



Natural Resources Conservation Service
P.O. Box 2890
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**DECISION MEMORANDUM FOR ARLEN L. LANCASTER, CHIEF,
NATURAL RESOURCES CONSERVATION SERVICE**

THROUGH: Dana D. York *Dana D. York 6/19/07*
Associate Chief
Natural Resources Conservation Service

FROM: Thomas W. Christensen *Thomas W. Christensen* JUN 10 2008
Deputy Chief for Programs

William E. Puckett *Will E. Puckett* JUN 10 2008
Deputy Chief for Science and Technology

SUBJECT: National Economic Development (NED) Plan Requirement affecting Watershed Rehabilitation Program (WRP) Projects

ISSUE:

WRP has unique situations regarding the application of the Economic and Environmental Principles and Guides for Water and Related Land Resources Implementation Studies (P&G). P&G requires that project implementation alternatives be evaluated. Also, it requires that the effects of an alternative plan be displayed showing the difference between the forecasted conditions with the plan and without the plan. The selected alternative must be the one with the greatest net economic benefits (the NED plan), unless an exception to the NED plan is granted.

Typically, water resource program plan alternatives are developed to install new measures, and the effects of the alternatives are evaluated against the pre-existing condition where no measures exist. If the recommended alternative does not have the greatest net monetary benefit, then an exception to the NED plan is required. Exceptions are allowable for several reasons, which are listed in P&G, including where potential loss of life exists. An exception to the NED plan based on the potential loss of life-over the pre-existing condition-would be a rare situation with new projects.

WRP is unique because it deals with, on a case-by-case basis, an existing dam as the pre-existing condition. Dams with a human population in the breach inundation area are classified as high hazard. High hazard dams that do not meet current safety and performance standards are unsafe. Unsafe high hazard dams have the potential for loss of life from a catastrophic failure. The legislation's purpose is to extend the service life of the structural measure and to meet applicable safety and performance standards.

Therefore, for the special situations involved with WRP high hazard dams, there is an opportunity to streamline how exceptions are granted and yet remain in compliance with P&G.

BACKGROUND:

The NED alternative reasonably maximizes net national economic development benefits. The procedures for developing the NED alternative are contained in P&G, and require that the NED plan be selected, unless an exception is requested and granted for "overriding reasons." P&G provides guidance to evaluate three other accounts, in addition to the NED account, in which to consider overriding reasons for an exception. These accounts are environmental quality, regional economic development, and social effects. The social effects account integrates life, health, and safety as potential overriding reasons for an exception. P&G states that the social effects account includes the potential loss of life due to structural failure.

Of the 94 WRP projects reviewed by the National Water Management Center through April 2008, nine have needed an exception to the NED plan requirement. All nine of these exceptions have involved cases in which human life would be at risk in the event of a catastrophic dam failure, which is included under the social effects account of P&G.

In eight of these nine exceptions, the No Federal Action alternative/Future Without Project was identified as the NED plan. The No Federal Action Alternative identifies what the local sponsors would do with the dam without the Natural Resources Conservation Service's (NRCS) assistance when faced with a dam that does not meet current safety and performance standards. In some projects, the State dam safety agency has notified the sponsors to correct the hazardous situation by removing the dam or upgrading the dam to current safety standards. Local sponsors may elect to breach the dam to avoid the consequences of a potential dam failure. Such an approach eliminates the threat of a catastrophic breach, but in most cases may allow pre-project flood conditions to recur. In other cases, local sponsors may elect to rehabilitate all or some of the structural deficiencies to meet State dam safety criteria, but not Federal. In both locally implemented situations, which are No Federal Action alternatives, the sponsors normally forego 50-100 years of serviceability of a floodwater retarding dam or nonstructural alternatives that would be provided through WRP.

Options 2 and 3 state how to efficiently manage the authorization process of watershed rehabilitation plans, where the recommended plan is selected based on the project purpose, and P&G social effects account loss of life criteria. The options below apply only to plans with that circumstance.

OPTIONS:

Option 1. Continue with the current process of seeking a NED exception for WRP projects in which the No Action alternative is identified as the NED plan.

Pro:

- No changes to policy.

Cons:

- NED exception approval process will continue to add time to the project schedule;
- The number of future NED exception requests would remain at current level; and
- This is not consistent with existing P&G policy requiring an alternative to pass four viability tests, including effectiveness in addressing the purpose of the project.

Option 2. Publish in the Federal Register a proposed categorical exception to the NED plan for rehabilitation projects in which human life would be at risk in the event of a catastrophic dam failure. The proposal would allow the Responsible Federal Official (State Conservationist) to accept the federally-assisted rehabilitation alternative with the greatest net benefit and meet current safety and performance standards.

Pro:

- The number of NED exception requests would be reduced (eight NED exceptions would not have been needed and potentially eliminated all NED exception requests).

Cons:

- NED alternative may not be the recommended alternative. However, the selected alternative would comply with P&G, which provides for exceptions where life, health, and safety have a bearing on the decision making process;
- It would be extremely difficult to prepare a categorical exception to cover the wide range of situations that are encountered in rehabilitation projects; and
- High level of sensitivity of other agencies and environmental groups that support and promote the decommissioning of dams.

Option 3. In those cases where human life is at risk in the event of catastrophic failure of an existing dam, other accounts in the P&G planning process have an overridingly large contribution to the decision process relative to the NED account.

To avoid seeking individual exceptions in those cases described above (existing, safety-deficient dam with human-loss-of-life risk in the event of catastrophic failure), issue an NRCS policy that identifies the NED plan as the federally-assisted alternative with the greatest net economic benefits. (This removes the No Action alternative as a NED plan option). Rehabilitation alternatives required by legislation and policy would still be evaluated: no action; decommissioning; rehabilitation; and where applicable, relocation of at-risk dwellings; and additional alternatives as appropriate. The no action condition will continue to be the baseline to evaluate the benefits of reasonable alternatives. If all reasonable alternatives result in similar benefits, a least-cost analysis will be allowed to evaluate alternatives and to select the P&G plan. If benefits of all alternatives are not similar, a benefit-cost analysis would

DECISION MEMORANDUM FOR THE CHIEF

continue to be completed for all reasonable alternatives. A project specific exception would be required if the policy-identified NED plan is not selected.

Pros:

- The policy improves program efficiency by grouping a specific type of future P&G exception Requests, involving only high hazard dams that do not meet applicable safety and performance standards, into a P&G policy exception. Policy conforms with P&G which provides for exceptions where life, health, and safety have a bearing on the decision making process;
- Policy ensures consistent application of P&G procedures for watershed rehabilitation projects;
- The plan preparation time will be reduced if a full benefit-cost analysis is not needed and a NED exception to the No Federal Action alternative is not required; and
- The number of NED exception requests will be reduced (eight NED exceptions would not have been needed).

Cons:

- The local sponsor may assume that authorization of the project is automatic and not be as engaged in the planning process as they should. NRCS will need to ensure local sponsor is actively involved in planning to identify the realistic alternative(s) that the sponsor could implement, in the absence of Federal assistance, to address the existing risks to human life in the event of catastrophic dam failure; and
- The sponsor must be aware that the Federally-assisted alternative will be the most cost effective alternative, anything different would require a request for a NED exception unless the local sponsor agreed to pay for the difference.

RECOMMENDATION:

Approve Option 3.

DECISION BY THE CHIEF:

Approve



Option Selected

3

Disapprove _____

Discuss with me _____

Date

6/23/2008

Reviewed by _____

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cc: (w/copy of attachment)

Dana D. York, Associate Chief, NRCS, Washington, D.C.

Gregory E. Johnson, Director, Conservation Planning and Technical Assistance Division, NRCS,
Washington, D.C.

Noller Herbert, Director, Conservation Engineering Division, NRCS, Washington, D.C.

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Natural Resources Conservation Service
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MAY 15 2008

SUBJECT: PDM - Decision Memorandum Pertaining to National Economic
Development (NED) Plan Exceptions in the Watershed
Rehabilitation Program

TO: Arlen L. Lancaster
Chief

File Code: 390

Thank you for your suggestions to improve the attached Decision Memorandum involving the Watershed Rehabilitation Program. The Decision Memorandum describes the Federal requirements set forth in the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&G). We request your consideration of a unique circumstance in how the Natural Resources Conservation Service (NRCS) complies with P&G, where there is the potential loss of life due to failure of an unsafe dam.

P&G requires that the NED plan, which is the plan with the greatest net economic benefits, be selected for implementation unless there are overriding reasons to grant an exception to the NED plan. P&G provides guidance as to what can be used as overriding reasons, including the potential loss of life due to structural failure. The Decision Memorandum offers that the potential loss of life due to structural failure is an overriding reason to select the most cost effective **Federally**-assisted rehabilitation alternative. The Decision Memorandum proposes a policy exception to the NED plan. The exception would allow NRCS to select the Federally-assisted rehabilitation alternative with the greatest net economic benefits, applicable only to the rehabilitation of **high hazard dams** that do not meet safety and performance standards.

We concur that the attached recommendation complies with the requirements of P&G. The recommendation meets the program objectives to extend the service life of dams and to meet dam safety and performance standards. The recommendation continues policy that requires NRCS to provide project sponsors with alternatives for non-Federal implementation.


THOMAS W. CHRISTENSEN
Deputy Chief for Programs 5/15/08

 FOR
WILLIAM E. PUCKETT
Deputy Chief for Science and Technology

Attachment