



December 8, 2022

To: Gulf Hypoxia Task Force

From: Environmental Policy Innovation Center

Re: Written Testimony for December 2022 Hypoxia Task Force Meeting

The Environmental Policy Innovation Center (EPIC) is a five year old national nonprofit focused on dramatically increasing the pace of environmental progress. A fiscally sponsored project of Sand County Foundation, EPIC concentrates its water quality work in the Mid Atlantic and Upper Mississippi River Basin regions.

The Hypoxia Task Force was established twenty-five years ago this year. In the past twenty-five years, the world has seen dramatic advances in technology and human living standards. But along with this success, we've seen many failures: technologies that failed to pan out and big risks that ultimately collapsed. Perhaps those successes only arose because we had a system in which failures could happen. The American market order has allowed regular people with big ideas who are willing to take big risks to make big progress. It is a founding cultural principle of our country. And yet, we don't extend this spirit to environmental policy.

EPIC thanks everyone who has served on the Gulf Hypoxia Task Force for their hard work over the past twenty-five years. We are grateful for the data developed painstakingly over decades of study. But the data show that the problem is not solved. There is still a Connecticut-sized expanse of water devoid of life just off our Gulf coastline. The five-year average size of the Hypoxic zone has never dipped below double the task force's modest goal. The hypoxic zone was larger last year than in the year the task force was established.

This risk averse approach must be adjusted to find success. I know the task force is not operating exactly as it was in 1997 and there have been some new approaches. But the results show that this is far from enough—more innovation and risk-taking is necessary to remove the hypoxic zone. When considering families who've lost their livelihoods and ecosystems that have been destroyed, there is a moral obligation to eschew the status quo in favor of big ideas, even if those ideas come with a higher risk.

Here are some examples of what these big ideas could be. While some of these ideas will fail, taking risks is often necessary to achieve the best outcome in a timely manner.

Overall, environmental programs should be reoriented to focus on *results*. In the Gulf Hypoxia case, the relevant outcome is the amount of phosphorus and nitrogen prevented from entering rivers and streams. Using this measure would facilitate easy comparison across programs and incentivize innovative solutions that can clean waterways more cost-effectively.

This approach is far from novel, with states like Iowa already using outcomes-based approaches in environmental policy. In Iowa, the Department of Agriculture and Land Stewardship buys water quality outcomes directly from the Soil and Water Outcomes Fund. The Soil and Water Outcomes Fund pays farmers to implement the best management practices—50% at the time of signup and 50% after verification—and sells water quality and carbon reduction outcomes separately. By offering an option focused on outcomes, the



Department is able to achieve better environmental outcomes in a more cost-effective manner and improve farmers' incentives to clean rivers and streams.

Maryland and Pennsylvania's legislatures have both authorized state funding specifically for buying water quality outcomes from farmers directly. This is not a pilot program; Maryland's Department of the Environment will be spending twenty million dollars every year to buy the most cost-effective outcomes for nitrogen reduction. Recently, they closed the first round of applications and received dozens of farm-based conservation projects which promise to achieve similar or better outcomes than traditional conservation programs at a lower cost.

There are also less-transactional ideas for improving the process by which conservation programs are funded. EPIC is helping to build direct relationships between farmers and the cities that rely on the water rolling off farmers' land. Nine cities in Iowa and over sixty cities in Wisconsin have already adopted this approach. Rather than spending tens of millions of dollars on new gray infrastructure - concrete and steel - to meet the strategic nutrient reduction goals, these cities opted to partner with farmers who prevent the same or greater amounts of nutrients from entering the same waterways at a lower cost. This approach has saved money for wastewater plants (and by extension ratepayers and taxpayers), kept resources in the community, and provided additional co-benefits in the form of flood prevention, habitat restoration and greater community connections between urban and rural areas.

Both of these strategies focus on increasing demand for water quality outcomes. This stands in contrast to the approach of many of the existing conservation programs, which generally tilt towards increasing the supply of water quality improvements rather than the demand side. But this is not to say that the supply side is unimportant - an effective plan will contain bold ideas for increasing supply as well. A dual approach is needed to rectify the hypoxia issue at a speed commensurate with the urgency of the problem, with a sharp eye on removing barriers and unnecessary regulatory hurdles.

"Batch and build" is one such solution. Consider the difference between trying to build a house yourself with working through a general contractor/commercial builder. When you build yourself, you sign a contract with the architect, the foundation pourer, the framer, the plumber, the electrician, the finisher, the painter, and many more, all one at a time, all while managing the project timeline, ordering materials, and pulling the permits. If you "buy" a house from an established builder, all those elements are bundled together. Some people will select extra customizability in spite of the higher transaction costs, but generally homebuyers choose the bundled option, prioritizing lower cost and faster production.

Polk County, Iowa applied the Batch and Build concept to conservation, specifically saturated buffers. Polk County partnered with a local agriculture co-op to conduct heavy direct outreach with local farmers, offering turnkey, edge-of-field conservation. After farmers agreed to the concept, Polk County set up a land survey, arranged for the design and approval of the projects under NRCS specifications, obtained group approval from the NRCS, all while acting as a financial intermediary and project manager. Farmers got paid \$1000 per drain line using simple contracts for construction easements, and the county went from



completing one or two projects a year in the six years prior to the policy change, to completing 51 projects last year. Next year, the program aims to scale up to 100 projects.

All three approaches—outcomes-based purchasing, water quality partnerships, and Batch and Build—have received acclaim from widely varying organizations. The National Association of State Departments of Agriculture has unanimously endorsed a federal matching program for the outcomes approach, while encouragement for water quality partnerships was the *only* Sense of Congress in the last Farm Bill. Batch and Build was a major focus of this year's Upper Mississippi River Basin Association's conference.

The hypoxia problem can and should be solved before another twenty-five years pass. But this solution will not come if we move at the pace of the last quarter-century. It will come only if we take risks and adopt new, bold approaches. Those policies can and should include the ones outlined above, but that list is far from exhaustive. America's entrepreneurial spirit will certainly bring surprises, and we should adopt a positive attitude towards these promising, yet experimental, strategies in environmental policy. Because to continue avoiding failure at all costs will mean never achieving success.

To that end we encourage you to adopt four new policy approaches:

**I. We have to elevate the Mississippi River to a place of prominence in federal policy.**

Support a Mississippi River Restoration Initiative modeled on the GLRI, Everglades, or Puget Sound initiatives. We need to elevate this multi-state issue and make it bigger than hypoxia. The Gulf Hypoxia Task Force could be housed here but with a cross-agency collaboration to improve the environmental and social quality of the River.

**II. Unify USDA and EPA funding and approaches to water quality, to enable watershed management in a holistic manner, whether for permitting compliance or general water quality goals.**

The USDA included language in the 2018 Farm Bill explicitly permitting the use of USDA-funded projects to also sell credits into eco service marketplaces (carbon, nutrient reduction). The EPA has been quiet on the issue, leaving it to the states. EPA should issue a memo that mirrors the USDA language. This will encourage multiple funding sources to work together for more overall conservation in a watershed.

EPA-USDA held a major workshop in September 2015 to advance market-based approaches to water quality. The partnership was put in hiatus since that meeting, but should be regenerated and supported.

**III. USDA should focus on supporting soil health and water quality in all its programs.**



The USDA should encourage farm involvement in carbon market programs, simplifying the access so more money goes to farmers (and conservation methods) and less being absorbed by the aggregators/marketers.

USDA should couple conservation practices with subsidy payments, specifically mandating soil conservation with crop insurance eligibility.

CRP and EQIP should be adjusted to allow greater flexibility in siting and practices, and reduce paperwork requirements, so farmers can use the programs on their farms based on each farm's practices, not a uniform approach that fits a national or regional policy. Each farm is inherently unique, and each farmer adjusts practices to fit each field and each farm. Right now there is a sense of "too much trouble" for farmers to engage with NRCS/USDA over conservation payments. Specifically, within the RCPP program, the Alternative Funding Arrangement should be enhanced with additional funding, a lower matching requirement, and presented as a "grant" to increase the flexibility for implementation of new programs.

USDA should support farmer-led watershed groups or conservation circles, to enhance the social support of (and by) farmers working in conservation and water quality. This is a low cost, low tech way to build support for conservation practices on the land.

Sincerely,

A handwritten signature in black ink that reads "Harry Huntley". The signature is fluid and cursive, with the first name "Harry" and last name "Huntley" clearly distinguishable.

Harry Huntley

Senior Agriculture Policy Analyst

Environmental Policy Innovation Center