

Climate Adaptation: EPA Actions to Increase Adaptive Capacity and Resilience as the Climate Changes

Vicky Salazar

US Environmental Protection Agency
Climate Adaptation Program

Climate Change

It is happening now.

Seattle Times
Sunday, March 20,
2022

NATION & WORLD

Temps at both poles far above normal

CLIMATE | The Arctic and Antarctic see extreme highs simultaneously.

By SETH BORENSTEIN
The Associated Press

Earth's poles are undergoing simultaneous freakishly extreme heat with parts of Antarctica more than 70 degrees Fahrenheit warmer than average and areas of the Arctic more than 50 degrees warmer than average.

Weather stations in Antarctica shattered records Friday as the region neared autumn.

The two-mile-high (3,234 meters) Concordia station was at 10 degrees, which is about 70 degrees warmer than average, while the even higher Vostok station hit a

degrees, according to a tweet from extreme weather record tracker Maximiliano Herrera.

The coastal Terra Nova Base was far above freezing at 44.6 degrees.

It caught officials at the National Snow and Ice Data Center in Boulder, Colorado, by surprise because they were paying attention to the Arctic where it was 50 degrees warmer than average and areas around the North Pole were nearing or at the melting point, which is really unusual for mid-March, said center ice scientist Walt Meier.

and the south (poles) both melting at the same time," Meier told The Associated Press on Friday evening. "It's definitely an unusual occurrence."

"It's pretty stunning," Meier added.

"Wow. I have never seen anything like this in the Antarctic," said University of Colorado ice scientist Ted Scambos, who returned recently from an expedition to the continent.

"Not a good sign when you see that sort of thing happen," said University of Wisconsin meteorologist Matthew Lazzara.

Lazzara monitors temperatures at East Antarctica's Dome C-ii and logged 14 degrees on Friday, where the

you should see in January, not March. January is summer there. That's dramatic."

Both Lazzara and Meier said that what happened in Antarctica is probably just a random weather event and not a sign of climate change. But if it happens again or repeatedly, then it might be something to worry about and part of global warming, they said.

The Antarctic warm spell was first reported by The Washington Post.

The Antarctic continent as a whole on Friday was about 8.6 degrees warmer than a baseline temperature between 1979 and 2000, according to the University of Maine's Climate Reanalyzer, based on U.S. National Oceanic Atmospheric Adminis-

8-degree heating over an already warmed-up average is unusual; think of it as if the entire United States was 8 degrees hotter than normal, Meier said.

At the same time, on Friday the Arctic as a whole was 6 degrees warmer than the 1979-2000 average.

By comparison, the world as a whole was only 1.1 degrees above the 1979-2000 average. Globally the 1979-2000 average is about half a degree warmer than the 20th-century average.

What makes the Antarctic warming really weird is that the southern continent — except for its vulnerable peninsula, which is warming quickly and losing ice rapidly — has not been warming much, especially compared

said.

Antarctica did set a record for the lowest summer sea ice — records go back to 1979 — when it shrank to 741,000 square miles in late February, the snow and ice data center reported.

What likely happened was that "a big atmospheric river" pumped in warm and moist air from the Pacific southward, Meier said.

And in the Arctic, which has been warming two to three times faster than the rest of the globe and is considered vulnerable to climate change, warm Atlantic air was coming north off the coast of Greenland.

Associated Press climate and environmental coverage receives support from several private foundations. The AP is solely responsible for all content.

ON THE WEB | What's a slotar? Find out and see more from the open field day at [st.news/Gaelicgames](https://www.seattletimes.com/st/news/Gaelicgames).

NATION & WORLD

Firefighters make headway on massive blazes in Texas

The Associated Press

EASTLAND, Texas — Fire crews in Texas made progress Saturday against a massive complex of wildfires that have killed a deputy sheriff and burned at least 50 homes, officials said.

"Progress has been made, but fire activity has picked up with rising temperatures and lower humidity," said Matt Ford, spokesperson for Texas A&M Forest Service. He said about 25% of the flames were contained, up from about 4% late Friday as the fire burned thick brush and grass fields.

The fires had burned about 130 square miles,

including about 70 square miles in the Eastland complex, according to the agency. That area is about 120 miles west of Dallas.

Gusty winds were expected to return Sunday, again raising the wildfire threat to critical levels in western and central Texas, Ford said.

"We are predicting weather severity to increase" Sunday, said Ford. "Fire activity may increase based on weather conditions, [but] containment lines are holding" thus far.

The National Weather Service forecast for the area called for high temperatures in the low 80s on Sunday

with winds of 15-20 mph and gusts up to 30 mph.

The forecast also calls for a 90% chance of rain on Monday, which Ford said would be welcome, but the winds could shift and drive the fire in another direction.

"Any kind of water source or rain is going to be beneficial," in extinguishing the flames, Ford said. "We'll hope for the best and prepare for the worst."

Gov. Greg Abbott said late Friday that at least 50 homes had been destroyed by flames with more possibly to be found. He declared a disaster in the 11 counties hardest hit by wildfires.

Texas A&M Forest Service noted that fires could also affect parts of Oklahoma, Kansas and Nebraska and warned of an extreme fire risk in those states.

Much of Eastland County and the surrounding area is livestock land, and it's in a drought that has turned the entire area into a tinderbox. The fast, shifting winds pushed the fire in unpredictable paths and made it impossible for firefighting aircraft to join efforts to combat the blaze until Friday.

The Eastland County Sheriff's Office released more details on the death of Depu-

ty Sgt. Barbara Fenley. In a statement, the office said she was going door to door, getting residents to evacuate their homes Thursday and it was "last heard that she was going to check on an elderly individual."

She was driving, and "with the extreme deteriorating conditions and low visibility from smoke, Sgt. Fenley ran off the roadway and was engulfed in the fire," the sheriff's statement said.

About 18,000 people live in Eastland County and about 475 homes were evacuated in the area, Ford said.

"We do have assessment teams on the ground investi-

gating exactly how many homes were lost," Ford said.

Several months of dry, windy weather have fueled deadly wildfires in Kansas and Oklahoma, including one a few weeks ago. In remote, western Nebraska ranching country, a large wildfire has been burning for several days. Meteorologists said they were hopeful that rain showers expected this week across the Plains would reduce the risk.

The fires caused hazy conditions hundreds of miles away and prompted automated phone messages from the Houston Fire Department and the city's Office of Emergency Management on Friday alerting area residents to smoke and ash.

A photograph showing a flooded field with a chain-link fence in the foreground. The water is murky and reflects the sky. In the background, there are dense green trees and a utility pole. A small sign is visible on the fence to the right.

**Climate Change
impacts EPA's ability to
fulfill its mission**

and it impacts the Air, Land, Water, and People EPA Protects





Diverse impacts across the US

Tackling the Climate Crisis: A Whole-of- Government Approach

- President Biden issued Executive Order 14008 on *Tackling the Climate Crisis at Home and Abroad*
- 3 major areas focus:
 - Climate Mitigation
 - **Climate Adaptation**
 - Securing Environmental Justice

Requires:

- Policy Statement on Climate Change Adaptation
- Climate Adaptation Action Plan

Directives from EPA Administrator Michael Regan, May 2021.

“Integrate climate adaptation planning into EPA programs, policies and rulemaking processes”

“Consult and partner with states, tribes, territories, local governments, environmental justice organizations, community groups, businesses, and other federal agencies to strengthen adaptive capacity and increase the resilience of the nation, with a particular focus on advancing environmental justice.”

As part of the whole-of-
government approach
**Transformational
Action**



U.S. ENVIRONMENTAL PROTECTION AGENCY

Climate Adaptation Action Plan

OCTOBER 2021



5 Key Actions



Internal transformation of program activities



Assisting partners to take action



Ensuring our facilities and workforce are resilient



Measure progress



Effective science

EPA 2022-2026 Strategic Plan

- Implement all actions in EPA's Climate Adaptation Action Plan and Implementation Plans
- Assist states, Tribes, territories, local governments, and communities, especially those disproportionately impacted by climate change, to take action to anticipate, prepare, adapt to, and recover from the impacts of climate change.

Building Adaptive Capacity

We are committed to building and strengthening the adaptive capacity of our partners through the provision of:

- **Training**: increasing awareness of ways climate change may affect their ability to implement effective programs
- **Tools**: providing necessary data, information and tools
- **Technical assistance**: working with states, tribes, territories, local governments, and businesses to help develop and implement locally-led plans
- **Financial incentives**: supporting climate-resilient investments in communities across the country

Climate Change Adaptation Resource Center (ARC-X)



King County, Washington, Helps Municipalities Account for Climate Change in Local Government Services

[Learn how King County, Washington is helping municipalities address climate change in local government services, including solid waste management.](#)

Tailored Information in
available now



Rising to the challenge of sea level rise

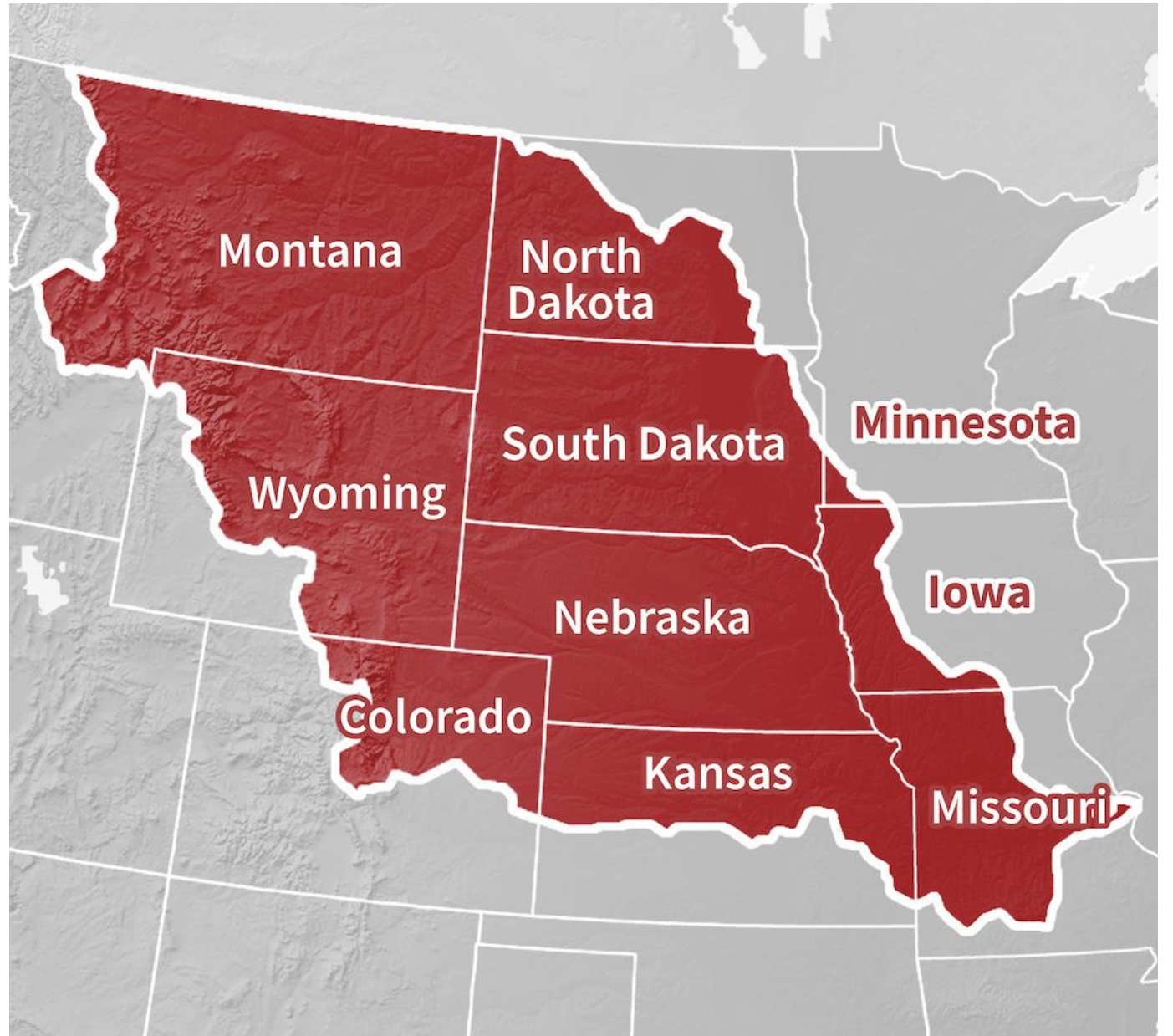
Planning for more severe weather





Preparing for drought.

Missouri River Basin

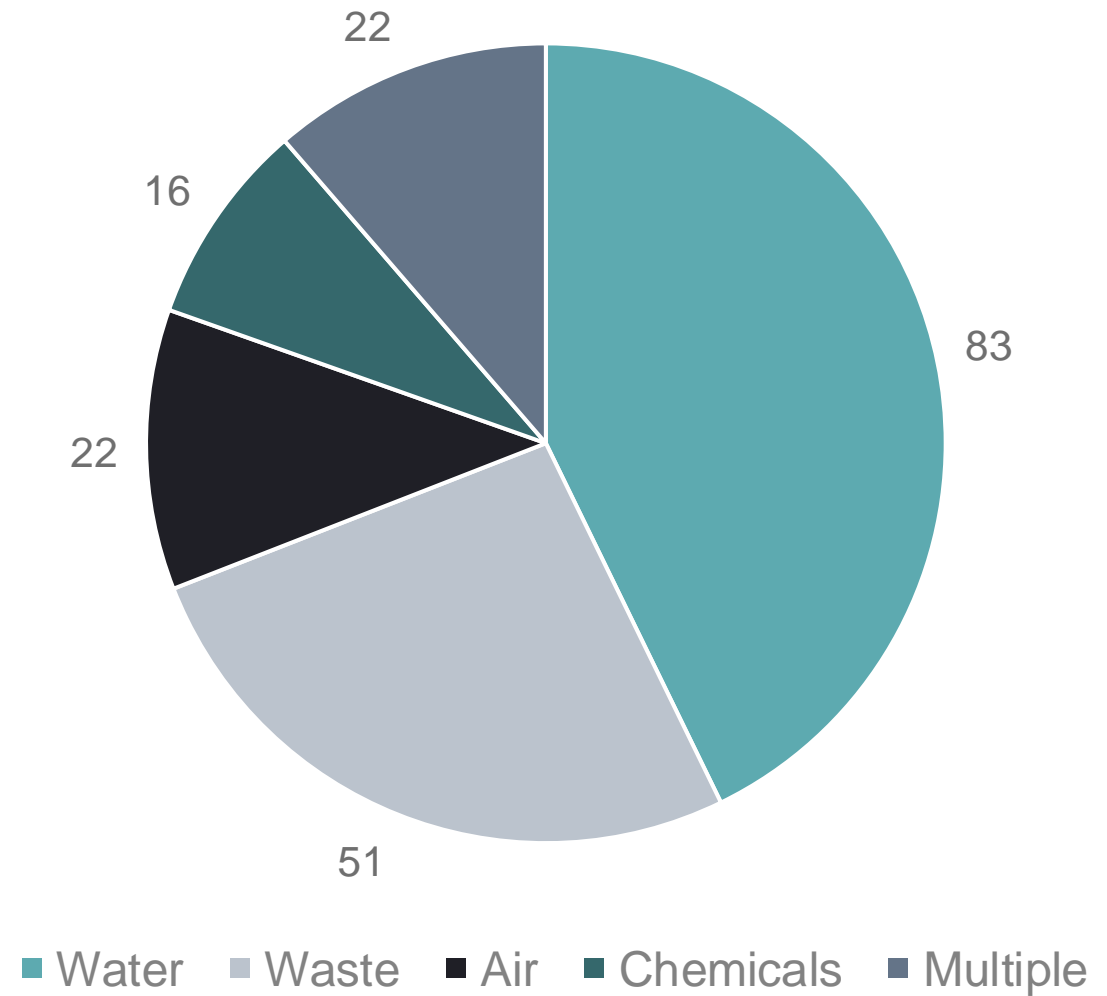


Preparing for longer, more intense fire seasons



Science Informed Decision Making

Science Needs Identified in Implementation Plans





Climate Justice

“The impacts of climate change that we are feeling today, from extreme heat to flooding to severe storms, are expected to get worse, and people least able to prepare and cope are disproportionately exposed,” **EPA Administrator Michael S. Regan**, Sept 2021

Viccy Salazar
US Environmental Protection Agency
Office of the Administrator
Office of Policy
Climate Adaptation Program
Salazar.viccy@epa.gov

**Listserv for the Climate Change Adaptation
Resource Center**

[climate-adaptation-resource-center-
subscribe@lists.epa.gov](mailto:climate-adaptation-resource-center-subscribe@lists.epa.gov)

