

Newsroom

Climate Change Costs in Oregon are Focus of New Economics Forum

The group includes faculty members from UO and Reed College and private economists

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PRESS RELEASE



EUGENE, Ore. — Oct. 24, 2024 — Wildfire smoke costs Oregon households \$450 per day as they try to adapt by purchasing air purifiers, canceling trips and keeping children at home to minimize their exposure.

That’s just one of many economic impacts of climate change tallied up in a new report put out by a nonpartisan group of economists and policy experts. The Forum on Oregon Climate Economics, or FORCE, today issued its first report, “[The Economic Costs of Climate Change for Oregonians: A First Look](#).”

Unlike previous assessments that explored the general effects of climate change, often on a national or international scale, the report begins the process of developing evidence-based estimates of the costs to Oregonians.

“We’re trying to estimate and communicate the real-life impacts of climate change on the bottom line for Oregonians,” said [Keaton Miller](#), a forum member and associate professor of economics with the [College of Arts and Sciences](#) at the University of Oregon.

The group sifted through available research to estimate specific costs for a range of climate impacts, including extreme heat, wildfires, deteriorating air quality, reduced water supplies, lost or damaged ecosystems, ocean acidification and warming, and global disruptions. The report is not intended to be comprehensive but rather a starting point, Miller said.

“Even with partial information we can say climate change is already having significant negative economic impacts on Oregonians,” he said. “We can already make some estimates of what will happen in the future if we don’t take action.”

The group plans to issue more-detailed reports over the next year addressing additional repercussions not explored in the first report, such as climate change effects on agriculture, forestry, the food system, grocery prices, and the costs businesses and public agencies will incur to adapt.

Although the first report includes many sobering numbers, the economists say they’re not trying to generate fear. They hope that presenting costs of climate change in ways people can understand will inspire local policy action to avoid worst-case scenarios.

“State, local and federal governments, businesses, and the international community are trying to figure out how big of a deal climate change is and how much do we need to invest to prevent it and adapt to it,” Miller said. “It’s really hard to make policy decisions without having some idea of what the costs are if you do nothing.”

This sampling of costs for Oregonians is among the report’s key findings:

- Wildfire response: as much as \$3,900 per household per year to contain wildfires and recover from their damage
- Wildfire smoke: \$450 per smoke day for an exposed household
- Income loss: roughly \$12,000 in personal income per year due to greenhouse gases already in the atmosphere

Some costs, for example for wildfires, are based on actual costs from past fires and predictions of the frequency and severity of fires based on future climate conditions.

For other costs, researchers compare current reality to a “counterfactual,” or a hypothetical scenario in which climate change isn’t happening. Through statistical methods they can estimate costs, such as deaths, job loss or property loss that can be attributed to climate change.

The forum includes economists and policy strategists with years of experience analyzing the economics of the natural environment and translating research into policy.

They came together at the invitation of [Ernie Niemi](#), a longtime Oregon natural resources economist and UO alumnus. He hopes to reprise a group similar to the Climate Leadership Initiative, a UO-based group in 2009 that provided analysis to legislative leaders in Washington, Oregon and New Mexico.

Throughout his career, Niemi has specialized in estimating “nonmarket costs,” or economic values for things that are not traded for money, such as clean air or healthy ecosystems.

“If they don’t see a market price, people often incorrectly assume the cost is zero, and they look away from it,” Niemi said.

His analytical findings have been significant in a range of policy and court proceedings, from the debate to protect spotted owl forest habitat to litigation to prevent an oil pipeline and coal-burning power plant in Kenya.

In addition to Miller and Niemi, the forum’s members include:

- [Joshua Skov](#), a strategy consultant focused on sustainability and climate change. He is an instructor of management and academic director and industry mentor in the Center for Sustainable Business Practices in the UO Lundquist College of Business.
- [Noelwah Netusil](#), Stanley H. Cohn Professor of Economics at Reed College in Portland. Her research focuses on the effect of flooding and floodplain location on property sale prices and on sustainable stormwater solutions.
- [John Talberth](#), a UO alumnus and senior economist and founder of the [Center for Sustainable Economy](#), a nonprofit organization based in Port Townsend, Washington. Talberth’s areas of expertise include international trade, public policy, forest management, sustainable development and land use planning.

The group emphasizes that the dire costs outlined in the report aren’t inevitable.

“Action we take today to both reduce climate-damaging emissions and mitigate the effects of climate change will have a measurable impact on these costs,” the report finds. “Our goal in compiling this report is to highlight that existing work provides a sound and reasonable basis for public investments in climate interventions. While some interventions may come with a substantial price tag, the cost of inaction is even greater.”

— *By Sherri Buri McDonald, University Communications*

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About the University of Oregon College of Arts and Sciences

The University of Oregon College of Arts and Sciences supports the UO's mission and shapes its identity as a comprehensive research university. With disciplines in humanities and social and natural sciences, the College of Arts and Sciences serves approximately two-thirds of all UO students. The College of Arts and Sciences faculty includes some of the world's most accomplished researchers, and the more than \$75 million in sponsored research activity of the faculty underpins the UO's status as a Carnegie Research I institution and its membership in the Association of American Universities.

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The University of Oregon Lundquist College of Business empowers an engaged community of students, faculty, staff, and stakeholders who create, apply, and disseminate knowledge that contributes significantly to their professions, communities, and society. The college delivers a dynamic learning environment where world-class professors engage and get to know students, where students gain hands-on experiences working on projects for real companies, and where alumni go on to high-powered jobs worldwide. It boasts top-ranked programs in sports business, entrepreneurship, sustainable business, marketing, finance, and accounting, and is housed in the nation's first certified environmentally friendly business school facility.

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Reed College is devoted to the intrinsic value of intellectual pursuit and governed by the highest standards of scholarly practice, critical thought, and creativity. Its undergraduate

program of study, leading to the degree of Bachelor of Arts, is demanding and intense and balances breadth of knowledge across the curriculum with depth of knowledge in a particular field of study. The goal of the Reed education is that students learn and demonstrate rigor and independence in their habits of thought, inquiry, and expression.

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