

HOW CAN SOCIAL SCIENCE RESEARCH HELP US IMPROVE THE MANAGEMENT OF OUR WATER RESOURCES?

Agricultural practices can have unintended consequences that put the quality of our water resources at risk. Working with agricultural stakeholders is essential to addressing these water quality concerns. Education and outreach programs have improved awareness of water quality issues, but government agencies and nonprofit organizations need to know how to design programs that turn awareness into action.

Land-grant university researchers are working together to study how certain events, conditions, and attitudes lead to individual, collective, and institutional actions that protect water resources. To understand how to encourage stewardship, researchers are surveying farmers, landowners, resource managers, and communities to assess beliefs, norms, and perceptions related to water resources and management.

Research findings, new survey tools, and trainings are helping organizations like the U.S. Forest Service, Environmental Protection Agency, and National Resource Conservation Service develop effective programs and policies. In particular, research helps agencies choose the right actions, incentives, regulations, partners, and other resources to best address specific situations. That means agencies can use resources more efficiently and achieve more meaningful outcomes. By finding ways to make water management programs engaging and effective, this project has potential to improve the quality of water resources across the U.S.



WHAT MOTIVATES FARMERS & COMMUNITIES TO PROTECT WATER?



Water management institutions could be improved by ensuring all stakeholder interests are represented and community members have more opportunities to participate.

Including farmers in research led to new insights on the drivers behind high nitrate levels in wells in central Montana. These insights helped Utah State University and Montana State University researchers develop management solutions tailored to address specific local situations.

In Minnesota, researchers are finding ways to enhance civic engagement in stormwater management programs in areas with poor stormwater management. Research is also influencing the state's stormwater policies. Better stormwater management means fewer pollutants draining into rivers, lakes, and other bodies of water.

In Iowa, research findings are showing agencies how to improve programs that help farmers implement a statewide initiative to reduce nutrient loss—a major source of water pollution.



Environmental policies can be more effective when incentives include more than money.



Many leadership development programs need to be revised so they promote leadership styles—like inspirational motivation—that improve group cohesion and engagement.



Research is helping coastal communities that depend on nature-based tourism prepare for climate change, which could impact the quality of the resources their economy relies on.

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Learn more: bit.ly/NC-1190