. Kate Marvel and Ben Cook, researchers at NASA's Goddard Institute for Space Studies and Columbia University in New York City, investigated humans' influence on 20th-century drought patterns using historical weather data and drought maps calculated from tree rings. They found that a data 'fingerprint' – a drying and wetting pattern predicted to occur in response to greenhouse gas emissions – was visible as far back as the early 1900s." [climate.nasa.gov, 6/13/2019]

Climate Change Is Already Affecting Global Patterns Of Drought, And Such Trends Are Expected To Continue. According to NASA, "Demonstrating that humans influenced global drought patterns in the past is an important part of understanding how we may influence them in the future, said Cook. 'Climate change is not just a future problem,' he said. 'This shows it's already affecting global patterns of drought, hydroclimate, trends, variability—it's happening now. And we expect these trends to continue, as long as we keep warming the world.'" [climate.nasa.gov, 6/13/2019]

Recent Droughts Affecting Wisconsin 2013 Drought Impacts

Spring – Fall 2013: Western Plains Drought And Heatwave Caused \$11.7 Billion In Damages And 53 Deaths. According to NOAA's National Centers for Environmental Information, droughts and heatwaves across the Western Plains, that impacted Wisconsin in the Spring and Fall of 2013, caused \$11.7 billion in damages and 53 deaths.

[ncdc.noaa.gov, Accessed 4/30/2020]

Wisconsin Was One Of 22 States That Experienced Moderate To Extreme Drought. According to NOAA's National Centers for Environmental Information, "The 2013 drought slowly dissipated from the historic levels of the 2012 drought, as conditions improved across many Midwestern and Plains states. However, moderate to extreme drought did remain or expand into western states (AZ, CA, CO, IA, ID, IL, KS, MI, MN, MO, ND, NE, NM, NV, OK, OR, SD, TX, UT, WA, WI, WY). In comparison to 2011 and 2012 drought conditions the US experienced only moderate crop losses across the central agriculture states."

[ncdc.noaa.gov, Accessed 4/30/2020]

2012 Drought Impacts

2012: Nationwide Droughts And Heatwaves Caused \$34.2 Billion In Damages And 123 Deaths. According to NOAA's National Centers for Environmental Information, drought and heatwaves across the U.S. in 2012 caused \$34.2 billion in damages and 123 deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

TRUMP'S CLIMATE DENIAL HURTS WISCONSIN'S ECONOMY

AGRICULTURAL IMPACTS

Climate Change Is Projected To Cause A 9.75% Loss In Crop Yields In Wisconsin, Including A 24% Loss In Grains. According to data on the impacts of climate change as part of a study published in Science Magazine, Wisconsin can expect to see a 9.75% loss in total value of agricultural crop yields by late in the century (2080-2100) if action isn't taken to immediately curtail carbon emissions. This includes a 17.4% increase in oil crop (palm, soybean, rapeseed and sunflower) production that would be wiped out economically by a 24.17% decline in grain production. The study used a model that aimed to calculate the future impact on agricultural yields on GDP. [Hsiang, S., Kopp, R.E., et al, "Estimating economic damage from climate change in the United States" Science Magazine, 6/30/2017 (data files via Zenodo)]

Wisconsin Agriculture Generates An Economic Impact Of \$104.8 Billion And Supports 435,700 Or 11.8 Percent Of The State's Employment. According to data published by the Wisconsin Department of Agriculture, Trade and Consumer Protection, "Wisconsin agriculture is a big economic driver contributing \$104.8 billion annually to our state's economy." The department also reported that Wisconsin agriculture supports 435,700 jobs, or 11.8% of the state's employment. [Wisconsin Department of Agriculture, Trade and Consumer Protection, last updated 5/7/2020]

TOURISM & OUTDOOR RECREATION IMPACTS

Outdoor Recreation In Wisconsin Supports 168,000 Jobs And \$17.9 Billion In Consumer Spending. According to data collected by the Outdoor Industry Association, outdoor recreation in Wisconsin supports 168,000 direct jobs and generates \$5.1 billion in wages and salaries. Outdoor recreation generates \$17.9 billion in consumer spending for the state, which brings in \$1.1 billion in state and local tax revenue. [Outdoor Industry Association accessed 6/9/2020]

Wisconsin Receives 113 Million Visitors Every Year, Who Support 202,000 Full- And Part-Time Jobs And Generate \$22.2 Billion In Total Business Sales. According to Travel Wisconsin, the state receives 113 Million visitors every year, who support 202,000 full-and part-time jobs and generate \$22.2 billion in total business sales. [Travel Wisconsin, 2020]

Great Lakes Fishing Economy

NOAA: Commercial Fishing Contributes More Than \$1 Billion To The Great Lakes Economy. According to the National Oceanographic and Atmospheric Administration's Great Lakes

Environmental Research Laboratory: "Commercial and sport fisheries are important industries in the Great Lakes region. Commercial fishing began in about 1820 and has increased ever since. About 65 million pounds of fish per year are harvested from the lakes, contributing more than \$1 billion to the Great Lakes economy. Primary commercial catches include whitefish, smelt, walleye, and perch, while sport anglers prefer salmon, steelhead, walleye, lake trout, perch and bass. The commercial fishery in the region has been declining however, due to over-fishing, pollution, habitat destruction, and introduction of invasive species." [NOAA Great Lakes Environmental Research Laboratory website accessed 10/12/2017]

NOAA: Sport Fishing Contributes More Than \$4 Billion To The Great Lakes Economy.

According to the National Oceanographic and Atmospheric Administration's Great Lakes Environmental Research Laboratory: "Sport fishery is a huge tourist attraction, which helps to build the economy of the Great Lakes region. Sport fishery contributes \$4 billion to the economy. Sport fishery has also been responsible for the unintended introduction of some invasive species. Exotic fish such as salmon were purposely introduced to help boost the sport fishing industry." [NOAA Great Lakes Environmental Research Laboratory website accessed 10/12/2017]

Great Lakes Flooding Damage

Wisconsin Declared An Emergency In February Due To Great Lakes Flooding With Three Shoreline Counties Totaling \$10 Million In Damages. In March of 2020, MLive reported: "Shoreline residents, officials and some lawmakers have been pushing for state emergency or disaster declarations. In some states, they're getting them. Wisconsin and Illinois declared emergencies along the lakeshore in February, opening the door to federal funds to combat erosion. In Illinois, the Chicago mayor's office estimated a January storm caused \$37 million in damages. In Wisconsin, damages in three shoreline counties was pegged at \$10 million." [MLive, 3/26/2020]

Due to flooding, some Washington Island attractions are not accessible, at least for the time being. The Jackson Harbor Maritime Museum will not open for the summer, and Rock Island is closed until July 1. The Washington Island Ferry has stalled trips to Rock Island through June. Lake Michigan set a monthly mean water level record in April, according to the U.S. Army Corps of Engineers, Detroit District. Through May 18, the monthly mean average for Michigan-Huron (which are measured together) was 581.86 feet, which is .23 feet above the record set in 1986, and again in 2019. Water already crept under the museum's aged structure last autumn. Washington Island Dock Master Pam Young, who also owns the Jackson Harbor Inn next door to the museum, said community members cleared out the space about a month ago." [Green Bay Press Gazette, 5/22/2020]

Flooding, Wind, And Waves, Caused "Millions Of Dollars In Damage To Port Milwaukee." In January of 2020, the Associated Press reported: "High winds, towering waves and flooding have caused millions of dollars in damage to Port Milwaukee on Lake Michigan, the port's director said Sunday. The wild weather Saturday forced the port to prohibit public access

to Jones Island and caused flooding on all major roadways at the port. Winds gusted up to 50 mph, and waves reached 6 to 8 feet (1.8 to 2.4 meters) high. Port Director Adam Schlicht called it 'an unprecedented event at Port Milwaukee.' Schlicht said the port's international docks, which are closed for the season, sustained 'significant damage.' Floodwaters were receding Sunday, he said. The inner harbor is expected to reopen early Monday, and tenants on Jones Island will have access to roadways." [Associated Press, 1/13/2020]

Winter Recreation

EPA: Shortened Winters Could Harm Local Economies That Depend On Recreational Activities Like Ice Fishing And Snowmobiling. According to a fact sheet from the Environmental Protection Agency, "Warmer winters are likely to shorten the season for recreational activities like ice fishing, snowmobiling, skiing, and snowboarding, which could harm the local economies that depend on them. Small lakes are freezing later and thawing earlier than a century ago, which shortens the season for ice fishing and ice skating." [EPA, "What Climate Change Means For Wisconsin," August 2016]

Great Lakes Ice Coverage Has Shrunk 63% Since The 1970s. According to a fact sheet from the Environmental Protection Agency, "Since the early 1970s, winter ice coverage in the Great Lakes has decreased by 63 percent. The warmer climate is likely to shorten the season when the ground is covered by snow, and thereby shorten the season for activities that take place on snow. Nevertheless, annual snowfall has increased in much of the Great Lakes region, which could benefit winter recreation at certain times and locations." [EPA, "What Climate Change Means For Wisconsin," August 2016]

The American Birkebeiner (Birkie) Is "North America's Largest Cross-Country Ski Race." According to Climate Wisconsin, a project of the Wisconsin Initiative on Climate Change Impacts, PBS, and the University of Wisconsin Madison: "The legendary American Birkebeiner, also known as the Birkie, is North America's largest cross-country ski race. The 50 kilometer ski race is located in Sawyer County of northern Wisconsin and takes place annually in mid-February. The trail transects the hilly, wooded forests between Telemark Resort near Cable, WI and the town of Hayward, WI." [Climate Wisconsin, accessed 6/11/20]

The American Birkebeiner (Birkie) Attracts More Than 25,000 People And \$4 Million To Wisconsin In A Single Weekend. According to Climate Wisconsin, a project of the Wisconsin Initiative on Climate Change Impacts, PBS, and the University of Wisconsin Madison: "Approximately 8000 skiers, 2,000 volunteers, and over 15,000 spectators participated in the Birkie events of 2010. The influx of visitors has a roughly \$4 million economic impact for Sawyer County over the span of the weekend. The Birkie trail also attracts many recreational cross-country skiers throughout the winter, and many own vacation property in the area. In addition to the economic impact of the Birkie, there is a healthy cross-country ski culture in the Sawyer County area supported by the local community. This cultural connection can be witnessed during the race finish on Main

Street, the Barnebirkie ski race for 1,300 three to thirteen year olds, and by the fact that the number of Birkie volunteers is roughly equal to the population of its host city, Hayward (2,342)." [Climate Wisconsin, accessed 6/11/20]

The American Birkebeiner Has Been Shortened Or Cancelled 7 Times Since The First Race In 1973, All Due to Warm Weather. According to Climate Wisconsin, a project of the Wisconsin Initiative on Climate Change Impacts, PBS, and the University of Wisconsin Madison: "Since the first race in 1973, the Birkie has been shortened six times and cancelled once due to weather related conditions; with four of these adaptations and one cancellation happening since 1990. The weather plays a major role in determining the success of the event. According to the American Birkebeiner Ski Foundation, which organizes the race and maintains the 85 kilometers of trail year round, reasons for shortening or canceling the event include large bare patches that can't be patched, poor lake-ice conditions and poor logging-road conditions for emergency vehicle access. Since weather is the primary factor determining the success of the event, examining past climate data and future climate predictions can provide us with some understanding of how climate change is impacting this event." [Climate Wisconsin, accessed 6/11/20]

Climate Change Is Driving Warmer Winters, Average Sawyer County Winter Temperatures Have Increased 3-4.5 Degrees Since 1950. According to Climate Wisconsin, a project of the Wisconsin Initiative on Climate Change Impacts, PBS, and the University of Wisconsin Madison: "According to researchers at the University of Wisconsin-Madison between 1950 and 2006 the Sawyer County area winter average temperature has warmed around 3 to 4.5° F. They also found: a 4.5° F increase in winter average daily low temperatures, a 4-10% reduction in the number of days with a high temperature below 20° F, and a 15 to 18% reduction in the number of days with nighttime low's below 0° F. Interestingly, spring is coming earlier by 3 to 9 days. In general, Sawyer County has seen warmer winters, with higher high and even higher low temperatures." [Climate Wisconsin, accessed 6/11/20]

Climate Models Show Increasingly Warm Conditions For American Birkebeiner. According to Climate Wisconsin, a project of the Wisconsin Initiative on Climate Change Impacts, PBS, and the University of Wisconsin Madison: "Researchers have also downscaled global climate models using local historical climate data to generate fine-scale climate change predictions state wide. For Sawyer County they project that from 1980 to 2055 there will be: 21 fewer nights below 0° F, fewer average annual freezing days, 16 to 18 fewer days with high temperatures below 20° F, and 7.5 to 10 days earlier onset of spring. Moreover, the average annual winter temperature is projected to increase 9° F, and the daily high and daily low are also expected to increase 6.3 and 9.0° F, respectively. Additionally, for Ashland, WI, northeast of Hayward, researchers projected a decrease in the probability of frozen precipitation (e.g. snow, sleet), especially early and late in the winter. Since Ashland is slightly buffered from climate change by Lake Superior we can expect an even greater reduction in the probability of frozen precipitation for the Hayward area, which is further

inland. Furthermore, a group of researchers from the Universities of Wisconsin and Iowa project that by the mid 21st century there will be a 25 to 40 cm reduction in snowfall and a 5 to 20 cm reduction in mean snow depth (on March 15th) for Sawyer County. In summary, by 2055, warmer winters, with warmer nights, a lower probability of snow fall, shallower snow pack, less snow cover, and an earlier onset of spring are expected. Considering the fact that the Birkie trail covers over 50 km of ground we can expect to see more adaptations to the event as warmer winter temperatures and less snow create unsafe race conditions." [Climate Wisconsin, accessed 6/11/20]

SPENDING ON DISASTERS

In The Past Decade, Wisconsin Has Experienced 13 Climate-Related Disasters Responsible For Almost 85 Billion Dollars' Worth Of Damages And 370 Deaths. According to NOAA's National Centers for Environmental Information, Wisconsin experienced 13 climate-related disasters that were responsible for over a billion dollars' worth of damages each with a combined total of \$84.8 billion. 730 deaths were attributed to these events. These 13 disasters that occurred between 2009 and 2019 include 10 severe storms, 2 droughts, and 1 flooding event. [ndcd.noaa.gov, Accessed 4/30/2020]

Since Trump Assumed The Office Of The Presidency, Wisconsin Has Experienced Five Climate-Related Disasters Responsible For Over 17 Billion Dollars' Worth Of Damages And 5 Deaths. According to NOAA's National Centers for Environmental Information, since President Trump assumed office in 2017, Wisconsin has experienced five climate-related disasters responsible for over a billion dollars' worth of damages each, with a combined total of \$17.2 billion. Five deaths were attributed to these events. [ndcd.noaa.gov, Accessed 4/30/2020]

2019: FEMA Obligated \$8,276,717 To Wisconsin Following Severe Flooding. According to data from the Federal Emergency Management Agency, Wisconsin was obligated \$8,276,717 in 2019 following severe flooding. [FEMA.Gov, Accessed 5/21/2020]

THE COST OF TRUMP CLIMATE POLICIES

Trump's Clean Cars Rollback Will Cost Wisconsinites Over \$427 Million Per Year. In March of 2019, the Center for American Progress analyzed the costs of some of Donald Trump's regulatory changes. For Trump's rollback of clean cars standards, they combined data from M.J. Bradley and Associates' analysis of the net cost for American families of freezing fuel economy targets at model-year 2020 along with data from the Energy Information Agency's oil price forecasts as well as the American Community Survey. The analysis found that Trump's rollback of clean cars standards will cost Wisconsinites \$427,400,000 per year. [Center for American Progress, 3/27/2019]

Trump Cut Budget Of EPA's Region 5, Which Has The Most Superfund Sites Of Any Region And Includes Wisconsin. In December 2019, The American Prospect reported: "OTHER

THAN BESIEGED communities, no one feels the sting of ineffectiveness more than the legion of frustrated scientists and program administrators at the EPA. In a feature for the Prospect last winter, I wrote about how the agency's Region 5, which covers Illinois, Michigan, Ohio, Indiana, Wisconsin, and Minnesota and contains more Superfund sites than any other region, had seen its ranks slashed from 1,250 staffers in 2010 to 987. That number is now 945. A year ago, the entire EPA was down to 13,758 employees, the lowest since the Reagan era. Trump and EPA Administrator Andrew Wheeler, a former coal lobbyist, propose to eliminate another 1,350 positions during the current fiscal year." The American Prospect, 12/5/2019

TRUMP'S CLIMATE DENIAL IS ESPECIALLY HARMFUL TO PEOPLE OF COLOR IN WISCONSIN

CHEMICAL POLLUTION

Report Showed Wisconsin One Of Two States To Receive F Grade For Environmental Racism In The Siting Of Dangerous Facilities. In a 2016 report, "The Center for Effective Government graded states based on the dangers faced by people of color and residents with incomes below the poverty line living within one mile of dangerous facilities, compared to white and non-poor people in these areas. Wisconsin scored on the failing end and was one of just two states with an "F" grade." [Center for Effective Governance, 2016]

Report Showed "Children Of Color Under Age 12 Are Twice Likely To Live In The Shadow Of A Hazardous Chemical Facility Compared To White Children." In a 2016 report, the Center for Effective Government wrote: "Children of color under age 12 are twice likely to live in the shadow of a hazardous chemical facility compared to white children." [Center for Effective Governance, 2016]

Ten Percent Of Wisconsinites (600,000 People) Live Within One Mile Of A Harardous Chemical Storage Site, Putting Their Health And Safety At Risk Every Day. In a 2016 report, the Center for Effective Government wrote: "More than 600,000 Wisconsinites (one in 10) live within one mile of a facility storing large amounts of extremely hazardous chemicals. These "fenceline communities" face potential chemical leaks and explosions on a daily basis." [Center for Effective Governance, 2016]

Report Showed That In Wisconsin "Poor Latino Children Are Three Times More Likely To Live Near Facilities Than White Children Not In Poverty." In a 2016 report, the Center for

Effective Government wrote: "Poor Latino children are three times more likely to live near facilities than white children not in poverty." [Center for Effective Governance, <u>2016</u>]

PFAS

Air Force based a squadron of F-35 fighter jets near a Starkwater Creek, a Creek In A Low-Income Community Of Color, Despite Public Health Concerns. In April 2020, The Cap Times reported: "Here in Madison, another public health threat looms: the Air Force's plan to base a squadron of F-35 fighter jets at Truax Field. State Rep. Chris Taylor, Madison Mayor Satya Rhodes-Conway and City Council members have opposed this plan based on projected negative health, environmental and economic impacts, especially on low-income residents and communities of color. But U.S. Sens. Tammy Baldwin and Ron Johnson and many state lawmakers have supported the F-35s. They have failed in their duty to advocate on behalf of Madison residents. So what exactly are the public health and safety threats posed by the F-35s? Firefighting foam used at Truax Field has already contaminated water and soil nearby with polyfluoroalkyl substances, known as PFAS. Wells 9, 15 and 23 in east Madison and the Starkwater Creek watershed have high levels of PFOS and PFOA as well as 11 other PFAS compounds for which the EPA and Wisconsin Department of Health Services have yet to set groundwater standards. PFAS compounds have been linked to high cholesterol, thyroid hormone disruption and cancer. There has been no attempt at PFAS remediation by the Air Force." [The Cap Times, 4/29/20]

Water In A Minority Community Near Truax Airfield In Madison Tested 569 Times Higher For PFAS Than Is Safe For Humans. In April 2019, The Daily Cardinal reported: "In a well less than a mile from the Truax Airfield, groundwater was tested to have a PFAS level about 569 times higher than is safe for human health. The contaminated water disproportionately affects low-income residents with historically underrepresented identities in the Truax neighborhood. The neighborhood is one of the most polluted and traffic congested areas in the city because it is adjacent to Highway 151 and Highway 51, according to Touyeng Xiong, a board member of the Midwest Environmental Justice Organization. This neighborhood is just one example of environmental inequalities that parallel the demographic outline of the city. Many areas with the most concentrated minority populations on the Racial Dot Map also have the highest percentiles on the EJSCREEN map. The city buys the cheapest land they can get, which is next to areas contaminated with chemicals or pollution," Xiong said. "Low-income minorities can't do anything because they just want affordable housing. They are not responsible for causing these problems but are the people most at risk." Many areas with a large population of low-income residents also have the highest percentiles in traffic proximity, wastewater indicators and cancer risk." [The Daily Cardinal, 4/2019]

Madison Teens Are Fighting PFAS Contamination In Their Community. In a May 2020 blog post, the Midwest Environmental Justice Organization wrote: "Standing on a small bridge overlooking the creek where the Bridge's Golf Course ditch flows into Starkweather,

Xiong spoke about the most recent test results. MEJO sent samples of sediment gathered from five locations along the creek to the Wisconsin State Lab of Hygiene to test for PFAS. The second highest level, 24,482 parts per trillion (PPT), was found at the golf ditch. PFAS have "been here for a long time," said Xiong, and have already affected many aspects of the local ecosystem. "You'll get sick from eating the fish." Contamination through fish consumption is a particular concern for subsistence anglers who catch fish from Starkweather Creek and Lake Monona to feed themselves and their families. In January, the DNR issued an advisory to limit consumption of certain types of fish because of PFAS contamination. "In the future," Xiong said, referring to the group of teenagers all peering over the bridge, "it's going to affect us too.""[Midwest Environmental Justice Organization, 5/28/20]

AIR POLLUTION

Eight Wisconsin Counties Received F Grades For Ozone Pollution In 2019. According to the American Lung Association's annual State of the Air report in 2019, Door, Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, and Sheboygan counties all received a grade of F grade for having high ozone days. [American Lung Association State of the Air Report Card: Wisconsin, 2020]

Sheboygan Metropolitan Area Ranked 22nd Worst City In America For Ozone Pollution. According to the American Lung Association's 2020 State of the Air report, Sheboygan ranks as the 22nd worst metropolitan area in the US for ozone pollution. [American Lung Association State of the Air Report, 2020]

Milwaukee Metropolitan Area Ranked 24th Worst City In America For Ozone Pollution. According to the American Lung Association's 2020 State of the Air report, Milwaukee ranks as the 24th worst city in the US for ozone pollution. [American Lung Association State of the Air Report, 2020]

Asthma and Allergy Foundation: "Ozone Triggers Asthma." According to the Asthma and Allergy Foundation of America, "Ozone, a gas, is one of the most common air pollutants. Ozone contributes to what we typically experience as "smog" or haze. It is most common in cities where there are more cars. It is also more common in the summer when there is more sunlight and low winds. Ozone triggers asthma because it is very irritating to the lungs and airways. It is well known that ozone concentration is directly related to asthma attacks. It has also caused the need for more doses of asthma drugs and emergency treatment for asthma. Ozone can reduce lung function. Ozone can make it more difficult for you to breathe deeply." [Asthma and Allergy Foundation of America, October 2015]

African American Children Were Four Times More Likely To Be Admitted To The Hospital And Ten Times More Likely To Die From Asthma. According to the Department of Health and Human Services, "In 2015, African American children had a death rate ten times that of non-Hispanic white children. Black children are 4 times more likely to be admitted to the

hospital for asthma, as compared to non-Hispanic white children. [Department of Health and Human Services, Accessed <u>9/7/18</u>]

LEAD POISONING IN WATER

2014 Report Found Eight Percent of Milwaukee Children Had Lead Poisoning. In September 2017, WTMJ-4 Milwaukee reported: "In Milwaukee, about 70,000 homes are connected to the city's water system with aging lead pipes, many of which run under low-income and African-American communities in the city's northside neighborhoods. These lead pipes - along with the 130,000 homes with lead-based paint - contribute to the high numbers of poisoned children, according to the 2014 Report on Childhood Lead Poisoning in Wisconsin. One of them is Troy Lowe, a 4-year-old infatuated with dandelions, which he picks for his bus driver. In December, his father, Tory Lowe, learned his son had lead poisoning, as do 8.6 percent of the children in Milwaukee, according to a 2014 report by the Wisconsin Department of Health Services." [WTMJ4-Milwaukee, 9/1/2017]

- Children In Milwaukee Have Gotten Lead Poisoning Even Without Drinking The Water. In September 2017, WTMJ-4 Milwaukee reported: "His son's lead test result of 5.9 micrograms per deciliter is lower than many children in Milwaukee, Lowe said, but the Centers for Disease Control and Prevention says researchers have not defined the effect lower levels might on the central nervous system and cannot rule out adverse effects at low levels. Any level above 5 micrograms is considered lead poisoning. As part of the line replacement plan, the city published lists of every property known to have lead service lines. The Lowe family's home was listed. He said his family does not drink from the tap, opting to buy bottled water instead. "I know there's thousands of kids being lead poisoned ··· if my son can get lead poisoning and we don't even drink the water," Lowe said." [WTMJ4-Milwaukee, 9/1/2017]
- At Current Rates, It Would Take The City 233 Years To Replace All Known Lead Pipes In Milwaukee. In September 2017, WTMJ-4 Milwaukee reported: "Milwaukee recently began an effort to replace the lead lines, starting with \$3.4 million to replace 300 that serve schools and day cares in 2017. Then, the city will spend another \$3.4 million to replace 300 lines serving residences. At that pace, it would it would take more than 233 years to replace all of Milwaukee's residential lead lines. To replace all 70,000 lead lines in the next 50 years, the city would need replace 1,400 pipes per year, which would cost about \$4.5 million each year, according to the Water Quality Task Force. [WTMJ4-Milwaukee, 9/1/2017]
- Milwaukee Children Tested Positive For Lead Poisoning At Double The Percentage
 Found In Flint, MI With Children In African-American Community Disproportionately
 Affected. According to a blog post from the Union of Concerned Scientists: "Lead
 exposure, especially from water in older pipes, is a major health problem in Milwaukee.
 A 2016 Wisconsin state report on childhood lead poisoning indicated that nearly 11% of
 children tested in Milwaukee showed elevated blood lead levels, which was double the
 percentage found in Flint, Michigan. Children from low-income families, especially
 within the African-American community, are disproportionately affected." [Union of
 Concerned Scientists, 10/23/2018]

- Milwaukee Youth Of Color Are Fighting Against The Environmental Racism Of Lead Poisoning. In May 2019, NPR Milwaukee reported: "After noticing a disconnect between young people of color and the environment, Ball founded Cream City Conservation Corps. Much, she says, has to do with environmental racism: the disproportionate impact of environmental hazards on people of color. For example, pollutants from power plant smokestacks that can contribute to asthma and other respiratory diseases. The Conservation Corps members range in age. Some are in high school, others in college, and some are working adults. Through the Corps, they go into communities to work on projects, such as installing green-infrastructure and revitalizing green spaces. They also learn about environmental concerns. Some members are worried about being exposed to lead in drinking water. Lead can flake off aging pipes, and flow into faucets, including in older homes. [NPR Milwaukee, 5/9/2019]
- Communities Of Color Most Frequently Face Water Contamination Issues And Live With Them Longer. In September of 2019, NJ.com reported: "Newark and Flint, Michigan aren't the only cities grappling with water troubles. Across the U.S., low-income communities of color most frequently face water contamination issues and live with those problems longer, according to a new report published by the Natural Resources Defense Council, Coming Clean and the Environmental Justice Health Alliance. The report comes on the heels of Newark's now three-year lead water crisis that has seen escalating levels of the contaminant in tap water samples since 2017. The NRDC, which has sued the city and state over their handling of the water emergency, has repeatedly accused regulators of not acting quickly or forcefully enough to protect public health." [NJ.com, 9/26/2019]
- See also: NRDC: "Watered Down Justice" 3/27/2020: https://www.nrdc.org/resources/watered-down-justice

COAL ASH

2014 Report Found That More Than One In Five Wells Are Contaminated With Coal Ash In Wisconsin's Disproportionately Black And Latinx Counties. In a 2014 blog post, Clean Wisconsin wrote: "A study released by Clean Wisconsin finds that more than one in five wells across Waukesha, Milwaukee, Racine and Kenosha counties are contaminated with molybdenum at levels above the state health advisory level. Families and schools in the area are being forced to buy bottled water or install expensive purification systems to avoid the toxic metal, which is found in coal ash." They Went on to Write, "Coal ash contains concentrated levels of toxins such as arsenic, mercury, lead, and molybdenum. Don't Drink the Water identifies more than 1 million tons of coal ash placed under roads, buildings and schools in southeastern Wisconsin, including at the Yorkville Elementary School where Clean Wisconsin conducted additional testing that confirmed contamination out into the surrounding community. "Toxic coal ash spills from landfills and retention ponds are not the only ways that coal ash can pollute the environment," said Cook. "It is also regularly placed under construction projects, often with no barrier between the ash and the groundwater." The study found that wells closer to those coal ash disposal sites

were contaminated at higher levels on average, and that nearly half the wells tested in the area exceeded the enforcement standard for molybdenum. The report also highlights deficiencies in Wisconsin's regulation of coal ash." [Clean Wisconsin, 11/18/2014]

Racine, Kenosha, and Milwaukee Counties are Disproportionately Black and Latinx.
 According to the Census Bureau, as of 2019, Racine County was 71.7% White 13.4%
 Hispanic or Latino, and 12% Black; Kenosha County was 75.6% White, 13.4% Hispanic or
 Latino, and 7.4% Black; Milwaukee County was 51% White 15.4% Hispanic or Latino,
 and 27.2% Black, while Wisconsin overall is 81.1% white, 6.7% Black, and 6.9% Hispanic
 or Latinx. [Census Bureau, July 2019]

NEPA

Midwest Environmental Justice Organization Called Out The Racism Of Trump's Plan To Gut NEPA. In March 2020, Derrick Z. Jackson of the Midwest Environmental Justice Organization published an op-ed in Environmental Health News: "For communities long polluted by industry, which are disproportionately poor and of color, the Trump administration's changes promise particular devastation. Such communities already suffer higher rates of illnesses from asthma to cancer, life-altering effects such as low birth weight and cognitive child development, and daily insults to quality of life in diesel exhaust, soot penetrating into homes, and contaminated yards and playgrounds. If the administration has its way, NEPA implementation guidelines would be rewritten so that even in neighborhoods already densely packed with toxic industries, a proposed facility need only assess its own pollutants, not how much they combine and compound those of nearby facilities to worsen the overall quality of air, water, and land. To make sure residents cannot complain about such compounded damage, the Trump administration is trying to severely limit the opportunity for mothers, fathers, seniors, and teens and community leaders to speak directly to the government." [Environmental Health News, 3/9/20]

ENBRIDGE LINE 5

Enbridge Line 5's Proposed Reroute Would Go Through Wisconsin, Endangering Native Bad River Chippewa Land. Enbridge has been exploring alternative routes since the Bad River Band of Lake Superior Chippewa filed a lawsuit against the company aimed at shutting down and removing the pipeline from the tribe's reservation. The line carries up to 23 million gallons of oil and natural gas liquids per day from Superior to Sarnia, Ontario. As Enbridge explores possible routes, the pipeline has created division among neighbors and communities over the path it may take. And, federal and state regulators have no authority to weigh in on the siting of the proposed line." They went on to write: "Bad River tribal officials urged the county to hold off on a decision, citing the threat the pipeline poses to the Bad River watershed. Tribal Chairman Mike Wiggins told board members everyone is getting "played" by Enbridge. "The other scam that's in play here is we actually have a choice. It's either the southern route or the northern route," said Wiggins.

"No. They're in the watershed, and they've been asked to leave."" [Wisconsin Public Radio, $\frac{2/6/20}{2}$]

WISCONSIN HAS AN OPPORTUNITY TO BUILD A STRONG GREEN ECONOMY

WISCONSIN'S GREEN ECONOMY

Wisconsin Was Ranked 17th Among The Top 20 States For Clean Energy Employment In 2019. According to the 2020 Clean Jobs America Report by E2, Wisconsin was 17th in clean energy employment in 2019, with the clean energy sector providing 76,685 jobs. [Clean Jobs America Report, E2, 2020]

Wisconsin Ranked Fourth For Clean Energy Jobs In Rural Areas, With The Sector Employing Nearly 19,513 Workers In 2019. According to the 2020 Clean Jobs America Report by E2, Wisconsin ranked fourth among the states in for clean energy jobs in rural areas. In 2019, the sector employed 19,513 workers. [Clean Jobs America Report, E2, 2020]

Report Found More Jobs In Wisconsin Clean Energy Generation Than In Electricity Generated From Fossil Fuels. In 2019, Wisconsin had 5,410 jobs in renewable electricity generation (3,820 jobs in electricity generation from solar and 1,590 jobs in electricity generation from wind), compared to 3,513 jobs in electricity generation from fossil fuel sources (2,420 jobs in electricity generation from coal, 1,064 jobs in electricity generation from natural gas, and 29 jobs in electricity generation from oil and other fossil fuels).

[National Association of State Energy Officials, U.S. Energy and Employment Report 2019]

SOLAR

2019: Wisconsin Was Home To 2,871 Jobs In The Solar Industry. According to The Solar Foundation, in 2019 there were 2,871 solar jobs in Wisconsin and the state was ranked eighteenth in the nation for solar jobs. [The Solar Foundation, Solar Jobs Census 2019: Wisconsin, Accessed 4/29/2020]

2019: There Were 213 Solar Companies In Wisconsin. According to The Solar Foundation, in 2019 there were 213 total solar companies in Wisconsin. [The Solar Foundation, Solar Jobs Census 2019: Wisconsin, Accessed 4/29/2020]

2019: 33,844 Equivalent Homes Were Powered By Solar In Wisconsin. According to The Solar Foundation, in 2019 the number of equivalent homes powered by solar in Wisconsin stood at 33,844. [The Solar Foundation, Solar Jobs Census 2019: Wisconsin, Accessed 4/29/2020]

WIND

2019: Wisconsin Was Home To 1,001 To 2,000 Direct Jobs In The Wind Industry.

According to American Wind Energy Association, in 2019 the wind industry supplied 1,001 to 2,000 direct jobs in Wisconsin. [American Wind Energy Association, State Fact Sheet: Wind Energy In Wisconsin, April 2020]

2019: There Were 28 Wind Energy Manufacturing Facilities In Wisconsin. According to American Wind Energy Association, in 2019 there were 28 active manufacturing facilities in Wisconsin. [American Wind Energy Association, State Fact Sheet: Wind Energy In Wisconsin, April 2020]

2019: There Were 452 Wind Turbines In Wisconsin. According to American Wind Energy Association, in 2019 Wisconsin was home to 452 wind turbines. [American Wind Energy Association, State Fact Sheet: Wind Energy In Wisconsin, April 2020]

2019: The Equivalent Number Of Homes Powered By Wind In Wisconsin Was 151,300.

According to American Wind Energy Association, the equivalent number of homes powered by wind in Wisconsin in 2019 was 151,300. [American Wind Energy Association, State Fact Sheet: Wind Energy In Wisconsin, April 2020]