

# Index to Online Resources on Climate Change in Oregon



This index provides links to agencies, organizations, and news sites that provide general information on global warming and climate change. The resources have been vetted by OE staff for their science-based approach and readability. Most sites are directly relevant to the effects of climate change in Oregon, but some take a national and global view.

The resources have been divided into five categories: [Teaching Climate Change in Oregon](#); [Databases, Charts, and Graphs](#); [Native Americans and Climate Change](#); [Climate Change Activism](#); and [Climate Change in Arts and Culture](#).

The [Oregon Climate Service](#) (OCS) serves as Oregon's state climate office, hosted by the College of Earth, Ocean, and Atmospheric Sciences (Oregon State University) and the Oregon Climate Change Research Institute, in partnership with state agencies.

## Teaching Climate Change in Oregon

These websites provide basic introductory information about climate change and classroom resources for teachers and their students.

<a href="#">National Oceanic and Atmospheric Administration (NOAA)</a>	NOAA is a federal agency that makes policy recommendations based on scientific studies and analyses. Its climate change portal provides basic, accessible information on climate change, with lesson plans, classroom resources, and multimedia.
<a href="#">Oregon Natural Resources Education Program, Oregon State University, College of Forestry</a>	OSU has created a resource page dedicated to teaching science and the environment. The database is searchable by grade level and includes multimedia tools, reading materials, and classroom activities.
<a href="#">U.S. Environmental Protection Agency, Climate Change Science</a>	The federal EPA provides basic information and data on climate change, including introductory material, causes, impacts, and indicators. Note: the information on the EPA varies depending on the policy goals of the current administration. The Biden administration tends toward science-based policy.
<a href="#">Bad Future, Better Future. A guide for kids, and everyone else, about climate change – and what we can do about it. <i>The New York Times</i></a>	An excellent introduction to climate change for young students in the form of an illustrated storybook.
<a href="#">The Science of Climate Change Explained: Facts, Evidence and Proof. <i>The New York Times</i></a>	Definitive answers to the big questions.
<a href="#">"Beyond Catastrophe: A New Climate Reality Is Coming Into View" by David Wallace-Wells. <i>The New York Times</i></a>	For more sophisticated readers, this comprehensive and long read by climate change journalist David Wallace-Wells explains what we know (and how we know) about climate change; why we need to be paying attention and taking action; and how we can mitigate the effects of a rapidly warming planet.
<a href="#">Global temperature trends over time, animated map, University of Oregon Climate Change Research Group.</a>	The CCRG works with students to create resources on climate change that can be used in the classroom. We recommend clicking on the "Animation of temperature trends" link for an accessible demonstration of how (and where) the planet has warmed since the Industrial Revolution. There are also links to Youtube videos on climate change basics.
<a href="#">The Oregon Conservation Strategy</a>	With a state-wide mandate to preserve fish and wildlife, the OCS provides resources, information, and data about climate change in the PNW and Oregon and strategies for addressing climate change. The organization divides the state into ecoregions, describes them, identifies key issues, and offers recommendations for action. Teachers and students can focus on their region and its particularly climate change issues.
<a href="#">Oregon Educators for Climate Ed</a>	The Oregon Educators for Climate Ed is a statewide collaboration of Oregon teachers working to mandate climate change curriculum into PK-12 classrooms. The site includes links to classroom resources.
<a href="#">Rethinking Schools</a>	Rethinking Schools formed to support the Portland Public School Board's climate literacy policy resolution, passed in 2016. The group created a "climate justice seed packet," which includes information on the resolution and how it may be implemented in classrooms.

## Databases, Charts, and Graphs

These sites provide graphic representations of the causes and effects of climate change and provide access to datasets in various forms that support research-based reports and research papers.

<a href="#">Climate Adaption Knowledge Exchange</a>	CAKE is an information-sharing climate adaptation resource hub with links to data, case studies on climate change mitigation, and interactive tools to help understand global warming.
<a href="#">En-Roads Climate Solutions Simulator</a>	Interactive, online simulator that allows users to examine and test a variety of climate solutions, such as energy sources, transportation, and land use. Developed by Climate Interactive, MIT Sloan Sustainability Initiative, and Ventana Systems.
<a href="#">EPA Global Greenhouse Gas Emissions Data</a>	A guide to the sources of greenhouse gas emissions global greenhouse gas emissions data, including industry (such as agriculture), infrastructure (such as transportation), and geographical location. Compiled by the Environmental Protection Agency.
<a href="#">Oregon Global Warming Climate Commission</a>	Tracks trends in greenhouse gas emissions in Oregon and provides analysis and data in published reports, including accessible graphs.
<a href="#">The OCCRI Projects Page</a>	The Oregon Climate Change Research Institute provides summaries, maps, and graphs related to climate change in Oregon, including useful guides to warming trends in every Oregon county.
<a href="#">OSU Climate Feedback Loops Project</a>	Oregon State University had created graphs to describe global warming feedback loops, which are circular or "looping" processes that amplify or lessen the effects of a changing climate. For example, the melting of sea ice and the effects of sun rays on the earth create a feedback loop--the temperature goes up, the ice melts, the heat from the sun is absorbed instead of reflected off the ice, which warms the earth, which melts more ice, and the process repeats.
<a href="#">Portland State University Climate Science Lab</a>	PSU collaborates with climate scientists, meteorologists, and geographers to study and address the effects of climate change in Oregon. Click on the Projects drop-down to access the many data sets they have developed, including weather conditions, temperature, and other atmospheric phenomena.
<a href="#">Pacific Northwest Research Station: Climate Change</a>	The Forest Service's Pacific Northwest Research Station in Portland is dedicated to studying and documenting the region's natural resources. As part of its climate change studies, it has created many useful research documents on subjects such as wildfires and carbon storage in soil. Significantly, the site provides information on how government agencies are working to slow and adapt to climate change in Oregon.
<a href="#">United Nations Climate Change</a>	The United Nations tracks and assesses Climate Finance Flows, which describe the financing of policies, systems, and projects across the world that adapt to and/or mitigate the effects of climate change. This useful graph illustrates the forms those efforts take by governments and private industries and organizations.
<a href="#">Water Conflict Chronology: Pacific Institute</a>	The Pacific Institute collaborates with scientists and policy experts to track and advocate for clean, available water for all. It takes a historical approach to conflicts over water sources, as both a trigger for conflict and as a tactic for power. The chronological list is plotted out on an interactive map.

## Native Americans and Climate Change

Native American communities are crucial participants in understanding and addressing climate change. These sites provide information on how the warming of the planet affects Native peoples and how Indigenous knowledge will mitigate the effects.

<a href="#">Affiliated Tribes of Northwest Indians: Climate Change</a>	The ATNI is a collaborative effort among Northwest Tribes to address the effects of climate change on tribal resources, with an emphasis on resiliency. We recommend clicking "Resources" in the menu to watch short informational videos on topics such as Traditional Ecological Knowledge and land management.
<a href="#">"Assessing the Cultural Effects of Climate Change on Northwest Tribes" Climate Adaptation Science Centers.</a>	The CASC has compiled valuable material on the effects of climate change on Northwest Tribes—their natural and cultural resources, for example—and the ways Traditional Ecological Knowledge (TEK) is being used to mitigate those effects.
<a href="#">"Dispossessed, Again: Climate Change Hits Native Americans Especially Hard" by Christopher Flavell and Kalen Goodluck. <i>New York Times</i>, June 27, 2021.</a>	An introduction to the effects of climate change on Native homelands and reservations lands.
<a href="#">"How loss of historical lands makes Native Americans more vulnerable to climate change" by Rachel Tressiman. <i>National Public Radio</i>, November 2, 2021.</a>	A news essay describing a multi-year study by Yale University, Colorado State University, and University of Michigan to document the economic and environmental impacts of Native land dispossession.
<a href="#">"How Native Tribes are Taking the Lead on Planning for Climate Change" by Nicola Jones. <i>Yale Environment 360</i>, February 11, 2020.</a>	A narrative on the programs Native communities have created, using traditional knowledge of the land and its resources, to fight the negative impacts of climate change.
<a href="#">Institute for Tribal Environmental Professionals</a>	Institute for Tribal Environmental Professionals is based in Arizona, but provides some valuable information on climate change relevant to the Northwest. Along with providing reports on the status of tribes and global warming, the site includes a useful glossary of terminology related to Native history, including the terms "subsistence" and "treaty rights."
<a href="#">U.S. Climate Resilience Toolkit</a>	The Climate Resilience Toolkit was created by NOAA in cooperation with other government agencies. This page focuses on U.S. Tribal Nations and includes a brief overview of the unique impacts of global warming on Native communities and resources on how tribes are preparing for those impacts.
<a href="#">U.S. Department of Agriculture</a>	In 2016, the U.S. Forest Service commissioned a report on how climate change was affecting Native peoples, and how tribal communities were working to mitigate those effects. The report includes information on Northwest Indians.

## Climate Change Activism

The following organizations support political, economic, and cultural activism dedicated to slowing climate change. The groups bring people together and provide tools for networking and political action.

<a href="#">350.org</a>	A global effort based in the U.S. and led by Bill McKibbin, 350 advocates toward the goal of keeping carbon dioxide concentration under 350 parts per million, primarily through renewable energy alternatives. The site provides information on the science of energy use and policy, as well as ways to advocate for change.
<a href="#">Action for the Climate Emergency (ACE) Space</a>	ACE Space is a non-profit focused on empowering young people in the fight against global warming, in part by providing tools for organizing and political actions and by creating networks of individuals and groups across the country. For kids who want to get involved in the national movement, this site is a good place to start.
<a href="#">The Biomimicry Institute</a>	Biomimicry describes the development of technologies that "mimic" the natural world in an effort to solve climate problems. The design strategy is meant to be sustainable and less dependent on natural resources. The site includes introductory videos.
<a href="#">Citizens' Climate Lobby</a>	A 501(c)4 nonprofit organization that pushes for nonpartisan policies to address climate change through a network of chapters across the globe. There are several chapters in Oregon, including Portland, Bend, and Lane County.
<a href="#">Climate Action Network International</a>	CANI is a global network of more than 1,300 environmental non-governmental organizations (NGOs) working to address climate change.
<a href="#">Climate Collaborative</a>	The Climate Collaborative is a partnership of natural product businesses, such as Whole Foods and Clif Bars, working to improve sustainability and reach climate goals. The site includes a list of participating companies.
<a href="#">Earth Justice</a>	EarthJustice is a non-profit environmental law organization which has advocated for the protection of the environment since 1971. Through the courts, its lawyers have successfully changed the business practices of companies who have adversely affected the environment, including polluters and mass resource extractors.
<a href="#">Friends of the Columbia Gorge</a>	The site provides a downloadable pdf of the the Climate Change Action plan for the Columbia River Gorge National Scenic Area.

## Climate Change in Arts and Culture

The impact of climate change on our environment brings with it cultural and emotional consequences. Writers, musicians, and artists on these sites have found ways to express those emotions, ranging from existential dread to hope.

<a href="#">9 Artists Confronting Climate Change</a>	Discover artists involved in environmental movements and how they are responding to the climate crisis. Heatley, Sophie. "9 Artists Confronting Climate Change." <i>Rise Art</i> , August 19, 2021
<a href="#">Art that Highlights Climate Change</a>	An essay featuring artists, including sculptors and photographers, who use their art to provoke conversations about climate change. "Art that Highlights Climate Change," by Nathalie Soo, <i>The Artling</i> , August 23, 2020.
<a href="#">The Artistic Climate</a>	An essay on an "eco-artist" who uses art to communicate scientific data on the natural world. "The Artistic Climate: Andrea Polli Transform Scientific Data into Art," by Whitney Dail Yoerger. <i>National Endowment for the Arts</i> , 2013.
<a href="#">Artists and Climate Change</a>	A blog format that serves as resource hub for artists using their art to interpret the effects of climate change.
<a href="#">Artists for Climate</a>	Artists for Climate have created the Climate Collection, submitted open-license illustrations to enhance public education about climate change.
<a href="#">The Climate Change Clues Hidden in Art History</a>	Art historians examine art over time as illustrated records of the changing climate. "The climate change clues hidden in art history," by Diego Arguedas Ortiz. <i>BBC Culture</i> , May 28, 2020.
<a href="#">Climate Change Has Already Transformed Everything About Contemporary Art</a>	An overview of how the art world has responded to climate change by looking at the past, confronting the present, and imagining the future. Smith, William S. "Climate Change Has Already Transformed Everything about Contemporary Art." <i>Art in America</i> , May 4, 2020.
<a href="#">Kathleen Dean Moore</a>	Moore is a writer and environmental philosopher at Oregon State University who examines the intersection of narrative, nature, and environmental ethics.
<a href="#">Resilience in the Age of Climate Change</a>	Artists and architects use design methods to educate and inspire people to respond to the warming planet. "Resilience in the Age of Climate Change: Visionary artists and architects explore the specter of a warming planet." <i>Art Works for Change</i> .
<a href="#">Ways in Which Art Can Fight Climate Change</a>	How artists are using environmentally friendly materials to respond to climate change. Richetti, Arianna. "Ways in Which Art Can Fight Climate Change." <i>Daily Art Magazine</i> , June 5, 2022.
<a href="#">What the Warming World Needs Now is Art, Sweet Art</a>	A commentary on the way cinema and stage have responded—or failed to respond—to the climate crisis. McKibbin, Bill. "What the warming world needs now is art, sweet art." <i>The Grist</i> , April 22, 2005.