

MERCATUS CENTER  
GEORGE MASON UNIVERSITY

REGULATORY STUDIES PROGRAM

**Reply to the Environmental Protection Agency's**

Response to Mercatus Center  
Willingness to Pay Survey: Phase III Cooling Water Intake Structures<sup>1</sup>

Ref: EPA ICR Number 2155.01

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The Regulatory Studies Program (RSP) of the Mercatus Center at George Mason University is dedicated to advancing knowledge of the impact of regulation on society. As part of its mission, RSP conducts careful and independent analyses employing contemporary economic scholarship to assess rulemaking proposals from the perspective of the public interest. On January 31, 2005, RSP filed comments with the Environmental Protection Agency (EPA) in response to its proposed Information Collection Request (ICR) on a willingness to pay (WTP) survey to evaluate the non-use benefits of its proposed Phase III regulation of cooling water intake structures. EPA placed a response to this comment in its docket on March 24, 2005 ("EPA's response"), and forwarded the ICR to the Office of Management and Budget (OMB) for approval.

This comment briefly replies to EPA's response. It does not represent the views of any particular affected party or special interest group, but is offered to assist OMB and EPA in determining whether the proposed focus groups and subsequent survey are necessary for the proper performance of EPA's Phase III regulatory analysis, and whether the resulting information will have practical utility. We also encourage OMB and EPA objectively to consider alternative approaches that might enhance the quality, utility, and clarity of the information to be collected, as required by the Paperwork Reduction Act.

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<sup>1</sup> Prepared by Susan E. Dudley, Director, Regulatory Studies Program, and Daniel R. Simmons, Research Fellow, Mercatus Center at George Mason University. This comment is one in a series of Public Interest Comments from Mercatus Center's Regulatory Studies Program and does not represent an official position of George Mason University.

**EPA suggests that non-use benefits are significant, but non-use costs are not.**

*In general, any non-market effect pertaining to specific resources on the cost side of a regulation is likely to be of no consequence—particularly in relation to an environmental regulation’s benefits—because of the dilution of the impact over the wide range of resource inputs that are called upon, directly or indirectly, to support regulatory compliance. (EPA’s response 1)*

The fact that costs are widely dispersed is not a valid argument for ignoring them. The economic theory of regulation (introduced by Stigler in 1971 and expanded by Pelzman, Buchanan and others) suggests that political pressure for counterproductive government programs occurs in exactly those situations where benefits are concentrated and costs dispersed. The implication of this theory is that regulation is likely to be biased toward benefiting interest groups that are better organized and have more to gain from the wealth redistribution.

The role of careful regulatory analysis should be to *counteract* those political pressures, not reinforce them. Other federal agencies, such as the Federal Trade Commission and the Antitrust Division of the Department of Justice, recognize this general principle. Historically, they have offered comments in other federal agencies’ regulatory proceedings precisely when consumers are likely to suffer harm from widely-dispersed costs.<sup>2</sup>

EPA recognizes elsewhere: “Even if non-use values for fish are small on a per-capita basis, they may be large in the aggregate.” (EPA’s response 4) The same argument holds for non-use costs. When it comes to regulatory costs, dilution is NOT the solution.

The proposed Phase III regulation presents opportunity costs, and EPA’s response does not justify why non-use opportunity costs are any less significant than the non-use benefits it is determined to measure by survey. For example, people who do not purchase the goods manufactured at these plants (and experience direct values that would be diminished by the regulations) may still enjoy non-use benefits from knowing that U.S. workers are employed and that jobs are not outsourced to other countries. They may also experience non-use values associated with the knowledge that lower-income families will not have to pay more for goods made in America.

We recognize the difficulty in measuring all the varieties of non-use costs and benefits that might be imputed to EPA policies, which is one reason why we do not advocate this type of analysis. It tends to produce arbitrary numbers. But for EPA to use the technique

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<sup>2</sup> See, e.g., James C. Cooper, Paul A. Pautler, and Todd J. Zywicki, “Theory and Practice of Competition Advocacy at the FTC,” pp. 11-14, available at <http://www.ftc.gov/ftc/history/docs/040910zywicki.pdf>. This paper speaks specifically of economic and consumer protection regulations that limit competition, but the general concept that consumer interests are likely to be under-represented when regulation creates dispersed costs is clear from the underlying literature that they cite.

only when it favors regulation, and to exclude the technique when it argues against regulation, is more than just arbitrary. It is deliberate and unsupportable bias.

**EPA asserts that the proposed stated preference study is necessary for developing comprehensive benefits of the final 316(b) regulation for Phase III facilities.**

*EPA refers the commenter to the “best practices” for preparing the economic analysis of a significant regulatory action described in the Office of Management and Budget (OMB) document: “Economic Analysis of Federal Regulations under Executive Order 12866” (OMB 1996).*

The “best practices” EPA references have been superseded by Circular A-4. While Circular A-4 does state that “presentation of monetized benefits and costs is preferred where acceptable estimates are possible,” it does not require the quantification of non-use benefits and costs. It specifically recognizes, “it will not always be possible to express in monetary units all of the important benefits and costs.”<sup>3</sup> As discussed below, other agencies routinely conduct benefit-cost analyses without quantifying non-use values.

**EPA continues to confuse indirect use and non-use values.**

*The commenter asserts that the values of protecting fish from impingement and entrainment are indirect use values and not non-use values, and these values are already captured in EPA’s analysis. This statement reveals a misunderstanding of the multiple primary ways in which forage fish affect the utility of individuals. ...For example, individuals who do not eat fish and do not participate in recreational fishing may still value existence of healthy commercial and recreational stocks. EPA refers to Freeman (2003), who provides a clear distinction between indirect use benefits and true non-use benefits. (EPA’s response 3-4)*

This response has not clarified the existence of non-use use values distinct from indirect use values. For example, any effect on recreational or commercial stock or harvest will be reflected in indirect use values.

It is not clear what EPA means by “multiple primary” uses. Either *one* use is primary (and the rest secondary) or it isn’t. Perhaps this statement means that fish have different values for different people, but that does not address the issue. It may be true that “*individuals who do not eat fish and do not participate in recreational fishing may still value existence of healthy commercial and recreational stocks.*” Why might such individuals hold such values? Perhaps they think fish keep the oceans (in which these individuals swim or water ski) clean, or maybe they just enjoy knowing that lots of fish help keep the other fish company. Regardless, these individuals assign a value to the fish that should be detectable in other areas of consumer choice.

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<sup>3</sup> Circular A-4, “Regulatory Analysis” (September 17, 2003)

**EPA disagrees that existence and bequest values for forage fish will likely be small.**

*EPA agrees that larger non-use values would be expected for unique resources with few substitutes. EPA, however, emphasizes that empirical evidence shows that fish are a diminishing resource. (EPA's response 4)*

EPA's references are to commercial and recreational fish catch, which are clearly use values. Our comment did not evaluate whether fish are a diminishing resource, but if fish are being as rapidly depleted as the EPA suggests, we should see their per-pound price rising proportionately to reflect the rising scarcity.<sup>4</sup> Such scarcity would clearly be captured in use values, and would unlikely be measured in a survey.

**EPA suggests that the goal of the survey will be to capture total use values, rather than non-use values.**

*[T]he stated preference study proposed by EPA is intended to measure total values (including use and non-use) of reducing fish losses from impingement and entrainment. EPA also points out that it is generally recognized in the economic literature, that it is preferable to estimate total value of a given resources rather than to estimate components of the total value (e.g., indirect use vs. non-use values) and then aggregate them. (EPA's response 4)*

This response seems to acknowledge the difficulty (if not impossibility) of distinguishing non-use from use values. How will EPA avoid double counting benefits if it combines the survey results with observed commercial and recreational values? Or does EPA intend to abandon the estimates of use values presented for public comment in the proposed Phase III rule in favor of the stated preference values that will emerge from the survey?

**EPA argues that concerns with using stated preference methods to value non-use benefits are “extreme.”**

*The [Mercatus] comments offered in this section—while reflecting the legitimate opinions of some researchers—do not reflect general standards or practice in the larger benefit-cost analysis literature.*

EPA references selected works of environmental economists who have received support from EPA to suggest that different views are out of the mainstream. However, the problems with stated preference are well known in standard economics. Namely, that in the absence of constraint (i.e., a requirement to give up one value in favor of another), people have built in biases to overstate willingness to pay.

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<sup>4</sup> If EPA is concerned that prices are not reflecting scarcity because they're fished from a commons, then the most effective solution is not likely to be cooling water intake regulations based on surveys, but better property rights specifications.

Furthermore, non-use values are not unique to environmental resources, yet other federal agencies are able to conduct benefit-cost analysis without resorting to surveys to justify regulatory proposals. For example, when the Department of Transportation evaluates seat belt regulations it does not ask people to quantify how they feel about the lives that would be saved. When the Securities and Exchange Commission promulgates a new regulation it does not conduct a stated preference survey to quantify the value people place on greater security or fairness that might be derived from the regulation.

**EPA summarily rejects the potential for experimental economics to provide alternative measures.**

*First, and perhaps most importantly, it is quite unclear how the proposed experimental economics methods would estimate non-use values, given the majority position in the literature that “stated preference valuation methods...are likely to offer the only feasible approaches to estimating nonuse values” Freeman (2003, p. 154). Indeed, EPA guidelines for economic analysis (US EPA 2000, p. 84) state that “contingent valuation is the only established method capable of measuring non-use values.” (EPA’s response 7)*

EPA should be more open-minded and resist rejecting alternative approaches because they were “not-invented-here.” EPA’s arguments against what it refers to as “simulated” markets (this reveals a misunderstanding of experimental research, which do not simulate behavior) apply equally to hypothetical surveys (unfamiliar setting, confusion, etc.). An important advantage of experiment economics is the imposition of constraints and tradeoffs. The main difference between the experimental approach and EPA’s survey approach is that the former uses real monetary values, whereas EPA’s approach uses imaginary money. The predictable result is that EPA gets imaginary results.

EPA recognizes that willingness to pay is bounded by budget constraints, but uses that to dismiss the validity of experiments conducted with college students (because they face a tighter budget constraint than the general population). We would welcome experiments conducted with any population EPA chooses; there is nothing in experimental economics that requires the subjects to be students.

**Conclusion: The willingness to pay survey information collection request does not meet the requirements of the Paperwork Reduction Act.**

First, the proposed focus group and subsequent willingness to pay survey are not necessary for the proper performance of the functions of the Agency. Executive Order 12866 does not require agencies to quantify all costs and benefits. Moreover, EPA has not articulated why one would expect Americans to hold non-use values that are additional to, and separate from, the indirect use values of protecting fish from impingement and entrainment (i.e., maintenance of the fish population). Neither has it justified why, if non-use values are important, it should focus only on non-use values associated with reducing harm to forage fish, while excluding the non-use values the rule

would diminish, such as those associated with a healthy manufacturing sector, low cost manufactured goods, and job opportunities for U.S. workers.

Second, information from a stated preference survey will not likely have practical utility. People do not have a single value even for well-understood environmental amenities, but rather values are determined based on opportunity costs (the next best alternative not chosen). When the good in question is not a unique resource or a known environmental good, but rather the forage fish in question here, the valuation becomes much more suspect, and simply cannot be deduced through survey questions.

EPA has not demonstrated that it is in society's interests to pursue government policies that would divert society's scarce resources to address hypothetical non-use values associated with the fish in question. However, if it is able to justify including measures of non-use values, they should not be based on subjective, stated preferences surveys.

To ensure the quality, utility, and clarity of the information to be collected, as required by the Paperwork Reduction Act, EPA should investigate revealed-preference approaches to estimating these values. Experimental economics offers an alternative method for revealing individuals' true willingness to pay for "non-use" items.