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VIA E-MAIL

Council on Environmental Quality
Attn: Terry Breyman, Deputy Associate Director for Natural Resources
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Subject: Draft Principles and Standards Sections of the “Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies”; Initiation of Revision and Request for Comments, 74 Fed. Reg. 65,102 (Dec. 9, 2009)

The Institute for Policy Integrity submits the following comments on the Proposed National Objectives, Principles and Standards for Water and Land Related Resources Implementation Studies (“Proposed Standards” or “the Proposal”) released by the White House Council on Environmental Quality (“CEQ”) on December 9, 2009.

The Institute for Policy Integrity (“IPI”) at New York University School of Law is a non-partisan advocacy organization and think-tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy.

On the whole, CEQ’s Proposal will improve decisionmaking in water resource initiatives by changing the emphasis of the National Objectives, increasing transparency, and focusing on sound science and modern analytical techniques. The Proposal only contains revisions to the first Chapter of the Principles and Guidelines for Water and Related Land Resources, and our comments are limited to the proposed revisions. With this in mind, there are several steps that CEQ can take to improve the Proposed Standards:

- Direct agencies, when the correct discount rate is uncertain, to explicitly acknowledge and account for that uncertainty;
- Require agencies to undertake retrospective evaluations for major projects;
- Release all data used in each study so that results may be reproduced by outside groups;
- Recommend sources to agencies for additional direction when conducting analyses; and
- Make several other substantive changes to the Proposal.

Support for Improvements

The Proposed Standards contain numerous improvements over the standards currently in force: the *Economic and Environmental Guidelines for Water and Related Land Resources Implementation Studies*, dated March 10, 1983 (hereinafter the “1983 Guidelines”).

National Objectives

In the 1983 Guidelines, the Federal Objective was “to contribute to national economic development” in a manner consistent with the nation’s environmental laws.¹ While other portions of the 1983 Guidelines appropriately included monetized environmental benefits as a part of national economic development², the Federal Objective narrowly interpreted the purpose of cost-benefit analysis, leaving out environmental benefits. The goal of cost-benefit analysis, however, is to maximize *all* societal net benefits, not just a narrow conception of costs and benefits related to economic development. This narrow view misconstrued the purpose of cost-benefit analysis to the detriment of the environment and of the nation as a whole. CEQ’s Proposal wisely redefines the National Objective as “develop[ing] water resources projects based on sound science that maximize net national economic, environmental and social benefits.”³ The mandate to include not only economic but also environmental and societal benefits into the cost-benefit analysis is an important improvement that can help generate more complete evaluations of the costs and benefits of each project.

Transparency

CEQ’s increased emphasis on transparency in its proposal is also a positive addition. The participation of the public and interested parties is crucial to government accountability. In particular, CEQ’s call to release “the steps, basic assumptions, analysis methods and results, criteria and results of various screenings and selections of alternatives, peer review proceedings and results, and the supporting reasons for other decisions necessary to execute the planning process” will allow greater transparency into the decisionmaking process.⁴ However, as noted below, each agency should go farther by releasing, to the extent practicable, all data used in the study and any data submitted by interested parties.

Emphasis on Best Available Data and Analysis

Under the 1983 Guidelines, additions or changes to the procedures laid out in Chapter Two of that document could only be made if the agency head believes a new technique is necessary. Proposed changes were then submitted to the Water Resources Council and the Cabinet Council on Natural Resources and Environment for approval.⁵

The new Proposal instead places decisions to change techniques in the hands of agency experts. It directs planners to “utilize the best available principles, data, analytical techniques, procedures, and tools in hydrology, engineering, economics, biology, risk and uncertainty, and other sciences.”⁶ The

¹ U.S. WATER RESOURCES COUNCIL, ECONOMIC AND ENVIRONMENTAL GUIDELINES FOR WATER AND RELATED LAND RESOURCES IMPLEMENTATION STUDIES iv (1983), *available at* http://www.usace.army.mil/CECW/Documents/pgr/pg_1983.pdf [hereinafter “1983 Guidelines”].

² *E.g., Id.* at 103 (“contributions or effects that can be measured in monetary terms are to be monetized”).

³ COUNCIL ON ENVTL. QUALITY, PROPOSED NATIONAL OBJECTIVES, PRINCIPLES AND STANDARDS FOR WATER AND LAND RELATED RESOURCES IMPLEMENTATION STUDIES page 2 of unnumbered section (2009), *available at* <http://www.whitehouse.gov/sites/default/files/microsites/091203-ceq-revised-principles-guidelines-water-resources.pdf> [hereinafter “Proposed Standards”].

⁴ *Id.* at 12.

⁵ 1983 Guidelines, *supra* note 1, at 9.

⁶ Proposed Standards, *supra* note 3, at 9.

Proposal specifies that planners should continuously seek to modernize their analytical tools and that each agency should specify appropriate types of peer review.⁷ This emphasis on constantly improving analytical procedures and data is a major improvement, as decisions on analytical techniques and data are better left in the hands of agency experts rather than political appointees.

Suggested Changes

(1) Acknowledge Uncertain Discount Rates

The Proposal does not address in depth the issue of discount rates to be used when valuing future costs and benefits. Instead, it merely requires that “[c]osts and benefits shall be discounted using rates prescribed by law or executive order.”⁸

This mandate gives agencies inadequate direction on the appropriate treatment of discount rates. There are significant economic and ethical challenges raised by discounting and there is no consensus in the legal and economic community on a single number, or even a single conceptual approach to choosing a discount rate. The Proposal does not address these complexities, and therefore leaves agencies both too much discretion and insufficient direction on how that discretion should be applied.

OMB Circular A-4 recommends using both 7%, based on the pre-tax real rate of return of private capital in the United States, and 3% based on the pre-tax real rate of return of 10-year U.S. Treasury Bonds.⁹ These discount rates are based on the rate of return on traditional financial instruments and are constant, meaning that one rate is applied to the entire period of the analysis. However, an emerging literature on the uncertainty of future discount rates provides compelling arguments for using a discount rate that declines over time, rather than a single constant rate. Such a time-varying discount rate explicitly acknowledges uncertainty. This literature also indicates that for projects with long-term consequences, a more appropriate range of constant discount rates should start at 2% or lower, and the upper bound should be set no higher than 4%. Attached to this document are comments submitted by IPI and the Environmental Defense Fund regarding a joint rulemaking of the Environmental Protection Agency and Department of Transportation, *Proposed Rulemaking to Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards*, 74 Fed. Reg. 49,454 (Sept. 28, 2009). These comments present a more thorough discussion of the issue of discounting over long time horizons on pages 2–27, and are incorporated into this document by reference.

CEQ may not be able to resolve all the complexities surrounding discounting in the near future. However, allowing agencies to use the high range of constant discount rates recommended by OMB will prove detrimental to the objective of the Proposal. An agency’s choice of a discount rate will affect the results of all cost-benefit analyses performed by the agency under the Proposal. To ensure agencies perform the best cost-benefit analyses possible, the Proposal should direct agencies to explicitly acknowledge uncertainty when a correct discount rate is uncertain.

(2) Require Retrospective Evaluations for Major Projects

CEQ should require agencies to undertake retrospective cost-benefit evaluations for major projects.¹⁰ This additional step will enhance improve decisionmaking and enhance public and government confidence in agency decisionmaking. The Proposal’s requirement that agencies

⁷ *Id.*

⁸ *Id.* at 22.

⁹ OFFICE OF MGMT. & BUDGET, CIRCULAR A-4, 33-34 (2003) *available at* <http://www.whitehouse.gov/OMB/circulars/a004/a-4.pdf>.

¹⁰ *E.g.*, Executive Order 12,866 defines a “significant regulatory action” to include any rule that would have an impact of 100 million dollars every year. Exec. Order 12,866, §3(f), 58 Fed. Reg. 51735 (1993).

collaborate for “post-project review” could be seen as hinting toward such a prospect.¹¹ The federal government has rarely required retrospective cost-benefit analyses as part of the decisionmaking process. Perhaps the best known example of a required retrospective analysis is the Environmental Protection Agency’s review of the first 20 years of the Clean Air Act, published in 1997.¹²

However, independent retrospective evaluations of major projects would be a major step forward across the federal regulatory system.¹³ First, it will allow regulators to evaluate flaws in prospective cost-benefit analyses. Systematic biases could be revealed over time (such as the overestimation of compliance costs due to the innovation of regulated firms) and could be corrected. Second, retrospective analyses would be a decision-point for discontinuing ineffective regulation or expanding effective rules. A respected and independent review process could operate outside of the daily political pressures facing agencies and thus promote accountable and effective regulation for the long run.

(3) Release All Study Data Where Practicable

While the Proposal makes great strides in terms of transparency,¹⁴ the final step of publicly releasing all data used in agencies analyses, to the extent possible while protecting personal data, would help ensure the accountability and “good government” results desired by the CEQ. It would enhance the credibility of the analyses by enabling interested parties to replicate the results of the agency. The availability of this data would also support related policy research by outside groups.

(4) Provide References for Additional Guidance

Although the Proposal provides some direction to agencies when performing economic analyses, there are many questions that are not specifically addressed, and CEQ should consider recommending sources that agencies can refer to for additional information. For projects that have impacts on greenhouse gas emissions, a recent interagency working group has provided guidance concerning the social cost of carbon.¹⁵ In addition, the Environmental Protection Agency has provided a detailed and peer-reviewed set of guidance for conducting cost-benefit analysis, the *Guidelines for Preparing Economic Analyses*.¹⁶ The *Guidelines* are currently under revisions, and when released the updated version will likely be based on the most recent research on these issues and provide a very useful resource for agencies across the federal government.

(5) Additional Substantive Recommendations

Simplify Screening Process

As in the 1983 version, the Proposal requires that all alternatives should be screened on the basis of “completeness, effectiveness, efficiency, and acceptability.”¹⁷ However, the subsequent paragraph specifies that, if there are significant tradeoffs among the costs and benefits of alternatives, multiple

¹¹ Proposed Standards, *supra* note 3, at 13.

¹² U.S. ENVTL. PROT. AGENCY, THE BENEFITS AND COSTS OF THE CLEAN AIR ACT, 1970 to 1990 (1997), *available at* <http://www.epa.gov/oar/sect812/retro.html>

¹³ Michael Greenstone, *Towards a Culture of Persistent Regulatory Experimentation and Evaluation*, in NEW PERSPECTIVES ON REGULATION (David Moss & John Cisternino eds. The Tobin Project 2009).

¹⁴ Proposed Standards, *supra* note 3, at 12.

¹⁵ INTERAGENCY WORKING GROUP ON SOCIAL COST OF CARBON, SOCIAL COST OF CARBON FOR REGULATORY IMPACT ANALYSIS UNDER EXECUTIVE ORDER 12,866 12 (2010) *available at* http://www1.eere.energy.gov/buildings/appliance_standards/commercial/small_electric_motors.html.

¹⁶ NAT’L CTR. FOR ENVTL. ECON., U.S. ENVTL. PROT. AGENCY, GUIDELINES FOR PREPARING ECONOMIC ANALYSES (Sept. 12, 2008) (unpublished external review draft).

¹⁷ *Id.* at 22.

alternatives must be carried forward for further analysis.¹⁸ These two sections could be significantly clarified and simplified in two ways.

First, all alternatives to be carried forward should meet the criteria of completeness and acceptability. Second, instead of choosing which alternatives to maintain, the guidelines should specify that only alternatives that are “dominated”¹⁹ by other alternatives should be eliminated from further analysis. This two part procedure should serve the same goal as the procedure laid out in the proposal while simplifying the directives.

Clarify Baseline for Recommended Plan

The Proposal specifies that the decisionmaker shall recommend a plan that provides the greatest net contribution to the National Objectives and then further specifies that this plan must “provide combined beneficial effects for the Nation that outweigh the combined adverse effects considering all significant monetary and non-monetary impacts, both quantified and unquantified.”²⁰ However, because the beneficial effects and adverse effects are all relative to the baseline “No Action” Alternative, the “No Action” Alternative, by definition, will never have combined beneficial effects higher than the combined adverse effects. This undesirable result can be avoided by altering the language of Section 3.K.1 as follows:

If the recommended plan is not the “No Action” Alternative, the recommended plan must provide combined beneficial effects for the Nation that outweigh the combined adverse effects considering all significant monetary and non-monetary impacts, both quantified and unquantified. If the recommended plan is the “No Action” Alternative, then none of the alternatives considered may provide combined beneficial effects for the Nation that outweigh the combined adverse effects considering all significant monetary and non-monetary impacts, both quantified and unquantified.

Focus on Distributional Effects

The Proposal contains an admirable emphasis on consideration of the impact of projects on low income, tribal, and minority communities.²¹ However, environmental justice considerations are only one segment of the overall distributional effects. The only location where other distributional effects are considered is the listing of “income distribution” under “Other Social Effects” as a part of the “Non-Monetary Effects Category.”²²

In addition to the difficult semantic distinction of placing changes in income distribution in the “Non-Monetary Effects Category,”²³ the Proposal seems to give short-shrift to distributional effects more generally. To correct for this, CEQ should add the following language to the end of Section 3.I.4.a.3.a:²⁴ “To the extent feasible, the incidence of national economic effects on different economic subgroups should be reported (e.g., by income quintile). This incidence should include both changes

¹⁸ *Id.*

¹⁹ If an alternative is dominated, that means that another alternative is equal or superior on all analyzed dimensions. The result should be functionally the same as the requirement that alternatives should be kept if there are “significant tradeoffs.”

²⁰ Proposed Standards, *supra* note 3, at 23.

²¹ *E.g., Id.* at 12.

²² *Id.* at 20.

²³ More specifically, this categorization may reflect the correct sentiment that, while changes in income distribution are obviously monetary effects, there should not be any independent weight put on any particular changes in income distribution (also known as “transfers”) apart from the overall (or net) effect of the plan on total incomes.

²⁴ Proposed Standards, *supra* note 3, at 19.

in incomes and costs going forward and wealth effects such as land valuation.” This language would ensure that agencies give full attention to distributional effects more generally.

Reinsert International Considerations

While the Proposal mentions international concerns twice (Sections 3.H.2 on the formulation of alternatives and 3.K.2 on the recommendation of a plan)²⁵, it appears to omit the following language on international concerns that appeared in the 1983 Guidelines:

- Federal water resources planning is to take into account international implications, including treaty obligations. Timely consultations with the relevant foreign government should be undertaken when a Federal water project is likely to have a significant impact on any land or water resources within its territorial boundaries.²⁶
- When a Federal water project is likely to have a significant impact on any land or resources situated in a foreign country or to affect treaty obligations, the responsible Federal planning agency, through the Department of State, should enter into consultations with the government of the affected country, with a view to determining the international implications of the project under consideration.²⁷

At the very least, the language from these two sections should be returned to the current proposal. In addition, all identifiable international effects should be included in the beneficial and adverse effects of the alternatives. These effects should not be limited to direct water resource concerns but should also extend to other environmental issues with significant transnational implications. The valuation and inclusion of international costs and benefits will become an increasingly important issue as more economic analyses consider trans-border environmental issues such as climate change. Indeed, the recent interagency taskforce that considered the appropriate treatment of the social cost of carbon for regulatory impact analyses found that use of a global value was most appropriate.²⁸

Incorporate Existence Values

The Proposal’s directive in Section 2.A. that studies should seek to “protect and restore natural ecosystems” recognizes the concept of existence values (or “intrinsic natural values”) as an important impact of water resource initiatives.²⁹ However, the Proposal does not revisit the concept in the remainder of the Standards. Existence values are an important part of water resources planning generally and should be kept in mind throughout the entire analysis. However, a great deal of controversy surrounds the existence and measurement of non-use values.³⁰ If the Standards

²⁵ *Id.* at 16 and 23.

²⁶ 1983 Guidelines, *supra* note 1, at iv.

²⁷ *Id.* at 3.

²⁸ See INTERAGENCY WORKING GROUP, *supra* note 15.

²⁹ Proposed Standards, *supra* note 3, at 5.

³⁰ See, e.g., SUSAN DUDLEY & DANIEL SIMMONS, MERCATUS CENTER, PUBLIC INTEREST COMMENT ON THE ENVIRONMENTAL PROTECTION AGENCY’S PROPOSED NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATIONS 8 (2005), available at

<http://www.mercatus.org/PDFDownload.aspx?filePath=/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=18750> (suggesting that countervailing existence values exist for many regulations – “Some individuals may gain nonuse values from the knowledge that the Alaskan wilderness is untouched by oil drilling, while others may gain nonuse values from the knowledge that oil wells exist to provide jobs for Alaskan workers and national security. Some individuals may assign nonuse values to knowing people attend church regularly, while others may gain nonuse values from knowing others engage in hedonistic behavior.”). See also Letter from National Roofing Contractors Association to Lorraine Hunt, Office of Information & Regulatory Affairs

aim to encourage analysts to consider existence values in a routine and consistent manner, it should provide more advice to agencies on the types of existence values they should measure and the types of studies they should rely on.

The definition of the “study area” under Section 3.C should be extensive enough to include all relevant existence values.³¹ Arguably the parameters of Section 2.D (“Utilize Watershed and Ecosystem Based Approaches”)³² are expansive enough to ensure this, but CEQ could easily make this inclusion explicit. To that end, CEQ should insert additional language into these two sections mentioning existence value or intrinsic natural values.

Simplify Period of Analysis

The Proposal suggests the following period of analysis:

The period of analysis shall be the same for all alternatives, and shall reflect the period of time that alternatives would produce significant beneficial or adverse effects. The period of analysis begins when alternatives begin to produce substantial benefits, typically when basic implementation is completed.³³

To ensure simplicity and consistency, the second sentence in this excerpt should provide that the period of analysis “begins when alternatives begins to produce any substantial beneficial or adverse effects.” This change would ensure that the second sentence mirrors the requirements of the first sentence.

Express Preference for System-wide Approach

The Proposal will typically apply to “site-specific projects and project modifications.”³⁴ However, it should encourage agencies to use system-wide planning rather than project-by-project evaluation where possible. System-wide planning can capture the impacts of related projects and produce higher net benefits over considering projects in sequence. For example, conservation at upstream locations could offset the need for structural projects downstream. This would encourage agencies to simultaneously increase the effectiveness of existing infrastructure and maximize end-use conservation.

Evaluate Nonstructural Options

The Proposal should encourage agencies to evaluate options that do not involve creating new infrastructure that affect water resources, if possible. It currently contains language that “[s]tudies shall give full and equal treatment to nonstructural approaches that avoid and minimize actions and changes that are incompatible with or adversely impact floodplain functions.”³⁵ CEQ should go further, directing agencies to “value the ecological benefits provided by floodplains in their natural state,” when evaluating nonstructural approaches. Nonstructural approaches can have many benefits over infrastructure-based projects and the Standards should ensure that agencies captured any possible advantages when evaluating projects. Programs encouraging more efficient use of infrastructure and employing conservation techniques can often achieve the same aims as structural projects at significantly lower costs. These approaches should be evaluated using the same cost-benefit analysis framework as structural projects.

(May 5, 2003) (on file with author) (arguing that contingent valuation “is so fundamentally flawed as to warrant exclusion altogether”).

³¹ Proposed Standards, *supra* note 3, at 14.

³² *Id.* at 6-9.

³³ *Id.* at 22.

³⁴ *Id.* at 4.

³⁵ *Id.* at 6.

Conclusion

There are tremendous difficulties involved in instructing myriad different agencies on how to conduct a complex and contentious process in an accurate, fair, and transparent manner. CEQ has exerted an admirable effort to achieve this objective. The current Proposal has made many crucial improvements to the 1983 Guidelines including changing the emphasis of the National Objectives increasing transparency, and focusing on sound science and modern analytical techniques.

However, there still is room for further refinement to improve the standards. CEQ should make revisions to: consider an appropriate range of long-run discount rates including time-varying discount rates that explicitly acknowledge uncertainty; require a retrospective evaluation for major projects; release all data used in each study so that the results can be reproduced by outside groups; provide references for additional guidance to issues not addressed; simplify the screening process; clarify the baseline used; increase the focus on distributional effects and international considerations; expand incorporation of existence values; simplify period of analysis; use a system-wide approach where possible; and evaluate nonstructural options.

Finally, while cost-benefit analysis is an important tool for making sound regulatory decisions, it should not be used to circumvent the legal requirements imposed by statute. An additional reform that CEQ could make is to clarify that the role of cost-benefit analysis is to aid agencies in implementing statutes, and is not to be substituted for statutory decisionmaking criteria.

Respectfully submitted,



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