# Concerned Scientists' Weekly News Bulletin [March 1, 2021]





Our weekly bulletin collects and digests news of the past week.

Contributions welcome.

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#### **NEWS ITEMS AND ARTICLES**

*Politico*: Biden hikes cost of carbon, easing path for new climate rules

The Biden administration raised the social cost of carbon to \$51 per ton released into the atmosphere. This matches the Obama-era level and is well above the Trump era's \$8 per ton but is less than scientists and economists say new research justifies. However, this price point is considered temporary as an interagency working group will release a new figure by next January that can then be used to guide climate policy.

Chemistry World: Scientists back creation of an international body to oversee chemicals and waste

Climate change has the Intergovernmental Panel on Climate Change (IPCC) and biodiversity has the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Service (IPBES), but no comparable body exists to oversee the environmental impact of waste and chemicals. Now, an international group of scientists is calling for an equivalent body for chemicals and waste, and the idea has been broadly welcomed.

Smithsonian: One-third of freshwater fish species are at risk of extinction

A global assessment called "The World's Forgotten Fishes" was released by 16 different conservation organizations and determined that nearly 1/3 of freshwater fish are at risk of extinction. Additional research found that only 14% of freshwater river basins qualify as "pristine." 16 freshwater species became extinct just in 2020. Overfishing and climate change pose the biggest threats, but human development along rivers as well as the addition of dams and invasive species threaten many freshwater ecosystems.

NPR: Interior nominee Deb Haaland faces tough questions on climate goals

Congresswomen Deb Haaland would be the first Native American Interior Secretary and Presidential Cabinet Member. The Department of Interior has been historically used to disenfranchise and harm Native American communities and is currently responsible for ¼ of total greenhouse gas emissions in the US. Haaland hopes to improve the US government's relationship with those of the 574 federally recognized tribes, emphasizing the importance of tribal consultation when managing both fossil fuel and renewable energy projects on tribal land.

Science Daily: Scientists describe "hidden biodiversity crisis" as variation within species is lost
The rapid loss of variation within species is a hidden biodiversity crisis, according to a
new study looking at how this variation supports essential ecological functions and the
benefits nature provides for people. The study highlights the need to better understand
and conserve variation within species to safeguard nature's contributions to people.

## AIP: Senate aiming to pass Endless Frontier Act and chip funding this spring

The Senate is preparing major competitiveness policy legislation centered around the Endless Frontier Act, which proposes to reconfigure the National Science Foundation. The package could include emergency funding for a new semiconductor chip manufacturing initiative.

American Institute of Physics: Final FY21 appropriations: STEM education
Funds directed towards STEM education within the Department of Education, NASA,
the National Science Foundation, the Department of Energy, and the National Oceanic
and Atmospheric Administration all saw small to moderate increases, despite final
Trump administration proposals to cut and restructure relevant funding.

Reuters: <u>U.S. doubles down on protecting university research from China</u>

The National Security Commission on Artificial Intelligence (NSCAI), led by former Google Chairman Eric Schmidt, voted unanimously to approve its final report to Congress, which recommends requiring more disclosure on research funding and partnerships at universities. It also proposes creating a database of individuals and entities to flag risks in advance.

New York Times: Vaccines adapted for variants will not need lengthy testing, F.D.A. says

The FDA will only require small trials, similar to those used to test annual flu vaccines,
for coronavirus vaccines adapted for new variants. Both Moderna and Pfizer have said
their mRNA technology used in their vaccines can be adapted to combat the variants
within six weeks, but testing and manufacturing these adapted versions would take
additional time.

#### NPR: CDC Panel endorses Johnson & Johnson's one-dose COVID-19 vaccine

On Sunday, the Advisory Committee on Immunization Practices within the CDC voted 12-0 in favor of recommending the use of the Johnson & Johnson coronavirus vaccine for people 18 and older. The FDA had approved the vaccine the day before. In addition to only requiring one dose, the Johnson & Johnson vaccine does not need special storage and will remain stable in a normal refrigerator. The company is prepared to deliver 20 million doses by the end of March and 100 million by June. In trials, the vaccine was 66% effective at preventing moderate to severe forms of the disease and 85% effective at preventing severe to critical forms of the disease.

Science: As trials ramp up, doctors stress need to vaccinate kids against COVID-19

Although no vaccine has yet been approved for young people, Moderna and Pfizer have each begun clinical trials on around 2000-3000 kids aged 12-15, with results expected this summer. The AstraZeneca-University of Oxford vaccine and the Johnson & Johnson vaccine will also begin testing their vaccines on children. Though part of a population considered to be not at high-risk from the virus, 250 children have died in the US and 2,000 have developed severe inflammatory syndromes because of the virus.

#### REGIONAL NEWS

*IndyStar*: House environmental committee a no-show despite Indiana being one of U.S.' most polluted

The House Environmental Affairs Committee has not met a single time. Bills that would have required preschool and daycare facilities to test for lead, prohibited utilities from keeping contaminating coal ash in unlined ponds where it pollutes groundwater, and limited the amount of toxins known as "forever chemicals" in drinking water died without any consideration. Meanwhile lawmakers have advanced bills to make popcorn the official state snack of Indiana, provide protections for children's lemonade stands, and prevent Indianapolis from changing its name. Indiana releases more chemicals and pollutants per square mile compared to any other state.

*Greenfield Daily Reporter*: Wetlands threat: A bill in the legislature would strip protections from sensitive habitats—and that would be disastrous

Former state senator Beverly Gard is asking us to imagine an Indiana without the wetlands that play host to a vast variety of migrating waterfowl, without the estimated 300 nesting pairs of bald eagles, without winding nature trails and nature parks built around isolated wetlands and the diverse ecosystems they support. That is likely be the Indiana we live in if Senate Bill 389 is passed into law.

### **OPINION AND ANALYSIS**

EOS: Natural hazards have unnatural impacts—What more can science do?

As climate change leads to a growing number of severe weather events and as natural hazards increasingly affect communities on multiple fronts, both scientists and policymakers have a challenging task: ensuring that solutions and recommendations arising from scientific research are communicated effectively and applied equitably.

Washington Post: A third of all food in the U.S. gets wasted. Fixing that could help fight climate change

Reducing food waste is one of a few climate solutions that cost almost nothing but deliver massive financial as well as environmental benefits. If food waste is halved in the next 30 years, the world will avoid emitting at least 10 gigatons of carbon dioxide — equivalent to taking 2,570 coal-fired power plants offline. By avoiding deforestation for farmland, these measures will also prevent more than 70 gigatons of additional emissions.

Science Advances: <u>Supporting women in academia during and after a global pandemic</u>
Now is the time to challenge long-standing institutional traditions and policies that propagate gender inequity. Solving such widespread problems will not be easy, but

with persistent effort and multipronged approaches, institutions can restructure academic science so that it supports and retains the best and brightest minds.

The Inverse: The scientists want to influence Congress. A new study reveals how to do it.

The need for scientific input is more crucial than ever. The Research-to-Policy
Collaboration initiative aims to increase the use of scientific research in the writing of new bills.

Environmental Health News: Fractured: The body burden of living near fracking
It's been 12 years since fracking reshaped the American energy landscape and much of
the Pennsylvania countryside. An EHN scientific investigation finds western
Pennsylvania families near fracking are exposed to harmful chemicals, while
regulations fail to protect communities' mental, physical, and social health.

*Vox*: There's a clear fix to helping Black communities fight pollution

Over the past three decades, roughly 150 chemical plants and refineries have been building facilities up and down the 85-mile stretch of the Mississippi River that straddles New Orleans and Baton Rouge. According to EPA data, seven out of 10 US census tracts with the country's highest cancer risk levels from air pollution are in this corridor, known as "Cancer Alley." The early steps the Biden administration has taken in centering environmental justice across his climate and economic agendas creates an urgency to right the wrongs of the previous administration.

## TAKE ACTION AND RESOURCES FOR ACTIVISTS

*NRD*: Tell congress to permanently protect the Arctic Refuge!

With pro-environment majorities in both the U.S. House of Representatives and Senate, we have a real chance to permanently protect the Arctic Refuge—but we must demand that every single senator and representative stand with us.

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