

HQUSACE
Attn: P&G Revision
CECW-ZA
441 G Street, NW
Washington, DC 20314-1000

October 15, 2008

Dear Mr. Prather:

Following are the comments of the American Shore & Beach Preservation Association on the Draft Proposed Principles for Water and Related Land Resources Implementation Studies published in the *Federal register* on September 12, 2008.

Sincerely,



Mayor Harry Simmons
President

American Shore and Beach Preservation Association Comments on Draft Proposed Principles for Water and Related Land Resources Implementation Studies

Introduction. The following comments on the draft general principles are provided in response to a request for comments in the Federal Register, volume 73, number 178, Friday, September 12, 2008. We recognize that it may be premature or even inappropriate to provide comments solely on the overriding general principles without the benefit of also reviewing how those principles are proposed to be applied in the guidelines that will ultimately accompany those principles. Nevertheless, we have attempted to offer detailed comments based on what has been made available at this time. Hopefully some of our concerns and comments will be covered adequately in the future proposed guidelines. ASBPA would have preferred had this proposal reflected a clearer and more concise statement of principles along with a similarly well-crafted proposal for guidelines. Therefore, we reserve the right to provide additional comments on the principles once the specific details are identified in the guidelines, since the guidelines will more clearly identify the intent of the principles.

Summary of Changes. It is recommended that a summary section be included with the future Principles and Guidelines (P&G), when drafted, to indicate changes or deletions from the existing P&G and identification of new principles or guidelines added to the draft new P&G. This will assist reviewers in providing meaningful responses.

History of Water Resources Principles, Standards, and Guidelines. We have taken the opportunity to briefly identify some of the key history of water resources evaluation principles and standards to show how water resources guidance has evolved over a significant period of time. We suggest that the proposed P&G also incorporate this history so that it is clearly understood that many of the principles are long standing and that much of the current emphasis is not new but was actually incorporated in principles that were published more than 50 years ago.

The Green Book, Budget Circular A-47, and Senate Document 97. Several fundamental elements of the planning process were established in the 1950s. In 1950, a report of the Subcommittee on Benefits and Costs was circulated among agencies. This document, "Proposed Practices for Economic Analysis of River Basin Projects" was revised and published in 1958 and became known as "the Green Book". The report covers the basic principles and concepts of benefit-cost analysis; principles and procedures for project and program formulations to include the maximization of net benefits; standards, problems, and procedures in benefit and cost measurement; analysis of various project purposes; and cost allocation. The principles contained in the initial draft of the Green Book provided guidance in formulation and evaluation. However, there was no Federal policy to assure uniformity of planning until the Bureau of the Budget issued Circular A-47 in December 1952. The Green Book and Budget Circular A-47 mandated one objective for water resources projects: national economic efficiency. This was contrary to the history of water resources which had always included a strong regional economic development component.

In 1962, President John F. Kennedy approved a statement of "Policies, Standards, and Procedures in the Formulation, Evaluation, and Review of Plans for Use and Development of

Water and Related Land Resources”. The statement was contained in Senate Document 97, the name by which these policies are better known. Senate Document 97 identifies three objectives of planning that are each to receive full consideration. Briefly, they are development, preservation, and well-being of people. This is the first time that preservation was added as an objective. In addition, multi-purpose planning was to be used, departures from the economically optimum plan to account for intangible impacts were allowed, all viewpoints (national, state, regional, and local) were to be taken into account, and river basins were to be the preferred planning area. Although Senate Document 97 replaced Budget Bureau Circular A-47, Senate Document 97 was an interdepartmental agreement that was never formally approved by Congress.

The Water Resources Planning Act of 1965 mandated that the Water Resources Council review principles and standards for planning water and related land resources projects. A Special Task Force to the Water Resources Council prepared reports on “Principles” and “Standards”, and a third report on “Procedures” was to be completed later. Four objectives for planning were proposed. The objectives were to enhance national economic development, to enhance the quality of the environment, to enhance social well-being, and to enhance regional development. No one of any of the four objectives was to be more important than any other. These reports were never adopted.

Principles and Standards & Principles and Guidelines. The Water Resources Council (WRC), in 1973, issued its own “Principles and Standards for Planning Water and Related Land Resources (P&S)” in the Federal Register, replacing Senate Document 97. The P&S used two equal objectives: enhancing national economic development and enhancing the quality of the environment. In addition, there were four accounts: national economic development (NED); environmental quality (EQ); regional development (RD); and social well-being (SWB). P&S defined three levels of planning: framework studies and assessments (Level A studies); regional or river basin plans (Level B studies); and implementation studies (Level C studies). In 1980, P&S was modified to make the status of the two coequal objectives clearer. These objectives are protection and enhancement of national economic development (NED) and protection and enhancement of environmental quality (EQ). The new P&S required that alternative plans be formulated in consideration of the four tests of completeness, effectiveness, efficiency, and acceptability. In addition, alternative plans were now to include an NED plan, an EQ plan, and a primarily non-structural plan. An example the latter would be an instance where the majority of the project costs would be for evacuation or flood proofing in combination with a structural component such as channel modification. The new P&S were in effect for about two years.

The “Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies” (P&G) were approved in 1983. The P&G changed the focus from two coequal objectives to a single Federal objective, the NED plan. Despite the swing to and from emphasis on NED only, the planning process and the four-account framework have continued to be applied since 1983.

Shifting Emphasis on Water Resources Objectives. This half century history of water resources principles demonstrates that many of the concerns, criticisms, or issues today regarding planning guidance are not new. There have been shifts in emphasis over the years with a current

desire to return to the coequal objectives of NED and EQ as contained in P&S and even four multiple coequal objectives. Social well-being and regional development were also equal objectives in the past. Emphasis on planning in a systems context with a watershed and regional perspective is also not new.

Expand from Guidance for Project Implementation Studies (Level C) to Include Level B Type Studies. The Administration and Congress ultimately determine future directions for water resources analyses. We are pleased that the draft proposed principles appears to incorporate an appropriate shift in emphasis. However, it is important to recognize that all of the water resources guidance to date is applicable to project implementation studies (Level C). Draft Level B guidance was developed by WRC after issuance of the P&S, but was never finalized and implemented for civil works planning. The applicability solely to project implementation studies is important because there is a renewed focus on including watershed, river basin, or regional considerations (typically covered in Level B studies) within the implementation studies. Without additional Federal or state support, this objective becomes problematic. The non-Federal sponsors for a study may be a city or a county that may be unable or unwilling to provide cost-sharing support for studies beyond their jurisdiction.

ASBPA strongly supports watershed, regional, and systems study perspectives. To implement this approach, the new P&G should be modified to incorporate guidance that is applicable beyond implementation studies. The currently proposed draft principles continue to be limited to implementation studies as indicated in the title of the document.

Emphasis on Public Safety, Adaptive Management, and Loss of Life. In general, we are pleased with the focus on collaborative planning. The collaborative approach, however, adds time and money to the planning process. The Federal government should be prepared to provide increased funds for collaboration. In addition, ASBPA also supports the focus on multi-objective planning, risk and uncertainty, national economic development, environmental quality, regional economic development, other social effects, and public safety. We further recommend that adaptive management be incorporated into project authorizations so that flexibility is maintained in making project adjustments, if necessary. We also believe that public safety should include an emphasis on avoiding loss of life. Other Federal agencies place a monetary value on the loss of human life. There is every reason that water resources evaluations should do the same (except for the current policy within the Army to not do so). The proposed principles must address valuing loss of life.

Details Needed Regarding Opposing Principles. We believe that much of the proposed principles refer to sound concepts. However, the document does not provide specific details on opposing principles. For instance, application of the proposed minimum 1.5 benefit-cost ratio requirement is in conflict with the maximization of net benefits. In addition, the focus on the project benefit-cost ratio is typically in opposition to assuring public safety and avoiding loss of life. Elevating the benefit-cost ratio standard to 1.5 for flood control and hurricane/storm damage reduction projects will often be at the expense of public safety. There is no discussion or specific details in the proposed principles related to how opposing principles will be dealt with in the formulation of the recommended plan.

Inappropriateness of Arbitrary Benefit-Cost Ratio of 1.5. Our greatest concern with the proposed principles is the minimum 1.5 benefit-cost ratio standard for recommending projects. There is no basis in any water resources principles developed to date for violating the net benefits evaluation criteria and establishing an arbitrary 1.5 benefit-cost standard. For over 50 years it has been agreed that the plan that maximizes net NED benefits is the NED plan. That does not prevent the Administration from using an overall project benefit-cost ratio standard of 1.5 in terms of preparing the President's budget. However, it is important that the project formulation be based on the principles set forth in the revised P&G without regard for Administration budgetary policy. After the best plan is identified consistent with P&G principles, the Administration can determine budgetary priorities for the President's budget. The whole formulation process and benefit-cost procedure is based on benefits exceeding cost for incremental justification at an appropriate discount rate or rate of return on investment.

The water resources discount rate has been determined after years of study and analysis to be a reasonable compromise between those who support a lower rate and those that support a higher rate. In addition, the water resources discount rate is now mandated by law. To set formulation principles to require a minimum benefit-cost ratio of 1.5 implies that the minimum rate of return to the Federal Government as established by Congress is no longer adequate in justifying Federal participation in water resources projects. The proposed principles provide a standard that is contrary to law. In addition, incremental justification procedures do not work well in benefit-cost analysis if the concept of net benefits is violated.

A simple example of the formulation dilemma is provided by the following hypothetical riverine flood control project. In project formulation, it is typical for the incremental justification to decrease as the level of protection increases. Assume that a 20-year level of protection will provide \$2 million in annual benefits at an annual cost of \$1 million. The incremental benefit-cost ratio is 2.0. Assume that the next increment from a 20-year level of protection to a 50-year level of protection will provide \$1.4 million in annual benefits at an annual cost of \$1 million. The incremental benefit-cost ratio is 1.4 and the overall project benefit-cost ratio is 1.7 (\$3.4/\$2.0). Further assume that the next increment from a 50-year level of protection to a 100-year level will provide \$1.2 million in annual benefits at an annual cost of \$1 million. The incremental benefit-cost ratio is 1.2 and the overall benefit-cost ratio is 1.5 (\$4.6/\$3.0). Further assume that the next increment from a 100-year level of protection to a 200-year level of protection will provide \$ 1.1 million in annual benefits at an annual cost of \$1 million. The incremental benefit-cost ratio is 1.1 and the overall benefit-cost ratio for the project is 1.4 (\$5.7/\$4.0). Finally, assume that the last increment from a 200-year level of protection to a 500-year level of protection will provide \$.9 million in annual benefits at an annual cost of \$1 million. The incremental benefit-cost ratio is \$0.9 and the overall benefit-cost ratio for the project is 1.3 (\$6.6/\$5.0). Under the current policies of determining the NED plan, the plan selected would be a 200- year level of protection with an overall project benefit-cost ratio of 1.4 since the next added increment is not justified. Applying the principles in the proposed document, the NED plan would be a 20-year level of protection even though the overall project benefit-cost ratio is 1.7 because the incremental benefit-cost ratio going from a 20-year level of protection to a 50-year level is 1.4 and does not meet the proposed minimum standard of a BCR of 1.5:1 for incremental justification. The net benefits for the 200-year plan are \$1.7 million (\$5.7-\$4.0). The net benefits for the 20-year plan are \$1.0 million (\$2.0-\$1.0).

It can be seen that formulating projects based on the draft principles would not lead to the formulation of NED plans in which optimum contributions are made to the national economic development objective. We believe that the net benefits approach is the appropriate approach to project scaling, even under budget constraints. In addition, given the current renewed emphasis on environmental quality, public safety, social well-being, loss of life, regional economic development, and risk and uncertainty, a plan with a low-level of protection, as is common using a 1.5 benefit-cost ratio standard, will compromise all these areas of renewed emphasis. As demonstrated in recent disasters, maximizing short-term economic gains can result in the loss of life and personal ruin that can cripple an entire region. While an exception can be made, the need for exceptions should not be common or the principle becomes inappropriate. Actually, the report of the Interagency Floodplain Management Review Committee to the Administration Floodplain Management Task Force titled “Sharing the Challenge: Floodplain Management into the 21st Century”, recommended reducing the vulnerability of population centers and critical infrastructure to damages from the standard project flood discharge. It is very unlikely that this would be possible with an incremental 1.5 benefit-cost ratio standard for formulation of the recommended plan.

Inconsistency between NED and EQ Plan Justification Requirements. There is an inconsistency between the requirements for benefits that are measured in monetary values only (traditional NED) and non-monetary benefits. While a minimum 1.5 benefit-cost ratio is required for each increment of work for plans based on monetary benefits, plans based on non-monetary benefits must only be cost-effective, sustainable, and best reflect an appropriate level to invest from a national perspective after considering national and regional significance. In essence, non-monetary plans must have benefits that exceed the costs but monetary plans must have incremental benefits that are at least 50 percent greater than the cost. This is an inappropriate inconsistency, and we reject it.

National Objective. The national objective of the proposed principles is to foster environmentally sound, efficient use of the Nation’s resources consistent with public safety. This is a continued emphasis on NED. There is no mention of environmental quality being a coequal objective in the statement of the national objective. While the proposal indicates support for the protection and restoration of significant aquatic ecosystems, this is not a change from the current planning guidance. The national objective should be reworded to clearly identify multiple equal objectives.

Watershed Analysis for Implementation Studies. The draft principles indicate that the national objective for a study can be accomplished through watershed analyses that recognize the interdependency of water uses. The implication is that all implementation (i.e., feasibility) studies will include watershed analyses. Since the non-Federal cost-sharing requirements were established in WRDA 1986, water resources problems and opportunities being considered have been more restrictive in order to conform to the interest of the study cost-sharing partner. Many sponsors do not have the authority or money to cost-share in these studies outside of their own project area. Studies funded fully by the Federal government or Federal/state studies may be required to provide the necessary watershed information desired for implementation studies. This is the approach that ASBPA supported in Section 2037 of WRDA 2007.

In addition, the principles indicate that water resource planning is collaborative and may consider alternatives and strategies for implementation by other Federal agencies, state, and local agencies, Native American tribes, non-Federal interests, non-governmental organizations, affected groups and individuals, and/or the public at large. While considering alternatives and strategies for other Federal agencies, states, and other interests to implement sounds good and is a valid principle for watershed or regional studies, the proposal is for implementation studies only. Most non-Federal sponsors are primarily interested in meeting their water resource study area needs. The additional study costs to include a wide array of additional alternatives that may not meet the sponsor's immediate needs may be unreasonable or unacceptable to the sponsor. The guidelines, when issued, should describe how regional and watershed studies including collaboration can be included in cost-shared implementation studies.

Planning Process Steps. The major steps of the basic planning process are included in the proposed principles. We recommend that these steps continue to be included as guidelines since they define how to perform the analyses in support of the principles.

Formulation Criteria. Traditionally, alternative plans are formulated in consideration of the criteria of completeness, effectiveness, efficiency, and acceptability. There is no mention of these criteria as key principles in the proposed document. If these principles have been deleted, the introductory information in the Federal Register on the proposed document should indicate that fact and the reason for the deletion.

One additional area which we expect to discuss as consideration is given to developing new water resources planning guidelines is the need to include a variety of benefits that are currently not captured. ASBPA believes that both the national and regional recreation benefits of beach projects fit into this category of benefits that are left on the table. There is no consideration in the planning process to the increased tax revenues on businesses and wage earners resulting from renourishing an eroded beach.

Equally, if a navigation channel is dredged, it may produce transportation benefits that are also currently left on the table. More ship traffic may mean reduced highway traffic. In turn, that reduces the need for more highways as well as the wear and tear on existing highways. In addition, the project may improve air quality and reduce highway accidents.

With and Without Project Condition. The proposed principles state that the with and without project condition is an objectively based extrapolation of current conditions into the future which serves as one basis for estimating and evaluating the cost, effectiveness, and beneficial and adverse effects of the alternative plans. There is no mention of another basis. We believe the word "one" should be deleted and the word "the" substituted as "the with and without project conditions" are the only basis for comparing alternative plans.

Consideration of Federal and Non-Federal Constraints. Under plan formulation, the proposal indicates that the development of alternatives should generally be unconstrained. However, it also proposes that the development of alternatives must take into account the ability of Federal and non-Federal interests to implement a plan. We agree that fiscal resources at any level of government are finite. However, we do not believe it either possible or appropriate for

water resource planners to determine what the availability of funds may be at any point in time and over the long-term. While non-Federal funding availability may be known, Federal funding availability may be very difficult to determine at the feasibility report stage of planning. We look forward to the guidance on this since this proposal could be a major constraint in consideration of plan alternatives.

Net Benefits Criterion. In regard to plan selection under the net beneficial effects criterion, it is proposed that a recommended plan must have combined NED and beneficial EQ effects that outweigh the combined NED and adverse EQ effects. It further states that, where both benefits and costs of the plans can be quantified and expressed in monetary terms, these values will be produced to provide information on the net beneficial effects of the plan.

It appears that the net beneficial effects criterion is consistent with the current guidance where the plan with the greatest net economic benefits is recommended. However, later in the plan selection principles, it is proposed that the plan with high net economic return (benefit-cost ratio of at least 1.5) for each increment will be considered minimally acceptable. This is a contradiction with and deviation from the net benefits criterion. This deviation is significant since it modifies a principle that has been applied for over 50 years in determining the NED plan and a combination NED/EQ plan. Deviating from the net benefits principle is not acceptable to ASBPA unless in specific circumstances a deviation to the NED plan is needed for sound reasons such as including environmental benefits, safety considerations, loss of life, or identifying a multi-purpose plan.

Development of EQ Planning Concepts. For NED, there is a Federal objective and evaluation standard that clearly defines the overarching national goal for planning and the conceptual basis for measuring a plan's contribution toward that goal. For the EQ mission, the proposed planning concepts are not defined with sufficient precision and need to be more fully developed to provide the guidance needed to formulate and evaluate environmental outputs. In addition, guidelines need to be developed to guide multi-objective planning and project recommendations.

P&G Application to Other Federal Agencies. The Federal Register announcement also invites comments on suggested changes in language that might be desirable to enable other water resources agencies to use these principles as well. While we have not made an attempt in these comments at rewriting the principles for that purpose, we do note that P&S was applicable to the Corps of Engineers, TVA, Bureau of Reclamation, and the Natural Resources Conservation Service. The current draft principles only apply to the Corps. ASBPA strongly believes that the principles should be applicable to all water resources agencies. In addition, we believe that water related projects by other Federal agencies such as the Environmental Protection Agency, the Small Business Administration, the Fish and Wildlife Service, and the Federal Emergency Management Agency could also benefit by applying these principles to their planning process. All Federal agencies should apply the same set of principles and basic planning process to similar work in the nation. To apply the principles to the Corps and have different or no principles for other Federal agencies is neither appropriate nor equitable. The principles have been developed to ensure proper, consistent, and transparent planning in the formulation, evaluation, and selection of proposed Federal projects. This purpose and scope is certainly applicable to all of the above Federal agencies.

The Federal Water Resources Discount Rate. The Federal Register announcement also specifically invites comments on the appropriate discount rate to use in formulating proposed water resources projects. A discount rate reflects the time value of money and risk. It is society's opportunity cost of current consumption. The ideal water resources discount rate would achieve a rate of return that maximizes total social welfare. There are many viewpoints on the appropriate discount rate from a public point of view. Many support a low rate as Federal Government borrowing is considered risk free or pure interest. Others advocate basing the interest rate on the rate paid to borrow funds for project financing. Some would advocate using the current market interest rate. Economists themselves are not of one mind when discussing the social opportunity cost of funds, hence no final resolution of this matter is likely from economic theory.

The current discount rate formula was a compromise that was prescribed by Section 80 of WRDA 1974. It is based on the average rate of interest payable by the Treasury on interest-bearing marketable securities of the United States. In addition, to avoid significant fluctuation from year to year, Congress legislated that the interest rate could not change by more than ¼ percent in any one year. We believe that the interest formula established by Congress has worked well as an appropriate discount rate for water resources projects. We feel that to entertain legislation to modify the rate at this time would be problematic and unproductive.