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ENVIRONMENT

# Trump's Order May Foul U.S. Drinking Water Supply

## Narrowing the Clean Water Rule could increase pollution in critical waters

By Annie Sneed on March 10, 2017

The 2015 Clean Water Rule clarified that federal agencies could also regulate certain types of smaller or

more isolated waters, like seasonal streams and wetlands near them, which have a less obvious connection to larger waters. *Credit: HildeAnna Getty Images*

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Pres. Donald Trump insists he wants clean water. In a speech to Congress last week, he vowed to "promote clean air and clean water." And in an interview with *The New York Times* last November, he said, "Clean water, crystal clean water is vitally important." Ironically, though, the president just signed an executive order that could pollute many Americans' drinking water sources.

On February 28, Trump ordered a review of the Clean Water Rule, with the aim of rolling it back. Pres. Barack Obama finalized the Clean Water Rule in June 2015 to clear up confusion over which water bodies the federal government can regulate under the 1972 Clean Water Act, the main federal law for water pollution. Now, legal experts say, Trump appears to want to restrict what types of waters are regulated, much more so than the Clean Water Rule and the regulations before it. Specifically, his executive order—if and when it leads to a final rule—would likely cut protections for many wetlands and smaller streams that help keep U.S. waters clean. All of this could result in dirtier drinking water supplies for millions of Americans. "Almost certainly, some water bodies will face increased pollution under a narrower federal Clean Water Rule," Daniel Esty, professor of environmental law and policy at Yale Law School, wrote to *Scientific American*. "It would leave some critical water resources less protected." Of course, federal agencies will first need to go through a lengthy rule-making process before Trump's directive becomes a final rule.

The Clean Water Act protects major water bodies like large streams, rivers, bays and other coastal waters, along with streams and wetlands that flow into them from being destroyed or polluted—or, at least, not polluted without federal oversight. It covers a large range of pollutants, including sewage, garbage, biological and radioactive materials, and industrial and agricultural waste. The 2015 Clean Water Rule clarified that federal agencies could also regulate certain types of smaller or more isolated waters, like seasonal streams and

wetlands near them, which have a less obvious connection to larger waters. Previously, oversight for those waters was decided on a case by case basis, although protection was often granted by the U.S. Environmental Protection Agency or Army Corps of Engineers. The 2015 rule never really went into effect, however, because a federal court stopped its implementation until judges decide a lawsuit against it, which is still in progress.

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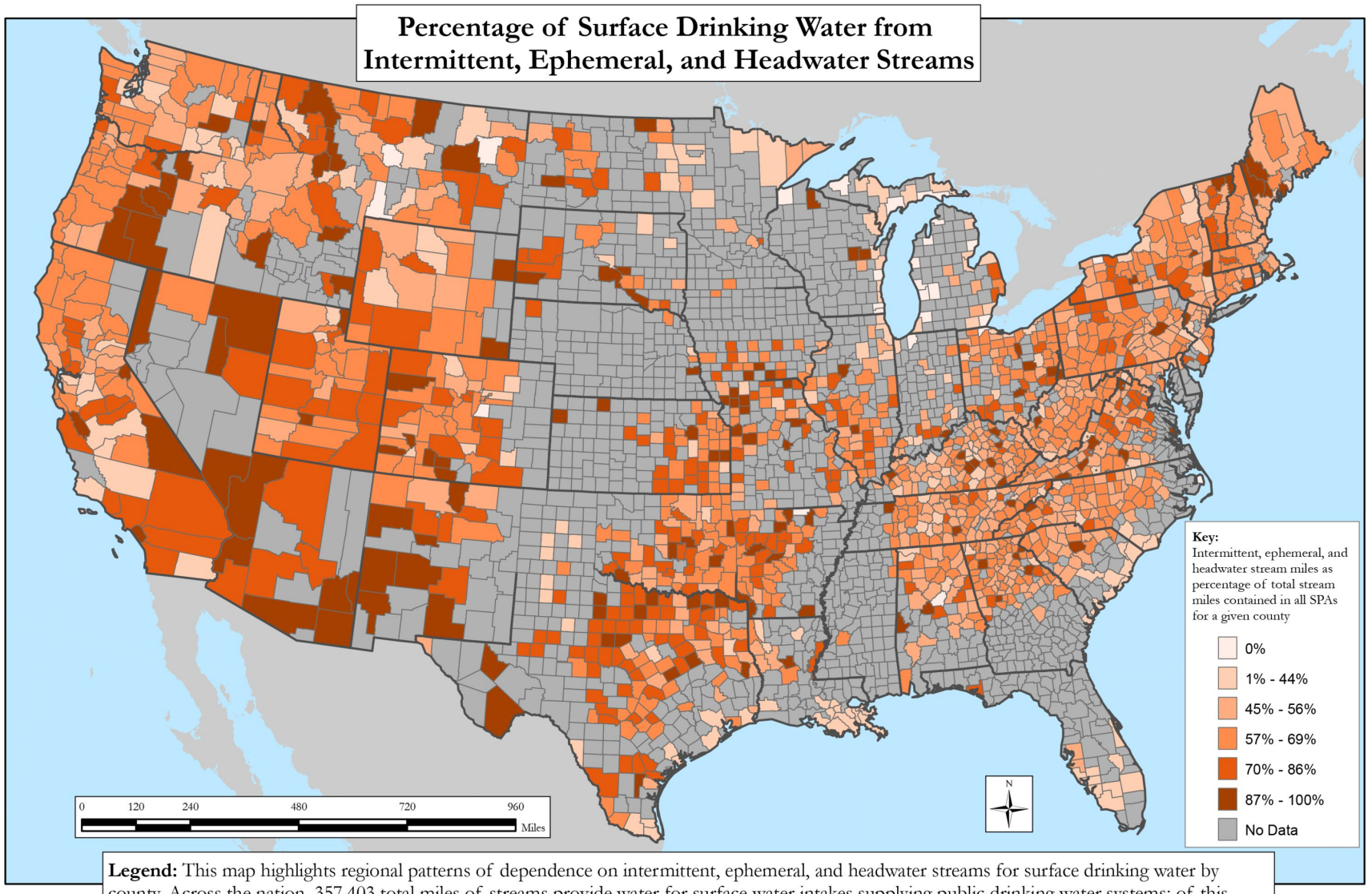
Trump wants to rescind or replace the Clean Water Rule to encourage economic growth and cut regulations, according to his order. James Salzman, a professor of environmental law at the University of California, Los Angeles, says Trump's order suggests the future rule will likely lift controls on these smaller "ephemeral and intermittent" streams—those that typically flow only when it rains, and those with segments that only flow certain times of the year, such as when snow melts. Even though ephemeral and intermittent streams do not run continuously—which some argue is why they do not qualify for protection—scientists have found they are still key to water quality of the larger bodies in which they flow. "These streams are connected" to waters downstream, says Ken Reckhow, professor emeritus of water resources at Duke University—and they can carry pollutants to places where communities may draw their drinking water.

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According to the EPA, about two thirds of U.S. stream miles only run seasonally or after rainstorms. The EPA estimates that one in three Americans—about 117 million people—draw all or some of their water from public drinking water systems that depend at least partly on the streams which the Clean Water Rule would protect.

Jeffrey Gaba, professor of health law at Southern Methodist University, notes there is a chance the future rule might still require polluters to get a permit if they want to dump upstream of officially protected waters, because the contaminants ultimately flow into those waters. But Salzman is skeptical. “The point of [Trump’s] executive order is to exclude as much as possible,” he wrote to *Scientific American* in an e-mail.

If these intermittent and ephemeral streams are not covered, then the wetlands and other

water bodies near them may not be either. Any wetlands that do not have a visible connection to waters the federal government has traditionally regulated, like a river or large stream, would likely lose protection, according to Gaba. These wetlands do an excellent job filtering out pollutants; for example, bacteria in wetlands remove nutrients like nitrates from agricultural fertilizer runoff, which prevents the contaminant from moving downstream. If Trump's rule no longer covers them, they could be polluted or dredged and destroyed. "A lot of wetlands could be lost," Gaba says.

Experts say such a move would not be based on science either. Although some wetlands may not be visibly linked to protected waters, they may be connected in ways that are not readily apparent, such as underground water flows "It would be a very limited idea of how these water systems are connected," says William Stringfellow, director of Lawrence Berkeley National Laboratory's Ecological Engineering Research Program. The White House and EPA did not respond to requests for comment, nor did several groups who support the president's executive order.

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More polluted streams would harm water quality downstream for all sorts of activities. The EPA highlights drinking, swimming, farming, fishing, tourism and manufacturing as some of them. It is important to note that even if drinking water sources do get dirtier, it would not necessarily cause unhealthy levels of pollutants in everyone's tap water. Many people get their water from treatment plants that ostensibly would remove the pollutants —at least the pollutants that are currently regulated.

But it would still come at a cost, because community treatment plants would likely need to increase spending to remove more contaminants. It may also be harder for treatment facilities to clean the water, because they are designed to handle a certain amount of pollutants—too much could overwhelm their systems and potentially result in drinking water with unacceptable contaminant levels, says Charles Haas, professor of environmental engineering at Drexel University. Many Americans also get their water

from private wells, which could be affected—shallow wells, for example, are often connected to nearby streams and other water, according to Haas. “The history of environmental protection is that you’re always better controlling contamination at the source,” he notes, “rather than dealing with it after.”

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