

Weathering **CHANGE**

Policy Reforms

That Save Money and
Make Communities Safer



American Rivers
Thriving By Nature

Weathering CHANGE

Confronting Change

Larger and more frequent floods. More severe droughts. Shrinking snowpack and dwindling water supplies. Increased water pollution. Communities nationwide are already feeling the impacts of climate change.¹ We don't know exactly what the "new normal" will look like in every corner of the country, but when it comes to managing water resources and ensuring public health and safety, we know that the past is no guide for the future. Communities large and small, urban and rural, are all facing greater uncertainty and volatility, which translates to greater risk. We must take immediate steps to dramatically reduce carbon pollution if we are to keep these changes to a manageable level, but we also must rethink how we interact with our land and water resources in order to minimize the risk of future catastrophes.

As an editorial in the *Des Moines Register* recently put it,

"[T]he state must begin shaping policies around the reality of increased flooding, soil erosion, pollution and stream degradation. Unless the process of adaptation begins soon, Iowa faces a future in which its cities are perpetually recovering from floods and its farms are losing topsoil faster than it can be restored. That's a future of decline and chronic disaster."

Learning from the Past, Preparing for the Future

We are poorly equipped to deal with the challenges climate change is bringing because of how we have managed land and water in the past. We have built houses and planted crops right up to the river's edge, causing stubborn pollution problems and leaving ourselves vulnerable to floods. We have wasted water as if it were an infinite resource. We have filled in wetlands and leveled forests that control floods and provide clean water for free. We rely on expensive built infrastructure that consistently fails, has little capacity to adjust to



changing conditions, and is designed to serve one narrow purpose. In short, we have embraced the most expensive and least effective options when building communities, managing landscapes, designing infrastructure, and using water supplies. Many of these practices never made much sense, but in an era of scarce resources and growing volatility, they are even more problematic.

¹ For more information on how climate change will impact water resources, see *Global Climate Change Impacts in the United States* (U.S. Global Change Research Program, 2009).

Fortunately, we know how to spend our money more responsibly by planning for the future and building in flexibility that will help us deal with changing conditions. We can protect and restore the wetlands, forests, and rivers that slow floods and provide clean water. We can use water more efficiently at home, in factories, and on farms. And we can install green roofs, rain gardens, and green streets in our cities to decrease polluted runoff, improve air quality, and lower temperatures. Cities like Philadelphia, Milwaukee, Portland, and New York are already embracing these cost-effective, 21st century solutions to save money and address immediate problems they face. These cities are demonstrating that to survive and thrive in an era of more volatile and extreme weather, we must invest in the solutions that do the most good for the least amount of money. At the same time, they are showing that we can simultaneously create community amenities like parks and trails, along with healthier fish and wildlife populations by making smarter choices. Spending less money to solve

more problems and prepare for the future is the responsible thing to do.

Bringing Federal Policy into the 21st Century

Many federal policies still encourage the same backward-looking water management approaches that didn't work in the past and are even less suited to the future. Federal funding and policies reward wasteful water use and support destructive, inflexible infrastructure projects, while important programs that would help save water or preserve valuable wetlands and floodplains fall woefully short of what is needed. There is a widespread failure to plan for and address the changing conditions we know are coming. Taxpayer dollars are being wasted on infrastructure that won't work very well as the "new normal" takes hold. Too many federal policies are moving us in the wrong direction and making communities and wildlife more vulnerable.



HORICON MARSH, WI | Ryan Hagerty, U.S. Fish and Wildlife Service

10 Policy Reforms

That Save Money and Make Communities Safer

The following ten reforms are some of the best ways we can change outdated federal policies and embrace a forward-looking approach to water management. They represent proactive steps Congress and the Executive Branch can take to address climate change. Even better, all of these policies make sense even in the absence of climate change. No matter what happens in the future, we'll be better off by not building in floodplains, wasting water, or destroying forests and wetlands.

- 1. National Flood Insurance Program:** Change flood insurance rates and maps to ensure they reflect risk and discourage construction and reconstruction in vulnerable areas
- 2. Farm Policy:** Reward farmers for being responsible stewards of land and water resources and encourage better flood management practices on agricultural lands
- 3. Bureau of Reclamation:** Develop comprehensive water management plans for Reclamation projects to create greater flexibility and improve the health of rivers
- 4. Energy Policy:** Integrate water management and energy planning and ensure that energy and water are being used as efficiently as possible
- 5. Clean Water Act:** Restore protections to wetlands and streams and improve implementation and enforcement of protections for all waters
- 6. Water Resources Development Policy:** Reform the principles that guide construction of federal water infrastructure projects to minimize damages to rivers, wetlands, and floodplains and prioritize more cost-effective, flexible projects
- 7. Clean Water and Drinking Water Infrastructure Funding:** Reform funding criteria to ensure that funded projects embrace green infrastructure and can adapt to changing conditions
- 8. National Forest Management:** Diversify Forest Service management practices to prioritize effective water management
- 9. Transportation Policy:** Ensure that funded projects minimize impacts on surrounding water resources and wildlife populations
- 10. Wildlife Management:** Better coordinate federal actions and invest in climate change planning to help maintain healthy fish and wildlife populations

As federal policymakers take up these issues in coming years, they must seize the opportunity to correct the mistakes of the past and prepare communities and wildlife for the defining challenge of the future. By injecting common sense into these areas of federal policy, the nation can become safer and more financially secure, ready to deal with greater volatility and uncertainty. It is a challenge that we cannot afford to ignore.





American Rivers
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National Office:

1101 14th Street, NW
Suite 1400
Washington, DC 20005

Toll-free: (877) 347-7550
www.AmericanRivers.org

Regional Offices:

- California
- Great Lakes
- Mid-Atlantic
- Midwest
- Northeast
- Northwest
- Northern Rockies
- Southeast
- Southwest

About American Rivers:

American Rivers is the leading conservation organization standing up for healthy rivers so communities can thrive. American Rivers protects and restores the nation's rivers and the clean water that sustains people, wildlife, and nature. Founded in 1973, American Rivers has more than 65,000 members and supporters, with offices in Washington, DC and nationwide.

TAKE ACTION AT AmericanRivers.org

Funding for this report was provided by the Kresge Foundation.



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