



THE COUNCIL ON ENVIRONMENTAL QUALITY

COMMENTS OF

THE WATER RESOURCES COALITION

ON THE CEQ NOTICE

74 FED. REG. 65102 (DEC. 9, 2009)

ON THE DRAFT

ECONOMIC AND ENVIRONMENTAL PRINCIPLES AND

GUIDELINES FOR WATER

AND RELATED LAND RESOURCES IMPLEMENTATION

STUDIES

APRIL 5, 2010

improve, prevent, save
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INTRODUCTION

The Water Resources Coalition (WRC) is pleased to submit this statement to the Council on Environmental Quality (CEQ) in response to the December 9, 2009, notice requesting comment on the CEQ's proposed revisions to the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies of 1983. *See* 74 Fed. Reg. 65102 (Dec. 9, 2009).

The WRC was established in 2007. It works for the development, implementation and funding of a comprehensive, national water resources policy to ensure a sustainable, productive economy; a healthy aquatic ecology; and public health and safety. Coalition members become key players in the effort to improve, prevent, and save our nation's water resources.

The Coalition's members are the American Council of Engineering Companies; the American Public Works Association; the American Shore and Beach Preservation Association; the American Society of Civil Engineers; the Association of California Water Agencies; the Association of State Dam Safety Officials; the Associated Equipment Distributors; the Associated General Contractors of America; the Atlantic Intracoastal Waterway Association; the Coast Builders Association; the Dredging Contractors of America; the Everglades Trust; the Florida Inland Navigation District; the Missouri Corn Growers Association; the National Association of Regional Councils; the National Association of Flood and Stormwater Management Agencies; the National Sand, Stone and Gravel Association; the Oregon Water Resources Congress; and the Upper Mississippi, Illinois and Missouri Rivers Association.

BACKGROUND

The December 2009 draft proposal was required by section 2031 of WRDA 2007. The CEQ notice stated that the administration "is considering developing uniform planning standards for the development of water resources that would apply governmentwide, including agencies other than the traditional water resources development agencies covered under the current Principles and Guidelines."

The 2009 proposal calls for the development of water resources projects to be based on the best available science, greater consideration of non-monetary benefits to select a project, improved transparency, and consideration of non-structural approaches that can solve the flooding problem without adversely impacting floodplain functions. The proposal would also expand the scope of the Principles and Guidelines to cover all federal agencies that undertake water resource projects.

The proposed revision recommends 13 "planning principles" for all federal agencies to observe when designing and constructing projects that could affect U.S. water resources. Among them are requirements to protect and restore natural ecosystems and the

environment while encouraging sustainable economic development; to “account for ecosystem services”; to “account for the benefits and costs in appropriate monetary and non-monetary terms”; and to “incorporate public safety.”

The proposal calls for the development of water-resources projects to be based on the best available science, increased consideration of monetary and non-monetary benefits to justify and select a project, improved transparency, and consideration of nonstructural approaches that can solve the flooding problem without harming floodplain functions. The proposal would also expand the scope of the Principles and Guidelines to cover all federal agencies that undertake water-resource projects.

In the Water Resources Development Act of 2007, Congress instructed the Secretary of the Army to develop a new Principles and Guidelines for the U.S. Army Corps of Engineers. In the CEQ rewrite, the administration is expanding the scope of the Principles and Guidelines to cover all federal agencies that undertake water resource projects, not just the four agencies (i.e., U.S. Army Corps of Engineers, Bureau of Reclamation, Natural Resources Conservation Service and the Tennessee Valley Authority) which are subject to the current Principles and Guidelines.¹

The proposed revisions to the Principles and Guidelines would require that:

- Federal water-resources planning and development to protect and restore the environment and improve the economic well-being of the nation for present and future generations. While the 1983 standards emphasized economic development alone, the new approach calls for development of water resources projects based on sound science that maximize net national economic, environmental, and social benefits.
- All federal agencies consider monetary and non-monetary benefits to justify and select a project that has the greatest net benefits – regardless of whether those benefits are monetary or non-monetary. For example, the monetary benefits might capture reduced damages measured in dollars while the non-monetary benefits might capture increased fish and wildlife benefits, or biodiversity.
- Any decision to modify water resources and floodplains will be based on evaluations of the services gained and lost by such an action. Only those actions that provide a net benefit will be further pursued or recommended for construction. For the first time such evaluations must give full and equal consideration to nonstructural approaches that can solve the flooding problem without adversely impacting floodplain functions.
- Water-resources projects deliver “good government” results for the American people. It is expected that the use of best science, peer review, and full transparency will ensure that projects undergo a more rigorous study process, which should inform authorization and funding decisions.

WRC COMMENTS

A. The proposal speaks to the need to “incorporate public safety” into the planning process, but it does not contain any discussion of obvious ways to

achieve the goal. Specifically, nothing in the proposal identifies the unequivocal need for resiliency in the design and construction of federal civil engineering projects.

In engineering terms, resiliency is the ability of an infrastructure system to recover its function after it is damaged by a natural disaster or a terrorist attack.

Sustainability and resiliency must be an integral part of improving the nation's infrastructure. Today's infrastructure—especially flood control systems—must be able to respond to, and change with, dynamic conditions.

Infrastructure systems are designed to protect and improve the natural environment and carry on even after natural or man-made disasters. Resilience, implemented through a risk-management approach, can be built into infrastructure systems by taking a comprehensive approach at identifying potential hazards; assessing the likelihood of occurrence; identifying methods of recovery; recognizing system interdependencies and critical connections; and encouraging ongoing training and research for engineers and owners of infrastructure.

By taking these steps, disasters will pose less of a threat to public health and will minimize disruptions to our economy. The federal government has a clear duty to provide infrastructure systems that will last for future generations, and the guidelines need to reflect the paramount importance of infrastructure resiliency.

Although the proposal correctly identifies structural and non-structural methods (including political and legal policies designed to shift human behavior in favor of greater safety measures), the revision does not recognize an inherent weakness in nonstructural approaches to ecosystem engineering, namely the ability of people to accept far greater risks for themselves and their property than government generally condones. This needs to be discussed more fully in the guidelines.

Some of these issues—including social sustainability—are more fully explained in the U.S. Agriculture Department's newly reinstated National Forest System Land and Resource Management Planning rule, which was first adopted in 2000 and which has guided the development, amendment, and revision of all the land management plans throughout the National Forest System, 74 Fed. Reg. 67,059 (Dec. 18, 2009).

B. The proposal's discussion of the use of cost-benefit analyses (CBA) in the development of water-resources projects is not thoroughly explored. The CEQ needs to explain in some detail how it will require CBA to be employed, especially in the likeliest methods required to monetize the social or environmental benefits of projects.

We are concerned with the effort to monetize new welfare "benefits" to society. This appears to be a somewhat a risky undertaking when it comes to deciding on the value of economic development versus environmental benefits.

CBA seeks to instruct current decisionmaking processes. It is ill suited to informing contemporary policymakers about intergenerational issues—the *prospective* ecological needs of a society, that is, the plants, animals, and ecosystems that future generations may value.

As with all economic approaches to environmental problems, the use of CBA generally is most appropriate in those cases where economic efficiency, not environmental protection, is the ultimate policy goal. Thus cost-benefit analyses may continue the government down the present path of emphasizing the economic welfare to the nation of water resources projects while leaving environmental amenities vulnerable due to the inability to monetize their welfare benefits adequately during the project-planning stage.

C. The section on peer review of federal water-resources projects is unsound. It contemplates the use of internal agency peer reviews as well as totally independent reviews by outside experts. The type of review apparently depends upon the scope of the project. This is the wrong approach.

Sound engineering principles emphasize that a proper project design peer review provides a completely independent assessment of a public works project in the majority of cases. This independent review “is a high-level action taken to improve quality in constructed projects,” according to *Quality in the Constructed Project*, a manual of engineering practice issued by the American Society of Civil Engineers.

Good engineering requires that external peer reviews should be conducted where performance is critical to the public health, safety and welfare; where reliability of performance under emergency conditions is critical; for projects using innovative materials or techniques or that are lacking redundancy in the design; or, that have unique construction sequencing or a short, overlapping design and construction schedule. We believe that virtually every federal water-resource project will satisfy one or more of these conditions.

Project peer reviews are necessary whenever the project is larger or more complex for the design team; whenever previous projects of a similar nature have experienced difficulties; when the project involves new technologies; when project objectives have changed during the design; when the project team includes more than one office in an organization or different organizations; when the project requires a fast-track design and construction schedule—e.g., under a design-build project delivery contract—when budgets are limited; when the project involves large potential liabilities for the owner and builder and poses unusual risks to the public; and when it involves special environmental concerns.

The principles and guidelines should *not* restrict the use of external peer reviews only to projects that are controversial or that are of a given size, complexity, or cost. While those issues certainly warrant debate among policymakers, they cannot ascertain the best engineering solution to a problem to be addressed by a public works project. A project peer review should occur throughout the design process. In other words, the independent peer review should begin *before* the project planning process is completed.

The ASCE manual of practice emphasizes that the review ought to provide a detailed examination of the overall technical and management aspects of a proposed engineering project, and it may address policies, procedures, and practices. “A distinguishing feature of a project design peer review is that *its scope goes beyond routine standard procedures and daily quality control checks.*” (emphasis added).

D. The Proposal’s Objectives Need to be Clarified

Despite the intent of the proposal to maximize economic, environmental and social benefits, the revision appears to promote environmental goals over economic and social ones. Such a tactic could retard flood control, navigation and water supply projects critical to public safety.

The December 9 proposal also contemplates including multiple objectives in every water resources planning study. Requiring that *every* study include the multiple objectives of economic, environmental, and social benefits might lead to projects that involve fewer positive returns on the investment than other projects, programs or plans. This requirement is unworkable, does not reflect the reality of project development, and would result in a waste of scarce resources.

Therefore, CEQ needs to develop a long-term planning model in which the Council establishes a narrow list of proposed principles. These should include a concise set of principles useful and necessary for sound decision-making, that the agencies are able to effectively make operational. Such a list should be premised on the notion of net beneficial effects, whereby decision-makers would utilize cost-benefit analyses and other such analytical tools to compare various plans. The principles should ensure consideration of all alternatives, and those alternatives should be quantified

In addition, as noted, peer review is an important element of successful planning. It can add to the knowledge available to planners and is best integrated into the planning process on an ongoing basis, occurring seamlessly at key milestones throughout plan formulation, so as not to add additional time and expense to an already time-consuming process.

E. CEQ Proposal Conflicts with WRDA Requirements

As a general matter, the WRC believes that the Council lacks the statutory authority to issue regulations governing water resources projects generally, to order an interagency drafting effort that binds the U.S. Army Corps of Engineers, or to require the Principles and Guidelines to apply to water resources projects carried out by agencies other than the Corps.

In enacting section 2031, Congress carefully tailored the requirements for the new Principles and Guidelines to meet the needs of the nation for economic growth and the protection of scarce environmental resources. The December 9 plan proposes a system that would place roadblocks in the way of projects. As written, the draft could upset the

careful legislative compromise and undermine the congressional goal of projects
“maximize sustainable economic development.”

Respectfully submitted,

The Water Resources Coalition

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ENDNOTES

¹ In comments to the CEQ in July 2009, the WRC objected to the CEQ's decision to assume control of the revisions to the Principles and Guidelines, a program Congress directed the Corps of Engineers to complete by November 2009. Our objections remain valid today. The Coalition's complete comments on the initial P&G announcement are at <http://www.waterresourcescoalition.org/files/pdf/WRCLettertoCEQre-PG--FINAL.pdf>