# NATIONAL GEOGRAPHIC

## Protecting North America's Lakes pg.2

A Look inside North America's budding climate crisis.

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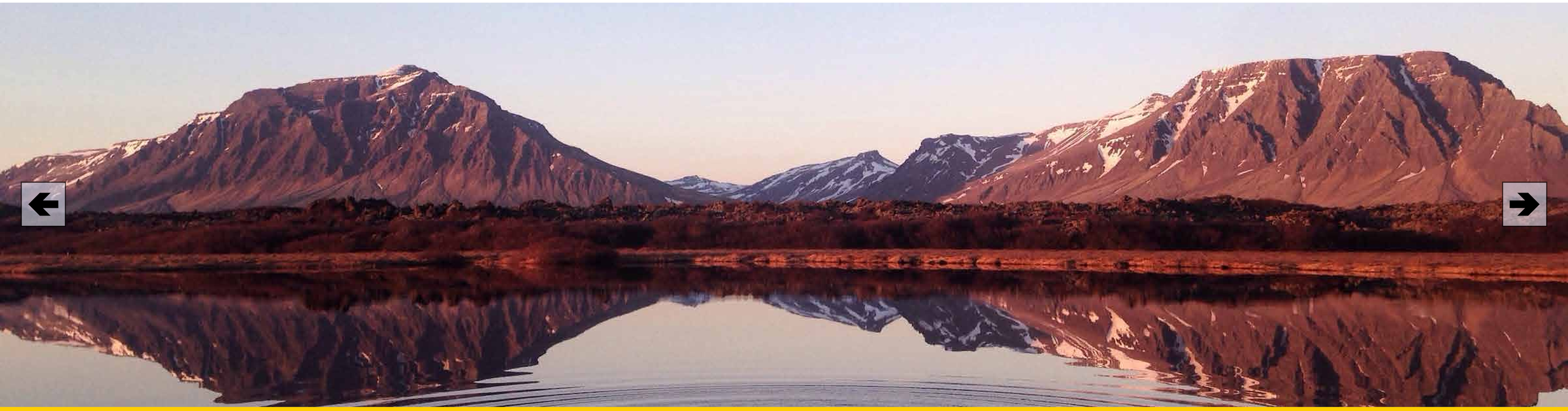
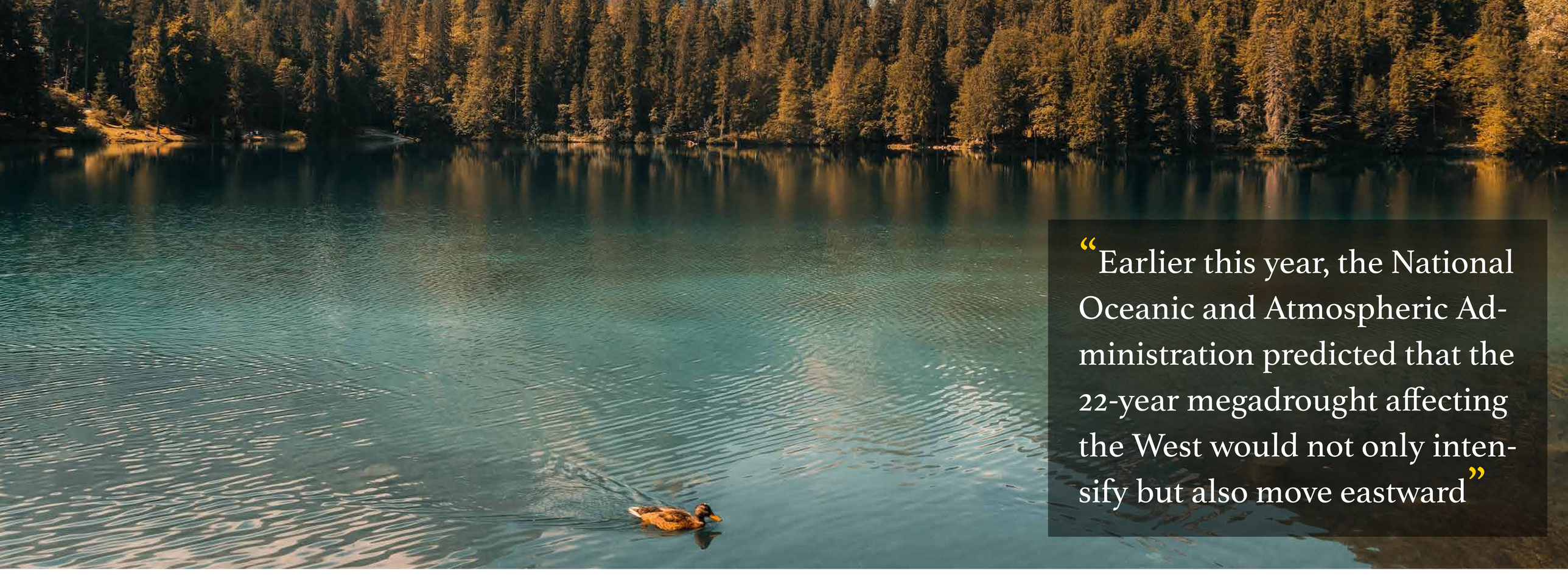




> “Earlier this year, the National Oceanic and Atmospheric Administration predicted that the 22-year megadrought affecting the West would not only intensify but also move eastward”

# Protecting North America’s Lakes

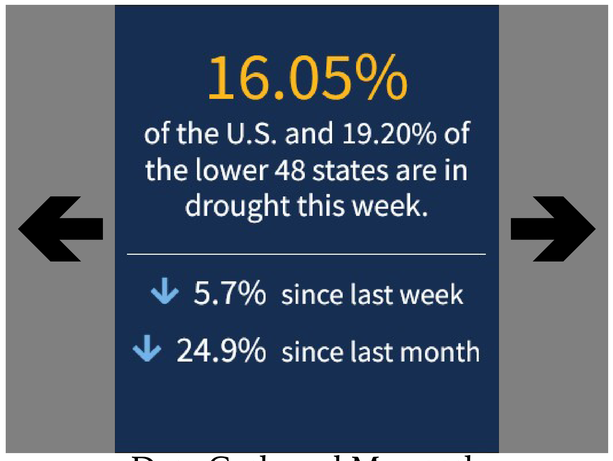
Bodies of water all over North America are drying up as a result of drought and a decrease in precipitation, experts told National Gerographic. Earlier this year, the National Oceanic and Atmospheric Administration predicted that the 22-year megadrought affecting the West would not only intensify but also move eastward. That prediction appears to be coming into fruition, with about 82% of the continental U.S. currently showing conditions between abnormally dry and exceptional drought, according to the U.S. Drought Monitor. And while the U.S. and North America continue to witness water levels dropping in crucial rivers, lakes and reservoirs, a mixture of climate change and poor water management policies are causing similar events all over the world, experts told National Geographic.

> “In addition, if the lake were to dry out, dust storms would be a great concern due to the decades of heavy metals and toxic substances that remain trapped in the sediment, scientists said”

"Rivers all over the world are running really low," especially the Tigress and Euphrates Rivers in Iraq, as well as significant bodies of water in countries like Italy, Romania, France and China, Jonathan Deason, professor of the Environmental and Energy Management Program at George Washington University.

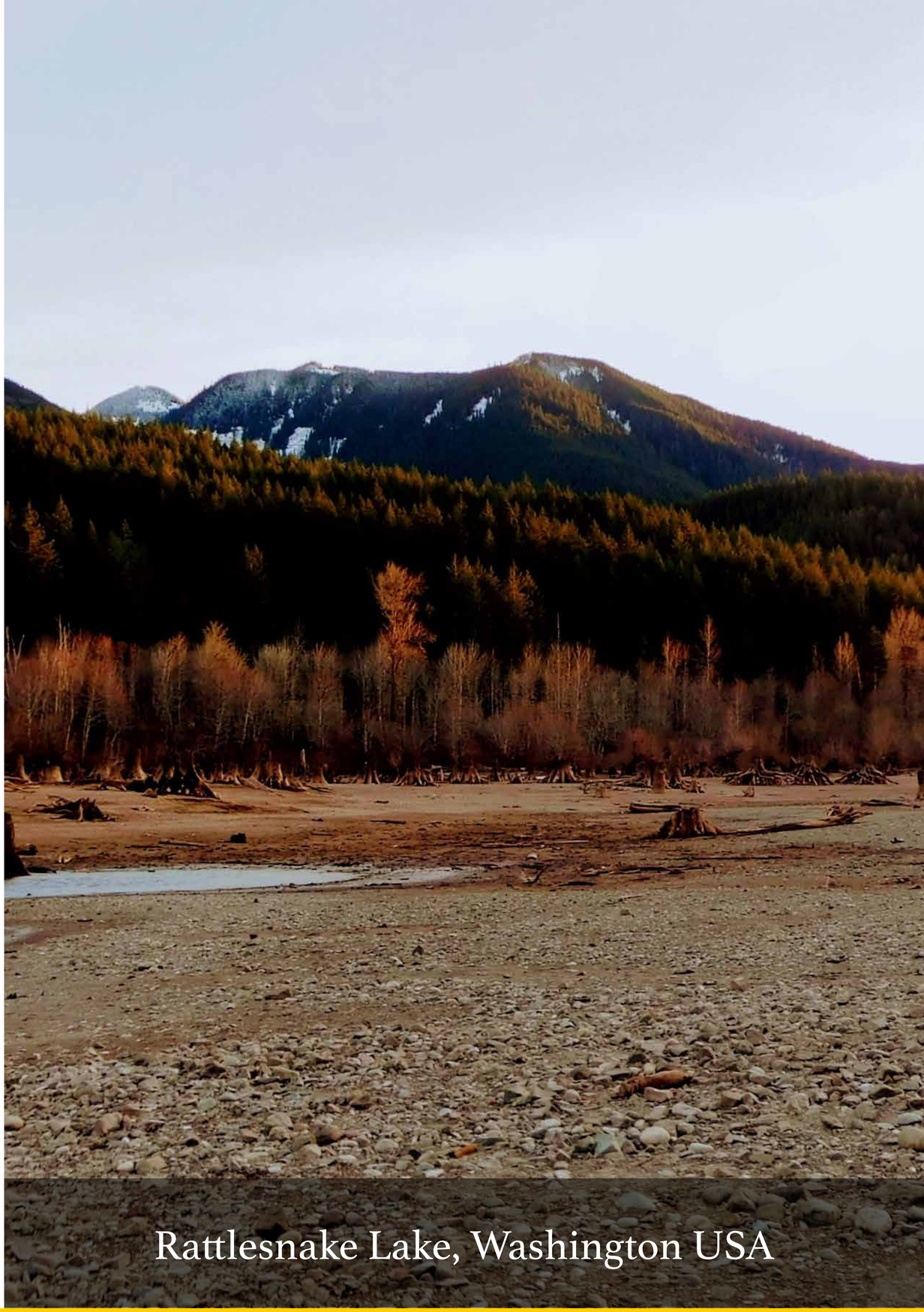
The experts said that a two-pronged approach that includes climate change mitigation and better water management policies will be crucial as bodies of water continue to dry up. But so much damage has already been done, that even drastic improvements or reductions in emissions will not immediately impact reducing the stress on water levels, they said.

## Want to Learn More?




Data Gathered May 29th

[Watch the Drought.gov Presentation]

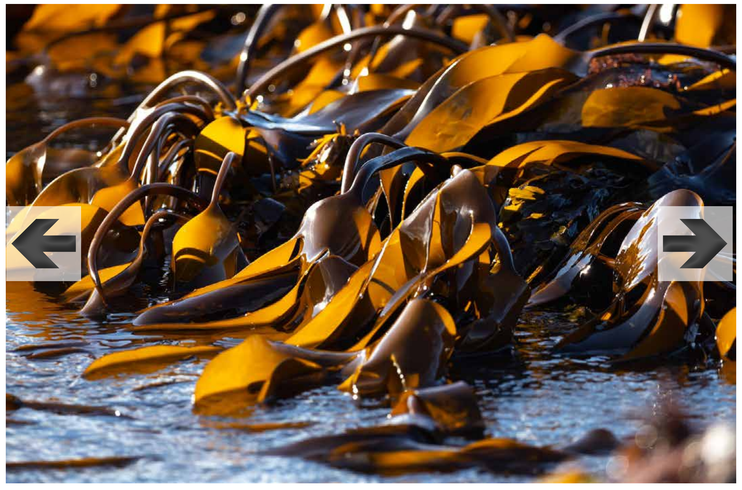


Rattlesnake Lake, Washington USA

# Kelp Farming: A Path Towards a Cleaner Ocean?

## Benefits of Kelp

Kelp feeds off excess carbon dioxide, nitrogen and phosphorus. The last two are pollutants responsible for harmful algal blooms that have killed off plants and animals in Shinnecock Bay, says Christopher Gobler, a marine scientist at Stony Brook University on Long Island. Kelp blades are lined with cells containing sulfated polysaccharides, essentially chains of sugar molecules that give kelp its slimy texture. These polysaccharides bind with nitrogen and phosphorus, pulling both out of the water and dissolving the nitrogen into a compound called nitrate. The dissolved nitrogen is what makes kelp a potent natural fertilizer.



These kelp forests promote biodiversity, lessen ocean acidification and remove dissolved carbon dioxide from the water. One meta-analysis by researchers at the National Oceanic and Atmospheric Administration found that, on average, these farms remove 575 pounds of nitrogen per acre. (Projections based on another study, from Stony Brook University, put that figure at 200 pounds of nitrogen per acre.) Seaweed aquaculture could absorb nearly 240 million tons by 2050, equal to the annual emissions from more than 50 million fossil fuel–powered cars, according to a 2021 study published in Nature...