



*Clean Water Action/Clean Water Fund's **Putting Drinking Water First** approach means preventing threats to drinking water where they start. Clean Water Action is working to win strong water pollution controls by focusing on public health and drinking water impacts in Clean Water Act programs and other policies where decisions about water pollution are made. We also work to bring public health and environmental voices into Safe Drinking Water Act (SDWA) implementation activities.*

Putting Drinking Water First: Restoring Clean Water Act Protections to Streams and Wetlands

Protecting sources of drinking water from contamination is essential. Recent incidents of widespread drinking water service disruption have drawn attention to this important issue. Source Water Protection includes maintaining the health of streams, wetlands, and other water bodies and is embodied in the Safe Drinking Water Act (SDWA) as a key approach to ensuring safe drinking water. These water bodies are more than just landscape features — they are critical parts of our natural water infrastructure that influence water quality in drinking water sources. Protecting streams and wetlands protects drinking water, eases the burden of pollution, and reduces treatment costs for communities.

There has been confusion over which streams, wetlands, and other water resources are covered under Clean Water Act pollution control programs following Supreme Court decisions in 2001 and 2006 and subsequent Bush Administration policies. These decisions led to permitting delays and left water resources vulnerable to pollution or destruction. In May 2015, the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) issued a final Clean Water Rule to clarify which types of small streams, wetlands, and other water resources are protected by the Clean Water Act.¹ Polluters and political allies in several states immediately sued to block the rule and it has been tied up in litigation since, leaving these valuable water resources at risk.

Adding to the confusion is an Executive Order issued by President Trump on February 28, 2017, which ordered EPA and the Corps to “reconsider” the Clean Water Rule. Specifically the Agencies have



been directed to consider withdrawing the rule and replacing it with a narrower version that would only protect rivers or streams that flow year-round and connected wetlands. This would result in nearly half of all streams and over 20 million acres of wetlands losing pollution protections, putting precious drinking water sources at risk. President Trump's shortsighted directive takes an extreme view of the legal history of the Clean Water Act and completely ignores the overwhelming scientific evidence that headwater, ephemeral and intermittent streams, and wetlands impact downstream rivers and streams, including those used as drinking water sources.

Clean Water Action's **Putting Drinking Water First** approach means making drinking water impacts a primary consideration when developing regulations and other programs involving upstream activities that could negatively impact downstream drinking water sources. The EPA/Corps Clean Water Rule better protects tributaries that impact the health of downstream waters, include drinking water sources: The Clean Water Rule has concrete implications for source water protection and for drinking water quality.

Streams, wetlands and other water bodies are complex systems that influence larger downstream water bodies.

EPA's *Connectivity of Streams and Wetlands to Downstream Waters (Connectivity Report)*, a review and synthesis of the vast amount of science underpinning the Clean Water Rule, confirms the role of wetlands, small streams, and other water bodies in supporting the health of downstream water bodies.² In its review of the proposed Clean Water Rule, EPA's Science Advisory Board found "the available science supports the proposed Clean Water Rule, and advised EPA to reconsider the proposal to evaluate some water bodies on a case by case basis due to their influence on downstream waters."³ This connection is important for both water quality and water quantity. Streams and wetlands filter pollution that would otherwise make its way to downstream water bodies. Streams and wetlands can also transport pollution into the water bodies in which they feed. Most rivers get the majority of their water from headwater streams, so disruption of flow in upstream reaches can influence water quantity in the downstream river. Over 95% of Americans get most of their drinking water from Public Water Systems regulated under the Safe Drinking Water Act. Over 70% of these Systems use surface water sources.⁴ Safeguarding the streams, wetlands, and other water bodies that influence larger bodies of water that serve as drinking water sources is a commonsense approach to protecting these tap water sources and preventing drinking water problems for the majority of the U.S. population.



Streams feed the drinking water sources for over 117 million people.

EPA analyzed the connection between a specific group of vulnerable water bodies (headwaters and intermittent and ephemeral streams) and downstream drinking water sources.⁵ The analysis shows that more than 117 Americans get their drinking water from Public Water Systems that rely on headwater and seasonal streams.⁶ This means that the sources of drinking water serving those people can be affected by the health of streams which the Clean Water Rule aims to better protect.

This analysis illustrates only one aspect of the potential impact of pollution and destruction of streams and wetlands on drinking water sources. For example, it does not include analysis of wetland connections to drinking water sources or the potential impact of pollution and disruption of streams and wetlands on groundwater used by Public Water Systems or those relying on private wells.

Streams and wetlands reduce contaminants of specific concern for drinking water quality.

Streams and wetlands filter pollution out of water before it makes its way to downstream receiving waters. The pollutants filtered by streams and wetlands include nutrients, chemicals, and other contaminants, which can cause public health risk and impact Public Water Systems' ability to comply with the Safe Drinking Water Act. The August 2014 tap water disruption in Toledo, Ohio is one example. Excessive phosphorus and nitrogen in Lake Erie contribute to algal blooms, which contribute to occurrence of a class of toxic chemicals called cyanotoxins. One of these cyanotoxins, microcystin, was found in finished tap water samples at levels above the Ohio advisory level, leading to a two-day "Do Not Drink" advisory for nearly 500,000 consumers.⁷ In *Connectivity of Streams and Wetlands to Downstream Waters*, EPA found that one study demonstrates that the complex processes occurring in small streams can remove as much as 20–40% of nitrogen before it makes its way to larger water bodies downstream.⁸ EPA found current scientific literature to be "replete" with data supporting the role of wetlands as sinks for nutrients including phosphorus.⁹ This nutrient removal function is critical in the face of the serious public health concerns, the cost of water service disruption and the enormous costs to Public Water Systems and their consumers. Protecting these natural pollution filters is a common sense way to protect drinking water sources.



EPA policy and strategy supports Protecting Drinking Water through strong Clean Water Act programs.

Putting the burden on downstream drinking water users is not a pollution solution: Allowing pollution and destruction of streams, wetlands, and other water bodies that feed drinking water sources is counter to EPA's stated policy on pollution prevention goals because it shifts the burden of contamination caused by upstream activity onto a downstream user through potential treatment costs.¹⁰ Downstream drinking water users should not have to pay higher treatment costs to solve pollution problems that can be solved by stronger Clean Water Act programs upstream.

Our Nation's Water Laws Should Work Together: Consideration of the contribution of streams and wetlands to healthy drinking water sources is an appropriate way to integrate Clean Water Act and Safe Drinking Water Act programs. This integration has been an area of increasing interest to diverse stakeholders during the past decade, is part of EPA's 2010 Drinking Water Strategy,¹¹ and is embodied in EPA's Strategic Plan for 2011–2015.¹² The public assumes that our water laws work together to achieve the maximum protection of public health but in fact, consideration

of downstream drinking water impacts often appear to be an afterthought in Clean Water Act regulations and other implementation activities. For example, in the final Economic Analysis to support the Clean Water Rule, the agencies failed to quantify avoided drinking water treatment costs or public health risks prevented by the Rule. Had the agencies quantified these benefits we would have a clearer picture of the potential benefits of protecting drinking water sources and the costs of inaction.

In writing the final Clean Water Rule, the Obama administration took a very conservative view of the available scientific evidence, according to an *amici curiae* (“friend of the court”) brief filed in support of the Clean Water Rule by a group of wetland and water scientists in January 2017.¹³ This brief details how the current science overwhelmingly supports protecting small streams and wetlands because of the many services they provide to people: mitigating non-point pollutants such as nutrients, sediments, and pathogens; absorbing flood waters and buffering communities; and providing essential habitat for fish and other wildlife. The Clean Water Rule does not protect all of the resources that science tells us are critical for supporting healthy watersheds, but it captures the most valuable. The Trump administration should listen to the scientists and instead of repealing the commonsense Clean Water Rule, work with EPA to maximize pollution prevention policies under the Clean Water Act to ensure that drinking water and public health are protected.

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 2. Environmental Protection Agency, Office of Research and Development, *Connectivity of Streams & Wetlands to Downstream Waters: A Review & Synthesis of the Scientific Evidence*, EPA/600/R-14-475F, January 2015, <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=296414>.
 3. September 30, 2014, Letter from Dr. David T. Allen, Science Advisory Board Chair to EPA Administrator Gina McCarthy, Science Advisory Board (SAB) Consideration of the Adequacy of the Scientific and Technical Basis of the EPA’s Proposed Rule titled “Definition of Waters of the United States Under the Clean Water Act”
 4. EPA, Public Drinking Water Facts and Figures, <http://water.epa.gov/infrastructure/drinkingwater/pws/factoids.cfm>
 5. <https://www.epa.gov/cwa-404/surface-drinking-water-provided-intermittent-ephemeral-and-headwater-streams-county-table>
 6. EPA, Rivers and Streams: Drinking Water Map, <http://water.epa.gov/type/rs/drinkingwatermap.cfm>
 7. City of Toledo, Urgent Notice to Residents, 8-2-14, <http://toledo.oh.gov/news/2014/08/urgent-water-notice/>
 8. EPA, *Final Connectivity Report*, ES-8
 9. EPA, *Connectivity*, 5-30
 10. EPA, *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health*, 2000 [2000 Human Health Methodology], 4-2
 11. EPA, *Water: Drinking Water Strategy*, <http://water.epa.gov/lawsregs/rulesregs/sdwa/dwstrategy/>
 12. EPA, *Fiscal Year 2011–2015 Strategic Plan*, September 10, 2013, p 12
 13. http://www.stetson.edu/law/international/biodiversity/media/amici_curiae_brief_of_wetland_and_water%20scientists-01-20-17_filed.pdf

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