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ROBIN LOZNAK/ZUMA WIRE



A group of children and young people (shown here with lawyer Julia Olson) is suing the US government to force stronger action on climate change.

## LAW

# Historic kids' climate lawsuit gets green light

Young people claim US government has violated their rights by failing to avert warming.

BY EMMA MARRIS

**A** landmark climate-change lawsuit brought by young people against the US government can proceed, the Supreme Court said on 2 November. The case, *Juliana v. United States*, had been scheduled to begin trial on 29 October in Eugene, Oregon, in a federal district court. But those plans were scrapped last month, after President Donald

Trump's administration asked the Supreme Court to intervene and dismiss the case.

The plaintiffs, who include 21 people ranging in age from 11 to 22, allege that the government has violated their constitutional rights to life, liberty and property by failing to prevent dangerous climate change. They are asking the district court to order the federal government to prepare a plan that will ensure that the level of carbon dioxide in the atmosphere falls below

350 parts per million by 2100, down from an average of 405 parts per million in 2017.

By contrast, the US Department of Justice argues that "there is no right to 'a climate system capable of sustaining human life'" — as the *Juliana* plaintiffs assert.

Although the Supreme Court has now denied the Trump administration's request to dismiss the case, the path ahead is unclear. In its 2 November order, the Supreme Court ▶

► suggested that a federal appeals court should consider the administration's arguments before any trial starts in the Oregon district court. Lawyers for the young people said that they would push the district court to reschedule the trial this week.

"The youth of our nation won an important decision today from the Supreme Court that shows even the most powerful government in the world must follow the rules and process of litigation in our democracy," said Julia Olson, co-counsel for the plaintiffs, in a statement.

Although climate change is a global problem, lawyers around the world have brought climate-change-related lawsuits against local and national governments and corporations since the late 1980s. These suits have generally sought to force the sort of aggressive action against climate change that has been tough to achieve through political means.

Many of the cases have failed, but in 2015, a citizen's group called the Urgenda Foundation won a historic victory against the Dutch government. The judge in that case ordered the Netherlands to cut its greenhouse-gas emissions to at least 25% below 1990 levels by 2020, citing the possibility of climate-related damages to "current and future generations of Dutch nationals" and the government's "duty of care ... to prevent hazardous climate change". A Dutch appeals court upheld the verdict last month.

Over the past few years, the Dutch case has emerged as a model for climate lawsuits in other countries, says Gillian Lobo, a lawyer who specializes in climate-change-related cases at ClientEarth in London. More recently, she says, the *Juliana* lawsuit has inspired

its own copycats — some of which have progressed further than *Juliana* itself. "It is a global phenomenon," Lobo says.

One case modelled on the *Juliana* lawsuit has already produced a striking victory. In January, 25 young people sued the Colombian government for their right to a healthy environment, in a case called *Demandas Generacionales Futuras v. Minambiente*.

The Colombian Supreme Court found in the plaintiffs' favour in April. Not only did it order the government to take steps to reduce deforestation and climate change, it also ruled that the Colombian Amazon rainforest is "a subject of rights" that is entitled to "protection, conservation, maintenance and restoration".

The young plaintiffs in the *Juliana* case allege that they have already suffered harm from climate change. Seventeen-year-old Jaime and her family left their home on the Navajo Nation Reservation in Cameron, Arizona, in 2011 because the springs that supplied their water were drying up. Fifteen-year-old Jayden's home in Louisiana was severely damaged by flooding in 2016, and 19-year-old Vic's school in White Plains, New York, closed temporarily in 2012 after Hurricane Sandy hit.

US climate hawks hope that the *Juliana* plaintiffs will ultimately prevail, but President Trump's administration is mounting a multipronged defence. The Justice Department denies that the district court in Oregon has jurisdiction over the broad sweep of federal

policies at issue, and that the rights to life, liberty and property set out in the Constitution translate into the right to a stable climate. In any case, the department argues, no meaningful redress is possible, given that sharp cuts in US emissions might not move the needle on climate change much if other countries' greenhouse-gas output grows.

Andrea Rodgers, co-counsel for the *Juliana* plaintiffs, says that the Trump administration hasn't challenged the fact that humans are changing the climate. "They haven't presented experts to contest what our scientists are saying about ice melt or sea-level rise or terrestrial impacts or how climate change happens or ocean acidification," she says.

To win, Rodgers says, "we have to show that the United States government is liable, but also that there is a remedy that the judge can order". The United States has seen its greenhouse-gas emissions drop in recent years, as the country shifts its energy mix away from coal and towards renewable sources, but as of 2016, it remains the second-largest emitter after China.

James Hansen, a climatologist at Columbia University in New York City and a long-time climate activist, is an expert witness in the case — and a plaintiff, representing "future generations" not yet born. (His 20-year-old granddaughter Sophie Kivlehan is also a plaintiff.)

Hansen has been fighting for action on climate change since he first testified on the subject before the US Senate in 1988. He says that if the *Juliana* plaintiffs lose their case, he will simply try another way. "We need to win as soon as possible," Hansen says, "but if we lose, we don't give up — we come back with a stronger case." ■

## ECOLOGY

# South Africa's invasive species guzzle water and cost US\$450 million a year

*The country's first report on its biological invaders is pioneering in scope, and paints a dire picture for resources and biodiversity.*

BY SARAH WILD

**S**outh Africa is losing its battle against biological invaders, according to the government's first attempt to comprehensively assess the status of the country's alien species.

The invaders, including forest-munching wasps and hardy North American bass, cost the country around 6.5 billion rand (US\$450 million) a year and are responsible for about one-quarter of its biodiversity loss. That's the conclusion of a pioneering report (see go.nature.com/2qmwgag) that the South African National

Biodiversity Institute in Pretoria released on 2 November.

Invasive species also guzzle water, a serious problem in a country suffering from a prolonged and catastrophic drought that is expected to worsen as the climate changes.

The report, which the institute compiled in response to 2014 regulations that mandate a review of invasive species every three years, examines the pathways by which these species enter the country and the effectiveness of interventions. It also weighs the toll they take on the nation's finances and biodiversity.

This achievement constitutes a "significant advance" compared with efforts by most other countries, says Piero Genovesi, who chairs the invasive species specialist group of the International Union for Conservation of Nature in Rome. He says that other reports have looked at the impact of biological invasions, or at measures to address the problem, but have not considered all aspects of invasions.

The report provides "an incredible basis" on which to deal with invasive species in South Africa, says Helen Roy, an ecologist at the Centre for Ecology and Hydrology near Oxford, UK.