

These the the events that illustrate The Climate Catastrophe
since November 2019
Compiled by George Orr, Green Party
As of June 2021

	NOVEMBER 2019
29	BRUSSELS - The European Parliament has declared a <i>"climate emergency."</i> The move raises pressure on member states to take action to curb emissions ahead of a United Nations climate summit starting December 2 in Spain. <i>"Five years ago, no one would have expected the European Parliament to declare a climate emergency, so there's some progress,"</i> boasted Sebastian Mang , professional Greenpeace lobbyist.
	DECEMBER 2019
6	ATLANTA - The U.S. Centre for Disease Control and reported the U.S. winter flu season is off to its earliest start in more than 15 years. It warned this early start meant a lot of suffering is in store. <i>"It really depends on what viruses are circulating. There's not a predictable trend as far as if it's early it's going to be more severe, or later, less severe,"</i> said virus expert Scott Epperson .
9	ANCHORAGE - The National Oceanic and Atmospheric Administration reported that 2019 has been Alaska's warmest year on record, since measurements first started. The warm temperatures have coincided with an unprecedented low in the state's cod population in the Gulf of Alaska. Anchorage's federal cod fishery announced Friday it would close for the 2020 season, as there were <i>"next to no"</i> new eggs in the warmer waters thanks to climate change.
11	NUUK, GREENLAND - As the planet warms, Greenland's ice sheet losses have accelerated dramatically according to the journal <i>Nature</i> . The losses have increased from 33 billion tons of ice per year in the 1990s to 254 billion tons per year. Nearly four trillion tons of Greenland's ice have run off into the ocean since 1992, enough to raise global sea levels by a centimeter. Such change can be catastrophic, according to the 89 scientists who conducted the study. <i>"Around the planet, just 1 centimeter of sea-level rise brings another 6 million people into seasonal, annual floods,"</i> warned Andrew Shepherd , a University of Leeds professor involved in the study.
15	MADRID, SPAIN - The United Nations climate talks ground to a halt in Madrid on Sunday by kicking hard decisions down the road for yet another year. There was no decision about global carbon markets, only agreeing they will need to come up with new plans next year in Glasgow. They also agreed in principle to compensate the world's most vulnerable countries for the effects of extreme weather which they all agreed are coming hard and fast.
20	SYDNEY, AUSTRALIA - Dangerous fire conditions are threatening large parts of New South Wales as 110 bush fires raged across the state on Thursday afternoon and into the night, with that orange glow spanning the entire horizon to the west. It roared like an incineration from hell itself as howling winds and soaring temperatures brought extreme fire danger warnings for the Greater Sydney, Illawarra and Shoalhaven and Southern Ranges areas. Across Sydney air pollution levels ranged from poor to hazardous, with the worst conditions recorded in history, all due apparently to climate change.
	MARCH 2020
23	NAIROBI - Giant swarms of locusts spread across East Africa, the Arabian Peninsula and the Middle East, devouring crops that feed millions of people. Scientists say global warming is contributing to proliferation of the destructive insects.

	<p>The largest locust swarms in more than 50 years have left subsistence farmers helpless to protect their fields and will spread misery throughout the region, said Robert Cheke, a biologist, who has helped lead international efforts to control insect pests in Africa.</p> <p>"I'm concerned about the scale of devastation and the effect on human livelihoods," Cheke said, adding that he also worried about.</p> <p>New swarms are currently forming from Kenya to Iran, according to the the United Nations locust watch website.</p>
	MAY 2020
13	<p>OTTAWA - Canada lacks consistent movement on transitioning to a more secure, sustainable and affordable energy future and must ratchet up energy-efficiency targets and reduce emissions, according to a new World Economic Forum report.</p> <p>Canada ranked 28th in the annual global scorecard, which in part examines how prepared countries are to combat climate change.</p> <p>The report was published Wednesday, a day after the world's largest wealth fund blacklisted four Canadian oil sands companies for "acts or omissions that on an aggregate company level lead to unacceptable greenhouse-gas emissions." The companies are Canadian Natural Resources Ltd. (CNRL), Cenovus Energy Inc., Suncor Energy Inc. and Imperial Oil Ltd.</p> <p>The move marked the first time that Norway's US\$1-trillion wealth fund, which operates under ethical guidelines set by the country's parliament, used excessive greenhouse-gas emissions as a reason to divest.</p> <p>Alberta Energy Minister Sonya Savage called the decision "poorly informed and highly hypocritical."</p>
19	<p>CLIMATE CHANGE - A study of the pandemic's effects on the global energy system finds that lockdowns, reduced driving and flying, and industrial cutbacks earlier this year drove emissions down to 2006 levels. The plunge is equivalent to more than a billion tons of carbon dioxide that never made its way into the atmosphere. But the drop in emissions, which reached its lowest level in early April, is believed to be temporary. Experts see greenhouse gas levels bouncing back later this year as the world gradually reopens.</p>
20	<p>MIDLAND - In less than 12 hours, about 11,000 people evacuated Midland, Michigan, and its surrounding areas after two dams failed, unleashing waist-deep floodwaters.</p> <p>The Edenville and Sanford dams, which normally contain the Tittabawassee River to create two separate lakes, gave way to historic flooding Tuesday.</p> <p>By Wednesday night, the water had begun receding from many areas, but some roads remained impassable or closed, according to officials. But residents should expect to stay away from home for a couple of days, said Midland spokeswoman Selina Crosby Tisdale.</p> <p>The river, swollen from heavy rains that ravaged the state for days, crested at 35.05 feet Wednesday afternoon, officials said.</p> <p>Officials are now monitoring the situation around the Sanford Dam, which according to Midland City Manager Brad Kaye, did not completely fail. "<i>We're cautiously optimistic that as the waters are dropping down, that risk continues to decrease.</i>"</p> <p>No deaths and no serious injuries have been reported, officials said on Twitter.</p> <p>Democrat Governor Gretchen Whitmer issued an emergency declaration Tuesday night and ordered thousands to evacuate immediately, warning downtown Midland could be under nine feet of water.</p> <p>It's an added crisis to a state already grappling with effects of the coronavirus pandemic. Officials said workers at shelters that were set up during the floods took temperatures and</p>

	<p>kept evacuees away from each other to maintain social distance. The governor said any orders relating to coronavirus would be locally suspended if they impede emergency responses for the flooding.</p> <p><i>"On Tuesday, we were trying to evacuate 10,000 people and social distance. And as you can imagine, incredibly stressful circumstances," Whitmer said in an interview on "CBS This Morning" on Thursday. "But as I surveyed the damage yesterday from the air, there's no question it was the right thing to do."</i></p> <p>LONDON - The Aldabra white-throated rail bird was declared extinct, a victim of rising sea levels almost 100,000 years ago. However, the flightless brown bird has recently been spotted – leaving scientists scratching their heads as to how – and why – the species has come back to life. According to research in the <i>Zoological Journal of Linnean Society</i>, the re-incarnated Aldabra bird is a product of ‘<i>iterative evolution</i>’. That’s when old genes thought to have died out re-emerge at a different point in time.</p>
22	<p>HELSINKI - This story will provide important context for the headline, and I encourage you to read it—but really, the headline tells you what you need to know: <i>It was 80 degrees Fahrenheit above the Arctic Circle this week!</i></p> <p>A little farther south, in Siberia—you know, the region of world we reference when we want to connote something cold—it was 86 degrees Fahrenheit. Arctic sea ice in the neighboring Kara Sea took the deepest May nose dive ever recorded.</p> <p>Oh, and random swaths of the region are on fire.</p> <p>Things are extremely wrong.</p> <p>Let’s look at the heat above the Arctic Circle.</p> <p>Mika Rantanen, a researcher at the Finnish Meteorological Institute, flagged a map showing blistering heat across western Siberia. The region has been the epicenter of an explosive heat wave that has rippled across the Arctic this week. Models forecast temperatures there will be as much as 36 degrees Fahrenheit above normal for this time of year. The heat could break a bit by the middle of next week, but widespread warmth will continue to grip the region.</p>
28	<p>NOVOSIBIRSK - The bitterly cold Arctic winter typically snuffs out the seasonal wildfires that erupt in this region. But every once in a while, a wildfire comes along that refuses to die. These blazes, known as “<i>zombie fires</i>” or “<i>holdover fires</i>,” can burrow into the rich organic material beneath the surface, such as the vast peatlands that ring the Arctic, and smolder under the snowpack throughout the frigid winter.</p> <p>With the Siberian Arctic seeing record warm conditions in recent weeks and months, scientists monitoring Arctic wildfire trends are becoming more convinced that some of the blazes erupting in the Arctic this spring are actually left over from last summer.</p>
	JUNE 2020
7	<p>June NEW ORLEANS - Tropical Storm Cristobal threw itself at New Orleans Sunday afternoon. High winds, rainfall and flooding were reported. The National Weather Service said that Cristobal would be responsible for heavy storm damage. Climate change creeps closer.</p> <p><i>"Tropical Storm Cristobal makes landfall in Louisiana this afternoon, then tracks up the Mississippi Valley through Tuesday with impacts from heavy rain, strong wind gusts, coastal and inland flooding, and isolated tornadoes,"</i> said the agency</p>
12	<p>LAKELAND, FLORIDA - The National Oceanic and Atmospheric Administration confirmed five coronavirus cases among staff members at the Lakeland base for its famed “<i>Hurricane</i></p>

	<p><i>Hunter</i>” research aircraft. The cases raise the possibility that one of the country’s vital early-warning systems could be hobbled during what is already an unusually active hurricane season. The base at Lakeland Linder Regional Airport houses the planes NOAA uses to fly into and around the planet’s strongest storms.</p>
19	<p>AMSTERDAM - The minks on Dutch fur farms first got sick in mid-April, showing symptoms ranging from runny noses to severe respiratory distress. They had caught the novel coronavirus from human handlers, the government later said, and soon farmed minks appeared to have passed it back to two other people, in the world’s first reports of animal-to-human transmission since the pandemic began.</p> <p>The Netherlands has since culled more than 500,000 minks from 13 infected fur companies. The goal of the grim task, set to continue until the farms are virus-free, is to snuff out the possibility of the animals becoming a reservoir for the virus that causes covid-19, which could stymie efforts to end a pandemic that has killed nearly half a million people worldwide.</p>
20	<p>LOCUSTS - An increasing number of second-generation immature swarms continue to form in northwest Kenya. The bulk of swarm formation is likely to occur during the next two weeks followed by a decline in July.</p> <p>Before migration, swarms will remain for a short time during which there is a considerable threat to crops and pastures in Turkana and Marsabit counties. Thereafter, the swarms are expected to migrate northwards to the summer breeding areas in Sudan and Ethiopia where they will mature quickly and lay eggs. Some of the swarms will take about a week to cross South Sudan to reach South Kordofan and South Darfur while other swarms will move north to east and northern Ethiopia. Any swarms in northern Somalia can migrate across the Indian Ocean to the summer breeding areas along both sides of the Indo-Pakistan border.</p> <p>In Sudan, some rains have fallen so far in South Darfur and South Kordofan, and no locusts are present except for isolated adults in the Nile Valley. If the rains are not sufficient, then the invading swarms are likely to continue to eastern Chad and migrate westwards across the Sahel of West Africa. This threat should decline progressively during the next four weeks.</p> <p>In Ethiopia, control operations continue against hopper bands and new swarms that are forming in the east and northeast. Smaller operations are underway in central and northern Somalia.</p> <p>In Saudi Arabia, control operations are in progress against hopper bands in the southwest near Najran and adult groups in the Asir Mountains.</p> <p>In Yemen, hopper bands are present in the interior and highly mobile swarms are moving in highland and southern coastal areas. Some of these swarms are likely to migrate to northern Somalia and northeast Ethiopia.</p> <p>Locusts have been around since at least the time of the pharaohs of ancient Egypt, 3200 B.C., despoiling some of the world's weakest regions, multiplying to billions and then vanishing, in irregular booms and busts.</p> <p>If the 2020 version of these marauders stays steady on its warpath, the United Nations Food</p>

	and Agriculture Organization says desert locusts can pose a threat to the livelihoods of 10% of the world's population.
21	<p>VERKHUYANSK, RUSSIA - Alarming heat scorched Siberia on Saturday as the small town of Verkhoyansk (67.5°N latitude) reached 100.4 degrees Fahrenheit, 32 degrees above the normal high temperature. If verified, this is likely the hottest temperature ever recorded in Siberia and also the hottest temperature ever recorded north of the Arctic Circle, which begins at 66.5°N.</p> <p>The town is 3,000 miles east of Moscow and further north than even Fairbanks, Alaska. On Friday, the city of Caribou, Maine, tied an all-time record at 96 degrees Fahrenheit and was once again well into the 90s on Saturday. To put this into perspective, the city of Miami, Florida, has only reached 100 degrees one time since the city began keeping temperature records in 1896.</p> <p>These record warm conditions in Siberia sparked raging wildfires in the peatlands that ring the Arctic. There have been what some scientists branded “zombie” blazes — fires sparked the previous summer that never fully died out as winter set in and then were reignited as temperatures soared. The Siberian Arctic is warming at twice the rate of the rest of the world.</p> <p>“The Arctic is figuratively and literally on fire — it’s warming much faster than we thought it would in response to rising levels of carbon dioxide and other greenhouse gases in the atmosphere, and this warming is leading to a rapid meltdown and increase in wildfires,” climate scientist and University of Michigan environmental school dean Jonathan Overpeck told the Associated Press.</p> <p>The heat and fires have terrifying consequences in the short term, too. It is believed that a monumental Arctic oil spill in Norilsk, north-central Russia, took place after melting permafrost led to a reservoir collapsing toward the end of last month, triggering a leak in the facility that reminded many of the 1989 Exxon Valdez spill</p>
23	<p>PHOENIX - Firefighters have now encircled three-fifths of a major fire northeast of metro Phoenix and the progress in containing the fire has allowed authorities to lift evacuation notices and to reopen previously closed highways.</p> <p>The Gila County Sheriff’s Office announced Monday the lifting of evacuation notices for Tonto Basin and several other previously evacuated communities and the Maricopa County Sheriff’s Office on Tuesday said Sunflower and Apache Lake residents also could return home.</p> <p>The Tonto Basin post office reopened Tuesday.</p> <p>The Arizona Department of Transportation said previously closed parts of State Routes 87, 88 and 188 had been reopened.</p> <p>The 295-square-mile (764-square-kilometer) fire was contained around 61% of its perimeter as of Tuesday, the inter-agency team managing the fire said.</p> <p>Nearly 600 firefighters and other personnel were assigned to the fire, which was reported 42% contained Monday.</p> <p>It started June 13 due to a vehicle fire northeast of Mesa</p> <p>No damage to structures have been reported.</p> <p>Crews continued to battle large fires elsewhere in Arizona, including north of the Grand Canyon and in the Santa Catalina Mountains overlooking Tucson.</p>
27	<p>LOCUSTS - By Saturday, swarms of locusts reached the environs of the Indian capital New Delhi, marking the latest advance of a vast plague, the scale of which experts haven’t seen in</p>

	<p>decades. Successive invasions of the desert insects are expected to hit parts of South Asia through the summer, following multiple swarms ravaging countries in East Africa. Scientists suggest the magnitude of the new swarms is a direct consequence of warming temperatures in the Indian Ocean, which created a pattern of torrential rainfall and cyclones that yielded more fertile breeding grounds for the locusts. Though much of the Indian spring harvest was collected before the locust swarms arrived, the Horn of Africa region could suffer up to \$8.5 billion in lost crops and livestock production by the end of the year as a result of this locust outbreak, according to World Bank estimates.</p> <p>“Nations which were already under threat of food insecurity now face a real danger of starvation,” Rep. Christopher H. Smith (R-N.J.) said in a statement touting bipartisan legislation in the House to boost aid to African countries affected by the infestation. “There are now up to 26 million people who are at risk of acute food shortages and widespread hunger.”</p>
29	<p>A hot desert wind is carrying a massive cloud of Saharan dust into the southern United States this week. Dust plumes from the Sahara routinely blow westward across the Atlantic at this time of year, but this event is a doozy — by some measures, the biggest in decades. And a second plume appears to be forming about a week behind the big one.</p>
30	<p>Millions of homeowners face flood risks without realizing it, and climate change is making it worse</p> <p>By 2050, 16,200,000 properties will be at ‘substantial risk’ of flooding in a given year, report finds</p> <p>First street foundation</p> <p>Now, an exhaustive report out Monday shows that nationally, there are at least 6 million households that are unaware they’re living in homes that have a 1 percent chance of flooding in each year — putting them within a “100-year” flood zone. This is nearly 70 percent more homes at substantial risk of flooding than are within the Federal Emergency Management Agency’s Special Flood Hazard Areas, a designation that determines eligibility for the National Flood Insurance Program.</p> <p>[In these two neighborhoods, flooding from Harvey went beyond the worst projections]</p> <p>This count is set to grow substantially in coming decades due to the effects of climate change, including sea level rise, which will make hurricane storm surges more damaging, as well as precipitation extremes.</p>
30	<p>A second wave of the Godzilla dust cloud will hit the Gulf Coast today. The Saharan Air Layer (SAL) that wafted over the Atlantic and now covers a large portion of the United States causes poor air quality and remarkable sunsets. The second wave is expected to envelope southeastern Texas, Louisiana and southern Mississippi this week and dissipate over the weekend.</p> <p>Miami just experienced its hottest week on record, rounding out its warmest first half of the year ever observed. Two out of every three days this year have featured a broken record of some sort somewhere in South Florida.</p> <p>The unrelenting, punishing heat — even in a place known for its tropical climate — fits into the pattern of rising temperatures from climate warming. This latest burst of heat was further intensified by a plume of dry, dusty air carried into the region from the Sahara desert.</p> <p>[Miami and most of Florida shattered heat records this spring]</p> <p>Temperatures have climbed into the 90s each of the past 11 days, unremarkable by itself</p>

	<p>since Miami's average late-June high is 90 degrees. But more impressive have been the overnight lows — refusing to fall below 80 degrees for nearly a week. Miami's hottest weather typically comes in late July or early August.</p>
	<p>JULY 2020</p>
1	<p>GABARONE, BOTSWANA - Hundreds of elephants have mysteriously dropped dead in Botswana in what is being described as a '<i>conservation disaster</i>'. More than 350 elephants have died from unknown causes, with aerial photos showing their carcasses scattered across the Okavango Delta and other northern parts of the country.</p> <p>The first unusual deaths were reported in May when 169 elephants died. Scientists have urged the government to test the animals to ensure they do not pose a risk to human life, as human to animal pathogen transmission is at the forefront of the world's mind.</p>
2	<p>TOKYO - Climate Change may have doomed the Winter Olympics forever. Understandably the immediate concern for the future of the Olympics is that Tokyo 2020 will not start next month. A new report, "<i>Playing Against the Clock: Global Sport, the Climate Emergency and the Case For Rapid Change</i>" has found that the Winter Olympics is set to be hit hard by climate change in the coming years. The headline is that most previous host cities of the Winter Games will be unable to stage the event again by 2050. "<i>The organizers of the 2010 Vancouver Winter Games wrote that 'the warmest weather on record challenged our ability to prepare fields of play for athletes in the venues at Cypress Mountains'. Sochi 2014 was warmer still.</i>"</p>
8	<p>BEIJING - With torrential rain and massive flooding ravaging much of southern China, the Xin'anjiang Dam on Wednesday opened all nine of its floodgates, causing 12 villages downstream to be inundated, impacting over 300,000 people.</p> <p>As water levels rose at an alarming rate due to incessant rain, authorities opened three floodgates on the dam, for the the first time since 2011. On Wednesday morning, the water level in the dam's reservoir, commonly known as Qiandao Lake, reached a record 108.45 meters, 0.08 meters higher than the previous record of 108.37 set in 1999, reported the Global Times.</p> <p>In order to lower the water levels further, dam operators at 9 a.m. announced they had opened all nine floodgates for the first time since it was built in 1959. By the afternoon, floodwater discharge from the dam had reached 7,800 cubic meters per second, far exceeding official expectations.</p> <p>Such was the power of the massive wall of water, that bighead carp could be seen flying in the air, according to local Chinese media reports. Many villagers downstream captured the "<i>flying fish</i>" and posted on social media, with some weighing up to 15 kilograms.</p>
10	<p>NOVOSIBIRSK - Siberian wildfires have are further north and more widespread than in years past. Arctic wildfires in June released more pollution than in the previous 18 years that data had been collected. Some of the fires have spent the winter months smoldering only to grow again in warmer weather, a phenomenon called "<i>zombie fires</i>."</p> <p>"<i>Higher temperatures and drier surface conditions are providing ideal conditions for these fires to burn and to persist for so long over such a large area</i>" according to fire specialist Mark Parrington.</p> <p>Smoke from those wildfires is now coming over the west coast of North America. Seasonal wildfires are common in Siberia, but this year's fires are unusually widespread in part because of a climate change-driven heatwave,</p>

	<p>The Arctic is experiencing climate change-driven warming faster than the rest of the Earth, which sets up the dry conditions that make blazes spread. While on average, the Earth's temperature has risen by 1.71 degrees Fahrenheit, the Arctic has seen a rise of 5.6 degrees Fahrenheit.</p> <p><i>"I was a little shocked to see a fire burning 10 kilometers south of a bay of the Laptev Sea, which is like, the sea ice factory of the world,"</i> Miami University in Ohio fire researcher Jessica McCarty tells National Geographic. <i>"When I went into fire science as an undergraduate student, if someone had told me I'd be studying fire regimes in Greenland and the Arctic, I would have laughed at them."</i></p>
10	<p>VERKHUYANSK - Permafrost is rich in organic material that froze before it could completely decompose. Melting permafrost releases greenhouse gases on top of the pollution released by the blazes themselves. All of which exacerbates further climate change. And the weather has certainly gotten warmer: in June, the Russian town of Verkhoyansk, above the Arctic circle hit a high temperature of 100.4 degree Fahrenheit.</p>
12	<p>YEMEN -Yemen's Houthi rebels have agreed to provide United Nations inspectors access to an abandoned oil tanker off the Yemeni coast. The United Nations expressed its concerns over the decaying tanker on Friday, warning of a major environmental crisis if it ruptures. The tanked named Safer believed to contain more than 1,000,000 barrels of crude oil has been floating off the Red Sea oil terminal of Ras Issa since the war began in 2014. The UN Security Council is scheduled to discuss the crisis on Wednesday, after water entered the engine room of the tanker.</p>
13	<p>WASHINGTON - A long-lasting, widespread and intense heat wave is set to swallow the United States, arriving right at the historical peak in annual temperatures. While hot weather is expected in the summertime, the magnitude, duration, and intensity of the upcoming heat wave will be impressive. A wide swath of the Lower 48 will be engulfed by temperatures 10 or more degrees above normal, with a sprawling heat dome likely to park over the nation's heartland, lingering for weeks. The combination of heat and stifling humidity could even catapult heat index levels into the triple digits near the coasts.</p> <p>Climate change? Yup.</p>
18	<p>TOKYO - As of Saturday, the Arctic as a region had an ice extent that was about 193,000 square miles below the previous record low for the date, using data from the Japanese Aerospace Exploration Agency.</p> <p>In other words, the difference between the sea ice extent on July 18, 2020, and the previous record low for the same date is equivalent to the states of Colorado and Oklahoma combined. The study by the World Weather Attribution project, was produced through a collaboration between climate researchers from multiple institutions in France, Germany, the Netherlands, Russia, Switzerland and the United Kingdom.</p> <p>The researchers found that the prolonged January-to-June heat, which has led to a record spike in wildfires across the Siberian Arctic, was made at least 600 times as likely by human-caused climate change. This led them to conclude such an event would be nearly impossible in the absence of global warming.</p>
21	<p>TORONTO - As climate change disproportionately warms the Arctic, the future looks increasingly bleak for one of the planet's most iconic species. Specifically, if greenhouse gas emissions remain unchecked, <i>"then it is highly likely that we'll lose every polar bear</i></p>

	<p><i>population in the world before the end of the century,”</i> said Peter Molnar, a researcher in global change ecology at the University of Toronto and lead author of a new study that tracks the bears’ fate through time under different emissions scenarios.</p>
28	<p>TEHRAN - Iraq isn’t just hot. It’s punishingly hot. Record-breakingly hot. When a reporter returned here last week, the air outside felt like an oven. The suitcase crackled as it was unzipped. It turned out that the synthetic fibers of a headscarf had melted crispy and were now stuck to the top of the case. A cold bottle of water was suddenly warm to the lips. At our office, the door handle was so hot it left blisters at the touch.</p> <p>Baghdad hit 125.2 degrees on July 28, blowing past the previous record of 123.8 degrees — which was set here five years ago — and topping 120 degrees for four days in a row. Sitting in one of the fastest warming parts of the globe, the city offers a troubling snapshot of the future that climate change might one day bring other parts of the world.</p> <p>Experts say temperature records like the one seen in Baghdad will continue to fall as climate change advances.</p> <p><i>“It’s getting hotter every year,”</i> said Jos Lelieveld, an expert on the climate of the Middle East and Mediterranean at the Max Planck Institute in Germany. <i>“And when you are starting to get above 50 degrees Celsius [122 degrees Fahrenheit] it becomes life threatening.”</i> Warming in the country is far above average.</p>
	<p>AUGUST 2020</p>
1	<p>MIAMI - Hurricane Isaias is beginning a multi-day assault on the U.S. East Coast with tropical storm conditions to gradually develop over Florida Saturday night and hurricane conditions on Sunday. Experts predict an an awful season.</p>
2	<p>BEIJING - The plague of locusts arrives in China. Authorities are conducting emergency drills, spraying pesticide and deploying drones to ward off this invasion of crop-devouring locusts from neighboring countries. The Ministry of Agriculture and Rural Affairs ordered the response after the pests were found to have damaged about 90 square kilometers of cropland over the last month. The insects were found to be yellow-spined bamboo locusts, a species which feasts on major crops like rice, corn, bamboo and bananas.</p>
2	<p>RIVERSIDE COUNTY - Firefighters were unable to contain any of the more than 20,000-acre wildfire burning in Southern California on Sunday morning.</p> <p>The Apple fire, about 75 miles east of Los Angeles, began Friday and has forced around 8,000 people to evacuate, with more orders expected. On Saturday, one single-family home was destroyed.</p> <p>Earlier on Sunday, fire officials in Riverside County had said the fire was 12 percent contained. But in their morning announcement, the San Bernardino National Forest Service, which took over unified command of the blaze, said containment levels were back to zero and the fire had grown to 20,516 acres.</p>
3	<p>VANCOUVER - A first of its kind study from the University of British Columbia has found that melting glaciers will bring water shortages to one in four people living in Alberta. The study, which was published in the journal of Nature Climate Change on Aug. 3, found that global glacier retreat will have big impacts on the availability of water for communities that rely on glacier runoff during the summer season.</p> <p>Sam Anderson, the study's lead author and a PhD candidate in UBC's department of earth, ocean, and atmospheric sciences, grew up in Alberta.</p>

	<p>During his undergrad at the University of Alberta, he came across photos comparing the size of glaciers in the Rocky Mountains 100 years ago and today.</p> <p>"I was really shocked at how much smaller they were today, versus in the past. And then I was thinking, you know, in Edmonton, when I turn on the tap, that water is coming from the North Saskatchewan River, which at the very beginning is starting at these glaciers that are disappearing," he said.</p> <p>"So that's when I became very concerned and interested in figuring out how water supply in communities will change as we lose these glaciers."</p> <p>Anderson and co-author Valentina Radic looked at water flow data for 194 rivers from the 1980s through 2010, to see how glacier-fed rivers in the province behave differently from non-glacier fed rivers.</p> <p>What they found was the loss of glacial water sources will cause shortages for the communities of Rocky Mountain House, Lake Louise and Hinton, as well as the Bighorn Dam, affecting more than one million people. Alberta's total population is roughly 4.4 million.</p> <p>"Once these glaciers are no longer contributing water to the rivers, the rivers at those locations will have lower flows on average, and greater variability from year to year," he said.</p>
6	<p>ELLESMERE ISLAND - And then this...The last fully intact ice shelf in the Canadian Arctic has collapsed, losing more than 40% of its area in just two days at the end of July. The Milne Ice Shelf is at the fringe of Ellesmere Island, in the sparsely populated northern Canadian territory of Nunavut. <i>"Above normal air temperatures, offshore winds and open water in front of the ice shelf are all part of the recipe for ice shelf break up,"</i> the Canadian Ice Service said in a tweet.</p> <p>The Arctic has been warming at twice the global rate for the last 30 years, due to a process known as Arctic amplification. But this year, temperatures in the polar region have been intense. The polar sea ice hit its lowest extent for July in 40 years. Record heat and wildfires have scorched Siberian Russia. Summer in the Canadian Arctic this year in particular has been 5C above the 30-year average, Copland said.</p>
8	<p>Konrad Steffen, an Arctic scientist whose work showed that climate change is melting Greenland's vast ice sheet with increasing speed, died on Saturday in an accident near a research station he created there 30 years ago. He was 68. Police investigators said he had fallen into a crevasse in the ice and drowned in the deep water below.</p> <p>A fellow scientist at the station, Jason Box, said the crevasse, or large crack, was a known hazard. But he added that high winds and recent snowfall had made visibility poor and landmarks harder to spot. He had a gift for translating that science for nonspecialists, including journalists, "letting the public and policymakers know what we know," Dr. Alley said. Dr. Steffen served on influential bodies like the United Nations Intergovernmental Panel on Climate Change.</p>
8	<p>JIANGXI, CHINA - Surging floodwater burst the banks of Poyang Lake in Jiangxi province last month, destroying thousands of acres of farmland in what's known as the <i>"land of fish and rice."</i> The broader Yangtze River basin — which includes Poyang Lake and stretches more than 3,900 miles from Shanghai in the east to the Tibetan border in the west — accounts for 70% of the country's rice production.</p> <p>The flooding that walloped 13 million acres of cropland — about the size of West</p>

	<p>Virginia — is the worst that that China has experienced in years. China's Ministry of Emergency Management pegs the direct economic cost of the disaster at \$21 billion in destroyed farmland, roads and other property. Some 55 million people have been affected. The disaster is bad news for the world's second-largest economy, which is already in a fragile state because of the coronavirus pandemic. Beijing has so far been able to secure food supplies by importing vast amounts of produce from other countries, and by releasing tens of millions of tons from strategic reserves.</p>
9	<p>Shawna Foo, The Conversation <i>Heat is a concern for an important form of underwater gardening: growing corals and “outplanting,” or transplanting them to restore damaged reefs. The goal of outplanting is to aid coral reefs’ natural recovery process by growing new corals and moving them to the damaged areas. It’s the same idea as replanting forests that have been heavily logged, or depleted farm fields that once were prairie grasslands. I have studied how global stressors such as ocean warming and acidification affect marine invertebrates for more than a decade. In a recently published study, I worked with Gregory Asner to analyze the impacts of temperature on coral reef restoration projects. Our results showed that climate change has raised sea surface temperatures close to a point that will Coral reefs support over 25% of marine life by providing food, shelter and a place for fish and other organisms to reproduce and raise young. Today, ocean warming driven by climate change is stressing reefs worldwide. Rising ocean temperatures cause bleaching events – episodes in which corals expel the algae that live inside them and provide the corals with most of their food, as well as their vibrant colors. When corals lose their algae, they become less resistant to stressors such as disease and eventually may die. Hundreds of organizations worldwide are working to restore damaged coral reefs by growing thousands of small coral fragments in nurseries, which may be onshore in laboratories or in the ocean near degraded reefs. Then scuba divers physically plant them at restoration sites. Coral reefs face an uncertain future and may not recover naturally from human-caused climate change. Conserving them will require reducing greenhouse gas emissions, protecting key habitats and actively restoring reefs. I hope that our research on temperature will help increase coral outplant survival and restoration success.</i></p>
11	<p>TORONTO -- Arctic sea ice could be completely gone by 2035. This stark declaration according to a new study that compared present day conditions with those during the last interglacial period some 127,000 years ago. The findings, published in Nature Climate Change, are important for helping predict future climate change patterns, researchers said. <i>“The advances made in climate modelling means that we can create a more accurate simulation of the Earth's past climate, which, in turn gives us greater confidence in model predictions for the future,”</i> said joint lead author Maria Vittoria Guarino with the British Antarctic Survey. <i>“We know the Arctic is undergoing significant changes as our planet warms. By understanding what happened during Earth's last warm period we are in a better position to understand what will happen in the future,”</i> said Louise Sime, also a joint lead author with BAS. <i>“The prospect of loss of sea ice by 2035 should really be focusing all our minds on achieving a low-carbon world as soon as humanly feasible.”</i></p>

11	<p>Red Lake Fire, A forest fire that was barreling through Ontario on a collision course with a small town earlier this week has been officially deemed under control, meaning thousands of people can return to their homes.</p> <p>Residents are now able to go back to Red Lake, a community that was evacuated this week due to fears that it would be overtaken by the fire, according to a statement posted on Facebook by Mayor Fred Mota.</p> <p>“Since the early evening of Monday, August 10th, our community has been in state of extreme uncertainty,” Mota wrote. “It has been challenging and at times very stressful for all of us. Through our resiliency as a community and with the gracious assistance of our neighbouring communities, we have overcome and endured something that could have been much worse. I personally am thankful our homes, families, and pets are all safe!”</p>
12	<p>The heart of North Korea's nuclear program may have been damaged by recent significant flooding from heavy rain, a U.S. based think-tank said on Wednesday.</p> <p>38 North, a U.S.-based North Korea analysis website, claimed "the flooding exposed how vulnerable the nuclear reactors' cooling systems are to extreme weather events," by showing a view of the Yongbyon Nuclear Scientific Research Center through satellite images.</p> <p>The North Korea-monitoring website assumed that their pumps and power systems could potentially have been damaged, and piping systems that draw water from the river also could have been clogged due to the flooding, "perhaps the worst in the past several years".</p> <p>The nuclear center, a facility about 62 miles north of North Korea's capital Pyongyang has been called the crown jewel of North Korea's nuclear program. The center reportedly comprised nearly 400 nuclear-related buildings. At the heart of its nuclear program, there's the 5 MWe reactor, presumably for the production of weapons grade plutonium and a facility to produce highly enriched uranium (HEU) used to make atomic bombs.</p>
13	<p>CEDAR RAPIDS - A catastrophic group of storms that tore through the Midwest this week has left homes destroyed, millions of acres of crops, mostly corn, demolished and over a quarter of a million people still without power days later.</p> <p>Nearly 100,000 people in Northern Illinois were still without electricity on Thursday morning. In Iowa, about 200,000 people were without power.</p> <p><i>"There is no trash pickup. There are one hundred thousand fridges of rotting food. There are raccoons. There is no escape from the heat, except to run out of town to look for basic supplies in an air-conditioned car. Downtown, bricks and glass litter the sidewalks. Plate glass windows shattered during the storm. Many businesses have been physically destroyed. All restaurants lost all of their perishables. Factories are closed. Offices are closed. The economy — the whole thing — is stopped."</i></p> <p><i>"Is it Thursday?"</i> Clarissa Huilman, 34, who lives in Cedar Rapids, Iowa, said in a phone call. <i>"We still don't have power back,"</i> she added as she watched workers trying to remove a 75-foot tree that had crashed onto her one-story home, puncturing its roof and intruding into the living room and dining room. Governor Kim Reynolds of Iowa has issued disaster proclamations for 23 counties. The rare group of storms, called a derecho (pronounced deh-REY-cho), brought hurricane-force winds of over 100 miles per hour to the Midwest. At least two people died as a result of the severe weather.</p>
13	<p>The Arctic summer of 2019 was supposed to be an outlier. Featuring massive blazes in Siberia, including what scientists strongly suspected were smoldering fires beneath the peat in the carbon-rich soils of the transition zone between the tundra and Arctic taiga, last year set records for emitting planet-warming greenhouse gases via wildfires. Many scientists</p>

	<p>thought it might be a one-off, considering that computer model projections tend to show that the emergence of such extreme fire years won't happen until mid-century. However, this year is proving those scientists wrong. And it raises the unsettling possibility that fire seasons that begin much earlier than average and end later — and affect delicate Arctic ecosystems — could soon be the new normal. Wildfires continue to burn unimpeded across Siberia, as they have since May, after getting an unusually early start to the fire season. A thick blanket of smoke has turned the sky a milky gray in Siberia's cities, with some smoke making it across the Pacific into Alaska and Canada's Hudson Bay. Based on data stretching back to 2003, when the satellite sensors began recording reliable data, Mark Parrington says Arctic fires released more carbon dioxide in June and July this year than during any complete fire season before that. This is an especially noteworthy milestone, since 2019 itself had been a record-breaker for Arctic wildfires. This year, some of the Arctic fires were burning so far north that they were spotted bordering sea ice cover. Looking at carbon emissions from fires in the Arctic Circle, Parrington says 2020 is already the top year even when the January 1 to August 11 period is considered, vs. the full 365 days for each of the other years. Last year had set a record for such emissions, with 180 megatons of carbon dioxide emitted by Arctic fires, but 2020 has eclipsed it so far, with about 240 megaton through August 11. Parrington said Arctic wildfire emissions rose significantly from June into July, particularly in the northern Russia Sakha Republic, a pattern also observed last year.</p>
16	<p>DEATH VALLEY - In the midst of a historic heat wave in the West, the mercury in Death Valley, Calif., surged to a searing 130 degrees on Sunday afternoon. The temperature in Death Valley hit 130 degrees at 3:41 p.m. Pacific time on Sunday, according to the National Weather Service. 54.4 degrees celsius</p> <p style="text-align: center;">The hottest day ever for humans on planet Earth.</p>
17	<p>The Pine Gulch fire in Colorado has broken records as one of the top-five largest Coloradan wildfires of the past decade.</p>
18	<p>ALBANY - Meet "D58".</p> <p>Researchers at the State University of New York College of Environmental Science and Forestry are seeking federal approval to release their genetically engineered (GE) Darling 58 (D58) American chestnut tree into U.S. forests. Researchers claim the transgenic D58 tree will resist the fungal blight that, coupled with rampant overlogging, decimated the American chestnut population in the early 20th century.</p> <p>The D58 would be the first GE forest tree approved in the U.S. and the first GMO intended to spread in the wild <i>"This is a project to rapidly domesticate a wild species through genetic engineering and accelerated breeding, and then to put it back into ecosystems to form self-perpetuating populations — an intentional evolutionary intervention that has never been attempted before with any species,"</i> explain scientists at the Center for Food Safety (CFS) and International Center for Technology Assessment (ICTA), which are nonprofits based in Washington, D.C.</p> <p>The GE American chestnut faces an uphill battle due to decades of opposition to GE trees by Indigenous peoples, scientists, students, activists, foresters and others, including a GE tree ban by the Forest Stewardship Council and a United Nations decision that warns countries of the dangers of GE trees and urges use of the precautionary principle while addressing the issue.</p>

19	<p>Mexico - Hurricane Genevive is moving north along the Baja California peninsula...no landfall predicted, but a great deal of rain will bring flooding to coastal regions.</p> <p>California - Mired in a dry, sweltering heat that has baked the brush and timber into parched fuel, the state is on fire again, with blazes threatening communities up and down the West Coast. Tens of thousands of people evacuated their homes early Wednesday as wildfires raged out of control, this time after an unusual series of thunderstorms swept through the region with more than 20,000 lightning strikes acting as lit matches to piles of kindling. Authorities said they were tracking and battling at least 92 known wildfires spanning more than 200,000 acres across California. Many of the fires are largely uncontained or not contained at all. Officials are tracking and battling wildfires and fire “complexes” — clusters of many smaller blazes — spanning more than 200,000 acres around California, according to an updating map from the state fire agency Cal Fire. The city of Vacaville, population 100,000 is under evacuation orders because of the advancing flames.</p> <p>Colorado - The Pine Gulch Fire grew more than 37,000 acres overnight, according to the Rocky Mountain Area Coordination Center. It's now 125,108 acres and the second-largest wildfire in Colorado history. At more than 125,000 acres, the fire has surpassed the size of the 2018 108,045-acre Spring Fire. For three to four hours, wind gusts reached speeds of 40 mph at the fire, creating "extreme and erratic fire behavior," according to the incident management team.</p> <p>Oregon -The Oregon Department of Forestry says lightning started 11 new wildfires in Central Oregon Monday evening and that all of them grew overnight. The largest is the Green Ridge Fire near Camp Sherman. As of 9 a.m., fire officials said it was 500 acres. This fire is burning in heavy timber on the Deschutes National Forest, Sisters Ranger District. Crews are also battling the Lily Fire near the Pacific Crest Trail in the Deschutes National Forest.</p> <p>Washington - Firefighters made substantial progress Tuesday on a wildfire on the Yakima Training Center, even as they fought another fire in the Naches Ranger District and cleared out after a blaze near Granger. The Ahtanum Ridge fire started 10 miles east of Union Gap and took off as high winds hit the area around 8 p.m. Sunday. Evacuation orders were issued for homes south of Ahtanum Road. The fire was contained Monday and blackened 5,971 acres, according to the Northwest Interagency Coordination Center. It was human-caused, the coordination center said. With the Ahtanum Ridge fire contained, officials are assessing the damage.</p> <p>British Columbia - Massive plumes of smoke are rising from the Mount Christie wildfire in the South Okanagan, threatening thousands of properties in the area. The fire is on the east side of Skaha Lake, between Penticton and Okanagan Falls. The BC Wildfire Service says the fire at last estimation is 1,000 hectares in size, and is located around six kilometres north of Okanagan Falls. 4,000 homes are under evacuation alert</p>
20	<p>All of the fires burning yesterday across the west are a great worse as the record heatwave in the West persists with high winds exacerbating the ongoing drought.</p>

21	<p>SACRAMENTO - Amid a scorching heat wave that is now in its second week, hundreds of wildfires are burning in California, forcing over 100,000 people to evacuate. Blazes threatened homes and blackened city skies Friday as firefighters pleaded for more help in their efforts to contain the fires, according to officials. At least six people have died. The state is battling about two dozen large complex fires, Governor Gavin Newsom said Friday.</p> <p style="text-align: center;">In total, 560 fires are raging in the state.</p> <p>Major fires in Southern California are coming under control, and the state is shifting resources to battle massive blazes in Northern California, Newsom said. There, fires have chewed through brushland, rural areas, canyon country and dense forest surrounding San Francisco.</p> <p>Newsom confirmed 5 deaths have associated with the fires. Separately, a Pacific Gas & Electric utility worker was found dead Wednesday in a vehicle in the Vacaville area. In the past week alone, fires have charred over 1,200 square miles across the state, according to Cal Fire — a size comparable to Rhode Island.</p> <p><i>"We're putting everything we have on this," Newsom</i> said, noting the state is seeking aid from the federal government, other states as far away as the East Coast and even Canada and Australia. California firefighters are <i>"overwhelmed"</i> by the ongoing fires, he said. Two of the fires there are now the 7th and 10th largest fires in state history, having burned as much as 300 square miles each, Newsom said Friday.</p> <p><i>"If you are in denial about climate change, come to California."</i></p> <p>The Big Basin Redwoods, a 10,800-acre haven of beautiful old-growth forest, was established as a California State Park in 1902. In 2020, it was completely destroyed by wildfire.</p> <p>As the CZU Lightning Complex Fire continues to blaze 48,000 acres of land through San Mateo and Santa Cruz Counties, thousands of residents have been displaced and at least 50 structures have been destroyed. Some of the structures that were destroyed were in the Big Basin Redwoods State Park.</p> <p><i>"We are devastated to report that Big Basin, as we have known it, loved it, and cherished it for generations, is gone,"</i> wrote the Sempervirens Fund in a statement. <i>"Early reports are that the wildfire has consumed much of the park's historic facilities. We do not yet know the fate of the park's grandest old trees."</i></p>
22	<p>CALIFORNIA - At least 140 Western weather stations notched record highs in the past 10 days as a thermometer in California's Death Valley hit 130 degrees Fahrenheit, one of the highest temperatures measured on Earth. Eighty million U.S. residents are under excessive heat advisories. More than 35 wildfires are raging in California, burning 125,000 acres in the San Francisco Bay area alone, threatening 25,000 businesses and homes this week. Parts of the country are suffering drought conditions. In Colorado, four wildfires are scorching forest, and half the state is experiencing severe to extreme drought, according to the U.S. Drought Monitor, creating dry brush that's primed to ignite. The Pine Gulch Fire 18 miles north of Grand Junction, sparked by lightning on July 31, is already the state's second-largest in history.</p> <p>CEDAR RAPIDS - Iowa just had its third <i>"once in a lifetime"</i> climate disaster in twelve years. Thousands of people in Iowa are still living in a humanitarian crisis after a massive <i>"inland hurricane"</i> caused straight-line wind damage across the state.</p> <ul style="list-style-type: none"> - In many places, there's still no cell phone signal or internet. - Twenty schools are closed indefinitely due to damage.

	<p>- For days there was no gasoline for hours upon hours of driving. A quarter of a million people went without power for over a week, during a pandemic. This is the reality of climate disasters. As climate change accelerates, storms like this will continue to destroy communities like this, while elected officials sit idly by. National attention missed Iowa, and Trump only initially approved 1.5% of the FEMA aid requested.</p>
23	<p>BEIJING - Heavy rain is expected across China's southwest, northwest and northeast in the next three days, raising flood risks and pressure on dams, weather forecasters have warned. The Ministry of Water Resources urged local authorities to be on alert, particularly along the upper reaches of the Yangtze River and the middle reaches of the Yellow, Hai, Songhua and Liao rivers. The National Meteorological Centre said Sichuan province would be particularly hard hit, with up to 300mm (11.8 inches) of rain forecast for Monday. Torrential rains slam China's normally dry Gansu province, trapping over 10,000 people. Between 30-50mm of rain is expected to fall per hour in the provinces of Yunnan, Gansu, Shaanxi, Hebei, Inner Mongolia and Heilongjiang, rising to over 70mm an hour in some scattered areas.</p> <p style="text-align: center;">The wildfires along the Pacific Coast continue to rage. The winds are forecast to pick up. The famed giant redwoods and the Joshua trees are burning.</p>
24	<p>SHANGHAI - Weeks of flooding along the Yangtze River, China's longest waterway, has crippled commodity production, weighing on an economy that has been shaking off the coronavirus downturn. Though authorities have not revealed total economic losses caused by the deluge of rain since June, several companies whose production plants have been submerged have ceased operations.</p>
25	<p style="text-align: center;">More than 1,000 homes have burnt to the ground in California so far.</p>
	<p>Across the United States, there are everywhere signs of climate disaster.</p> <ul style="list-style-type: none"> - In California, two of the worst wildfires in the state's history took place simultaneously, scorching more than a million acres of land, including a beloved forested national park. - On the Gulf Coast, residents of Louisiana and Texas braced for an unprecedented double-hurricane event churned up by exceptionally warm waters in the Gulf of Mexico — the first luckily petered out at sea, but the second, Tropical Storm Laura, is predicted to make landfall late Wednesday after leading to deadly floods in the Dominican Republic and Haiti. - In other parts of the Northern Hemisphere, the summer has already seen its toll of heat waves and heavy rains. Record-breaking temperatures in the Iraqi capital of Baghdad this July blistering their hands simply by touching the handle of an office door. - The coastal Indian metropolis of Mumbai experiences seasonal flooding every year, but was hit by a year's worth of rain in the space of a month this summer. <p>Higher-than-average rainfalls in the past weeks led to an arc of destruction from central Europe to the Turkish Black Sea coast to southern China, where, in a grim omen, rising waters submerged the toes of a towering Tang dynasty-era statue of the Buddha that has stood for more than 13 centuries.</p> <p><i>"This year's flooding has unfolded not as a single natural disaster, with an enormous loss of life and property," noted the New York Times, "but rather as a slow, merciless series of smaller ones, whose combined toll has steadily mounted even as official reports have focused on the</i></p>

	<p><i>government's relief efforts."</i></p> <p>Experts are broadly convinced that a steady uptick in extreme weather events of recent years is at least in part the result of man-made climate change. <i>"It seems like every year re-ups the previous year in terms of pushing the envelope, in terms of how much fire we're seeing in the landscape and how severe that fire is," Neil Lareau, an atmospheric scientist, told the Guardian.</i></p>
	<p>UNSURVIVABLE - Add another new word to clarify the impacts of climate change. Forecasters project that some coastal areas near the Texas-Louisiana border could see "unsurvivable" storm surge, which could impact areas up to 30 miles inland. Hurricane Laura is swirling in the Gulf of Mexico and is projected to hit the Texas and Louisiana coasts Wednesday night as a major hurricane, according to the National Hurricane Center.</p>
27	<p>LAKE CHARLES - Hurricane Laura slammed southern Louisiana early Thursday as a Category 4 storm, one of the most powerful to strike the Gulf Coast in decades. The storm made landfall at 1 a.m. near Cameron, La., about 35 miles east of the Texas border. Downtown Lake Charles took a heavy hit, with widespread destruction from Laura's devastating winds. Roofs were peeled off, buildings were destroyed, and lampposts were tossed into the streets.</p> <p>The storm, packed 150 mph peak winds when it crossed the coast. The storm weakened and was downgraded to a Category 2 hurricane Thursday morning as it headed northward, but it still had sustained winds of more than 100 mph. Heavy rain was predicted to be widespread across the west-central Gulf Coast with five to 10 inches falling over a broad area, and locally up to 18 inches, leading to flash flooding.</p> <p>The warming of the planet doesn't seem to have increased the frequency of hurricanes. But it has increased their severity, scientists say. Storms draw their energy from the ocean, and warmer water provides more energy. Warmer air, in turn, can carry more water, increasing rainfall and flooding. Since the 1990s, the frequency of extreme hurricanes — either Category 4 or 5 — has roughly doubled in the Atlantic Ocean. No single storm is solely a result of climate change, of course. Yet climate change is leading to more storms like Laura.</p>
	<p>LAKE CHARLES - The clean up starts now in Louisiana and Texas as this Force Four Hurricane Laura spends itself out...compounding the tepid misery in this impoverished corner of America already laid horridly low.</p>
28	<p>PHOENIX - Friday marked the 50th day to reach 110 degrees or higher in the Valley this year, setting a record nobody wanted. Before 2020, the previous record for most days in a calendar year to reach 110 degrees was 33 days set in 2011. Phoenix surpassed that on August 9 and has beat it almost every day since then. Phoenix passed the scorching milestone on Friday afternoon when the temperature at Phoenix Sky Harbor International Airport hit 111 degrees.</p> <p><i>"It's not like we barely broke this record, We sort of obliterated it."</i> said National Weather Service's Matthew Hirsch. <i>"When you don't have moisture to cool it down, excessive heat can persist. "Essentially, we didn't get any relief from monsoon storms."</i></p> <p>Phoenix experienced less than 4 inches of rainfall since the beginning of the year.</p>
29	<p>VERKHUYANSK - This past weekend, this small Russian town in the Arctic Circle hit a</p>

	<p>scorching temperature, 100.4 degrees Fahrenheit. The town is known for its brutally cold winters and is one of the coldest towns on Earth. However, temperatures in recent months have skyrocketed double digits above average temperatures. The average high temperature in Verkhoyansk in June is 68°F, meaning this record day was over 30 degrees hotter than average. For reference, the coldest month of the year Verkhoyansk is January where the high is, on average, -44°F. Yes, you read that correct, negative 44 degrees Fahrenheit is the average high temperature in January.</p> <p style="text-align: center;">This is the hottest temperature ever recorded in the Arctic Circle. We watch the planet get torn apart, one huge event at a time.</p>
<p>SEPTEMBER 2020</p>	
<p>1</p>	<p>SACRAMENTO - Anita Chabria, LA Times reporter: <i>"What's striking about these fires is how quickly we went from nothing in California to our largest fire crisis in history. Just in the span of a couple days, we've seen 1.4 million acres burn. We just have never seen anything else like this.</i> <i>And what's becoming more and more clear is we do not have the resources to fight it. So our only goal right now is to protect people and property and infrastructure, and wait it out for cooler weather to help us get this under control.</i> <i>We have 14,000 firefighters out right now. I've heard people say we need three times that many folks just to start to get a handle on these things. We don't have the equipment, we don't have the engines, we don't have the air power."</i></p>
<p>2</p>	<p>SYDNEY -- Orange skies, falling ash, smoke creeping into lungs, mobile phones pinging "<i>fires near me</i>" warnings, people seeking shelter on beaches as infernos rage inland -- these memories are rushing back as Australians brace for a possible repeat of the disastrous 2019-2020 "<i>Black Summer</i>" of bushfires. <i>That is diabolically depressing, but when you see what is happening in California, Europe and elsewhere, we are just part of a global nightmare."</i> Professor David Bowman, a bushfire expert, says he cannot dismiss the possibility of another bad season despite the heavy rains and floods that broke a long drought across much of the nation earlier this year. <i>"We are in a new climate regime, so we don't really know. I wouldn't rule out a big fire season ahead."</i></p>
<p>5</p>	<p>LOS ANGELES - Excessive heat watches and warnings are already posted for 50,000,000 people in California, Nevada and Arizona from Friday to Monday. For 40,000,000 of those residents, temperatures will exceed 100 degrees at some point over the next several days. As of now, 150 record high temperatures are in jeopardy through early next week, with the heat wave peaking on Sunday. Some cities are forecast to reach or exceed 110 degrees. But the heat will not be confined to California. Phoenix and Las Vegas are forecast to max out between 110-115, Death Valley near 125, and even Medford, Oregon peaking at 106.</p>
<p>6</p>	<p>THE PANTANAL - tropical wetland in Brazil, one of the most diverse habitats on the planet, has been devastated by fire. Enormous blazes — often intentionally set but worsened by unusually dry conditions — scorched 7,861 square miles, or about 10 percent, of the area known as the Pantanal from January to August. That's an area slightly larger than New Jersey. And to the north, fires in the Brazilian Amazon have been as destructive as last year's, but they have drawn less attention in a year overwhelmed by the pandemic. It's the latest ecological crisis to unfold on the watch of President Jair Bolsonaro.</p>

6	<p>LOS ANGELES - Sunday will be one of the hottest days in recent memory across much of California, the day after scorching temperatures set scores of records and intensified destructive wildfires erupting in the state.</p> <p>The most serious wildfire situation developed with the Creek Fire in the Sierra National Forest, about 290 miles north of Los Angeles, which was first detected Friday night and rapidly grew to at least 45,500 acres by Sunday morning.</p> <p>That fire trapped about 1,000 people near Mammoth Pool reservoir as flames crossed the San Joaquin River, including about 150 people who became stranded at a boat launch. According to the Associated Press, 200 people were rescued from the Mammoth Pool Campground by military helicopters. In addition to the Creek Fire, firefighters are still battling the second-, third- and fourth-largest fires in state history that erupted during a mid-August heat wave and unusual thunderstorms north of San Francisco.</p> <p>Michael Wehner researches extreme weather events at Lawrence Berkeley National Laboratory: "Climate change has caused extreme heat waves to be 3 to 4 degrees Fahrenheit warmer in California." These trends "<i>will continue as the planet continues to warm.</i>"</p>
7	<p>DENVER (CBS4) –Dave Aguilera "<i>After a high of 101 degrees in Denver on Saturday and two more days in the 90s on the way this headline feels surreal to write, but I can assure you, it's not "fake" news. A major change in the forecast will arrive sometime after sunset on Monday night. The National Weather Service has already issued a Freeze Watch for northwest Colorado where temperatures by Tuesday morning could fall as low as the middle 20s. We may see additional freeze alerts issued.</i>"</p> <p>GRAHAM, WASHINGTON -- Eight homes were destroyed in Graham Monday night as multiple brush fires exploded around the South Sound amid a rare September wind storm that has knocked out power to tens of thousands.</p> <p>Red Flag Warnings -- indicating critical fire conditions -- are in effect through Wednesday evening along the Cascade foothills -- even below 1,500 feet -- plus the Cascades themselves, the eastern slopes of the Olympic Mountains, the Black Hills and the lowland areas of the central coast and southwestern Washington. The smoke is being carried by an unusually strong east wind event that brought up to 45 mph winds overnight, knocking out power to nearly 80,000 Puget Sound Energy customers. There have even been some reports of ash fall in the region.</p>
8	<p>FRESNO - About 50 hikers spent a second night at a wilderness resort near Fresno, Calif., on Monday with all escape routes cut off by the growing Creek Fire in the Sierra National Forest, an "<i>unprecedented disaster</i>" that nearly doubled in size on Monday alone, fire officials said. The explosive fire, featuring towering clouds of smoke that probably triggered lightning and fire tornadoes, has caused mass evacuations of an estimated 30,000 people. Although Cal Fire reported late Monday that 65 structures are listed as destroyed in the fire, according to the Fresno Bee, almost 5,300 structures remained threatened. Nick Truax, the incident commander for Cal Fire, told reporters that there has been a "<i>pretty heavy structure loss,</i>" including the destruction of homes.</p>
9	<p>SALEM - there are more than 480 active fires across the state, and more than 2,500,000 acres have been burned.</p> <p>Several fast-moving fires prompted evacuation orders in communities across Oregon and Southwest Washington overnight Monday and through the day Tuesday. Governor Kate</p>

	<p>Brown of Oregon called the fires in her state an <i>“unprecedented”</i> situation. She cited several communities that appeared to have been <i>“substantially destroyed”</i>: Blue River, Detroit, Phoenix, Talent, Vida.</p>
10	<p>MALDEN -The wildfire arrived with such ferocity that deputies drove through the streets, screaming for people to leave. By the time the blaze passed, not even the fire station was spared — the town’s only fire truck was still trapped inside, turned into an ashen hulk. The devastation in Washington State was repeated up and down the parched West Coast on Wednesday as a wildfire season of unrivaled destruction continued to spread, destroying not only much of Malden but several other communities in the Northwest, while belching enough smoke to blot out the sun in San Francisco.</p> <p>In California, fires have now charred some 2,500,000 acres — a modern record and nearly 20 times what had burned at this time last year. In Washington, a wildfire pushed into suburban communities near Tacoma. And in Oregon, officials said more than 1,000 homes had already been destroyed.</p> <p>This wildfire season has been devastating all along the West Coast, fueled by an unusual summer wind event in the Northwest, a record-breaking heat wave followed by wind in California and the early signals of climate change, as warmer average temperatures leave lands parched and vulnerable to a fire started by a spark.</p> <p>In Phoenix, Oregon, residents reported that they were unable to get back to their homes to retrieve pets as the fires moved along the Interstate 5 corridor, stoked by winds as high as 45 miles per hour.</p> <p>As he looked over his still-smoldering city on Wednesday, Mayor Chris Luz estimated that the area might have lost up to 1,000 houses and apartment units. He said the downtown area was decimated, with many businesses lost, and fires continued to smolder. Officials had not found anyone who died.</p>
	<p>MOLALLA, OREGON -This has become a catastrophe beyond imagining along the American west coast. As wildfires began consuming communities across Oregon this week, leaders at the state emergency management office fired off an email to counterparts around the country, pleading for 10 firefighting strike teams that could bring 50 extra engines to the region.</p> <p>The state got one commitment: Utah would send a team with five engines. Fires continued to rage in southern Oregon, where hundreds of homes have been razed, as well as east of Salem, where two bodies have been found, and along the state’s coast. More than 900,000 acres have burned, nearly double a typical season. Hundreds of thousands of people have been ordered to evacuate, including parts of the Portland suburbs, where fires were still on the move.</p> <p><i>“California, Oregon, Washington, we are all in the same soup of cataclysmic fire,”</i> said Washington’s governor, Jay Inslee. More than 133,546 hectares burned in Washington in a 24-hour period — an area larger than the acreage that normally burns during entire fire seasons that stretch from spring into the fall.</p> <p>The dead so far include 10 people who died in a fast-moving fire in California’s Butte County; a 1-year-old boy who was killed in the Cold Springs Fire in northern Washington; two people who were discovered in a vehicle east of Salem, Ore.; and two people who died in one of the region’s most destructive fires, the Almeda Fire in southern Oregon. Emergency responders</p>

	<p>struggle to keep pace with fires that have destroyed entire towns and led to at least 15 deaths in California, with seven more people found dead on Thursday from a fire north of Sacramento.</p> <p>California's governor, Gavin Newsom, has put out personal requests for aid across the country. He has spoken with the Canadian prime minister about more help, and Israel recently sent 10 firefighters to California.</p> <p><i>"I don't know that we have any fires where we can say we have got enough resources to do what we need to do,"</i> Andrew Phelps, the director of the Oregon Office of Emergency Management, said.</p>
11	<p>MONTGOMERY - <i>"When you have a fire run 15 miles [24 kilometres] in one day, in one afternoon, there's no model that can predict that,"</i> U.S. Forest Service forester Steve Lohr said. <i>"The fires are behaving in such a way that we've not seen."</i></p> <p>The phenomenon isn't restricted to California. Doug Grafe, chief of Fire Protection at the Oregon Department of Forestry, said it was unprecedented in his state for fires to spread from the crest of the Cascade Mountains into the valleys below, <i>"carrying tens of miles in one period of an afternoon and not slowing down in the evening — (there is) absolutely no context for that in this environment."</i></p>
	<p>PORTLAND - An estimated 500,000 Oregon residents have fled because of the wildfires that have burned hundreds of thousands of acres, according to the Oregon Office of Emergency Management. The nearly 70 active wildfires raging along the West Coast have produced the worst air quality on the planet. Portland, San Francisco and Seattle were top three worst, according to IQ Air, as of Friday afternoon. Los Angeles ranked fifth after Vancouver. At least 25 people have been killed this year in the fires, including 17 just this week.</p>
12	<p>SACRAMENTO - This is a climatic catastrophe far beyond anything ever experienced before... anywhere on earth.</p> <p>Fire tornadoes have spun up by the handful in at least three big wildfires in the past three weeks, based on radar data. Giant clouds of ash and smoke have generated lightning. Multiple fires have gone from a few acres to more than 100,000 acres in size in a day, while advancing as many as 25 miles in a single night. And wildfire plumes have soared up to 10 miles high, above the cruising altitude of commercial jets.</p> <p>MEDFORD - Huge swaths of Oregon are on fire, and the state has evacuated 500,000 residents. Teams of firefighters are battling the blaze, but more than 900,000 acres of forest have already been lost to the fire. Key to the fight against a large wildfire like this are helicopters, but the Oregon's six Chinooks aren't available to fight the fire right now. They've been deployed to Afghanistan.</p> <p>Chinooks are workhorses. Moving at speeds up to 188 miles per hour, the Chinook can transport up to 44 people and carry a payload of 26,000 pounds. It can transport troops and supplies at breakneck speeds into some of the hardest to reach areas of the country. It's also great at evacuating people from wildfire stricken areas and carrying bambi buckets to extinguish flames. Chinooks carry large bambi buckets capable of holding 2,000 gallons of water. The 18,000 pounds of water can cover 100 meters of forest. And at almost 200 miles per hour, the Chinooks can dump a lot of water very quickly. Just not now, when they are needed most.</p> <p>SALEM — Chris Tofte blew past the blockade, his green Jeep Cherokee aimed for the bowels</p>

of the raging Beachie Creek fire.

It was around 4 a.m. Tuesday morning, and he was desperately searching for his wife, son and mother-in-law. The family lived 4½ miles up North Fork Road SE, about 10 minutes from Lyons and 30 minutes from Salem.

Halfway there, the road flanked by walls of fire and fallen trees, he stopped for a man whose arm was badly burned. The man wanted a ride but didn't get in when he found out **Chris** was headed deeper into the wildfire.

Chris agreed to pick him up on the way down, but the man wondered out loud whether he'd make it.

Back in the Jeep, struggling to navigate a road once so familiar but now shrouded by smoke-filled darkness, **Chris** almost ran over what looked like a bikini-clad woman on the road. Once he was closer, he realized she was wearing underwear. Her hair was singed, her mouth looked almost black, and her bare feet were severely burned.

He impatiently tried to help her into his car, explaining how he needed to find his wife and son, feeling like she was resisting.

Finally, she spoke. *"I am your wife."*

Friends and family still clung to hope that **Wyatt**, who turned 13 in February, had made it out safely. But they had seen his mom, her injuries, her bare feet. How long would **Wyatt's** shoes last?

Leann Moore, a friend of **Angela's** for more than 20 years since they were co-workers at Willamette Humane Society, said he was found in the driver's side of a vehicle on the family's property, with Duke draped over him.

No one knows how or why **Wyatt** returned.

Earlier in the day, his dad rehashed his worst nightmare. What if he had been allowed past the blockade or blown through it earlier? Could he have saved them? **Leann Moore**, a friend of **Angela's** for more than 20 years since they were co-workers at Willamette Humane Society, said he was found in the driver's side of a vehicle on the family's property, with Duke draped over him.

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LAS CRUCES - *"It is terribly frightening, We've never seen anything like this. ... We're losing probably hundreds of thousands, if not millions, of migratory birds."*

Over the past few weeks, various species of migratory birds are dying in "unprecedented" numbers of unknown causes, reported **Martha Desmond**, a professor at NMSU's Department of Fish, Wildlife and Conservation Ecology.

"A number of these species are already in trouble," Desmond said. *"They are already experiencing huge population declines and then to have a traumatic event like this is - it's devastating."* The biologists guessed the cause might involve the wildfires ravaging the western U.S. and dry conditions in New Mexico.

"They may have been pushed out before they were ready to migrate," **Desmond** said. *"They have to put on a certain amount of fat for them to be able to survive the migration. These birds migrate at night and they get up in the jet stream, and they might migrate for three nights in succession, they'll come down and they'll feed like crazy, put on more fat and go again."*

The affected birds have included warblers, sparrows, swallows, blackbirds, flycatchers, and the western wood pewee.

The biologists noted that the majority of the dying birds are insectivores, but that seed

	<p>eaters were sickening and dying as well. "Over 3 billion birds have died since 1970. Insect populations are crashing, and this is just an unprecedented mortality," she said. "Climate change is affecting the abundance of insects, it's affecting the volatility of the fires, and the scary thing is this may be an indication of the future."</p>
12	<p>DONALD TRUMP: "But, you know, it is about forest management. Please remember the words, very simple: forest management. Please remember. It's about forest management."</p> <p>GAVIN NEWSOM, California Democrat Governor: "I'm a little bit exhausted that we have to continue to debate this issue. This is a climate damn emergency. ... And I'm not going to suggest for a second that the forest management practices in the state of California over a century-plus have been ideal, but that's one point, but it's not the point."</p> <p>ERIC GARCETTI, Los Angeles Mayor: "This is climate change. And this is an administration that's put its head in the sand. While we have Democratic and Republican mayors across the country stepping up to do their part, this is an administration, a president, who wants to withdraw from the Paris climate accords later this year — the only country in the world to do so. Talk to a firefighter if you think that climate change isn't real. And it seems like this administration are the last vestiges of the Flat Earth Society of this generation. We need real action. "</p> <p>JAY INSLEE, Washington Democrat Governor: "These are not just wildfires. They are climate fires. And we cannot and we will not surrender our state and expose people to have their homes burned down and their lives lost because of climate fires."</p> <p>KATE BROWN, Oregon Democrat Governor: "Well over a million acres of land has burned, which is over 1,500 square miles. Right now our air quality ranks the worst in the world due to these fires. ... There is no question that the changing climate is exacerbating what we see on the ground. We had, as we mentioned earlier, unprecedented, a weather event with winds and temperatures. In addition, we added a ground that has had a 30-year drought. So, it made for extremely challenging circumstances and has certainly exacerbated the situation. "</p>
13	<p>"Climate fires".</p> <p>California Democrat Governor Gavin Newsom:</p> <p>"We have temperatures, record-breaking temperatures, record droughts...then you've got something else at play and that's exactly what the scientists have been predicting for half a century. It is here now. California folks is America fast-forward.</p> <p>What we're experiencing right here is coming to communities all across the United States of America unless we get our act together on climate change...unless we disabuse ourselves of all the BS that's being spewed by a very small group of people who have an ideological reason to advance the cause of a 19th century framework and solution.</p> <p>We're not going back to the 19th century.</p> <p>We are not apologists to that status quo.</p> <p>We believe in the fresh air progress versus the stale air emphasis stale air normalcy</p> <p>And that's California. Forgive me. I'm a little bit long-winded but a little bit exhausted that we have to continue to debate this issue. This a climate damn emergency</p> <p>This is real</p> <p>And it's happening... this is the perfect storm. It is happening in unprecedented ways... year in, year out.</p> <p>And you can exhaust yourself with your ideological BS by saying 'a hundred years ago we should have done this, or that'. All that may be true and I'm not going to suggest for a second that the forest management practices in the State of California over a century plus have been ideal.</p> <p>But that's one point. But it's not 'the' point.</p>

	<p><i>The realist is the mega-fires we're experiencing come from these mega-droughts that we've experienced. 115,000,000 dead trees in our forests in the Southern Sierras, beetle-infested forests, those mega-droughts impacting the mega-fires.</i></p> <p><i>There is something else going on. Not just bad past practices over a century related to forestry."</i></p>
14	<p>Two Antarctic glaciers that have long kept scientists awake at night are breaking free from the restraints that have hemmed them in, increasing the threat of large-scale sea-level rise. Located along the coast of the Amundsen Sea in West Antarctica, the enormous Pine Island and Thwaites glaciers already contribute around 5 percent of global sea-level rise. The survival of Thwaites has been deemed so critical that the United States and Britain have launched a targeted multimillion-dollar research mission to the glacier. The loss of the glacier could trigger the broader collapse of the West Antarctic ice sheet, which contains enough ice to eventually raise seas by about 10 feet.</p>
	<p>SALEM - "From June 20, 2019, all 11 Republican state senators for Oregon, including Fred Girod, refused to show up for work at the Oregon State Capitol, instead going into hiding, some even fleeing the state. Their aim was to push the vote on a cap-and-trade proposal that would dramatically lower greenhouse gas emissions by 2050 to combat climate change to voters instead of being instituted by lawmakers. The Senate holds 30 seats, but 1 is vacant due to a death. Without the Republican senators, the remaining 18 Democratic state senators could not reach a quorum of 20 to hold a vote. Although several Republican state senators returned to the Senate chamber on June 29, 2019, leading to the cap-and-trade bill being sent back to committee, while other bills were passed, Girod was missing, and it was stated that he would not return for the month's legislative session."</p> <p>Now with wildfires raging in Oregon, climate change has come to Girod's doorstep. Literally. Girod walked around the house that his parents had built in 1968, a year before he finished high school.</p> <p>The only recognizable items in the ash were a metal bed frame in what used to be his bedroom and a metal bowl for logs that stood on the fireplace mantle for logs. He doubts the three cats he left behind are alive – perhaps the toughest loss for him and his wife to bear. He has yet to decide if he'll rebuild. First, he'll have to clean up the property, see what the insurance companies say and check the condition of the trees.</p> <p>The remains of his Dodge diesel truck, recently in "cherry" condition, stood higher up the hill from his house.</p> <p><i>"That's my forever home," Girod said. "That's my forever truck."</i></p>
16	<p>DENVER — Early cold temperatures and snow in Colorado may have destroyed millions of dollars worth of cannabis plants.</p> <p>The drop of about 70 degrees Fahrenheit occurred too early in the growing season for farmers to harvest the plants, Marijuana Business Daily reports. CEO Jon Vaught, of a cannabis biotech firm Front Range Biosciences, said the temperatures below freezing Tuesday and Wednesday combined with snow were "catastrophic for growers."</p> <p>At the PotCo outdoor marijuana farm outside Pueblo, co-owner James Lowe said he was ready for low temperatures but unprepared for up to 9 inches of wet snow.</p> <p>The farm has about 7,000 plants trellised together and the heavy moisture collapsed much of the canopy over them. The losses could reach between \$4 million and \$5 million, he said.</p> <p><i>"We were on pace for the largest harvest we've ever had. The weight of it was what ended up being the problem."</i></p>

20	<p>JOURNAL NATURE: The 2019/20 Australian wildfires generated a persistent smoke-charged vortex rising up to 35 km altitude <i>“The Australian bushfires around the turn of the year 2020 generated an unprecedented perturbation of stratospheric composition, dynamical circulation and radiative balance. Here we show from satellite observations that the resulting planetary-scale blocking of solar radiation by the smoke is larger than any previously documented wildfires and of the same order as the radiative forcing produced by moderate volcanic eruptions. A striking effect of the solar heating of an intense smoke patch was the generation of a self-maintained anticyclonic vortex measuring 1000 km in diameter and featuring its own ozone hole. The highly stable vortex persisted in the stratosphere for over 13 weeks, travelled 66,000 km and lifted a confined bubble of smoke and moisture to 35 km altitude.”</i></p>
21	<p>GABORONE, BOTSWANA - Veterinary scientists have confirmed that a bacterial toxin other scientists say is thriving more because of warming temperatures in water bodies as a result of climate change is the cause of massive elephant deaths in Botswana this year. The death toll of elephants in the southern Africa country has subsequently risen to 330, with Monday’s announcement by its Department of National Parks and Wildlife confirming the elephants drank water contaminated by cyanobacteria. The research findings, building on tests conducted in laboratories in Zimbabwe, South Africa, the US, and Canada, represents a ground-breaking and until now elusive scientific explanation that could also provide answers to the yet to be explained deaths of more elephants in neighboring Zimbabwe. Tests detected “cyanobacterial neurotoxins” in the waters of the Okavango Delta within the areas where the elephants were found dead. Climate scientists have been warning about the impact of heating up temperatures on earth including creating environments conducive for the presence of cyanobacteria which favors warmer water temperatures.</p>
22	<p>Tropical Storm Beta crawled Monday night inland along the middle Texas coast, the ninth tropical storm or hurricane to make landfall in the United States in 2020, tying a record. Now a tropical depression, Beta had already unloaded more than a foot of rain Tuesday morning, with torrential downpours generating flash flooding around Houston. Another half-foot or more of rainfall was possible for some, with totals in some spots likely to close in on 20 inches. As Beta continues to drift northeast through Wednesday, “[f]lash, urban, and minor river flooding is likely” the National Hurricane warned.</p>
23	<p>TASMANIA - The majority of a 470-strong pod of pilot whales found stranded off southern Australia has died as rescuers struggled in freezing waters and fading light to free those still alive. The group, which is the biggest beaching in the country's modern history, were first spotted on a wide sandbank during an aerial reconnaissance of rugged Macquarie Harbour in Tasmania state on Monday. Marine scientists said at least 380 of the long-finned pilot whales had died.</p>
	<p>MIAMI - As of September 23, with more than two months left in hurricane season, the Atlantic had already spit out 23 named storms — roughly double its long-term average for an entire season. For only the second time in its history, the National Hurricane Center exhausted its regular list of 21 names last week and began using the Greek alphabet.</p>
27	<p>LAKE JACKSON - Read this out loud to yourself: <i>“a deadly brain-eating microbe”...</i></p>

	<p>Residents have been warned about using tap water after a deadly brain-eating microbe was found in the city's public water supply.</p> <p>Tests confirmed the presence of <i>Naegleria fowleri</i> in the system. The amoeba can cause an infection of the brain, which is usually fatal.</p> <p>Officials in Lake Jackson said they were disinfecting the water supply but did not know how long this would take.</p> <p>Eight Texas communities were originally told on Friday night not to use their water supply for any reason except to flush toilets. An investigation into the city's water supply began after a six-year-old boy contracted the microbe and died earlier this month, Lake Jackson City Manager Modesto Mundo told reporters.</p>
28	<p>NAPA VALLEY -More than 17,000 firefighters continue to battle 25 major wildfires in California, including several new fires that sparked Sunday, including the Glass Fire in the Napa Valley area, which has burned at least one Napa Valley winery.</p> <p>The Zogg Fire, which also broke Sunday, has burned 7,000 acres and evacuation orders have been issued for multiple parts of Shasta County.</p> <p>A Red Flag Warning is in effect through Monday for much of northern California, with <i>"gusty winds and low humidity creating critical fire weather conditions,"</i> Cal Fire noted.</p>
29	<p>NAPA VALLEY -The Restaurant at Meadowood, a three--star Michelin restaurant inside the St. Helena luxury resort, was completely destroyed by the Glass Incident Fire, a fast-moving blaze that has destroyed at least seven area wineries and burned over 36,236 acres.</p>
30	<p>Humans have to slow down greenhouse gas emissions if they want to curb Greenland's ice loss, a new study has found.</p> <p>The research, published on Wednesday in the journal Nature, says the rate of the ice loss in Greenland this century will likely outpace that of any other century over the past 12,000 years.</p> <p>The largest pre-industrial rates of mass loss — up to 6,000 billion tonnes per century — occurred in the early Holocene epoch, according to the study, and it's about equivalent to the rate of modern day ice loss this century, which is around 6,100 billion tonnes per century.</p>
	<p>OCTOBER 2020</p>
1	<p>LUOHE, CHINA - At least 5,000 pets were found dead in cardboard shipping boxes last week at a logistics facility in Central China, likely casualties of a miscommunication in the supply chain of China's thriving mass-breeding industry. Only a couple hundred animals were saved, and authorities have launched an investigation into the grim discovery in Henan Province, a local animal rescue group told CBS News on Wednesday. <i>"The station was cluttered with express boxes with thousands of animals that had already died, and the entire place reeks of rotting bodies,"</i> said Sister Hua, the founder of animal rescue group Utopia. She doesn't use her real name, saying she prefers to keep attention on the animals rather than her personally.</p> <p><i>"It was like a living hell,"</i> she told CBS News in a phone interview on Wednesday. After the rescue operation in Luohe city, Hua and her charity heard about another batch of animals being transported to the nearby village of Dameng. After 13 hours of further rescue operations, the group was able to save about 1,000 more animals, mostly rabbits. But that was only about half of the total number found at the second site.</p> <p>The rest died.</p>

3	<p>NAPA - Now, two major wildfires are raging out of control in Northern California. The Glass Fire has scorched more than 60,000 acres and the Zogg Fire has burnt more than 55,000 acres and killed at least four people. The causes of both fires are under investigation. The Glass Fire in Sonoma and Napa counties is now 61,150 acres and 8% contained, Cal Fire said. Nearly 17,000 Sonoma County residents have been evacuated because of the flames, county officials said Friday. About 17,500 residents are under an evacuation warning. <i>"The Glass Fire continues to burn actively in all fuel models in Sonoma and Napa counties,"</i> Cal Fire said. <i>"Active fire behavior continues to threaten control lines."</i> The Zogg Fire, burning in Northern California's Shasta and Tehama counties, is 56,168 acres and is now 56% contained.</p>
4	<p>NAPA - Glass Fire has now damaged 17 Napa Valley wineries as world-famous region remains under grave threat.</p>
6	<p>CANCUN, MEXICO - Hurricane warnings are in effect for the Yucatán Peninsula between Tulum and Dzilam, Mexico, as well as Cozumel. That's where the National Hurricane Center warns that <i>"extremely dangerous storm surge and hurricane conditions are expected,"</i> with the potential for <i>"areas of significant flash flooding"</i> inland as well. Tropical storm warnings have been issued for portions of western Cuba. As of 2 p.m. Tuesday, Delta was centered 260 miles east-southeast of Cozumel, Mexico. Infrared satellite imagery revealed warming cloud tops near the storm's center, a sign its eye was beginning to emerge. There is a growing chance that Delta could be devastating in Mexico's Yucatán Peninsula, with winds gusting over 140 mph in the hurricane's eyewall. Because Delta's radius of maximum winds is so small but potent, subtle shifts in the storm's track will have enormous bearings on impacts. Delta could become the strongest hurricane to strike Cancun since Wilma in 2005.</p> <p>KAMCHATKA - Russia's easternmost region, has been hit by an ecological catastrophe. Photos of lifeless marine animals strewn along the Pacific coast have been posted on social networks, and local surfers complain of nausea and eye cornea burns. In mid-September, Kamchatka surfer Anton Morozov started experiencing strange symptoms: dry, blurred, painful, and filmy eyes, plus sore throat and swollen ligaments. Morozov had been to a surfer camp on Khalaktyrsky beach — Kamchatka's <i>"calling card"</i> — many times before, but he had never known anything like this. The ocean also tasted <i>"really weird."</i> Bitter, not salty. <i>"After a while, all 20 of us at the camp got poisoned. We decided it was an intestinal infection. It was unparalleled,"</i> said Anton. Social network users began posting videos and photos of different parts of the Kamchatka coast showing hundreds of dead sea animals and mollusks, plus several large and rare octopuses and even one seal. <i>"At around the same time as the first symptoms appeared, military exercises were being held on Khalaktyr beach and in the adjacent water area,"</i> wrote Ekaterina Dyba, an administrator of the surfing school and one of the victims, on Facebook. <i>"This has to do with the nearby naval submarine base, which houses, among other vessels, the latest Borey-class nuclear submarines. Under the NATO classification, the base is called the "hornet's nest" and it lies 50 km from the beach. Meanwhile, the Radygino rocket firing range, where the exercises were held, is a mere 18 km away, and since 1998 has been used to store around 300 tons of rocket fuel."</i> Suspicion also fell on the Kozelsk pesticide landfill, especially after Greenpeace posted</p>

	<p>satellite images of the Khalaktyrka River flowing into the ocean, showing that the river turned a sickly yellow color a month ago on September 9. This landfill is located on the bank of a tributary of the Nalycheva River, on the other side of the beach.</p> <p>According to local media, there have already been leaks from buried pesticides. Regional agronomist Anatoly Fedorchenko said in 2006 that <i>"this amount [20 tons of arsenic] is enough to poison the entire northern Pacific Ocean."</i></p>
7	<p>SACRAMENTO - Wildfires have gotten so extreme in recent years that experts have had to coin new terms to describe their increasingly massive scale. Enter the <i>"gigafire"</i> -- a term for a blaze that burns at least a million acres of land and a level above the <i>"megafire,"</i> which burns more than 100,000 acres. California recorded its first gigafire in modern history on Monday, after the expansive August Complex in the northern part of the state scorched more than 1,000,000 acres. The August Complex is now the largest fire in California's history, according to Cal Fire. California wildfires have burned 4,000,000 acres this year. That's more than double the previous record</p> <p>The fire, which is now burning across several counties, began as a series of separate fires sparked by lightning strikes in August. Those smaller fires later morphed into the larger complex that firefighters are now battling. The blaze is 58% contained as of Tuesday morning.</p> <p>The record set by the August Complex comes during an already record-setting year in California.</p> <p style="text-align: center;">This fire season has also produced five of the six largest wildfires in California's history.</p> <p>CANCUN - Hurricane Delta made landfall just south of the Mexican resort of Cancun on Wednesday, downing trees and knocking out power along the northeastern coast of Yucatan Peninsula, but without immediate reports of deaths or injuries. The U.S. National Hurricane Center in Miami said satellite imagery, radar data from Cuba and surface observations in Mexico indicate that the center of the Category 2 storm came ashore around 5:30 a.m. local time, sustaining top winds of 110 mph (175 kmh). The center said Delta was about to emerge into the Gulf of Mexico after having crossed over the Yucatan peninsula, where it knocked out power to about 266,000 customers, one third of the total in the area.</p> <p>A hurricane watch was issued for the northern U.S. Gulf coast from High Island, Texas, eastward to Grand Isle, Louisiana.</p> <p>Louisiana Governor John Bel Edwards said Delta was expected to make landfall there Friday night or Saturday morning and the entire state is in the storm's possible path. State and local officials in coastal areas were shoring up levees, sandbagging and taking other protections measures, he said.</p>
8	<p>LAKE CHARLES - Hurricane Delta has strengthened to a Category 3 storm as it prepares to make landfall along the Louisiana coast Friday...</p>
9	<p>LAFAYETTE - Hurricane Delta delivered yet another assault of wind and storm surge on Friday on a stretch of the Louisiana coast that had been eviscerated just six weeks ago by</p>

	<p>Hurricane Laura, one of the most powerful storms to hit the state. Delta, which had weakened to a Category 2 storm, made landfall at roughly 6 p.m. local time in Creole, La., sweeping in with 100-mile-per-hour winds, according to the National Hurricane Center. Delta is expected to cut a path similar to that of Laura, which wrought an estimated \$8 billion to \$12 billion in damage, upending lives in communities that were struggling to claw their way back. <i>“People are frustrated, people are emotional, people are fatigued,”</i> said Nic Hunter, the mayor of Lake Charles, where power was finally fully restored this week and where thousands of homes remain uninhabitable. <i>“We just went through a major catastrophe, and in our wildest dreams, no one would have thought that six weeks later we would be going through the same thing.”</i></p> <p>Louisiana has been in the path of six major storms since June, and along with the wildfires in the West, they have brought fresh attention to the effects of climate change, which has likely contributed to the intensity of the storms and the persistence and size of the fires.</p>
10	<p>NEW YORK - The Lancet Commission carried this catastrophic warning to the United Nations:</p> <p><i>“Hunger is rising, with dire forecasts that at least an additional 83,000,000 people—and up to 132,000,000 people—might experience extreme hunger in 2020. COVID-19 could push at least 71 million people into extreme poverty (ie, living on less than US\$1.90 a day), assuming no change in in-country inequality. Additionally, a 1% increase in the Gini coefficient of each country would translate into an extra 19,000,000 people falling into extreme poverty”</i></p> <p><i>The great divide in the outcomes of the epidemic has been the relative success of the Asia–Pacific region compared with western Europe and the Americas. The Asia–Pacific region has largely suppressed transmission and mortality (less than 10 deaths per million). Western Europe and the Americas have had very high transmission and mortality (several hundred deaths per million in several countries). Many low-income countries have suppressed the epidemic, such as Cambodia, Lao People's Democratic Republic, and Viet Nam.</i></p> <p><i>One reason for failure to suppress the epidemic is a style of political leadership that has been called medical populism; Lasco has described political leaders as “simplifying the pandemic by downplaying its impacts or touting easy solutions or treatments, spectacularizing their responses to crisis, forging divisions between the ‘people’ and dangerous ‘others’, and making medical knowledge claims to support the above”. Lasco makes three cases in point: the US President, Donald Trump, the Philippine President, Rodrigo Duterte, and the Brazilian President, Jair Bolsonaro.</i></p> <p><i>We call on governments to prioritise advice from the professional public health community, working in cooperation with international agencies and learning from the best practices of other nations. All countries should combat decisions based on rumour-mongering and misinformation. Leaders should desist from expressing personal viewpoints that are at odds with science.</i></p>
11	<p>MURMANSK - Russian failed to complete testing of its newest and largest nuclear-powered icebreaker Arktika because there is not enough Arctic ice to prove its capabilities. Captain Oleg Shchapin said <i>“We tried to find a three meter thick ice flow but without success.”</i></p>
12	<p>NEW YORK - There has been a <i>“staggering”</i> rise in natural disasters over the past 20 years and the climate crisis is to blame, the United Nations said Monday.</p> <p>Researchers pointed to a failure of political and business leaders to take meaningful action to mitigate the impact of climatic change and stop the planet from turning into <i>“an</i></p>

	<p><i>uninhabitable hell for millions of people."</i></p> <p>Between 2000 and 2019, there were 7,348 major natural disasters including earthquakes, tsunamis and hurricanes that</p> <ul style="list-style-type: none"> - claimed 1,230,000 lives, - affected 4.2 billion people and <p>resulted in \$2.97 trillion in global economic losses, according to the UN Office for Disaster Risk Reduction (UNDRR).</p> <p>That's almost double the 4,212 disasters recorded from 1980-1999, the UN said in its new report <i>The Human Cost of Disasters 2000-2019</i>.</p> <p>The vast majority of those disasters were climate-related, with researchers reporting more flooding, storms, droughts, heatwaves, hurricanes and wildfires in the past 20 years.</p>
13	<p>CANBERRA - Half of the coral populations on Australia's Great Barrier Reef — from "big mamas" to the little baby coral they spawn — have been wiped out in the warming ocean, a new study says.</p> <p>Studying coral as if it were a residential demographic, and counting its abundance over 30 years starting in 1995, four Australian researchers determined that size didn't matter when bleaching events, such as two that occurred in recent back-to-back years, strike the giant reef.</p> <p><i>"The decline occurred in both shallow and deeper water, and across virtually all species — but especially in branching and table-shaped corals,"</i> Terry Hughes, a professor at the ARC Center of Excellence for Coral Reef Studies in Queensland and a co-author of the research paper, said in a statement Tuesday. <i>"These were the worst affected by record breaking temperatures that triggered mass bleaching in 2016 and 2017."</i></p> <p>On some areas of the northern half of the reef, <i>"the abundance of large colonies on the crest dropped" by up to 98 percent</i>, according to the study, published in the journal <i>Proceedings of the Royal Society</i>.</p>
14	<p>PHOENIX - "144 Days" The unrelenting and unprecedented heat that scorched Phoenix all summer has carried over into the fall. Now it has set another blistering milestone: the most 100-degree days ever observed in a calendar year.</p> <p>On Wednesday, the mercury in Phoenix climbed to at least 100 degrees for the 144th time in 2020, surpassing 143 days in 1989 for the most instances on record.</p> <p>A few more such days are likely.</p>
15	<p>FORT COLLINS - The Cameron Peak wildfire in northern Colorado is officially the largest ever observed in the Centennial State, with strong winds pushing the blaze — still just 56 percent contained — ominously close to Fort Collins. <i>"Extreme fire activity"</i> on Wednesday prompted numerous evacuations, with officials citing an <i>"immediate and imminent danger."</i></p> <p>Expanding more than 30,000 acres between late Tuesday and early Thursday, the Cameron Peak Fire, which began August 13, has now charred some 164,140 acres and remains just 56 percent contained. Roaring westerly winds, up to 70 mph, helped it make a single-day eastward run greater than 15 miles.</p> <p>Now it has claimed top spot for the largest wildfire in Colorado history, beating out the Pine Gulch Fire, which also set a record this year, charring more than 139,000 acres. That fire affected northwest Colorado north of Grand Junction after being ignited by a lightning strike July 31 and continued to spread until mid-September.</p>
16	<p>Donald Trump started the day by deciding that California did not deserve emergency status</p>

	<p>because of the wildfires that continue to ravage the state. Once he made it known, Governor Gavin Newsom got through to him by phone and pleaded his case. And Trump relented.</p>
17	<p>TOKYO - Japan is set to officially decide to release treated water from the Fukushima Daiichi Nuclear Power Plant into the ocean amid opposition from a fishing industry worried about its reputation. Keeping water at the site, where the devastating tsunami in 2011 led to three meltdowns, could affect the decommissioning. The government's decision about the disposal of the water, which could come this month, is expected to speed the decommissioning work. As of fiscal 2019, an additional 180 tons of water was being contaminated every day by the high concentration of radioactive substances.</p>
18	<p>MIAMI - An unprecedented fish kill in Biscayne Bay this summer has brought a new push to address issues caused by sea level rise and pollution. Sea-level rise in Miami and southeast Florida is not a new problem. The water in the area has risen 5 inches since 1993.</p> <p><i>"If you look from now till 2040 -- so 20-year horizon -- we're planning on worst case about 11 inches of sea level rise, which if you live in South Florida that's a very frightening thing in your coastal community,"</i> Kevin Lynskey, the department's director, told ABC News.</p> <p>Louis Aguirre, a reporter from Miami ABC affiliate WPLG, recently produced a special about the challenges facing Biscayne Bay.</p> <p><i>"We have over 100,000 septic tanks in Miami-Dade County -- still to this day. And we need to transition those septic tanks and connectors to our sewer system, which is also aging, ASAP because those septic tanks are just spewing wastewater into our groundwater. You know Miami-Dade only stays 6 feet above sea level, so whatever goes through our groundwater goes into our bay, and that's pretty disgusting,"</i> he told ABC News.</p> <p>Biscayne Bay is described as a turquoise paradise that laps at the coast of southeast Florida and kisses the barrier island of Miami Beach. It includes a national park and aquatic preserve to protect wildlife in the area.</p> <p>Rachel Silverstein, executive director of the advocacy group Miami Waterkeeper, called it one of the jewels of the state.</p> <p><i>"Biscayne Bay generates billions of dollars annually for our regional economy,"</i> she said.</p> <p>But the bay is dying.</p> <p>Canals are carrying trash, fertilizer runoff and contamination from failing septic tanks into the bay. Over the summer, all the chemicals running into the bay -- combined with record heat levels -- starved the oxygen out of the water, killing thousands of fish.</p> <p>The city of Miami agrees the problem is serious, but Lynskey said local leaders haven't agreed on a path forward. The department is in the process of raising key infrastructure as high as 20 feet above sea level to reduce risk.</p> <p><i>"Nobody's come up with a magic bullet, we've already built billions of dollars of buildings and infrastructure. How do we make those survive? We're still very much grappling with all that,"</i> Lynskey said.</p>
22	<p>FRASER - The East Troublesome Fire in Grand County, Colorado has grown to roughly 125,600 acres as of Thursday, extending into Rocky Mountain National Park and forcing hundreds of people to evacuate, per the Washington Post.</p> <p>Why it matters: After expanding sixfold over a 24-hour stretch, East Troublesome is now the fourth-largest wildfire in state history and is expected to worsen due to a severe drought and record heat. This is all happening while the new record-holder for largest wildfire in the state, the Cameron Peak Fire, continues to burn in the Fort Collins area.</p> <p>The state of play: Three of the four biggest fires in Colorado history — Cameron Peak, Pine</p>

	<p>Gulch and East Troublesome — have occurred in 2020. "The blazes have burned the second-most acreage since 2000," AP writes.</p> <p>The National Weather Service Doppler radar depicted a smoke plume towering close to 40,000 feet overhead, which is atypical given Colorado's elevation and cooler average temperatures for this time of year. <i>"That's pretty rare just in the summer for 8,500 feet, let alone late October,"</i> said Nick Nauslar, a predictive services meteorologist with the National Interagency Fire Center in Boise, Idaho.</p>
24	<p>BELLINGHAM - This news stings.</p> <p>A nest of murder hornets was discovered for the first time ever in the US, scientists said — after more than a dozen of the invasive insects have been spotted in the state since late last year. Entomologists attached radio trackers to the hornets and followed them to the nest. The Asian giant hornet home was found in a tree near a house in Whatcom County, Washington, the state's agriculture department announced Friday.</p> <p>Four of the vicious stingers — which can grow up to 2-inches long and can decimate entire hives of honeybees — were captured in the area Wednesday and Thursday, according to the Washington State Department of Agriculture (WADA).</p> <p>The agency said it plans to <i>"eradicate"</i> the nest on Saturday.</p> <p>The Asian giant hornet can deliver painful stings to humans, which can in rare cases be fatal.</p>
25	<p>SACRAMENTO - In preparation for the winds and fire risk, the utility company Pacific Gas & Electric plans to preemptively cut power to about 366,000 customers in 36 counties, or about 1,000,000 residents, on Sunday.</p> <p>Already in the midst of the worst wildfire season on record, California faces the most favorable conditions for instigating large wildfires so far this year, beginning Sunday afternoon and lasting into Tuesday. The combination of hurricane-force wind gusts and extremely dry conditions mean that the potential of a fire starting, and spreading rapidly, is unusually high.</p> <p>In the San Francisco Bay and areas from Sacramento northward, high winds of up to 80 mph are expected in higher elevations, with gusts to 50 mph possible even in downtown San Francisco.</p> <p>The National Weather Service's Storm Prediction Center has designated much of Northern California's fire risk as <i>"extremely critical,"</i> the most severe level on its scale.</p> <p>Humidity levels Sunday night are expected to be in the single digits once the winds begin cranking out of the north and northeast, and the strongest winds will reach lower elevations than usual. The National Weather Service forecast office in Sacramento wrote a foreboding technical forecast discussion on its website Sunday morning, making clear that this event has the potential to be historic.</p>
27	<p>THE LAPTEV SEA - Scientists have found evidence that frozen methane deposits in the Arctic Ocean – known as the <i>"sleeping giants of the carbon cycle"</i> – have started to be released over a large area of the continental slope off the East Siberian coast, the Guardian can reveal.</p> <p>High levels of the potent greenhouse gas have been detected down to a depth of 350 metres in the Laptev Sea near Russia, prompting concern among researchers that a new climate feedback loop may have been triggered that could accelerate the pace of global heating.</p> <p>Methane has a warming effect 80 times stronger than carbon dioxide over 20 years. The United States Geological Survey has previously listed <i>Arctic hydrate destabilisation</i> as one of four most serious scenarios for abrupt climate change.</p>

The international team onboard the Russian research ship **R/V Akademik Keldysh** said most of the bubbles were currently dissolving in the water but methane levels at the surface were four to eight times what would normally be expected and this was venting into the atmosphere.

"At this moment, there is unlikely to be any major impact on global warming, but the point is that this process has now been triggered. This East Siberian slope methane hydrate system has been perturbed and the process will be ongoing," said the Swedish scientist **Örjan Gustafsson**, of Stockholm University.

SIBERIA - For the first time since records began, the main nursery of Arctic sea ice in Siberia has yet to start freezing in late October.

The delayed annual freeze in the Laptev Sea has been caused by freakishly protracted warmth in northern Russia and the intrusion of Atlantic waters, say climate scientists who warn of possible knock-on effects across the polar region.

Ocean temperatures in the area recently climbed to more than 5C above average, following a record breaking heatwave and the unusually early decline of last winter's sea ice.

The trapped heat takes a long time to dissipate into the atmosphere, even at this time of the year when the sun creeps above the horizon for little more than an hour or two each day.

"The lack of freeze-up so far this fall is unprecedented in the Siberian Arctic region," said **Zachary Labe**, postdoctoral researcher at Colorado State University. He says this is in line with the expected impact of human-driven climate change. This year's Siberian heatwave was made at least 600 times more likely by industrial and agricultural emissions, according to an earlier study.

ANTWERP - Escaped self-cloning mutant crayfish created in experimental breeding programmes have invaded a Belgian cemetery.

Hundreds of the duplicating crustaceans, which can dig down to up to a metre and are always female, pose a deadly threat to local biodiversity after colonising a historic Antwerp graveyard.

"It's impossible to round up all of them. It's like trying to empty the ocean with a thimble," said **Kevin Scheers**, of the Flemish Institute for Nature and Woodland Research.

Marbled crayfish, which travel across land and water at night and eat whatever they can, do not occur in nature and are banned by the European Union.

The mutation, which occurred about 25 years ago, means populations can spring up rapidly from just a single *Procambarus virginalis*.

IRVINE - California prepared for more dangerous fire weather Tuesday even as crews fought two fast-moving blazes in the south that critically injured two firefighters and left more than 100,000 people under evacuation orders. Some of the fiercest winds of the season drove fires up and down the state Sunday night and Monday before easing. They were expected to resume overnight and continue into Tuesday morning, although not to the earlier extremes, according to the National Weather Service. Forecasts called for Santa Ana winds up to 80 to 130 km/h over much of Southern California, with strong gusts howling through Orange County, where two blazes sped through brush hills near major urban centres. A fire that broke out around dawn Monday prompted evacuation orders for thousands of homes in the area of Irvine, while a few kilometres away another blaze did the same in the Yorba Linda area. More than 100,000 people were told to flee the fast-moving flames. The latest threats came amid California's worst wildfire season on record in terms of landscape burned, with more than 4,000,000 acres (1,600,000 hectares) scorched since the start of the year, along

	with thousands of homes destroyed and 31 lives lost.
28	<p>VANCOUVER - 16 British Columbian firefighters are back in Canada under quarantine because they caught the virus while fire fighting in northern California.</p> <p>NEW ORLEANS - Hurricane Zeta blasted the coast with powerful winds on Thursday, shredding homes and businesses, knocking down trees and leaving about two million electricity customers without power.</p> <p>The storm moved quickly, making landfall on the Louisiana coast as a Category 2 hurricane on Wednesday afternoon. Before the night was over, officials on the coast had already begun assessing the extent of the damage and deploying workers to begin restoring power.</p> <p>By Thursday afternoon, about 400,000 customers in Louisiana were still without electricity, according to Entergy Louisiana, while more than 500,000 across Georgia, about 465,000 in Alabama, more than 510,000 across the Carolinas and about 80,000 in Mississippi were also without power.</p> <p>Zeta pounded a region that had been left hobbled and exhausted by a long and punishing season that has been one of the most active in more than a decade. It was the fifth named storm to hit Louisiana this year, and the 27th so far in the Atlantic season</p>
30	<p>TOKYO - Hungry bears with a taste for grapes and chestnuts are causing havoc across Japan, and thousands of the animals are ending up dead as a result.</p> <p>Two people have been killed and almost 100 have been injured this year as human-bear encounters soar, according to Environment Ministry data and media reports. Four prefectures have put residents on high alert, with some children carrying bells on their way to school.</p> <p>Farmers are counting the cost this week after bears raided their vineyards and munched through thousands of dollars' worth of premium grapes. Crop losses in many areas are rising.</p> <p>But the news is even more grisly for the bears. More than 9,000 Asiatic black bears have been caught and killed since the start of 2019, according to the Environment Ministry, by far the highest rate since data began in 1950.</p> <p>NEWPORT BEACH - Massive southern California wildfires are still raging, but firefighters are having more success containing them and evacuation orders in Orange County have been lifted.</p>
	NOVEMBER 2020
1	<p>NEW YORK - Exxon announced that it will lay off 15% of its workforce over the next year: about 14,000 employees worldwide.</p> <p>With oil prices in decline and fossil fuels in the crosshairs as global climate concerns grow stronger, Exxon has found itself in a major slump.</p> <p>Yet, despite the company's financial strain, it will remarkably pay over \$3 billion to shareholders via its fourth quarter dividend.</p> <p>CNBC: <i>"On Wednesday the company maintained its fourth quarter dividend at 87 cents per share, although this was the first time since 1982 that it didn't raise its payout."</i></p> <p>This is the current state of obscene corporate greed: paying out over \$3 billion to shareholders, in one quarter alone, while claiming that the company has no money to keep 14,000 workers employed. It's a shameful practice that is becoming all too common in Corporate America.</p>

4	<p>PHOENIX - Thursday's temperature of 99 degrees will go in the record books as the hottest November day in the Valley since 1895.</p> <p><i>"It falls in line with the rest of the year, especially in the summer that we all endured, it's been exceptionally hot,"</i> said Andrew Deemer, a meteorologist for the National Weather Service in Phoenix.</p> <p>Previously, the hottest recorded day in November topped out at 96 degrees, according to the Weather Service.</p>
6	<p>SAN PEDRO SULA - In Central America, Hurricane Eta has killed at least 57 people as the storm caused heavy rains and flooding. Most of the deaths have been in Guatemala, where the Associated Press reports at least 42 were killed due to mudslides. Massive floods were also reported across the Atlantic Coast of Honduras, including in San Pedro Sula, where hundreds of people were evacuated. Yesterday afternoon, videos of a completely flooded San Pedro Sula international airport emerged on social media. At least 13 have died in Honduras.</p>
7	<p>Newly-elected Joe Biden will rejoin the Paris climate accords, according to those close to his campaign.</p>
9	<p>MIAMI - Subtropical Storm Theta became the 29th named storm of the tumultuous 2020 hurricane season on Monday night, breaking a record set in 2005. Theta was about 995 miles southwest of the Azores in the Northeast Atlantic on Monday night and producing maximum sustained winds of 50 miles per hour. <i>"This year has been super active,"</i> said Phil Klotzbach, a research scientist in the department of atmospheric science at Colorado State University. <i>"We've seen a tremendous amount of storms."</i></p>
11	<p>MIAMI -In an act of meteorological defiance, Eta briefly became a hurricane for a time Wednesday morning west of the Florida Peninsula, prompting tropical storm warnings along the Florida Gulf Coast as the intrepid and long-lived system churns northeast. Eta was continuing to churn towards the coast as a tropical storm during the early afternoon. Eta has been around since the end of October and has already made three landfalls, including as a Category 4 in Nicaragua, but the system is having yet another impact in its fourth and final act.</p> <p>Eta will probably make landfall north of Tampa Bay overnight Wednesday into Thursday as a tropical storm, but rain, wind and storm surge impacts were already beginning to manifest themselves along the Florida Gulf Coast late Wednesday morning.</p>
15	<p>MIAMI - Hurricane Iota, a system born Friday in the western Caribbean, has begun a period of rapid intensification as it roils mild waters on its way to landfall late Monday into Tuesday in Central America. The system is forecast to strike Honduras and Nicaragua at major hurricane (Category 3 or greater) intensity, packing "potentially catastrophic" winds, a <i>"dangerous" storm surge and life-threatening</i> inland flooding. Iota is the 13th hurricane of the 2020 hurricane season, a feat matched only once before, and an indicator of the unrelenting extreme activity; an average season produces only a dozen named storms, including five or six hurricanes.</p> <p>MANILA - Dozens are dead and whole villages remain underwater three days after Typhoon Vamco slammed into the Philippines, the third typhoon and fifth tropical cyclone to wallop the region in recent weeks. Vamco wreaked havoc with continuous rain and wind from Wednesday night into Thursday, causing the worst flooding in years and a power outage for millions in the capital region of Manila. The extent of the devastation in northeastern</p>

	provinces is still unfolding.
16	<p>MANAGUA - Hurricane Iota, the strongest Atlantic storm ever observed this late in the year smashed into in northeastern Nicaragua at 10:40 p.m. Eastern time on Monday with catastrophic maximum wind speeds of near 155 miles per hour, according to the National Hurricane Center in Miami. Central America is still reeling from Hurricane Eta, which struck less than two weeks ago and made landfall about 15 miles from where Iota did. Aid workers are still struggling to reach communities cut off by washed-out bridges, downed trees and flooded roads.</p>
17	<p>GENEVA - Global efforts to tackle climate change are currently failing to protect the people who are most at risk, according to new analysis by the International Federation of Red Cross and Red Crescent Societies (IFRC).</p> <p>IFRC's World Disasters Report 2020: <i>Come Heat or High Water</i> shows that the countries most affected by climate-related disasters receive only a fraction of the funding that is available for climate change adaptation and thus struggle to protect people from the aggravating effects of climate change.</p> <p>Over the past decade, 83 per cent of all disasters were caused by extreme weather and climate-related events such as floods, storms, and heatwaves. Together, these disasters killed more than 410,000 people and affected a staggering 1.7 billion people.</p>
19	<p>Greenhouse gases generated by the U.S. economy will slide 9.2 percent this year, tumbling to the lowest level in at least three decades, a new Bloomberg-NEF study says.</p> <p>Battered by the coronavirus pandemic, the stalled economy is projected to have generated 5.9 billion metric tons of emissions, about the same level as 1983, according to the private research organization.</p> <p>As a result, the United States has been inadvertently pushed back on track to meet the commitments the Obama administration made at the Paris climate agreement in December 2015, despite the fact the Trump administration pulled the country out of the pact. Before 2020, the United States had fallen badly behind its targets under the accord.</p>
20	<p>ANCHORAGE (Reuters) - As the world's climate warms, parasite-carried wildlife diseases will move north, with animals in cold far-north and high-altitude regions expected to suffer the most dramatic increases, warns a study published on Friday in the journal Science</p> <p>The study projects increasing spread over the next five decades of wildlife diseases caused by bacteria, fungi, viruses and infectious worms. There are serious implications for humans, said co-author Jason Rohr of the University of Notre Dame, Indiana.</p> <p><i>"We do know that 75% of emerging infectious diseases have a wildlife origin," said Rohr, who runs an ecology and public health lab at Notre Dame. "We should be concerned for our own health when we see studies suggesting that there could be increases in infectious disease in wildlife."</i></p> <p>Climate change is already causing a surge in wildlife diseases, the study notes. And people are already being infected with diseases coming from wildlife, including COVID-19, Rohr said.</p> <p>The study supports the "thermal mismatch" theory of wildlife disease, finding that cold-adapted species are at increased risk when their habitats warm and warm-adapted species are at increased risk when their habitats cool.</p>
24	<p>GENEVA - Greenhouse gas concentrations climbed to a new record in 2019 and rose again</p>

	<p>this year despite an expected drop in emissions due to COVID-19 lockdowns, the World Meteorological Organization said on Monday, warning against complacency. Many scientists expect the biggest annual fall in carbon emissions in generations this year as measures to contain coronavirus have grounded planes, docked ships and kept commuters at home.</p> <p>However, the WMO described the projected 2020 drop as a <i>“tiny blip”</i> and said the resulting impact on the carbon dioxide concentrations that contribute to global warming would be no bigger than normal annual fluctuations.</p> <p><i>“..In the short-term the impact of the COVID-19 confinements cannot be distinguished from natural variability,”</i> the WMO’s Greenhouse Gas Bulletin said.</p>
26	<p>SACRAMENTO - The California fires are back. They never actually got left out on purpose, but Americans tend to need to be spoon-fed, and the Great Divide sucked up all the oxygen. High wind warnings overnight and as many as 100,000 homes will be in the dark.</p> <p>LONDON - Archaeologists have uncovered a haul of ancient artifacts from a melted ice patch in Norway, including a record number of arrows used for reindeer hunting from more than 6,000 years ago. The team found 68 arrows at the Langfonne ice patch in the Jotunheimen Mountains, tracing the artifacts back to various periods of time across thousands of years, from the Stone Age all the way through to the Medieval Period. The discovery included the remains of reindeer antlers, Iron Age scaring sticks used in reindeer hunting and a 3,300-year-old shoe from the Bronze Age. The arrows mark the earliest ice finds in Northern Europe, according to the study's authors.</p> <p>The Langfonne ice patch, where the arrows were found, has retreated by more than 70% over the past two decades as global warming has caused dramatic ice melt, the study says.</p> <p><i>“With the ice now retreating due to climate change, the evidence for ancient hunting at Langfonne is reappearing from what is in essence a frozen archive,”</i> said Lars Pilø, the study's lead author and an archaeologist from the Innlandet County Council, in a statement.</p> <p><i>“The ice melt, sad as it is, provides an unprecedented archaeological opportunity for new knowledge.”</i></p>
	DECEMBER 2020
2	<p>WINDHOEK - Has Covid isolation made you think about getting a house pet? Namibia has put 170 <i>“high value”</i> wild elephants up for sale due to drought and an increase in elephant numbers, the southern African country’s environmental ministry said on Wednesday.</p> <p>An advertisement carried by state-owned daily New Era said an increase in incidents of human-elephant conflict motivated the sale of the large mammal that is at risk of extinction due to poaching and ecological factors.</p>
3	<p>SANTA ANA - A wildfire in Orange County’s Silverado Canyon, the Bond Fire, grows to 2,000 acres, the quickly to more than 7,200 acres, early on December 3, 2020 prompting a number of mandatory evacuation orders from the local fire authority. The blaze began with a house fire.</p> <p><i>“It’s shocking that fire season is still going on into December. It seems like every time there’s winds, a fire breaks out,”</i> said homeowner Patrick Day, whose family was ready to leave by 10 a.m. and planned to stay at a friend’s hotel in Anaheim. <i>“So much of the hillside burned in the last fire and there’s so little left to burn, so I’m not so sure how big of a risk there is to my home.”</i></p>

	<p>COPENHAGEN - <i>"We are now putting a final end to the fossil era,"</i> Climate Minister Dan Jørgensen declared in a statement.</p> <p>In a dramatic deal late Thursday, legislators in Denmark have agreed to stop issuing licences for oil and gas exploration in the North Sea and set a 2050 deadline to end all fossil extraction and exploration in the area.</p> <p>A rough estimate from Jørgensen's ministry put the cost of the announcement at Kr. 13 billion/US\$2.1 billion.</p> <p><i>"The future of Denmark's oil and gas operations in the North Sea has been a political issue after the Nordic country agreed last year on one of the world's most ambitious climate targets of reducing emissions by 70% by 2030 and being climate neutral in 2050,"</i> Reuters reports.</p> <p>Denmark produced an estimated 104,000 barrels of oil and equivalent this year, enough to make it the biggest oil and gas producer in the European Union, which includes neither Norway nor the United Kingdom.</p> <p><i>"Denmark's announcement marks a bold milestone on the way to a phaseout of North Sea oil production,"</i> said Energy Futures and Transitions Program Director Hannah McKinnon.</p> <p><i>"This is a clear signal that climate leadership means an end to fossil fuel expansion and the start of a just transition and managed decline of all production."</i></p>
5	<p>SACRAMENTO - California reports its worst wildfire season on record in 2020, with about 4,200,000 acres burned, more than double the acreage in the previous record-breaking year.</p>
7	<p>LONDON - The world just experienced its hottest November on record while Europe had its warmest fall, according to an alarming report from the European Union's Copernicus Climate Change Service.</p> <p>Temperatures were most elevated in a large region across northern Europe, Siberia and the Arctic Ocean, where sea ice was at the second lowest level ever seen in November.</p> <p>The United States, South America, southern Africa, the Tibetan Plateau, eastern Antarctica and most of Australia also saw temperatures well above average.</p> <p>Globally, November was almost 0.8 degrees Celsius (1.44 Fahrenheit) above the average for 1981-2010, and 0.1C (0.18F) higher than last year. And this unusual heat comes despite the cooling effect of La Niña.</p> <p>In Australia, a bushfire has been burning out of control for six weeks now in the popular tourist spot of Fraser Island as parts of the country swelter through a record-breaking heatwave.</p> <p>"These records are consistent with the long-term warming trend of the global climate," said Carlo Buontempo, director of the Copernicus Climate Change Service at ECMWF.</p> <p>He said November was "an exceptionally warm month" globally and temperatures in the Arctic and northern Siberia remained consistently high while sea ice was near its lowest extent.</p> <p><i>"This trend is concerning and highlights the importance of comprehensive monitoring of the Arctic, as it is warming faster than the rest of the world,"</i> he added.</p> <p>ANCHORAGE - Climate action advocates and wildlife defenders celebrated Monday after the U.S. Court of Appeals for the 9th Circuit rejected the Trump administration's approval of Liberty, a proposed offshore oil-drilling project in federal Arctic waters that opponents warned would endanger local communities, animals, and the environment. <i>"This is a huge victory for polar bears and our climate,"</i> declared Kristen Monsell, oceans legal director at the Center for Biological Diversity, in a statement. <i>"This project was a disaster waiting to happen that should never have been approved. I'm thrilled the court saw through the Trump</i></p>

	<p><i>administration's attempt to push this project through without carefully studying its risks."Despite the win for the region's polar bears in terms of offshore drilling, the animals are still threatened by the Trump administration's ongoing effort to open up the Arctic National Wildlife Refuge to oil and gas extraction — despite opposition from local Indigenous people as well as environmentalists.</i></p>
8	<p>KOBE - The cargo loss is believed to be the biggest weather-related cargo loss in history. The containership ONE Apus arrived at the Port of Kobe, Japan on Tuesday after its eight-day trek from the middle of Pacific Ocean where it lost nearly 2,000 containers during a storm.</p> <p><i>"Chidori Ship Holding LLC as owners and NYK Shipmanagement Pte Ltd as managers of the container vessel ONE Apus (IMO# 9806079) can confirm that the ship is now safely berthed in the Port of Kobe after losing 1,816 containers overboard when it encountered severe weather on Monday, November 30, 2020,"</i> the latest update said.</p>
9	<p>ANCHORAGE - The Arctic continued its unwavering shift toward a new climate in 2020, as the effects of near-record warming surged across the region, shrinking ice and snow cover and fueling extreme wildfires, scientists said Tuesday in an annual assessment of the region. Rick Thoman, a climate specialist at the University of Alaska and one of the editors of the assessment, said it <i>"describes an Arctic region that continues along a path that is warmer, less frozen and biologically changed in ways that were scarcely imaginable even a generation ago. Nearly everything in the Arctic, from ice and snow to human activity, is changing so quickly that there is no reason to think that in 30 years much of anything will be as it is today."</i></p> <p>VENICE - St Mark's Square is under water after a newly installed system of mobile artificial dams failed to activate with flooding that reached a high of 1.37 metres (4.5 feet) above sea level in the afternoon.</p> <p>A massive flood defence system called MOSE aimed at protecting Venice's lagoon during high tide was finally installed in October.</p> <p>The network of water-filled caissons is designed to be raised within 30 minutes to create a barrier capable of resisting a water rise of three metres above normal. But on Tuesday the system failed to swing into action because the forecast erroneously predicted a rise of only 1.2 metres (four feet) above sea level.</p>
	<p>JANUARY 2021</p>
7	<p>SEASIDE - On a chilly December morning, Bree Machuca walks into the entrance of Pacific Grove's Monarch Butterfly Sanctuary. With binoculars in hand, she's searching for the orange and black symbol of the coastal city. Pacific Grove is nicknamed "Butterfly Town, U.S.A." because thousands of western monarchs usually spend the winter there. But this year, its sanctuary is empty.</p> <p><i>"We can't find anything. It's very disappointing because I was expecting at least we'd see maybe a few hundred, I'd see one or two,"</i> Machuca said today.</p> <p>Back in 1997, 45,000 monarchs showed up to the sanctuary. It's an overwintering site, a place where monarchs spend the winter. Eastern monarchs overwinter in Central Mexico and western monarchs come to California's Central Coast. These spots offer "Goldilocks" environments; they're not too hot, not too cold and protection from the wind. Pacific Grove's monarch sanctuary was one of 400 overwintering sites for western monarchs. This winter,</p>

	<p>three-quarters of those sites are empty, according to the Xerces Society for Invertebrate Conservation, an international science-based nonprofit that works to protect monarchs. "I've gone to 23 sites so far this year. I've seen 15 monarchs," said Connie Masotti.</p>
11	<p>CALGARY - Canada's Imperial Oil says it will update its carbon pollution disclosure <i>"in the coming months,"</i> after parent company Exxon Mobil pulled back the curtain for the first time on emissions from the use of its own products.</p> <p>Exxon bowed to investor pressure and released information this week showing the carbon pollution that is generated when its products are used, such as when the gasoline sold at company-affiliated gas stations is combusted inside people's car engines.</p> <p>This measurement of pollution, known by its technical term <i>"Scope 3,"</i> accounts for between 70 and 80 per cent of life cycle emissions for most oil companies, according to the Pembina Institute.</p> <p>Exxon's Scope 3 emissions, the company admitted in its 2021 Energy and Carbon Summary, were equivalent to 730 megatonnes (Mt) of carbon dioxide in 2019. That puts Exxon, one of the largest oil and gas companies in the world, roughly on par with Canada's entire emissions output of 729 Mt in 2018.</p>
14	<p>WASHINGTON - <i>"The last seven years have been the seven warmest on record,"</i> said Ahira Sánchez-Lugo, a climate expert with NOAA's National Centers for Environmental Information. <i>"And the 10 warmest years have now occurred since 2005."</i></p> <p>The year 2020, which witnessed terrifying blazes from California to Siberia and a record number of tropical cyclones in the Atlantic, rivaled and possibly even equaled the hottest year on record, according to multiple scientific announcements Thursday.</p> <p>Experts said that another year as hot as 2016 coming so soon suggests a swift step up the climate escalator. And it implies that a momentous new temperature record — breaching the critical 1.5 degrees Celsius (2.7 degrees Fahrenheit) warming threshold for the first time — could occur as soon as later this decade.</p> <p>In the western United States, the 2020 wildfire season was devastating and deadly, with a total of about \$16 billion in losses, and Colorado and California saw their largest blazes in state history. Five of the six largest wildfires in California history occurred in 2020, including the biggest blaze, known as the August Complex. That fire alone burned more than 1 million acres, becoming the state's first <i>"gigafire."</i> The region was smothered in noxious smoke for months, a severe assault on people's lungs even as they hunkered down because of the coronavirus pandemic.</p> <p>THOUSAND OAKS - Evacuated residents were allowed to return to their homes Thursday night as firefighters continued to battle a wind-driven brush fire burning near homes in Thousand Oaks.</p> <p>The blaze, dubbed the Erbes Fire, erupted on the north side of Erbes Road near Sunset Hills Boulevard shortly after 5 p.m., according to the Ventura County Fire Department. It then exploded to 250 acres by 6:25 p.m. But at about 8 p.m., firefighters said the fire's forward progress had been stopped.</p> <p>Evacuation orders had been issued for several streets east of the 23 Freeway, which drivers were told to avoid. But at about 8:40 p.m., authorities said all evacuations were lifted and residents could return home.</p>
17	<p>WILMINGTON - Joe Biden plans to cancel the Keystone XL pipeline expansion as one of his first acts in office, transition documents suggest, dealing a blow to Canadian efforts to get the</p>

	<p>project built and jeopardizing the prospect of thousands of jobs in Alberta. Rescinding the Keystone XL pipeline is included as an executive order on a to-do list, according to The Canadian Press, which has viewed the documents. Outgoing President Donald Trump in 2017 signed the construction permit, which will now likely be terminated. Though his move is being met with swift criticism in Canada, Biden has been clear in his opposition to the pipeline expansion. He has promised a clean-energy revolution and won the presidency with support from Democrats who want strong action on climate change.</p>
19	<p>SACRAMENTO - Residents of several communities in the Santa Cruz mountains were ordered to evacuate by the local sheriff's office Tuesday morning as California's fire agency, Cal Fire, responded to more than a dozen new vegetation fires across the area. Some of the fires were ignited when power lines were toppled by high winds; others were wind-driven re-ignitions of areas that burned in 2020, Cal Fire said. By midday Tuesday, six fires in the area were still burning.</p> <p>The evacuations came as Californians grappled with the latest example of the reality of climate crisis: red flag warnings – the National Weather Service's highest level of caution for wildfire activity – across much of the state in January. The early start to 2021's fires follows 2020's record-breaking year, which saw wildfires that burned approximately 4.26m acres and killed 33 people.</p> <p><i>"We're not seeing 'fire season' any more,"</i> said Issac Sanchez, battalion chief of communications for Cal Fire Sacramento. <i>"It's just one big fire year, where we can be prepared for and expect a large destructive fire at any point."</i></p> <p><i>"The fact that the winds are blowing is not unusual, but what is unusual is the higher temperatures and dry conditions. We're just not seeing enough rain to turn the corner."</i></p> <p>The warm winter weather has seen decades-old single-day temperature records fall in Los Angeles and San Francisco, according to the National Weather Service. This follows a 2020 that was the hottest year on record, according to Nasa.</p> <p>Local utilities have turned off the electricity for tens of thousands of residents, most of them in southern California, due to the risk of high Santa Ana winds downing power lines and igniting fires. An additional 260,000 customers are at risk of losing their power in southern California, according to Southern California Edison.</p>
20	<p>THE WHITE HOUSE - Biden sat in the Oval Office and signed a sweeping executive order to rejoin the Paris Agreement and undo Trump's rollback of greenhouse gas policies. The administration also rescinded the permit for the controversial Keystone XL pipeline. The line transports crude from the western Canadian province of Alberta to refineries in Illinois and Texas and to other oil facilities in Oklahoma.</p> <p>CALGARY - Tools down. Construction on the Canadian-owned Keystone XL pipeline is being suspended in anticipation that new U.S. President Joe Biden will soon revoke a 2019 permit allowing construction of the controversial project.</p> <p>The climate order will also initiate a major review of the Trump administration's rollback of environmental and public health protections. It will scrutinize <i>"federal regulations and other executive actions taken during the last four years that were harmful to public health, damaging to the environment, unsupported by the best available science, or otherwise not in the national interest,"</i> according to a description of the executive order provided by the Biden transition.</p>

	<p>The review will include the Trump administration’s weakening of endangered species protections, forest management, oil and gas emissions standards, and myriad pollution control standards.</p> <p>It will place a temporary moratorium on all oil and gas drilling in the Arctic National Wildlife Refuge and will advance oil and gas methane regulations, energy efficiency standards for appliances, and the air toxic rule for power plants.</p> <p>It will also review the Trump administration’s weakening of vehicle emissions standards. Environmental groups praised the announcement yesterday but said more could be done. Rainforest Action Network Executive Director Ginger Cassady:</p> <p><i>“As we celebrate this long delayed victory of people power over the fossil fuel industry, it is important to be clear that truly moving the climate needle forward will require following through on the logic of climate science and Indigenous land rights that makes KXL unacceptable. This means cancelling Enbridge’s equally destructive Line 3 tar sands pipeline, as well as the [Dakota Access] pipeline and other oil and gas export projects that would commit our economy to years of future dependence on fossil fuels.”</i></p>
22	<p>Gun-toting Republican Lauren Boebert has introduced a bill to block the Paris Agreement, calling it a "job-killing amendment."</p> <p>Tweet: <i>"My bill prohibits Congress from spending a single penny on the Paris Agreement until this treaty is ratified by the United States Senate. Joe Biden took an oath to uphold the U.S. Constitution. If he wants to keep it, he must transmit the job-killing Paris Agreement to the U.S. Senate for ratification."</i></p> <p>In a tweet this Friday, Boebert invited some internet mockery when she declared that she works for her constituents, <i>"not the people of Paris."</i></p> <p>Lauren Boebert tweet: <i>i work for the people of Pueblo, not the people of Paris."</i></p> <p>Johnny Akzam tweet: <i>"You DO understand the Paris Climate Accord is just the name of it right? It doesn't do anything special for the people of Paris. I mean, you do get that right? You're not really that clueless, serving as a U.S. Congresswoman. Surely you can't be that utterly stupid."</i></p>
23	<p>WASHINGTON - \$16 billion in damage was caused in the U.S. in 2020 by 16 climate-driven disasters, which cost \$1 billion each. That number of disasters of that magnitude has quadrupled in the last three decades.</p>
25	<p>MUNICH - (From the European Geosciences Union)</p> <p><i>"We combine satellite observations and numerical models to show that Earth lost 28 trillion tonnes of ice between 1994 and 2017.</i></p> <ul style="list-style-type: none"> - Arctic sea ice (7.6 trillion tonnes), - Antarctic ice shelves (6.5 trillion tonnes), - mountain glaciers (6.1 trillion tonnes), - Greenland ice sheet (3.8 trillion tonnes), - Antarctic ice sheet (2.5 trillion tonnes), - Southern Ocean sea ice (0.9 trillion tonnes) have all decreased in mass. <p><i>Just over half (58 %) of the ice loss was from the Northern Hemisphere, and the remainder (42 %) was from the Southern Hemisphere. The rate of ice loss has risen by 57 % since the 1990s – from 0.8 to 1.2 trillion tonnes per year – owing to increased losses from mountain glaciers, Antarctica, Greenland and from Antarctic ice shelves. During the same period, the loss</i></p>

	<p><i>of grounded ice from the Antarctic and Greenland ice sheets and mountain glaciers raised the global sea level by 34.6 ± 3.1 mm. The majority of all ice losses were driven by atmospheric melting (68 % from Arctic sea ice, mountain glaciers ice shelf calving and ice sheet surface mass balance), with the remaining losses (32 % from ice sheet discharge and ice shelf thinning) being driven by oceanic melting. Altogether, these elements of the cryosphere have taken up 3.2 % of the global energy imbalance.”</i></p>
26	<p>THE WHITE HOUSE - Biden is poised to impose a moratorium on new federal oil and gas leasing Wednesday. The move will deliver on one of Biden’s boldest climate campaign pledges but will encounter stiff resistance from the fossil fuel industry. The White House has prepared documents that would pause new oil and gas auctions on federal land and water as the new administration reviews the program, these people said.</p>
27	<p>SAN JOSE DEL CABO - Reports of emaciated gray whales have started to come in as the whales arrive at their breeding grounds off of Baja California, Mexico. If the trend continues this will be the third hard year in a row for the North Pacific gray whale population, with hundreds turning up dead in what scientists are calling an unusual mortality event, reports Isaac Schultz for Gizmodo.</p> <p>According to new research published this week, the die-off began in January 2019 and as of the paper's publication, the official death toll stood at 378. To build up the fat reserves the whales need to survive and successfully reproduce during their stay in the balmy southern climes, they have to feed non-stop from May until October. If the whales can’t eat enough to pack on a thick layer of blubber, it can spell doom for the marine mammals, who may die en route to their breeding grounds or lack the energy reserves to make the return trip, according to a statement. In a separate research paper released last week, scientists with the National Oceanic and Atmospheric Administration (NOAA) said that the North Pacific gray whale population as a whole has shrunk by nearly 25 percent since 2016, the Associated Press reports. NOAA researchers counted roughly 6,000 fewer whales last January, for a total of 21,000, compared to 2016 when they saw 27,000.</p>
28	<p>DETROIT - General Motors, the maker of Chevrolet, Buick and Cadillac vehicles said Thursday that all of its passenger cars and sport utility vehicles will be electric starting in 2035, which would make it the first major U.S. carmaker to sunset the internal combustion engine. GM's medium and heavy trucks would still be gas powered.</p>
31	<p>SACRAMENTO - It's not supposed to be wildfire season in California. Yet, a month into 2021, the Golden State has more than doubled the number of wildfires in 2020 – a record-setting year with more than 9,600 blazes that blackened more than 4 million acres. And the number of acres burned on nonfederal land last month was more than 20 times the state’s five-year average for January.</p> <p>While the rain and snow of the past week may make last year’s fire season seem like a distant memory, those numbers are a reminder that wildfires have become a year-round concern in the nation's most populous state.</p> <p>In January, 297 fires consumed 1,171 acres statewide on nonfederal lands, according to the California Department of Forestry and Fire Protection.</p> <p>During the same period last year, there were 97 wildfires that burned 22 acres. The five-year average for January is 108 fires, with 58 acres burned, according to Cal Fire. Though it's too early to predict this year's wildfire season, precipitation totals continue to lag, putting most of the state in an ongoing drought. As of Jan. 26, most of the state was in severe to extreme</p>

	drought, according to the U.S. Drought Monitor.
	FEBRUARY 2021
1	OSLO - Norway's sovereign wealth fund has sold its entire portfolio of companies focused on oil exploration and production, marking a major step away from fossil fuels for the investing giant. Norway's wealth fund, the world's biggest, started turning its back on oil and gas more than three years ago. The intention back then was to diversify away from an industry to which Norway's economy was heavily exposed, with a view to addressing a key financial risk. But the fund's new CEO, Nicolai Tangen , has also made sustainable investing an explicit focus of his strategy, and says all portfolio managers who work for the fund need to operate with that in mind.
2	NEW YORK - A historic winter storm continues to affect the Mid-Atlantic states and the Northeast with heavy snow, strong winds and coastal flooding. The storm brought travel to a standstill in the New York City area on Monday, with closings of coronavirus vaccination sites continuing into Tuesday. In northern New Jersey, parts of New York State, eastern Pennsylvania, and much of southern New England, snow fell Monday at rates of up to three inches per hour, quickly overwhelming crews trying to clear roadways.
3	FALMOUTH - This week's winter storm is part of a pattern caused by disturbances to the upper-atmosphere phenomena known as the polar vortex that can send icy blasts from the Arctic into the middle latitudes, chilling Europe, Asia and parts of North America. The disturbance and its effects have persisted for an unusually long time this year, said Jennifer Francis , a senior scientist at the Woodwell Climate Research Center, with two disruptions of the polar vortex so far this year and, potentially, a third on the way. Research into the interplay of the complex factors that bring on blasts from the polar vortex is ongoing, but climate change appears to be part of the mix. The wild weather has its origins in the warming Arctic. The region is warming faster than the rest of the planet, and research suggests that the rising temperatures are weakening the jet stream, which encircles the pole and generally holds in that frigid air. In early January, a surge of sudden warming hit the polar stratosphere, the zone five to thirty miles above the surface of the planet. The United States has already seen heavy snowfall in the Sierra Nevada and in the Great Plains in the past week. Last month, Madrid was buried under a paralyzing foot and a half of snow, and parts of Siberia suffered an unusually lengthy cold spell with temperatures of 40 degrees below zero Fahrenheit — and one area recorded a temperature of nearly 73 below. (Last summer, some of the same areas experienced record heat.)
4	IQUALUIT - Nunavut Canada reached the first -70C/-94f windchill on earth for this winter today by recording, -70.6C/-95.08f. CAIRO - Using solar power to pump wells, and using the desert sands to collect the power...The Egypt-based Enara group for renewable energy services signed on December 28, 2020, a cooperation protocol with the Chinese Chint energy company to establish a project aimed at locally manufacturing solar panels from silica-rich sand — a first in Egypt. Mohammad Adel , project development manager at Enara, told Al-Monitor over the phone that cooperation with the Chinese company will mark a quantum leap in the field of solar energy in Egypt, considering that the company has great experience in this field and has already installed three solar energy stations in the Benban solar power complex in Aswan

	<p>governorate. He stressed the aim is to implement and equip water wells to be fueled by solar energy through the military production companies supplying the necessary equipment for solar energy systems such as solar panels and stabilizers. And thus the desert can be brought to life.</p>
7	<p>DEHRA DUN - Dozens of people are feared dead in India after a Himalayan glacier broke apart and crashed into a hydroelectric dam, with people hurriedly being evacuated amid rising water levels on a nearby river. Speaking to reporters at a press briefing in Dehra Dun, the capital of Uttarakhand state, Chief Minister Trivendra Singh Rawat said <i>“seven bodies have been recovered from the site and rescue operations are going on”</i>. Om Prakash, Uttarakhand’s chief secretary, said earlier as many as 150 people were feared dead but <i>“the actual number has not been confirmed yet”</i>. <i>“There were 50 workers at Rishi Ganga plant and we have no information about them. Some 150 workers were at Tapovan. About 20 are trapped inside a tunnel. We are trying to reach the trapped workers.”</i></p>
8	<p>DENVER - The U.S. just saw the deadliest week for avalanches in more than 100 years. At least 15 people were killed in avalanches from January 31 to February 6 in Utah, Montana, Colorado, California, Arkansas and New Hampshire, according to the Colorado Avalanche Information Center (CAIC). In total, 21 people have died in avalanches across the country during the 2020-2021 season as of Monday. Last season, a total of 23 people died in avalanches and the U.S. typically sees an average of 27 deaths each year. Ethan Greene, director of the CAIC, said early season snowfall followed by drought — and very little snow — created unstable accumulations of packed snow. <i>“Every time we get another snow or wind event and we put more weight on the snowpack, we get avalanches,” Greene</i> told The Denver Channel. <i>“And just because that underlying weak layer — the snow that fell in October — is now really, really weak, those avalanches are both very easy to trigger and they’re also breaking very wide across terrain features,”</i> Greene told the outlet. They say this is one of the many results of climate change.</p> <p>DEHRA DUN - Rescue teams in northern India continued working early Monday to find survivors after a Himalayan glacier fell into a river, sending a wall of water and rocks down a mountain gorge and crashing through a dam. At least 19 people were killed, and at least 180 more remained missing. The flooding forced the evacuation of several villages in the state of Uttarakhand. About 2,500 people in 13 villages were trapped by the floods. About 30 workers were believed to be trapped inside a tunnel at the larger of two hydroelectric projects in the area. Rescuers drilled through more than 150 yards of the 1.5-mile-long tunnel.</p> <p>Elon Musk is funding a \$100,000,000 innovation contest to identify effective and economical ways to remove and store carbon dioxide. Why it matters: An innovation contest with a nine figure award could help encourage the development of new ways to approach what scientists increasingly agree is one of the most vital ways to address climate change. The \$100,000,000 prize — by far the largest in XPRIZE's history — is sponsored by Elon Musk and the Musk Foundation. The grand prize winner will take home \$50,000,000 with \$20,000,000 going to second prize</p>

	<p>and \$10,000,000 for third prize. Teams will be judged on their ability to produce a working prototype that can remove at least 1 ton per day, with the ability to economically scale to the gigaton level.</p>
9	<p>BIRMINGHAM - More than 8,000,000 people around the world die each year as a result of breathing polluted air that contains particles from fossil fuels, a new study has found. Burning fossil fuels such as coal and oil produces greenhouse gases that trap solar radiation in the atmosphere and cause climate change. But it also releases tiny poisonous particles known as PM2.5. Small enough to penetrate deep into the lungs, these particles can aggravate respiratory conditions like asthma and can lead to lung cancer, coronary heart disease, strokes and early death.</p> <p>Environmental Research on Tuesday, researchers from Harvard University, in collaboration with the University of Birmingham, the University of Leicester and University College London, found that exposure to particulate matter from fossil fuel emissions accounted for 18% of total global deaths -- almost one in five -- in 2018.</p> <p>The figure is much higher than previously thought. As recently as in 2019, scientists were estimating that 4,200,000 people die each year from outdoor airborne particulate matter pollution, a figure that included people who die because of pollution from dust and smoke from wildfires and agricultural fires.</p> <p>The new study shows that in 2018, estimated 8,700,000 deaths were linked to fossil fuel emissions alone.</p> <p>PARIS - In a separate modeling study published in The Lancet Planetary Health journal on Tuesday, researchers found that millions of deaths could be averted by 2040 if countries fully align their policies with their commitments made under the 2015 Paris Agreement to hold global warming below 2 degrees Celsius above pre-industrial levels.</p> <p>The authors found that policies in line with the goals of the Paris Agreement could save 6,400,000 lives by improving diets, 1,600,000 million lives due to cleaner air, and 2,100,000 million lives due to increased exercise. However, because people would experience crossover benefits from cutting air pollution, eating healthier and breathing cleaner air, the authors say it is difficult to estimate the total number of lives that would be saved.</p> <p>CLE ELUM - Trooper Steve Houle, 51, a nearly 30-year veteran of the Washington State Patrol, died Monday, according to the Kittitas County Sheriff's Office.</p> <p>Houle was snowmobiling with a friend in French Cabin Creek, north of Cle Elum in central Washington, when the avalanche occurred shortly before 1 p.m. local time, the sheriff's office said. Houle was the 22nd person in the U.S. -- and first in Washington state -- to die in an avalanche so far this winter season, according to the Colorado Avalanche Information Center.</p>
11	<p>COPENHAGEN - Trapped within the Arctic permafrost there's a whole lot of carbon - potentially up to four times more carbon than the combined amount of CO2 modern humans have emitted.</p> <p>It's one of the reasons scientists are so worried about the Arctic melting - as the ice goes, this carbon will be released. But now a new study has shown that a melting Arctic may actually unleash far more carbon than even our worst-case models have predicted.</p> <p>The amount of extra carbon that could be released, currently trapped and bound by iron,</p>

	<p>could equal up to five percent of all the carbon already in our atmosphere, the team says - that's five times as much as humans pump into the atmosphere each year.</p> <p>"This means that we have a large new source of CO2 emissions that needs to be included in climate models and more closely examined," says Carsten W. Müller, who studies soil organic matter at the University of Copenhagen.</p> <p>"Frozen soil has a high oxygen content, which keeps iron minerals stable and allows carbon to bind to them," explains Müller.</p> <p>"But as soon as the ice melts and turns to water, oxygen levels drop and the iron becomes unstable. At the same time, the melted ice permits access to bacteria. As a whole, this is what releases stored carbon as CO2."</p> <p>Interestingly, the team noticed hints that deeper parts of the soil might contain a higher number of carbon-trapping iron oxides, and this suggests that as the sink collapses, more carbon is set to be released.</p> <p>"The majority of climate research in the Arctic focuses on the amount of stored carbon and how sensitive it is to climate change. There is a great deal less of a focus on the deeper mechanisms which trap carbon in soil," says Müller.</p> <p>As plants spread across thawing tundra, for instance, their expanding root systems could very well activate microbial production of carbon four fold, possibly priming the ground for further melt.</p>
14	<p>A historic Arctic outbreak continues to bring a bone-chilling deep freeze to the central United States, as the coldest air in generations plunges south and is accompanied by snow and ice all the way to the Gulf of Mexico. Some cities will see their lowest temperatures in more than a century as high-impact winter storms roll across the country.</p> <p>Temperatures about 50 degrees below average occupy an enormous swath of the central United States, stretching from the Rockies to the Mississippi Valley and the Midwest. At least 15 states could see temperatures of minus-10 or colder, while lows near the U.S.-Canada border flirt with minus-40.</p> <p>The climax of the cold air outbreak is expected Monday night, when temperatures between minus-10 and minus-15 could pour as far south as the Texas Panhandle, with single digits and teens making it to the Gulf of Mexico. Houston could start early Tuesday at 10 degrees, which would be its coldest reading since 1989. Depending on its effect on agriculture and the broader economy, this cold snap could end up on the list of 2021's billion-dollar weather events because of its wide scope, duration and severity.</p> <p>For the first time, the Weather Service issued a wind chill warning that covers the city of Houston. The warning, in effect from Sunday night through noon local time on Tuesday, calls for wind chills to potentially drop below zero.</p> <p>There was a chance that Austin could see more snow from the system than the 4.5 inches Washington has measured this winter.</p> <p>Five to 10 inches of snow was expected in Oklahoma City, where single-digit temperatures dropping below zero Sunday night were expected to lead to a fluffy powder and winds were forecast to lead to blizzard conditions at times. Oklahoma City may hit minus-11 on Tuesday morning, a temperature not observed there in 116 years</p> <p>Grand Forks, N.D., hadn't reported a temperature above zero since Feb. 6 and probably won't until at least Monday afternoon. Saturday's high temperature was minus-12, up from a</p>

	<p>morning low of minus-27. Minneapolis had dropped below minus-10 degrees seven of the past nine nights, with Sunday's low falling to minus-17. Subzero readings had also been observed in Omaha, Des Moines and Chicago, while International Falls, Minn., set a daily record early Saturday at minus-42 degrees.</p> <p>BOTTINEAU - The temperature here in North Dakota fell to minus-51 degrees Saturday morning, an all-time record. Bismarck reported a low of minus-28 early Saturday and was sitting at minus-25 to start Sunday morning.</p>
15	<p>Nearly 154,000,000 people in the United States were under some sort of winter weather alert Monday, according to the National Weather Service. Icy roads, power outages and dangerously low temperatures were making life miserable.</p> <p>A severe cold snap has turned the central and southern parts of the country into an extension of the Arctic, with dangerously low temperatures not seen in decades and a blast of snow and ice which has shut down population centers in multiple states.</p> <p>The excessive cold has sent energy demand skyrocketing.</p> <p>In Texas, 2,800,000 customers were without electricity as of 1:30pm amid the punishing cold. On Monday, the temperature in Dallas was a high of 14 degrees, about 50 degrees lower than normal for February. Experts have attributed this weather to a mass of cold air from the Arctic</p> <p>The mercury plummeted in the Lone Star State on Sunday night while it was blitzed by snow and ice, causing nearly impossible driving conditions and hundreds of vehicle accidents. Officials have urged residents not to travel, as social media videos proliferated of cars and trucks sliding down roads out of control.</p> <p>Houston's Bush Intercontinental and Hobby airports were closed, while all flights out of Austin-Bergstrom International Airport were also canceled Monday morning.</p> <p>The economic toll on agriculture could be staggering, with meteorologists in the insurance industry expecting this event, which should go through the end of the week, to end with a billion-dollar cost.</p> <p><i>CNN Tweet: Winter weather isn't the only threat across the US today. A tornado watch is in effect for portions of the Gulf Coast, including southeast Alabama, southwest Georgia and the Florida Panhandle.</i></p>
16	<p>DALLAS - Brandon Friedman, 42, who lives in northeastern Dallas, had been without power since about 2:00am. and had no water despite leaving the faucets open slightly to drip.</p> <p>Speaking to The Washington Post from his car where he was charging his phone, Friedman described his driveway — blanketed in five inches of snow — and his regret at leaving one household item behind for the new residents when he moved from Virginia back to Dallas four years ago.</p> <p><i>"I left our snow shovel hanging up in the garage in Virginia because we weren't going to need it in Texas."</i></p> <p>As the storm moved north into the Ohio Valley on Monday afternoon, so did the problems.</p> <ul style="list-style-type: none"> - In Louisiana, icy conditions prompted authorities to close dozens of highways and bridges, including sections of Interstate 10. - Icy roads were reported in at least 74 of Mississippi's 84 counties, which Governor Tate Reeves told the Weather Channel was complicating efforts to restore power to more than

61,000 residents.

- In Arkansas, Little Rock was paralyzed by a two-inch-per-hour snowfall rate, the National Weather Service reported.

- In Kentucky, Governor **Andy Beshear** sent the National Guard door to door in remote rural communities to urge residents — some of whom have been without power since a storm last week — to move into shelters. **Beshear** urged everyone to take the storm seriously.

*"We did not make it through almost a year of a pandemic to lose people to a snow or ice storm," **Beshear** said in a televised address. "You have more ability to work remotely. You have more ways to connect to one another and get things done. We are looking at coming out of this pandemic by summer, so please do not let the next couple of days or this week be what injures you or causes the loss of a loved one."*

The bitter cold is affecting about 30 states, with temperatures as much as 50 degrees below normal.

Sgt Joker Tweet: *"While Houston Texans need heat, food, and shelter, Joel Osteen's church remains closed...just like it did during and after Hurricane Harvey when people needed help."*

And later...

At least 14 people are dead in four states from the effects of a record-shattering cold snap and series of winter storms since Sunday. In Texas, as the electricity grid struggles to keep pace with record high demand amid a historic cold outbreak, people are turning to unsafe means to heat their homes. A woman and a girl died from carbon monoxide poisoning in Houston after a car was left running in a garage to keep them warm, according to police. The Arctic air has also claimed the life of at least one homeless person in Houston, and a 10-year-old boy died after he fell through ice near Millington, Tenn. A tornado associated with the storm system that helped draw Arctic air to the south struck in North Carolina overnight, killing at least three and injuring 10.

On February 16, just over 73 percent of the lower 48 United States was blanketed in snow, which is the highest percentage since NOAA began tracking snow coverage in 2011. Record snowfall hit Salt Lake City, Detroit and several Texas cities including Austin, Abilene and San Angelo.

Extremely low temperatures also hit regions where people and infrastructure are not accustomed to dangerous cold. While Anchorage, Alaska faced lows of plus-20 degrees Fahrenheit, Kansas City saw lows of minus-ten degrees on Tuesday morning, reports the Washington Post.

- 17 **COLORADO CITY** - The mayor of this small Texas town who told residents they were owed *"NOTHING"* as many went without power or heat during a deadly cold snap has resigned.
- "No one owes you [or] your family anything,"* mayor **Tim Boyd** wrote Tuesday in a since-deleted Facebook post. *"I'm sick and tired of people looking for a damn handout!"*
- "The City and County, along with power providers or any other service owes you NOTHING!"* he said while urging residents to *"step up and come up with a game plan"* for acquiring power or heat.
- "Only the strong will survive and the weak will [perish],"* he added.

	<p>Eric Feigl-Ding Tweet: <i>"FEMA's update on power outages in Texas. No real improvement since yesterday. Vaccination sites have been closed in parts of in these states due to winter storm: TX, OK, KS LA, MO, MN, WI, IL, IN, OH, MI, KY, TN, AL, MS."</i></p>
18	<p>AUSTIN - It's been a marathon week for dangerous winter weather across the Lone Star State, and the third winter storm in a week continues to affect south-central Texas today. San Antonio is under a winter storm warning, while Austin remains under a winter weather advisory, with snow likely to fall most of today.</p> <p>The latest storm will bring snow to a relatively limited region compared with earlier this week, when every county in Texas was under a winter storm warning. San Antonio could see one to three inches of accumulation, with as much as half a foot possible for the Rio Grande plains and the area between San Angelo and Interstate 10.</p> <p>When St. David's South Austin Medical Center ran out of water and lost heat Wednesday, the hospital was forced to ask staffers to use trash bags to remove feces from toilets, KVUE reported.</p> <p>That dire scene captured a growing crisis for hospitals in the state. As scores of Texans remain without power for what could be days, hospitals throughout Texas have now lost water and heat, leaving doctors scrambling to conserve resources and coronavirus vaccine shots while caring for vulnerable residents.</p> <p>Some are now moving patients to other facilities for their safety — if they can find anywhere with the ability to take them amid an ongoing pandemic and power emergency.</p> <p>"No one hospital currently has the capacity to accept transport of a large number of patients," David Huffstutler, CEO of St. David's HealthCare, told The Washington Post in a statement early Thursday.</p> <p>Sen. Ted Cruz and his family flew to Cancun, Mexico, as a winter disaster in his home state left millions without power or water, according to photos posted on social media and confirmed to CNN by a person familiar with the travel itinerary.</p> <p>The same person familiar with the trip confirmed to CNN that Cruz is booked on a flight from Cancun back to Houston on Thursday afternoon.</p> <p>The trip was immediately criticized, including by Texas state Rep. Gene Wu, a Democrat representing southwest Houston, who tweeted a photo of Cruz aboard a flight, saying Cruz was flying south "while the state was freezing to death and having to boil water."</p> <p>Anthony Scaramucci Tweet: @Scaramucci <i>Ted Cruz is the Ted Cruz of Ted Cruzes</i></p> <p>Jim Acosta tweet: Cruz says in statement that he flew down to Cancun with his kids to be a "good dad" and now he's heading back to the US. Later...if you find you're in a hole, stop digging..</p> <p>The president said on Twitter that his administration is sending help to the hardest-hit states. "Jill and I are keeping Texas, Oklahoma, and other impacted states in our prayers," he wrote.</p>

"I've declared states of emergency, authorized FEMA to provide generators and supplies, and am ready to fulfill additional requests. Please heed the instructions of local officials and stay safe."

Biden has approved emergency declarations for Oklahoma and Texas and is reviewing a request from Louisiana, the White House said. Oklahoma Gov. Kevin Stitt (R) thanked the president for "quick action" in approving the request. Stitt asked the White House for help Wednesday and said Biden had pledged federal support in a phone call with the governor. The state's top emergency official, Mark Gower, said record-breaking low temperatures, combined with heavy snow and freezing rain, had strained communities throughout the state and made federal support crucial.

Mississippi confronted mounting power outages on Thursday, as the state's governor described residents confronting "a slow-moving disaster" that has not let up for days. "We are used to hurricanes, tornados, and flooding," Gov. Tate Reeves, a Republican who took office last year, wrote in an extended statement posted on Twitter. "We are not used to this, but we are always ready to come together and protect one another."

More than 100,000 people are still without power in Oregon, where the storm that has crippled the southern United States levied its first strike nearly a week ago. Portland General Electric, the utility responsible for providing electricity to nearly half the state, reported Thursday that about 100,000 customers statewide were without power, more than half of them in the Portland metropolitan area.

The storm, which struck the Pacific Northwest last week before making its way south and east, delivered about six inches of wintry precipitation to Portland over the course of 24 hours, leading ice-coated trees to crash onto cars, homes, power lines and roadways. Dallas resident DeAndre Upshaw said it was "very shocking" when he opened his latest electricity bill.

"While I'm trying to get gas and groceries and make sure that my pipes don't explode, the last thing I'm thinking about is a \$7,000 bill from my utility company," Upshaw told CNN's Fredricka Whitfield via Skype Saturday.

As Texas struggles to recover from a deep freeze that has killed dozens, some customers in Texas like Upshaw are facing unprecedented price hikes in their energy bills as a result of the recent snow storm. Texas officials say they are investigating.

Texas' utility regulator, Public Utility Commission of Texas (PUCT), said Saturday that it is investigating "the factors that combined with the devastating winter weather to disrupt the flow of power to millions of Texas homes." Texas Gov. Greg Abbott is convening an emergency meeting to look into the situation, he said in a statement.

"It is unacceptable for Texans who suffered through days in the freezing cold without electricity or heat to now be hit with skyrocketing energy costs," Abbott said. "To protect families, I am actively working with the Lieutenant Governor, the Speaker of the House and members of the Legislature to develop solutions to ensure that Texans are not on the hook for unreasonable spikes in their energy bills."

20 It's back to Texas for Heidi Cruz and the kids. The family of Lone Star State Sen. Ted Cruz was spotted Saturday afternoon lining up at Cancun's airport for the two-and-a-half-hour flight home. Later Saturday, they were seen dragging their suitcases through a Houston airport. The senator's brood had carried on without him during their Wednesday-through-Saturday

vacation at the Mexican resort, after Cruz himself was shamed into turning tail and abandoning the tone-deaf trip. Cruz has faced massive blow-back for traveling to Cancun, with Houston's own police chief chiding the senator for leaving millions of constituents behind to face historic cold weather, lingering power outages and mounting water shortages. The Electric Reliability Council of Texas, which controls the majority of the state's power, said Friday that it has returned to normal conditions, restoring power to millions of people who had had lost it during a deadly, out-of-the-ordinary winter storm earlier this week. Additionally, temperatures are expected to rise in Texas on Saturday, but the situation remains very serious, with millions of people still facing difficulties accessing clean water.

For more than 24 hours last week, Maria Elisa Pineda's pastel green mobile home outside Houston had no power and heat as temperatures plunged to 9 degrees. On Tuesday, Pineda found her 11-year-old son, Cristian Pavon, dead under a pile of blankets on his own bed — a death authorities suspect was a result of hypothermia.

Now, Pineda is suing two major Texas energy providers, alleging Cristian would not have died had both companies alerted residents that the outages would last several days during the dangerous cold snap.

The lawsuit filed over the weekend, first reported by the Houston Chronicle, also accuses Entergy Texas and the Electric Reliability Council of Texas, known as ERCOT, of failing to protect the state's independent power grid from a historic deep freeze that left millions without electricity, heat and water for days.

While the Texas Senator was doing all this, a Congresswoman from New York City went to work for his constituents, because someone had to. **Alexandria Ocasio-Cortez** raised \$1,000,000 for the people of Texas.

All of it will be distributed to five Texas charities.

- 21 Texas oil refineries released hundreds of thousands of pounds of pollutants including benzene, carbon monoxide, hydrogen sulfide, and sulfur dioxide into the air as they scrambled to shut down during last week's deadly winter storm, Reuters reported Sunday. Winter storm *Uri*, which killed dozens of people and cut off power to over four million Texans at its peak, also disrupted supplies needed to keep the state's refineries and petrochemical plants operating. As they shut down, refineries flared — or burned off — gases in order to prevent damage to their processing units. According to the Texas Commission on Environment Quality, the five largest refiners emitted nearly 337,000 pounds of pollutants in this manner.
- Motiva's Port Arthur refinery released 118,100 pounds of pollutants into the air between February 15 and February 18. This was triple the amount of excess emissions the plant reported to the U.S. Environmental Protection Agency for the entire year of 2019.
 - Valero's refinery in Port Arthur flared 78,000 pounds of pollutants over 24 hours beginning February 15, while Marathon Petroleum's Galveston Bay refinery released 14,255 pounds in less than five hours that same day. **Hilton Kelly**, who lives in Port Arthur, told Reuters that there were "six or seven flares going at one time." **Wilson** said that the flaring "could have been prevented" by winterizing the refineries.
- "We need someone in the Texas legislature to file a bill requiring the oil and gas industry to thoroughly winterize all their equipment," **Wilson** told Earther. "The bill probably won't pass in Texas, but that will create some more scrutiny about it."

- Chemicals released from Texas facilities include over 6,500 pounds of the carcinogen isoprene from a Shell plant in Deer Park near Houston, as well as an indeterminate amount of methane, which is 84 times more harmful to the atmosphere than carbon dioxide over the short term.
- ExxonMobil's Baytown Olefins plant in Baytown released 68,000 tons of carbon monoxide and nearly a ton of benzene in what it called a "safe utilization of the flare system." Critics noted, however, that benzene is harmful to bone marrow, red blood cells, and the immune system.

At least 30 Texans have died so far, including a 75-year-old man whose oxygen machine lost power and an 11-year-old boy who may have perished of hypothermia. Desperate families have tried to stay warm by running generators and grills indoors, leading to more than 450 carbon-monoxide poisonings, many of them in children. Severed from electricity and bare to the frigid weather, Texas's infrastructure suffered a kind of multisystem failure. Pipes began to burst inside homes. Cell networks went down, preventing people from calling 911.

When Texas needs more power, the price of electricity on ERCOT's market increases. For days this week, it approached \$9,000 per megawatt-hour. (A megawatt-hour is enough to power several hundred homes. Today in Washington, D.C., electricity currently costs about \$34 a megawatt-hour.)

Daniel L. Swain

"California has experienced increasingly severe autumn wildfires over the past several decades, which have exacted a rising human and environmental toll. Recent fire and climate science research has demonstrated a clear link between worsening California wildfires and climate change, mainly through the vegetation-drying effect of rising temperatures and shifting precipitation seasonality."

22 **TEL AVIV** - *"Out of 190 kilometers (119 miles) of beach in Israel, 170 kilometers (105 miles) were hit by the ecological disaster,"* the authority said on its Facebook page Sunday. *"The event is not over yet, and tar still continues to emit to the shores."* Israeli authorities are trying to locate the source of a suspected oil spill that has been described as one of the most severe ecological disasters to hit the country, threatening wildlife, forcing beaches to close and prompting a mass cleanup. Blobs of sticky tar started washing up on the country's Mediterranean shores last week. Images posted on official government accounts showed sea birds and turtles covered in tar and sticky oil. *"The enormous amounts of tar emitted in recent days to the shores of Israel from south to north caused one of the most severe ecological disasters to hit Israel,"* the country's Nature and Parks Authority said.

MOSCOW - A tanker sailed through Arctic sea ice in February for the first time, the latest sign of how quickly the pace of climate change is accelerating. The **Christophe de Margerie** was accompanied by the nuclear-powered **50 Let Pobedy** icebreaker as it sailed back to Russia this month after carrying liquified natural gas to China through the Northern Sea Route in January. Both trips broke navigation records. *"I am confident that the Northern Sea Route is competitive, that changes in the ice situation and the improvement of marine technologies create new conditions for its development,"* said **Yury**

	<p>Trutnev, Russia’s deputy prime minister and a member of the supervisory board at Rosatom, the state-owned nuclear corporation that manages the route.</p> <p>The experimental voyage happened after a year of extraordinarily warm conditions in the Arctic that have sent shockwaves across the world, from the snowstorm that blanketed Spain in January to the blast of cold air that swept through Canada in mid-February, moving deep into the South as far as Texas.</p>
26	<p>NEW YORK - Pledges made by so far by countries around the globe to cut greenhouse gas emissions fall strikingly short of the profound changes necessary to avoid the most catastrophic impacts of climate change, the United Nations said Friday.</p> <p>The U.N. analysis comes as presidents and prime ministers face pressure to ramp up the promises they made as part of the Paris climate accord in 2015. Through the end of last year, roughly 75 countries representing about 30 percent of global emissions had updated their initial plans ahead of a key U.N. climate summit this fall in Scotland.</p> <p>But so far, U.N. officials reported Friday, those more ambitious pledges are hardly ambitious enough. Even if countries follow through, their combined impacts would put the world on a path to achieve only a 1 percent reduction in global emissions by 2030, compared to 2010 levels. By contrast, scientists have said that emissions must fall by nearly 50 percent this decade for the world to realistically have a shot at avoiding devastating temperature rise.</p>
27	<p>HALLEY VI STATION, ANTARCTICA - A large iceberg about 20 times the size of Manhattan broke off the Brunt Ice Shelf in the Weddell Sea section of Antarctica during the past day, following the buildup of a large crack in the floating ice during the past decade. The iceberg is about 490 square miles and about 492 feet thick, according to the British Antarctic Survey (BAS).</p> <p>The iceberg is large, but not as huge as the iceberg that calved from the Larsen C Ice Shelf in 2017 and recently threatened to run aground on South Georgia Island.</p> <p>According to the European Space Agency, the most recent calving event on the Brunt Ice Shelf before this one occurred in 1971.</p>
28	<p>PHILADELPHIA - At the 2021 Top Producer Summit, Eric Snodgrass, principal atmospheric scientist at Nutrien Ag Solutions, gave farmers an overview of weather lessons learned from the past several months as well as a longer-term outlook.</p> <p>“This winter wasn’t what we expected,” he says. “We’ve been studying La Nina for 70 years, and normally we’d have colder air out of the Canadian prairies and a wetter Ohio River Valley than what we’ve seen.”</p> <p>While the events of the past 10 days will cause many to remember this winter as very cold with widespread precipitation events, Snodgrass reminded attendees that the U.S. has had a dry and mild winter.</p> <p>“In the front half of winter—Dec 1 to Feb 1—it was extremely warm. The Northern Plains in the U.S. were quite warm. Temperatures in Canada were 15 to 20 degrees above average continually,” he notes.</p> <p>“It’s the driest it’s been in North Dakota in the past 40 years,” he says.</p> <p>Notable dry pockets. Snodgrass says the latest drought monitor “is very unique.”</p> <p>“Over the last 20 years, we’ve never seen a drought situation looking like this through February. There’s extensive drought in the Northern Plains. There’s exceptional drought in the four-corner states. But there’s little drought in the eastern half of the U.S.,” he says</p>
	MARCH 2021
2	AUSTIN - The largest and oldest power cooperative in Texas is filing for Chapter 11

bankruptcy protection, citing last month's crippling winter storm that left millions of state residents without power. Brazos Electric Power Cooperative, which serves 16 distribution member co-ops that cater to more than 1,500,000 Texans, said Monday that it accumulated \$2.1 billion in bills during the severe cold that hit Texas between February 13 and 19.

With gas-fueled power plants offline, wells frozen, a nuclear power plant shut down and iced-over wind turbines, the state experienced a severe electricity shortage, and wholesale prices for electricity spiked as high as \$9,000 per megawatt-hour. Brazos said it received "*excessively high invoices*" from the Electric Reliability Council of Texas for collateral and for purported cost of electric service. The invoices, totaling \$2.1 billion, were required to be paid within days. That's because as a cooperative, Brazos' costs are passed through to its members and retail consumers served by its members. "*We will probably see a whole bunch of electric providers go out of business, particularly those that offer fixed-rate plans to people,*" **Joshua Rhodes**, a research associate at the University of Texas at Austin, told CBS News. "*If you're selling it for 10 cents a kilowatt-hour and paying \$9 per kilowatt-hour, it doesn't take long to mess up your balance sheet.*"

- 4 **RENO** - Hundreds of butterfly species across the American West are vanishing as the region becomes hotter, drier and more vulnerable to the effects of climate change, according to a study released today.
- In a swath of 11 states, from California to Montana, and from New Mexico to Washington, the populations of a majority of 450 butterfly species are dropping, according to observations by professionals and amateurs stretching back to the 1970s.
- The loss of butterflies across Western forests and prairies, like the similar drop in bumblebees nationwide due to rising temperatures, is troubling because both insects play a key role in pollinating crops and wildflowers.
- And the findings may add to fears among researchers of a broader die-off of insects that could be underway everywhere from Germany to Puerto Rico and beyond — a potential and debated bugpocalypse that threatens to upend ecosystems across the world.
- In the United States, the alarming butterfly decline is most evident in Western areas where balmy summer temperatures creep well into the fall, drying out vegetation and potentially disturbing the seasonal cycles of the fluttering insects as they prepare for cooler months.
- "The influence of climate change is driving those declines, which makes sense because they're so widespread,"* said **Matt Forister**, a biology professor at the University of Nevada at Reno and co-author of the study published in the journal Science. *"It has to be something geographically pervasive."*
- DUBLIN** - The Gulf Stream - one of Earth's major climate-regulating ocean currents - is moving slower than it has in thousands of years, a new study suggests. Human-induced climate change is largely to blame. Global warming increases annual rainfall and accelerates the melting of ice sheets, including the Greenland Ice Sheet in the North Atlantic. Both of these factors dump ever greater amounts of freshwater into the ocean, reducing the density and salinity of the surface water at the northern end of the Gulf Stream conveyor belt.
- According to the researchers, this freshwater inhibits how quickly the water can sink and begin its journey back south, weakening the overall flow of the AMOC.
- This "*unprecedented*" slowdown could impact weather patterns and sea levels on both sides of the Atlantic, the researchers found. And it only looks poised to worsen over the coming decades if climate change continues unabated. Indeed, if global warming persists at its current pace, the Gulf Stream could pass a critical "*tipping point*" by the year 2100, lead study author **Levke Caesar**, a climatologist at Maynooth University in Ireland, said,

	<p>potentially causing the current to grind to a halt, regardless of the climate. This disruption could unleash rising sea levels along the coasts of North America and northwestern Europe, and usher in more extreme weather such as heat waves and cyclones. <i>"If the Gulf Stream crosses its tipping point, it will continue to weaken even if we have managed to stop global warming," Caesar told Live Science. "Afterwards, it will slow down by a lot, coming close to a complete shutdown of the circulation."</i></p>
5	<p>WASHINGTON - The United States would cut its greenhouse gas emissions 50% from 2005 levels by 2030 and count on a clean electricity standard to achieve a 100% clean energy grid by 2035 under legislation reintroduced this week by Democrats in the U.S. House of Representatives.</p> <p><i>"Today's introduction of the CLEAN Future Act promises that we will not stand idly by as the rest of the world transitions to clean economies and our workers get left behind, and that we will not watch from the sidelines as the climate crisis wreaks havoc on Americans' health and homes,"</i> said House Energy and Commerce Committee Chair Frank Pallone (D-NJ). The US\$565-billion, 10-year program includes \$500,000,000 for electric vehicle charging stations and other equipment and \$2.5 billion per year to shift the U.S. school bus fleet to zero-emission vehicles, The Hill writes. It lays out energy efficiency targets and standards for buildings and directs <i>"more funding for energy efficiency in schools, homes, non-profits, and infrastructure."</i></p>
6	<p>AUSTIN - <i>"The entire energy sector failed Texas. We know we can do better and we must do better to make sure that this never happens again,"</i> said Mauricio Gutierrez, chief executive of NRG, while testifying before Texas lawmakers. <i>"We did suffer our share of unit problems ... for that reason, we own it. We did not perform as well as I would have hoped."</i></p> <p>The corporate and municipal owners of more than 30 power-generation plants in Texas appear to have failed to adequately heed a decade of warnings to better prepare for deadly winter weather, contributing to their malfunctions or shutdowns during last month's historic winter freeze that led to statewide power outages and a humanitarian crisis. Facilities owned by Fortune 500 energy giants NRG, Calpine Corporation and Vistra Corporation, all headquartered in Texas, and the Chicago-based Exelon, experienced shutdowns during last month's winter storm as well as during the state's last historic cold snap a decade ago, according to a review by The Washington Post.</p> <p>In testimony to state lawmakers, documents for shareholders and statements to The Post, the companies have said that last month's problems occurred at least in part due to a failure to properly winterize equipment — in other words, to implement certain upgrades designed to protect power infrastructure from the cold. The same issue contributed to their shutdowns back in 2011.</p> <p>At least 50 residents died just in the Houston region due to circumstances related to the plunging temperatures and power outages, the Houston Chronicle reported. Hundreds of thousands across the state still lacked clean water earlier this week.</p>
8	<p>JACKSON - After a winter storm caused record low temperatures and snowfall across the U.S. in February, thousands of residents in Jackson, Mississippi, lost water in their homes. As the city slowly fixes water breaks, some residents are now in their fourth week without water.</p> <p>Tens of thousands of Jackson's 160,000 residents went weeks without water after the storm, and the rest of the city was, and still is, under a boil-water advisory. Last week, the city's public works director Charles Williams said that a quarter of the city, or about 10,000</p>

connections, still lacked water. As of Friday, the city had restored connections to 42,000 customers total and fewer than 5,000 customers still lacked water.

The crisis is also connected to climate catastrophe. The February storm was almost certainly a result of the climate crisis causing unusual weather patterns and increasing the frequency of extreme weather, which Lumumba has acknowledged. The city's infrastructure, much like the energy infrastructure in Texas, was not ready for the cold temperatures that suddenly hit the state.

"Not only do we need this investment because of the aging infrastructure," Lumumba said earlier this month, "we need this investment because of the increased pressure that these extreme weather conditions are taking." Lumumba has requested \$47 million in emergency funding from Republican Gov. Tate Reeves for needed water infrastructure updates.

Coastal communities are experiencing sea level rise four times worse than global water rise, according to a new study released Monday.

Groundwater pumping, extraction of materials from the ground and sediment production are all happening near the coasts and that is causing the land to actually sink -- compounding the effects of a rising sea level.

It is no coincidence that these are the same locations where people live, worsening the impacts and increasing the vulnerability.

Many of the largest, most populated cities in the world are built along the deltas of major rivers, where there is the added exposure of rivers connecting to the ocean.

This is the first ever study that factors in land subsidence into current sea level rise observations globally.

"We've actually quantified (sea level rise) and are able to get the relative magnitude. And it's surprising -- it's surprisingly large. We're making the point that climate change is bad and climate induced sea level rise is bad," Robert Nicholls, lead author of this research and director of the UK's Tyndall Centre for Climate Change Research, told CNN.

"But we have this additional process that is making things even worse. And of course, these things add up. It doesn't really matter whether the sea rises or the land sinks, the people living on the coast still have the same impacts."

9 **BERKELEY** - Seems we have progressed beyond the tipping point.
"Environmental Research Letters"
"Even under a "best case" scenario where greenhouse gas emissions are rapidly reduced in the coming decades and global warming is limited to 2 degrees Celsius, climate change will still drastically increase the size and likelihood of destructive wildfires globally, according to a new international study published in Environmental Research Letters.
It's essential to reduce warming as much as possible to avert wildfire catastrophes, according to the study's authors. Limiting warming further by even half a degree — to 1.5 degree Celsius, the rosier of climate projections — would substantially reduce the danger of fire across the most populated continents, including in the African Sahara as well as the Amazon rainforest, which saw alarming outbreaks of forest fire in 2019 and 2020. Climate disruption contributes to heat waves, droughts and other factors that create prime conditions for wildfires and lengthen regional fire seasons — fueling a dangerous "feedback loop" as fires put more carbon dioxide into the air.
In the western U.S., for example, researchers have found human-caused climate change caused hotter, drier conditions that doubled the number of acres of land and forest burned since the mid-1980s. The number of dry, hot and windy autumn days that are perfect weather for fires has doubled in California, which saw its worst fire season on record last year. Climate

	<i>change has extended the annual fire season in the U.S. by an average of 78 days since 1970, draining firefighting resources at both the state and federal levels."</i>
11	<p>MIAMI - In the first six weeks of the new year, 317 manatee deaths were reported across Florida, CBS Miami reported. Since then, that number has risen to at least 432 deaths — about three times the normal amount of deaths in the state by this time of year, The Weather Channel reported. The five-year average for manatee deaths is 578. The first few months of 2021 have been extremely deadly for manatees as food sources in Florida have become increasingly limited, scientists say.</p> <p><i>"This is the worst that I've ever seen,"</i> Phil Stasik, who witnessed 13 manatee carcasses washed up on the shore of the Indian River Lagoon in Merritt Island while kayaking, said in an e-mail to Florida Today, according to The Weather Channel.</p>
12	<p>BOULDER - A major snowstorm is on the move and it will severely impact parts of Colorado, Wyoming, Nebraska and South Dakota this weekend. So much so that the National Weather Service in Cheyenne, Wyoming, had some bold words: <i>"The snowfall totals currently forecast are absolutely historic."</i></p> <p>More than 5,000,000 people across this region are under winter weather alerts. The latest weather models clearly show areas of snow accumulating 20 to 40 inches deep along the foothills and front range from Denver to Cheyenne.</p> <p>LATHAM - A fast-growing U.S. maker of hydrogen fuel cells has signed a deal to produce green hydrogen by using hydroelectricity from Brookfield Renewable Partners LP's Holtwood power plant in Pennsylvania, as the industry touts the dawn of an energy revolution. Plug Power Inc. , based in upper New York State, has ambitious plans over the next eight years to build and install electrolyzers, which generate green hydrogen by using renewable electricity. Through a process known as water electrolysis, hydrogen is captured as fuel after being split from oxygen.</p>
13	<p>NEW YORK - UN Secretary-General Antonio Guterres says time is running out for the world to act on climate change.</p> <p>The UN chief issued a video message on Saturday, two years after Tropical Cyclone Idai made landfall in Mozambique, leaving more than 700 people dead in the southeastern African nation and nearby countries.</p> <p>Guterres said Mozambique has since been hit by other cyclones.</p> <p>He warned, "Tropical storms are becoming more intense and more frequent. Parts of Africa are warming at twice the global rate." He said, "The force of the storm is a reminder that time is running out for the world to act on climate change."</p> <p>Guterres urged countries to take immediate action to mitigate global warming.</p> <p>He also expressed concern that Mozambique and other low-income nations that emit less greenhouse gases are the least responsible for climate disruption, but yet are on the front line of climate change.</p> <p>His statement appears to be urging advanced countries that are major emitters to help poor countries prepare for natural disasters and fight climate change.</p>
14	<p>Peat fires emit large amounts of carbon dioxide. A record 244 million tons of CO2 equivalent were released by fires near the Arctic Circle, mainly in Russia, in the 12 months through last August, according to the British journal Nature. That is 35% more than a year earlier and equal to 21% of Japan's total emissions in 2017.</p>

	<p>In Siberia, plants and other organisms that have been decomposing for more than 10,000 years are trapped in the soil as CO₂ and methane gas. These gases are released by fires and other events, further accelerating global warming. The world's permafrost zones are thought to contain twice the amount of carbon that is in the atmosphere.</p>
15	<p>DENVER - A record-breaking blizzard hammered Colorado, Wyoming, and western Nebraska with high winds and heavy snow, bringing travel in the region to a halt. The National Weather Service issued an emergency alert calling for people to avoid driving because road conditions were extremely dangerous. Parts of northern Colorado got 24 inches of snow. Nearly 20 inches fell in Denver over just two hours. About 35 inches fell in Wyoming west of Cheyenne. Tens of thousands of customers lost power in northern Colorado, and airlines canceled about 1,900 flights at Denver International Airport on Saturday and Sunday.</p>
16	<p>WASHINGTON - Ahead of the storms Wednesday, the National Weather Service Storm Prediction Center declared a very rare Level 5 out of 5 "high risk" of severe thunderstorms highlighting the exceptional intensity and widespread nature of the anticipated outbreak. By Wednesday night, the Storm Prediction Center had received 129 reports of severe weather, including 21 tornadoes, some of which led to serious damage of homes and businesses in Alabama and Mississippi.</p> <p>Over 40,000,000 Americans from Texas to Georgia were at risk of severe weather on Wednesday, including nearly 1,500,000 residing in the top-tier high-risk zone, which spanned extreme northeast Louisiana, central Mississippi and western Alabama, and includes Birmingham and Tuscaloosa, and Jackson.</p> <p>Government agencies on both sides of the U.S.-Canada border are gearing up to battle the Asian giant hornet this year in Washington state and British Columbia, and they are hoping to enlist an army of citizens from both countries to join the fight. The invasive insects, which can decimate local honeybee hives and threaten crops that rely on pollination, are native to eastern Asia and Japan. They were first spotted in British Columbia and Washington state in 2019.</p> <p>Since then, the Washington state Department of Agriculture and the British Columbia Ministry of Agriculture have been trying to track down the insects, also known as "murder hornets," and eradicate them. If left unchecked, it's feared that the hornets could invade all of western Washington, western Oregon and southwestern B.C. within 20 years.</p> <p>OTTAWA - The Canadian government is investing \$132,900,000 million for a Canada-Africa climate fund targeted to boost women's economic rights and clean growth solutions on the continent.</p> <p>International Trade Minister Mary Ng and International Development Minister Karina Gould made the announcement following the end of a three-day Clean Growth virtual symposium co-hosted by Canada, Senegal and Ethiopia.</p> <p>NEW YORK - <i>"Climate change is having a growing impact on the African continent, hitting the most vulnerable hardest, and contributing to food insecurity, population displacement and stress on water resources,"</i> said Petteri Taalas, secretary-general of the UN World Meteorological Organization.</p> <p><i>"In recent months, we have seen devastating floods, an invasion of desert locusts and now face the looming spectre of drought because of a La Niña event. The human and economic toll has</i></p>

	<i>been aggravated by the COVID-19 pandemic.”</i>
18	<p>WASHINGTON - Nuclear-powered electricity generation surpassed coal-fired generation for the first time on record last year, according to an analysis released this morning by the U.S. Energy Information Administration (EIA). In 2020, natural gas generated 1.6 billion megawatt-hours (MWh) and nuclear power plants generated 790,000,000 MWh, while coal-fired electricity was third with 774,000,000 MWh, according to the EIA. As of 2020, nuclear power in the U.S. had 97 gigawatts of capacity, less than half that of coal, but with a 93 percent capacity factor, more than that of coal. Last year was the first time since at least 1949 that coal was neither the largest nor second-largest source of annual electricity generation in the country.</p>
20	<p>BEIJING - The China Meteorological Administration announced a yellow alert, saying sandstorms had spread from Inner Mongolia into the provinces of Gansu, Shanxi and Hebei, which surrounds Beijing</p>
21	<p>SYDNEY - The Australian government has declared a natural disaster in large swaths of New South Wales as heavy rains batter the state and force thousands to evacuate. Rains have been inundating communities since Thursday, but parts of the east coast tipped into crisis on Saturday as a major dam overflowed, adding to swollen rivers and causing flash flooding. The NSW and federal government have signed 16 natural disaster declarations in areas spanning the central and mid-north coast, from Hunter Valley near Sydney to Coff's Harbour, said NSW Emergency Services Minister David Elliott in a news conference on Sunday.</p>
24	<p>NEW ORLEANS - <i>"Rainfall totals of 6 to 8 inches are possible,"</i> according to the NWS Weather Prediction Center (WPC). 5,000,000 people across parts of southern Louisiana, Mississippi and Alabama are under flash flood watches until Thursday.</p> <p>JACKSON - For the second time in eight days, an outbreak of dangerous storms, including the possibility of strong tornadoes, is shaping up across the Deep South ahead of a potentially volatile atmospheric setup. A number of twisters, as well as large hail and damaging winds, may sweep across Mississippi, Alabama and Tennessee on Thursday, lasting into Thursday night before the threat diminishes Friday morning. The National Weather Service Storm Prediction Center has issued a level 4 out of 5 risk for severe weather, highlighting the threat of <i>"a potential outbreak of severe storms including several long track strong tornadoes."</i></p>
25	<p>BIRMINGHAM - An outbreak of severe weather, including damaging and deadly tornado activity, is ongoing across the South Thursday after a barrage of roughly 50 tornadoes tore through the region last week. The National Weather Service has declared a rare level 5 out of 5 <i>"high risk"</i> of severe thunderstorms, highlighting a volatile atmospheric setup with the potential to yield widespread and destructive storms. Through this afternoon, a tornadic thunderstorm had carved a 100-plus mile path across north central Alabama into northwest Georgia, spawning multiple twisters while passing south of Tuscaloosa and then south and east of Birmingham. The tornadoes left behind pockets of severe damage along with reports of injuries and fatalities. In Calhoun County, east of Birmingham and near the Georgia border, authorities reported</p>

	<p><i>“significant damage”</i> in the town of Ohatchee and braced for still more dangerous weather. An official county’s emergency management agency said they have heard reports of fatalities, but have not yet been able to confirm how many people have been killed. <i>“The large tornado that passed south of Tuscaloosa is now roaring east into the zone about 40 miles south of Birmingham where a tornado emergency is in effect until 6 p.m. The emergency includes Montevallo, Wilton, and Calera, Ala. as the confirmed “destructive” tornado heads east at 50 mph. This is a particularly dangerous situation,”</i> the Weather Service warned.</p>
26	<p>ATLANTA - An outbreak of severe weather, including several destructive tornadoes, swept across the South Thursday, killing at least five people in Alabama and one in Georgia. The swarm of storms came after roughly 50 tornadoes tore through the region last week. An extremely volatile atmospheric setup prompted the National Weather Service to declare a rare level 5 out of 5 “high risk” for severe thunderstorms, focused in Alabama but touching several surrounding states. Late Thursday afternoon into early evening, a second long-track, destructive tornado was on the ground for about 100 miles in north central Alabama before it lifted, only about 10 miles south of the first tornadic storm. A tornado emergency was issued for Newnan at 12:10 a.m. Friday, about 35 miles southwest of Atlanta, where the Weather Service wrote <i>“a confirmed large and destructive tornado was confirmed”</i> and radar showed large amounts of debris lofted into the air.</p>
29	<p>ADELAIDE - A group of the world’s top ecologists have issued a stark warning about the snowballing crisis caused by climate change, population growth, and unchecked development. Their assessment is grim, but big-picture societal changes on a global scale can still avert a disastrous future. Their starkly titled article, <i>“Underestimating the Challenges of Avoiding a Ghastly Future,”</i> reads less as an argument than as a rain of asteroids encountered in the course of flying blind on a lethal trajectory. The authors’ stated goal is not to dispirit readers. <i>“Ours is not a call to surrender,”</i> they write, <i>“we aim to provide leaders with a realistic ‘cold shower’ of the state of the planet that is essential for planning to avoid a ghastly future.”</i></p> <p>Put on your shower cap and step into the cold.</p> <p>Humans have altered about 70 percent of Earth’s land surface and ocean.</p> <p>Wetlands have lost 85 percent of their natural area</p> <p>kelp forests have lost 40 percent</p> <p>seagrass meadows are disappearing at 1 percent per year</p> <p>the ocean’s large predatory fish are two-thirds gone</p> <p>coral reefs have lost half their living mass</p> <p>Agriculture has halved the weight of living vegetation on land, driving a diversity loss of 20 percent</p> <p>40 percent of extant plants are currently endangered.</p> <p>Farmed animals and humans now constitute 96 percent of all land vertebrates; only around 5 percent are wild, free-living animals.</p> <p>world’s wild populations of birds, mammals, fishes, reptiles, and amphibians have declined by an average of nearly 70 percent in just the last 50 years, a breathtaking plummet.</p> <p>More than 700 vertebrate species have gone extinct over the last 500 years, an extinction rate 15 times the natural rate.</p> <p>Around 1,000,000 species are now threatened with total extinction.</p> <p>These disruptions and declines have caused the deterioration of soil, air, and water quality; pollination; carbon sequestration; and human health. Other things have increased: floods, fires, the number of malnourished people, plastic pollution, general toxification, and</p>

	<p>infectious epidemics.</p> <p>KYOTO - Cherry blossoms in Washington, D.C. and Japan have already reached peak flowering dates — and the Japanese city of Kyoto recorded its earliest bloom for over 1,200 years, the Washington Post reported on Monday.</p> <p>Why it matters: It fits a longer-term trend spanning decades of Japanese mountain cherry trees flowering earlier, and scientists warn it's another strong sign of the impact of climate change.</p>
31	<p>VANCOUVER - A new study from researchers in British Columbia estimates that Canada will lose \$11.9 billion because of the Trans Mountain pipeline expansion project.</p> <p>The paper from a team at Simon Fraser University's School of Resource and Environmental Management argues there is no likely scenario in which the project would lead to a net benefit.</p> <p><i>"The \$11.9 billion loss to Canada is primarily due to a more than doubling of the Trans Mountain construction costs from the original \$5.4 billion to \$12.6 billion, combined with new climate policies just confirmed by the Supreme Court that will reduce the demand for oil,"</i> lead author and SFU professor Thomas Gunton said in a press release.</p> <p>The Canadian government bought the Trans Mountain pipeline from energy giant Kinder Morgan in 2018 for \$4.5 billion. The SFU study points out that Ottawa has not provided the public with an evaluation of the costs and benefits that led to that decision.</p> <p>The expansion project involves twinning the existing 1,150-kilometre pipeline between Strathcona County, Alta., and Burnaby, B.C. It will add 980 kilometres of new pipeline and increase capacity from 300,000 barrels a day to 890,000 barrels a day.</p> <p>The project is expected to be finished by December 2022, and is currently about 20 per cent complete, according to Trans Mountain.</p>
	APRIL 2021
1	<p>VANCOUVER - A new study from researchers in British Columbia estimates that Canada will lose \$11.9 billion because of the Trans Mountain pipeline expansion project.</p> <p>The paper from a team at Simon Fraser University's School of Resource and Environmental Management argues there is no likely scenario in which the project would lead to a net benefit.</p> <p><i>"The \$11.9 billion loss to Canada is primarily due to a more than doubling of the Trans Mountain construction costs from the original \$5.4 billion to \$12.6 billion, combined with new climate policies just confirmed by the Supreme Court that will reduce the demand for oil,"</i> lead author and SFU professor Thomas Gunton said in a press release.</p> <p>The Canadian government bought the Trans Mountain pipeline from energy giant Kinder Morgan in 2018 for \$4.5 billion. The SFU study points out that Ottawa has not provided the public with an evaluation of the costs and benefits that led to that decision.</p> <p>The expansion project involves twinning the existing 1,150-kilometre pipeline between Strathcona County, Alta., and Burnaby, B.C. It will add 980 kilometres of new pipeline and increase capacity from 300,000 barrels a day to 890,000 barrels a day.</p> <p>The project is expected to be finished by December 2022, and is currently about 20 per cent complete, according to Trans Mountain.</p>
2	<p>NEW YORK - Top U.S. meat and dairy companies, along with livestock and agricultural lobbying groups, have spent millions campaigning against climate action and sowing doubt about the links between animal agriculture and climate change, according to new research</p>

	<p>from New York University. The next goal of the study is to examine how these companies and their lobbying groups have fought climate regulation in Congress and before the Environmental Protection Agency, and to analyze how they've shaped a narrative around animal agriculture's role in climate change.</p> <p>The authors calculated that U.S. agribusiness, which includes meat and dairy companies and also other agricultural companies, spent \$750,000,000 on national political candidates from 2000 to 2020. The U.S. energy sector, by comparison, spent \$1 billion.</p> <p>The same agribusinesses spent \$2.5 billion on lobbying from 2000 and 2019, compared to \$6.2 billion by energy and natural resource companies.</p>
4	<p>PORT MANATEE - Florida Governor Ron DeSantis, state and local officials held a briefing in Manatee County Sunday morning regarding the threat of a catastrophic discharge from the old Piney Point phosphate plant. Officials fear a collapse that could release a rush of polluted water into the surrounding area — and then into Tampa Bay itself.</p> <p><i>“What we’re looking at now is trying to prevent and respond to, if need be, a real catastrophic flood situation,” DeSantis said.</i></p> <p>The governor addressed reports of radioactive wastewater, saying <i>“To be clear the water being discharged to Port Manatee is not radioactive. It is primarily saltwater from the Port Manatee dredge project mixed with legacy process water and stormwater runoff. ... The primary concern is nutrients.”</i> Dr. Scott Hopes, acting Manatee County administrator, said they are now down to 340,000,000 gallons of water left to pump, and if there was a full breach, models show in less than an hour up to a 20 foot wall of water could form. He encouraged those in the current evacuation zone to heed the warning and leave their homes. When asked about the staff and residents at the Manatee County Central Jail, which falls within the latest evacuation area, Hopes said those inside the building have been moved to the second floor of the facility, and sand bags had been placed around the outside of the building.</p> <p>In regards to the future, Hopes said, <i>“We won’t be repairing the liner, we will be depleting the holding ponds of their water and then we will be moving forward to a permanent solution into the future once we mitigate the current risk, which will probably include filling these ponds after they are devoid of their contents and capping them.”</i></p>
5	<p>IRVINE - With the Arctic warming at up to three times the pace of the global average, more lightning storms will invade the High North, igniting wildfires that release carbon dioxide and speeding the transition of flat mossy tundra to brush and forest landscapes that absorb more solar heat energy.</p> <p>Yang Chen, an Earth scientist with the University of California, Irvine and lead author of a study released today in the journal Nature Climate Change that projected the increases in lightning strikes, said the findings were somewhat unexpected, and intensify wildfire concerns in the High North because lightning is the main ignition source in the Arctic.</p> <p><i>“The size of the lightning response surprised us because expected changes at mid-latitudes are much smaller,”</i> he said. More lightning-caused fires would speed a vicious circle of climate-warming changes already under way in vast areas of tundra and permafrost across Siberia and Alaska, he added.</p>
8	<p>SACRAMENTO - It's only early April, but parts of the West are already at mid-July levels of dryness — and scientists are warning that the upcoming fire season could be destructive. Why it matters: This summer will mark one year since the West Coast experienced a historic spate of wildfires. The prospect of another severe fire season, along with concerns about</p>

	<p>water supplies, is raising questions about how to prepare the region for the ravages of climate change.</p> <p>Set against the backdrop of a long-term, human-enhanced drought, the current drought is forecast to expand and become more severe across much of the West, from Colorado to Montana, southwestward to California and Arizona.</p>
13	<p>WASHINGTON - More than 300 businesses have signed an open letter calling on the Biden administration to reduce greenhouse gas emissions in the United States to at least half of 2005 levels by 2030. That would nearly double a previous target set by former President Barack Obama in 2015, who pledged a 25 to 28% reduction by 2025.</p> <p>The United States is not currently on track to meet either goal.</p> <p>The signatories include some of largest companies in the United States, including Walmart, Apple, McDonald's and Starbucks. <i>"A bold 2030 target is needed to catalyze a zero-emissions future, spur a robust economic recovery, create millions of well-paying jobs, and allow the U.S. to 'build back better' from the pandemic,"</i> the letter said, echoing the president's economic recovery slogan.</p> <p>A 50% reduction target would put the Biden administration in line with what groups such as the United Nations and National Academies of Science say is necessary to mitigate the worst impacts of climate change.</p> <p>So far, the White House has not indicated exactly how ambitious their plan will be. An announcement is expected in the coming days as the White House prepares for its Earth Day climate summit with world leaders.</p>
14	<p>DENALI - The Muldrow Glacier, on the north side of Denali in Alaska, is undergoing a rare surge. In the past few months the 39-mile-long river of ice has been moving as much as 90 feet a day, 100 times its usual speed.</p> <p>The event has excited glaciologists, who've rushed to study it using satellite imaging, specialized aerial photography and global positioning system devices delicately placed on the shifting ice.</p> <p>In early March, the pilot of just such a flight near the Muldrow Glacier noticed large numbers of new crevasses as well as changes to lateral moraines, areas of rocky debris that build up on the edges of glaciers. <i>"They looked all torn up,"</i> said Chris Palm, the pilot, with K2 Aviation.</p> <p>Since global warming is causing less ice accumulation and more melting, Glaciologist Mark Fahnestock said it is likely to have an impact. <i>"There will be effects, especially in Alaska because the mass loss is so high."</i></p>
15	<p>LONDON - This ship full of bombs near London that would cause a tsunami in the Thames if it ever blew up.</p> <p>Situated in the mouth of the river, the SS Richard Montgomery was an American ship that split in two and sank just off the coast of Sheerness in Kent in 1944. It was an American Liberty Ship, a type of transport ship meant to be manufactured quickly and in large quantities during WWII. These ships could carry troops or dry cargo,</p> <p>But it wasn't your average Titanic - it has 1440 tonnes of explosives on board. The operative word here is has, not had, because the 2,000 cases of <i>"used and non-fused fragmentation cluster bombs"</i> and 208 cases of TNT are still live despite it being submerged for over 70 years.</p> <p>A man who has been studying the ship for over ten years has predicted that a <i>"large-scale disaster is inevitable"</i>. Lives in London could be at risk. Director Ken Knowles spent 10 years</p>

making a documentary on the ship, and he believes its condition is worsening.
"If the Montgomery went off it could cause a tsunami that would flood London."

KENSINGTON - A two-decade-long dry spell that has parched much of the western United States is turning into one of the deepest megadroughts in the region in more than 1,200 years, a new study found.

And about half of this historic drought can be blamed on man-made global warming, according to a study in Thursday's journal Science.

Scientists looked at a nine-state area from Oregon and Wyoming down through California and New Mexico, plus a sliver of southwestern Montana and parts of northern Mexico. They used thousands of tree rings to compare a drought that started in 2000 and is still going — despite a wet 2019 — to four past megadroughts since the year 800. What's happening now is *"a drought bigger than what modern society has seen,"* said study lead author **A. Park Williams**, a bioclimatologist at Columbia University.

Daniel Swain, a UCLA climate scientist who wasn't part of the study, called the research important because it provides evidence *"that human-caused climate change transformed what might have otherwise been a moderate long-term drought into a severe event comparable to the 'megadroughts' of centuries past."*

The U.S. drought monitor puts much of Oregon, California, Colorado, Utah and Nevada and good chunks of New Mexico, Arizona and Idaho in abnormally dry, moderate or severe drought conditions. Wyoming is the only state Williams studied that doesn't have large areas of drought.

This week, water managers warned that the Rio Grande is forecast to have water flows less than half of normal, while New Mexico's largest reservoir is expected to top out at about one-third of its 30-year average.

This is *"what we can expect going forward in a world with continued global warming,"* said Stanford University climate scientist **Noah Diffenbaugh**.

18 **SHANGHAI** - China and the US say they are committed to working together and with other countries on tackling climate change.

It comes after several meetings between Chinese climate envoy **Xie Zhenhua** and his US counterpart **John Kerry** in Shanghai last week.

They both agreed on further specific actions to reduce emissions, a joint statement on Sunday confirmed.

US President **Joe Biden** is holding a virtual climate summit this week, which China says it is looking forward to. **Li Shuo**, senior climate adviser for environmental group Greenpeace, described the statement as *"positive"*.

"It sends a very unequivocal message that on this particular issue (China and the United States) will cooperate. Before the meetings in Shanghai this was not a message that we could assume,"

Li told Reuters news agency.

Kerry's trip to China is the first high-level visit by a member of the **Biden** administration since the new US president took office. However US and Chinese officials met for talks in Alaska last month.

THE WHITE HOUSE - Fired. Officials have removed **Betsy Weatherhead**, an experienced atmospheric scientist tapped by a **Trump** appointee to oversee the U.S. government's definitive report on the effects of climate change, from her position. According to two officials, she has been reassigned to the U.S. Geological Survey, the Interior Department's scientific arm.

20	<p>LONDON - <i>“This is a dire warning that the economic recovery from the COVID crisis is currently anything but sustainable for our climate”</i>: IEA Executive Director Fatih Birol. Global CO2 emissions from energy are seen rising nearly 5 per cent this year, suggesting the economic rebound from COVID-19 could be “anything but sustainable” for the climate, the International Energy Agency said today..</p> <p>The IEA’s Global Energy Review 2021 predicted carbon dioxide emissions would rise to 33 billion tonnes this year, up 1.5 billion tonnes from 2020 levels in the largest single increase in more than a decade.</p> <p>WASHINGTON -The target, intended to reassert America’s global leadership on climate action, would require profound changes at home. President Biden this week will pledge to slash U.S. greenhouse gas emissions at least in half by the end of the decade, according to two individuals briefed on the plan, as part of an aggressive push to combat climate change at home and convince other major economies around the world to follow suit. The move comes as Biden convenes a virtual summit of more than three dozen world leaders on Thursday, aimed at ratcheting up international climate ambitions and reestablishing the United States as a leader in the effort to slow the planet’s warming.</p>
21	<p>MOUNT EVEREST - On Wednesday, Outside magazine first reported a climber at base camp had been evacuated by helicopter for what was believed to be high-altitude pulmonary edema and tested positive for the coronavirus upon arriving at a hospital in Kathmandu last week.</p> <p>The New York Times subsequently revealed that in fact there had been multiple climbers who tested positive after being flown out of base camp.</p>
22	<p style="text-align: center;">earth day</p> <p><i>“Think of it. We are blessed with technology that would be indescribable to our forefathers. We have the wherewithal, the know-it-all to feed everybody, clothe everybody, and give every human on Earth a chance. We know now what we could never have known before - that we now have the option for all humanity to make it successfully on this planet in this lifetime. Whether it is to be Utopia or Oblivion will be a touch-and-go relay race right up to the final moment.”</i></p> <p style="text-align: right;">Buckminster Fuller</p> <p>THE WHITE HOUSE - President Biden committed the United States to cutting its greenhouse gas emissions as much as 52 percent by the end of this decade, a pledge that would require fast and far-reaching changes to American life, from how people power their homes to the cars they drive.</p> <p>The highly anticipated announcement roughly doubles a target set by President Barack Obama in 2015 as part of the Paris climate accord, by vowing the nation will reduce its emissions between 50 and 52 percent by 2030 compared with 2005 levels. Biden plans to formalize the goal in a submission to the United Nations, the White House said.</p> <p>BRUSSELS - In comparison, the European Commission has set a target of a 55 per cent emissions reduction below 1990 levels by 2030. The British government also announced new reductions this week, saying they would cut emissions by 78 per cent, compared to 1990 levels, by 2035.</p> <p>OTTAWA - So there was U.S. President Joe Biden, at the virtual Earth Day</p>

summit that he's convening, pledging to cut greenhouse gas emissions by more than 50 per cent from 2005 levels by 2030. There was European Commission President **Ursula von der Leyen**, pledging a 55-per-cent cut by the same date. There was Britain's **Boris Johnson**, vowing a whopping 68-per-cent reduction by 2035.

And there was Prime Minister **Justin Trudeau**, able to offer only 40 per cent minimum, 45 per cent tops, by decade's end.

As a basic comparison, it looked as though Canada – one of the world's highest per-capita emitters – was failing to meet the moment of unprecedented ambition to tackle climate change.

Canada's plans to cut greenhouse gas emissions by 40 to 45 per cent by 2030, are a more aggressive target than the one the country signed onto under the Paris Agreement. It will also be harder for Canada to meet its emissions targets compared to the U.S., because the growth of Canada's oil and gas sector since 2005 has increased emissions. Canada now needs to put in place more stringent policies in order to keep up.

The world remains nowhere near meeting the central goals of the Paris agreement — namely, to limit Earth's warming to “*well below*” 2 degrees Celsius (3.6 Fahrenheit) compared with preindustrial levels, and if possible to stay closer to 1.5 degrees Celsius. Failure to hit those targets, scientists have warned, will result in a cascade of costly and devastating effects.

...

Joe Biden has invited 40 world leaders for this virtual check-in on national climate strategies, ahead of the Glasgow Climate Change Conference in November. **Biden's** guests are from the major economies that produce about 80% of global greenhouse-gas emissions. South Korea's **Moon Jae-in** and Japan's **Yoshihide Suga** will attend, buoyed by their landmark commitments to reach carbon neutrality by 2050. China's **Xi Jinping** has not committed to the meeting, although **John Kerry**, **Biden's** climate envoy, had meetings in Shanghai last week.

NEW YORK - Mayor **Bill de Blasio** celebrated Earth Day today with an announcement that the city is suing three of the world's biggest oil companies for trying to trick consumers into thinking their products are good for the environment.

The lawsuit — filed in Manhattan Supreme Court — accuses Exxon, BP, Shell and the American Petroleum Institute, an industry trade group, of breaking city consumer protection laws through false advertising and deception.

- 23 **THE WHITE HOUSE** - President **Biden** wrapped up his virtual climate change summit on Friday, focusing on technological innovation, jobs and international cooperation. Even with new pledges by the United States and other countries announced this week, experts calculate that the world is still far off track for closing the “emissions gap” and putting the planet on track to achieve a carbon neutral economy by 2050, fending off the worst effects of climate change.
- “I hope we don't lose focus here, lose a sense of how much we can do together, by helping ourselves,”* **Biden** said in his concluding remarks. *“We're helping ourselves, we are helping others.”*
- Energy Secretary **Jennifer Granholm** said clean energy development represents a \$23 trillion market through 2030, and that her department was spurring critical research to fill the need. She announced new U.S. goals to slash the cost of “*clean renewable hydrogen*” by 80

	<p>percent by 2030, an amount she said would make it competitive with natural gas.</p> <p>World leader after world leader who participated in the summit thanked the United States for reclaiming a leadership role in addressing climate change, one that had been abrogated by former President Donald Trump.</p> <p>The solar cell was invented when Russell Shoemaker Ohl, a researcher in Bell Labs, noticed in 1940 that a cracked silicon sample produced a current when exposed to light.</p>
26	<p>KINGMAN - The Flag Fire was reported yesterday around 2pm. The fire originated between the Flag Mine and Wild Cow Campground in the Hualapai Mountains, approximately 11 miles south/southeast of Kingman, Arizona.</p> <p>Today the fire covers about 1,000 acres.</p> <p>Helicopter scheduled to do a reconnaissance over the fire area this morning. A better assessment of acreage and full situation should be available after that flight. The Arizona Central West Type 3 Incident Management Team will be in-briefing and 0900 today. A Type 1 Incident Management Team has been ordered and is scheduled to in-brief and transition on 4/27.</p> <p>High winds and low relative humidity with shift to gusty winds and increasing humidity into the evening with a change of showers extending into Tuesday.</p> <p>MEXICO CITY - Drought conditions now cover 85 percent of Mexico, and residents of the nation's central region said Thursday that lakes and reservoirs are simply drying up, including the country's second-largest body of freshwater.</p> <p>The mayor said the drought was the worst in 30 years, and the problem can be seen at the reservoirs that store water from other states to supply the capital.</p> <p>The capital's 9,000,000 inhabitants rely on reservoirs like Villa Victoria and two others – which together are at about 44 percent capacity – for a quarter of their water. Most of the rest comes from wells within city limits. But the city's own water table is dropping and leaky pipes waste much of what is brought into the city.</p> <p>Further to the west, in Michoacan state, the country is at risk of losing its second-largest lake, Lake Cuitzeo, where about 70 percent of the lake bed is now dry. The main culprit is drought, but residents say that roads built across the shallow lake and diversion of water for human use have also played a role.</p>
27	<p>GREENWICH - Climate change is likely the cause of a recent shift in the Earth's axis of rotation, a new study suggests.</p> <p>Melting glaciers around the world – a result of rising atmospheric temperatures from the burning of fossil fuels – redistributed enough water to cause the location of the North and South Poles to move eastward since the mid-1990s.</p> <p>The locations of the poles aren't fixed and unchanging. The way that water moves around the planet's surface is one factor that causes the two poles to drift, the study said.</p> <p>Each year, as the globe warms, hundreds of billions of tons of ice melt into the Earth's oceans.</p> <p><i>“The faster ice melting under global warming was the most likely cause of the directional change of the polar drift in the 1990s,”</i> study co-author Shanshan Deng of the Institute of Geographic Sciences and Natural Resources Research at the Chinese Academy of Sciences said in a statement.</p>

JAKARTA - Indonesia's navy on Tuesday said that last week's fatal submarine sinking was likely caused by an underwater phenomenon known as an "internal solitary wave." Officers said that differences in the density of waters off Bali and in the nearby Lombok Strait may have triggered a "massive movement" strong enough to pull down the submarine in seconds.

Iwan Isnurwanto, commander of the Navy Staff and Command School, said the presence of the wave around the location of the submarine at the time of the accident last Wednesday was confirmed from images produced by Japanese weather satellite Himawari 8. With large amplitudes that cause powerful currents, internal solitary waves are considered a major hazard to marine engineering and submarine navigation. They can impose unexpectedly large stresses on offshore oil rigs.

Moving quickly to cut emissions of methane, a potent greenhouse gas produced by everything from livestock farming to fossil fuel extraction, could slow the rate of the Earth's warming as much as 30 percent, new research has found.

The study, published in the journal *Environmental Research Letters*, calculated that a full-scale push using existing technologies could reduce methane emissions in half by 2030. Such reductions could have a crucial impact in the global effort to limit warming below 2 degrees Celsius (3.6 Fahrenheit) compared to preindustrial levels — a central aim of the Paris climate accord.

Carbon dioxide is far more abundant in the Earth's atmosphere and can linger for hundreds of years, while methane typically breaks down after about a decade. But in the short term, methane is far more effective at trapping heat — roughly 80 times more potent than carbon dioxide.

that means cutting back on methane pollution in the near term could provide a relatively quick and compelling way to curb the Earth's warming.

"People talk about net zero in 2050, but what the temperature will be in 2050 will be determined by what we do now," Ocko said.

So far, the trajectory is not encouraging. Concentrations of methane in the atmosphere have been rising, and fast. Earlier this month, the National Oceanic and Atmospheric Administration reported that levels of methane showed a "significant jump" in 2020, marking "the largest annual increase recorded since systematic measurements began in 1983."

David Victor, a professor of international law at the University of California at San Diego, said that "the politics of doing something about these problems are easier to manage; it is easier to build a coalition around demonstrable success." But he warned that methane is "really, really potent" and "right now global warming is accelerating."

BURNABY - Activists and protesters have tried fruitlessly for years to stop the construction of the controversial TransMountain oil pipeline in western Canada.

Now, a tiny hummingbird have succeeded where others have fallen short, forcing construction on the multibillion-dollar project to halt for the next four months.

Environment and Climate Change Canada has ordered work to stop until 21 August after the discovery of an Anna's hummingbird nest in a tree felled during construction of the pipeline. The migratory bird is not endangered, but it is protected under federal law, and community groups in southern British Columbia had raised the alarm that TransMountain was chopping down trees in vulnerable nesting areas. Concerned residents have closely monitored construction near the city of Burnaby amid fears that protected birds and their nests were being ignored by the company as it presses ahead with construction.

	<p><i>“Our members have confirmed eight active nests on this site, but there are hundreds, likely thousands more bird nests along the 1,500km of the pipeline route. And yet, construction continues without adequate government monitoring or protection,” Sarah Ross from Community Nest Finding Network said in a statement.</i></p> <p>TransMountain, which was purchased by Justin Trudeau’s government in 2018, said the stop-work order applied to a 900 meter tract of land but doesn’t impact its planned completion date in late 2022. It also plans to continue on whatever construction is still permitted under the order.</p> <p>Marred by cost overruns in recent months, the C\$12.6bn (\$10bn) project will nearly triple capacity of the existing pipeline, moving 890,000 barrels of crude oil each day to the Pacific Ocean when complete.</p>
29	<p>SYDNEY - Radio editorial by Richard Glover: <i>“Australia, right now, feels a little biblical. There was a terrible drought, then the worst bush fires ever recorded. A flood came next. Now it’s the turn of the mice. The scale of the mouse plague is hard to comprehend. In the western districts of New South Wales (NSW), the country’s most populous state, millions of mice are now on the march. There are also serious infestations in southern Queensland, Victoria and South Australia. On social media, farmers post videos showing the swarm in action, while farming organizations say the cost is already in the millions. When presenting reports of the mouse plague on Sydney radio, I issue a warning about “material that may disturb some listeners.” The details are disgusting. Consider yourself warned.”</i></p>
30	<p>SANTA CATALINA - When the research vessel Sally Ride set sail for Santa Catalina Island to map an underwater graveyard of DDT waste barrels, its crew had high hopes of documenting for the first time just how many corroded containers littered the seafloor off the coast of Los Angeles.</p> <p>But as the scientists on deck began interpreting sonar images gathered by two deep-sea robots, they were quickly overwhelmed. It was like trying to count stars in the Milky Way. The dumpsite, it turned out, was much, much bigger than expected. After spending two weeks surveying a swath of seafloor larger than the city of San Francisco, the scientists could find no end to the dumping ground. They could’ve kept going in any direction, they said, and uncovered even more.</p> <p><i>“I was pretty shocked that it just kept extending as far as it did,”</i> said Eric Terrill of UC San Diego’s Scripps Institution of Oceanography, who led the mission of 31 scientists and crew members. <i>“We couldn’t keep up with the flow of data coming in.”</i></p> <p>Terrill shared these findings this week in a U.S. congressional briefing led by Senator Dianne Feinstein who has been pushing for action since The Times reported last fall that the nation’s largest DDT manufacturer once dumped its waste into the deep ocean. As many as 500,000 barrels could still be underwater today, according to old records and a recent UC Santa Barbara study that provided the first photos of this pollution bubbling 3,000 feet under the sea.</p> <p>David Valentine, whose UC Santa Barbara research team first came across about 60 barrels on the seafloor while conducting a different research project, said the new mapping data revealed interesting hot spots — and <i>“hot lines,”</i> suggesting the path of a ship or barge as the dumping occurred — that will help scientists figure out where to focus further sediment and chemical studies.</p> <p><i>“The Southern California offshore dumping industry clearly got away with dumping wherever</i></p>

	<i>they wanted,” he said, “and that really makes me wonder: What else did they get away with?”</i>
	May 2021
3	<p>WASHINGTON - Report by Environmental Science and Technology: <i>“The potential for critical infrastructure failures during extreme weather events is rising. Major electrical grid failure or “blackout” events in the United States, those with a duration of at least 1 h and impacting 50,000 or more utility customers, increased by more than 60% over the most recent 5 year reporting period. When such blackout events coincide in time with heat wave conditions, population exposures to extreme heat both outside and within buildings can reach dangerously high levels as mechanical air conditioning systems become inoperable. Study results find simulated compound heat wave and grid failure events of recent intensity and duration to expose between 68 and 100% of the urban population to an elevated risk of heat exhaustion and/or heat stroke.”</i></p>
5	<p>LONDON - Scientists struggling to understand the threat of sea level rise on a warming Earth found Wednesday that amid lingering uncertainty, this much is clear: Meeting the goals of the Paris climate agreement remains humanity’s best hope for preserving current coastlines in the 21st century.</p> <p>At the same time, they diverged over the risks posed by the biggest wild card, the Antarctic ice sheet, which contains by far the most ice on the planet and holds the potential to unleash tens of feet of sea level rise. Ice losses from Antarctica have been accelerating in recent years, and research suggests that in warm periods in the Earth’s past (similar to the one that humanity is now fueling), the ice sheet shed a great deal of its mass. But a central issue is how fast that could occur this time around and whether today’s computer simulations can adequately capture what will really happen, especially during the lifetimes of people currently living.</p> <p>At this point, the authors found, ice losses could greatly accelerate beginning in the second half of this century and extending well beyond it, with particularly rapid sea level rise in the 2100s and 2200s.</p> <p><i>“For managing coastal flooding, we still need to stay really flexible because we haven’t pinned down that uncertainty in future sea level rise,”</i> said Tamsin Edwards, an expert on the Antarctic ice sheet at King’s College London and lead author of the first study. <i>“We need to be able to adapt to a wide range.”</i></p>
6	<p>BEIJING - China’s greenhouse gas emissions in 2019 surpassed those of the United States and the developed world combined, according to an analysis published Thursday by the research firm Rhodium Group.</p> <p>China’s share of global emissions rose to 27 percent of the world’s total, while the United States remained the second-largest emitter at 11 percent. India’s share came third at 6.6 percent, edging the 27 nations in the European Union, which account for 6.4 percent, the report found.</p> <p>China, India and other developing nations have long noted that over the past century, the United States and Europe grew their economies while generating massive amounts of greenhouse gases, and that requiring the developing world to clamp down on emissions as they industrialize and bring millions of citizens into the middle class is unfair.</p> <p>Meanwhile, China’s emissions reached 14.1 gigatons of carbon dioxide equivalents in 2019, the Rhodium analysis calculated — more than triple 1990 levels and a 25 percent increase over the past decade.</p> <p>Measuring China’s greenhouse gas emissions on a per capita basis also shows a sharp</p>

	<p>increase. China is home to more than 1.4 billion people, and its per capita emissions have reached 10.1 tons annually, nearly tripling over the past two decades.</p> <p>LANSING - Michigan Governor Gretchen Whitmer's office says a key petroleum pipeline for Central Canada that runs through the Great Lakes state is a <i>"ticking time bomb"</i> and that Calgary-based operator Enbridge Inc. would be breaking the law if it doesn't shut it down next week as she has ordered. Bobby Leddy, press secretary to Whitmer, said the Governor's position is that Enbridge must stop operating Line 5 by May 12.</p>
7	<p>ALPHARETTA - A ransomware attack led one of the nation's biggest fuel pipeline operators to shut down its entire network on Friday, according to the company and two U.S. officials familiar with the matter.</p> <p>While it is not expected to have an immediate impact on fuel supply or prices, the attack on Colonial Pipeline, which carries almost half of the gasoline, diesel and other fuels used on the East Coast, underscores the potential vulnerability of industrial sectors to the expanding threat of ransomware strikes.</p> <p>It appears to have been carried out by an Eastern European-based criminal gang — DarkSide, according to a U.S. official and another person familiar with the matter. Federal officials and the private security firm Mandiant, a division of FireEye, are still investigating the matter, they said. Colonial's 5,500 miles of pipelines carry fuel from refineries on the Gulf Coast to customers in the southern and eastern United States. It says it transports 45 percent of the fuel consumed on the East Coast, reaching 50,000,000 Americans.</p> <p>BERLIN - Germany is boosting its 2030 carbon reduction goal to 65% and accelerating its net-zero emissions deadline from 2050 to 2045, spurred on in part by last week's <i>"globally remarkable"</i> constitutional court ruling that declared the country's previous 2030 target inadequate.</p> <p>The other factor driving the change in plan is the public opinion gains the opposition Green Party has begun racking up ahead of national elections in September, Reuters reports.</p>
8	<p>NEW YORK - Millions of urban Americans will be put at serious risk of heat exhaustion this summer if any heat waves coincide with power failures—a deadly conjunction that is increasingly likely, says a new study.</p> <p><i>"Power failures have increased by more than 60% since 2015, even as climate change has made heat waves worse,"</i> writes the New York Times, citing research just published in the journal Environmental Science & Technology.</p> <p>Using computer modelling to study the impacts of a combined heat wave and power failure on three representative U.S. cities—Atlanta, Detroit, and Phoenix—a team of American and Canadian researchers found that such a combination <i>"would expose at least two-thirds of residents in those cities to heat exhaustion or heat stroke."</i></p> <p>While all three cities run cooling centres for those in need, they added, such shelters <i>"could accommodate no more than 2% of a given city's population...leaving an overwhelming majority of residents in danger."</i></p>
10	<p>DUPLIN COUNTY - The aroma of hog feces was overwhelming, Elsie Herring said. The breezes that wafted from the hog farm next to her mother's Duplin County, N.C., home carried hazardous gases: methane, ammonia, hydrogen sulfide.</p> <p><i>"The odor is so offensive that we start gagging, we start coughing,"</i> she told a congressional</p>

	<p>committee in November 2019. Herring, who died last week, said she and other residents developed headaches, breathing problems and heart conditions from the fumes. Now, a first-of-its-kind study shows that air pollution from Duplin County farms is linked to roughly 98 premature deaths per year, 89 of which are linked to emissions directly caused by hogs. Those losses are among more than 17,000 annual deaths attributable to pollution from farms across the United States, according to research published today in the Proceedings of the National Academy of Sciences. These emissions now account for more annual deaths than pollution from coal power plants.</p> <p>Jim Monroe, a spokesman for the National Pork Producers Council, criticized the study as <i>"highly suspect,"</i> saying it <i>"irresponsibly draws conclusions based on modeling and estimates."</i></p>
11	<p>WASHINGTON - The Biden administration on Tuesday approved the first large-scale offshore wind farm in the United States, a project that envisions building 62 turbines off Martha's Vineyard in Massachusetts and creating enough electricity to power 400,000 homes.</p> <p>Vineyard Wind is the first of several massive offshore wind-farm proposals that could put more than 3,000 wind turbines in the Atlantic Ocean from Maine to North Carolina. The Biden administration has committed to processing the other 13 projects under federal review by 2025 in an attempt to meet the administration's ambitious goal of producing 30,000 megawatts of electricity from offshore wind by 2030, powering some 10 million homes.</p> <p>The goal is part of the Biden administration's effort to fight climate change by shifting away from fossil fuels.</p> <p>LANSING - Michigan has told Canadian energy company Enbridge that it must shut down an oil and gas pipeline that runs through the state.</p> <p>Al Monaco, president of Enbridge, has pointed out that Canada's two most populous provinces, Ontario and Quebec, rely on the pipeline for nearly half of their oil needs. Enbridge has yet to comply.</p> <p>The state's government says the line, which has existed for over 65 years, could cause a spill that would severely damage the area.</p> <p>Enbridge has denied that the pipeline, known as Line 5, is at any risk of spilling, saying that while the line does go underwater through the Straights of Mackinac, the line runs through a tunnel beneath the lakebed, reports The Guardian.</p> <p>Michigan Governor Gretchen Whitmer has set a hard deadline for the pipeline's shut down, at May 12.</p>
12	<p>WASHINGTON - The destruction of year-round permafrost in Alaska, loss of winter ice on the Great Lakes and spike in summer heat waves in U.S. cities all signal that climate change is intensifying, the EPA said in its report. The assessment, which languished under the Trump administration for three years, marks the first time the agency has said such changes are being driven at least in part by human-caused global warming.</p> <p>As it launched an updated webpage to inform the public on how climate change is upending communities throughout the country, the Biden administration gave the agency's imprimatur to a growing body of evidence that climate effects are happening faster and becoming more extreme than when EPA last published its <i>"Climate Indicators"</i> data in 2016. For years, Trump and his deputies played down the impact of greenhouse gas emissions from burning fossil fuels and delayed the release of an Environmental Protection</p>

	<p>Agency report detailing climate-related damage.</p> <p>But on Wednesday, the EPA released a detailed and disturbing account of the startling changes that Earth’s warming had on parts of the United States during Trump’s presidency. In 2020 ocean heat reached its highest level in recorded history, and it fuels marine heat waves and coral bleaching.</p> <p>The extent of Arctic sea ice also was the second smallest on record dating to 1979. Wildfire and pollen seasons are starting earlier and lasting longer.</p> <p>Heat waves are occurring about three times more often than they did in the 1960s, the agency found, averaging about six times a year.</p> <p>In turn, Americans are blasting air conditioners to stay cool during the hot months, which has nearly doubled summer energy use over the past half-century and added even more greenhouse gases to the atmosphere.</p> <p>At nearly every spot measured in Alaska, permafrost has warmed since 1978. The biggest temperature increases were found in the northernmost reaches of the state, where the thawing of the once permanently frozen soil has made it more difficult for Native Alaskans to store wild game underground and for drillers to transport oil by pipeline.</p> <p>While the EPA’s report does not make projections into the future, it suggests disastrous times ahead if the United States and other industrialized nations do not act quickly on global warming.</p> <p>SAN JOSE - A recent analysis by Matthew Cappucci of the Washington Post of 60 years of California climate and fire data finds climate change is expanding the Golden State’s fire season and compressing its traditional rainy season.</p> <p>On May 2, the National Weather Service (NWS) issued a “red flag” fire warning for parts of Northern California, the first time such a warning has been issued in May since 2014. The warning was triggered by a confluence of dry, hot conditions with strong winds, which were gusting up to 35 miles per hour in some areas, reports Maanvi Singh for the Guardian.</p> <p>Just a few days after the warning was issued, temperatures were a full 15 degrees Fahrenheit above average for this time of year. The red flag warning and the fire-prone conditions signal that the most dangerous part of California’s now year-round fire season may have already arrived.</p> <p>The conditions stoked a number of small fires including one in Big Basin Redwoods State Park, an area that burned during last year’s CZU Lightning Complex fires, reports Amy Graff for SFGate. Last week, the state fire agency, Cal Fire, was also fighting a 5,100-acre wildfire near San Diego.</p>
13	<p>Every April, thousands of elegant terns migrating from Central and South America nest in the sands of the Bolsa Chica Ecological Reserve, one of the last remaining protected coastal wetlands in Southern California.</p> <p>This year, however, their refuge was no sanctuary. On May 13, a drone crash-landed on their nesting ground, scaring off about 2,500 of the terns. Left behind were about 1,500 eggs, none of which were viable after they were abandoned.</p> <p>“In my 20 years of working with wildlife and in the field, I have never seen such devastation,” said Melissa Loebel, an environmental scientist and manager of the Bolsa Chica Ecological Reserve, which encompasses more than 1,300 acres of mud flats, saltwater and freshwater marshes, dunes and other habitats in Huntington Beach, Calif.</p> <p>“My gut is wrenching,” Ms. Loebel said. “It’s awful to see.”The elegant tern, a sleek seabird with a pointed orange bill, is among 800 species that rely on the reserve as a critical habitat, Ms. Loebel said. Although the elegant tern is not considered threatened or endangered, a</p>

	<p>number of other birds in the reserve are, including the California least tern and the Ridgway's rail, Ms. Loebel said.</p>
14	<p>VIRGIN ISLANDS - The Environmental Protection Agency on Friday ordered a controversial refinery in the U.S. Virgin Islands to stay shut for 60 days because it poses an <i>"imminent"</i> threat to people's health, a rare step marking the first significant environmental enforcement action undertaken by the Biden administration.</p> <p>St. Croix's Limetree Bay Refining started operating in February after Trump administration officials expedited a key permit. Since then, it has showered oil on local residents twice, spewed sulfuric gases into the surrounding area and released hydrocarbons into the air. <i>"Today, I have ordered the refinery to immediately pause all operations until we can be assured that this facility can operate in accordance with laws that protect public health,"</i> EPA Administrator Michael Regan said in a statement.</p> <p>On Wednesday the company announced it was temporarily halting operations after an accident sparked a fire and sent a fine mist of oil over an affluent community to the west, polluting water supplies. The oil traveled several miles, reaching the airport as well as Sandy Point National Wildlife Refuge.</p> <p>The rapid succession of mishaps has turned the refinery into a national litmus test over how to weigh the fossil fuel industry's impact on vulnerable communities. Along with an adjoining logistics hub, Limetree generates at least \$25,000,000 a year to the U.S. Virgin Islands government. With some residents now questioning whether their elected officials can protect them from harm, Biden officials have scrambled to bring a greater level of accountability to an area where industry has operated with little oversight for decades.</p>
16	<p>TOPANGA - Firefighters on Sunday continued to battle a fire threatening homes in Topanga Canyon, with officials hoping cooler, moist conditions could help them get the upper hand. As of 1:00 p.m., the Palisades fire was 1,325 acres and 0% contained and evacuations were in place for homes near Topanga Canyon Road. About 1,000 people have been displaced from their homes, authorities said Sunday.</p> <p>The fire was burning through dense, old-growth chaparral that hadn't burned in more than 50 years, authorities said. The vegetation was very dry due to a lack of recent rainfall, as well as longer-term drought.</p> <p>The blaze marked the dawn of a fire season that has been starting earlier each year, thanks to warmer temperatures and longer, drier periods of drought with briefer, more intense bouts of precipitation between them.</p> <p>REGINA - Farmers in parts of the Prairies are worrying about crop failures and water-deprived livestock, and communities are already facing local water restrictions and at least one forest fire, as the region enters a period of near-record dry conditions. With one of the most parched springs in recent years coming on the heels of an unusually dry fall, Agriculture and Agri-Food Canada is reporting extreme drought conditions in southwestern Manitoba and southeastern Saskatchewan, with moderate drought across most of the rest of the Prairies, CBC News reports. John Pomeroy, Canada Research Chair in Water Resources and Climate Change, said soil moisture levels are below 40% of normal in some locations. While droughts are a normal part of the agricultural cycle, this one extends <i>"from Vancouver Island to southern Quebec, down into the United States, into California, right into Mexico,"</i> Pomeroy told CBC. <i>"It's enormous."</i></p> <p>The impacts will show up quickly in a part of the country that depends on water for irrigation, hydropower, potash mining, and fossil production, CBC says.</p>

"Back about 20 years ago, there were four years where there was a C\$10-billion hit to the western Canadian economy from drought and 41,000 jobs lost in Saskatchewan alone. So there's an impact," Pomeroy told the national broadcaster. "It's like losing the automotive industry out of southern Ontario."

That dire future may not be far away, said Starbuck, MB canola grower **Chuck Fossay**. *"If we don't get a rain, a nice, gentle, soaking rain in probably the next two weeks, we're probably talking a crop failure out here in Manitoba," Fossay said. "Dry is dry and nothing grows without water. That's just a fact of life. You need water to live. And if you don't have enough water, nothing grows."*

17 **GOA** - A powerful cyclone struck India's west coast Monday, forcing officials to move hospitalized coronavirus patients and suspend vaccination campaigns as the storm disrupted nationwide efforts to contain a surge of infections in the country of 1.3 billion. But by late Monday night, despite heavy physical damage in many seaside areas, no significant loss of life had been reported, and extensive advance measures had been put in place to protect hospitalized patients and oxygen supplies. Officials in Goa state confirmed two deaths, and there were unconfirmed reports of up to 10 additional related fatalities. 'Extremely severe' Cyclone Tauktae could be the strongest storm to hit region since 1998 Cyclone Tauktae, named for the harmless gecko lizard, pummeled coastal stretches along hundreds of miles, with driving rains and winds up to 90 miles per hour. News footage from Mumbai, the seaside financial capital of 20,000,000, showed waves leaping over urban sea walls and makeshift tented vaccine centers blown away in the gusts.

THE WHITE HOUSE - The Biden administration has reinstated the director of the federal climate program that produces the U.S. government's definitive reports on climate change, after the Trump administration fired him in November.

Michael Kuperberg, the climate scientist who ran the program for six years during Democratic and Republican administrations, was reinstated Monday, the White House confirmed.

As the executive director of the U.S. Global Change Research Program, Kuperberg coordinates climate change research across 13 federal agencies and production of the program's National Climate Assessment, the nation's most important report on climate change science and its consequences.

OTTAWA - Canada warned against the United States shutting down Enbridge Line 5, a crucial petroleum supply for Ontario and Quebec, on the eve of talks regarding the new NAFTA deal.

International Trade Minister **Mary Ng** spoke with U.S. Trade Representative **Katherine Tai** in a virtual meeting today before this week's trilateral Free Trade Commission meeting about the United States–Mexico–Canada Agreement.

Michigan Governor **Gretchen Whitmer**, a Democratic ally of Mr. **Biden's**, is trying to shut down Line 5, citing the risk of oil spills into the Great Lakes from where the pipeline crosses the Straits of Mackinac in the northern part of her state.

Enbridge, which has challenged her move in court, has said it will continue to operate the pipeline in defiance of Ms. **Whitmer's** shutdown order, but Michigan's Attorney-General remains intent on obtaining a court order that would enforce her notice to cease operations. The petroleum pipeline is a vital energy source for Ontario and Quebec, carrying up to 540,000 barrels a day from Alberta and Saskatchewan through two Great Lakes states before re-entering Canada at Sarnia, Ont.

	<p>The Canadian government has warned a shutdown would represent a threat to this country's energy security.</p>
<p>18</p>	<p>PARIS - To limit climate change, by 2030 the world must install the equivalent of the current largest solar park — every day. The rate of energy efficiency improvements will have to triple the rate of the past two decades. And by 2035, the sale of the internal combustion engine needs to be a thing of the past.</p> <p>Those are some of the items in a new International Energy Agency report titled “<i>Net Zero by 2050: A Roadmap for the Global Energy Sector</i>,” which warns that the pathway to net zero is “achievable” but “narrow.”</p> <p>The report hails the rapid growth in the number of countries that have pledged to achieve net zero emissions; those pledges now cover about 70 percent of global emissions of carbon dioxide. China has pledged to reach net zero emissions by 2060.</p> <p>But the report warns that in many cases there is nothing backing up the pledges. Most of them “<i>are not yet underpinned by near-term policies and measures</i>,” the report said. Even if successfully fulfilled, the pledges to date would still fail to cover 22 billion tons of carbon dioxide emissions worldwide in 2050. There will be no need to invest in new fossil fuel supplies, the report says. Coal demand would plunge from 90 percent to just 1 percent of total energy use in 2050. The demand for natural gas would drop by 55 percent, and oil would tumble 75 percent to 24,000,000 barrels per day, down from around 90,000,000 barrels in 2020.</p> <p>SHENZHEN - One of China's tallest skyscrapers has been evacuated after it mysteriously started to shake, sending panicked shoppers running to safety.</p> <p>The 980-foot SEG Plaza started swaying at 1pm on Tuesday in the southern city of Shenzhen, causing a mass exit from the building. No earthquakes have been recorded and authorities remain baffled as to what caused the motion.</p> <p>The 79-storey building was sealed shut as of 2:40pm, according to local media reports. Emergency management officials are investigating what caused the tower in Shenzhen's Futian district to wobble, according to a post on the Twitter-like Weibo platform.</p> <p>BOCA RATON - 13 Inches of rain in a single day !</p>
<p>19</p>	<p>TAIPEI - On top of a surge in COVID-19 cases and power outages, Taiwan is suffering from its worst drought in 56 years.</p> <p>The announcement on water restrictions comes as Taiwan today raised its COVID-19 alert level for the whole island. Previously it had just been Taipei City and New Taipei under level three restrictions - one step below a de facto lockdown. The island has also suffered two major blackouts in less than a week as demand spiked amid the drought and a power plant malfunction.</p> <p><i>"We are facing the most serious drought ever. The last time we had obvious rainfall across Taiwan was 360 days ago,"</i> an official at the Water Resources Agency said.</p> <p>ANTARCTICA - An enormous iceberg, a little bigger than the state of Rhode Island, has broken off of Antarctica.</p> <p>The finger-shaped chunk of ice, which is roughly 105 miles (170 kilometers) long and 15 miles (25 kilometers) wide, was spotted by satellites as it calved from the western side of Antarctica's Ronne Ice Shelf, according to the European Space Agency. The berg is now</p>

	<p>floating freely on the Weddell Sea, a large bay in the western Antarctic where explorer Ernest Shackleton once lost his ship, the Endurance, to pack ice.</p> <p>The 1,667-square-mile (4,320 square kilometers) iceberg — which now the world’s biggest and has been called A-76, after the Antarctic quadrant where it was first spotted — was captured by the European Union’s Copernicus Sentinel, a two-satellite constellation that orbits Earth’s poles.</p>
20	<p>SANTA BARBARA - A California wildfire, with a <i>"rapid rate of spread"</i> in an area of Santa Barbara located around 80 miles northwest of Los Angeles, has burned at least 20 acres since it broke Thursday around 9 p.m. local time, according to the county's fire department . Several parts of the surrounding area were evacuated, including the KEYT television station, which is near where the fire sparked on the hillside between Miramonte Drive and Loma Alta Drive, the Santa Barbara County Fire Department told the Los Angeles Times. The blaze, dubbed the Loma Fire, was reported to be 40 percent contained as of late Thursday evening, following decreased winds. Firefighters are expected to be on the scene throughout the night, according to a spokesperson for the fire department, Mike Eliason. <i>"This is extremely dangerous for FF's [firefighters],"</i> Eliason tweeted late Thursday.</p> <p><i>"Cal Fire has been saying for a few years that wildfire is now a year-round phenomenon in California,"</i> said Noah Diffenbaugh, a professor at Stanford's Department of Earth System Science. Diffenbaugh said there is a <i>"confluence of conditions"</i> that contribute to wildfires, but the drought persisting throughout California has made many residents concerned about what the arid conditions will mean for the next spate of fires.</p> <p><i>"We're certainly in much more severe drought status at this time than we were last year,"</i> Diffenbaugh said.</p> <p>WASHINGTON - The National Oceanic and Atmospheric Administration predicts that this Atlantic hurricane season will be more active than usual, according to a statement released on Thursday.</p> <p>While NOAA does not expect this hurricane season to reach the historic levels of 2020, which saw a record-breaking 30 named storms, forecasters predict between 13 and 20 named storms with up to five major hurricanes.</p>
21	<p>MOSCOW - It’s only May, and temperatures near the Arctic Circle in northwestern Russia are approaching 90 degrees. In Moscow, temperatures have shattered records on consecutive days. Since last week, historic warmth has swelled over much of western Russian and bled into eastern Scandinavia.</p> <p>On Thursday, the mercury surged to 89.4 degrees in Naryan-Mar, Russia, a town near the Arctic Ocean and almost 1,000 miles northeast of Moscow. The temperature shattered the previous monthly record of 82 degrees, according to Serge Zaka, a meteorologist in France. The scorching reading came a day after the temperature surged to 86.5 degrees in Nizhnyaya Pesha, about 800 miles northeast of Moscow, also inside the Arctic Circle</p> <p>Arkhangelsk, more than 600 miles north of Moscow near the shore of the Arctic Ocean, soared to nearly 90 degrees, its highest temperature ever recorded during the month. Moscow broke temperature records over 100 years old on both Monday and Tuesday, according to the Moscow Times, reaching 86.7 degrees and 84.6 degrees. The Russian capital has seen temperatures at least 10 to 20 degrees above normal for days.</p>

	<p>WINNIPEG - It has also been unusually warm in central Canada, where raging wildfires in Manitoba are sending plumes of smoke across retreating ice in Lake Winnipeg. Summer has yet to begin in the northern hemisphere, but temperatures in high latitudes are already alarmingly warm, portending another brutally hot season while signaling more climate troubles.</p> <p>It's not unusual for Manitoba to see wildfires at this time of year, said Rob Paola, a retired meteorologist from the Meteorological Service of Canada. But <i>"this year has been especially intense fairly early given how dry our spring has been, and our low snowpack this past winter,"</i> he told The Washington Post. The warmth seen in the high latitudes this month is consistent with what climate scientists expect with increasing frequency as the planet's temperature rises due to human-caused climate change.</p>
22	<p>VANCOUVER - Wildfire conditions are cause for concern this year as parts of Saskatchewan, Manitoba and British Columbia report either significant drought or record low rainfall between January and April, experts say.</p> <p>However, the severity of the wildfire season will depend on what kind of weather the next few months bring, they say. Mike Flannigan, a professor of wildland fire at the University of Alberta, said May is the busiest month for wildfires in Alberta, and June and July for the rest of Canada except for B.C. where it is August.</p> <p><i>"It just doesn't depend on June. It depends on the weather during June, July and August."</i></p> <p>The recent trend, Flannigan said, has seen a decrease in the number of fires but an increase in the area burned caused by more lightning strikes.</p> <p>Twenty one ultra-marathon runners have died after extreme weather conditions hit a 100-kilometer (62-mile) mountain race in northwest China.</p> <p>The high-altitude Huanghe Shilin Mountain Marathon began on Saturday morning in sunny conditions. But by 1 p.m. local time weather conditions had turned, with freezing rain, hail stones and gale winds lashing runners in Gansu County, according to the state-run Global Times.</p> <p>As temperatures dropped in the Yellow River Stone Forest, runners started reported suffering from hypothermia, while others went missing.</p> <p>The marathon organizers called off the race and launched a search party of 1,200 people to scour the complicated terrain. The search operation continued after dark.</p>
23	<p>The first heat wave of the season begins Sunday and continues into the workweek for much of the eastern US.</p> <p>While we're not yet officially in the summer, Mother Nature is playing by her own rules. Over 30% of the US population will experience temperatures of at least 90 degrees or higher this week.</p> <p><i>"The warm, smothering embrace of a high-amplitude ridge will continue into the long term period,"</i> says Kyle Theim, a meteorologist at the National Weather Service office in Atlanta.</p> <p><i>"Temperatures starting on Monday will run between 10-15 degrees above normal, and border on record maximum temperatures, both for daily highs and lows."</i></p>
25	<p>NEW DELHI - Cyclone Yaas intensified into a very severe cyclonic storm this evening, India Meteorological Department (IMD) Director General M Mohapatra said.</p> <p><i>The IMD has also issued a red-coded warning alert to the Odisha and West Bengal coasts.</i></p> <p><i>"The severe cyclonic storm Yaas (pronounced as Yass) over northwest and Bay of Bengal intensified into a very severe cyclonic storm."</i></p>

	<p>It is very likely to move north-northwestwards, intensify further and reach near north Odisha coast close to Dhamra port by the early morning of Wednesday. <i>"It is very likely to cross north Odisha-West Bengal coasts between Paradip and Sagar Islands close to north of Dhamra and south of Balasore, during noon of Wednesday, the 26th May as a Very Severe Cyclonic Storm,"</i> the Cyclone Warning Division of the IMD said.</p> <p>Later...</p> <p>NEW DELHI - Cyclone Yaas intensified into a very severe cyclonic storm this evening, India Meteorological Department (IMD) Director General M Mohapatra said. <i>The IMD has also issued a red-coded warning alert to the Odisha and West Bengal coasts. "The severe cyclonic storm Yaas (pronounced as Yass) over northwest and Bay of Bengal intensified into a very severe cyclonic storm."</i></p> <p>It is very likely to move north-northwestwards, intensify further and reach near north Odisha coast close to Dhamra port by the early morning of Wednesday. <i>"It is very likely to cross north Odisha-West Bengal coasts between Paradip and Sagar Islands close to north of Dhamra and south of Balasore, during noon of Wednesday, the 26th May as a Very Severe Cyclonic Storm,"</i> the Cyclone Warning Division of the IMD said.</p>
26	<p>ISTANBUL - Say <i>"sea snot"</i>. For months, Turkish fishermen in the Sea of Marmara have been running into a problem: They can't catch fish. That's because a thick, viscous substance known colloquially as <i>"sea snot"</i> is floating on the water's surface, clogging up their nets and raising doubts about whether fish found in the inland sea would actually be safe to eat. Scientists say that the unpleasant-looking mucus is not a new phenomenon, but rising water temperatures caused by global warming may be making it worse. Pollution — including agricultural and raw sewage runoff — is also to blame. Since phytoplankton thrive in warmer waters, scientists suspect that climate change may be a factor. This past winter was milder than usual, meaning that the Sea of Marmara remained several degrees warmer than average. Mustafa Sari, a professor at Bandırma Onyedi Eylül University, told the Kisa Dalga podcast that the massive, sticky clumps of mucus were <i>"a situation where climate change becomes visible."</i> The problem has become harder to ignore in recent weeks as Istanbul's coastline begins to resemble a beige carpet, but fishermen who rely on the sea to make a living have been sounding the alarm for months. A diver who hunts sea snails for a living told Turkey's state-run Anadolu Agency that he had lost most of his income because the visibility was so poor underwater, and that crabs and sea horses were dying because the slimy mucus was clogging their gills.</p>
27	<p>The oil industry, long THE political heavyweight in the economy of the planet, suffered a series of extraordinary blows today after shareholders, customers and the courts turned on the industry out of concern over climate change. In the space of a few hours...</p> <p>AMSTERDAM - The action started early today when a Dutch court said European energy giant Royal Dutch Shell had helped drive <i>"dangerous climate change"</i> and ordered the company to cut its own CO2 emissions and those of its suppliers and customers by 45 percent by the end of 2030 from 2019 levels. The closely watched suit — filed by Friends of the Earth Netherlands and more than 17,000</p>

citizen co-plaintiffs — claimed that Shell’s annual emissions, which account for about 3 percent of the globe’s total, constituted an unlawful danger to the climate that must be stopped.

IRVING, TEXAS - ExxonMobil conceded defeat this afternoon in a months-long proxy battle, after the oil and gas giant lost a vote over the future of its board to a newly created investment firm, Engine No. 1.

The vote also has huge implications for other companies facing pressure over their approach to reducing emissions and managing energy transition. Though Engine No. 1's campaign would otherwise be a classic activist campaign, long-time Exxon watchers said in the months leading up to the vote that a political shift with the election of Joe Biden, and sudden momentum on climate action in the finance world, sets this vote apart.

SAN RAMON, CALIFORNIA - Shareholders also offered a stunning rebuke to management at Exxon's main rival, Chevron, with 61% of investors voting in favor of the company slashing emissions produced by consumers using its products—by driving or flying, for example—a group of emissions known as “scope 3.”

Shareholders at ConocoPhillips supported a similar vote earlier this month.

SAN FRANCISCO - *“Game-changer is an overused metaphor, but surely this is one,”* Environmental Defense Fund President **Fred Krupp** said of the day’s events. *“The policy environment for companies has already changed and will change more.”* The rebukes signal that climate concerns, once confined to environmental activists and barely registering with some Washington lawmakers, have become mainstream thinking in C-suites and on Wall Street, analysts said. The visible effects of climate change, action by governments, and shifting consumer sentiment are transforming the world in which companies do business. The speed of events — taking place in an industry that typically measures change in decades — means that companies and even entire regions, including West Texas, will have to face a reality in which there will be less demand for their product, said **Mark Jones**, a political science fellow at Rice University in Houston.

“There’s no going back to where things were for oil and natural gas.”

PARIS -The world may temporarily breach the 1.5 C warming mark within the next five years, according to an updated assessment of global climate trends released Thursday. The World Meteorological Organization and Britain's Met Office said there was a 40 per cent chance of the annual average global temperature surpassing 1.5 C above pre-industrial temperatures -- the aspirational warming limit of the Paris climate accord. According to the Met Office's updated global 10-year climate prediction, there is a 90 per cent chance of at least one year between 2021-2025 being the hottest on record.

JUNE 2021

2 **CHEYENNE** - Wyoming Governor **Mark Gordon** this morning announced that a next-generation nuclear power plant will be built at a soon-to-be-retired coal-fired plant in Wyoming in the next several years, with the project a joint initiative between Bill Gates’s TerraPower and PacifiCorp, owned by **Warren Buffett’s** Berkshire Hathaway. *“Today’s announcement really, truly is game-changing and monumental for Wyoming,”* Gordon said at a press conference at the state Capitol in Cheyenne.

	<p>The project features a 345-megawatt sodium-cooled fast reactor with a molten salt-based energy storage system, which would produce enough power for roughly 250,000 homes. The storage technology is also able to boost output to 500 megawatts of power for about five and a half hours, which is equivalent to the energy needed to power around 400,000 homes, according to TerraPower.</p>
3	<p>LONDON - Britain's Heathrow Airport will use sustainable jet fuel for the first time as part of a test ahead of a Group of Seven (G7) rich nations summit in the country next week. The fuel, produced by Finland's Neste and supplied by oil trader Vitol, is made entirely of renewable and sustainable waste such as cooking oil and animal fat, the airport and companies said in a joint statement on Thursday.</p> <p>NEW YORK - The UN Security Council will meet this week to discuss a long-abandoned fuel tanker off Yemen amid growing fears of a catastrophic oil spill, diplomats said yesterday. Today's meeting, requested by Britain, comes after Huthi rebels said an agreement to allow a UN mission to inspect the tanker had <i>"reached a dead end."</i></p> <p>The 45-year-old fuel vessel FSO Safer has 1,100,000 barrels of crude on board and has been abandoned near Yemen's western port of Hodeida since 2015. UN inspectors were initially meant to assess the tanker last year but the mission has been repeatedly delayed over disagreements with the rebels.</p> <p>A spokesperson for Britain at the UN said there was a <i>"grave risk"</i> of an oil spill <i>"which would be catastrophic for Yemen and the region."</i></p> <p><i>"The responsibility for the tanker lies with the Huthis and they must cooperate with the UN. We are bringing this issue to the UN Security Council tomorrow to discuss next steps,"</i> he added.</p>
5	<p>ANCHORAGE - The hummocky hills of ice at the <i>"toe"</i> of Alaska's Muldrow Glacier have sat undisturbed and covered by tundra for more than 60 years. Soon they will be overtaken by a force that scientists are scrambling to understand — even as they wonder whether climate change will one day halt it completely.</p> <p>The rare phenomenon began last fall some 12 miles uphill. That's where the glacier initially started sliding, its smooth surface ice cracking under tremendous, hidden stresses. New crevasses opened and ice cliffs were pushed up in a chaotic jumble. The first witness was a pilot who spied the scene in March as he flew around the north side of Denali, the continent's tallest mountain.</p> <p>The Muldrow has been <i>"surging"</i> forward ever since, 100 times faster than normal.</p>
7	<p>Economies worldwide nearly ground to a halt over the 15 months of the coronavirus pandemic, leading to a startling drop in global greenhouse gas emissions.</p> <p>But the idle airplanes, boarded-up stores and quiet highways barely made a dent in the steady accumulation of carbon dioxide in the atmosphere, which scientists from the Scripps Institution of Oceanography and the National Oceanic and Atmospheric Administration said Monday had reached the highest levels since accurate measurements began 63 years ago. The report of a climb in atmospheric carbon dioxide was also published on the eve of a meeting of the Group of Seven industrialized countries, where climate change is expected to be at center stage. The G-7 meeting is intended to prod major emitting countries toward more ambitious actions ahead of the major international climate conference in Glasgow in November.</p>
8	<p>AUSTIN -Republican Louie Gohmert from Texas was mocked this week after he asked</p>

federal Forest Service officials if they could change the orbit of the Earth and moon in order to fight climate change during a House Natural Resources hearing.

LONDON - Oxygen levels in the world's lakes are declining because of climate change, according to new research published in the journal Nature. Global heating is increasing water temperatures, which reduces the amount of oxygen water can hold. Less oxygen may cause problems for fish and other freshwater wildlife, reports **Damian Carrington** for the Guardian.

The study analyzed changes in water temperature, clarity and oxygen content for 393 lakes located in temperate climates in North America, South America, Asia and Europe over time. For some lakes, the data stretched all the way back to 1941, but the majority of the records began in the 1980s, reports **Kirsti Marohn** for Minnesota Public Radio (MPR).

Since the 1980s, the average oxygen content of these lakes declined 5.5 percent near the surface and fell by 18.6 percent in deep waters, according to the study. *"All complex life depends on oxygen. It's the support system for aquatic food webs. And when you start losing oxygen, you have the potential to lose species,"* says **Kevin Rose**, a freshwater ecologist at Rensselaer Polytechnic Institute and the study's senior author, in a statement. *"Lakes are losing oxygen 2.75 to 9.3 times faster than the oceans, a decline that will have impacts throughout the ecosystem."*

The steeper decline in oxygen at depth is an indirect consequence of the hotter, longer summers caused by climate change in many parts of the world. A longer, hotter summer creates a bigger temperature discrepancy between the water being heated up at the surface and the deeper, cooler waters. The larger the temperature difference between two layers of water the less they are inclined to mix, which results in an increase of what researchers call *"stratification."*

CALGARY - The company behind the Keystone XL pipeline announced today that it's officially scrapping the project after President **Biden** nixed a border-crossing permit for it. A statement from TC Energy said that after *"a comprehensive review of its options, and in consultation with its partner, the Government of Alberta, it has terminated the Keystone XL Pipeline Project."*

"We value the strong relationships we've built through the development of this Project and the experience we've gained," **François Poirier**, the company's president and CEO, said in a statement. The company also said that it will work with regulators and others to safely terminate the project.

The news was first reported by the Washington Examiner.

- 10 A very dry week with well-above average temperatures has worsened an already severe drought in the Western US, according to the US Drought Monitor. New data shows the entirety of four states are under drought conditions -- California, Oregon, Utah and Nevada. Overall, drought is being experienced in 88% of the Western US as of this week. Scientists say persistent drought conditions in this region are being exacerbated by manmade climate change. In addition to the critical water shortages this year's drought has caused, forecasters have raised concerns that the continued dry conditions will cause a particularly intense wildfire season. As of today the Storm Prediction Center's fire weather outlook was classified as *"critical"* or *"extreme"* across parts of Wyoming, Utah, Colorado and Arizona. *"Warmer than normal temperatures dominated from California to the Dakotas with*

departures of 9-12 degrees above normal and even higher in the northern Plains," scientists with the US Drought Monitor wrote today.

Meanwhile ...

VAN HORN - Border Patrol agents in Van Horn, Texas, found 33 illegal immigrants locked inside a U-Haul box truck amid a strong heatwave that has hit a large part of the nation. Authorities were alerted to a possible human smuggling operation at around 10 p.m. on June 10, 2021. They were informed about suspicious activity happening near a McDonald's restaurant and approached two vehicles. Upon checking the U-Haul, the agents found 33 people that were close to death due to the heat and lack of air.

Over the next hour, 12 of the illegal immigrants were taken to regional hospitals after the medical technicians determined they needed special treatment. The rest were treated for dehydration symptoms on site.

"Had our heroic agents not been able to free these trapped undocumented migrants, we could have seen 33 miserable deaths in this event," stated Big Bend Sector Chief Patrol Agent **Sean McGoffin**. *"Smugglers do not care what type of misery they put people through as they take their money."*

The temperature was about 100 degrees around the time.

WOODINVILLE - On Tuesday, **Betz Family Winery** wrote to supporters with news it called *"brutal."* The company would not be releasing a 2020 vintage.

The culprit: last summer's wildfire smoke.

"Our team has been hopeful since harvest, yet after countless hours of sensory analysis, we decided that this was our only option," wrote the owners of the winery near Woodinville, Washington.

"Smoke-taint" has the industry worried as another wildfire season approaches. At its worst, the damage can leave a wine tasting *"like an ashtray."* For now, the effects do appear limited. While Washington is home to around 1,000 wineries, **Betz** is the only so far to make such an announcement, according to **Steve Warner**, president of the Washington State Wine Commission.

ACCRA - Students, community leaders, celebrities, and politicians in Ghana all came together last Friday to revitalize the country's forests. As part of the Green Ghana program, 5,000,000 trees were planted, with the government giving free seedlings to individuals, schools, and organizations. Government statistics show that in 1900, Ghana had 20,000,000 acres of forest cover, and today, that has dropped to about 4 million acres. The forests are being ravaged due to small-scale mining and rampant illegal logging, and now is the "time for action," Ghana's Minister for Lands and Natural Resources Samuel Abu Jinapor told Agence France-Presse. "The aim of Green Ghana is to save us now and our future generations. We can't fail our future leaders." The government, which will sustain this program for the next five years, gave extra seedlings out to students like **Rosemond Asante**, 12, who told Al Jazeera they were "happy to be part of this beautiful event," adding, "I love trees."

SACRAMENTO - Last year, California's Castle fire may have killed off ten to 14 percent of the world's giant sequoias, reports **Joshua Yeager** of the Visalia Times-Delta.

The tally of dead trees comes from a new draft report that used satellite imagery, forest modelling and surveys to revise initial estimates of how many titanic trees were lost when flames ripped through parts of Kings Canyon and Sequoia National Parks. That initial estimate was around 1,000 dead sequoias, but now scientists with the National Park Service and U.S. Geological Survey (USGS) suspect between 7,500 and 10,600 mature trees may have died, reports **Kurtis Alexander** for the San Francisco Chronicle.

	<p>The Castle fire was sparked by lightning and burned from August to December 2020. The inferno scorched 175,000 acres of parkland in the heart of the giant sequoia's extremely limited natural range before being contained by fire crews. Like many of California's fires in recent memory the blaze burned very hot because of built-up, tinder-dry fuels covering the landscape, reports Jack Herrera for the Guardian.</p>
12	<p>SRI LANKA - The waters off Sri Lanka's capital of Colombo seem calmer now, more than two weeks after a blazing 610-foot container ship lit up the coastline. Most of the X-Press Pearl, a four-month-old Singapore-flagged container ship, has settled on the bottom of the sea. Aboard the ship were nearly 1,500 containers, dozens of which contained dangerous goods, including nitric acid, sodium methoxide and methanol. In addition to the chemicals, the small plastic pellets pose a danger to marine life.</p> <p><i>"It's very close to a nuclear disaster, what has happened here,"</i> said Muditha Katuwawala, a coordinator at the Pearl Protectors, a volunteer organization committed to protecting Sri Lanka's marine life. <i>"This is not a problem just in Sri Lanka. In the coming weeks, this is going to be a regional problem."</i></p> <p>Today X-Press Feeders, the company that owns the ship, shared in a news statement that a <i>"gray sheen"</i> was observed emanating from the vessel but that there were no confirmed reports of fuel oil pollution.</p> <p>Experts say the catastrophic effects of the disaster are only beginning to take hold. The ship's cargo, now partly on the ocean floor, contains toxic chemicals and harmful items that could devastate Sri Lanka's marine wildlife, as well as its fishing communities</p>
13	<p>GUANGDONG - The US government has spent the past week assessing a report of a leak at a Chinese nuclear power plant, after a French company that part owns and helps operate it warned of an <i>"imminent radiological threat,"</i> according to US officials and documents reviewed by CNN.</p> <p>The warning included an accusation that the Chinese safety authority was raising the acceptable limits for radiation detection outside the Taishan Nuclear Power Plant in Guangdong province in order to avoid having to shut it down, according to a letter from the French company to the US Department of Energy obtained by CNN.</p> <p>Despite the alarming notification from Framatome, the French company, the Biden administration believes the facility is not yet at a <i>"crisis level,"</i> one of the sources said. While US officials have deemed the situation does not currently pose a severe safety threat to workers at the plant or Chinese public, it is unusual that a foreign company would unilaterally reach out to the American government for help when its Chinese state-owned partner is yet to acknowledge a problem exists.</p>
14	<p>ROCKTON - An Illinois chemical plant that manufactures grease and oil caught fire Monday morning, creating a massive conflagration that rained ash and debris as far as 50 miles away, reports said.</p> <p>The Rockton Chemtool plant, located close to the Wisconsin border about 100 miles northwest of Chicago, caught fire around 7 a.m., leading to the evacuation of anyone within a one-mile radius due to possible dangerous chemicals being released into the air, FOX 39 reported.</p> <p><i>"We have confirmed all on site are safe and accounted for. Our concern right now is for the safety of all our employees and the surrounding community. As a precaution, authorities have evacuated residents in a one-mile radius of the site,"</i> Chemtool told the outlet in a statement.</p> <p>AUSTIN - In Texas, where the heat isn't extreme but temperatures are still above normal, the</p>

	<p>state’s power grid manager, ERCOT, on Monday asked residents to conserve power through the week.</p> <p>Today, records were shattered in the desert Southwest and the Rockies, including in Tucson, where highs hit 112 degrees. Las Vegas spiked to 110.</p>
15	<p>LAS VEGAS - A dangerous and widespread mid-June heat wave is bringing blowtorch-like heat, skyrocketing power demand, and “critical” wildfire danger to much of the West Tuesday through this weekend.</p> <p>Why it matters: The heat is building in a region that is experiencing a record drought, leading to dangerous fire weather conditions, straining electrical grids, and causing water supplies to dwindle further. The heat itself may prove deadly.</p> <p>Threat level: While the Southwest in particular is used to hot weather, this event could break all-time records in normally hot places like Las Vegas, where the all-time high temperature of 117°F could be toppled and overnight low temperatures won’t fall below 90°F for several days.</p> <p>The heat wave has engulfed regions from New Mexico to California, northeastward to Utah, and all the way north to the Canadian border, with temperatures approaching the century mark Tuesday in Wyoming and Montana.</p> <p>Details: Heat warnings and advisories are in effect for tens of millions.</p> <p>Death Valley, Calif., which holds the U.S. record for hottest temperature ever recorded, could eclipse 120°F for several days.</p> <p>In addition to the Las Vegas record, statewide high-temperature records for Arizona (128°F), set in Lake Havasu City, and Nevada (125°F), set in Laughlin, could be in jeopardy.</p> <p>California’s Central Valley region is likely to see temperatures in the triple digits throughout the week, and even downtown Los Angeles could experience triple-digit heat on Tuesday.</p> <p>Areas in the San Diego, L.A., and San Francisco metro regions could see triple-digit heat lasting much of the week.</p> <p>“Critical” fire weather conditions are forecast for Tuesday night in Santa Barbara County, as well as portions of Nevada, Utah and Montana. Vegetation is at record-dry levels across many parts of the West amid an extreme drought.</p> <p>More than 20 large wildfires are already burning in Arizona, California and other parts of the West.</p> <p>In Utah, where temperatures in Salt Lake City are expected to be hover near 110°F Tuesday, Weather Service forecasters urged residents to “[p]lease take measures to reduce the impact of extreme heat on yourselves and your neighbors.”</p> <p>While it’s just mid-June and the hottest time of the year is historically still weeks away, temperatures have matched their highest ever observed levels in parts of Utah, Wyoming and Montana. Salt Lake City; Casper, Wyo.; and Billings, Mont., all made history Tuesday, soaring to 107, 101 and 108 degrees, respectively.</p> <p>As 115-degree temperatures cooked Phoenix’s Roosevelt Row Arts District on Tuesday, Timothy Medina, 58, was perched on a black metal platform 12 feet above the sidewalk, finishing the blue lettering of a sign for a coffee shop. “It’s brutal — that heat against the wall,” he said. “Let me take a quick swig of water.”</p> <p>Construction workers, landscapers and outdoor painters like Mr. Medina have few options but to bear the heat. He wore jeans to avoid burning his skin, along with a long sleeve fluorescent yellow shirt and a \$2 woven hat. But soon the heat was winning.</p> <p>“I start feeling out of breath, fatigued,” he said.</p> <p>Extreme heat is the clearest signal of global warming, and the most deadly. Last year heat</p>

	<p>killed at least 323 people in Maricopa County, which includes Phoenix, a record by far.</p>
<p>16</p>	<p>The amount of heat Earth traps has roughly doubled since 2005, contributing to more rapidly warming oceans, air and land, according to new research from NASA and the National Oceanic and Atmospheric Administration.</p> <p>“The magnitude of the increase is unprecedented,” said Norman Loeb, a NASA scientist and lead author of the study, which was published this week in the journal <i>Geophysical Research Letters</i>. “The Earth is warming faster than expected.”</p> <p>Using satellite data, researchers measured what is known as Earth’s energy imbalance — the difference between how much energy the planet absorbs from the sun, and how much it’s able to shed, or radiate back out into space.</p> <p>When there is a positive imbalance — Earth absorbing more heat than it is losing — it is a first step toward global warming, said Stuart Evans, a climate scientist at the University at Buffalo. “It’s a sign the Earth is gaining energy.”</p> <p>The official observing site at McCarran reached 116F at 4:23 PM. This breaks the old record of 114F for the date, and is only one degree below the all time record high of 117F, which has occurred four times since records began in 1937. 116F has occurred 17 other times.</p> <p>One of Arizona's largest wildfires has scorched more than 139,000 acres and continues to spread rapidly as weather conditions are expected to remain hot and dry.</p> <p>More than 1,000 people are fighting to tame the Telegraph Fire, burning east of Phoenix, as it has grown and began merging with the neighboring Mescal Fire. Both fires have charred more than 210,000 acres.</p> <p>The Telegraph Fire's containment fell to 59% from 68% Tuesday while the Mescal Fire is contained at 88%.</p> <p>The Telegraph Fire is one of the 10 largest fires the Southwest has seen since 1990, according to CNN meteorologist Michael Guy.</p> <p>The drought has strained water supplies throughout the West, shriveling reservoirs. In one California lake, the water became so shallow that officials identified the wreckage of a plane that had crashed into the lake in 1986.</p>
	<p>SACRAMENTO - The heat and drought have forced decisions from farmers and policymakers far earlier than in years past — what crops to grow, what fields to fallow, how much to spend to protect the state’s \$50 billion agricultural industry.</p> <p>Gov. Gavin Newsom (D) has declared a drought emergency in 41 of the state’s 58 counties, covering about a third of the state’s population, and set aside \$5.1 billion to manage some of the immediate consequences. On Thursday, Newsom declared a state of emergency because of the heat wave, a move that makes more energy available within the power grid.</p> <p>PHOENIX - Phoenix now experiences more than 100 days of triple-digit temperatures every year. Mountain snowpacks, which provide most of the region’s water, have declined 15 to 30 percent since the middle of the century, and water levels in Lake Mead — the country’s largest reservoir — have never been this low.</p> <p>Under a worst-case scenario, in which emissions continue to increase, scientists anticipate that Western summers could warm by as much as 4 degrees Celsius. Drought severity will triple. Wildfire “season” will become a year-round event.</p> <p>If the nation is forced to put restrictions on water from the Colorado River, farmers in Arizona</p>

	<p>will be among the very first to see cuts. In a decades-old deal, the state agreed to claim the most “junior” rights to the river if the federal government helped build an aqueduct to transport water to cities and fields across the state.</p> <p>Now those growers of produce, hay and cotton may see their entire allotments cut.</p>
17	<p>SACRAMENTO - One of the most extreme heat waves ever observed in the western United States this early in the season is near its climax. The punishing blast of heat, which began Sunday, has set hundreds of records while simultaneously worsening a historically severe drought, intensifying fires and degrading air quality.</p> <p>About 40,000,000 Americans have endured triple-digit heat and more than 50,000,000 have been under excessive-heat warnings this week.</p> <p>After focusing in the northern and central Rockies earlier in the week, the core of the heat has shifted into the Desert Southwest and California’s Central Valley, where scores of additional records are predicted to fall through Saturday.</p>
19	<p>LAKE OROVILLE – The work had to be done quickly as water vanished to vapor in the early summer heat. Hauling giant houseboats, some 50 to 60 feet long, from this lake became urgent just a few weeks ago.</p> <p>In all, the Oroville Lake Marinas company removed 130 houseboats; floating recreation palaces such as the Monte-Carol and La Bella Vita now sit in a parking lot on stacks of pasteboard props. The lot stands where the lake’s high water mark would usually be — 900 feet. It is now 700 feet and falling fast.</p> <p>The man-made lake, which helps to irrigate thousands of acres of crops through the elaborate California State Water Project, is now so low that it is impossible for the marina to remove more of the large boats even as dun-colored islands begin to pop up. The launch ramp no longer reaches the water, which will keep disappearing amid a summer of record heat, including the “mega-heat wave” currently scorching much of the West.</p> <p><i>“I’ve seen it like this before but only at the end of summer, never this early,”</i> said Aaron Wright, the area’s public safety chief who has worked in and around Lake Oroville — the state’s second-largest reservoir — for that last eight years. <i>“This low will be historic.”</i></p> <p>In Lake Oroville, the dam, which at 770 feet high is the nation’s tallest, and its electricity production could soon be affected. Another 60 feet or so of evaporation, which could come within weeks, will drop the water line below the turbines that provide power to the broader grid. Power companies across the California are preparing residents for a summer of rolling outages.</p>
21	<p>SEATTLE - ‘Heat dome’ may push Western Washington temperatures into record-breaking territory. Seattle-area temperatures may shoot past 90 degrees on Monday, which would break a record set back in 1992he so-called heat dome, which has stretched across the Western United States for the past week and is now creeping north and east, has set record temperatures from Omaha to Death Valley. The heat dome is a heat wave that sits over one region — in this case, the entire Western half of the United States — and stays there, said Mary Butwin, meteorologist at the National Weather Service in Seattle.</p> <p>CHICAGO - A tornado damaged more than 100 homes in a Chicago suburb, local officials said Monday. At least five people were injured, one critically, and hospitalized in Naperville, city spokeswoman Linda LaCloche said. Sixteen homes were deemed “uninhabitable.” The tornado also knocked down trees and power lines, cutting electricity in some</p>

	<p>neighborhoods. <i>"We're lucky that it wasn't worse," LaCloche said.</i></p>
22	<p>WHISTLER - Every year, the province's glaciers lose enough water to fill BC Place Stadium 8,300 times. The province's scientists and outdoor community worry that's putting people and wildlife at risk.</p> <p>Glaciologists estimate 22 billion cubic metres of water are lost from the province's glaciers every year. The loss of that slow trickle of ice-cold water into mountain streams is predicted to have devastating consequences for British Columbia's iconic salmon populations and the web of life that rely on the cooling effects of glacier runoff. A lot of those effects are expected to land at the feet of First Nations communities.</p> <p>"The change in the last 150 years, some of it is so fast we haven't seen it in the last 10,000 years," says Johannes Koch, a glaciologist at Kwantlen Polytechnic University who spent the past 20 years studying glaciers in Garibaldi Park and the Pemberton Icefield.</p> <p>WELLINGTON - That plague of mice in the Australian state of New South Wales has forced a prison to evacuate at least 420 inmates and 200 staff, according to local authorities. The mouse infestation at the Wellington Correctional Centre broke down parts of the prison building's infrastructure, damaging internal wiring and ceiling panels. Corrective Services NSW Commissioner Peter Severin said Tuesday inmates would be transferred to other prisons, and staff would be relocated while authorities battle the infestation.</p> <p>ISTANBUL - Remember sea snot?</p> <p>The slime is, in short, a national crisis. Turkey is now trying to vacuum up its embarrassment of sea snot, dispatching workers with hoses to collect mucus by the tons for incineration. But scientists say that much more is probably lurking under the water. And even worse, the floating mucus is a sign of much larger disruptions in the sea. As unsightly as sea snot might be, its most devastating effects happen far away from human eyes, deep below the surface. Bacteria trapped in the mucus will eventually start to eat and digest it, creating air bubbles that ultimately float the whole sheet of sea snot up to the surface. In the Adriatic Sea, the arm of the Mediterranean just east of the Italian peninsula, the floating mucus can dry and toughen in the sun. Seagulls are known to walk on it.</p>
23	<p>SEATTLE - The week after one of the worst heat waves in the history of the Western U.S., a series of wildfires has already broken out unseasonably early, sparking fears that this will be one of the worst fire seasons ever.</p> <p>The normal wildfire season of summer and fall is approaching at a time when the entire West has experienced an unusually low winter snowpack and an early snow melt. This has led to dryer conditions that could exacerbate fires by July and August as well as into early autumn.</p> <p>Brian Harvey, an assistant professor with the University of Washington's School of Environmental and Forest Sciences, said the areas of the country on fire are the areas experiencing the historically dry conditions.</p> <p><i>"More than half of the current area burning is in Arizona, New Mexico, and Utah, though there are wildfires burning in other western U.S. states as well. The location of the bulk of the current fire activity lines up with most of the Southwest experiencing wildfire potential (fuel dryness) that is above normal for this time of year."</i></p>

	<p>Harvey said the area of the country that has experienced burns is larger than what was seen to this point in 2020, even before the main fire season in late August and early September. Interior Secretary Deb Haaland today during testimony before the House Natural Resources Committee warned that the dry conditions could become a new normal in the West , sparking wildfires over 12 months. She told Representative Joe Neguse that the region could face “<i>fire years</i>” rather than fire seasons. This year the acreage burned stands at 1,160,000 as of Wednesday.</p>
24	<p>SURFSIDE - 1:25 a.m.: At the 12-storey Champlain Towers condo highrise, a cloud of ash and smoke rose into the sky, along with shouts and terrified cries. Nicholas Balboa, in town from Phoenix to visit relatives, was on Collins Avenue walking the family dog when he felt the ground shake.</p> <p><i>“I heard a sound, almost sounded like thunder. I thought a storm might be rolling in.”</i></p> <p>But then a whip of air rushed between the buildings, followed by a plume of dust and debris, and Balboa knew this was nothing nature had created.</p> <p>1:29 a.m.: A first responder with Engine 76 to dispatch: <i>“This is going to be an entire building. One, two, three, four, five — 12 to 13 stories. Um, shit.”</i></p> <p>He paused. <i>“Most of the building is gone.”</i></p> <p>1:50 a.m.: The entire avenue was chock-a-block with emergency vehicles, more than 80 of them. Firefighters and other first responders hurried onto the tall mound of rubble, looking for people. An urban rescue dog sniffed the debris, searching for survivors.</p> <p><i>“We’ve got people trapped,”</i> a fire-rescue dispatcher called out to all units. <i>“The building is at risk for a further collapse. We need manpower. We got active people trapped on the rubble. Need some backboards over here.”</i></p> <p>From the still-standing portion of the tower, residents waved to rescue workers, who directed cherry-pickers to nudge up against the building and retrieve people whose apartments had been sheared open. Entire rooms stood exposed, like stage sets before an audience — bunk beds here, a couch there, a washing machine hanging from a ledge, mattresses stacked against a wall.</p> <p>2 a.m.: Balboa walked his dog around to the oceanside of the Champlain complex and heard someone yelling. <i>“A little boy, by voice,”</i> he said.</p> <p>He saw a hand waving from the rubble, called out to a police officer and together they climbed up the concrete shards as the officer radioed for help.</p> <p><i>“Don’t leave me,”</i> the boy cried. <i>“Don’t leave me.”</i></p> <p>The boy, Jonah Handler, 15, a junior varsity baseball player at Monsignor Edward Pace High School in Miami Gardens, was taken to the hospital but did not suffer severe injuries, a family member said. His mother, Stacie Fang, was extracted from the rubble but died at Aventura Hospital of blunt force injuries, according to the county medical examiner.</p> <p>3:15 a.m.: At the town’s recreation center, people evacuated from the hotels and apartments adjacent to Champlain Towers stood watching TV coverage of the collapse. A few children tried to sleep on coffee tables and the floor.</p> <p>4:30 a.m.: Rescue dogs prowled the rubble pile, their keepers waiting for the barks that would indicate signs of life. The animals stayed silent.</p> <p>At hospitals throughout the county, emergency rooms prepared for a steady stream of injured people. Barely a trickle arrived.</p> <p>6 a.m.: If people were still alive under the rubble, they needed to be found quickly. The rescue chiefs on the scene ordered workers to drill into the mound, creating tunnels through which they could search. More than 60 firefighters deployed, cutting open crevices to squeeze into the spaces between pieces of the building. But they kept running into blockages</p>

— thick concrete barriers — and small fires that seemed to flare every time they opened a new passageway.

8:15 a.m.: Fire officials said anyone still alive might already have been pulled out. In all, rescuers helped 35 people out of the building, the county reported.

9:45 a.m.: *"We are bracing for some bad news,"* Governor **Ron DeSantis** said at a news conference.

11:10 a.m.: More than 100 friends and relatives of the missing gathered at an optimistically-named Family Reunification Center at Surfside's community center. Officials took down the names of those who had not been heard from. But they had nothing to offer in return, leaving family members to scroll through their social media feeds, call neighbors and otherwise keep searching.

10 p.m.: Flashes of lightning illuminated the upscale condo buildings along Collins Avenue, which runs parallel to the ocean from frenetic Miami Beach to quieter Surfside. Near the Fendi Chateau Residences, six blocks from the Champlain, hundreds of people huddled under umbrellas — mostly press and some family members — hoping for news of loved ones.

As rain lashed in sheets, relatives wondered how anyone could be found alive in the deluge. The 12-story condominium tower that crashed down early Thursday near Miami Beach was built on reclaimed wetlands and is perched on a barrier island facing an ocean that has risen about a foot in the past century because of climate change.

Underneath its foundation is sand and organic fill — over a plateau of porous limestone — brought in from the bay after the mangroves were deforested. The fill sinks naturally, and the [subsidence worsens](#) as the water table rises.

But it is already clear that South Florida has been on the front lines of sea-level rise and that the effects of climate change on the infrastructure of the region — from septic systems to aquifers to shoreline erosion — will be a management problem for years.

MIAMI - The U.S. Army Corps of Engineers is proposing a \$6 billion, 20-foot high wall that would run through six miles of the city to protect it from it from hurricane storm surge, which is expected to get worse and worse as the climate gets hotter and the seas rise.

25 **OTTAWA** - Persisting drought conditions are prompting the International Lake Ontario-St. Lawrence River Board to continue its policy of lower outflows from the lake into the river. The board, which is in charge of implementing the lake and river outflow policies of the International Joint Commission (IJC), issued a statement Friday acknowledging that "drought conditions that have impacted the Great Lakes-St. Lawrence River watershed this spring have continued to persist into the summer."

"The water level of Lake Ontario has remained stable in June. Unless the basin receives significant rainfall, it is likely that Lake Ontario is approaching (or has already reached) its seasonal peak or maximum level," officials added.

That means the board will continue to deviate from the flows outlined in the so-called Plan 2014 "at least into July," the statement continued. On May 29, outflows from Lake Ontario were set to 100 m³/s below the amount prescribed in the regulation plan, to account for the dry conditions.

VANCOUVER - Expect the next week to be the hottest ever on Canada's west coast. This is a jaw-dropping weather forecast.

	And then the heat bomb was dropped!
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This is a Climate Catastrophe Diary produced by George Orr

george.orr@greenparty.ca

604-377-2736