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Officials note climate change concerns on Earth Day

By KIMBERLY CAUVEL @Kimberly_SVH Apr 22, 2016



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With climate change viewed by many scientists and officials as one of the gravest concerns of our time, the issue will get special attention today during the United States' 46th annual Earth Day.

Many countries will join the U.S. today in revisiting a potential international agreement drafted in Paris in December that aims to curb global greenhouse gas emissions and limit warming.

The threats posed by climate change are often talked about in terms of melting Arctic ice, shrinking tropical islands and dying coral reefs. Effects are already being seen in the Pacific Northwest, according to the U.S. Environmental Protection Agency.

The glaciers in the North Cascades are receding, according to the North Cascades National Park's Glacier Monitoring Program.

Warmer than usual temperatures are expected to result in less snowpack to supply streams during the summer, according to the state Department of Ecology and the University of Washington's Climate Impacts Group.

With hotter and drier summers, the western U.S. will see more droughts and wildfires, such as Washington's extreme wildfire season in 2014 and its <u>snowpack drought</u> last year.

According to Ecology and the National Oceanic and Atmospheric Administration, water temperatures in Puget Sound and the Pacific Ocean are also increasing in response to warmer air temperatures. Also increasing is the the acidity of the water, often referred to as ocean acidification.

Together, the various impacts of climate change threaten the region's streams, oceans, forests, wildlife, water supply, human health, infrastructure and industries, according to agencies including Ecology and the EPA.

Officials taking notice

From the <u>Board of County Commissioners</u> in Skagit County to Gov. Jay Inslee and President Barack Obama, many political leaders have acknowledged that a changing climate means potential shifts in weather patterns, growing seasons and the spread of disease.

Leaders from many countries convened in Paris at the end of 2015 to discuss potential international cooperation on combating climate change. According to a statement from the White House, the U.S. and China are expected today to sign the agreement reached in Paris.

The goal of the agreement is to limit warming to no more than 3.6 degrees above pre-industrial temperatures, according to the agreement.

The U.S. and China are the world's largest carbon emitters, together accounting for about 38 percent of emissions, according to the World Resources Institute.

Obama and Inslee have hailed the Paris agreement as the world's best chance at preventing climate change impacts.

"The world took a big step for the first time (in Paris) ... The world came united in pushing a go button to start facing climate change," Inslee said during a video conference in December with university students from throughout the state.

Moving forward, reducing <u>emissions of carbon dioxide</u> — a greenhouse gas produced by burning fossil fuels — is a top priority among various levels of government. State and federal agencies are working on potential emissions regulations.

Carbon dioxide is one of several greenhouse gases that trap heat in the atmosphere.

Some say the impacts are becoming increasingly clear as record-breaking weather is documented.

Deke Arndt, chief of the Climate Monitoring Branch at NOAA, said in a recent <u>Washington Post</u> <u>article</u> that warming trends in the past few years are "an irrefutable indicator of climate warming in the United States."

Following a record-warm year globally in 2015, January, February and March have set recordhigh temperatures this year for each month, according to NASA.

Public opinion

Warmer weather is driving changes such as early blooms for the Skagit Valley Tulip Festival and {span}{span}span}span}space for some agricultural crops, such as berries.{/span} {/span}

{span}{span}Is climate change the cause?{/span}{/span}

According to a Yale University <u>climate opinion study</u>, 63 percent of Americans believe climate change is happening, 52 percent are worried about the effects, and the majority support efforts to reduce emissions and increase renewable energy sources.

The study, part of the Yale Project on Climate Change Communication, included about 13,000 responses between 2008 and 2014.

In 2015, Yale partnered with the nonprofit Skagit Climate Science Consortium to delve into Skagit County's public opinion on climate change. In May 2015, 1,000 county residents completed phone surveys.

Consortium administrator Carol MacIlroy said when compared to the national results, a higher percentage of those <u>surveyed in Skagit County</u> believe climate change is happening.

According to the consortium, 79 percent of Skagitonians believe climate change is happening, 59 percent believe human activities are the cause, 48 percent believe people in the U.S. are already being harmed by the effects and 65 percent are worried about the impacts.

The Skagit Climate Science Consortium is a group of area researchers working together to evaluate how climate change may affect the area.

The group's goal is to provide information to local governments and the public about the potential risks of climate change.

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